



eRAD RIS

**COMBINED CUSTOMER
RELEASE NOTES**

for versions 2.2016.1 through 2.2016.7

UPDATED MARCH 9, 2022

SUMMARY

This document re-publishes the previously released Customer Release Notes for eRAD RIS versions 2.2016.1 through 2.2016.7 as a single document.

The following documents have been merged:

1. eRAD RIS Customer Release Notes 2.2016.1.0.1.pdf
2. eRAD RIS Customer Release Notes 2.2016.1.0.2.pdf
3. eRAD RIS Customer Release Notes 2.2016.1.0.3.pdf
4. eRAD RIS Customer Release Notes 2.2016.1.0.4.pdf
5. eRAD RIS Customer Release Notes 2.2016.1.1.pdf
6. eRAD RIS Customer Release Notes 2.2016.1.pdf
7. eRAD RIS Customer Release Notes 2.2016.2.1.pdf
8. eRAD RIS Customer Release Notes 2.2016.2.2.pdf
9. eRAD RIS Customer Release Notes 2.2016.2.pdf
10. eRAD RIS Customer Release Notes 2.2016.3.1.pdf
11. eRAD RIS Customer Release Notes 2.2016.3.2.pdf
12. eRAD RIS Customer Release Notes 2.2016.3.pdf
13. eRAD RIS Customer Release Notes 2.2016.4.1.pdf
14. eRAD RIS Customer Release Notes 2.2016.4.2.pdf
15. eRAD RIS Customer Release Notes 2.2016.4.3.pdf
16. eRAD RIS Customer Release Notes 2.2016.4.4.pdf
17. eRAD RIS Customer Release Notes 2.2016.4.5.pdf
18. eRAD RIS Customer Release Notes 2.2016.4.6.pdf
19. eRAD RIS Customer Release Notes 2.2016.4.pdf
20. eRAD RIS Customer Release Notes 2.2016.5.pdf
21. eRAD RIS Customer Release Notes 2.2016.6 through 2016.7.pdf
22. eRAD RIS Customer Release Notes 2.2016.7.1.pdf
23. eRAD RIS Customer Release Notes 2.2016.7.10.pdf
24. eRAD RIS Customer Release Notes 2.2016.7.11.pdf
25. eRAD RIS Customer Release Notes 2.2016.7.12.pdf
26. eRAD RIS Customer Release Notes 2.2016.7.13.pdf
27. eRAD RIS Customer Release Notes 2.2016.7.14.pdf
28. eRAD RIS Customer Release Notes 2.2016.7.2.pdf
29. eRAD RIS Customer Release Notes 2.2016.7.3.pdf
30. eRAD RIS Customer Release Notes 2.2016.7.4.pdf
31. eRAD RIS Customer Release Notes 2.2016.7.5.pdf
32. eRAD RIS Customer Release Notes 2.2016.7.6.pdf
33. eRAD RIS Customer Release Notes 2.2016.7.7.pdf
34. eRAD RIS Customer Release Notes 2.2016.7.8.pdf
35. eRAD RIS Customer Release Notes 2.2016.7.9.pdf
36. eRAD RIS Utilization Management 2.2016.7.pdf

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.1
Update 2.2016.1.0.1

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7

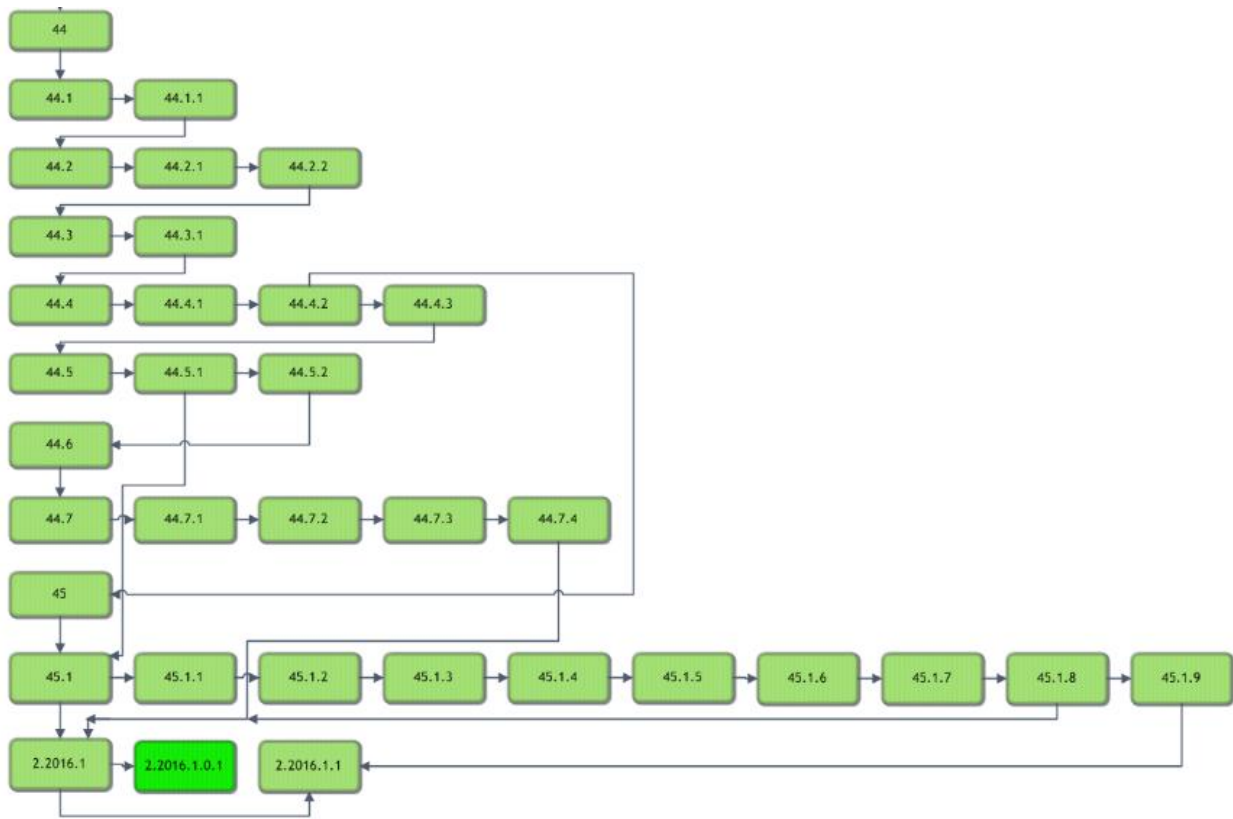
eRAD RIS Server Update

Resolved Items

Redmine #	Subject
13469	Insurance Eligibility intermittently fails

eRAD RIS Server Update

Code Stream



Legend:


Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _ReleaseNotes	03/26/2012 11:02 AM
 ThickClient	03/21/2016 11:11 AM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

This should only be installed at sites that have 2016.1 and intend to use Insurance Eligibility.

It should not be installed at a site that has 2016.1.1 installed, as the change in 2016.1.1 is not included in this release.

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip (This is not included in 2016.1.1, version directly above)

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.16.1.0.1.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.1
Update 2.2016.1.0.2

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Web Service 7

eRAD RIS Server Update

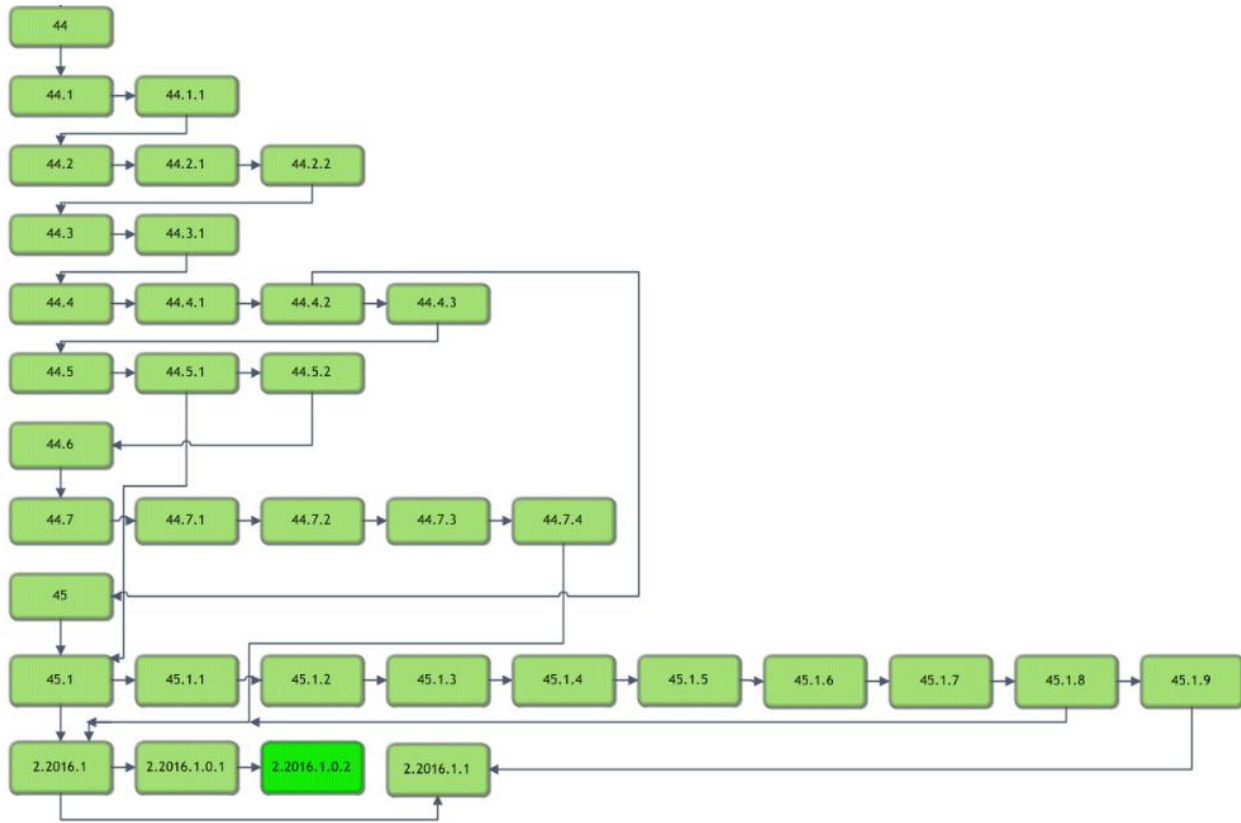
Resolved Items

Redmine #	Subject
13512	Wedge is running slowly due to a new feature where scan documents are retrieved even if no scan document was sent in.

NOTE: This update is only required to for the Wedge Web Services.

eRAD RIS Server Update

Code Stream



Legend:

Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _ReleaseNotes	03/26/2012 11:02 AM
 rRISService	03/28/2016 4:38 PM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

This should only be installed at sites that plan to install 2016.1 or have installed 2016.1.0.1. This is only an update to the Wedge Web Service.

It should not be installed at a site that has 2016.1.1 installed, as the change in 2016.1.1 is not included in this release.

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416	Wedge Web Services only
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip

eRAD RIS Server Update

Installing

Web Service

This update is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 97 files in the rRISService folder and 6 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), and pt_BR (Brazilian Portuguese) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.

NOTE: the rRISServices.exe.config file is also included in the deploy folder. If this file has changes it **will not** update your current file in the Web Service directory. Any changes to this file will require a manual update of the rRISServices.exe.config and rRISServicesx64.exe.config files.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.1
Update 2.2016.1.0.3

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7
 Database Updates..... 11

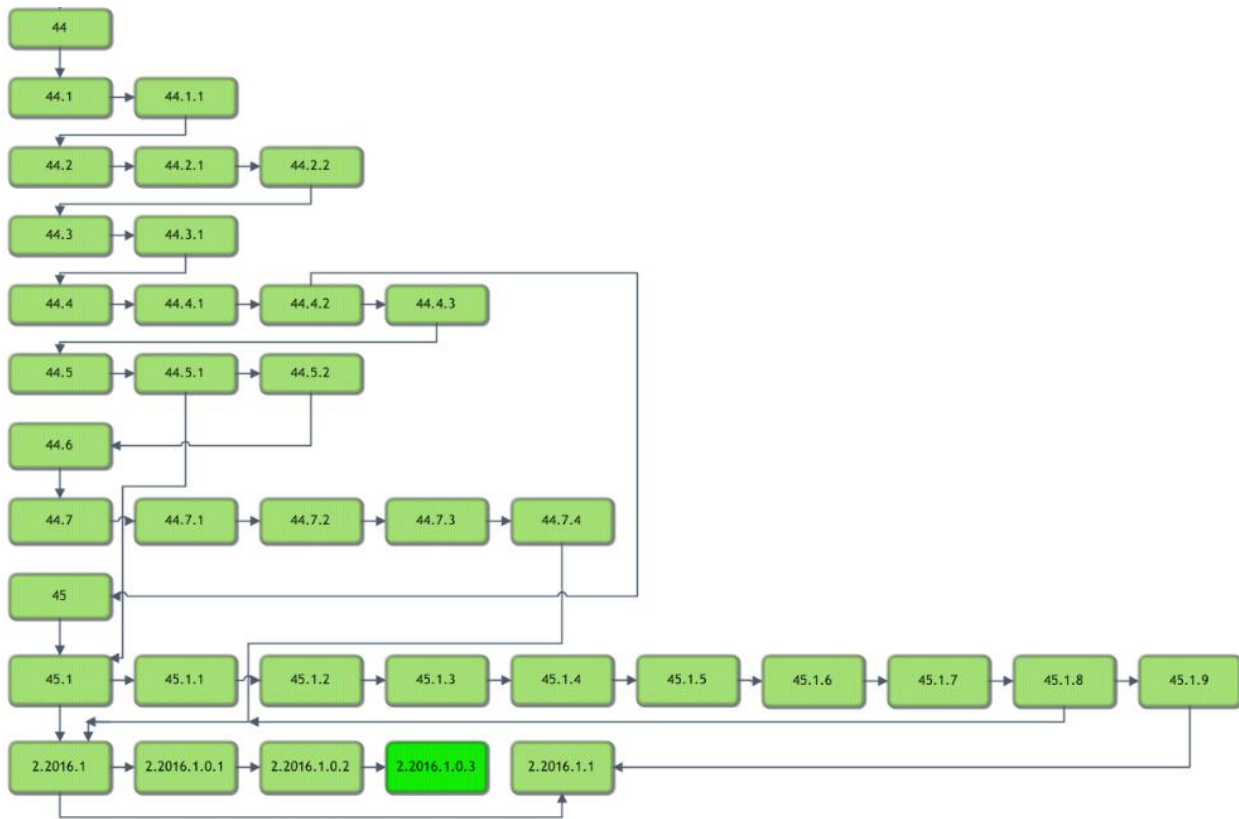
eRAD RIS Server Update

Resolved Items

Redmine #	Subject
13516	Insurance Eligibility - Portal password submitted in I.E. request may be from an incorrect practice
13514	Include 'Alternate MRN issuer of ID' on patient search results screen
13513	Reporting screen tool window may leave previous study data visible in tool windows
13511	Study may move to another patient in error during walkin process if more than one patient record is open
13508	Outbound messaging system throws an error on fields that have whitespace values

eRAD RIS Server Update

Code Stream



Legend:

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eRAD RIS Server Update

Package Contents

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45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416	Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918	GUI.zip, Web Services and DB
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.2016.1.0.3.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 98 files in the rRISService folder and 6 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), and pt_BR (Brazilian Portuguese) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

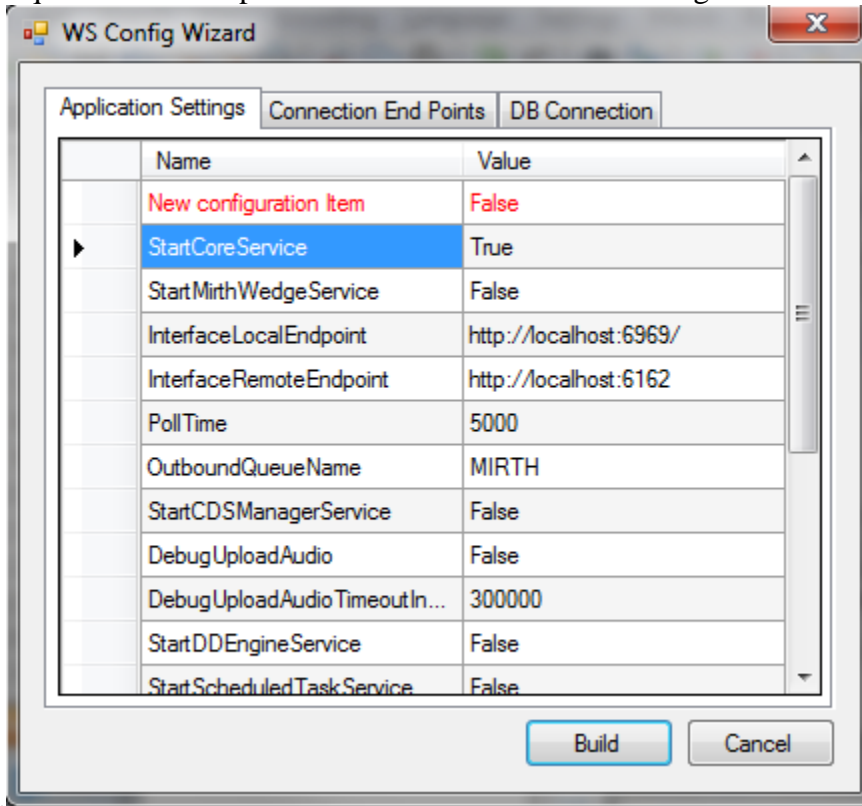
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.

eRAD RIS Server Update

NOTE: the rRISServices.exe.config file is also included in the deploy folder. If this file has changes it **will not** update your current file in the Web Service directory. Any changes to this file will require a manual update of the rRISServices.exe.config and rRISServicesx64.exe.config



files.

eRAD RIS Server Update

Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.

WS Config Wizard

Application Settings | **Connection End Points** | DB Connection

Study Service

http:// localhost:8040 /rRIS/

net.tcp:// localhost:8041 /rRIS/

Notify Service

net.tcp:// localhost:7095 /rRIS/

CDS Service

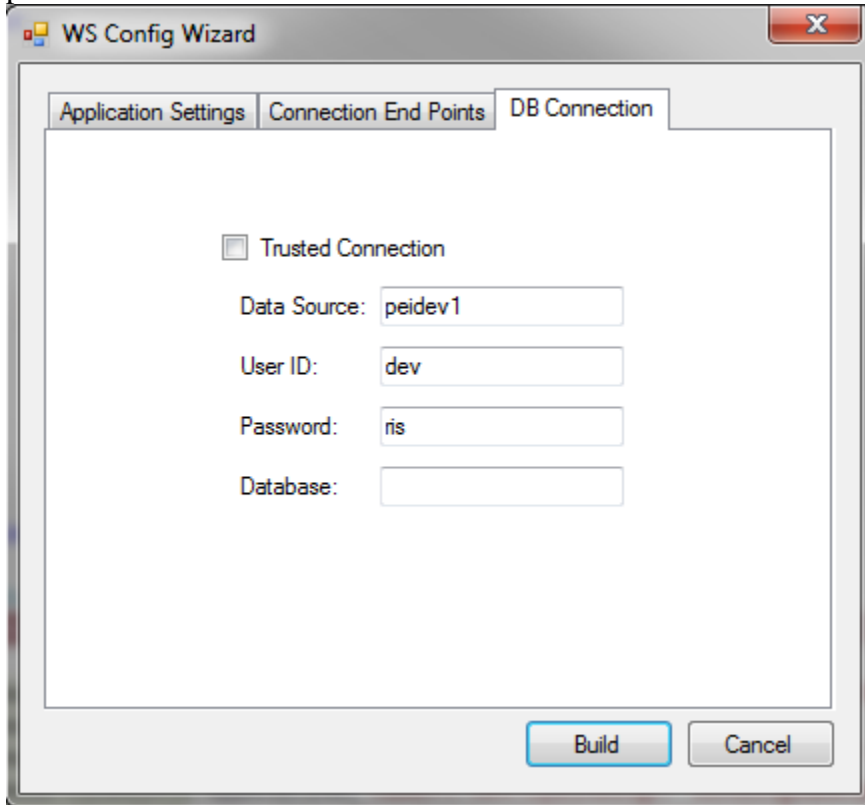
http:// localhost:7092 /rRIS/

net.tcp:// localhost:7093 /rRIS/

Build Cancel

eRAD RIS Server Update

DB Connection: will display the existing configuration, if the Connection is to be used as a trusted connection, then the user ID and password will become disabled and will not be used, and will rely on the provided database value, When not using the trusted connection, The Database value is not needed but can be used to force a specific database connection as long as the provided user has access to that database.



It is always good practice to do a compare of the .config files.

- 1) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService.

rRISService directories include:

- a) *rRISService*
- b) *CDS rRISService*
- c) *Wedge rRISService*
- d) *DDE rRISService*

Restart each service.

eRAD RIS Server Update

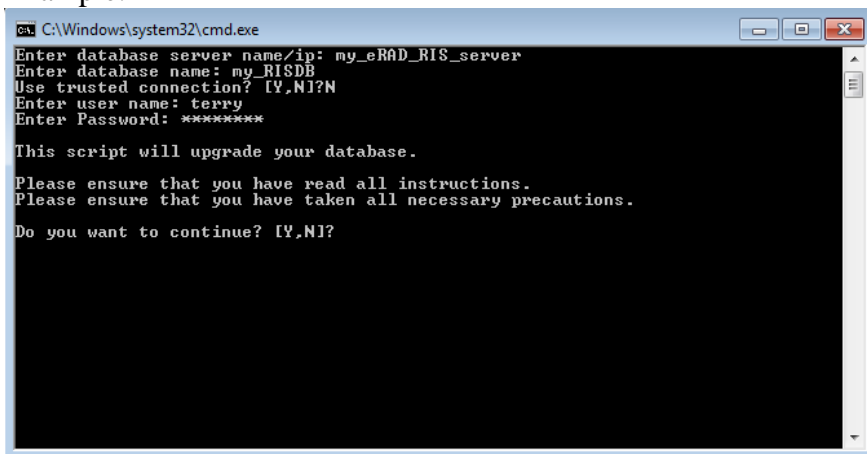
Database Updates

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

- 1) From the upgrade folder, double click the "RunUpgrade.bat" command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.
- 3) You can choose to use "Trusted connection". Using this option will pass the identity of the currently logged on user. If this user has "db_owner" access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use "Trusted connection" then you will be prompted for user id and password.

Example:



```
C:\Windows\system32\cmd.exe
Enter database server name/ip: my_eRAD_RIS_server
Enter database name: my_RISDB
Use trusted connection? [Y,N]?N
Enter user name: ferry
Enter Password: *****

This script will upgrade your database.

Please ensure that you have read all instructions.
Please ensure that you have taken all necessary precautions.

Do you want to continue? [Y,N]?
```

- 5) After the upgrade program has finished you can find the upgrade logs in the "log" folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team
- 6) In the Common folder there is a subfolder of MU. The MU folder contains updates to lookups relevant for MU as well as updates for Zip Code table to add the County. Copy the

eRAD RIS Server Update

MU folder to the database server before running the batch file. There is a readme file contained in the MU folder. The details have also been included below

- a) The mu bulk install process must be run from a path on the database server!
 - b) Copy Files ImportDataFileUpgradeDB.bat and ImportDataFileUpgradeDB.sql from upgrade folder to a location on the database server(This location will be referred to as the "Script Folder Path".)
 - c) Copy Folder scripts and Source files from the upgrade folder to "Script Folder Path"Note source files must be inside the scripts folder
 - d) Run bat file
 - i) Enter Script Folder path [C:\Temp\SNOMED]:
 - ii) Enter database server name/ip: [ie peidev1]
 - iii) Enter database name: [ie rRIS_MU]
 - iv) Use a trusted connection to log on to SQL Server:
"N" means you will have to enter db [username] [password]
"Y" means you have a trusted connection and will not have to enter [username][password]
 - v) Do you wish to load SNOMED concept codes?
"N" no files will be loaded into the l_snomed_concept table
"Y" yes means l_snomed_concept table will be truncated and reloaded with the latest US concept codes
Source File [sct2_Concept_Snapshot_US1000124_20140301.txt]
 - vi) Do you wish to load SNOMED descriptions codes?
"N" no files will be loaded into the l_snomed_description table
"Y" yes means the l_snomed_description table will be truncated and reloaded with the latest US description codes
Source File [sct2_Description_Snapshot-en_US1000124_20140301.txt]
 - vii) Do you wish to load ICD9 to SNOMED mappings codes?
"N" no files will be loaded into the l_snomed_icd9_map table
"Y" yes means the l_snomed_icd9_map table will be truncated and reloaded with the latest US ICD9 to SNOMED mapping codes
Source File [ICD9CM_SNOMED_MAP_1TO1_201312.txt and ICD9CM_SNOMED_MAP_1TOM_201312.txt]
 - viii) Do you wish to load ICD10 to SNOMED mappings codes?
"N" no files will be loaded into the l_snomed_icd10_map table
"Y" yes means the l_snomed_icd10_map table will be truncated and reloaded with the latest US ICD10 to SNOMED mapping codes
Source File [xder2_iisssccRefset_ExtendedMapSnapshot_US1000124_20131220.txt]
 - ix) Do you wish to load US zip codes?
"N" no files will be loaded into the z_zipCodesWithCounty table
"Y" yes means the z_zipCodesWithCounty table will be truncated and reloaded with the latest US zip codes
Source File [5-digit Commercial.csv]
-

eRAD RIS Server Update

Note: the following files should be loaded once only with B43!

x) Do you wish to load CMS codes?

"N" no files will be loaded into the s_mu_code table

"Y" yes means the s_mu_code table will be truncated and reloaded with the latest CMS codes

Source File [s_mu_code.txt]

xi) Do you wish to load HL7 support sets for CCDA?

"N" no files will be loaded into the l_hl7v3_voc_value_set table

"Y" yes means the l_hl7v3_voc_value_set table will be truncated and reloaded with the latest hl7v3_voc_value_set codes

Source File [l_hl7_voc_value_set.txt]

xii) Do you wish to load HL7 support codes for CCDA?

"N" no files will be loaded into the l_hl7v3_voc_value_code table

"Y" yes means the l_hl7v3_voc_value_code table will be truncated and reloaded with the latest l_hl7v3_voc_value_code codes

Source File [l_hl7_voc_value_code.txt]

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.1
Update 2.2016.1.0.4

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

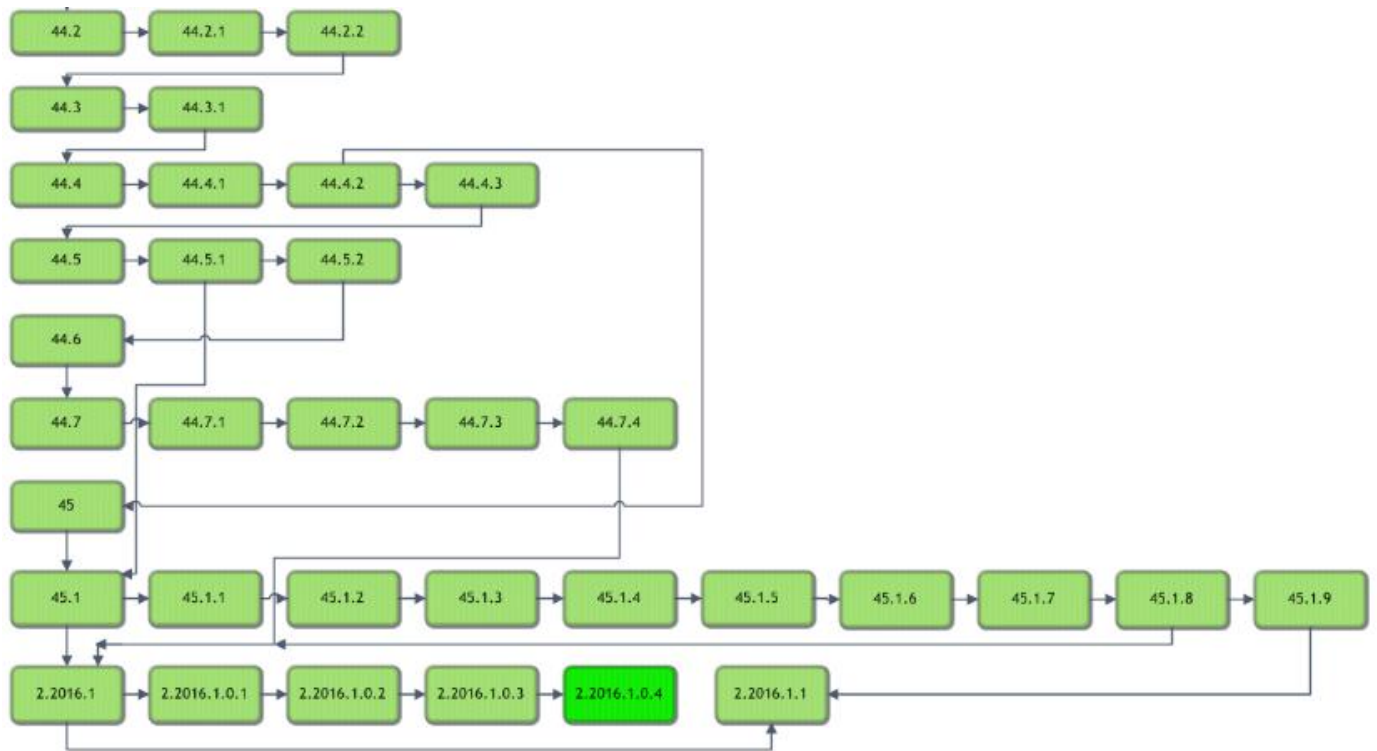
eRAD RIS Server Update

Resolved Items

Redmine #	Subject
13599	Occasional error 'Implicit conversion from data type nvarchar to varbinary(max)'
13579	Files missing from RIS deployment ZIP file (Microsoft.SqlServer.Types.dll)
13568	The 'Matching Alternate MRN Issuer' should only display values related to the 'Matching Alternate MRN' column
13552	Performed_end_date occasionally not populated causing subsequent errors
13530	Formatting characters in MRN masks are inadvertently being removed upon save
13525	In Perform Exam, if a study is selected then de-selected for inclusion, it is still included, even though it is clearly un-checked
13522	Error scheduling an EMR order 'Cannot insert duplicate key row' when EMR MRN is the same but Issuer ID is different

eRAD RIS Server Update

Code Stream



Legend:

Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

This must be installed on systems that are already at version 2.2016.1.0.3

It should not be installed at a site that has 2016.1.1 installed, as the change in 2016.1.1 is not included in this release.

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	Gui.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	Gui.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	Gui.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Gui.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416	Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918	GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918	GUI.zip, Web Services
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.2016.1.0.4.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 98 files in the rRISService folder and 6 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), and pt_BR (Brazilian Portuguese) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

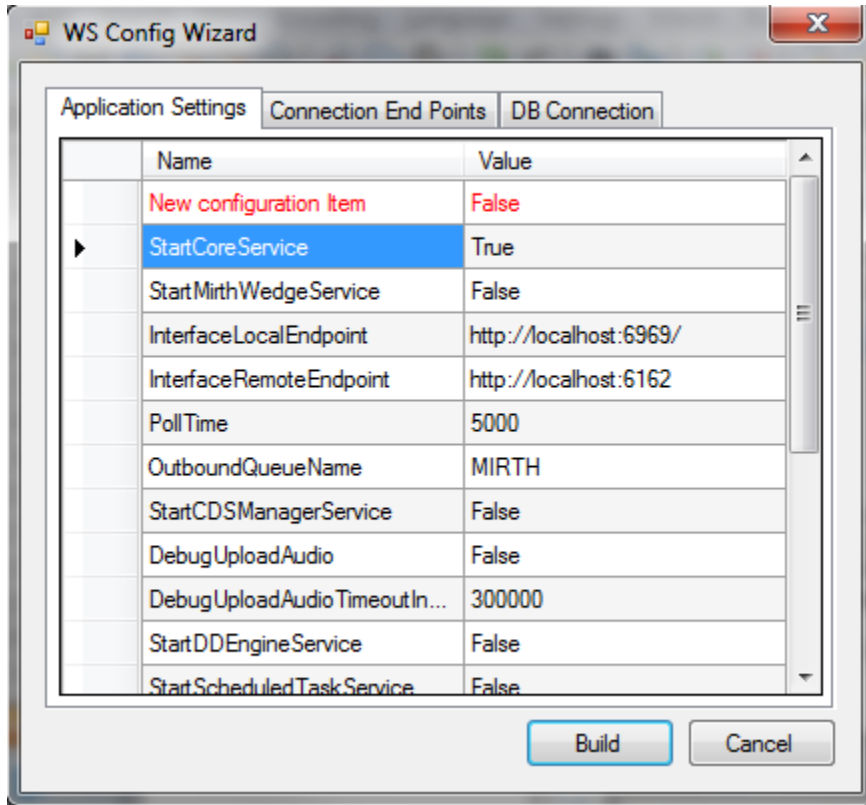
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.

eRAD RIS Server Update

NOTE: the rRISServices.exe.config file is also included in the deploy folder. If this file has changes it **will not** update your current file in the Web Service directory. Any changes to this file will require a manual update of the rRISServices.exe.config and rRISServicesx64.exe.config files.



eRAD RIS Server Update

Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.

WS Config Wizard

Application Settings | **Connection End Points** | DB Connection

Study Service

http:// localhost:8040 /rRIS/

net.tcp:// localhost:8041 /rRIS/

Notify Service

net.tcp:// localhost:7095 /rRIS/

CDS Service

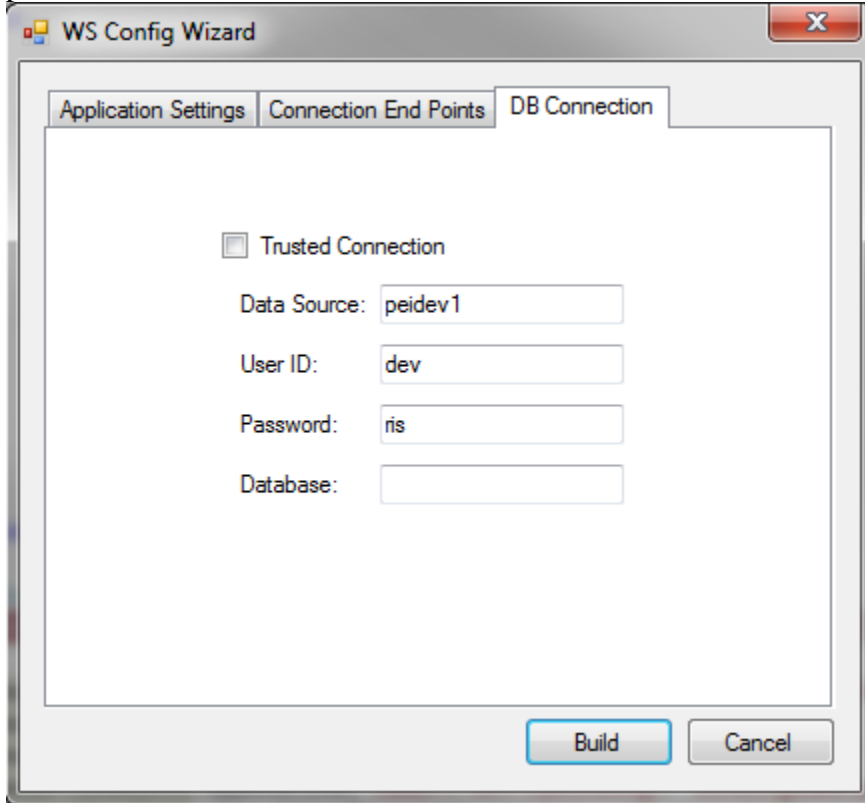
http:// localhost:7092 /rRIS/

net.tcp:// localhost:7093 /rRIS/

Build Cancel

eRAD RIS Server Update

DB Connection: will display the existing configuration, if the Connection is to be used as a trusted connection, then the user ID and password will become disabled and will not be used, and will rely on the provided database value, When not using the trusted connection, The Database value is not needed but can be used to force a specific database connection as long as the provided user has access to that database.



It is always good practice to do a compare of the .config files.

- 1) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService.

rRISService directories include:

- a) *rRISService*
- b) *CDS rRISService*
- c) *Wedge rRISService*
- d) *DDE rRISService*

Restart each service.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.1
Update 2.2016.1.1

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7

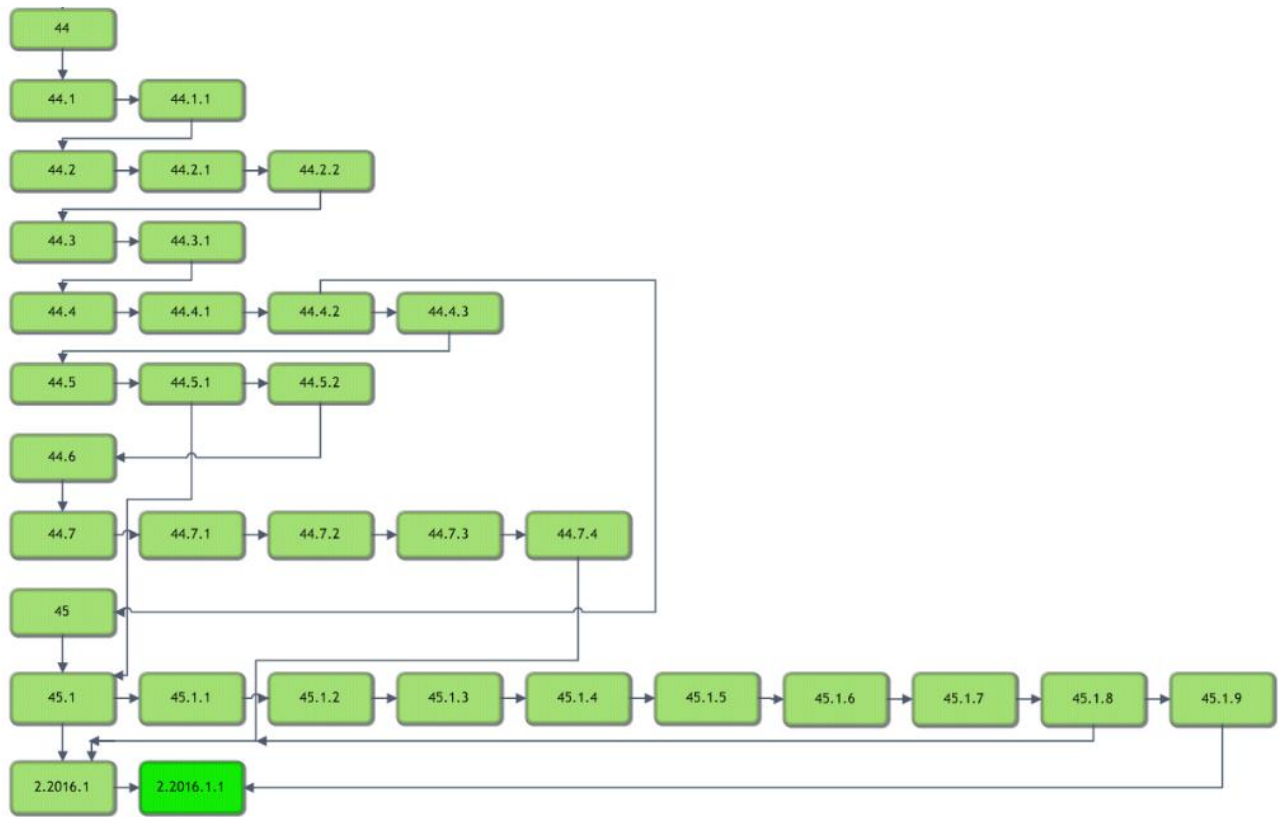
eRAD RIS Server Update

Resolved Items

Redmine #	Subject
13370	IW or CSH PACS integration - intermittently produces "given key not present" error
13368	Intermittent issue where View Images button is remaining disabled and PACS Enable/Disable menu remains disabled
13373	PACS images not synced with current study after timeout exceeded in eRAD RIS
13369	Intermittent RIS hang during exit
13375	Powerscribe integration - Closing a study using X on the tab may produce "given key not present" error.
13371	eRAD PACS Integration - If 2 studies are opened and both do not have images attached, RIS will stall until OK is clicked on "Invalid study file" message
13374	When RIS prompts "An action is required in PACS" and the user kills PACS manually, the user cannot continue working in RIS.
13376	eRAD PACS - Integration - using the next workflow the 'Waiting for PACS' message times out when relevant studies to open is greater than 0
13377	PACS Integration - When the "Waiting for PACS" message is on the screen, and the user presses Cancel, the RIS should not display a "Thread was being aborted" message box.
13372	PACS Sync - When images are displayed in reading mode, then the radiologist opens another study to sign off, the images for the first patient remain displayed.

eRAD RIS Server Update

Code Stream



Legend:




Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _ReleaseNotes	3/10/2016 12:48 PM
 PACS Citrix Bridge	3/4/2016 9:49 AM
 ThickClient	3/10/2016 9:51 AM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

Build 2016.1 installs. This server update must be applied to 2016.1

eRAD RIS Server Update

eRAD RIS Release Version Numbers

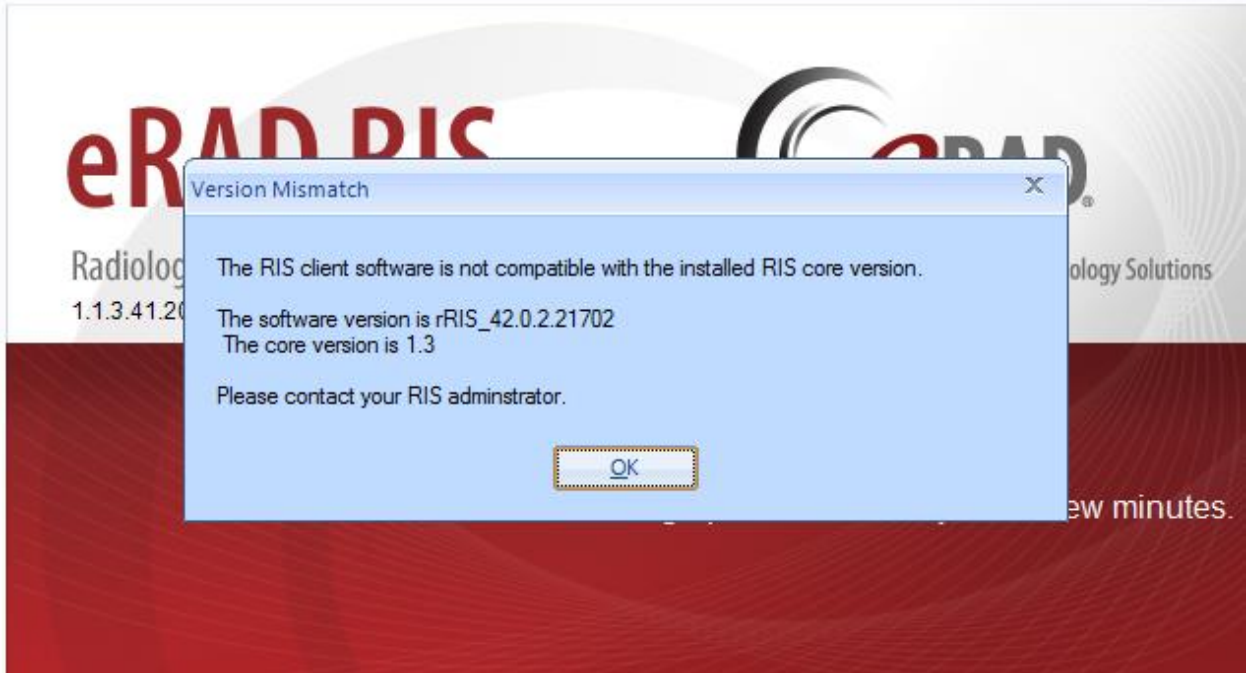
Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.16.1.1.33672.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.



If you receive the Version Mismatch error above the GUI.zip will need to be renamed to add 1.3. to it. The GUI.zip file name change is from rRIS_16.1.1.33672 → rRIS_1.3.16.1.1.33672

NOTE: the GUI.zip included with this release has already been renamed to include 1.3.

This is required for installs that have not reached build 42. Because the software installed on your local workstation is a pre-42 build it detects a version mismatch in the software naming and won't allow the newest build to be launched (it is looking for 1.3. in the name). Once the workstation(s) have reached a build of 42 we will no longer need to add "1.3." to the GUI.zip name. Also note that a core install will not resolve this issue below.

NOTE: If your upgrade is coming from 40.016.1 or prior a core install will be required. Versions (builds) of 40.017 and greater do not require a core install as long as you are at least at 40.017 (Core Version 1.3.40.18756)

Release Notes

eRAD RIS

Version 2

Build 2016.1

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge

TABLE OF CONTENTS

- 1. Purpose3
- 2. Intended Audience.....3
- 3. Installing/Accessing the Application3
- 4. New Settings4
 - 4.1. New access strings4
 - 4.2. New system configuration settings5
 - 4.3. Changes to Web Services7
- 5. New Features and Enhancements8
- 6. Code Stream.....42
- 7. RIS Release Version Numbers43
- 8. Resolved Defects.....45
- 9. Known Limitations59

PURPOSE

This document describes some of the new features and changes implemented in eRAD RIS in build 2.2016.1

Not every feature will be described in this document. Typically only features which can be visually demonstrated to the user are outlined in this document.

INTENDED AUDIENCE

This document is created by the eRAD RIS Development/Commercialization team for customers of eRAD RIS.

INSTALLING/ACCESSING THE APPLICATION

The installation guide for the eRAD RIS client have been posted to the RadNet Wiki page at <http://mdbal01rdtweb/Wiki/>

Under the RIS menu click on the rRIS page. The credentials to access the page are:

Username: rRIS

Password: Summerside

If you experience difficulties accessing the application, please contact Darcy Noye with the PEI RIS Development Team.

NEW SETTINGS

NEW ACCESS STRINGS

Setting	Default	Purpose
Clinical.ConnectAnswers.Edit	None	Controls the ability to edit Connect Answers via the RIS. The Connect Answers are the Patient provided answers to scheduling questions entered via the Patient Portal at the time of scheduling.
Clinical.CreateEditSendForDictation	None	Allows the user to send report for dictation from create/edit report screen
Clinical.CreateReportFromExamDone	None	Allows the user to create/edit report from exam done status
Clinical.FollowUp	Full	Controls access to the Mammo Follow Up screen
Clinical.ImportStudies	None	Access to context menu for importing studies into an order
Clinical.ImportStudies.AcrossEMRs	None	Access to importing studies into an order from a different EMR
Clinical.Linkstudies	None	Access to the manual study linking screen.
Clinical.PeerReview.MarkAsCompleted	Full	Allows the user to mark a peer review as completed
Clinical.PingMessage	None	Controls access to the Ping message feature.
Clinical.PreviewTerminatedReport	None	Controls access to previewing reports that have been terminated such as status like void and discontinued.
Config.DigitalFormsEditor Replaces Config.QuestionnaireEditor	None	Controls access to the browser-based Digital Forms editor.
Config.LookupEditor.Complication	None	controls access to the Complication lookup table
Config.LookupEditor.CreatedBySystem	None	lookup table access for Created By System
Config.LookupEditor.Personnel.ConfirmedRadiologistFlag	None	Access to the edit or view the Confirmed Radiologist Flag
Notification.PendingBiopsyNotify Replaces WLNnotification.PendingBiopsyNotify	Full	Enables ability to show worklist driven pending biopsy notifications

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Notification.PendingSignatureWorklist Replaces WLNnotification.PendingSignatureWorklist	Full	Enables ability to show worklist driven pending signature notifications
Notification.STATPendingSignature Replaces WLNnotification.STATPendingSignature	Full	Enables ability to show STAT Case Pending Signature notifications
Notification.STATPendingSignatureWorklist Replaces WLNnotification.STATPendingSignatureWorklist	Full	Enables ability to show worklist driven STAT Case Pending Signature notifications
Notification.SuspendedNotify Replaces WLNnotification.SuspendedNotify	Full	Enables ability to show suspended notifications
View.DigitalFormAnswers Replaces View.QuestionnaireAnswers	None	Access to see the Digital Form Answers menu item from View menu (visible when dictate window is open on a mammo study)
View.SelectedDigitalFormAnswers	Full	Access to see the Selected Digital Form Answers menu item from View menu (visible when dictate window is open)
WL.Reception	Full	Controls access to the Reception worklist under Front Desk menu

NEW SYSTEM CONFIGURATION SETTINGS

BreastBodyPartCode		The code for the breast body part. May be used to activate mammo related functionality (e.g. Create Reminder)
GoogleAPIKey		A Google Key use to connect to their WEB services for information such as getting geo coordinates for sites, etc.
MUMedlinePlusConnectProblemSearchICD10	mainSearchCriteria.v.cs=2.16.840.1.113883.6.90	MedlinePlus Connect Problem ICD-10 search specification.

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MUMedlinePlusConnectProblemSearchICD9	mainSearchCriteria.v.cs=2.16.840.1.113883.6.103	MedlinePlus Connect Problem ICD-9-CM search specification.
MUMedlinePlusConnectProblemSearchSNOMED	mainSearchCriteria.v.cs=2.16.840.1.113883.6.96	MedlinePlus Connect Problem SNOMED search specification.
MUMedlinePlusConnectProblemSearch	Removed	Replaced with MUMedlinePlusConnectProblemSearchICD10 MUMedlinePlusConnectProblemSearchICD9 MUMedlinePlusConnectProblemSearchSNOMED
NPDServiceAddress		URI to NPD Service. If blank, we will use the address in the application config. An example URI is: http://10.10.1.23/NPDService/NPDService.asmx
NPI_URL	https://npiregistry.cms.hhs.gov/registry/search-results-table?first_name={firstname}&last_name={lastname}	URL to NPI registry including placeholders for {firstname} and {lastname}
ReferringAddressCode	Removed	The referring practice address pattern was replaced with a referring doctor address editor. Therefore: references to ReferringAddressCode config needs to be removed.
ReportingImpressionSectionStartText	IMPRESSION	Search string of text to mark the beginning of the impression section.
ResetInsuranceVerifiedOnReschedule	False	Determines if insurance verified flag is reset when rescheduling a study

CHANGES TO WEB SERVICES

Changes to Web services applicationsettings.config file:

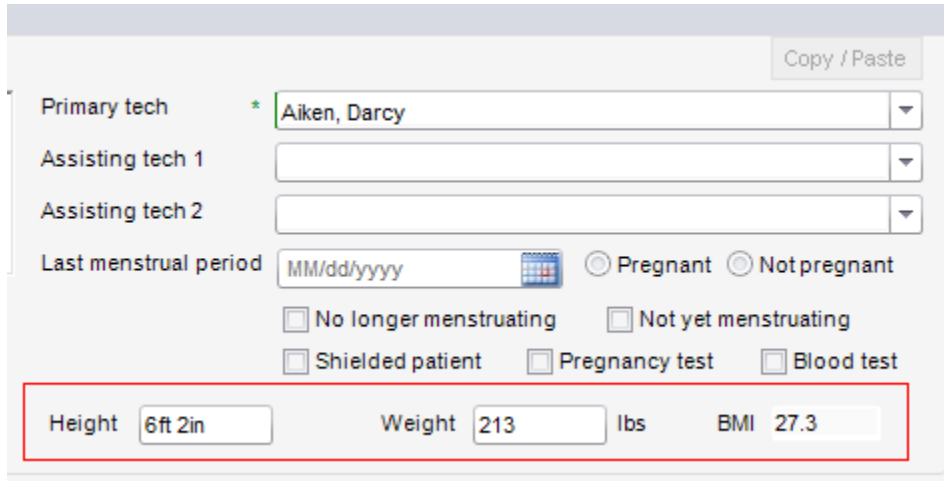
Setting	Default value	
LegacyInterfaceMode	True	Changes in 45, 45.1 and 2016.1 for some customers required interface files to be updated. This setting will allow pre-existing customers to continue to use their current interfaces without adjustment.

NEW FEATURES AND ENHANCEMENTS

TECHNOLOGIST

6477 - DISPLAY THE HEIGHT AND WEIGHT FIELDS ON THE TECH DOCUMENTATION SCREEN

It was observed that at some sites the patient weight was being re-typed into the Order Notes field, to save the technologist from having to select the MU tab simply to see the weight. At other sites, the technologists were taking the extra time to select the MU tab to see the patient weight, or were simply ignoring this step to save time. Therefore, the patient weight, height, and BMI are now also displayed on the tech 'Documentation' tab to eliminate these extra steps.



The screenshot shows a form for technologist documentation. At the top right is a 'Copy / Paste' button. Below it are three dropdown menus for 'Primary tech' (selected as 'Aiken, Darcy'), 'Assisting tech 1', and 'Assisting tech 2'. The 'Last menstrual period' field is followed by a calendar icon and radio buttons for 'Pregnant' and 'Not pregnant'. Below these are three checkboxes: 'No longer menstruating', 'Not yet menstruating', and 'Shielded patient'. Further down are two more checkboxes: 'Pregnancy test' and 'Blood test'. At the bottom, a red box highlights the 'Height' field (6ft 2in), 'Weight' field (213 lbs), and 'BMI' field (27.3).

Technologists can edit the height and weight here, and the values will be updated on the MU tab. BMI is calculated automatically based on the height and weight values.

11031 - CREATE GFR CALCULATOR

Glomerular filtration rate (GFR) is a test used to check how well the kidneys are working. Specifically, it estimates how much blood passes through the glomeruli each minute. Glomeruli are the tiny filters in the kidneys that filter waste from the blood.

To eliminate the need for technologists to navigate to an external website or application to calculate GFR, we now have the ability to add a conditional tab that will include a GFR calculator within RIS.

eGFR Calculator

Creatinine Units mg/dL umol/L

Sex Male Female

Race Black Other

Age

eGFR 79 ml/min/1.73m²

Conditional Tab showing GFR calculator

The calculator uses the following logic:

For creatinine in $\mu\text{mol/L}$:

$$\text{eGFR} = 32788 \times \text{Serum Creatinine}^{-1.154} \times \text{Age}^{-0.203} \times [1.210 \text{ if Black}] \times [0.742 \text{ if Female}]$$

For creatinine in mg/dl:

$$\text{eGFR} = 186 \times \text{Serum Creatinine}^{-1.154} \times \text{Age}^{-0.203} \times [1.210 \text{ if Black}] \times [0.742 \text{ if Female}]$$

Creatinine levels in $\mu\text{mol/L}$ can be converted to mg/dL by dividing them by 88.4. The 32788 number above is equal to $186 \times 88.4^{1.154}$.

How to enable the feature:

External customers will be instructed to contact the eRAD Support team for assistance with enabling the GFR calculator.


eRAD Support:

Use the *QuestionnaireUtil* command line utility to publish the calculator, which has been placed in source control under source\DigitalForms\GFR.xml.

Once deployed, use the Conditional Tabs editor in RIS to configure the calculator to be displayed for the desired screens/studies.

11826 - DISPLAY THE USER ID (AND DATE) OF THE TECHNOLOGIST WHO VERIFIED THE ID BESIDE THE TECH VERIFIED ID CHECKBOX ON THE PERFORM EXAM SCREEN

eRAD RIS has the ability for the individual responsible for injecting contrast to indicate that they have verified the patient’s ID. RIS will now display and store the name and date of the injection ID verification on the Exam Details tab within the Contrast Injection workflow. If configured to require a sign off by the Injection Physician, the name and date are similarly recorded in this section.



The screenshot shows a form titled "Contrast Injection Details" with two checked checkboxes. The first checkbox is "ID verified (injector)" with "Verified by: Yeo, Dale (902) 555-5555" and "Verified date: 09-28-2015 14:50". The second checkbox is "Injection signed" with "Signed by: Yeo, Dale (902) 555-5555" and "Signed date: 09-28-2015 14:53".

Field	Value
<input checked="" type="checkbox"/> ID verified (injector)	Verified by: <u>Yeo, Dale (902) 555-5555</u> Verified date: 09-28-2015 14:50
<input checked="" type="checkbox"/> Injection signed	Signed by: <u>Yeo, Dale (902) 555-5555</u> Signed date: 09-28-2015 14:53

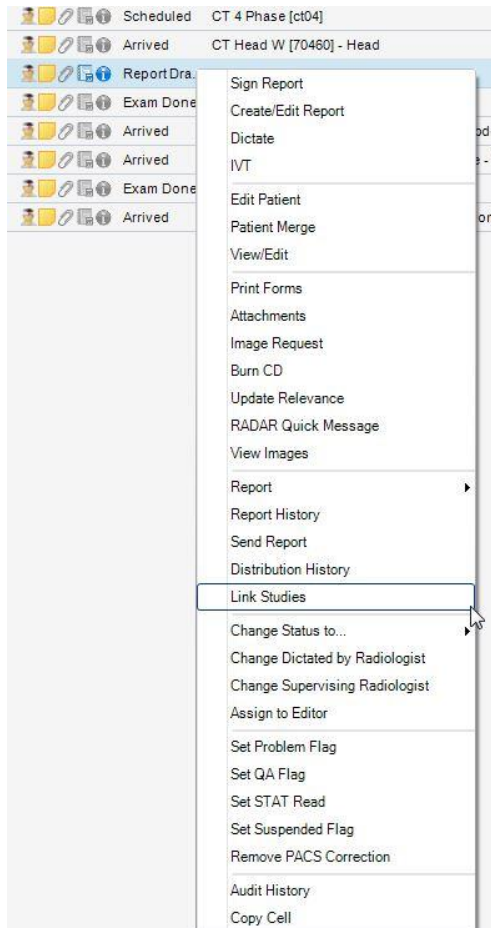
RADIOLOGIST

10433 - VOICE ENABLED PICK LIST OPTIONS (M*MODAL ONLY)

Pick List options are now voice enabled in M*Modal dictation mode. A voice command can be created for each pick list option and the commands become available when the radiologist selects a picklist field. The cue takes the form of “pick” + display text of the pick list option. There is also a generic cue “pick option” + list position (1, 2, 3, etc.).

12334 - MANUAL LINK AND UNLINK STUDIES CONTEXT MENU

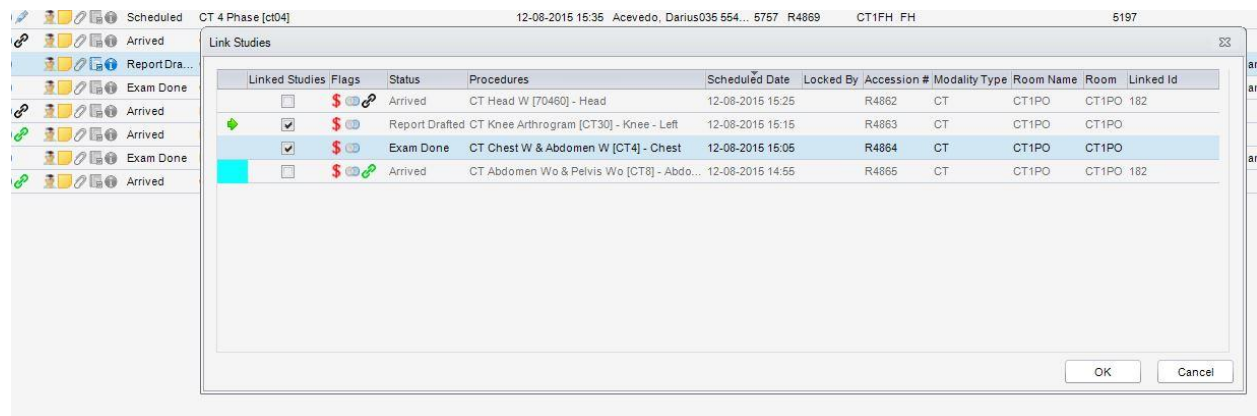
Previously, linked reporting in eRAD RIS could only be done when a Procedure Plan was used, and did not include the ability to manually link or unlink studies on demand. This prevented users from reporting on multiple exams together if they had not initially been scheduled/registered using the appropriate Procedure Plan. It is now possible to manually link or unlink exams in the Patient Folder via the right-click context menu option **Link Studies**. For this phase of linked reporting, the exams must be on the same Order to be eligible for linking.



The menu will only be available for exams which qualify as a primary study to link others into.

Manual linking can only occur prior to signing. Exams with existing interpretations cannot be linked into another primary study; they will first have to be reset to Exam Done.

When selecting the Link Studies option, the selected row in the Patient Folder will default as the Primary Study. The following window will open to allow the user to select the exams which should be linked to the Primary Study.



The manual linking screen will only show rows from the same order as the targeted primary study. Any row that does not qualify to be linked into the primary study will be a disabled row.

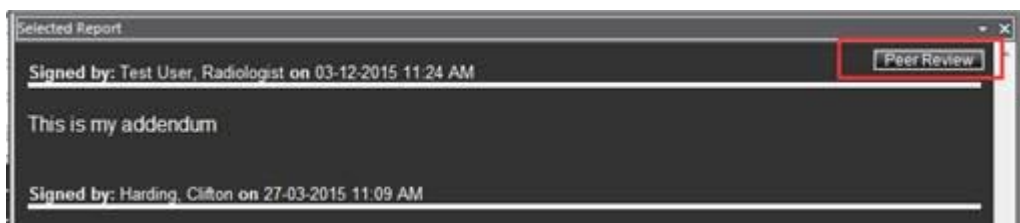
When linking, if the primary exam is post Exam Done status, then secondary exams which are at least at Exam Done will have their status sync with the primary. When *unlinking*, if the primary exam is post Exam Done status, then secondary exams are rest to Exam Done status after being unlinked.

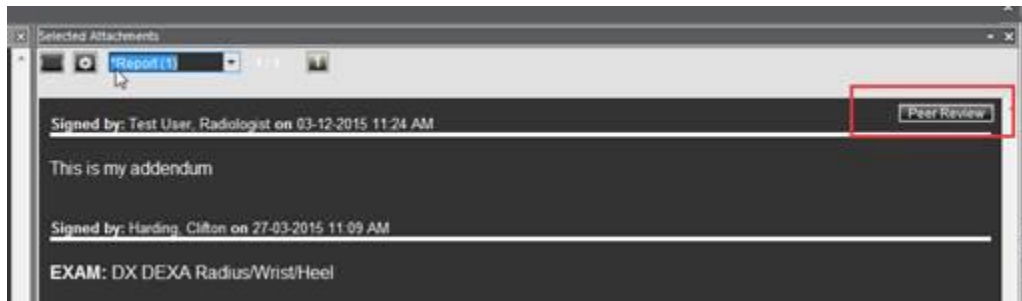
How to enable the feature:

To manually link or unlink exams, a user must have the access string *Clinical.Linkstudies* set to Full. Default access is none.

12682 - MOVE PEER REVIEW ACTION BUTTON TO SELECTED REPORT AND SELECTED ATTACHMENTS PANELS, AND THE REPORT DATA NUGGET

The Peer Review button was located in an area that was inconvenient for many radiologists, due to the placement of panels in their reporting layout. The button has now been moved to the areas in which a radiologist may view a prior report for which they may choose to perform a Peer Review: the panels for Selected Report and Selected Attachments, as well as the Report Data Nugget.

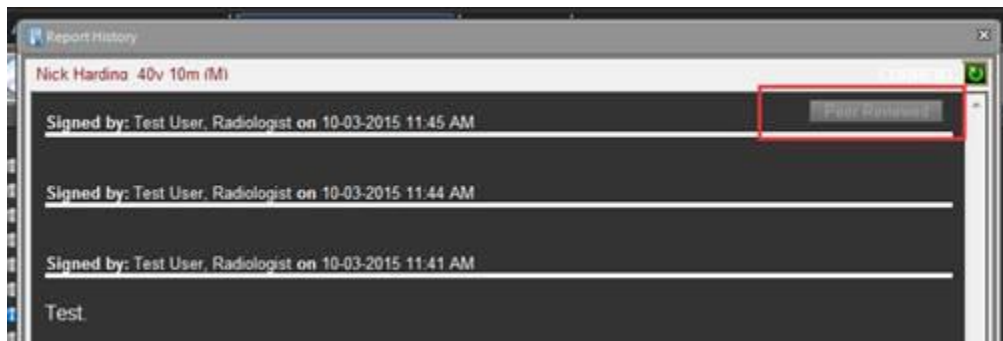




With this change, users can also now peer review via the Report Data Nugget in the main patient folder or within the patient folder panel in the reporting screens.

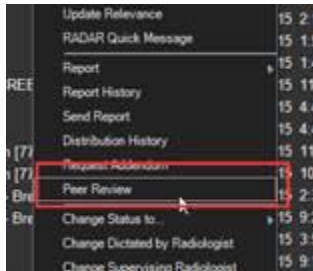
In addition, some rules have been added to enable or disable the Peer Review button appropriately. The button is enabled and visible for all reports the user is permitted to peer review. If the user touched the report (dictated, contributed or signed) the button will *not* be visible. This helps reduce clutter on the screen as it would not be appropriate to peer review one's own report.

If the user previously peer reviewed the report, the button will be visible but disabled. This will indicate to the user that they have already peer reviewed the report. The text in the disabled button will read "Peer Reviewed."



The prior Peer Review access buttons in the context menu and the patient folder panel in the Reporting screen have been removed.





How to enable the feature:

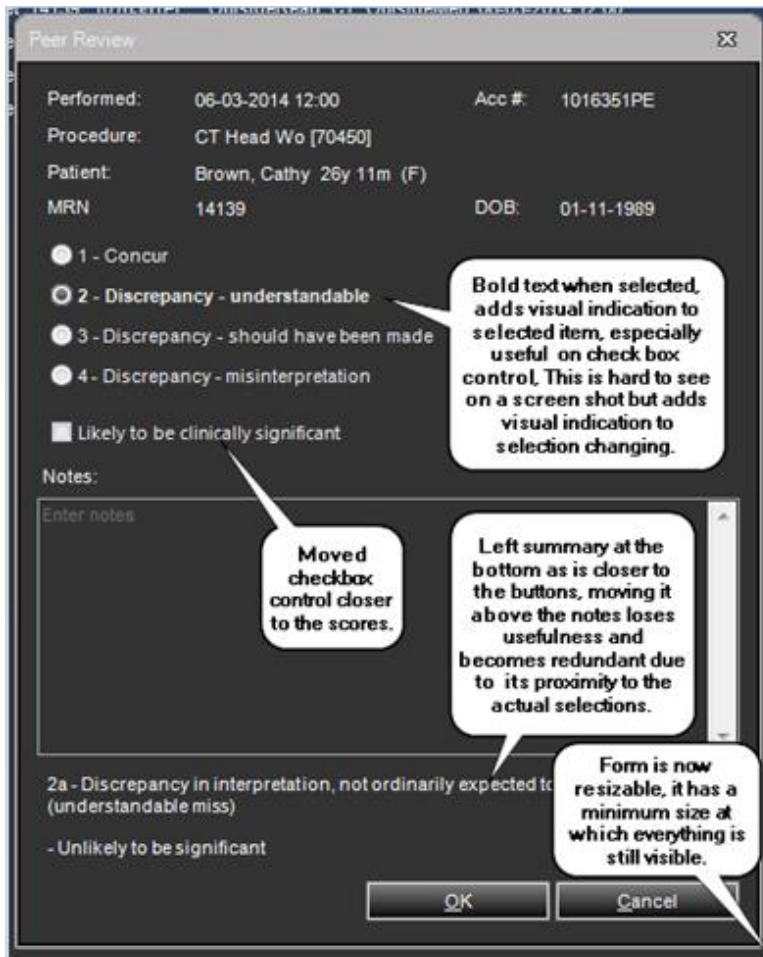
There is an existing access string “*Clinical.PeerReview*” which needs to be enabled for the button to appear.

12445 - REDESIGN PEER REVIEW WINDOW TO BE MORE INTUITIVE

Improvements were made to make the layout of the Peer Review window more intuitive, particularly when choosing between subcategories. The clinical significance checkbox has been moved and selection cues have been added to bold the active item.

The same changes are reflected in the Peer Review control in the Peer Review QA screen.

The changes result in a workflow with a top down pattern that reduces the need for the user to bounce between the top and bottom of the window, along with reduced visual clutter.



These changes are made in an ongoing effort to enhance the Peer Review capabilities in eRAD RIS.

8280, 8281 - DIFFERENTIATE BETWEEN AN ACTUAL RADIOLOGIST AND ANOTHER PERSON WITH THE RADIOLOGIST RESOURCE SETTING

It is often necessary to assign radiologist capabilities to a non-radiologist for various operational needs. However, since this user is not accredited as a radiologist, it is dangerous to allow them the power to sign patients' reports.

eRAD RIS now supports an additional flag called 'confirmed radiologist.' This flag can only be assigned by a specific type of system administrator, instead of all users with the 'RIS Administrator' role. When this flag is added or removed, it is stored in an audit trail along with the following information:

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- When the flag was changed.
- The user who changed the flag.
- The IP address of the user who changed the flag.
- The radiologist for whom the flag was changed.
- Notes describing the change (e.g. confirmed_radiologist_flag changed from 'N' to 'Y').

The radiologist workflow has been updated so the RIS will track if a report was signed by a ‘confirmed radiologist.’ This will allow a system administrator to easily track if any diagnostic reports have been signed by someone who has not been flagged as an actual radiologist.

A management report called Confirmed Radiologist Audit has been added to the Maintenance folder in eRAD RIS. It has a data range as a parameter and presents the following information:

- A listing of all radiologists (full name and NPI) who have the Confirmed Radiologist Flag enabled.

Confirmed Radiologist Audit

The following users are identified as having the Confirmed Radiologist flag enabled.

Person Name	NPI
Baird, Adam John (bairdj)	asdf3w2qfasefd
MacDougall, Spencer (spencer)	45634563546
Noye, Darcy T (darcyn)	2587411235
Test User, Radiologist (radtest)	20135
Count: 4	

Confirmed Radiologist Audit

Confidential and Proprietary
Page 1 of 4

Date Run: 11-13-2015 11:58
Spencer-Laptop\formsguestuser

- A listing of all users who have **full** access to the *Config.LookupEditor.Personnel.ConfirmedRadiologistFlag* access string which enables the user to set the Confirmed Radiologist flag.

Access string = Config.LookupEditor.Personnel.ConfirmedRadiologistFlag		
The following user groups and users have Full access to set the Confirmed Radiologist flag.		
The default access level for this access string is currently set to: None		
User Group	User id	User Name
Access to the Confirmed Radiologist Flag		
	radtest	Test User, Radiologist
	spencer	MacDougall, Spencer
Total Count		2

Confirmed Radiologist Audit

Confidential and Proprietary
Page 2 of 4

Date Run: 11-13-2015 11:58
Spencer-Laptop\formsguestuser

How to enable the feature:

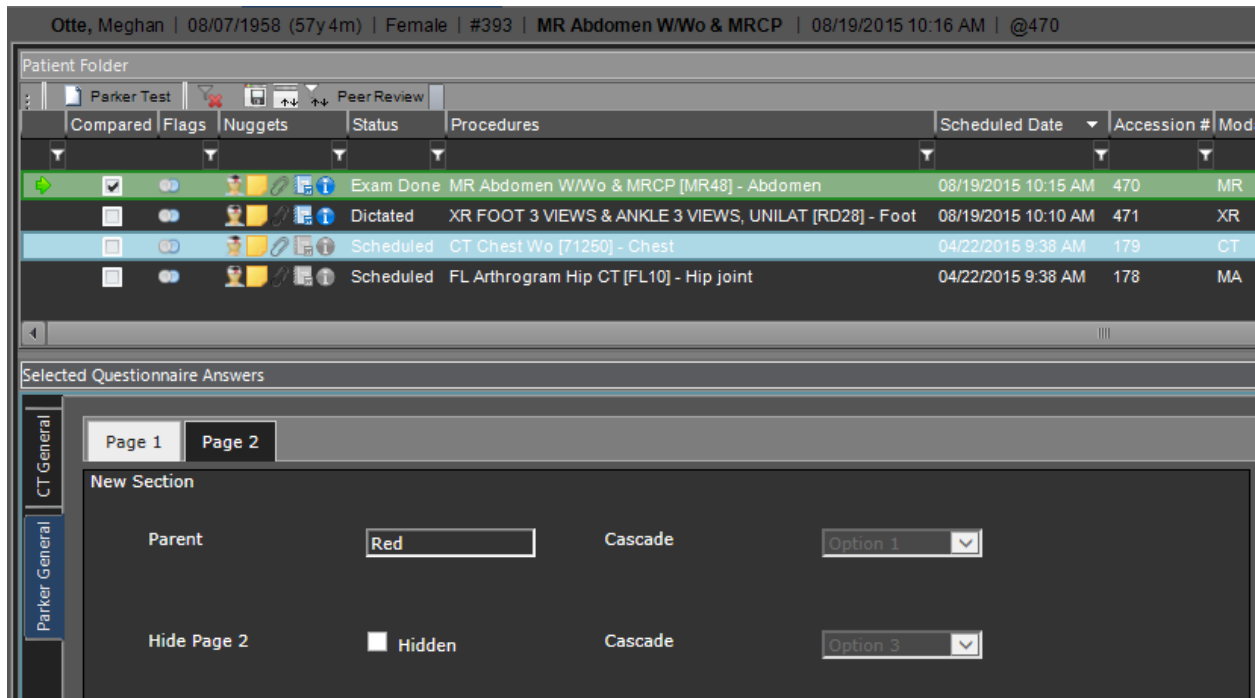
To set or remove the Confirmed Radiologist flag, the RIS administrator must first create a user group which has access to set this flag. This is accomplished by creating a group with permission to the *Config.LookupEditor.Personnel.ConfirmedRadiologistFlag* with an Access Level of Full and assign to the appropriate users.

Once the administrator has this permission, the following flag can now be set in the Personnel editor:

The screenshot shows the 'Personnel editor' interface with several tabs: General, Resource, Account, Notes, Attachments, Preferences, and Referring Preferences. The 'Resource' tab is active. The 'Resource Type' section includes checkboxes for Referring physician, Radiologist (checked), Surgeon, Editor, Technologist, Unknown referring, UM Reviewer, and Injection Physician. The 'Referring Flags' section includes checkboxes for Direct referral program, Pre-auth program, and Gold card. The 'Resource Information' section contains fields for NPI (20135), UPIN, License #, Specialties, Medical groups, and Contact type. The 'Confirmed radiologist' checkbox is checked and highlighted with a red box. Other checkboxes include Unknown NPI, Registered in PECOS, DEA, Primary state license, and Sign level (Contributor A).

12598 – ADD “SELECTED DIGITAL FORMS” VIEWER IN REPORTING SCREENS

In the Reporting screen, radiologists required a method to view data from digital forms that were completed for prior studies. A new panel is now available for the Reporting screen: Selected Digital Form Answers. The data displayed in this panel will update to match available Digital Forms for the exam selected in the Patient Folder control, in the same way that the Selected Attachments and Selected Breast Diagram panels function. When the selected row in the patient folder changes, the digital form tabs in the Selected Digital Form Answers panel change to those for the selected row.



How to enable the feature:

To view the new panel, a user must have the access string *View.DigitalFormAnswers* set to Full.

INSURANCE ELIGIBILITY & VERIFICATION

8540 - DO NOT COLLECT ANY COPAY AMOUNT TO COLLECT, IF SECOND INSURANCE IS MEDICAID

It is desired that the RIS not display an amount to collect if the second insurance is Medicaid. This feature can also be used to set the Amount to Collect to zero dollars when any configured insurance carrier is used at any level (primary, secondary, tertiary, etc.).

How to enable the feature:

An insurance carrier can be configured to trigger a zero dollar amount to collect by setting the Carrier lookup table column *collect_with_multiple_carriers_flag* to 'N.'

Carrier Code	Description	Collect With Multiple Carriers Flag	Collect Co Pay Flag	Collect Co Insurance Flag	Collect Deductible Flag	Phone	Fax	Address1	Address2
Contains:	Contains:	Contains:	Contains:	Contains:	Contains:	Contains:	Contains:	Contains:	Contains:
ZAZB	VANTAGE MEDICAL GROUP	Y	Y	Y	Y			PO BOX 85909	
ZEET	RPNBLUE CROSS (CAP)	Y	Y	Y	Y			PO BOX 51420	PO BOX 5...
ZEFC	RPNBLUE CROSS (FFS)	Y	Y	Y	Y			PO BOX 51420	PO BOX 5...
Cigna	Cigna	Y	Y	Y	Y				
greatWest	Great West Life	Y	Y	Y	Y				
test	cigna	Y	Y	Y	Y	(123) 123-1233	(231) 233-...		
medicare	Medicare	N	Y	Y	Y				

By default, the RIS will always collect the copay amount when there are multiple insurance carriers on an order. However, if the *collect_with_multiple_carriers_flag* is set to equal 'N' for any of the selected carriers, the RIS will not collect any copay and amount to collect will be zero.

11155 - ADD CONFIGURATION OPTION TO OMIT COPAY, COINSURANCE OR DEDUCTIBLE BY PAYER OR CARRIER

Occasionally, it may be necessary to temporarily stop collecting copay, coinsurance, and/or remaining deductible for a particular carrier. In the Carrier lookup table, there are now options to set the following flags:

- collect_deductible_flag
- collect_co_insurance_flag
- collect_co_pay_flag

Carrier Code	Description	Collect With Multiple Carriers Flag	Collect Co Pay Flag	Collect Co Insurance Flag	Collect Deductible Flag	Phone	Fax	Address1	Address2
Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼
ZA28	VANTAGE MEDICAL GROUP	Y	Y	Y	Y			PO BOX 85909	
ZEET	RPNBLUE CROSS (CAP)	Y	Y	Y	Y			PO BOX 51420	PO BOX 5...
ZEFC	RPNBLUE CROSS (FFS)	Y	Y	Y	Y			PO BOX 51420	PO BOX 5...
Cigna	Cigna	Y	Y	Y	Y				
greatWest	Great West Life	Y	Y	Y	Y				
test	cigna	Y	Y	Y	Y	(123) 123-1233	(231) 233-...		
medicare	Medicare	N	Y	Y	Y				

When receiving Eligible API returns, if the flag for deductible, coinsurance, or copay is set to 'N', the value for that component will default to zero. If all three flags are set to 'N,' the amount to collect will be zero dollars.

12249 - INSURANCE VERIFIED CHECKBOX DOES NOT RESET WHEN EXAM IS RESCHEDULED

The Insurance Verification Required workflow in eRAD RIS is configured by Modality Type Code. For example, a practice could have Insurance Verification Required enabled for all exams in the CT and MRI modalities. This will push the order to the IVT worklist and also prompt the user to verify the insurance when registering the patient.

Often patients who have had their insurance verified have to reschedule a procedure. Previously, eRAD RIS would not reset the insurance verification status when the procedure was rescheduled. However, some clients may want to re-verify the insurance if the exam is rescheduled for a future date, since the insurance policy could expire.

A new system configuration value called *ResetInsuranceVerifiedOnReschedule* has been added to eRAD RIS with a default value of False.

System Config Code	Value	Default	Description
Contains: resch	Contains: ▼	Contains: ▼	Contains: ▼
ResetInsuranceVerifiedOnReschedule	True	False	(value = bool) Determines if insurance verified flag is reset when rescheduling a study

If this value is set to True and the insurance verification status is “Verified,” the system will reset the insurance verification status to “Required” and push the study back to the IVT worklist.

If the *ResetInsuranceVerifiedOnReschedule* system configuration value is set to False, the insurance verification status will remain as “Verified” when rescheduling.

How to enable the feature:

Set the *ResetInsuranceVerifiedOnReschedule* system configuration vale to True.

RECEPTION

8615 - ABILITY TO ENTER BLANK CREDIT CARD INFORMATION

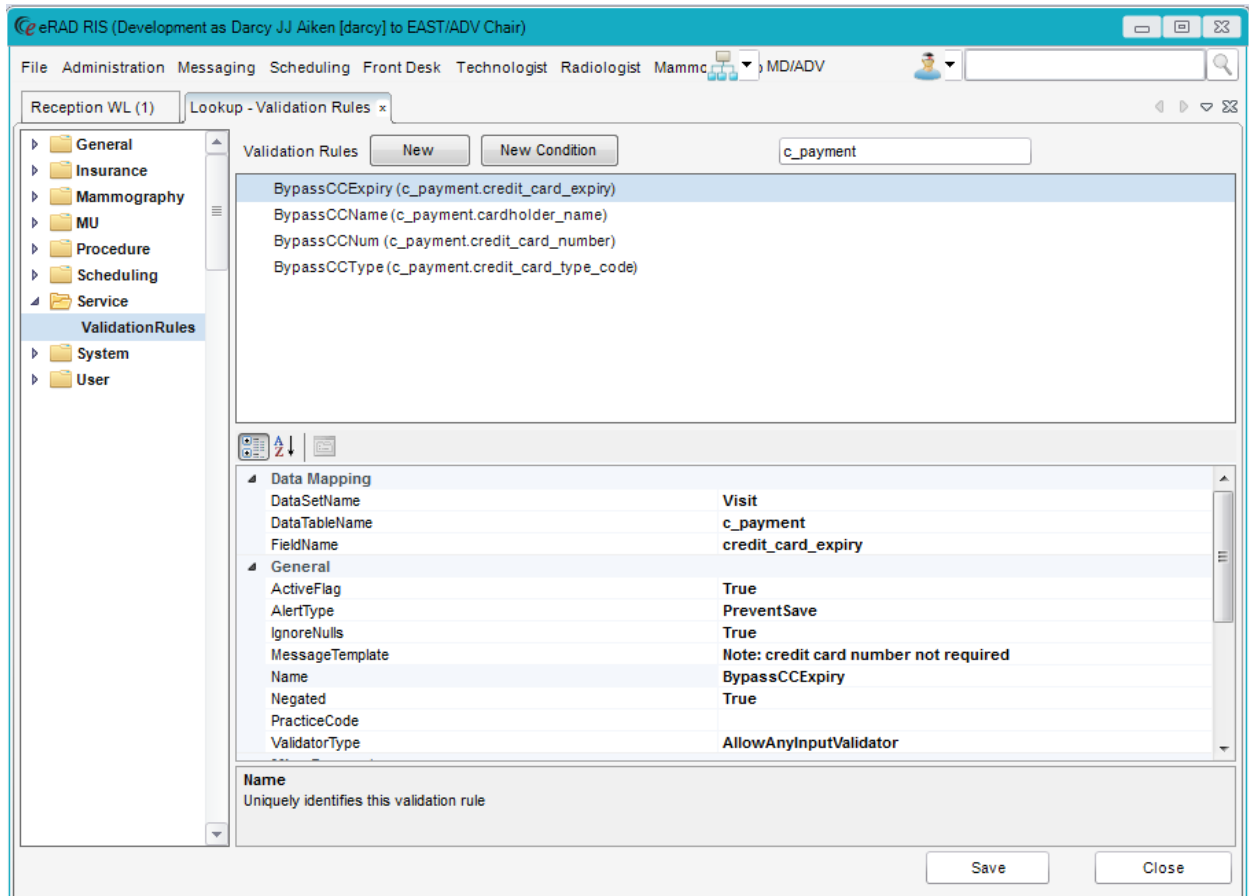
The RIS currently requires credit card information to be entered if the payment type is 'credit card.' It was desired by a number of customers to allow the custom validation framework to manage these required fields, which would allow them to be configured as optional.

To address this, there is a new validator type '*AllowAnyInputValidator*' which will allow service to configure and override the core validation rules. *AllowAnyInputValidator* will allow a field to be null or contain any value that is permitted by the database.

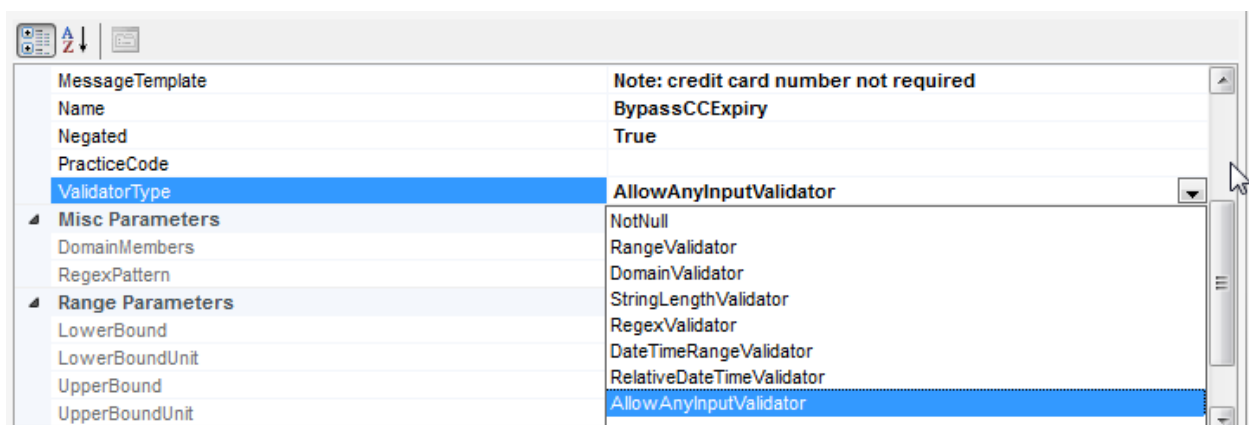
How to enable the feature:

External customers will be instructed to contact the eRAD Support team for assistance with adjusting validation rules.

The upgrade scripts will insert new rows into the *_validation_rule* table on the 4 credit card related fields with active_flag = 'N.' In order to "opt in" to these more relaxed rules, the active_flag can be set to "Y" and once users log in they will obtain the new configuration.



Validation Rules Editor showing the new possible validation rules



Specifying a validator type of AllowAnyInputValidator

INTERFACING

8667 - REMOVE XML NODES FROM MESSAGE

The messages sent out from RIS to external systems are large and may contain data that is irrelevant to the receiving system. It is desirable to have the ability to configure the data that is sent to the interface engine which will save bandwidth and cpu cycles in the interface engine (Mirth, Ensemble, etc.).

To resolve this concern, the RIS now features a configurable database table of xpath statements that will cause the wedge to remove content from the message. This removal of data can be prior to the expanding nodes such as `procedure_code`, `*_person_key`, etc. and some can be after. This removal is performed before the message is sent to Mirth.

Example: The Wedge expands `site_code` but the downstream recipient does not need the site's `last_updated`, `last_updated_by_user_id`, or `notes` nodes. Notes in particular are sometimes quite large.

How to enable the feature:

External customers will be instructed to contact the eRAD Support team for assistance with adjusting validation rules.

The `l_queue_container_pruning` table has been created and added to the QueueSubscription lookup table. This enables it to be edited from the configuration editor in the RIS UI. The `l_queue` table has also been added to provide a list of queue names. This change has been retroactively fitted to have a foreign key relation from the `l_queue_subscription` table.

The pruning table has the following columns:

`active_flag` – determines whether or not the rule is used at all.

`execution_order` – determines the order in which the statements are used. This ordering takes effect after the rules are split based on the `pre_expansion_flag` column. This has no effect on the end result but can be used to optimize the pruning.

`xpath` – determines the nodes to which the pruning rule applies. It is recommended to thoroughly test the xpath in order to verify it behaves correctly before activating the rule. Notepad++ has a `pre_expansion_flag`. If set to Y, the rule is applied before the lookups are expanded. Otherwise the rule is applied after.

`description` – describes what nodes the rule is intended to remove.

Entries in the table used during development testing looked like this:

queue_name	active_flag	execution_order	xpath	pre_expansion_flag	description
MIRTH	Y	0	/StudyContainer/Patient/c_patient/deleted_flag	Y	NULL
MIRTH	Y	0	//l_person/note	N	NULL
MIRTH	Y	0	//l_child_person[active_flag='N']	N	NULL

In order to use this feature, the *LegacyInterfaceMode* flag must be set to False. This feature should be used with caution, as it has the potential to remove too much from the message.

11947 - RADAR INTERFACE FOR SITE SPECIFIC REMINDERS/CONFIRMATIONS SHOULD FILTER OUT PATIENTS WHO HAVE 'OPTED-OUT' OF REMINDERS

On the Patient Tab, there is an option to indicate whether the patient would like to opt-out of Reminders. If this box is checked, RADAR will filter these patients out when sending reminders/confirmations.

The screenshot shows the 'Patient' tab selected in a software interface. A red box highlights the 'Patient' tab. A red arrow points from the 'Patient' tab to the 'Do not send reminders' checkbox, which is also highlighted with a red box. The interface shows various patient information fields like Prefix, First, Last, Middle, Sex, DOB, Address, and City.

ALL

8446 - SUPPORT EMAIL OPT-OUT FOR PATIENTS

Some patients will want to opt-out of email communications for surveys and marketing campaigns. To address this need, two radio buttons have been added to the Contact Information on the patient tab in RIS. The options available under Marketing Messages are “Permitted” and “Prohibited.”

Contact Information

Address 1	215 Duke Street	Zip	90610	Home phone	5559998123
Address 2	Apt 678	Country	US	<input type="checkbox"/> No alternate phone	
City	Whittier	Marketing messages <input checked="" type="radio"/> Permitted <input type="radio"/> Prohibited		Work phone	
State	California	Email	test@mail.com	Cell phone	
Preferred contact method		Preferred delivery method	Email	<input type="checkbox"/> Do not send reminders	

Note that eRAD RIS does not directly distribute marketing messages at this time, so this is provided as a data collection point for eventual extraction.

7100 – ADD PATIENT ZIP CODE TO PATIENT SEARCH SCREEN

In order to enhance the search results and increase the odds of finding the correct patient, eRAD RIS now supports searching by zip code. This search is based on an **exact match** to the primary zip code of the patient.

The Zip code column is also included in the returned results grid after the State column.

Patient Search

Search Criteria

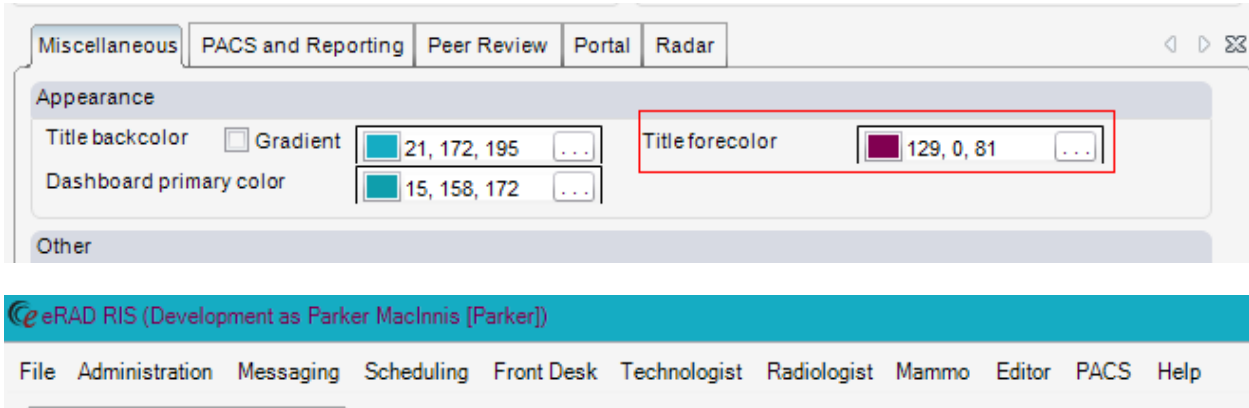
First Name:	<input type="text"/>	Birth Date:	MM-dd-yyyy
Last Name:	<input type="text"/>	Phone #:	<input type="text"/>
<input type="checkbox"/> Search Other Variations		Zip Code:	95620
MRN:	<input type="text"/>	<input type="button" value="Search"/>	<input type="button" value="Reset"/>

New Pt + Apt ▾

First Name	Last Name	Middle Name	Birth Date	MRN	Issuer	Gender	Address	City	State	Zip Code	Home Phone	Mobile Phone
Frances	Smith		09-09-1980	6	system	F	345 Fox Drive	Liberty Farms	CA	95620		

12645 – ALLOW TEXT COLOR TO BE ADJUSTED IN TITLE BAR OF RIS APPLICATION

In build 38, the ability was added to change the background border color of the RIS application to enable a visual clue when the user changed practices. The title foreground (text) color could not be set. This could make the title difficult to read when the foreground (text) color was not visually distinct from the chosen background color. This can now be adjusted in the Add/Edit Practice window in the Organization table. If no color is selected, it will default to black, unless the user is in dark theme, which will default to white.



12638 - ADD ORDER # COLUMN TO IVT, RECEPTION, AND TECHNOLOGIST WORKLISTS

The Order # column has been added to the IVT, Reception, and Technologist worklists in eRAD RIS.

The screenshot shows a 'Reception WL (8)' window with a table of worklist items. The 'Order #' column is highlighted with a red arrow. The table contains the following data:

Flags	Status	Order #	Procedures	Scheduled Date	Referring	Room	Accession #
🏠 \$ 📅 📄 📝	Scheduled	5502	CT Chest W [71260] - Chest	10-20-2015 10:30...	Refer, Self	CT1EL	5092
\$ 📄 📝	Checking In	5505	CT Chest W [71260] - Chest	10-20-2015 11:30...	Smith, Alliso	CT1EL	5095
📄 📝	Checking In	5506	CT Chest W [71260] - Chest	10-20-2015 1:00 PM	Smith, Alliso	CT1EL	5096
\$ 📄 📝	Checking In	5507	CT Chest W [71260] - Chest	10-20-2015 1:30 PM	Smith, Alliso	CT1EL	5097
\$ 📄 📝	Checking In	5508	CT Chest W [71260] - Chest	10-20-2015 2:00 PM	Smith, Alliso	CT1EL	5098
\$ 📄 📝	Checking In	5509	CT Chest W [71260] - Chest	10-20-2015 2:30 PM	Smith, Alliso	CT1EL	5099
📄 📝	Checking In	5510	CT Chest W [71260] - Chest	10-20-2015 3:00 PM	Smith, Alliso	CT1EL	5100
\$ 📄 📝	Checking In	5511	CT Chest W [71260] - Chest	10-20-2015 3:30 PM	Smith, Alliso	CT1EL	5101

8528 - WORKLISTS - CHANGE LOGIC FOR ACTIVITY IN PAST 15 SECONDS TO ALLOW REFRESH IF ACTIVITY IS IN ANOTHER APPLICATION

Worklists in eRAD RIS self-refresh, but there are circumstances where the system automatically suspends refreshing. Imagine for example that the user is about to click on a worklist row, then the RIS refreshes, causing the user's click to now be on a different row. If the user was not aware of this refresh, they may end up opening a study they did not intend to open. To resolve this concern, there is a feature where if the user is actively moving the mouse on the workstation, worklist refreshes are automatically suspended for a period of 15 seconds. However, the user may be working on a different application (e.g. Excel, Word, email, etc.) and while they are active on that other application, the RIS should not disable refreshing. RIS will now differentiate between activity on the RIS and activity on another application. Worklist refresh will not be suspended when activity is occurring in another application.


For supplemental information, here are the rules around worklist refreshing:

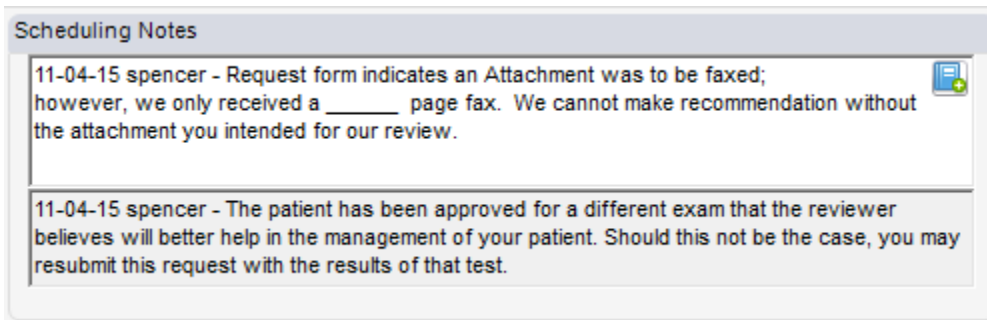
- The default WL refresh interval is 1 minute.
- If the RIS screen is locked, the refresh will not occur.
- If RIS is minimized, the refresh will not occur.
- If a radiologist reporting screen is the current tab, the refresh will not occur.
- If a transcription reporting screen is the current tab, the refresh will not occur.
- If the current tab is a WL and there has been mouse or keyboard activity in the past 15 seconds in RIS the refresh will not occur on the current Tab's WL (other WLs will refresh).


12091 - CREATE A VISUAL INDICATOR THAT A LOG CONTROL SUPPORTS AUTOTEXT

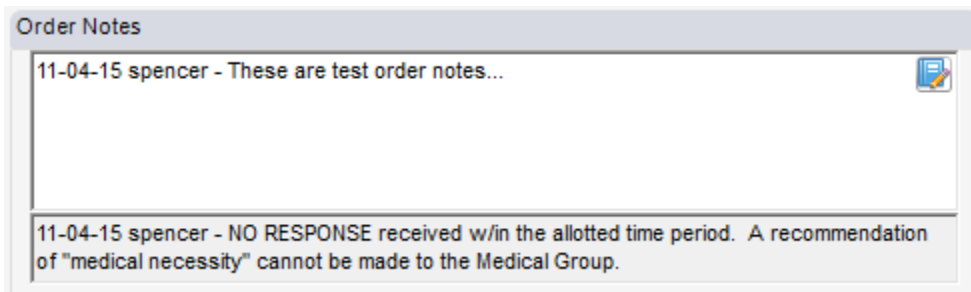
The log controls (notes fields) in eRAD RIS can be configured to support Autotext. Customer feedback has indicated that confusion can occur because the user must know to right-click in the log control in order to select 'Autotext' from the context menu. This is not intuitive as the user may try to type free text, but nothing appears if the field is configured for Autotext only and the user may believe the RIS is frozen or waiting for something to refresh.

For this reason, if a log control is configured to support Autotext, a visual indicator will now appear.

If the log control supports Autotext, a button  will appear in the upper right corner of the control. Clicking this button will launch the Autotext dialog.



If the log control supports Free *and* Autotext, a different button  will appear in the upper right corner of the control. Clicking this button will launch the Autotext dialog, but the user is also permitted to type or copy into the input area.



If the log control supports Freetext only, no button will appear.

How to enable the feature:

Log controls are configured for Autotext using the LogControl and Autotext lookups.

12140 - HELP ABOUT SCREEN SHOULD CONTAIN THE DIGITAL FORMS VERSION IN ADDITION TO THE OTHER VERSION NUMBERS

The Help About screen will now display the Digital Forms Version.



12137 – ADD THE LAST UPDATED DATE AND USER ID AS DATA ELEMENTS IN THE LIST OF DIGITAL FORMS

To assist with the management of Digital Forms, new columns were added to the Digital Forms list on the Administration page of the Digital Forms Editor to display the Last Updated date and the Last Update By User Id.

Name	Last Updated	Last Updated By	Design	Delete
Biopsy Report	21-10-2015	hardingc		

11944, 12246 – ABILITY TO CONFIGURE DIGITAL FORMS TO DISPLAY IN SPECIFIC SCREENS

Some digital forms (aka questionnaires) are only applicable to particular screens. RIS now has the ability to indicate whether the conditional tab with the digital form displays for a receptionist but not a technologist, for example.

There is now a Screen criterion in the Conditional Tab editor. This can be left blank and then the conditional tab will be eligible to be displayed on any screen, or the admin can specify one or more screens to which the digital form should be limited.

Conditional Tabs + Add

Questionnaire Name	Tab Title	Active	Display Order	Conditional Tab Type
No filter:	Contains:	Cont	Equals:	Contains:
Mammo Questionnaire	Breast Questionnaire	Y		1 General
RB - Screening Mammo Report Builder	RB - Screening Mammo	Y		1 ReportAssistant
MRI Screening Questionnaire	MRI Questionnaire	Y		1 General
MR/CT Tech Questionnaire	Additional History	Y		1

Display Criteria

Description	Last Updated	Active	BI-RADS Enabled	Procedur...	Biopsy Enabled Procedures...	Modality Type	Practice	Procedure	Body Part	Screen
Click here to add a new row										
All Practic...	11-21-2015 12:20 PM	Y	Y	N		(all)	(all)	(all)	(all)	(...)

Display Criteria

Description	Last Updated	Active	BI-RADS Enabled	Procedures Only	Biopsy Enabled Procedures Only	Modality Type	Practice	Procedure	Body Part	Screen
Click here to add a new row										
MRWorksheet	07/22/2015 11:29 AM	Y	N	N		(all)	(all)	(all)	(all)	(...)



Display Criteria including the new Screen column

Rules for Screen

Unassigned:

- Contains:
- Schedule Order (ScheduleOrder)
- Register (Registration)

Assigned:

- Contains:
- Perform Exam (PerformExam)
- ReportingRadiologist (ReportingRadiologist)
- ReportingTranscription (ReportingTranscription)
- View/Edit (ViewEdit)

➔
➜

OK Cancel

Popup dialog for assigning one or more screens

How to enable the feature:

After adding the Digital Form to the Conditional Tab editor, specify screen criteria in the lower Display Criteria grid. Leave blank to display the conditional tab containing the Digital Form on any screen.

Note: Conditional Tab Type will now serve a different purpose. The Radiologist type will be displayed to the user as 'ReportAssistant' and will be used to help govern the treatment of a digital form on the radiologist screens.

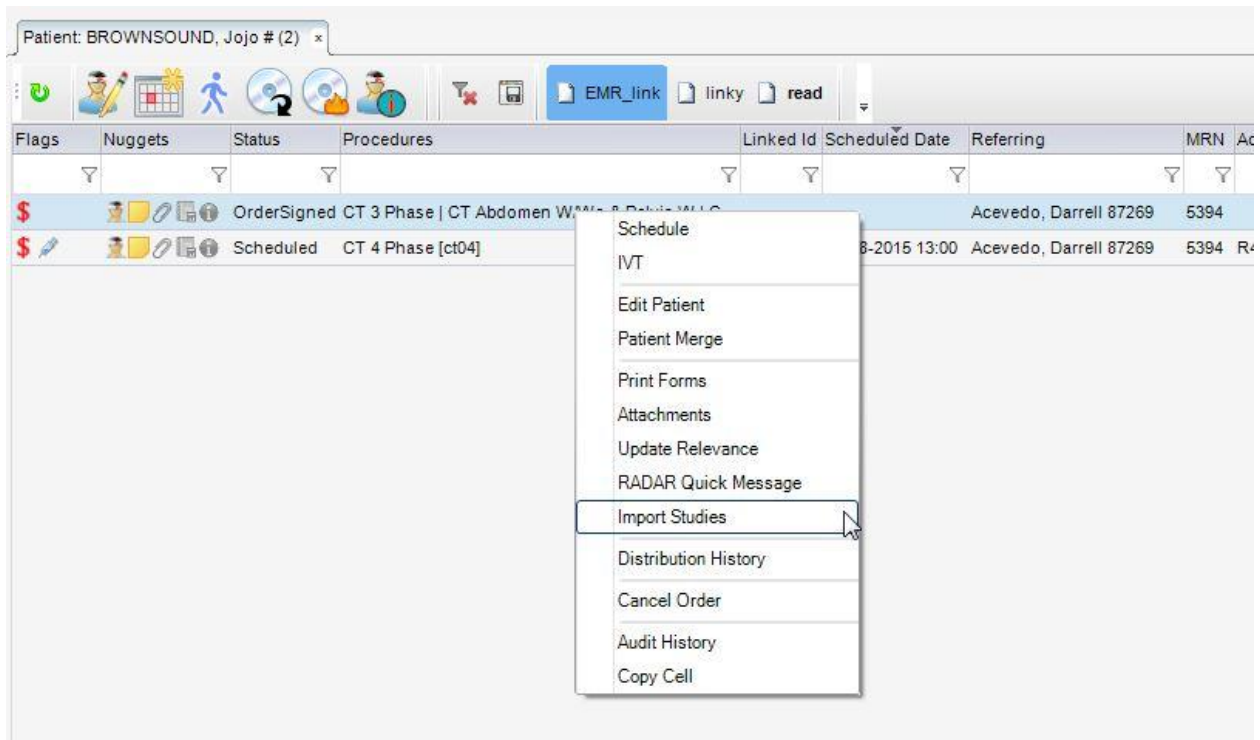
12188, 8136 - ADD FUNCTIONALITY TO ALLOW FOR MORE COMPLEX EMR ORDER MAPPING

Functionality was added to eRAD RIS to allow an authorized user to import pre-existing scheduled studies into an EMR order on an individual basis. This functionality was added because sometimes users schedule an exam without using the EMR order, and it is necessary to link them up at a later point in the workflow. If the un-used EMR order has multiple exams, a user may have a situation in which some exams have been scheduled and need to be mapped to the EMR order, but the EMR order needs to also remain available to be used for the unscheduled exams. Similarly, there may be a situation in which a patient is scheduled for multiple exams, but only one of them should be mapped to the EMR order. Consider the following examples:

- A referring physician sends an EMR order for a Carotid Ultrasound and a Brain MRI. The ultrasound is scheduled without using the EMR order. This is discovered and an administrator wants to import the scheduled ultrasound into the EMR order. However, the EMR order still needs to also exist in an Ordered status because staff is in the process of obtaining insurance authorization for the Brain MRI and it is not ready for scheduling.
- A referring physician sends an EMR order for a Knee MRI. When the patient is contacted, she also schedules a Pelvic ultrasound that is referred by another physician. An administrator later realizes and wants to import the Knee MRI to the EMR order, but the ultrasound should stay on the existing order.

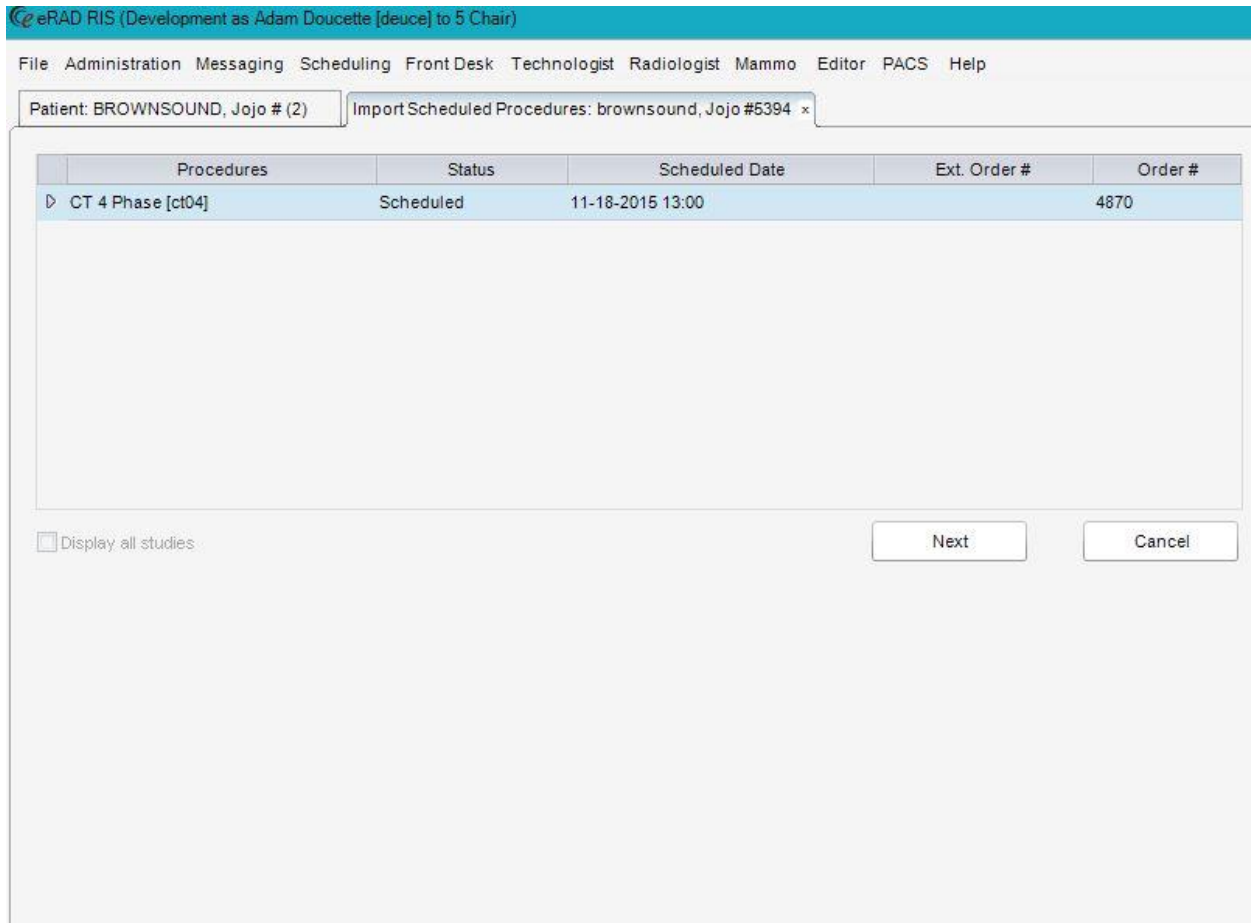
To handle scenarios of this nature, it is now possible to choose which exams to import from one order into an EMR order. If all exams are selected, the source order is cancelled after all exams are imported to the EMR order. If only a subset of exams is selected, the source order will continue to exist with the remaining studies.

In the case that a user realizes later that additional studies should have been imported to the EMR order, an authorized user can now access the Import Studies window from the right-click context menu in the Patient Folder, even after one or more procedures have already been mapped to an EMR order.

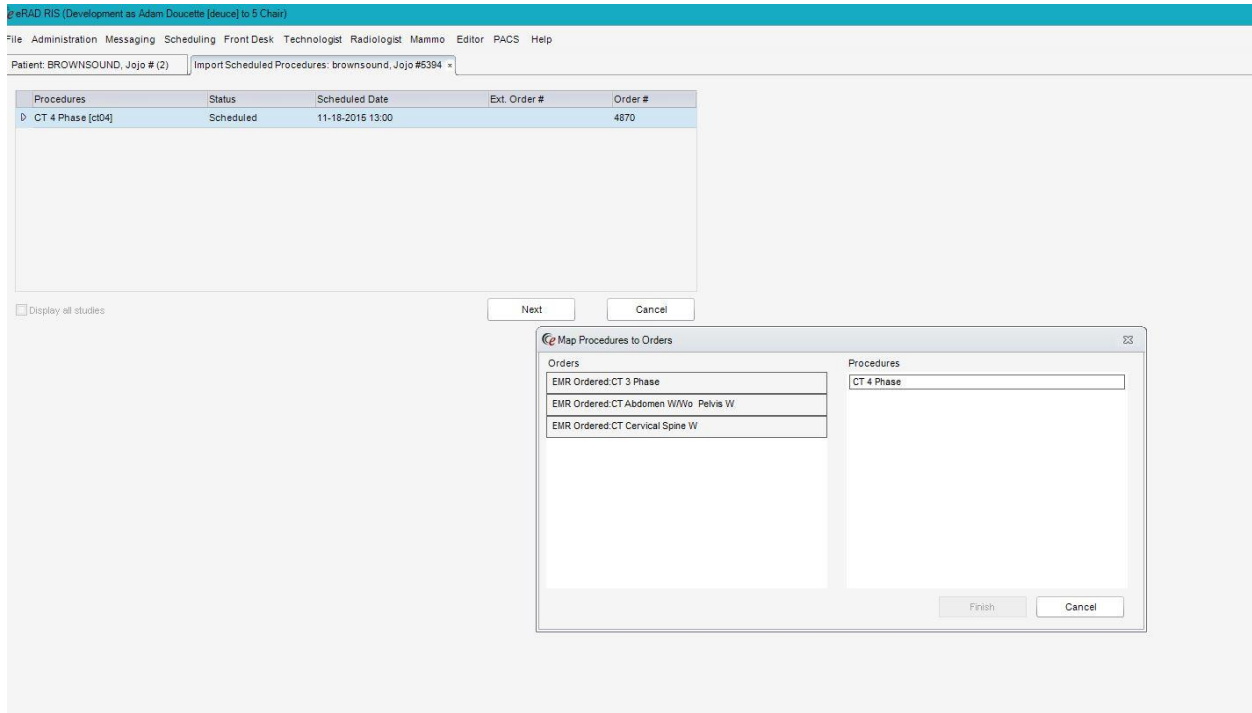


The menu item for Import Studies is available for studies in an *OrderSigned*, *Scheduled*, *CheckingIn*, or *Arrived* status. To access, the user must have the access string **Clinical.ImportStudies** set to Full.

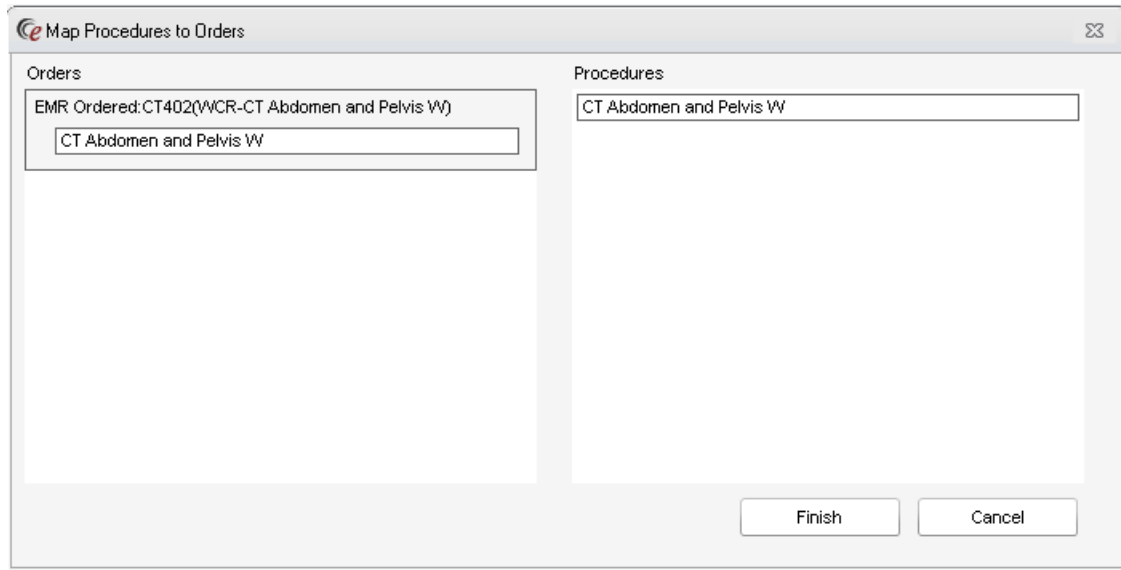
The Import Scheduled Procedures window will open in a new tab.



Clicking the Next button will display a pop-up with available Orders on the left and the Procedures on the right.

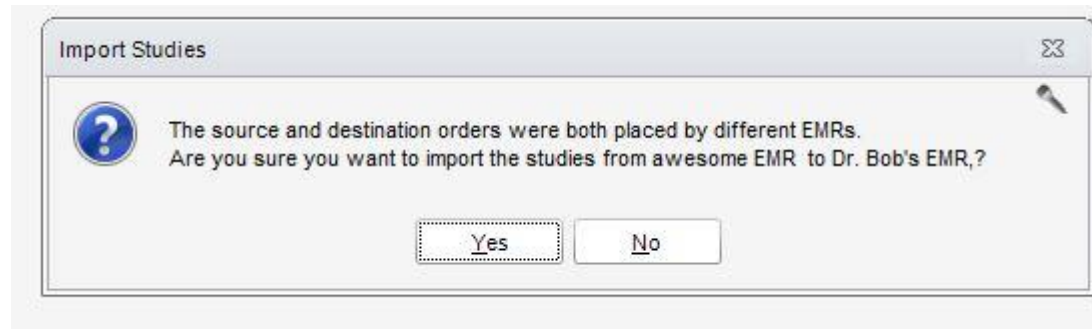


The user can match the Procedure to the appropriate EMR order by dragging.

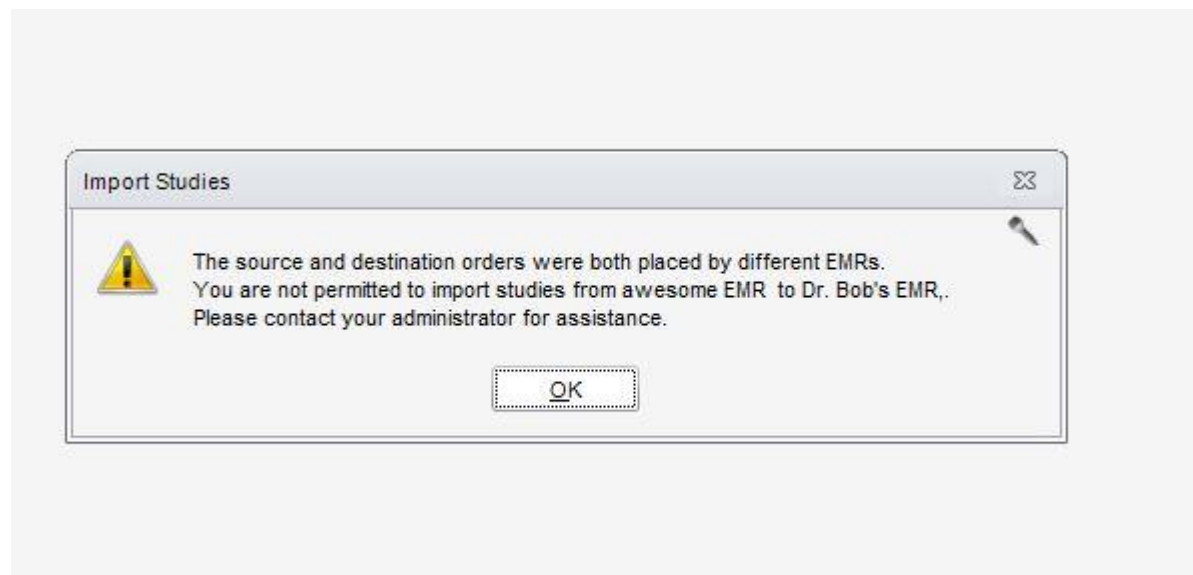


If the Procedure that is being mapped into an EMR order is already associated to a *different* EMR, a user must have additional permissions to continue. Access string **Clinical.ImportStudies.AcrossEMRs** must be set to Full for the user to continue.

They will be presented with a warning message that must be acknowledged before continuing.



If the user does not have the appropriate access to move studies from one EMR order to another, they will be presented with a message to contact their administrator for assistance.

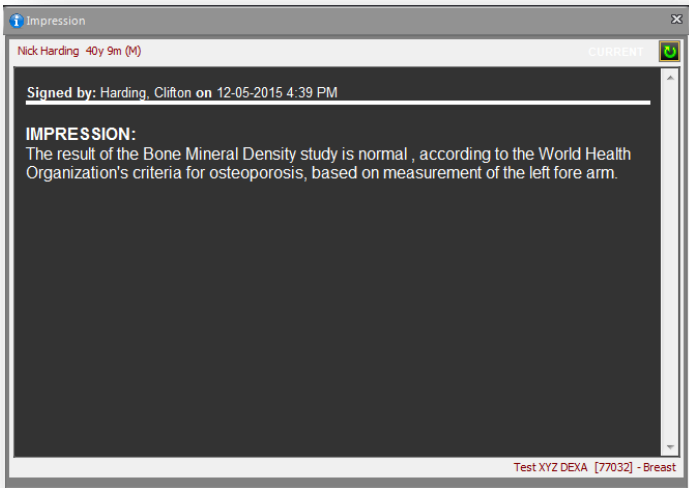


12273 - IMPRESSION NUGGET NEEDS TO SUPPORT ERAD AND POWERSCRIBE REPORTING MODES

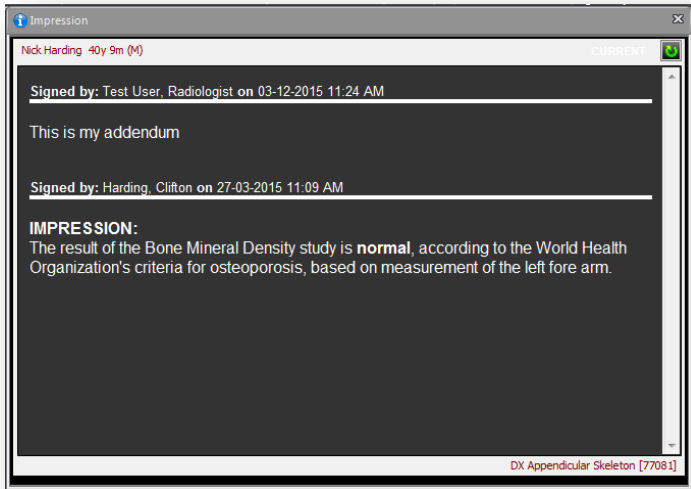
The Impression data nugget in eRAD RIS now supports PowerScribe 360 and eRAD reporting modes. Previously, the Impression data nugget only supported M*Modal sections named "Impression." The 'impression' string is now configurable so that terms such as 'conclusion' or 'assessment' can be used to drive the Impression data nugget. This also allows languages other than English to capture the impression in the data nugget.

There is now a system configurable value '*ReportingImpressionSectionStartText*' with a default value of 'IMPRESSION'. eRAD RIS will now parse the report RTF (PowerScribe 360 and eRAD reporting modes) looking for the first line that begins with '*ReportingImpressionSectionStartText*' value. When found, we select that line and all subsequent lines to be part of the impression.

When using M*Modal reporting mode, we look for sections titled '*ReportingImpressionSectionStartText*' and we will only capture the content within that section.



When a report has an addendum, we show each complete addendum in the impression data nugget (with the most recent addendum first) in addition to the Impression text. We have no way of knowing if the addendum will alter the intent of the impression so we add the complete addendum text.



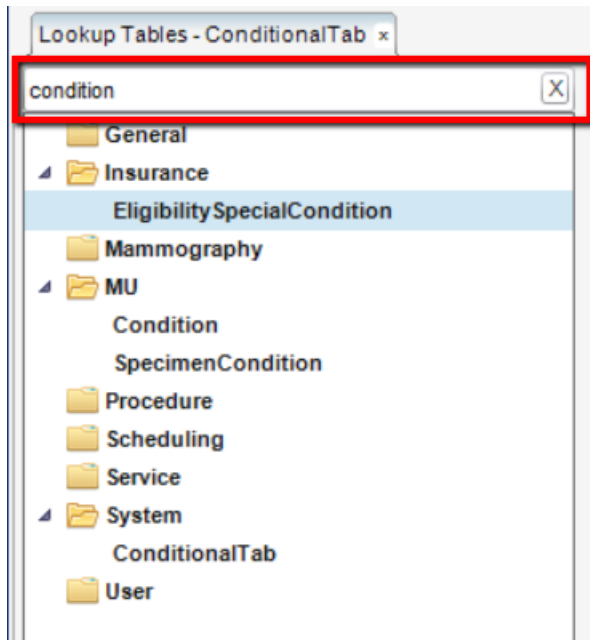
How to enable the feature:

Under System Configuration, select the desired value for '*ReportingImpressionSectionStartText*'. No change is necessary when the default value of 'IMPRESSION' is desired. If a word other than IMPRESSION is used, such as CONCLUSION or a word in a language other than English, the value must be added.

The ability to view the Impression data nugget is controlled by the *DataNugget.Impression* access string as in previous builds. We now also share the access rules controlling the Report data nugget for the Impression data nugget. If the access strings "*Clinical.PreviewPreliminaryReport*" and "*Clinical.PreviewSuspendedReport*" are not set to Full, both the Impression and Report data nuggets will not display when the report is unsigned or suspended, respectively.

12457 - SEARCH CAPABILITY IN THE LOOKUP TABLE EDITOR

To assist administrators in quickly locating the desired lookup table, a search box has been added to the lookup editor. Typing in this search field will allow a user to filter the lookup tables by name. Any parent folders that contain lookup tables matching the typed text will be expanded to display the matching lookup. The "X" on the right side of the search box can be clicked to remove the filter. If a user opts not to use the search box, the list of lookup tables can be navigated as usual.



11968 – MANAGEMENT REPORT: PATIENT EMAIL AND CELL PHONE PERCENTAGES

A new Management Report has been added to display the percentage of email addresses and cell phone (mobile phone) numbers that have been collected in RIS for a given Practice/Site and Date Range. It can be found in the Operations folder.

Patient Email and Cellphone Percentages

Practice: *Advanced Imaging, Brighton, Oak Hill, West*

Site(s): All sites for the selected practice(s).

Date Range: 08-01-2015 - 10-26-2015

Description: This report shows the % of collected cell phone and email addresses for patients who've had studies within the specified practices, sites and date range. Dates are based on when the study was created rather than date of service.

Note: These numbers could change if a user were to update the patient cellphone or email addresses between the time this report was run and current date.

Practice/Site	Aug 2015			Sep 2015			Oct 2015			Total		
	% with Email	% with Cell	Patient Count	% with Email	% with Cell	Patient Count	% with Email	% with Cell	Patient Count	% with Email	% with Cell	Patient Count
<input type="checkbox"/> Advanced Imaging	0%	100%	2	0%	2%	120	0%	3%	61	0%	3%	183
<i>Brighton</i>	0%	100%	1	0%	2%	60	0%	2%	60	0%	2%	121
<i>West</i>	0%	100%	1	0%	0%	59	0%	100%	1	0%	3%	61
<i>Labville</i>	0%	0%		0%	100%	1	0%	0%		0%	100%	1
<input type="checkbox"/> Brighton	0%	0%		0%	0%	59	0%	0%		0%	0%	59
<input type="checkbox"/> Oak Hill West	0%	0%		0%	0%	59	0%	0%		0%	0%	59
Total	0%	100%	2	0%	1%	238	0%	3%	61	0%	2%	301

11851 - ADD PHILLIPS SPEECHMIKE DRIVER EXTENSIONS TO CITRIX BRIDGE INSTALLER

To allow for a single installation on the Radiologist workstations, we now bundle the Phillips SpeechMike Citrix extension drivers with the Citrix Bridge installer.

11150 - NEW MULTI PHONE / EMAIL PATTERN NEEDS TO BE IMPLEMENTED FOR THE RIS UI UPGRADE SCRIPT

A new upgrade script was required to convert to the new multi- phone/email pattern. File patient phone number upgrade script.sql has been added.











12584 - UPGRADE DATABASE FROM B44.5+ CODE STREAM

B45.x (now known as 2016.x) and B44.5+ are 2 active code streams. Over the past 6 months, changes have been made to both streams and commercialized. An upgrade script was written to update a B44.4.0 database to B45.0.0, but since then, B44.5+ and B45+ continued to grow separately with feature additions and bug resolutions. This caused a break in the upgrade path to B45.x (aka 2016.x) if the existing database was upgraded to B44.5 or later in the B44 stream.

The scripts have been updated to upgrade from B44.5+ to B45.x as well as maintain the existing upgrade paths for customers already on the B45 release.

The current B45.0.0.29064.sql script will upgrade the system from 44.4.0.28609 to 45.0.0.29064. This is a large upgrade script that update from the B44 to B45 code stream.

The following B45 upgrade scripts have been added to all of the current B44.5+ upgrade scripts:

-  B44.5.0.29775.sql
-  B44.5.0.29835.sql
-  B44.5.0.29935.sql
-  B44.5.0.29976.sql
-  B44.5.1.30449.sql
-  B44.5.2.30554.sql
-  B44.5.2.30660.sql
-  B44.6.0.31159.sql
-  B44.6.0.31182.sql
-  B44.7.0.32125.sql

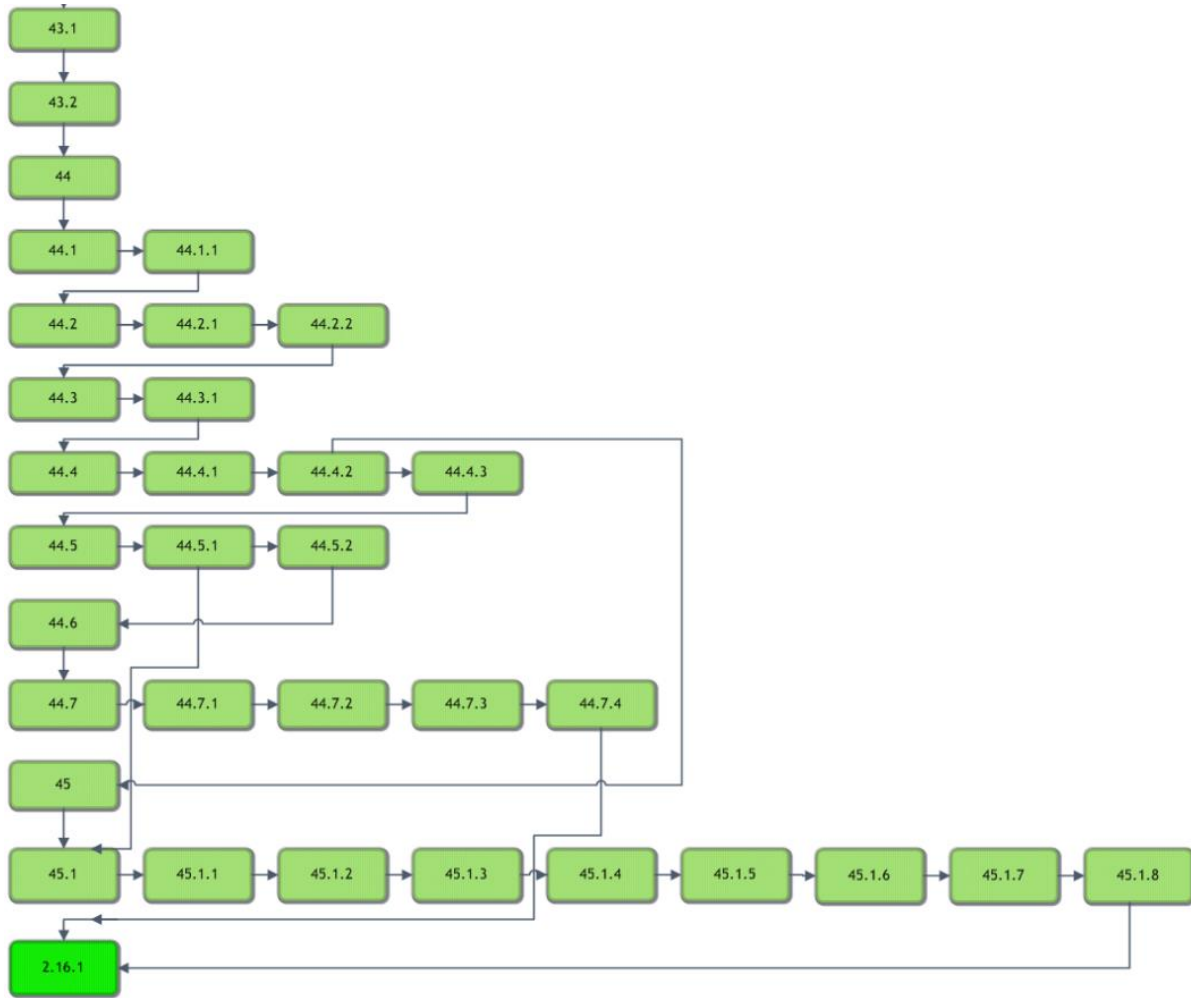
This will update a B44.x database to 44.7.0.32125.

Then there is a “delta” upgrade script to update the database to 45.0.0.29064, which is the first database version in the B45 stream. This script is called “B44.7.0.32125_to_B45.0.0.29064.sql”.

The “runscripts.bat” (an internal upgrade script) has been changed to skip the “B45.0.029064.sql” script if the “B44.7.0.32125_to_B45.0.0.29064.sql” was executed. This results in allowing the database to be upgraded from B44.5+ to B45.0.0.29064 without running the B45.0.029064.sql file, which would have caused errors because it upgrade to the same version, but from a different starting point.

After getting to this point, the database should be 45.0.0.29064. All subsequent scripts in the B45 stream, such as B45.0.0.29070.sql, B45.0.029158, B45.0.0.29270.sql and so on will be executed as normal upgrade process.

CODE STREAM



Legend:

Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	Gui.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	Gui.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service

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44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge

RESOLVED DEFECTS

Bugs, suggested features and support issues resolved in build 2.2016.1. The extract is taken from Redmine bug tracking system and only displays defects resolved in 2.2016.1.

Bug #	Priority	Category	Subject
11894	Normal	Access strings	Access string rename needed for Notifications
13025	Normal	Admin-Other	Orphaned configuration setting LocationLayoutFormatString and PortallImageMigrationToolUrl should be removed.
12837	Normal	Admin-Other	Cannot set a "string" system configuration setting to empty when the system configuration setting has a default
12048	High	Admin-Other	Medline plus URL change
12044	High	Admin-Other	PrepInstructionType Lookup missing defaulting of display_order column
11852	Normal	Admin-Other	Date format with lower case "m" should not be allowed in SystemConfig
11747	Low	Admin-Other	Access string for WLNotification.* is confusing with the WL prefix. Should be just Notification.*
8134	Normal	Admin-Other	Unable to add schedule groups if none already exists
7217	Low	All Workflows	Editing a phone number that contains a zero in the area code requires extra clicks to perform
11923	High	Appointment book	Appointment Book - Rescheduling more than once creates duplicates (for different times)
12547	High	Billing	Add/Edit billing codes- An item with the same key has already been added
11741	Normal	Billing	Adding a billing code after an exam is Signed causes error
11021	High	Billing	Billing status automatically updated to Pending after "Place billing on hold" is cleared
10317	Normal	Billing	Billing Notes doesn't refresh properly on Checking In
8036	High	Billing	Cannot post a payment with a non insurance billing method
11725	Normal	Billing	Billing screen - c_study_item_certification_RowChanged event has a contrast related exception that happens in the background
9218	Normal	CD Burning	Destination path label doesn't display path if Auto Select is used
9217	Normal	CD Burning	Remember users previous destination preference
12028	Normal	CD Import	After completing a CD import get message InstallDir.txt

			cannot be found in folder I imported CD from on logout of RIS
12007	Urgent (next build)	CD Import	CD Import thows exception if DOS on disk cannot be found and time format is not dd-mm-yyyy
12005	Urgent (next build)	CD Import	CD Import or Legacy Data can overwrite the system MRN
11749	Normal	CD Import	CD Import - fails to import all images.
10375	Normal	CD Import	CD Import - Unable to see exam description when font size is Med or Large
8994	High	Citrix Support	ris.exe crashes on exit on Windows Server 2012
11960	Normal	Confirmation	Confirmation - Administered checkbox under Medications is always unchecked (visually)
12173	High	Connect Portal-Scheduling	Error on importing procedure picker XML
11641	High	Connect Portal-Scheduling	Search for an appointment solution for 2 or more studies returns for 2 different room and fragmented times
4833	High	Connect Portal-Scheduling	Appointment search wcf service should not log an error in the application event logs when an appointment solution could not be found.
10767	High	Dark Mode/Theming	M*Modal Interactive Dictionary color problem
12594	Normal	DB	Open Capacity pulling in default template when there is an override
12362	Normal	DB	Phone/fax number fields should be 100 characters in length
12281	High	DB	Error when previewing addended report in radiologist window
12081	Normal	DB	Constraint issue CK_I_person_unknown_npi
12036	Normal	DB	The SPS_ID is missing an index
11645	Normal	DB	DB Cleanup to remove tables
10508	Normal	DB	Db view called c_vw_WL_SignedByDate_My is obsolete.
8414	Normal	DB	Removed former referring practice address references
12413	Normal	DB	System generated MRN workflow - problem if issuer of patient ID is in issuer look up but is not system
12778	Normal	Digital Forms	Error when saving digital forms
12687	Normal	Digital Forms	Cascading drop-downs options have a default 'Show on parent value' of 'test'
12605	Urgent (next build)	Digital Forms	Previously completed digital forms don't always get carried over on Reschedule
12562	High	Digital Forms	Required field and Perform Exam actions conflict

12531	Normal	Digital Forms	Message about server unavailable is displayed on the wrong monitor
12436	Normal	Digital Forms	Required field validation issues on schedule order
12410	Normal	Digital Forms	Digital form tabs holding perform exam in memory longer than necessary
12404	Normal	Digital Forms	Digital Forms Editor - Empty expression with mapped variables causes whole editor to stop functioning
12391	High	Digital Forms	Read only digital forms should not attempt to save answers
12356	High	Digital Forms	Error opening perform exam for mammo study
12283	Normal	Digital Forms	Required fields on digital forms aren't required unless the user looks at the digital form
12263	Normal	Digital Forms	Issue with logins from the browser redirecting to kiosk login instead of digital form editor
12047	High	Digital Forms	Linked Digital Form checkboxes don't always set changes made flag
12041	Normal	Digital Forms	ui-icons_454545_256x240.png missing
12037	Normal	Digital Forms	Linked checkboxes not synced properly on checkbox toggle
12024	Normal	Digital Forms	Circular references in expressions can cause unhandled exceptions which cannot be fixed
12016	Normal	Digital Forms	Flicker on digital form when tabs are rendered first as a list and then redrawn as tabs
12015	High	Digital Forms	Changes not saved after connection to web server re-established
12014	High	Digital Forms	If communication service is interrupted while digital form tabs are being edited, the newly entered data may be lost
11998	Normal	Digital Forms	Digital forms should not reference CSS files from CDN servers
11943	Normal	Digital Forms	Digital form answers are saved to the database even when no answer is provided
11940	Normal	Digital Forms	Report Assistant is saving all digital forms regardless of changes
11917	Normal	Digital Forms	Digital Form Expression Editor allows the user to make over 26 variables, but does not support more than 26
11885	Normal	Digital Forms	Required field exclamation points not clearing on entering data (type-ahead/auto-text only)
11877	Normal	Digital Forms	Blank required fields on Digital Forms Answers pane prevents workflow
11876	Normal	Digital Forms	Linked checkboxes not syncing properly in Report Assistant
11874	High	Digital Forms	Digital Form Editor - Tab order can't be set anymore

11859	Normal	Digital Forms	Un-including a study should remove any digital form tab(s) that only apply to that study
11831	Normal	Digital Forms	Saved empty expressions with mapped variables cause error on refresh
11828	High	Digital Forms	Empty cascading dropdown values do not save properly
11696	Normal	Digital Forms	Radio buttons may still save an answer when hidden due to a rule
11678	Normal	Digital Forms	Required field message doesn't appear when on a different tab
11668	Normal	Digital Forms	Type-Ahead Textbox for Medication returning results with garbage text entered
11627	High	Digital Forms	A rule based on the value in an autotext field does not work
11603	Normal	Digital Forms	Localization of autotext form
11067	Low	Digital Forms	Digital Form Editor - Unable to clear font size to revert to default font size
7780	Normal	Digital Forms	Conditional Tab - exception raised in display criteria
12943	High	Document Distribution	Print jobs occur when config setting turned off
5795	Normal	Embedded Reporting	Object reference error from ReportFields.SelectSection
11606	Normal	EMR	Editing EMR MRN's needs to focus on MRN (start)
11539	Normal	EMR	Duplicate MRN on EMR patient causes exception
7899	Urgent (next build)	EMR	Walk In Scheduling of EMR order does not allow you to see what was ordered by the EMR
12412	Normal	EMR	EMR order - problems when issuer is the same as an issuer in the I_issuer look up
12271	Low	eRAD Editor	eRAD Editor - automacro fields added through Fields tab of template/macro editor aren't treated as automacro fields
11995	High	eRAD Editor	Inserting a text only macro into an optional field inserts it after the field.
11979	High	eRAD Editor	Subsequent macro insertions may jump to a seemingly random location in a report
11709	High	eRAD Editor	Field meta data is not being saved when pasting into report template with no fields
11483	Normal	eRAD Editor	Protected Field - although you cannot insert macros into protected fields, the behavior could be better
12114	High	Insurance Eligibility	Insurance eligibility service can crash core RIS Services if a database connection error occurs
11750	Normal	Insurance Eligibility	Special Condition configuration that removes the Plan will cause eligibility to fail.
11712	Normal	Insurance Eligibility	Amount to collect on Self-Pay cannot be modified in some cases

11708	Normal	Insurance Eligibility	Amount to collect field shows 4 decimal places in some cases
11706	High	Insurance Eligibility	Amount to collect on Self-Pay doesn't display for manual entries (non-NPD)
9673	Normal	Insurance Eligibility	Changes to Billing Codes not updating Amount to Collect on Self Pay
9215	Normal	Insurance Eligibility	Tier 2 and advanced / complex parsing
9209	High	Insurance Eligibility	Update on the order resulting in wrong IVT Intervention flag on the order table.
8368	Normal	Insurance Eligibility	NULL filtering should default to disabled
8040	Normal	Insurance Eligibility	Alter Coverage.JS insurance details viewer to display details when service type is inactive.
10426	Normal	Insurance Eligibility	Amount to collect details
8448	Normal	Insurance Management	Attempt to alter Group Number or Group Name of Insurance Carriers causes a shift in the list and potential incorrect changes
13144	Normal	Interfaces	External Interface AppointmentSearch is not working
13012	Normal	Interfaces	Source code for Ensemble Plugin not up to date with version in Assuta
12850	High	Interfaces	RIS Wedge causes an exception when attempting to expand c_study_item_certification.downcoded_procedure_code
11911	Urgent (next build)	Interfaces	Wedge interface channels should not need any modification between 44.x and 45.2
11865	Normal	Interfaces	Incorrect error message
11838	Normal	Interfaces	Inbound user_id fails with poor error message if person is not a user
11676	Normal	Interfaces	MRN - Issuer dropdown filtering out valid entries
8507	Normal	Interfaces	Mirth/Wedge matching a referring doctor by NPI does not return the "master" person key
12541	High	IVT / Precert	Self-Pay exams throw error on opening in IVT
9015	Normal	IVT / Precert	PreCert status not reflected in Reception WL
8594	Normal	IVT / Precert	IVT WL, Pre-cert status stays the same when changing insurance at arriving/checking stage.
8147	High	IVT / Precert	PreCert column on the Orders To Schedule worklist may not match the billing code pre-cert statuses
12366	High	Linked Reporting	Unable to add linked studies with voided exam
11985	Normal	Linked Reporting	Worklist actions not working when primary study is in Arrived, but child studies are in ExamDone
11858	Normal	Linked Reporting	Prior Report button no longer working from ScheduleOrder

RADNET Inc. – eRAD RIS Release Notes

11507	Normal	Linked Reporting	Error changing primary study flag after it has already been set
12753	Normal	Localization	Localization required - 'Audit history' context menu option
12555	Normal	Localization	"Save as Order" translated only to "Save" in Hebrew
12115	High	Localization	In Hebrew mode, worklists will throw an exception when opening the 'select statuses' filter option
11740	Low	Localization	Second row of message box sentences is forming from left instead of from right in Hebrew.
11980	Normal	Mammography	BI-RADS picker is editable - causes Index out of range error
8067	Normal	Mammography	Missing access string for follow up screen
12576	Normal	Meaningful Use	C-CDA - Exception when no study data available
12501	Normal	Meaningful Use	CCDA stylesheets may need to be remapped due to changes in the Raw Container.
12454	Normal	Meaningful Use	CCDA - administrativeGenderCode is sending over null value when configured incorrectly
11945	High	Meaningful Use	View MedlinePlus Info doesn't work for ICD10 codes
11916	Normal	Meaningful Use	Error producing CCDA in view/edit - mu - View CCDA
10526	Normal	Meaningful Use	New Diabetic Medications
9290	Low	Meaningful Use	There are 4 access strings related to Labwork that need to be reviewed and possibly modified, in particular Clinical.Labwork.Request.
8674	Normal	Meaningful Use	Deleting a Medical History row then changing from "Use grid" to "None" gives error on Save.
8247	Normal	Meaningful Use	Save as Order - Column 'visit_key' is read only
8103	Normal	Meaningful Use	Transition of Care
7807	Normal	Meaningful Use	ProcessCPOEFlag can result in exception if performed end date is null
6900	Low	Meaningful Use	CCDA preview is displaying requested lab orders under results
11723	Normal	Mgt - Report - Custom	Procedure c_bi_mqsa not looking at extended birad code
13014	Normal	Mgt Reports	Peer review report - Review Summary by Radiologist not returning correct results - seems you cannot search for 1 day only.
12543	Normal	Mgt Reports	Mammo Technologist Summary - Procedure Code suppression
12468	Normal	Mgt Reports	Report deployment Option 7 deletes the backup folder it deploys from
11658	Low	Mgt Reports	There are some reports that are sorted by First name not the Last Name
11261	Normal	Mgt Reports	Core Management Reports - Date time format

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13051	Normal	MModal	Wrong recognizer files being downloaded when the user preferences set to "Automatically download recognizer".
12691	Normal	MModal	Default field value for Pick List fields do not populate in Macros
12679	Urgent (next build)	MModal	Error when doing next workflow in M*Modal reporting mode
12650	High	MModal	Issues with fields in the report editor.
12442	High	MModal	Pick list selection into a field with dictated or typed text will render incorrectly
12441	High	MModal	Previous field voice command intermitently not selected in field browser
11849	High	MModal	Mapped non-required fields showing as required
11715	High	MModal	When creating a template from report the auto macro doesn't work correctly
11704	High	MModal	The protect data checkbox in template editor should be removed.
11493	High	MModal	Conditional fields not working in M*Modal
11319	High	MModal	MModal field controls - typing over selection
11318	High	MModal	MModal Report Field Controls - 3 issues with the field controls
11014	High	MModal	Picklist field changes from a field to plain text when the default value of the picklist is a macro with plain text in it.
11007	High	MModal	Picklist that has an option that is a macro created in previous version of RIS, when selected in the dictation window, get error, macro cannot be inserted into report.
10759	Normal	MModal	Performance improvement opportunity in GetCurrentReportFields for MModal
10648	Normal	MModal	Modifying a macro from within the dictation window, clicking Ok will produce an error
12409	Normal	PACS (eRAD) Integration	Sometimes you have to click OK twice to RIS message "Action required in PACS before continuing" to continue working in RIS
9633	High	PACS (eRAD) Integration	When using PS360 and creating an autotext it is possible to hang the PACS viewer
12859	Normal	PACS (Non - eRAD) Integration	PACS integration is prompting the rads too much with message boxes after the new update.
12351	Normal	Patient Folder	Assuta in Hebrew mode, Peer review button is not translated
10613	High	Patient Folder	Data Nuggets do not close when we close the patient folder tab

12779	High	Patient Merge	Error on Patient Merge
8160	Normal	Patient Merge	Previous MRNs not showing in Alternate MRN grid after a merge
12056	High	Payment control	Error adding payment: Column 'Remaining_balance' does not belong to table c_payment
12132	Normal	Performance	Performance enhancement - Loading Datasets for MModal Document Models while in Erad mode
12131	Normal	Performance	Performance enhancement - Next workflow
12130	Normal	Performance	Portal window in reporting screen is re-initializing after already being loaded.
12128	Normal	Performance	Perform Exam screen repeatedly requests the same data on open
12101	Normal	Performance	UI performance is poor when switching main tabs in reporting screens
12094	Normal	Performance	eRAD Reporting Performance - General performance enhancement populating fields
12052	High	Performance	Performance enhancement - Loading and processing of reporting layouts
12666	High	Person Management	NPI Link No Longer Valid in Personnel Editor
8372	Low	Person Management	Buttons are not entirely visible in the Add Radiologists form under the Referring Preferences
12608	High	Platform	PDFViewer project is requiring .NET Framework 4.5. All other eRAD RIS projects currently only required 4.0. PDF Viewer should require only 4.0.
12040	Normal	Portal Viewer	Missing top of browser control and tabs
11515	High	Portal Viewer	Unable to remove a portal launcher rule once added
12580	Normal	Powerscribe Integration	Wait when launching a report in PowerScribe using the button on the reporting screen.
10743	Normal	Powerscribe Integration	When failing to open a report in PowerScribe, study keeps returning in next workflow
11251	Normal	RADAR	Quick RADAR Message - Add Auditing to RADAR messages
11765	High	Radiology Peer Review	Peer Review - Missing access string for Mark As Completed
12683	High	Radiology Peer Review	Add peer reviewed count to the daily statistics dashboard
12681	High	Radiology Peer Review	Peer review button should disable when the user is not able to perform a review
12678	High	Radiology Peer Review	Peer review screen is not resizable
12677	High	Radiology Peer Review	Change spelling when loading the peer review QA screen.
13162	High	Radiology Reporting	Unable to sort exception opening the reporting screens without .net 4.5

13113	Normal	Radiology Reporting	Error when signing a report
12728	Normal	Radiology Reporting	Report data nugget is enabled for reports in dictated or exam done status without access to 'Clinical.PreviewPreliminaryReport'
12727	Normal	Radiology Reporting	Impression data nugget is available when access string are not granted
12667	High	Radiology Reporting	Datasets are localized creating problems for advanced data fields in all languages other than English
12662	Low	Radiology Reporting	Custom fields and DataFields are showing on the field control as the same, icon should be different.
12593	Normal	Radiology Reporting	M*Modal - Invalid field selection when inserting a pick list option set to navigate to previous field
12575	Urgent (next build)	Radiology Reporting	Selected Report - When failing to load the selected report the previous report images is persisted
12574	High	Radiology Reporting	Signed studies without a migrated report not presenting message appropriately all the time
12512	High	Radiology Reporting	Report history control causes an error when opening on a legacy (imported) report
12421	Urgent (next build)	Radiology Reporting	Report Editor - Populating fields with mixed Hebrew and English words renders incorrectly
12225	High	Radiology Reporting	Log Control - The Assign to Radiologist Notes do not support AutoText only
12214	Normal	Radiology Reporting	Improve screen appearance between screen loads "next workflow"
12185	High	Radiology Reporting	When editing an existing data field, protect check box is not available
12170	Normal	Radiology Reporting	Adding a conditional field produces an error when entering the expression value in the conditional value grid and clicking OK button in Field Editor window
12129	Normal	Radiology Reporting	CC Physicians not being cleared in exam details pane on reporting screens (Reuse)
12063	High	Radiology Reporting	Portal window - TabSelectionChanged error when skipping through cases with Reuse turned on.
12059	Normal	Radiology Reporting	Preview report in rad screen on addendum before save doesn't work
12055	Normal	Radiology Reporting	Portal window loads even when not visible, and it can load before the ParentContentBase is loaded.
12051	Normal	Radiology Reporting	eRAD Reporting Performance - Calling delete field with the paint argument set to true taking a long time
12039	Normal	Radiology Reporting	Adding macros with fields in a report that doesn't have a default template causes empty fields when macro is inserted a 2nd time

12022	Normal	Radiology Reporting	RTL - When adding assignments or procedures to a macro or template the arrow that is highlighted and enabled is pointing the wrong way
12019	Normal	Radiology Reporting	Create Edit Report from Perform Exam loads templates for current user
12012	Normal	Radiology Reporting	Reporting Layout - Localization bug
11975	Normal	Radiology Reporting	RTL - Report Assistant save button on wrong side in RTL
11933	High	Radiology Reporting	When verifying edits the 'Send for dictation and close/continue' should not be available options
11922	High	Radiology Reporting	Editor split button options should be controlled by access string and more descriptive naming of options
11912	High	Radiology Reporting	In right to left mode, the tabs for digital form answers and report assistant tool windows should be on the right
11860	Normal	Radiology Reporting	Reporting Layouts - When using custom output file path the deployed layouts do not load
11827	Normal	Radiology Reporting	Error when trying to do an addendum on Legacy reports
11675	High	Radiology Reporting	Indication required but could not add an indication.
11660	High	Radiology Reporting	Findings - if procedure 'findings required flag' is set to N, the context menu item (Set Required Followup Flag) in patient folder, should not be available
11615	Low	Radiology Reporting	Finding Follow Up - audit message after adding and removing follow up is spelled inconsistently
11609	High	Radiology Reporting	Finding Follow Up - Missing lang item for finding code in the finding follow up worklist
11591	High	Radiology Reporting	MModal - create a template from report - auto macros are not working correctly.
11573	High	Radiology Reporting	Shortcut keys for 'Create and Continue' and 'Create and close' required for the reporting editor
11570	High	Radiology Reporting	Dictation field in Summary Panel in dictation window copy option throws error
11499	Normal	Radiology Reporting	Report Assistant - no scroll bars
11491	High	Radiology Reporting	Conditional fields navigation setting is not working
11473	High	Radiology Reporting	In the editor window, the shortcut CTRL+ALT+S should be changed because the action button has been renamed from 'transcribe' to 'edit'
11005	High	Radiology Reporting	Template editor - some of the command bar buttons are producing an error, ie: Preview Report
10980	High	Radiology Reporting	Exceptions raised in Template Macro Lookup working with M*Modal reporting mode
10969	Normal	Radiology Reporting	TemplateMacro lookup table locks RIS when user has limited reporting modes
10968	Normal	Radiology Reporting	TemplateMacro lookup table error when user has specific reporting modes

10612	Normal	Radiology Reporting	Word Report Viewer does not close when closing the patient tab
10482	High	Radiology Reporting	External Reporting Mode - Unable to mark addendum as read
9639	High	Radiology Reporting	Error when clicking the Pending Dictation Tab while an exam is loading in Dictation window
9625	High	Radiology Reporting	Patient history control throws a hidden exception
9564	Normal	Radiology Reporting	On opening of dictation Window - exam details tool window is incorrect
9306	Normal	Radiology Reporting	Sign Report button missing on All Signed Pending QA
9305	Normal	Radiology Reporting	Sign Report button missing on All Dictated WL
9304	Normal	Radiology Reporting	Sign Report button disabled when in dictated status
9303	High	Radiology Reporting	After suspending a report and then moving to Dictated or Draft the suspend flag remains
9302	Normal	Radiology Reporting	Pending Signature WL has context menu Dictate but no button
9257	High	Radiology Reporting	EditorSpeechControl error when modifying a template or macro for the 1st time after an upgrade.
8055	Urgent (next build)	Radiology Reporting	Proxy sign - buttons mislabeled
5494	Normal	Radiology Reporting	Template/Macro editor from lookup editor won't prompt to save changes when closing the screen.
3784	Normal	Radiology Reporting	Reporting docked windows not maintaining current tab selections
7774	Low	Radiology Reporting	Bar-code scanning won't accept lower case letters and converts to symbols
11846	Urgent (next build)	Reception	A signed study may return to checking in or arrived
11295	High	Reception	Multi-Orders don't display correctly on opening Register
11230	High	Reception	Referring physician alert gets shown a second time when clicking the 'Checking In' button
12389	Normal	Scheduling	Cannot remove procedure from a procedure plan
12029	Normal	Scheduling	Error appears when cancelling a study from the reschedule window from the appointment book
12017	Normal	Scheduling	Appointment book load times too slow
11818	Normal	Scheduling	When trying to reschedule one study out of a procedure plan, get an error if one of the exams in the procedure plan is in exam done status.
11151	Low	Scheduling	Clearing Patient Flag notes adds empty string which causes alerts to display extra line with hyphen
9578	Low	Scheduling	Follow Up Date - Can't use 2 digits for year

RADNET Inc. – eRAD RIS Release Notes

8408	Normal	Scheduling	Inactive rooms showing in calendar view.
11949	High	Structured Reporting	eRAD Editor - When a conditional field exists and the expression is null, auto macros won't populate
12274	High	Technologist	Should be able to disable tech notes as required field
12252	High	Technologist	Assigned radiologist dropdown empty on initial opening of Perform Exam
12025	Normal	Technologist	Hebrew mode: Perform exam window - required flag for tech notes is cut off.
11529	High	Technologist	Contrast - Leaving contrast/sedation amount/units blank on multi-study order can cause false validation fails
11254	Normal	Technologist	Study Sedation doesn't work with multiple study items
9617	Normal	Technologist	Suspended flag remains when documenting multi-study in perform exam screen
9422	Normal	Technologist	User is able to complete an exam that Requires contrast without entering a contrast.
9186	Normal	Technologist	Sedation - Changing performed procedure in Perform Exam doesn't remove sedatives
9166	High	Technologist	Contrast is required on view/edit when contrast setting is set to true and is required
8587	Normal	Technologist	Contrast amounts that exceed Max Value are acceptable upon Saving in Perform Exam window
12659	Low	Thick Client GUI	Search in lookup editor is not closing the folders correctly when the delete (x) is clicked.
11946	Normal	Thick Client GUI	Error logging in to RIS: "The given key was not present in the dictionary"
7936	Normal	Thick Client GUI	Patient screen icons should have borders (Patient search and New Patient)
6084	Normal	Thick Client GUI	MU- CCDA problem and vital signs and goals section
6083	Normal	Thick Client GUI	MU- CCDA Procedure section is incomplete
6050	Normal	Thick Client GUI	RadNet - Edit Units - sometimes saving units as "1000" arbitrarily
3300	Low	Thick Client GUI	Scroll bar in lookup editor allows to scroll way below any entries.
2133	Low	Thick Client GUI	Timing issue between RIS and Jabber
12471	Normal	UI Look and feel	When closing a lookup editor, it closes the tab completely
12470	Normal	UI Look and feel	Login screen should select all text when tabbing into username or password fields
11966	Normal	UI Look and feel	Mammo Biopsies Window - Cancel and ESC Key functionality
11781	Normal	UI Look and feel	Patient tab tabbing opportunities
11773	High	UI Look and feel	Follow Up context menu item does not work
11731	Low	UI Look and feel	Emergency Contact showing as required on Registration

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11577	Normal	UI Look and feel	When skipping though cases, tab title switches from Loading... Assigning.. Dictating...
10919	Normal	UI Look and feel	Change font size feature does not change the size in the menus
10409	Normal	UI Look and feel	Insurance policies grid and Manage policies window have columns in different order
9640	Normal	UI Look and feel	Alert prompt verbiage for inaccurate Units value needs to be changed.
9299	Normal	UI Look and feel	User preferences screen alignment and spacing.
8543	Normal	UI Look and feel	Pin at top or bottom of insurance policies does not function
8266	High	UI Look and feel	When running application without RISDeployment folder the title bar says "eRAD RIS (Developer as UserName)"
8057	Normal	UI Look and feel	System Config description clean up
7121	Normal	UI Look and feel	Next workflow doesn't look good at all in between screen loads
8505	Normal	Unknown Reconcile	Changing an unknown referring doctor on an order performs a partial person merge.
8053	Normal	Utilization Management	Issue removing rows for additional procedures
12522	Normal	View Edit	Notes/Exam Times missing edited by user
12350	Normal	View Edit	Assuta - In the View/edit window there is an action button sitting on top of another action button
12880	Normal	Web Services/DB	Missing index on study_key in c_questionnaire_answer
12500	Normal	Web Services/DB	Not all data set column max lengths match those of columns in db
12401	Normal	Web Services/DB	Fill statement incorrect on c_questionnaire_completion_status
12247	Normal	Web Services/DB	The RequestedByAndRequestByAddressKeyRelation wcf test case occasionally fails during build process
12116	High	Web Services/DB	MU Export Service can terminate Core RIS Services if a database connection error occurs
11046	High	Web Services/DB	Personnel - Medical Group added to Referring Physician breaks RIS
10814	Low	Web Services/DB	Reschedule prompt improperly locking studies/orders
12585	Normal	Worklists	Supervising Dictation work list throws exception
12560	Normal	Worklists	Referring Portal Patient Folder view only shows scheduled modality for Room Name column
12521	Normal	Worklists	Patient Folder - Edited by column missing from the worklist
12504	Normal	Worklists	Patient folder could not be retrieve when connecting to the rRIS_Dev2 database
12458	High	Worklists	Status localization removed after applying filters

12120	Urgent (next build)	Worklists	The RIS Service method RefreshWorklistForPatient is no longer being called
12119	High	Worklists	Worklist Count - is still referencing old deprecated c_vw_client_worklist view
12113	Urgent (next build)	Worklists	Many worklists are performing very slowly on rRISDev2 database
12096	High	Worklists	Room Name column on worklists based on scheduled Modality only, not performed Modality
12095	Normal	Worklists	Patient folder worklist does not show room description
12053	High	Worklists	System.IndexOutOfRangeException: Index was outside the bounds of the array.
12030	Normal	Worklists	The signed by date for all worklist timeouts
11879	Normal	Worklists	No access string for the Reception WL
11629	Normal	Worklists	Image Request WL requires new "name" equivalents columns with description
10720	Normal	Worklists	Possible SQL injection on WL queries with parameter order by
8390	High	Worklists	Inconsistent RIS Filter Results

KNOWN LIMITATIONS

The following are bugs, suggested features and support issues found in build 2.2016.1.

Bugs reported in previous versions are not repeated here.

#	Status	Priority	Subject
12933	New	Normal	Selected Report tool window - When reloading a legacy report, the previously loaded legacy report is displayed first.
12907	New	High	Reading_stat_flag - right click menu only sets it on the study
12876	New	Normal	IsCitrixBridgeAlive timed out error.
12838	New	Normal	Selected Report tool window - When reloading a legacy report, and moving the window around, the report duplicates itself in the tool window.
12746	New	Normal	Voice cue navigation for datafields and picklists fields not working
12745	New	Normal	Field Browser - Fields not updating when voice navigation
12725	New	Normal	Reusable fields are not populating when the template is inserted into a report
12689	New	Normal	Running RIS in Minimized mode, logging in twice produces a message that ois hidden, have to quit RIS from task manager.
12684	New	Normal	MModal - create a template from report - data fields are populating.
12617	New	Normal	Registration screen retrieves the same data more than once

12601	New	Normal	Calculated columns on insurances are not updated when all insurances are removed
12599	New	Low	Procedure Picker - Unable to delete Attribute Types
12596	New	High	Precert information cannot be seen for Order IVT window from cancelled study
12591	New	Normal	Template/Macros - Conditional field the default column is not working correctly when set to True
12565	New	Normal	Rad screen - Opening legacy report in patient folder closes legacy report in tool window
12536	New	Normal	Contrast validation may complain about rows that are not visible
12279	New	Normal	Unique key violation during walkin process after switching orders
12213	New	Normal	Cannot filter the Prep Instruction Code column of Procedure Code lookup table if Prep Instruction Code has an apostrophe
12176	New	Normal	Updates to only issuer_of_patient_id will not result in updates to c_patient_key_data via trigger
12171	New	Normal	Available_datetime in the action queue is set by RISService box time instead of DB time
12925	Resolved	Normal	Getting Get Data/DisplayData when editor is MModal and you attempt to dictate an exam when 'Insert template with markers' is turned on.
12894	Resolved	Normal	Biopsy screen has not been localized
12854	Resolved	High	Cannot Create/Edit report from perform exam on PACS correction enabled studied.

12835	Resolved	Normal	Extra character appended to a field
12834	Resolved	High	Reschedule study can cause other studies from same order awaiting reschedule to fall off worklist
12808	Resolved	High	"Send to" button on reporting screen allows to fax/print preliminary reports even if user should not have access.
12744	Resolved	Normal	Attachment viewer on the patient folder (both main and mini) will not load the report initially
12174	Resolved	Normal	Procedure Picker Scrolling Bar Issue
12842	New	Normal	Verify Credentials window has spinning blue circle (hour glass)
12425	New	Normal	Specific identity validation errors
13266	New	Normal	Editing billing codes
13263	New	Normal	Template editor lookup, result tab, filter the grid by default = Y, edit one of the templates, get error when saving the template.
13248	New	High	Peer review window - if font is not set to Small either part of the word or all of the word 'review' is missing in the sentence 'I disagree with this review'
13237	New	Normal	WL Filter FLag selection is not translated
13224	New	Normal	When Phone number mask is disabled, the phone numbers are displayed in a mask in the referring addresses lookup table.
13204	New	High	EMR Ordering - Left over EMR order that is not mapped cannot be accessed again from work lists
13182	New	Normal	Report that is sent to PACS has the element {BR} displayed in the

			report. The report in RIS has a bolded section but the same section in the template is not bolded.
13172	New	Normal	mModal 7.93 dictation commands that do not work.
13049	New	Normal	Inserting a macro with picklist with default macro option multiple times doesn't work
13011	New	Normal	Log control fields dont separate auto text
12996	New	High	EMR Ordering - Left over EMR order that is not mapped cannot be accessed again from work lists
12989	New	Normal	Import scheduled procedures window is displaying order procedure description instead of scheduled procedure description
12918	New	Normal	Patient merge - Phone numbers and email addresses unselected if patient merge is opened when patient folder is open
13067	Peer Testing	Normal	Linked studies dialog OK button should be disabled
13053	Peer Testing	Normal	Linked studies dialog checkboxes should be disabled
13156	Resolved	Normal	Hebrew localization for Digital Forms and Selected Digital Forms
13066	Resolved	Normal	Unable to dictate on linked studies pending pacs correction
13010	Resolved	Normal	Creating an addendum on a study existing on the QA worklist will remove it from QA worklist - also unclear which version we are reviewing when in QA screen
13009	Resolved	Normal	Error on reschedule when digital form has not yet loaded
12993	Resolved	Normal	Increase character limit on External Notification Email Address

			column for MessageGroup table
12980	Resolved	Normal	Peer review button enabled when creating addendum even if you previously peer reviewed it
12971	Resolved	Normal	Error message when opening the Review window from Peer Review WL.
12959	Resolved	Normal	Questionnaire -when creating rulesets, Check box needs text in order to work
13035	New	Normal	EMR Orders - Register window only shows 1 of 2 mapped orders
13231	New	Normal	RadShortcut error possible when loading two peer review cases that prompt the user on open.
13223	New	Normal	Add payment, check-in and save, receipt is not auto printed
13217	New	Normal	Aborting a started study can result in an error on the billing codes tab
13212	New	High	Issues with arrive multiple dialog and timezone
13023	New	Normal	Some configuration settings are not populating default values in an upgrade or new install
13015	New	Normal	"PreCert Required" blank when it should be showing Not Required
12972	New	Normal	MU - Medical history search for ICD codes can only select one at a time
12949	New	Normal	Referring physician alert not being displayed on Schedule Order/Registration/Walk-In

12942	New	High	Inserting a text macro into a field may produce different results if the field is selected from the report tool window rather than the fields tool window.
12952	Peer Testing	Normal	Inactive prep instructions still being displayed
13211	Resolved	Normal	Error scheduled an EMR order when Issuer ID is the same as different Issuer ID for same patient
13161	Resolved	Normal	Study remains locked by your user, after tentatively signed is released
13077	Resolved	Normal	Procedure Picker - Unable to use the editor on a new system
13074	Resolved	Normal	Running ImportDataFileUpgradeDB.bat on a new install causes an exception
13029	Resolved	Normal	Error on Reschedule from No Show WL and Orders to Schedule WL
13019	Resolved	Normal	Not able to make changes to date/time in Notes/exam Times in Scheduling and arriving statuses
13006	Resolved	Normal	Perform Exam - Notes/Exam Times - disabled fields become enabled when including a second study

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.2
Update 2.2016.2.1

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Citrix Bridge Installer 7

Resolved Items

Redmine #	Subject
13825	PACS integration will not open sessions reliably via Citrix Bridge
13827	PACS integration will not close sessions reliably via Citrix Bridge
13845	The first call to “Show Images” to UV PACS after changing PACS server does not work via Citrix Bridge
13850	PACS incorrectly indicates “Study is locked” depending on how the user closed the study (via Citrix and non-Citrix)

Additional information on bug 13850:

Steps to reproduce the “Study is locked” state:

From the Pending Dictation WL, open a study to dictate.

2. Go back to the Pending dictation WL and open a 2nd study.
3. Click on the 1st study's tab → it's images are displayed.
4. Click on the 2nd study → it's images are displayed.
5. While the focus is on the 2nd study, close the study using the x on the tab. → Images are closed and you are returned to the first study – images are displayed for the first study.
7. Close the 1st study via the x on the tab. → Images are closed.
8. Open study 1 again → Images open.
9. Open study 2 again → PACS indicates “Study is locked”

eRAD RIS Server Update

Code Stream








Legend:

Light Green = Previously Released software

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _Documentation	05/20/2016 2:51 PM
 _ReleaseNotes	05/24/2016 1:17 PM
 PACS Citrix Bridge	05/20/2016 2:51 PM
 ThickClient	05/20/2016 2:48 PM
 RISServerMasterCert.pfx	03/31/2016 1:38 PM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

Build 2016.2 installs. This server update must be applied to 2016.2

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	Gui.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	Gui.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	Gui.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Gui.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416	Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918	GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918	GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540	Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540	GUI.zip and Citrix Bridge

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.2.1.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Citrix Bridge Installer

- 1) Copy and replace the eRAD RIS Citrix Bridge Installer.exe. Run the Installer on each workstation that will be using Citrix Bridge.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.2
Update 2.2016.2.2

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Database Updates..... 7
 Citrix Bridge Installer 9

eRAD RIS Server Update

Resolved Items

Redmine #	Subject
14054	A query scan documents is significantly increasing CPU time on DB
14046	Insurance Eligibility - IsInsuranceUsingEligibleAPI null reference error
14031	Saved study data is not displaying on several controls and screens (BI-RADS, Exam Summary, Mammo Drawing)
14026	Carestream PACS integration is not closing studies
14078	Adding a new practice causes site(s) from existing practice to be moved
14085	PACS over Citrix - RIS Crashes when you attempt to open images from mini patient folder in dictation window

eRAD RIS Server Update

Code Stream









Legend:

Light Green = Previously Released software

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _Documentation	06/23/2016 11:10 AM
 _ReleaseNotes	03/26/2012 11:02 AM
 DB	06/23/2016 11:07 AM
 PACS Citrix Bridge	06/23/2016 11:09 AM
 ThickClient	06/23/2016 11:04 AM
 RISServerMasterCert.pfx	03/31/2016 1:38 PM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

Build 2016.2 installs. This server update must be applied to 2016.2

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	Gui.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	Gui.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	Gui.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Gui.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416	Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918	GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918	GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540	Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540	GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102	GUI.zip, DB and Citrix Bridge

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.2.2.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

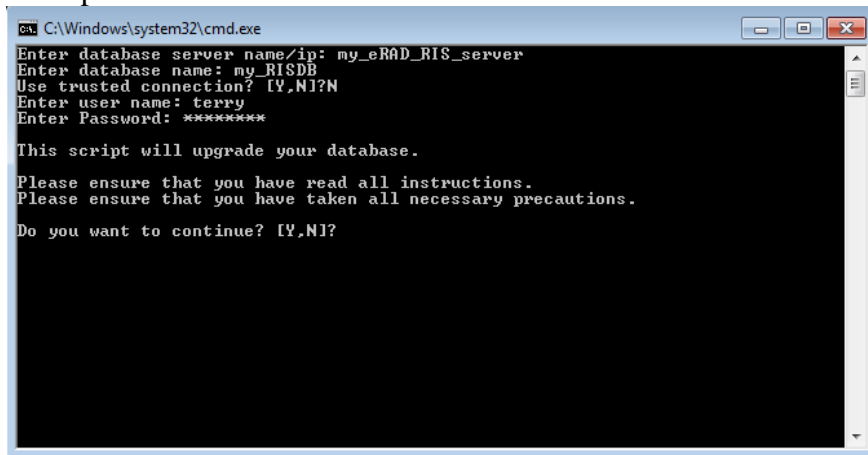
Database Updates

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

- 1) From the upgrade folder, double click the "RunUpgrade.bat" command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.
- 3) You can choose to use "Trusted connection". Using this option will pass the identity of the currently logged on user. If this user has "db_owner" access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use "Trusted connection" then you will be prompted for user id and password.

Example:



```
C:\Windows\system32\cmd.exe
Enter database server name/ip: my_eRAD_RIS_server
Enter database name: my_RISDB
Use trusted connection? [Y,N]?N
Enter user name: terry
Enter Password: *****

This script will upgrade your database.
Please ensure that you have read all instructions.
Please ensure that you have taken all necessary precautions.
Do you want to continue? [Y,N]?
```

eRAD RIS Server Update

- 5) After the upgrade program has finished you can find the upgrade logs in the “log” folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team
- 6) In the Common folder there is a subfolder of MU. The MU folder contains updates to lookups relevant for MU as well as updates for Zip Code table to add the County. Copy the MU folder to the database server before running the batch file. There is a readme file contained in the MU folder. The details have also been included below
 - a) The mu bulk install process must be run from a path on the database server!
 - b) Copy Files ImportDataFileUpgradeDB.bat and ImportDataFileUpgradeDB.sql from upgrade folder to a location on the database server(This location will be referred to as the "Script Folder Path".)
 - c) Copy Folder scripts and Source files from the upgrade folder to "Script Folder Path"Note source files must be inside the scripts folder
 - d) Run bat file
 - i) Enter Script Folder path [C:\Temp\SNOMED]:
 - ii) Enter database server name/ip: [ie peidev1]
 - iii) Enter database name: [ie rRIS_MU]
 - iv) Use a trusted connection to log on to SQL Server:
"N" means you will have to enter db [username] [password]
"Y" means you have a trusted connection and will not have to enter [username][password]
 - v) Do you wish to load SNOMED concept codes?
"N" no files will be loaded into the l_snomed_concept table
"Y" yes means l_snomed_concept table will be truncated and reloaded with the latest US concept codes
Source File [sct2_Concept_Snapshot_US1000124_20140301.txt]
 - vi) Do you wish to load SNOMED descriptions codes?
"N" no files will be loaded into the l_snomed_description table
"Y" yes means the l_snomed_description table will be truncated and reloaded with the latest US description codes
Source File [sct2_Description_Snapshot-en_US1000124_20140301.txt]
 - vii) Do you wish to load ICD9 to SNOMED mappings codes?
"N" no files will be loaded into the l_snomed_icd9_map table
"Y" yes means the l_snomed_icd9_map table will be truncated and reloaded with the latest US ICD9 to SNOMED mapping codes
Source File [ICD9CM_SNOMED_MAP_1TO1_201312.txt and ICD9CM_SNOMED_MAP_1TOM_201312.txt]
 - viii) Do you wish to load ICD10 to SNOMED mappings codes?

eRAD RIS Server Update

"N" no files will be loaded into the l_snomed_icd10_map table

"Y" yes means the l_snomed_icd10_map table will be truncated and reloaded with the latest US ICD10 to SNOMED mapping codes

Source File [xder2_iisssccRefset_ExtendedMapSnapshot_US1000124_20131220.txt]

ix) Do you wish to load US zip codes?

"N" no files will be loaded into the z_zipCodesWithCounty table

"Y" yes means the z_zipCodesWithCounty table will be truncated and reloaded with the latest US zip codes

Source File [5-digit Commercial.csv]

Note: the following files should be loaded once only with B43!

x) Do you wish to load CMS codes?

"N" no files will be loaded into the s_mu_code table

"Y" yes means the s_mu_code table will be truncated and reloaded with the latest CMS codes

Source File [s_mu_code.txt]

xi) Do you wish to load HL7 support sets for CCDA?

"N" no files will be loaded into the l_hl7v3_voc_value_set table

"Y" yes means the l_hl7v3_voc_value_set table will be truncated and reloaded with the latest hl7v3_voc_value_set codes

Source File [l_hl7_voc_value_set.txt]

xii) Do you wish to load HL7 support codes for CCDA?

"N" no files will be loaded into the l_hl7v3_voc_value_code table

"Y" yes means the l_hl7v3_voc_value_code table will be truncated and reloaded with the latest l_hl7v3_voc_value_code codes

Source File [l_hl7_voc_value_code.txt]

Citrix Bridge Installer

Copy and replace the eRAD RIS Citrix Bridge Installer.exe. Run the Installer on each workstation that will be using Citrix Bridge.

Customer Release Notes



RIS Version 2

Build 2016.2

TABLE OF CONTENTS

Table of Contents 2

 Purpose 5

 Intended Audience..... 5

New Features and Enhancements 6

 General 6

 12999 – Create a Configurable Default Values Framework 6

 7532 – Allow referring physicians to opt out of Marketing Faxes 6

 9569 – Add Email Delivery Preference to Search Screen and Address Summary 7

 13090 – Capture Patient’s County on the Patient Demographics Tab 8

 Reception 9

 13327 – Imagine Payment Portal Integration 9

 Insurance Eligibility & Verification 15

 13110 – Update the PAYERS.JSON URL to Resume Ability to Add New Payers 15

 13481 – Ability to Configure Eligibility Rules to Ignore the Amount to Collect for an Exam When Certain Insurance Carriers Are Included 16

 Technologist..... 16

 12911 – Create a Configuration Option to Default the Logged-In User as the Performing Technologist..... 16

 13157 – Support Tech Only Workflow Based on Procedure Code in Addition to Patient Class 16

 Radiologist 17

 13069 – Ability to Open Signed Reports in a Radiologist Layout as Read-Only 17

 PACS Integrations 18

 13351 – RIS/PACS Sync Enhancements 18

 12915 – GE Universal Viewer – Integrate based on Accession Number Instead of Study Instance UID 20

Digital Forms	20
12991 – Load Selected Answers from Previous Digital Form.....	20
Work Lists	21
7812 – Add a Sedation Required Flag to Work Lists	21
12675 – Add Referring and Patient Type (Class) Columns to Billing Exception and Billing Confirmation Work Lists	21
13613 – Limit the Scope of the IVT Work List to a Set of Sites	22
EMR.....	23
8158 – EMR Order Reassociation.....	23
CD Import.....	25
9511 – option to Retain the Institution Name from the CD or Substitute an Alternative Institution Name for CD Import.....	25
Interfacing.....	26
13228 – Receive and Update Billing Codes Via Interface.....	26
11989 – Configurable XML File Drop.....	27
Localization	29
13409 – Support Spanish Language in eRAD RIS.....	29
Platform	29
12697 – Minimum Supported .NET Framework Version is now 4.5.2	29
13183 – Microsoft SQL Server 2008 R2 SP3 has been validated.....	29
Code Stream	30
RIS Release Version Numbers.....	31
New Settings.....	33
New access strings	33
New system configuration settings	33
Resolved Defects	33

Resolved Defects for 2.2016.233

Known Limitations43

PURPOSE

This is the customer Release Notes document for eRAD RIS Version 2016.2.

Not every feature will be described in this document. Typically only features which can be visually demonstrated to the user are outlined here.

INTENDED AUDIENCE

This document was created by the eRAD RIS Development team and Product Management team for eRAD RIS customers.

NEW FEATURES AND ENHANCEMENTS

GENERAL

12999 – CREATE A CONFIGURABLE DEFAULT VALUES FRAMEWORK

eRAD RIS allows the Service Team to add validation rules to improve data integrity and meet custom business needs that are specific to a customer's individual needs. As an expansion of this capability, eRAD RIS now supports the specification of default values for various fields in RIS, based on a configurable set of criteria.

Key Features

- Almost any field can be selected from Patient, Visit, Order, or Study.
- A field that has a value will not be overwritten by a default value.
- Defaults can be optionally configured so that they apply to a single practice, a particular action undertaken by the user (e.g. StudyStarted), or so they only take effect once a study has reached a certain status in the workflow.
- A default value can be specified as a literal value, e.g. "42" or "routine screening," or it may be a special token value, e.g. \$UserID, that will be replaced at runtime (see Special Default Value Tokens).
- Default values may be associated with one or more additional conditions that all must be met before the default will be applied.

How to enable the Feature:

Please contact the eRAD Support team for assistance.

7532 – ALLOW REFERRING PHYSICIANS TO OPT OUT OF MARKETING FAXES

Some customers send mass faxes out to their referral base as a way of marketing new services or promotions. We have added a feature to indicate when a referring physician does not want to receive these faxes.

A "Marketing fax opt-out" checkbox has been added to the Personnel table for each address, so that a referring physician can choose to opt out of marketing faxes for one location, but still receive them for another if desired.

Edit Address

Address

Type: Active

Address 1:

Address 2:

City:

State: Zip Code:

Phone #: Fax #:

Marketing fax opt-out

Affiliations:

Referring Practices:

If the referring physician has multiple addresses, checking the opt-out box for one address’s fax number will prompt the user: "Do you wish to opt out for all fax numbers associated to this referring doctor?" Answering yes will check the opt-out box for all fax numbers.

The Referring Addresses lookup also now has a new column to allow setting the flag on multiple address rows.

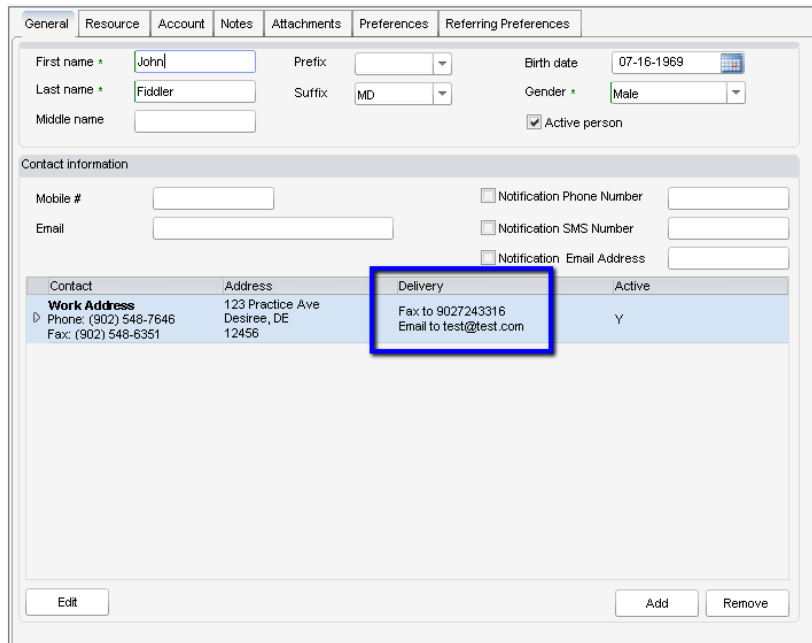
Marketing Fax Opt Out Flag
Contains: <input type="text"/>
N
N
N
N
N
N
N

9569 – ADD EMAIL DELIVERY PREFERENCE TO SEARCH SCREEN AND ADDRESS SUMMARY

If a referring physician has a report delivery preference of Email, that information is now displayed in the address section on the internal person Search Results screen. Other delivery preferences will continue to be displayed as well.

Last Name	First Name	Middle Name	Summary	Work Address
Fiddler	John		John Fiddler MD Male Cell: Internal ID: 1150	Report Delivery: Fax Email 123 Practice Ave Desiree, DE 12456 Fax: (902) 548-6351 Phone: (902) 548-7646 Email: test@test.com

In addition, the Email delivery preference will be visible in the address summary grid within the Personnel editor, under the Delivery column.



The screenshot shows the Personnel editor interface with several tabs: General, Resource, Account, Notes, Attachments, Preferences, and Referring Preferences. The 'General' tab is active, showing fields for First name (John), Last name (Fiddler), Middle name, Prefix, Suffix (MD), Birth date (07-16-1969), Gender (Male), and Active person (checked). Below this is the 'Contact information' section with fields for Mobile #, Email, and Notification options (Phone Number, SMS Number, Email Address). At the bottom is a 'Contact' summary grid with columns for Contact, Address, Delivery, and Active. The 'Delivery' column is highlighted with a blue box, showing 'Fax to 9027243316' and 'Email to test@test.com'. The 'Active' column shows 'Y'. Buttons for 'Edit', 'Add', and 'Remove' are at the bottom.

13090 – CAPTURE PATIENT’S COUNTY ON THE PATIENT DEMOGRAPHICS TAB

In some markets, government regulations require the submission of data which includes the patient’s county. This field has been added to the Patient tab in the address section. Entering the patient’s zip code will automatically populate the patient’s county, unless a particular zip code crosses multiple counties. In those cases, the user will need to manually select the county.



Contact Information			
Address 1	<input type="text"/>	Zip	<input type="text" value="33434"/>
Address 2	<input type="text"/>	Country	<input type="text" value="US"/>
City	<input type="text" value="Boca Rio Br"/>	Preferred contact method	<input type="checkbox"/>
State	<input type="text" value="Florida"/>	Preferred delivery method	<input type="checkbox"/>
County	<input type="text" value="Palm Beach"/>	Marketing messages	<input type="checkbox"/>

The County field will be available by default. If desired, it can be hidden by utilizing a custom access string. It can be set as a required field using a validation rule. Please contact eRAD Support with either request.

RECEPTION

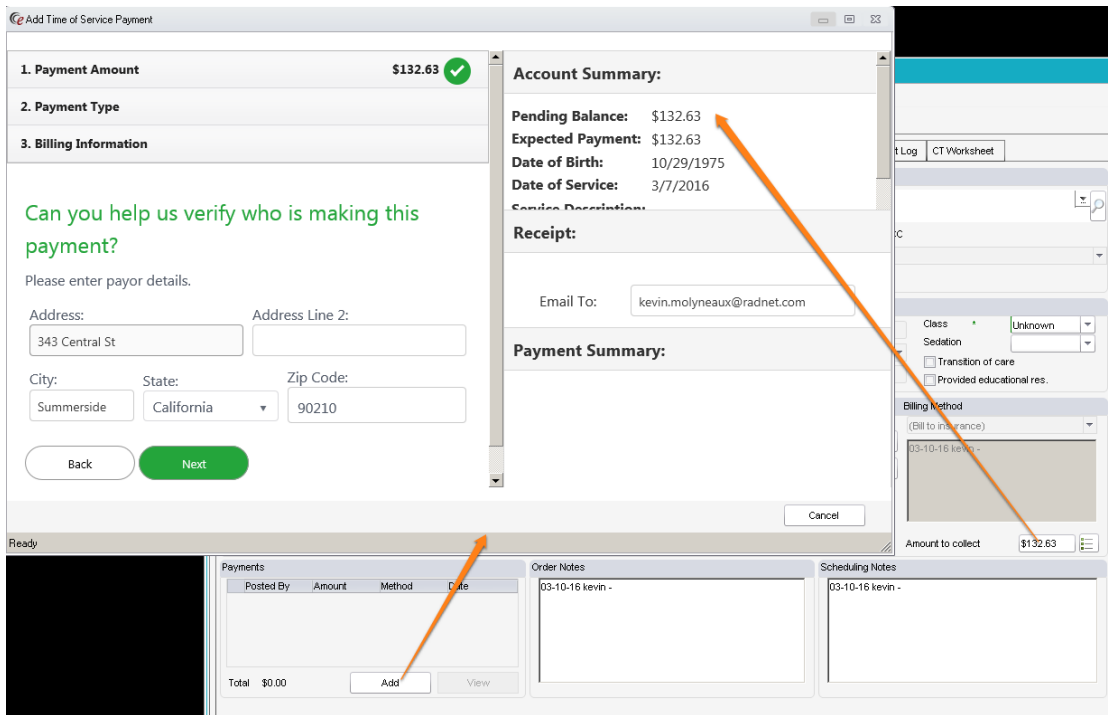
13327 – IMAGINE PAYMENT PORTAL INTEGRATION

Customers using Imagine Billing now have the ability to seamlessly integrate with the Imagine Payment Portal for time of service payments. eRAD RIS will launch the Payment Portal without the need for the receptionist to re-type any patient information, which should reduce data entry errors and ensure we have the correct patient account.

The "Add" payments button will launch the patient's account in the Imagine Payment Portal in a new window. Within the Payment Portal session, the user can pay with multiple methods such as Cash and Credit Card in one transaction. When they submit the payment via Imagine, one receipt will print for all payments. A row for each payment type will be recorded in the RIS payment grid. Using the "right click / void" context menu in RIS, the user can void each part of the transaction by payment type without needing to relaunch the Payment Portal. Users will also be able to reprint receipts via the right click "Print Receipt" context menu option.

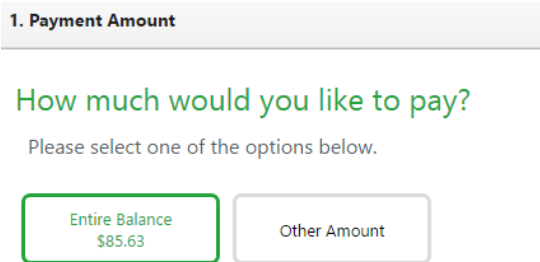
Details:

When the user clicks the "Add" payment button for a site that is configured to use the Imagine Payment Portal, the portal is displayed in the following pop-up.



The Pending Balance is pre-populated with the remaining amount to collect value from eRAD RIS, and other key fields, such as email and mailing address, are also pre-populated.

First, the receptionist will be asked to choose the amount the patient is going to pay today. If Other Amount is selected, a payment less than the entire balance can be entered; however, the receptionist will not be allowed to complete the payment process if the amount entered here is not met when splitting the amount across multiple payment types (cash, credit cards, checks, etc.).



Next, the receptionist will select the type of payment. If the patient is splitting the payment amount between multiple payment methods, click the Partial Amount button to enter the amount for the first payment method.

2. Payment Type

What payment method will you be using?

Please select one of the payment options below.

How much do you want to pay?

Payment Amount:

Credit Card and Check payment methods will require additional information.

Check:

What payment method will you be using?

Please select one of the payment options below.

Please enter your bank account.

Check Type: Routing Number (9 digits): Account Number:

Account Holder First Name: Account Holder Last Name: Check Number:

[Where is my account holder name?](#)

Hovering over the blue question marks on this screen will provide a hint to the user for locating the information on the check.

Credit:

What payment method will you be using?

Please select one of the payment options below.

Credit \$15.00 Check Cash

Please enter your credit card credentials.

Credit Card Number : Name On Card:
Expiration Month: Expiration Year: CVV:

Billing address information will default to the Responsible Party's mailing address but if that address does not exist in RIS, it will default to the patient's address.

1. Payment Amount	\$20.00 <input checked="" type="checkbox"/>
2. Payment Type	
3. Billing Information	


Can you help us verify who is making this payment?

Please enter payor details.

Address: Address Line 2:
City: State: Zip Code:

After completing the required information for the payment method, you will be asked to Add Another Payment if the total Payment Amount entered in step 1 has not been reached. (Remember, the Payment Amount can be less than the Pending Balance, but the payments must add up to this manually selected amount.)

1. Payment Amount \$50.00 ✓


2. Payment Type \$25.00  Cash ✓

Your payment information is complete!

Review your selections and click the "Add Another Payment" button to add additional payments.

[Add Another Payment](#)

When the Payment Amount has been reached (i.e. the Payment Amount and Payment Total match), the receptionist will be presented with a button labeled "Finished!" They must click this button to finalize the payment.

1. Payment Amount \$50.00 ✓	Account Summary:																
2. Payment Type \$25.00  Credit *5530 ✓	Pending Balance: \$85.63																
3. Billing Information ✓	Expected Payment: \$88.63																
	Date of Birth: 10/29/1975																
	Date of Service: 3/8/2016																
	Service Description: 03/07/16 - 74160 COMPUTED TOMOGRAPHY, ABDOMEN; WITH CONTRAST MATERIAL(S)																
	Notes: Carrier: demo																
Your payment information is complete!																	
Review your selections and click the "Finished!" button to complete this transaction.																	
Finished!																	
	Receipt:																
	Email To: <input type="text" value="test@test.com"/>																
	Payment Summary:																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Amount</th> <th>Type</th> <th>Status</th> <th></th> </tr> </thead> <tbody> <tr> <td>\$25.00</td> <td>Cash</td> <td>PENDING</td> <td>X REMOVE + EDIT</td> </tr> <tr> <td>\$25.00</td> <td>Credit *5530</td> <td>PENDING</td> <td>X REMOVE + EDIT</td> </tr> <tr> <td colspan="4">Payment Total: \$50.00</td> </tr> </tbody> </table>	Amount	Type	Status		\$25.00	Cash	PENDING	X REMOVE + EDIT	\$25.00	Credit *5530	PENDING	X REMOVE + EDIT	Payment Total: \$50.00			
Amount	Type	Status															
\$25.00	Cash	PENDING	X REMOVE + EDIT														
\$25.00	Credit *5530	PENDING	X REMOVE + EDIT														
Payment Total: \$50.00																	

When the user clicks "Finished!" the print receipt dialog is displayed. At this moment, the transaction has been saved in both the Imagine and RIS databases.

In the following workflow, two payments were collected in one Payment Portal session. There was a cash payment of \$20 and the remaining balance was paid with the credit card. When the "Finished!" button is clicked, the "Print

Payment Receipt” dialog is presented and the user has the option to Preview or Print the RIS receipt, which details both amounts and includes the billing codes, insurance co-pay, and co-insurance details.

Your payment information is complete!

Review your selections and click the "Finished!" button to complete this transaction.

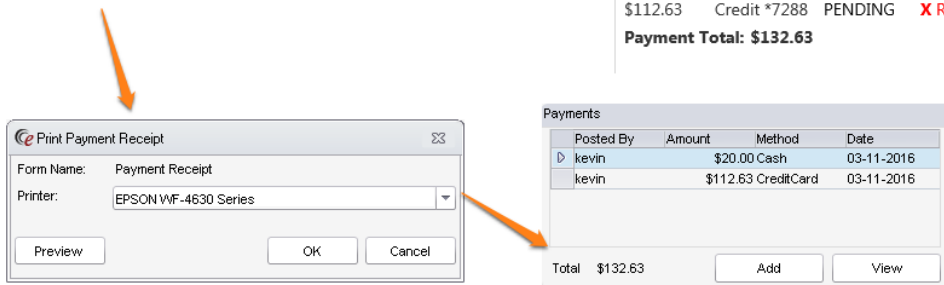


Receipt:

Email To:

Payment Summary:

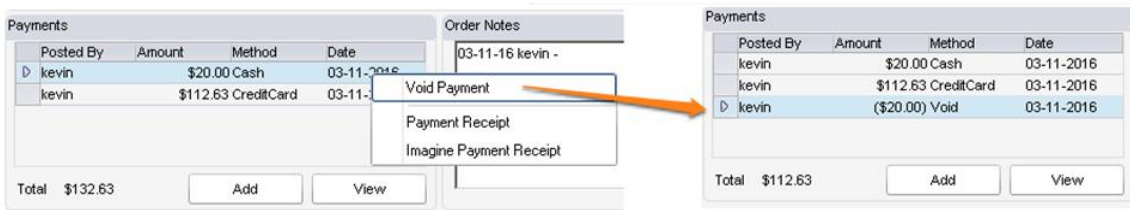
Amount	Type	Status	
\$20.00	Cash	PENDING	X REMOVE + EDIT
\$112.63	Credit *7288	PENDING	X REMOVE + EDIT
Payment Total: \$132.63			



The 'Print Payment Receipt' dialog shows Form Name: Payment Receipt and Printer: EPSON WF-4630 Series. It has Preview, OK, and Cancel buttons. An arrow points from the 'Finished!' button to this dialog. Another arrow points from the dialog to the 'Payments' table below.

Posted By	Amount	Method	Date
kevin	\$20.00	Cash	03-11-2016
kevin	\$112.63	CreditCard	03-11-2016
Total \$132.63			

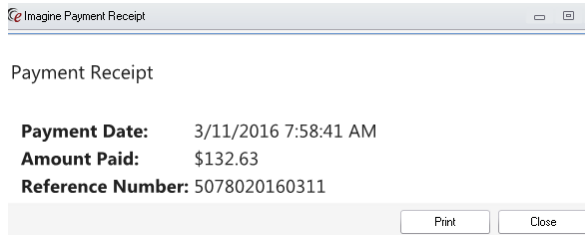
After the payment is made, staff can void portions of the payment. For example in the below image, the user is voiding only the cash portion of the payment (\$20).



The 'Payments' table shows two rows: a \$20.00 Cash payment and a \$112.63 CreditCard payment. A context menu is open over the cash payment with options: Void Payment, Payment Receipt, and Imagine Payment Receipt. An arrow points from the 'Imagine Payment Receipt' option to the right-hand 'Payments' table.

Posted By	Amount	Method	Date
kevin	\$20.00	Cash	03-11-2016
kevin	\$112.63	CreditCard	03-11-2016
kevin	(\$20.00)	Void	03-11-2016
Total \$112.63			

The Imagine receipt is stored as a PDF in the RIS system. Clicking on the “Imagine Payment Receipt” context menu item (as shown above) displays the PDF and gives the user the option to reprint. This receipt is similar to the receipt emailed to the customer’s “Email To” address.



There is also a configuration option to display the Imagine Payment Receipt as part of the Payment Workflow. This workflow configuration setting might be helpful in the future when the Imagine Payment Portal supports payment plans. At that time, the receipt will likely contain details on the payment plan agreement.

Note regarding Amount to Collect limits:

The same configuration options exist for setting a maximum payment amount and a maximum payment above the amount to collect value as previously existed.

System Config Code	Value	Default	Description
Contains: <input type="text" value="maxp"/>	Contains:	Contains:	Contains:
MaxPaymentAboveAmountToCollect	99	999	(value = int) Max \$ above the amount to collect that will be allowed.
MaxPaymentAmount	4000	6000	(value = int) Max \$ amount that can be paid in a single payment.

Just as before, users will be prevented from entering a collection amount greater than:

$$\text{MaxPaymentAboveAmountToCollect} + \text{AmountToCollect}$$

When the amount to collect is less than the MaxPaymentAmount, then a user will be prevented from entering an amount greater than MaxPaymentAmount.

How to enable the Feature:

Please contact the eRAD Support team for assistance.

Important Note: This feature requires client to have IE browser version 9 or newer.

INSURANCE ELIGIBILITY & VERIFICATION

13110 – UPDATE THE PAYERS.JSON URL TO RESUME ABILITY TO ADD NEW PAYERS

For organizations using the Eligibility feature, eRAD RIS previously gave administrators the ability to pick Eligibility Payer IDs from a list generated from <https://www.eligibleapi.com/resources/payers/eligibility.xml> once per session. If you believe Eligible API has added newer entries, you need to restart the RIS application.

Unfortunately, the list at the previous URL has been deprecated. We now retrieve the payer list from: https://account.eligible.com/rest#latest_payers.

13481 – ABILITY TO CONFIGURE ELIGIBILITY RULES TO IGNORE THE AMOUNT TO COLLECT FOR AN EXAM WHEN CERTAIN INSURANCE CARRIERS ARE INCLUDED

By default, we always collect the co-pay amount when multiple insurance carriers are active for an order. In some scenarios, money should not be collected if a particular insurance is selected as a secondary insurance. For example, if the patient’s secondary insurance is Medicaid, the amount to collect should be 0.

A column titled “Collect with Multiple Carriers Flag” has been added to the Carrier lookup table.

Carrier Code	Description	Collect With Multiple Carriers Flag
Contains: ▼	Contains: medicaid	Contains: ▼
Click here to add a new row		
1500	MEDICAID	N

If set to N, the Amount to Collect will be set to 0 if the insurance is active for an order, regardless of the insurance’s priority (primary, secondary, tertiary, etc.).

TECHNOLOGIST

12911 – CREATE A CONFIGURATION OPTION TO DEFAULT THE LOGGED-IN USER AS THE PERFORMING TECHNOLOGIST

The ability to default the performing technologist to the user who is currently logged into RIS has been requested for some time. With the addition of the Default Values framework, described later in this document, we now have the ability to configure this option when desired. If the logged in user is a Technologist and the Performing Technologist field is blank, the logged in user will be defaulted into the field and can be changed if needed.

How to enable the Feature:

Please contact the eRAD Support team for assistance.

13157 – SUPPORT TECH ONLY WORKFLOW BASED ON PROCEDURE CODE IN ADDITION TO PATIENT CLASS

There are scenarios where an eRAD RIS customer is required to only perform a diagnostic procedure and not produce report of the findings. This is referred to as Tech Only workflow. Currently, this is determined by the Class of the patient on the visit. If the class is set to “Tech Only” and the procedure is completed by the

technologist, the study is not forwarded to the radiologist for dictation and the status changes to “Exam Done [Tech Only].”

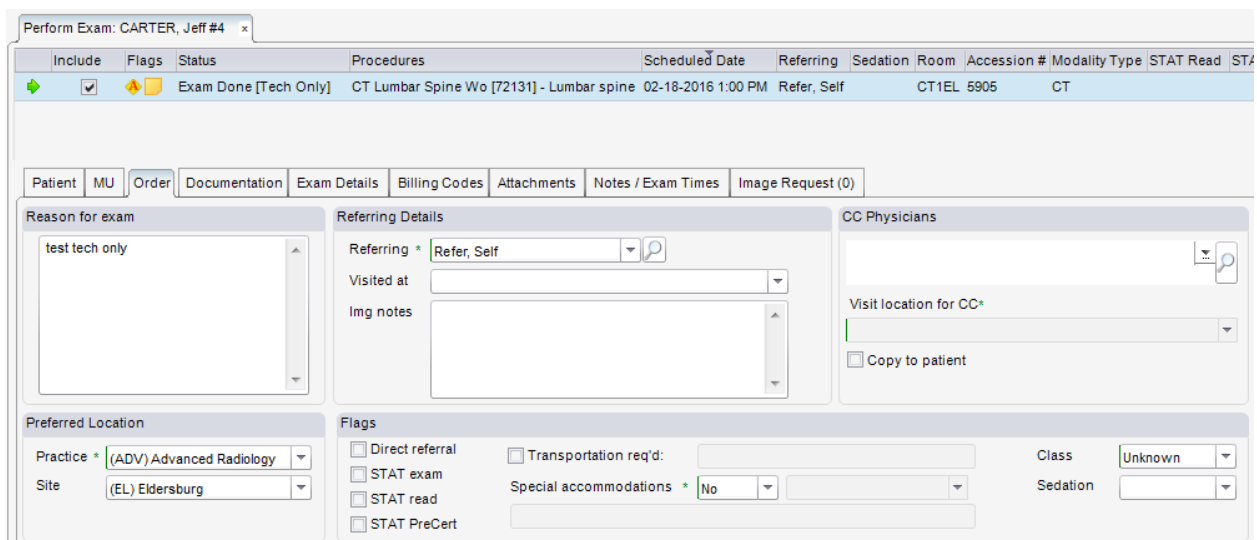
We have expanded the Tech Only workflow to be based on Patient Class **or** Procedure Code.

A new field has been added to the Procedure Code lookup called *Tech Only Flag* that defaults to ‘N.’

Procedure Code	Description	Tech Only Flag	Body Part Code	Laterality Code	Body Part Required Flag
Contains: ▾	Contains: ▾	Contains: ▾	Contains: ▾	Contains: ▾	Contains: ▾
Click here to add a new row					
▶ 72131	CT Lumbar Spine Wo	Y	T-11503 (Lumbar spine)		Y
▶ CT31	CT Ankle Arthrogram	Y	T-15750 (Ankle joint)		Y

If the Tech Only Flag for a procedure code is set to ‘Y,’ the status will become Exam Done [Tech Only] instead of Exam Done when the procedure is marked as complete.

Upon completion of the exam, the system will check to determine if the patient class is set to ‘Tech Only’ **OR** if the procedure code for the performed study has the Tech Only Flag set to ‘Y.’ In either case, the status will advance to Exam Done [Tech Only] and the exam will not fall to the Pending Dictation WL.



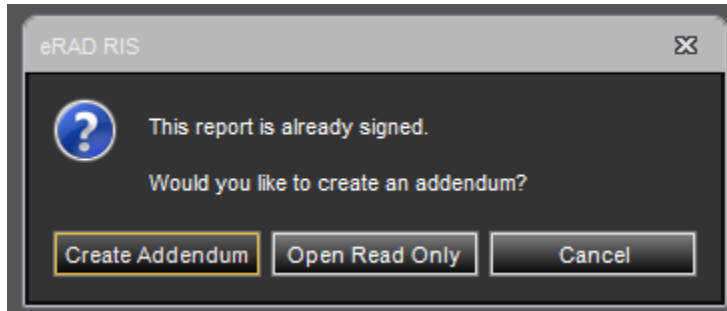
RADIOLOGIST

13069 – ABILITY TO OPEN SIGNED REPORTS IN A RADIOLOGIST LAYOUT AS READ-ONLY

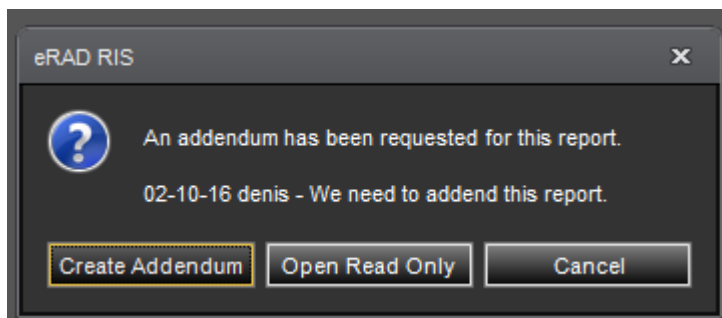
Radiologists sometimes need to look at a prior exam outside of the normal dictation workflow, such as when a referring physician calls to discuss a case. There is a desire to be able to open the case in the Radiologist Layout format, so that all of the data is at their fingertips in the panels to which they are accustomed.

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Now when the radiologist opens a signed report, we have added an option to the Addendum dialog box to open in read only mode.



The Open Read Only option is also available when an addendum has already been requested.



When the screen opens in read only mode, it operates in the same fashion as our existing read only mode that is used when the study is locked or dictated by someone else.

Outstanding issue: When reading in PowerScribe 360, the "Create Addendum" prompt is suppressed in eRAD RIS because PowerScribe issues its own prompt. Therefore, the option to Open Read Only would only be available for PowerScribe users when an addendum has been requested, which is shown in eRAD RIS due to the additional notes about the addendum request. This will be addressed in a future release.

PACS INTEGRATIONS

13351 – RIS/PACS SYNC ENHANCEMENTS

In order to improve the process of keeping RIS and PACS in sync, there are times when RIS will need to wait for PACS and block the user from performing certain actions until the PACS has begun the process of opening the current patient's images. This is accomplished by displaying a message dialog, and disabling the main page on the RIS application under certain circumstances. As a result, RIS will not move faster than PACS creating a situation where the radiologist may be looking at a previous patient's images while reporting on the current patient in RIS.

There are 3 new dialog boxes which provide feedback and guide/throttle the workflow in order to keep things synchronized. Efforts have been made to decrease the amount of time a radiologist would see or need to interact with the messages, while at the same time reducing risk. For example, as soon as the current patient's images have *started* to load in PACS, we allow the user to move forward in RIS, instead of waiting until the images are completely loaded.

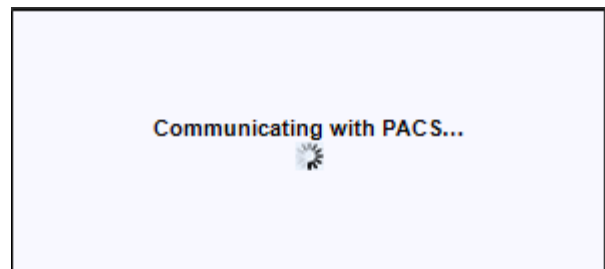
Dialog boxes used in RIS PACS Synchronization

Communicating with PACS

This dialog will show when PACS is busy on another exam and RIS has moved on to a new one. If PACS catches up before RIS is finished loading the reporting screen, then this dialog will not be displayed. If PACS is still busy closing or opening a previous exam, the message will be displayed to the radiologist to indicate that the process of updating the PACS images to match the current RIS exam is still underway. When the message does display, it will close on its own as soon as PACS has progressed to opening the current exam, even if the images are still loading.

Examples:

- RIS has a study open, and is waiting for PACS to close the previous study and start opening the current one.
- RIS opened a study that should not show images, it will wait for the previous study to close in PACS.

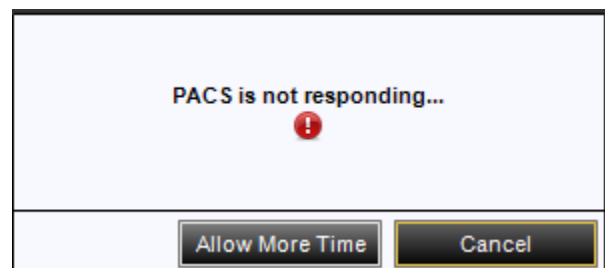


PACS is not responding

This dialog will be shown after the "Communicating with PACS" dialog has been displayed for 45 seconds and PACS has not yet begun the process of opening the current exam. If it takes PACS more than 45 seconds to finish working on previous exams and start opening the current one, then this will be shown and user should select "Allow more time" if they believe PACS simply is taking longer to finish. If the user believes PACS is no longer responding, they should select "Cancel" and take appropriate actions to rectify the problem.

Examples:

- PACS took 50 seconds to finish opening the previous study, and another 10 seconds to close it. User should "Allow more time."
- PACS is having problems connecting to the server. User should "Cancel."



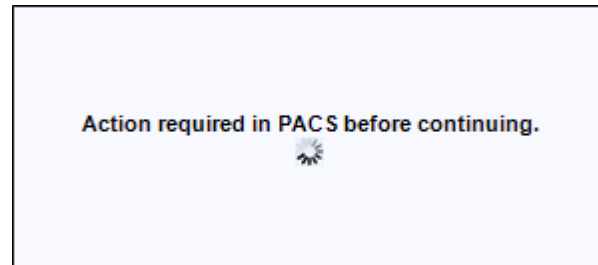
Action required in PACS before continuing

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This dialog is to prevent RIS from issuing more requests to PACS while PACS is waiting for user input on one of its own dialogs. When PACS is waiting for the user to “Break a lock or Open read-only,” for example, and RIS attempts to issue a new open request, this dialog will be shown until the action has been taken in PACS. Once that happens this dialog will close, and the new open request will be sent over to PACS.

Examples:

- Radiologist skips to the next exam in RIS, while PACS has an open dialog box regarding breaking a lock in PACS.
- PACS opens an exam and displays an error prompt, while radiologist skips to the next exam in RIS.



Special Note for GE PACS-IW: When multiple PACS windows are open, it is possible that the user might be left with the wrong images up. The described synchronization will only work properly if the user only opens one set of images at a time. This is no different than it would have been before. If the radiologist opens a case that cannot or should not display images (signing workflow for example), PACS will close its last set of images, but if there were more open, they will remain open and will be visible.

12915 – GE UNIVERSAL VIEWER – INTEGRATE BASED ON ACCESSION NUMBER INSTEAD OF STUDY INSTANCE UID

A customer requested that integration between eRAD RIS and GE Universal Viewer occur by passing the Accession number instead of the Study Instance UID. This is now possible.

DIGITAL FORMS

12991 – LOAD SELECTED ANSWERS FROM PREVIOUS DIGITAL FORM

In cases where a patient has more than one exam that requires a specific Digital Form, we may not want to prompt the user to re-enter all of the answers from scratch. In the future, we may allow Digital Forms to be linked to the patient or order level, but for the current release, we have created a feature to optionally load answers from *recent* versions of the same form and use those answers as defaults.

The time frame for “recent forms” is defined by a new System Configuration setting labeled *‘DigitalFormsNumberOfDaysToPullForward’* with a default of 2 days. This can be adjusted as desired.

A new attribute was added to Digital Forms to enable this functionality on a form by form basis. If the attribute is *not* turned on, there should be no change in the behavior of Digital Forms. If the attribute is on, we will load the most recent answers for the same patient and form, provided any were completed within the configured time frame.

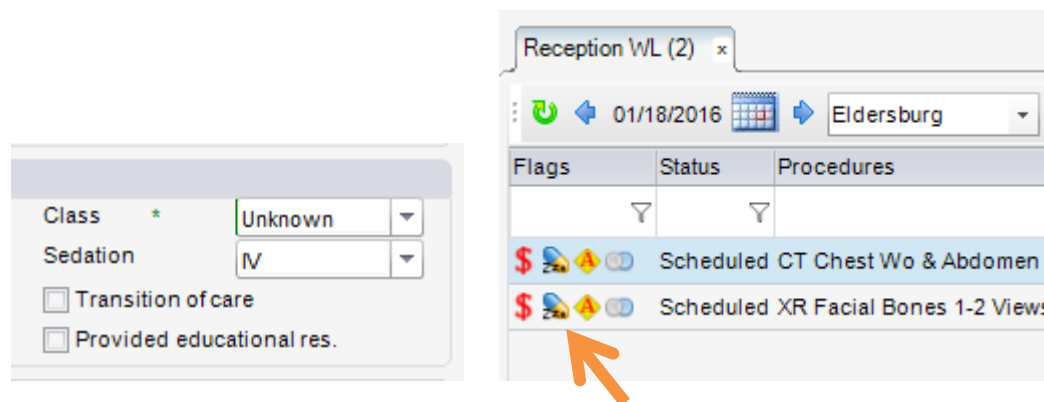
This feature most likely should not be used for Report Assistant Digital Forms that will be populated by the Radiologist as part of the report creation process.

Loading previous answers does not currently work during Scheduling or Walk In workflow. It requires a study that already exists in the database.

WORK LISTS

7812 – ADD A SEDATION REQUIRED FLAG TO WORK LISTS

When Sedation is indicated via the Sedation drop-down on the Order tab, a new flag will appear on the work lists.



The flag does not change depending on the type of sedation, but is intended to draw the user’s attention to the fact that some type of sedation is required. It is possible to filter the work list by this flag, if it is desirable to create a Custom View for Sedation patients.

If the user then resets the Sedation drop-down back to null (no option chosen), the flag will be removed.

12675 – ADD REFERRING AND PATIENT TYPE (CLASS) COLUMNS TO BILLING EXCEPTION AND BILLING CONFIRMATION WORK LISTS

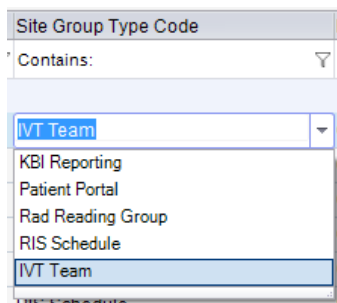
Two new columns were made available on the Billing Exceptions and Billing Confirmation work lists: Referring and Patient Type (Class).

13613 – LIMIT THE SCOPE OF THE IVT WORK LIST TO A SET OF SITES

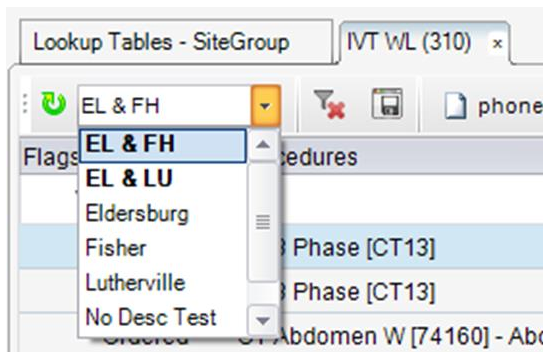
In order to improve IVT work list performance, the IVT work list was constrained to reduce the use of practice-wide work list filters. Several work lists in RIS, such as the Reception WL, have a drop-down list that allows the user to specify a single site; this functionality was enhanced for IVT to allow the user to specify a collection of sites through the use of Site Groups.

Site Groups are a collection of sites that may or may not exist within a single practice. A site group can be configured with a site group type. There is now an *IVT Team* site group type.

Site Group Code	Description	Display Order	Practice Code	Site Group Type Code	
Contains:	Contains:	Equals:	Contains:	Contains:	E
Click here to add a new row					
▶ CT	EL & FH	1		IVT Team	0
▶ CT2	EL & LU	1		IVT Team	0



Any site group with a type of IVT Team is eligible to appear in the top left portion of the IVT work list tab. Site groups will be shown in bold above a list of individual sites for the practice currently selected in the Organization Picker.



The list of site groups is filtered to show only those relevant to the current user for their current "Org Picker" selection in the top right portion of RIS.



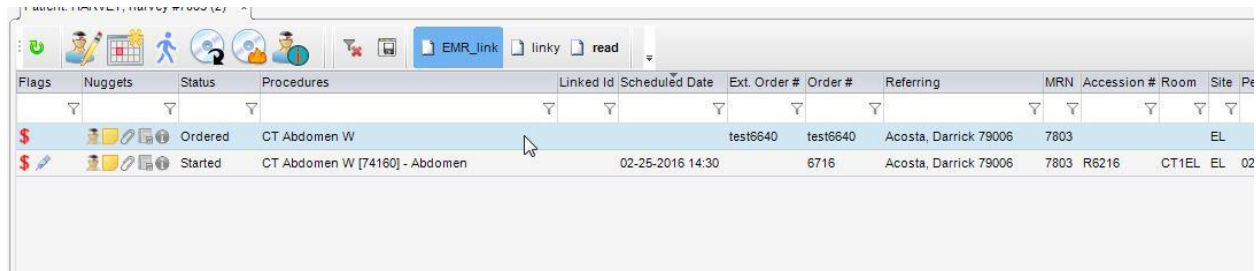
Only the IVT Team site groups that contain the currently selected site or at least one site from within the current practice will be included. There is also an additional filter to ensure that the user is not presented with site groups that contain sites that belong to practices to which the user has not been granted access in the Personnel Editor.

The list of sites and site groups will change as the user changes their currently selected filter in the Org Picker. The user's selected site or site group should be persisted and reloaded from one login session to the next. At this time, the Site Group work list functionality is only available for the IVT work list.

EMR

8158 – EMR ORDER REASSOCIATION

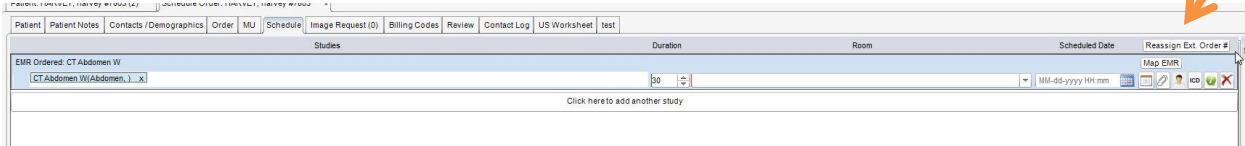
Sometimes exams for EMRs are scheduled without using the electronic order, whether this is accidental or the electronic order was received after the patient called to schedule or register for the exam.



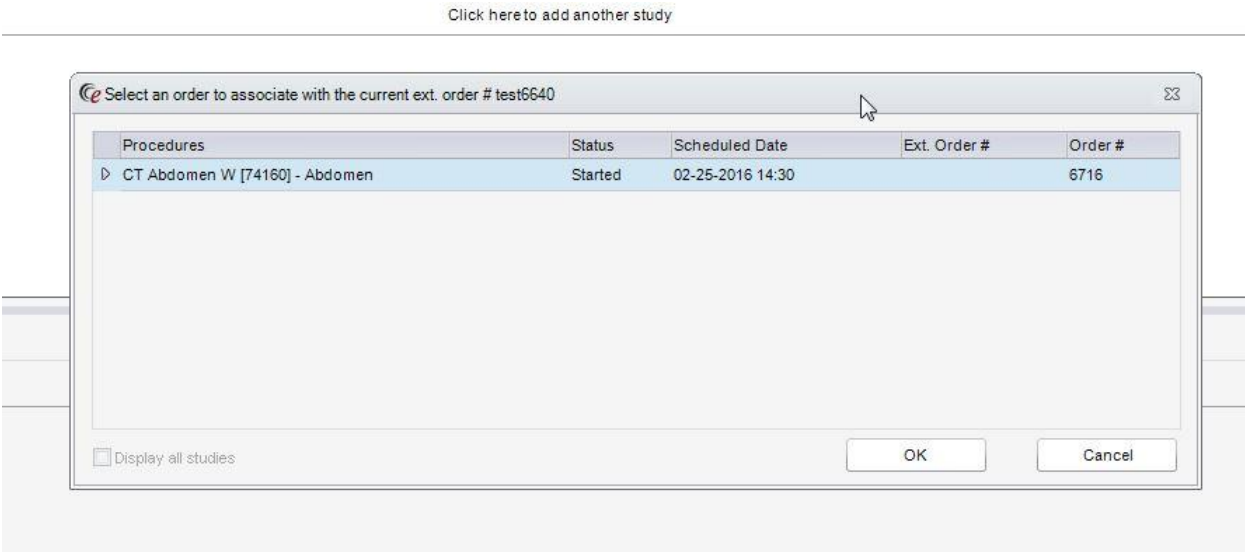
Flags	Nuggets	Status	Procedures	Linked Id	Scheduled Date	Ext. Order #	Order #	Referring	MRN	Accession #	Room	Site	Pt
\$		Ordered	CT Abdomen W			test6640	test6640	Acosta, Darrick 79006	7803			EL	
\$		Started	CT Abdomen W [74160] - Abdomen		02-25-2016 14:30	6716		Acosta, Darrick 79006	7803	R6216	CT1EL	EL	02

Until now, the process for associating the EMR's external order number and other data from the EMR order after the fact has been laborious and inefficient. eRAD RIS now has the ability to reassign the external order #, issuer, and associated scanned documents to an internal order, without overriding any of the data fields that have already been filled in for the internal order. The external order will be cancelled after it has been copied over to the internal order.

Where the RIS previously displayed the "Import" button on the scheduling screen for EMR orders, we will now display the "Reassign Ext. Order" button.

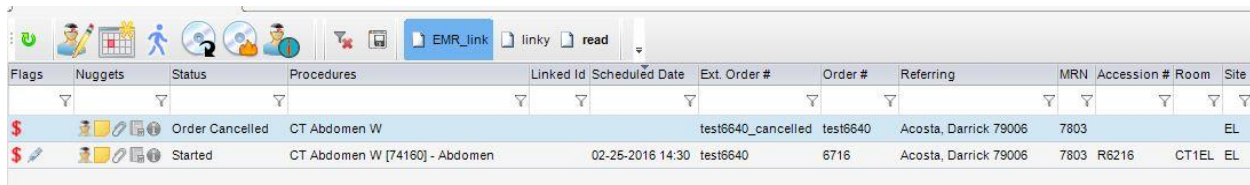


This will bring up the list of orders to choose from as it did before; however it will not have a Next button to load the Import Studies mapping screen, but instead will simply have an OK submission button.



Upon selecting an order and submitting, the selected order will assume the current open EMR order's external order #, issuer and scanned documents.

The original EMR order's placer_order_number will be left intact but appended with "_cancelled." This order is then cancelled.



The report for the exam will now flow to the EMR upon signature as usual.

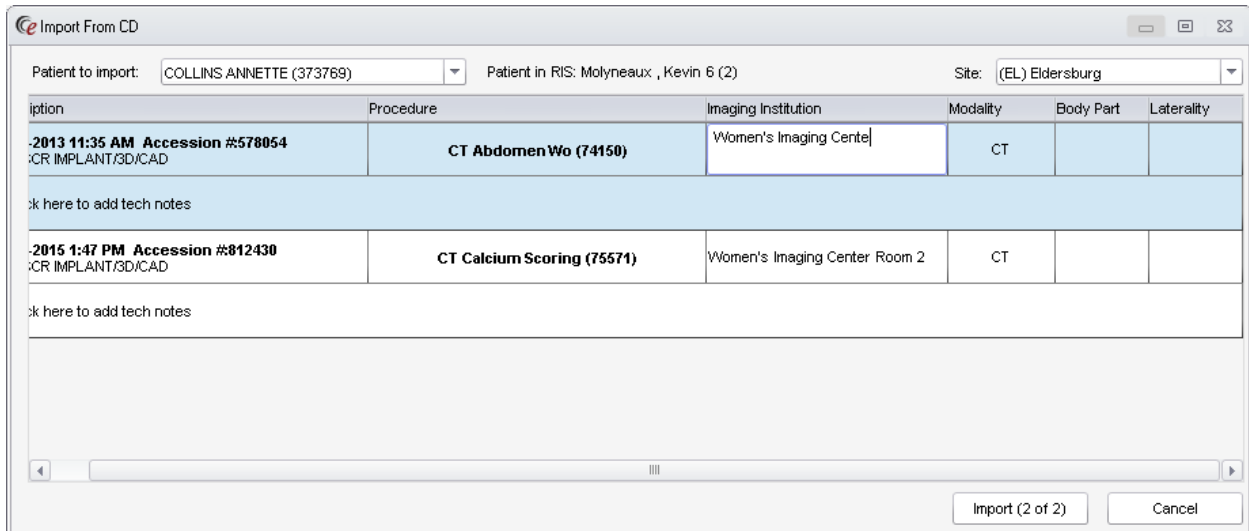
EMR and non-EMR studies can still be moved to different orders with the Patient Folder right-click menu item Import Studies. This functionality has been left intact and allows for moving exams between orders as needed.

CD IMPORT

9511 – OPTION TO RETAIN THE INSTITUTION NAME FROM THE CD OR SUBSTITUTE AN ALTERNATIVE INSTITUTION NAME FOR CD IMPORT

When importing CDs via eRAD RIS, clients have requested the ability to import the Institution Name from the DICOM data on the CD or have the option to coerce their own Institution Name. This allows for more flexibility in how the exams and images are labeled, and allows the radiologist to easily identify where a prior exam was performed when creating the report.

We now take the DICOM field *institution_name* from the CD and store it in the database field *c_study.cd_import_institution_name*. When importing a CD, the institution name will show for each study, as there might be a different institution name per study. In eRAD RIS, the field will always be identified as Imaging Institution as shown in the following:



Importation	Procedure	Imaging Institution	Modality	Body Part	Laterality
2013 11:35 AM Accession #578054 :CR IMPLANT/3D/CAD	CT Abdomen Wo (74150)	Women's Imaging Cente	CT		
:k here to add tech notes					
2015 1:47 PM Accession #812430 :CR IMPLANT/3D/CAD	CT Calcium Scoring (75571)	Women's Imaging Center Room 2	CT		
:k here to add tech notes					

The user can click on the Imaging Institution and edit the contents as shown in the above. Users can also modify the Imaging Institution on the “Notes/ Exam Times” tab after import, by opening in View/Edit mode. The Imaging Institution will only display if the type of exam is a CD Import, which is any study “scheduled” by the user “CDImport.” The CD Import is a user account (typically inactive), which must be created to perform a CD Import.

Patient: MOLYNEAUX , Kevin 6 # (296) View/Edit: MOLYNEAUX , Kevin 6 #2

Patient | Contacts / Demographics | MUJ | Order | Documentation | Exam Details | Billing Codes | Attachments | Notes / Exam Times | Contact Log | C

Place billing on hold

Billing Notes

01-22-16 kevin -

Exam Details

Scheduled time	* 08-04-2015	Scheduled by	CDImport, CDImport
Arrival time	MM-dd-yyyy h:mm am/pm	Imaging institution	Women's Imaging Center
Arrival early/late	<Arrived On Time>	Primary tech	Tech, Outside Read
Start time	08-04-2015	Cancel reason	N/A

Radiologists can see the Imaging Institution in the Summary and Exam Details panels. The Imaging Institution field will only display if the exam was imported via the eRAD RIS CD Import tool.

Patient: MOLYNEAUX , Kevin 6 # (296) Dictating: MOLYNEAUX , Kevin 6 #2

Molyneaux, Kevin 6 | 09-01-1977 (38y 4m) | Female | #2 | CT Abdomen W | 08-04-2015

Exam Details

Tech Notes

01-22-16 kevin - test

Order Notes

Signs and Symptoms

Exam Information

Location	MD / ADV / OUT
Accession #	11361 [Ext: 812430]
Procedure	CT Abdomen W [74160]
EMR order	
Imaging Institution	Women's Imaging Center
Body part	Abdomen
Laterality	
Primary tech	Tech, Outside Read
Assisting tech(s)	

M-Modal Interactive Report

Play Speed 1.0

EXAM

TESTING

History

TESTING

Comparison

TESTING

Summary

Initial Report

MRN	2	Loc.: MD / ADV / OUT
Patient:	Molyneaux , Kevin 6 patient test 38y...	
DOB:	09-01-1977	
Accession #:	11361 [Ext: 812430]	
Procedure:	CT Abdomen W [74160]	
Performed:	08-04-2015 1:47 PM	
Imaging Institution:	Women's Imaging Center	
Super. Rad:	Harding, Clifton	
Dictated:		
Tech Notes:	Tech, Outside Read	

INTERFACING

13228 – RECEIVE AND UPDATE BILLING CODES VIA INTERFACE

An enhancement was requested to allow a customer interface to be able to send and update billing codes and units.

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These requirements were also requested:

- If update was sent to RIS from the third party system, RIS should not add a billing code to a study (accession #) that was cancelled in RIS.
- If update was sent to RIS from the third party system, the RIS should not add a billing code that is already exists in the study (accession #).

To meet these needs, the external interface service was enhanced to receive and process `c_study_item_certification` updates.

The message sent to the service can define if updates should or should not be applied to Cancelled studies.

The message can also specify whether the billing codes it contains should replace what is currently in RIS and override the default logic applied based on the procedure code to billing code rules. Any billing codes that should have been added based on the configuration will be added as inactive billing codes.

The schema for the External Interface Service has been updated to include the definition of these two attributes.

The logic that adds missing billing codes to studies based on the procedure code configuration was also updated to not take effect for studies in Cancelled, Discontinued, or Void statuses.

If a message is sent with a `c_study_item_certification` node, the system will add or update the data provided.

Two new attributes can be applied to the Study node to provide some logic to control the updates.

- `update_sic_on_cancelled_study` - (Y or N) if attribute is present and set to N, the system will not update the `c_study_item_certification` data if the studies status is cancelled. Otherwise, updates will happen as normal.
- `override_sic` – (Y or N) if attribute is present and set to Y, the system will apply the insert/update of the `c_study_item_certification` data provided in the message and will not allow the automatic addition of the `c_study_item_certification` data based on procedure code configuration. It will also mark any currently active billing codes inactive if they are not contained in the message.

11989 – CONFIGURABLE XML FILE DROP

eRAD RIS now has the ability to configure XML files and allow users to write them out when opening or focusing a reporting tab. This functionality was needed for Merge PACS integration, but may be utilized for other possible third party product integrations.

Administration

The XML files are stored in a new lookup table, “*XML Integration*,” that allows administrators to add, modify or delete entries. Access to the lookup is controlled by the new access string: `Config.LookupEditor.XMLIntegration`.

Please contact the eRAD Support team for assistance with XML file drops.

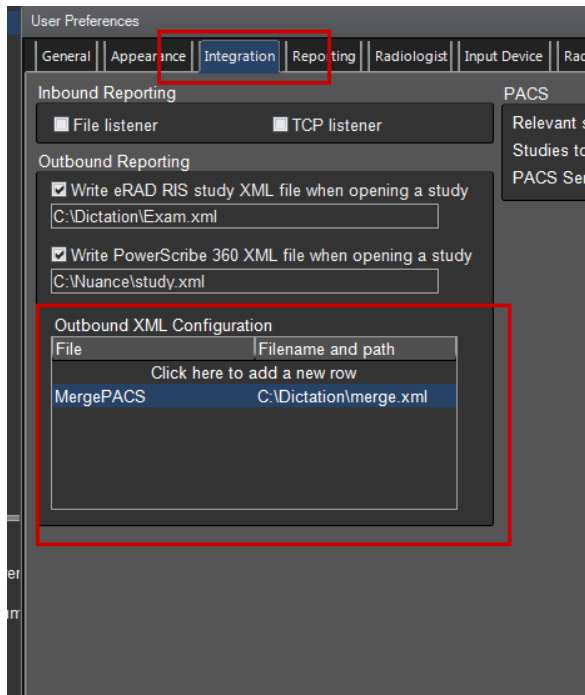
XML Integration Code	Description	Active	Default Filename with path	Display Order	Last Updated	Last Updated By User Id
MergePACS	Merge PACS	Y	C:\Dictation\merge.xml		1/3/2016 8:36:19 AM -03:00	hardingc


```

<?xml version="1.0"?>
<EpicStudyData>
  <Event>StudyOpen</Event>
  <AccessionNumbers>
    <AccessionNumber><mapped_field>Study_c_study_accession_number</mapped_field></AccessionNumber>
  </AccessionNumbers>
</EpicStudyData>
  
```

User preferences

Configuration of which XML file(s) should be written when focusing or opening a reporting tab is done in the user preference screen. This XML integration grid contains a list of files to be written when opening a study. Each file references a lookup value and a path to which it will write. It will assume the default path but allows overriding. The same XML file can be written multiple times.



LOCALIZATION

13409 – SUPPORT SPANISH LANGUAGE IN ERAD RIS

Resource files have been added for Spanish language localization. Note that configuration screens have not been localized.

PLATFORM

12697 – MINIMUM SUPPORTED .NET FRAMEWORK VERSION IS NOW 4.5.2

As previously communicated, Microsoft has ended support for .NET framework versions below 4.5.2 and we are raising the minimum requirement for eRAD RIS in response. A .NET folder with the installer for 4.5.2 will be provided with the upgrade.

13183 – MICROSOFT SQL SERVER 2008 R2 SP3 HAS BEEN VALIDATED

eRAD RIS has been validated with Microsoft SQL Server 2008 R2 SP3.

CODE STREAM



RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
-------	-------	------------	--------------	------------	------------	-------

43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771	Gui.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771	Gui.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475	Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906	Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906	Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365	Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909	Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909	Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138	Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138	Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676	Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676	Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676	Gui.zip and Web Service

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44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976	Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449	Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554	Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558	Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738	Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174	Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174	Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599	GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771	GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936	GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416	GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540	

NEW SETTINGS

NEW ACCESS STRINGS

Setting	Default	Purpose
Config.LookupEditor.XMLIntegration	None	Access to the XML Integration lookup

NEW SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
DigitalFormsNumberOfDaysToPullForward	2	Number of days considered “recent” for carrying forward digital form answers on configured forms
DisplayImaginePaymentPortalReceiptInWorkflow	FALSE	To determine whether Imagine version of Payment receipt will print if using Imagine Payment Portal
ImaginePaymentPortalAPIURL		Provided by Imagine Software if applicable
ImaginePaymentPortalClientID		Provided by Imagine Software if applicable
ImaginePaymentPortalDataset		Provided by Imagine Software if applicable
ImaginePaymentPortalPassword		Provided by Imagine Software if applicable
ImaginePaymentPortalURL		Provided by Imagine Software if applicable
RISSystemID		For identifying RIS System for Imagine Payment Portal

RESOLVED DEFECTS

RESOLVED DEFECTS FOR 2.2016.2

Bugs and support issues resolved in build 2.2016.2. The extract is taken from Redmine bug tracking system and only displays defects resolved in 2.2016.2.

Bug #	Category	Subject
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12993	Admin-Monitoring/Alerts	Character limit is too small for 'External Notification Email Address' in the Message Group table
7456	All Workflows	Changing the procedure to a non-hold code procedure from the patient folder will not push study to pending PACS Correction WL
11471	Archiving	Work lists that have audio length and audio size columns are displaying a blank values
13584	CD Import	CD Import intermittently throws an error - The issue is with UTF8 encoded files and the PDU reader defaulting to ASCII
13181	Digital Forms	A misconfigured digital form can cause an error
13222	Digital Forms	A required field in a digital form can be left empty and saved
13009	Digital Forms	An error can be thrown on reschedule when a digital form has not yet loaded
12587	Digital Forms	Digital Forms editor needs a logout option
13216	Digital Forms	Parent question field is not updating in the digital form editor
12959	Digital Forms	When creating rulesets a check box needs text in order to work
13719	Digital Forms	Unable to load digital form in editor due to 'Undefined variable' error
12835	eRAD Editor	An extra character is appended to a field
13056	eRAD Editor	When in read only mode the user can still insert macros and templates into report
12910	Exam Search	Exam Search screen is very slow to load
13075	Finding Followup	Finding/Follow up tool window should show if it has data
11842	Insurance Eligibility	The insurance eligibility manager occasionally throws a null reference error
13416	Insurance Eligibility	Changing billing codes is not updating the amount to

		collect field on self-pay
13002	Insurance Eligibility	Co-insurance portion field issue in stored procedure c_bi_eligibility_payment_receipt
13016	Insurance Eligibility	Eligibility and missing units on study_item_certification can cause error on save
13594	Insurance Eligibility	Eligibility items staying on the IVT work list
12292	Insurance Eligibility	Failed queries to Medicare are causing Denial Of Service trigger in their system
13415	Insurance Eligibility	If the initial insurance is not valid and the user overrides to make it approved, the pricing is ignored
13528	Insurance Eligibility	Intermittent exception occurs which prevents re-submitting insurance
13550	Insurance Eligibility	The insurance eligibility service queries too often
12803	Insurance Eligibility	The insurance eligibility portal password is not getting used until a site is selected
13122	Insurance Eligibility	Usual & Customary field from NPD can return as a string and prevent saving in RIS
13218	Insurance Management	When saving a payment the max payment amount to collect is not displayed in error message
13038	Insurance Management	When using insurance eligibility and the last name contains a single quote character, the details screen will not display
9546	IVT / PreCert	PreCert status doesn't update on IVT WL when a detail is changed on the registration/scheduling/walk-in
13349	Linked Reporting	Discontinued non-primary exams re-activate and adopt their primary status on status change to primary study
13290	Linked Reporting	Intermittent null reference error in work lists
13053	Linked Reporting	Linked studies dialog checkboxes should be disabled
13067	Linked Reporting	Linked studies dialog OK button should be disabled
13021	Linked Reporting	Patient Folder control in reporting screen causing a CPU spike

12970	Linked Reporting	ReportCreated action was created and sent for a cancelled linked study
13405	Linked Reporting	The 'Link Studies' right click menu should not show on orders in patient history
13066	Linked Reporting	Unable to dictate on linked studies Pending PACS Correction
13164	Localization	Correct Hebrew text
12685	Localization	Character ("") needs to be supported within the patient notes and other fields
13156	Localization	Hebrew localization for Digital Forms and Selected Digital Forms
13337	Localization	Integration messages are not aligned properly when in RTL mode
13308	Localization	Normals Browser group headers left aligned in right to left mode
12894	Mammography	Biopsy screen has not been localized
13229	Mammography	BI-RADS picker not showing on reporting screen
12892	Mammography	Tab order is incorrect on the mammo biopsy screen for the create reminder button
13286	Meaningful Use	Error occurs upon accessing the Labwork Advised WL
8164	Mgt Reports	Radiologist Productivity by User - formatting issues in report
12925	MModal	Intermittent 'Get Data/DisplayData' error when editor is M*Modal and the user attempts to dictate an exam when 'Insert template with markers' turned on
13336	PACS (eRAD) Int - RIS only	Disabling PACS integration when images are already shown on PACS will leave the current images open
13497	PACS (eRAD) Int - RIS only	PACS integration - Unable to enter PACS password
13304	PACS (eRAD) Int - RIS only	Prefetch studies engine is not logging which studies the RIS is attempting to fetch

13302	PACS (eRAD) Int - RIS only	Prefetch studies is occurring even when PACS integration is disabled
12505	PACS (eRAD) Integration	When PACS integrated and close studies using the X on tab, the last study's images may remain open
13307	PACS (eRAD) Integration	PACS loaded status column in the mini patient folder in dictation window is not displaying correct results
12914	PACS (Non - eRAD) Integration	GE Universal Viewer requires a new parameter to tell it not to load priors automatically
12067	PACS (Non - eRAD) Integration	GE Universal Viewer requires a new parameter to tell it stream instead of fetch from archive
13752	PACS (Non - eRAD) Integration	Intermittent PACS error when opening case for signature.
13384	PACS (Non - eRAD) Integration	IW PACS images can get out of sync with RIS (under very specific condition)
12836	PACS (Non - eRAD) Integration	PACS integration is prompting the radiologist with too many message boxes after the update to 44.1.7
13776	Patient Management	A duplicate MRN error can occur when manually linking an external MRN to existing patient
13223	Payment control	If you add a payment before performing a 'check in' the receipt will not be automatically printed
13335	Person Management	Merging an active account person account into an inactive account throws an exception and cannot be merged
13418	Powerscribe Integration	PS360 - Images can get out of sync when closing via the X on tab
13010	Radiology Peer Review	Creating an addendum on a study which is in the QA work list will remove it from QA work list - also unclear which version is being reviewed when in QA screen
12980	Radiology Peer Review	Peer review button is enabled when creating an addendum - even if the same user previously peer reviewed it
12676	Radiology Peer Review	Peer review reporting layout colors are applied

		incorrectly
10853	Radiology Peer Review	Peer review 'skip and continue' does not work
13706	Radiology Peer Review	Peer review button is not always showing/hiding appropriately
13402	Radiology Peer Review	Peer review QA window cursor is always an hour glass instead of a pointer
13112	Radiology Reporting	Ensure all member variables related to patient/study are reset when preparing to reuse the same control (internal patient safety enhancement)
12971	Radiology Reporting	An error can occur when opening the Review window from Peer Review WL
13094	Radiology Reporting	'Assign To' control causes error when using 'next' workflow
13005	Radiology Reporting	Attachment viewer is not evaluating all permissions when showing the report
12854	Radiology Reporting	Cannot Create/Edit report from Perform Exam screen on PACS correction enabled studies.
13421	Radiology Reporting	Delete dictation and report on a non-primary linked study will delete addendum key 0
12904	Radiology Reporting	Emergency Access button shows at all times if user has permission to the button
13219	Radiology Reporting	Hidden error occurs when multiple popups appear in reporting screen
13242	Radiology Reporting	In read-only mode, the report editor command bar shows a large empty gap
13361	Radiology Reporting	Language file has been updated
10626	Radiology Reporting	M*Modal - Automacros are not inserting when inserted via a macro
9162	Radiology Reporting	PACS Loaded Status column in reporting window is not populating when user preference set to "Reuse reporting screen"
12857	Radiology Reporting	Philips Speechmike LED and Foot Pedals do not work

		when running RIS via Citrix
11839	Radiology Reporting	Report assistant - Click save button on report assistant but close on dictation window causes an error
13136	Radiology Reporting	Report history audio control is shared between tabs instead of unique per tab
12573	Radiology Reporting	Reporting docked windows are not maintaining their current tab selections and order on initial load.
11695	Radiology Reporting	RIS crashes when scrolling through the Patient Folder pane in the editing window
13555	Radiology Reporting	Selecting a supervising radiologist from status bar in RIS will show an hourglass instead of a pointer
12747	Radiology Reporting	'Send report for dictation' will not remove suspended flag
12808	Radiology Reporting	'Send To' button on reporting screen allows to fax/print preliminary reports even if user should not have access.
11702	Radiology Reporting	'Set Follow Up Required Flag' is not always sending study to Finding Follow Up WL
12708	Radiology Reporting	'Skip and Continue' then 'Sign and Close' not working with Report Assistant opened and reuse
13050	Radiology Reporting	STAT and ICD buttons in reporting screens re-order after minimize/maximize
12336	Radiology Reporting	Template/Macro Editing - exception viewing templates or macros in the browser within the template/macro editor
13539	Radiology Reporting	The Reject/Edit button behaves as a toggle button instead of single click button
13408	Radiology Reporting	'View images', 'View patient folder' and 'View images and patient folder' actions are not working correctly
13252	Radiology Reporting	'View Patient Folder' button in reporting screen doesn't cause the data panes to load
13059	Radiology Reporting	When in read-only mode, the report assistant save button should be disabled

13058	Radiology Reporting	When in read only mode, users can still insert pick list options
13367	Reception	Registering a second order for same patient + same day prompts user if they want to include the order that was previously arrived
9377	Scheduling	Cancelling a single study cancels all studies from order in specific scenarios
13029	Scheduling	Error on Reschedule from No Show WL and Orders to Schedule WL
12952	Scheduling	Inactive prep instructions still being displayed
13019	Scheduling	Not able to make changes to date/time in Notes/exam Times in Scheduling and arriving statuses
9486	Scheduling	Procedure plan site override of min/max times cannot find available times
12834	Scheduling	Reschedule study can cause other studies from same order awaiting rescheduling to fall off work list
9521	Scheduling	Scheduling from Existing Orders window doesn't auto-populate Site in Advanced Search
9378	Scheduling	Scheduling an order can include a cancelled study that was originally scheduled together
13609	Scheduling	Scheduling screen site groups drop down should not show entries that are non-scheduling site groups
12755	Service Tools - Installer	Branding issues in client application - incorrect icon and directory naming
13283	Structured Reporting	Preview report - Tables are not displaying correctly in print preview when an addendum also has a table.
13378	Technologist	Exam status can revert back to Started when including multiple exams in Perform Exam and starting them separately
13006	Technologist	Perform Exam - Notes/Exam Times - Disabled fields become enabled when including a second study
7495	Technologist	Performed modality does not show up on the

		documentation window if it is now disabled
9688	Thick Client GUI	Opening a data window action sometimes results in an empty white tab
11963	Thick Client GUI	Using the escape key to exit out of adding new site throws an error
13385	UI Look and feel	Add space in title for Signs & Symptoms
11928	UI Look and feel	Annotate breast drawing label overlaps radio button in Hebrew
12982	UI Look and feel	Controls on the Exam Details tab in View Edit needs some adjustments.
12938	UI Look and feel	Critical Result button not re-enabling on Emergency Access
12941	UI Look and feel	Drop XML button on reporting base issues
12936	UI Look and feel	ICD button issues on reporting screen.
13763	UI Look and feel	IVT WL - Site select has no tool tip
12940	UI Look and feel	Launch PS360 button issues
13248	UI Look and feel	Peer review window - if font is larger the sentence 'I disagree with this review' is partially clipped
13233	UI Look and feel	Phone number mask - cannot enter a '+' at beginning of number if numbers are entered first
12946	UI Look and feel	Reject/Edit Button in reporting screen issue.
12985	UI Look and feel	Report History control is partially covered by the Legacy Report button's container
12945	UI Look and feel	Show PACS images button in reporting screen issues
12937	UI Look and feel	Stat button on reporting screen does not enable on emergency access
13027	UI Look and feel	Typo in "Reset Scanner Selection" message
13264	Upgrade process	Two missing access strings in upgrade scripts
13117	View Edit	StudyExtraInfo exception logged 31 times

9284	View Edit	View/Edit - Error on opening Billing Codes tab on Discontinued exams
13774	Walk-In	Error arriving walk-in. Duplicate studies created
12744	Worklists	Attachment viewer on the patient folder (both main and mini) will not load the report initially
13366	Worklists	Default custom views must be reset as default after upgrade to 2016.1
13543	Worklists	IVT WL are performing badly causing serious over utilization on the CPU
13772	Worklists	Site group issues on IVT WL when a site_group_code matches a site_code
13748	Worklists	The PeerReviewPendingQA (All) is taking longer then 2 seconds to run
13237	Worklists	WL Filter FFlag selection is not translated
13585	Worklists	WL that call the stored function c_GetReportLockByUserID caused a measurable increase in CPU
13045	Worklists	Work list Columns with Lookup Filters Cause Issues with Filtering and Custom Views
13341	Web Services/DB	Database view c_vw_client_worklist is no longer valid
13208	Web Services/DB	Missing index on c_user table
13161	Web Services/DB	Study remains locked by your user, after tentatively signed is released
13580	DB	Stored procedure missing a where clause - c_bi_radiologist_signing_activity
13546	DB	DB upgrade scripts do not correctly populate the c_patient_phone table
13542	DB	DB missing index
13526	DB	DB upgrade scripts may deadlock with other competing process

13524	DB	The 2016.1 upgrade scripts take too long to run
13523	DB	The 2016.1 upgrade scripts from B44.7 cause loss of data
13423	DB	RIS SQL jobs does not have a schedule for Update Mammo Recall Categories
13210	DB	Missing index on I_snomed_icd10_map
9732	DB	Database triggers rolling back transaction hides the error
7654	DB	B43 MU Scripts - Confirm they were properly imported
12046	Build	The default browser emulation level of the WebBrowser Control causes javascript errors in many web pages including digital forms
12483	Build	UV Templates directory is not included in RIS build package
13414	Mgt Reports	SQL Reporting folder missing custom "Upload" folders with build
13300	Scanning	Invisible error - Failed to refresh scan history error
13116	Scheduling	Invisible error - Specified cast exception - cast not valid

KNOWN LIMITATIONS

The following are Bugs and Support Issues found in build 2.2016.2. Bugs reported in previous versions are not captured as Known Limitation in this document.

#	Priority	Category	Subject
13590	Low	DB	Inbox messages work list stored procedure always has 0 rows retrieved

13474	High	EMR	EMR patients don't match when attribute c_child_patient create_internal="N"
12989	Normal	EMR	Import scheduled procedures window is displaying order procedure description instead of scheduled procedure description
13288	Normal	Image request	Referring physician image requests can be duplicated
13614	Normal	Meaningful Use	Exporting a CCD file and running it thru the XDS toolkit should not produce any errors
13172	Normal	M*Modal	M*Modal 7.93 dictation commands that do not work
13088	Low	M*Modal	M*Modal - fields tool window is not updating immediately
13602	Normal	PACS (eRAD) Integration	In the reporting window when you click view images when you already have those images open in PACS, receive a prompt asking you to break the lock you have on the images
13791	Normal	PACS (Non - eRAD) Integration	Hologic PACS - in the mini patient folder, the 'PACS Loaded status' column is populating 'Open' for the relevant studies
13615	High	Portal Viewer	Portal windows are leaking memory
13788	Normal	Powerscribe Integration	PS360 - if multiple studies are open in the reporting window, when closing the requested addendum study, 2 studies are closed.
13762	Normal	Radiology Reporting	Clinical.PreviewSuspendedReport set to NONE, getting different behavior in create/edit window vs dictate window vs sign window.
13182	Normal	Radiology Reporting	Report that is sent to PACS has the element {BR} displayed in the report. The report in RIS has a bolded section but the same section

			in the template is not bolded.
13049	Normal	Radiology Reporting	Inserting a macro with picklist with default macro option multiple times doesn't work
13805	Normal	Scanning	Scan doc association - patient level attachment changed to order level remains associated with other studies
13807	Normal	Scheduling	Error on close of scheduling and registration in some cases
13810	High	Scheduling	Cancelling an order twice will result in the procedure field being blank when scheduling it again
13809	High	Technologist	Error in Technologist WL - Object reference not set to an instance of an object and exam status does not change
13519	High	Technologist	Assigned Rad list in Perform Exam window is reordered after initial selection
13518	High	Technologist	Assigned Radiologist is not retained if referrer has preferred radiologist and included study is toggled
13588	Normal	UI Look and feel	Arrival early/late field calculates for completed studies
13241	Low	UI Look and feel	In the Carrier search window, the format mask for fax number is not applied
13011	Normal	UI Look and feel	Log control fields don't separate auto text
13745	Normal	User Views	Order # column not visible with existing my views
13475	Normal	View Edit	Problems with billing code adding/editing on View/Edit screen

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.3
Update 2.2016.3.1

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7
 Database Updates..... 11

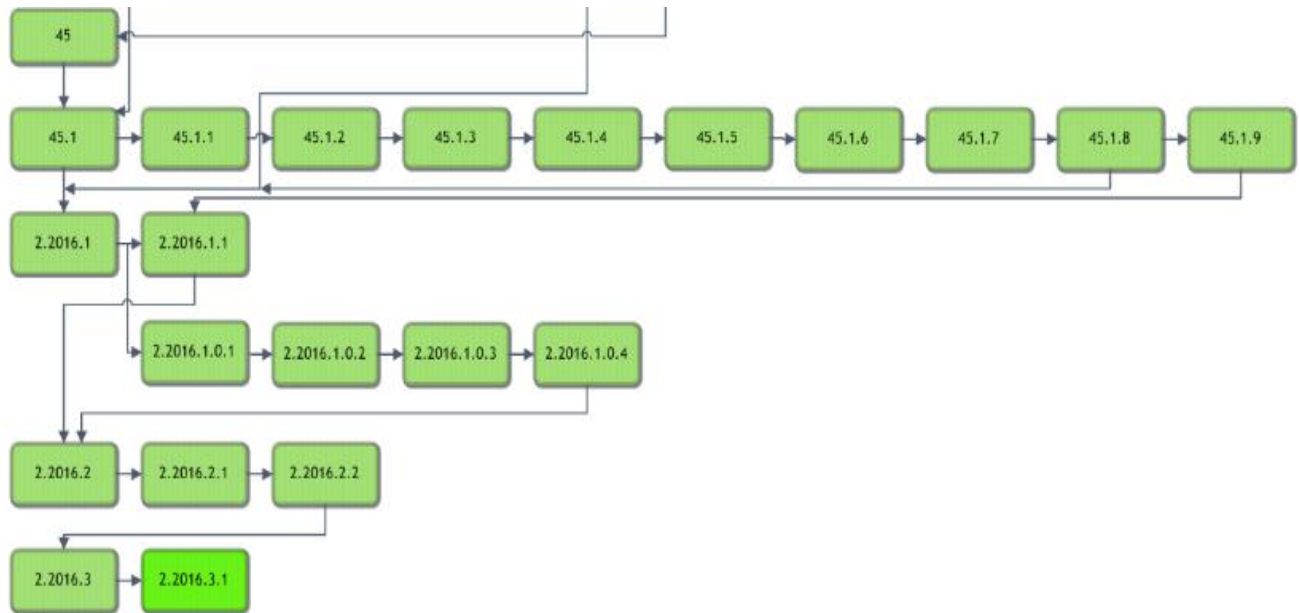
eRAD RIS Server Update

Resolved Items

Redmine #	Subject
14340	Changing procedure removes study from pending dictation worklist
14259	Patient folder default view not always loading on reporting screen
14247	Insurance Eligibility - Medical Group Rule feature not working

eRAD RIS Server Update

Code Stream








Legend:

Light Green = Previously Released software

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _Documentation	07/28/2016 1:22 PM
 _ReleaseNotes	03/26/2012 11:02 AM
 DB	07/28/2016 1:18 PM
 rRISService	07/28/2016 1:21 PM
 ThickClient	07/28/2016 1:21 PM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

Build 2016.3 installs. This server update must be applied to 2016.3

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1 (3GB)	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.3.1.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 98 files in the rRISService folder and 6 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), and pt_BR (Brazilian Portuguese) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

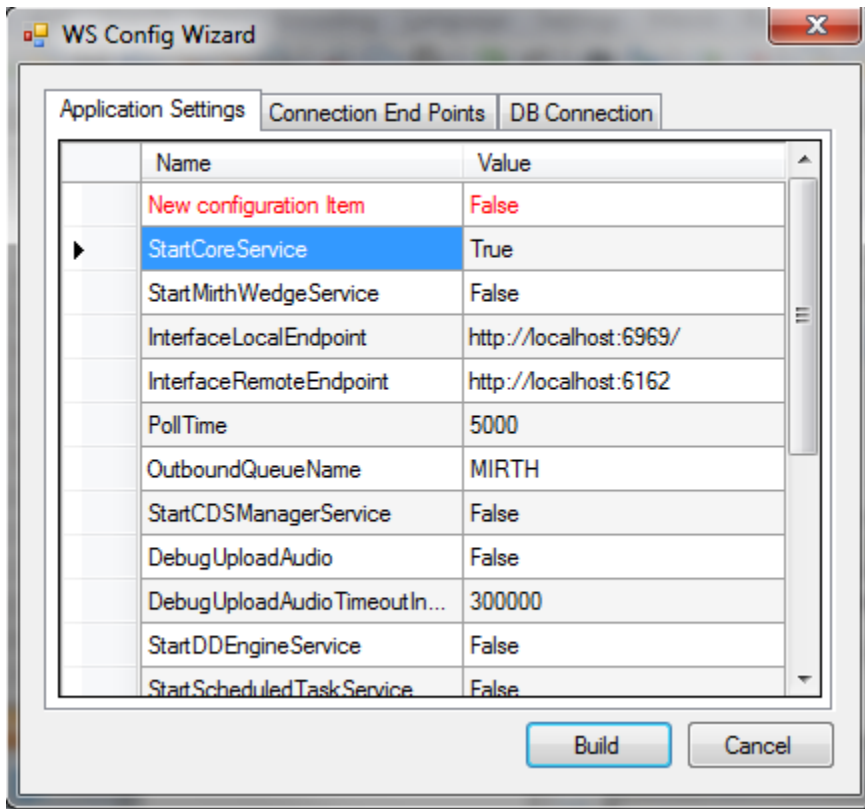
This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.

NOTE: the rRISServices.exe.config file is also included in the deploy folder. If this file has changes it **will not** update your current file in the Web Service directory. Any changes to this file

eRAD RIS Server Update

will require a manual update of the rRISServices.exe.config and rRISServicesx64.exe.config files.



eRAD RIS Server Update

Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.

WS Config Wizard

Application Settings | **Connection End Points** | DB Connection

Study Service

http:// localhost:8040 /rRIS/

net.tcp:// localhost:8041 /rRIS/

Notify Service

net.tcp:// localhost:7095 /rRIS/

CDS Service

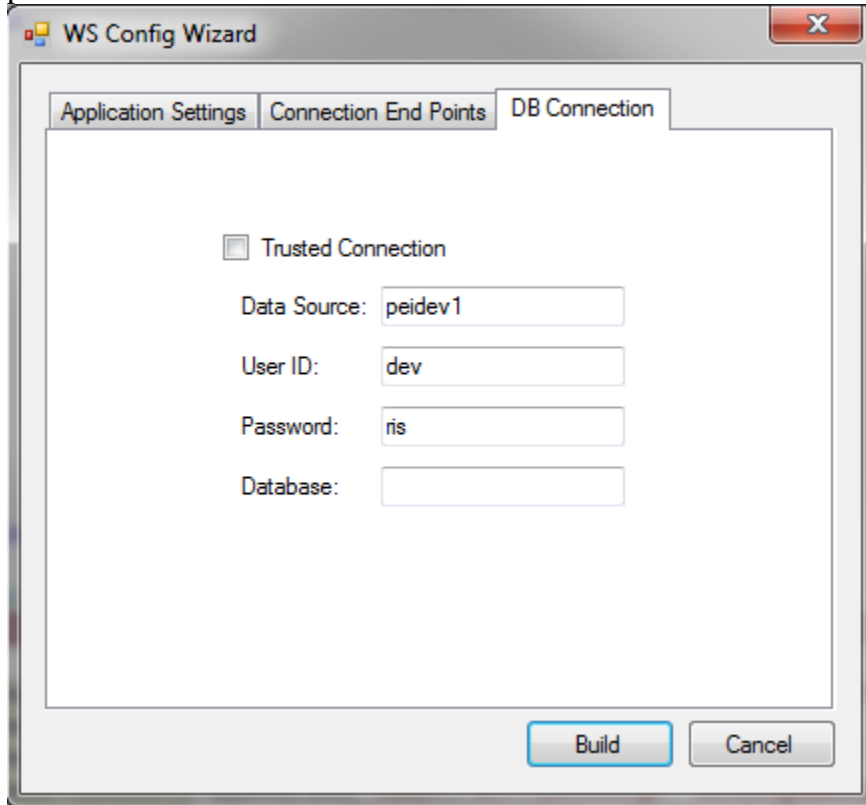
http:// localhost:7092 /rRIS/

net.tcp:// localhost:7093 /rRIS/

Build Cancel

eRAD RIS Server Update

DB Connection: will display the existing configuration, if the Connection is to be used as a trusted connection, then the user ID and password will become disabled and will not be used, and will rely on the provided database value, When not using the trusted connection, The Database value is not needed but can be used to force a specific database connection as long as the provided user has access to that database.



It is always good practice to do a compare of the .config files.

- 1) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService.

rRISService directories include:

- a) *rRISService*
- b) *CDS rRISService*
- c) *Wedge rRISService*
- d) *DDE rRISService*

Restart each service.

eRAD RIS Server Update

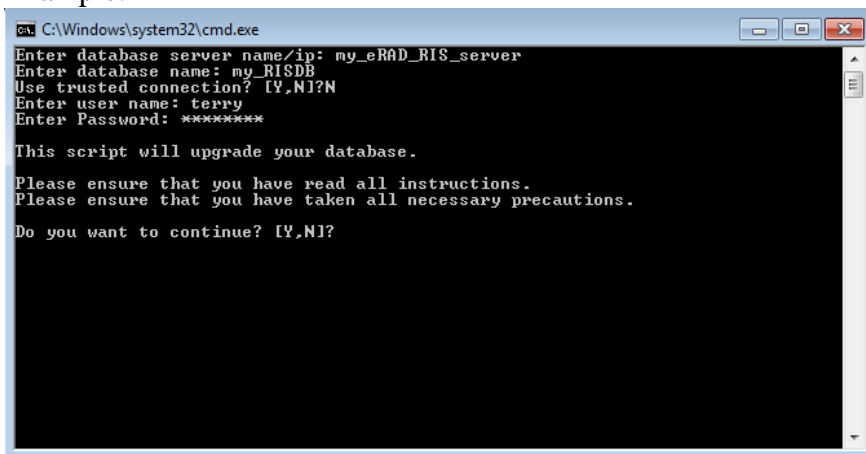
Database Updates

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

- 1) From the upgrade folder, double click the "RunUpgrade.bat" command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.
- 3) You can choose to use "Trusted connection". Using this option will pass the identity of the currently logged on user. If this user has "db_owner" access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use "Trusted connection" then you will be prompted for user id and password.

Example:



```
C:\Windows\system32\cmd.exe
Enter database server name/ip: my_eRAD_RIS_server
Enter database name: my_RISDB
Use trusted connection? [Y,N]?N
Enter user name: ferryy
Enter Password: *****

This script will upgrade your database.

Please ensure that you have read all instructions.
Please ensure that you have taken all necessary precautions.

Do you want to continue? [Y,N]?
```

- 5) After the upgrade program has finished you can find the upgrade logs in the "log" folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team
- 6) In the Common folder there is a subfolder of MU. The MU folder contains updates to lookups relevant for MU as well as updates for Zip Code table to add the County. Copy the

eRAD RIS Server Update

MU folder to the database server before running the batch file. There is a readme file contained in the MU folder. The details have also been included below

- a) The mu bulk install process must be run from a path on the database server!
 - b) Copy Files ImportDataFileUpgradeDB.bat and ImportDataFileUpgradeDB.sql from upgrade folder to a location on the database server(This location will be referred to as the "Script Folder Path".)
 - c) Copy Folder scripts and Source files from the upgrade folder to "Script Folder Path"Note source files must be inside the scripts folder
 - d) Run bat file
 - i) Enter Script Folder path [C:\Temp\SNOMED]:
 - ii) Enter database server name/ip: [ie peidev1]
 - iii) Enter database name: [ie rRIS_MU]
 - iv) Use a trusted connection to log on to SQL Server:
"N" means you will have to enter db [username] [password]
"Y" means you have a trusted connection and will not have to enter [username][password]
 - v) Do you wish to load SNOMED concept codes?
"N" no files will be loaded into the l_snomed_concept table
"Y" yes means l_snomed_concept table will be truncated and reloaded with the latest US concept codes
Source File [sct2_Concept_Snapshot_US1000124_20140301.txt]
 - vi) Do you wish to load SNOMED descriptions codes?
"N" no files will be loaded into the l_snomed_description table
"Y" yes means the l_snomed_description table will be truncated and reloaded with the latest US description codes
Source File [sct2_Description_Snapshot-en_US1000124_20140301.txt]
 - vii) Do you wish to load ICD9 to SNOMED mappings codes?
"N" no files will be loaded into the l_snomed_icd9_map table
"Y" yes means the l_snomed_icd9_map table will be truncated and reloaded with the latest US ICD9 to SNOMED mapping codes
Source File [ICD9CM_SNOMED_MAP_1TO1_201312.txt and ICD9CM_SNOMED_MAP_1TOM_201312.txt]
 - viii) Do you wish to load ICD10 to SNOMED mappings codes?
"N" no files will be loaded into the l_snomed_icd10_map table
"Y" yes means the l_snomed_icd10_map table will be truncated and reloaded with the latest US ICD10 to SNOMED mapping codes
Source File [xder2_iisssccRefset_ExtendedMapSnapshot_US1000124_20131220.txt]
 - ix) Do you wish to load US zip codes?
"N" no files will be loaded into the z_zipCodesWithCounty table
"Y" yes means the z_zipCodesWithCounty table will be truncated and reloaded with the latest US zip codes
Source File [5-digit Commercial.csv]
-

eRAD RIS Server Update

Note: the following files should be loaded once only with B43!

x) Do you wish to load CMS codes?

"N" no files will be loaded into the s_mu_code table

"Y" yes means the s_mu_code table will be truncated and reloaded with the latest CMS codes

Source File [s_mu_code.txt]

xi) Do you wish to load HL7 support sets for CCDA?

"N" no files will be loaded into the l_hl7v3_voc_value_set table

"Y" yes means the l_hl7v3_voc_value_set table will be truncated and reloaded with the latest hl7v3_voc_value_set codes

Source File [l_hl7_voc_value_set.txt]

xii) Do you wish to load HL7 support codes for CCDA?

"N" no files will be loaded into the l_hl7v3_voc_value_code table

"Y" yes means the l_hl7v3_voc_value_code table will be truncated and reloaded with the latest l_hl7v3_voc_value_code codes

Source File [l_hl7_voc_value_code.txt]

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.3
Update 2.2016.3.2

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

eRAD RIS Server Update

Resolved Items

Redmine #	Subject
14877	PACS Caching is not caching priors in reverse chronological order

eRAD RIS Server Update

Code Stream









Legend:

Light Green = Previously Released software

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

Name	Date Modified
 _Documentation	09/23/2016 1:21 PM
 _ReleaseNotes	09/28/2016 11:45 ...
 PACS Citrix Bridge	09/23/2016 1:21 PM
 rRISService	09/23/2016 1:19 PM
 ThickClient	09/23/2016 1:18 PM
 RISServerMasterCert.pfx	03/31/2016 1:38 PM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

Build 2016.3 installs. This server update must be applied to 2016.3

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1 (3GB)	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2 (3GB)	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.3.2.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 99 files in the rRISService folder and 6 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

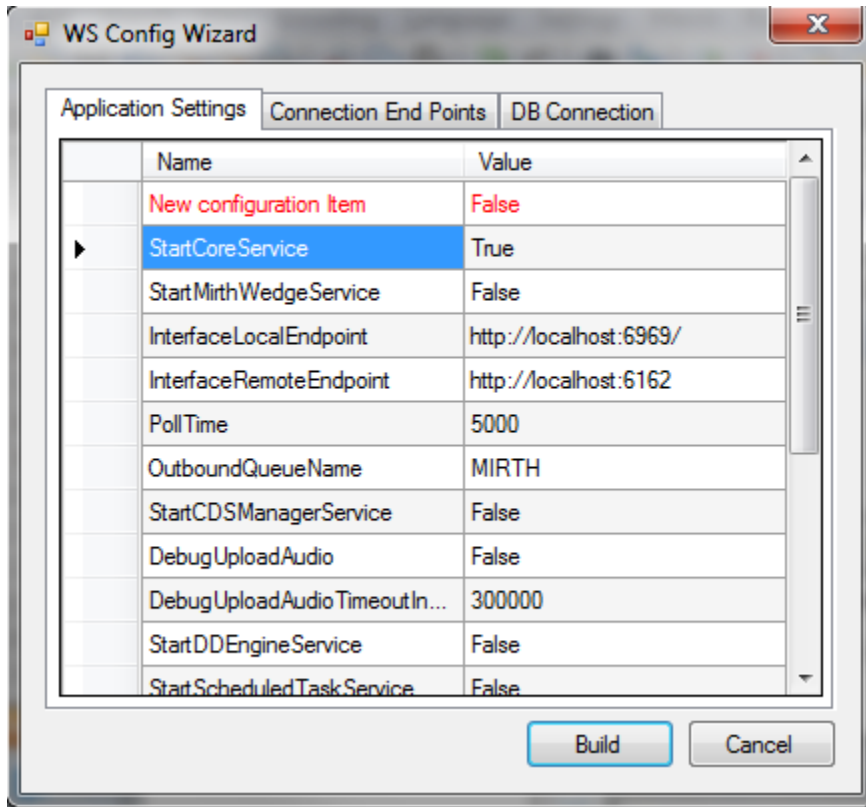
With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.

eRAD RIS Server Update



eRAD RIS Server Update

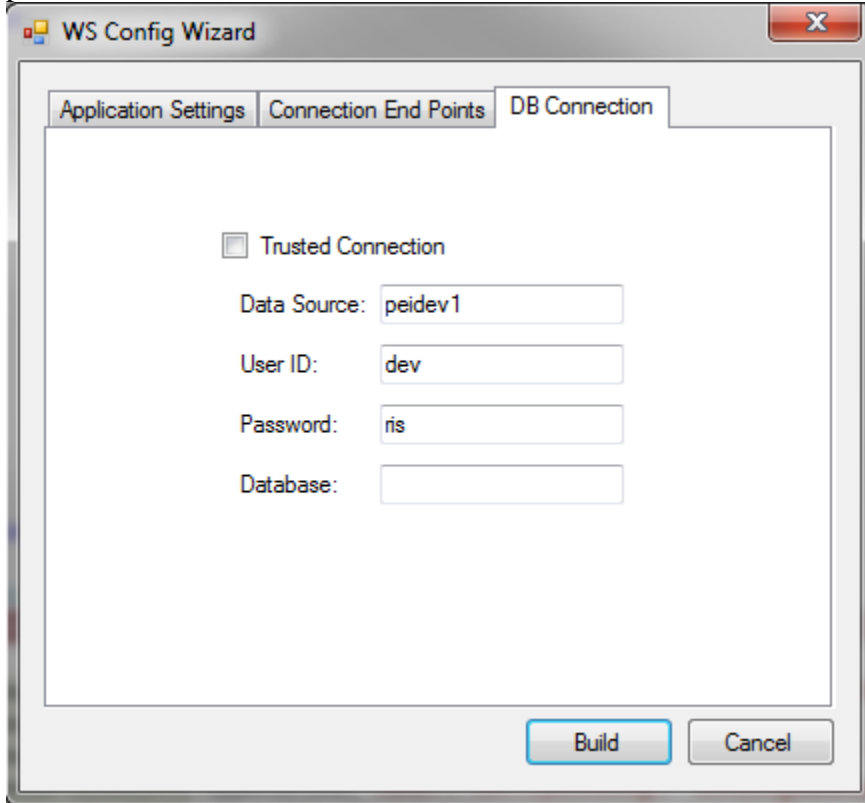
Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.

The screenshot shows a 'WS Config Wizard' dialog box with three tabs: 'Application Settings', 'Connection End Points', and 'DB Connection'. The 'Connection End Points' tab is active. It contains three sections: 'Study Service', 'Notify Service', and 'CDS Service'. Each section has two rows of input fields. The 'Study Service' section has 'http://' with 'localhost:8040' and '/rRIS/' and 'net.tcp://' with 'localhost:8041' and '/rRIS/'. The 'Notify Service' section has 'net.tcp://' with 'localhost:7095' and '/rRIS/'. The 'CDS Service' section has 'http://' with 'localhost:7092' and '/rRIS/' and 'net.tcp://' with 'localhost:7093' and '/rRIS/'. At the bottom are 'Build' and 'Cancel' buttons.

Service	Protocol	Host:Port	Path
Study Service	http://	localhost:8040	/rRIS/
	net.tcp://	localhost:8041	/rRIS/
Notify Service	net.tcp://	localhost:7095	/rRIS/
CDS Service	http://	localhost:7092	/rRIS/
	net.tcp://	localhost:7093	/rRIS/

eRAD RIS Server Update

DB Connection: will display the existing configuration, if the Connection is to be used as a trusted connection, then the user ID and password will become disabled and will not be used, and will rely on the provided database value, When not using the trusted connection, The Database value is not needed but can be used to force a specific database connection as long as the provided user has access to that database.



It is always good practice to do a compare of the .config files.

- 1) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService.

rRISService directories include:

- a) *rRISService*
- b) *CDS rRISService*
- c) *Wedge rRISService*
- d) *DDE rRISService*

Restart each service.

eRAD RIS Server Update

Customer Release Notes

for eRAD RIS

Version 2

Build 2016.3

TABLE OF CONTENTS

Table of Contents 2

 Purpose..... 3

 Intended Audience 3

New Settings..... 4

 New access strings..... 4

 New system configuration settings 4

New Features..... 6

 Interfacing 6

 5680 - MFN Message Handler 6

 Management Reports 7

 10525 - Exam Volume Breakdown by Payor Management Report..... 7

 Insurance Eligibility..... 8

 13547 - Eligibility tables Cleanup to improve performance..... 8

 13065 - Medical Group Rules ENHANCEMENTS 9

 13282 - Primary Insurance Warnings 14

 Infrastructure 16

 11204 - Support "Universal Device ID" 16

 13545- MU Post Process Redesign to improve performance 17

 13548 - Deprecate c_SummaryMaster objects..... 18

 Referring physician Management..... 19

 13598 - option to prohibit marketing emails from being sent..... 19

 RIS ADMINISTRATION 20

 13732 - Capture Order Cancelled Date 20

 13773 – Support exporting diagnostic report in MS Word and Other Formats 21

 13851 – Patient portal configuration helper..... 22

 Radiologist..... 23

 #13849 - Add PACS dialog messages to eRAD RIS status bar 23

Resolved Defects 24

Known Limitations 30

RIS Release Version Numbers..... 32

Code Stream Diagram..... 33

PURPOSE

This is the Customer Release Notes document for eRAD RIS Version 2016.3.

Not every feature will be described in this document. Typically, only features which can be visually demonstrated are outlined here.

INTENDED AUDIENCE

This document was created by the eRAD RIS Development team and Product Management team for eRAD RIS customers.

NEW SETTINGS

NEW ACCESS STRINGS

Setting	Default	Purpose
Clinical.RadarMessage	N/A	Removed a duplicate string that was not in use.
Config.LookupEditor.Organization.Portal.AdditionalConfiguration		Allows for the adding/editing of additional portal configuration overrides in the JSON editor.

NEW SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
RPAllowQuickApproval	False	(value = true/false) Determines if the referring portal user will have the 'Quick Approval' option if not configured to be a referring and not authorized to order on behalf of a referring.
RPAppointmentEnabled	False	(value = true/false) Determines if the Referring Portal 'Schedule Appointment' feature will be enabled.
RPAuthorizedToOrderNextReview	5	(value = number) The interval in days until the Referring provider is prompted to review the list of users authorized to order on their behalf.
RPIImageNoAccountMessage		(value = string) The message to display to the referring portal user when image access fails due to not having a valid PACS account.

The above configuration settings are created in preparation for a future release of our new Referring Physician Portal. There is no need to adjust these settings at this time.

eRAD RIS 2016.3

Feature Highlights

Upgrade to eRAD RIS 2016.3 and our New Features will allow you to:

- Decrease denials by creating special insurance carrier alerts based on plan information in your Eligible API returns.
 - Warnings when an incorrect carrier has been selected based on your rules
 - Warnings when the priority of carriers is incorrect
 - e.g. Supplemental insurance is entered as Primary
- Improve system performance.
 - Ability to schedule MU database tasks for after hours
 - Behind the scenes adjustments to database performance factors
- Export diagnostic reports in new formats, including Microsoft Word.
- Assess your exam volume breakdown by payor with a new management report.
- Configure new user preference options for displaying RIS/PACS communication messages to the radiologist.
- Allow external systems to query or update RIS look-up tables via interface.
- Enjoy smoother and more efficient RIS workflow with over 100 resolved defects.

NEW FEATURES

INTERFACING

5680 - MFN MESSAGE HANDLER

eRAD RIS now has the ability to allow a remote system to query or update lookup table data. This is limited and secured, and to be used only by an appropriate external system.

MANAGEMENT REPORTS

10525 - EXAM VOLUME BREAKDOWN BY PAYOR MANAGEMENT REPORT

A new core management report has been created called *Exam Volume Breakdown by Payor*. This report generates a pivot style table with a Modality Type across the top of the report and Payor Type down the side of the report. The user of the report can drill-down on the Payor Type to get details of each individual Insurance Payor. This report can query based on Date Range, Payor Type, and of course Practice(s) and Site(s). The report is located in the Operations folder.

Practice: Advanced Radiology,American Radiology 2,American Radiology,Borg/IDE,DATA,Get Well Clinic,PEI Radiology,SIMS Practice,TEST
Site(s): All sites for the selected practice(s).
Date Range: 05/01/2013 - 05/31/2013
Payor Types: All payor types selected.
Description: This report displays accession count by insurance payor and modality type based on practice, site(s), date range, and payor type.

Payor Type	BD	CT	MA	MR	NM	PT	US	XR	Accession Count	
<input type="checkbox"/> Automobile Medical (7)	29	1,531	4,705	2,567	84	140	6,320	10,353	25,729	7.88 %
<input type="checkbox"/> Blue Cross (P)	8	688	1,945	1,056	38	57	2,644	4,251	10,687	3.27 %
<input type="checkbox"/> Blue Cross Blue Shield (G)		47	234	99	9	8	248	425	1,070	0.33 %
<input type="checkbox"/> BCBS NCA NASCO (314)		19	113	59	5	4	135	193	528	
<input type="checkbox"/> test (CSEK)		28	121	40	4	4	113	232	542	
<input type="checkbox"/> Central Certification (K)	5	61	215	115	11	6	277	452	1,142	0.35 %
<input type="checkbox"/> Champus (8)	8	344	1,062	590	31	46	1,459	2,314	5,854	1.79 %
<input type="checkbox"/> Commercial Insurance Company (F)		38	106	43	3	1	138	233	562	0.17 %
<input type="checkbox"/> Disability (9)	2	70	212	102	3	4	266	437	1,096	0.34 %
<input type="checkbox"/> Exclusive Provider Organization (4)		32	103	71	2	4	109	220	541	0.17 %
<input type="checkbox"/> HMO (I)		42	97	56	1	2	121	222	541	0.17 %
<input type="checkbox"/> HMO Medicare Risk (6)		36	92	60	3	4	137	203	535	0.16 %
<input type="checkbox"/> Indemnity Insurance (5)		32	90	70	2	4	125	206	529	0.16 %
<input type="checkbox"/> Liability (S)	2	33	118	71		3	111	209	547	0.17 %
<input type="checkbox"/> Liability Medical (R)	1	25	109	59	2	3	112	242	553	0.17 %
<input type="checkbox"/> Medicaid (D)	1	39	104	55	5	3	123	203	533	0.16 %
<input type="checkbox"/> Medicare (C)		68	214	103	3	6	269	448	1,111	0.34 %
<input type="checkbox"/> Other (Z)	316	15,950	49,925	27,496	1,068	1,540	66,427	109,424	272,146	83.40 %
<input type="checkbox"/> Other Non-Federal Programs (1)	2	25	102	56	1	1	128	190	505	0.15 %
<input type="checkbox"/> Point of Service (POS) (3)		33	83	52	4	3	136	215	526	0.16 %
<input type="checkbox"/> Preferred Provider Organization (2)	1	25	88	50	5	1	117	202	489	0.15 %
<input type="checkbox"/> Self Pay (A)		31	90	46	1	4	135	220	527	0.16 %
<input type="checkbox"/> Title V (T)	1	33	92	67	2	2	135	195	527	0.16 %
<input type="checkbox"/> Worker's Compensation (B)	2	23	107	67	3	2	138	235	577	0.18 %
Total Counts	378	19,206	59,893	32,951	1,281	1,844	79,675	131,099	326,327	
	0.12 %	5.89 %	18.35 %	10.10 %	0.39 %	0.57 %	24.42 %	40.17 %		

INSURANCE ELIGIBILITY

13547 - ELIGIBILITY TABLES CLEANUP TO IMPROVE PERFORMANCE

The eligibility request and response tables contain a large amount of data that is only relevant for a short period of time. eRAD RIS will now trim these tables on a regular interval which will keep the RIS Services running at optimal performance levels.

13065 - MEDICAL GROUP RULES ENHANCEMENTS

This feature involves enhancements to informational warnings/alerts for customers using the integration with Eligible API. The intent is to prevent staff members from selecting the wrong insurance carrier by evaluating the medical group data in the return that comes back to RIS via Eligible API. Processing of medical group rules from the *Eligibility Special Conditions* table previously only worked when there was one payer. With multiple payers, the following issues could occur:

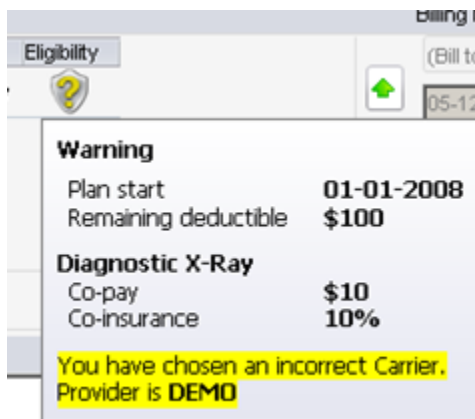
- 1) The medical group rules report produced duplicate entries.
- 2) The medical group string check could only apply to one base carrier, which could also cause duplicates and invalid data if multiple rules were configured.
- 3) Synonyms also needed to support wild cards such as Prospect%.

To resolve these issues, eRAD RIS now supports a new syntax in the *matching_string* field of the *Eligibility Special Conditions* lookup table. This table and the *matching_string* field define when to display a warning indicating an incorrect medical group has been selected. As a refresher, a medical group “string” is simply a piece of text that is found in the information returned from Eligible API in the appropriate section of the return. Remember that you can view the full return by clicking on the Eligible shield.

There are two variations on the *medical_group_rule* syntax:

- Base Carrier Medical Group Rule
- Simple Medical Group Rule

For both types of rules, an error will be presented to the user in the form of a yellow question mark in the Eligibility shield and a highlighted error message.



A Base Rule means that the string is exclusive to the base carrier. There is only one valid carrier for the string of text in that rule. Simple Rules require that a string of text exists in the return, but it may also exist for other carriers in a group and is not a one-to-one match. It will help the user narrow down the number of appropriate insurance carriers to select from, but if the user picks the wrong carrier from within that group, the Simple Rule will not be able to identify that there is not a correct match.

To explain the new configurations, examine the following examples. Assume the base carrier is “0100demo.” We will create a Base Carrier Medical Group Rule, which validates for this payer that the returned string exists and for all other carriers (for that payer_id) that the string does not exist.

The Base Medical Group Rule for the 0100demo carrier would be:

medical_group_rule:**payer_id=0100demo**:DEMO%:

For the other two carriers in this example, we will create two Simple Medical Group Rules. With simple medical groups rules we only validate for the matching string in the carrier code specified. An example of one of these simple medical group rules is:

medical_group_rule:**PROSPECT**%:

Carrier Code	Matching String	Warning Message
Contains:	Contains:	Contains:
Click here to add a new row		
1468014 - PROSPECT CAL OPTIMA	medical_group_rule:PROSPECT%:	<span style="background-color: #...
0328 - BCBS EMPIRE	medical_group_rule:BCBS%:	<span style="background-color: #...
0100demo - demo	medical_group_rule:payer_id=0100demo:DEMO%:	<span style="background-color: #...

In the example above, the first two rows are Simple medical Group Rules. The carrier ‘1468014’ will require the text “Prospect” in the return’s medical group field and the carrier ‘0328’ will require the text “BCBS.” If the required text is missing, the error will display.

The third row is a Base Medical Group Rule (note the “payer_id=” in the format). If 0100demo is selected as a carrier and the return does not contain the string “DEMO,” the user will get a warning just as with a Simple rule. The difference is that any other carrier that is selected that contains the string “DEMO” will also receive an error. You’ll note that carrier ‘0657’ is not listed in the above screen capture because it is not configured for any medical group rules. If that carrier is selected and there is a string of “DEMO” the user will receive an error because that string should only exist for the base carrier ‘0100demo.’ Similarly, if either carrier in the first two rows is selected, the error will display.

When should I use a Simple Medical Group Rule?

Since Base Rules are configured to be a direct match (the string of text always equals one specific carrier), you need to do a careful analysis of the historical returns for that payer and other payers that may have similar text in their returns. This process is time consuming so it is typical to focus on mapping only the most frequently used payers. Some payers only come up once in a while and the necessary historical data on their Eligible API returns is not available to understand what medical group strings to use. For these reasons, there will always be some payers that will not be mapped to a Base Rule. For these payers, you might use a Simple Medical Group rule that will apply to groups of carriers at the same time. Even if you cannot create a direct match between a string and an individual carrier, you can at least prevent staff from mistakenly choosing a “Prospect” carrier when it is one of the “BCBS” payers.

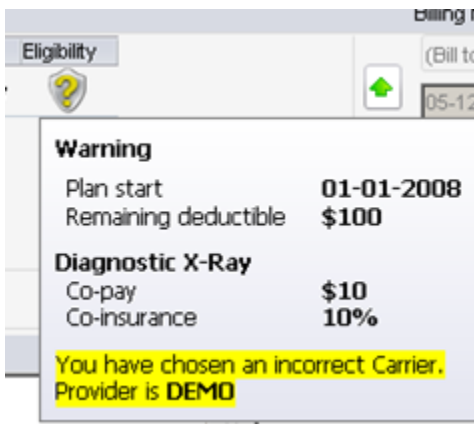
When should I use a Base Rule?

You should use a Base Rule if the medical group string will never be in another carrier's return. Otherwise, use a Simple Medical Group Rule.

Another feature of the Medical Group Rules is the ability to display a custom message to the user when there is a mismatch. In the "Warning Message" field you can specify a display string such as:

```
<span style="background-color: #FFFF00">You have chosen an incorrect Carrier.<br>Provider is  
<b>{0}</b></span>
```

This will display a highlighted message to the user explaining their incorrect selection. The {0} will be replaced with the Medical Group field from the insurance return.



For testing, we have modified the eRad_Demo carrier to include a medical group string in the return, when the policy # ends with brackets containing some string to display as the medical group. For example:

Note	Carrier Code	Carrier Name	Policy #	Gr
D	0100demo	demo	10010010[TESTGROUP]	25

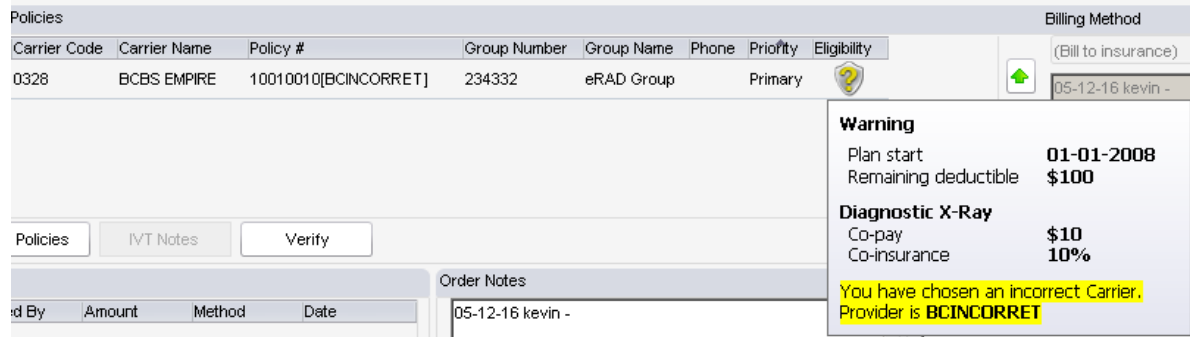
Insurance Eligibility Details

Print | Show All | History: ▾

Type	Primary Care	Restricted	Contacts
Primary Care Provider - Point of Service (POS)	Yes	No	Contracted Service Provider TESTGROUP Telephone: 8006543400 PO BOX 371330, RESEDA, C

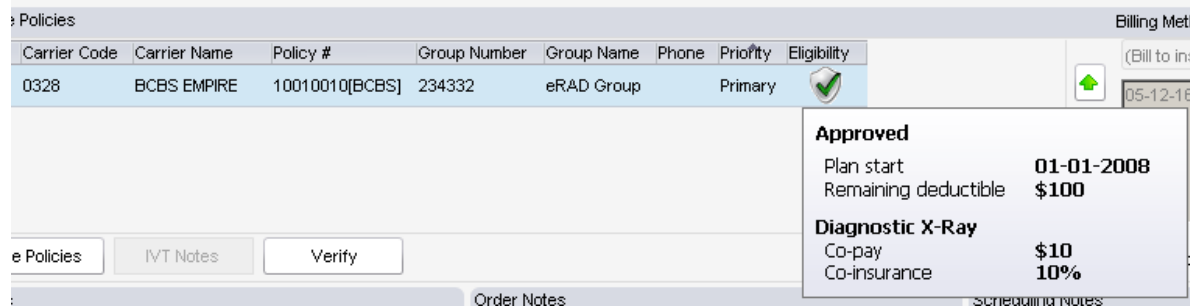
To give some additional illustration of these concepts, the following screenshots are some of the test cases using the 4 carriers shown in the previous illustrations.

BCBS EMPIRE: Rule is that it must start with 'BCBS' and cannot start with 'DEMO'



The screenshot shows a policy record for BCBS EMPIRE. A warning message is displayed, indicating that the selected carrier is incorrect. The warning details include:

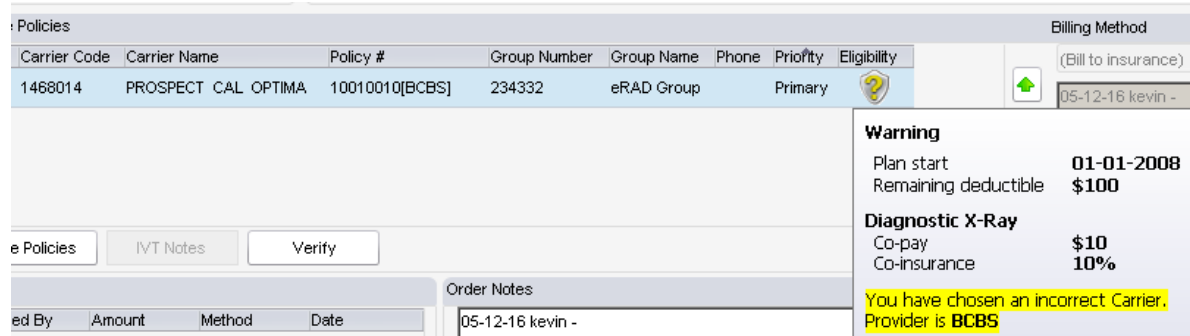
- Warning**
- Plan start: 01-01-2008
- Remaining deductible: \$100
- Diagnostic X-Ray**
- Co-pay: \$10
- Co-insurance: 10%
- You have chosen an incorrect Carrier. Provider is BCINCORRET



The screenshot shows the same policy record for BCBS EMPIRE, but with an approved status. The warning message is replaced by an approval message. The approval details include:

- Approved**
- Plan start: 01-01-2008
- Remaining deductible: \$100
- Diagnostic X-Ray**
- Co-pay: \$10
- Co-insurance: 10%

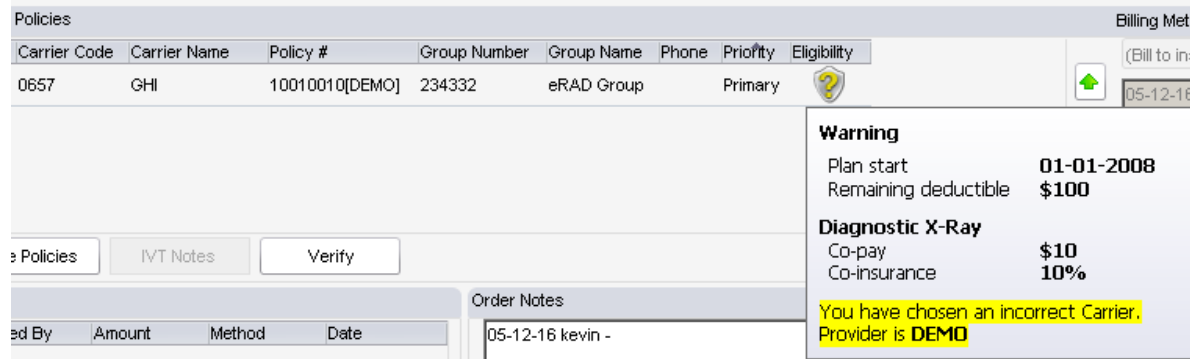
PROSPECT CAL OPTIMA: Rule is that it must start with 'Prospect' and cannot start with 'DEMO'



The screenshot shows a policy record for PROSPECT CAL OPTIMA. A warning message is displayed, indicating that the selected carrier is incorrect. The warning details include:

- Warning**
- Plan start: 01-01-2008
- Remaining deductible: \$100
- Diagnostic X-Ray**
- Co-pay: \$10
- Co-insurance: 10%
- You have chosen an incorrect Carrier. Provider is BCBS

GHI: No specific rules; however, but due to 0100demo Base Medical Group Rule it cannot start with 'DEMO'



The screenshot shows a policy record for GHI. A warning message is displayed, indicating that the selected carrier is incorrect. The warning details include:

- Warning**
- Plan start: 01-01-2008
- Remaining deductible: \$100
- Diagnostic X-Ray**
- Co-pay: \$10
- Co-insurance: 10%
- You have chosen an incorrect Carrier. Provider is DEMO

demo: Must start with 'DEMO'

Policies								Billing Method
Carrier Code	Carrier Name	Policy #	Group Number	Group Name	Phone	Priority	Eligibility	(Bill to insurance)
0100demo	demo	10010010[PROSP...	234332	eRAD Group		Primary		05-12-16 ke

Warning

Plan start **01-01-2008**
 Remaining deductible **\$100**

Diagnostic X-Ray
 Co-pay **\$10**
 Co-insurance **10%**

You have chosen an incorrect Carrier.
 Provider is **PROSPECT**

Buttons: Policies, IVT Notes, Verify

Order By	Amount	Method	Date
			05-12-16 kevin -

Policies								Billing Method
Carrier Code	Carrier Name	Policy #	Group Number	Group Name	Phone	Priority	Eligibility	(Bill to insurance)
0100demo	demo	10010010[TESTGROUP]	234332	eRAD Group		Primary		05-12-16 kevin -

Warning

Plan start **01-01-2008**
 Remaining deductible **\$100**

Diagnostic X-Ray
 Co-pay **\$10**
 Co-insurance **10%**

You have chosen an incorrect Carrier.
 Provider is **TESTGROUP**

Buttons: Policies, IVT Notes, Verify

Order By	Amount	Method	Date
			05-12-16 kevin -

13282 - PRIMARY INSURANCE WARNINGS

For customers using Eligible API, we have identified two additional opportunities to assist users in selecting the correct insurance carrier. Two frequent mistakes that lead to denials include:

- Medicare is entered as secondary when it should be primary.
- A supplemental insurance is entered as a primary insurance.

To assist our customers in avoiding denials and potentially missing timely filing deadlines, eRAD RIS can now issue the user a warning if it detects these conditions, based on information in the return from Eligible API.

Providers

Type	Primary Care	Restricted	Contacts
Other or Additional Payor	No	No	Insured or Subscriber Member Identification Number
Other or Additional Payor	No	No	Primary Payer MEDICARE

Plan


Coverage	Type
Active Coverage	Supplemental Policy

To enable this feature and configure the custom messages, add entries to the Eligibility Special Condition lookup as shown below:

Carrier Code	Matching String	Warning Message	Exclude Lir
	{MEDICARE_IS_PRIMARY}	Carrier should not be primary (Has Medicare)	N
	{IS_SUPPLEMENTAL}	Carrier should not be primary (This is supplemental)	N

Medicare Is Primary:


If a primary insurance has the “Primary Payer MEDICARE” string in the return, this means that the selected carrier is a Medicare supplement and should *not* be listed as primary. When you enable {MEDICARE_IS_PRIMARY} in the Eligibility Special Condition table, eRAD RIS will display the configured warning message under those circumstances.

Carrier Name	Policy #	Group Number	Group Name	Phone	Priority	Eligibility	Billing Method
demo	#13282MED	708742			Primary		(Bill to insurance)
demo	10010010	234332	eRAD Group		Secondary	Warning Plan start 08-01-2008 Plan end 12-31-9999 Diagnostic X-Ray Co-insurance 0% CARRIER SHOULD NOT BE PRIMARY (HAS MEDICARE)	05-16-16 kevin -
demo	#13282SLP	708742	eRAD Group		Tertiary		
IVT Notes Verify Order Notes							

Insurance Is Supplemental:

If a primary insurance has the “Supplemental Policy” string in the Plan section of the return, this means that the selected carrier is a supplemental insurance (any kind, not necessarily a Medicare supplement) and should *not* be listed as primary. When you enable {IS_SUPPLEMENTAL} in the

Eligibility Special Condition table, eRAD RIS will display the configured warning message under those circumstances.

Carrier Name	Policy #	Group Number	Group Name	Phone	Priority	Eligibility	Billing Method
demo	#13282SLP	708742	eRAD Group		Primary		(Bill to insurance)
demo	#13282MED	708742			Secondary		05-16-16 kevin -
demo	10010010	234332	eRAD Group		Tertiary		

Warning
 Plan start **03-01-2010**
Diagnostic X-Ray
CARRIER SHOULD NOT BE PRIMARY (THIS IS SUPPLEMENTAL)

IVT Notes Verify

INFRASTRUCTURE

11204 - SUPPORT "UNIVERSAL DEVICE ID"

As a result of an upcoming regulatory requirement, eRAD RIS now has a Universal Device ID field (UDID). This field is located on the Help/About screen.



13545- MU POST PROCESS REDESIGN TO IMPROVE PERFORMANCE

The eRAD RIS service layer has the ability to process study events immediately after they have happened in order to do such things as update roll up tables for Meaningful Use (MU) statistics. Since this happens immediately, it does slightly slow down the service layer. Since there is no operational reason to update these statistics immediately, it is desired to postpone these updates until a time of day when there is less activity on the system. eRAD RIS now supports the ability to push those events to a designated time of day.

From a customer perspective, this will be automatically enabled after the upgrade, and no action is required of you.

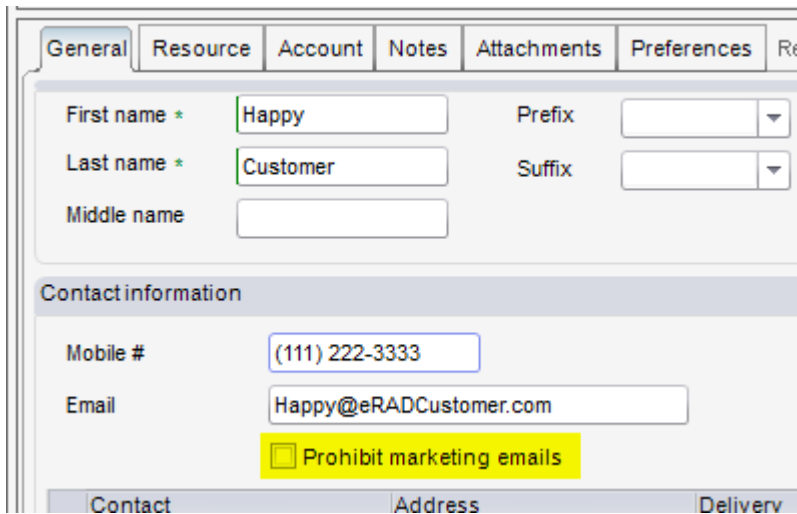
13548 - DEPRECATE C_SUMMARYMASTER OBJECTS

There are some objects (stored procedures and tables) in the RIS database that are only used by one customer. These objects do not need to remain in the core of eRAD RIS, and will therefore be removed from the database. This ensures continued optimal performance of the database. The one customer who does use these objects has been updated.

REFERRING PHYSICIAN MANAGEMENT

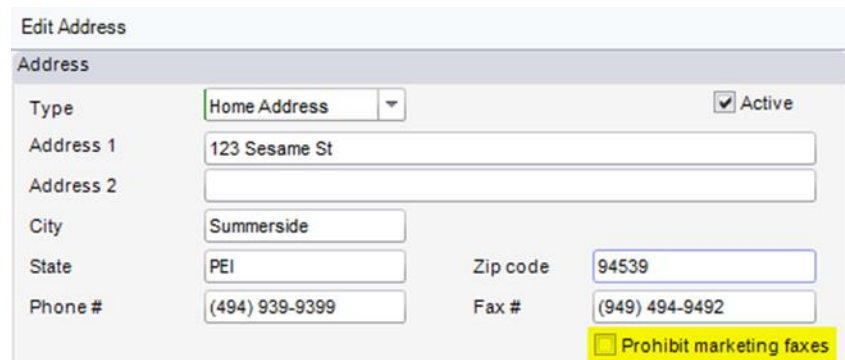
13598 - OPTION TO PROHIBIT MARKETING EMAILS FROM BEING SENT

In the future, the Referring Portal will have the ability to send marketing emails to referring doctors. Some doctors may not want this, so in preparation for this upcoming Referring Portal feature, an option has been added to the referring physician's profile in eRAD RIS to indicate that the portal should not send any marketing emails to their email address. This is set at the referring physician level and cannot be set differently for individual offices (addresses).



The screenshot shows a web form for a physician's profile. The 'General' tab is selected. Fields include: First name (Happy), Last name (Customer), Middle name, Prefix, and Suffix. Under the 'Contact information' section, there is a Mobile # field with the value (111) 222-3333 and an Email field with the value Happy@eRADCustomer.com. A checkbox labeled 'Prohibit marketing emails' is checked and highlighted in yellow. At the bottom, there are tabs for 'Contact', 'Address', and 'Delivery'.

This is not to be confused with a feature added in a previous RIS release to prohibit marketing **faxes**. Marketing faxes are set at the referring physician's address level.



The screenshot shows the 'Edit Address' form. The 'Address' section is active. Fields include: Type (Home Address), Address 1 (123 Sesame St), Address 2, City (Summerside), State (PEI), Zip code (94539), Phone # ((494) 939-9399), and Fax # ((949) 494-9492). A checkbox labeled 'Prohibit marketing faxes' is checked and highlighted in yellow. There is also an 'Active' checkbox which is checked.

RIS ADMINISTRATION

13732 - CAPTURE ORDER CANCELLED DATE

For statistical purposes, eRAD RIS now stores the date an order was cancelled in the database. This can be queried with a custom management report if desired. For clarity, if the order was scheduled, then the Schedule Later option is used (i.e. it is put back on Orders to Schedule), the order cancel date is not populated because the order is still available to be scheduled, it has simply been moved back to an Ordered status. In that case, the **Cancelled Date** would be recorded (since it was actually a scheduled appointment) but the **Order Cancelled Date** would *not* be recorded/stored.

13773 – SUPPORT EXPORTING DIAGNOSTIC REPORT IN MS WORD AND OTHER FORMATS

eRAD RIS now supports exporting the diagnostic report in the following formats: MS-Word, PDF, encrypted PDF, image, Excel, MHTML and HTML.

When working with Hebrew, one advantage to exporting in MS-Word is that the MS-Word format fully supports copy/paste in Hebrew. The PDF created by the Microsoft PDF engine within eRAD RIS does not support copy/paste functionality, so the MS-Word format is an advantage in a Hebrew environment.

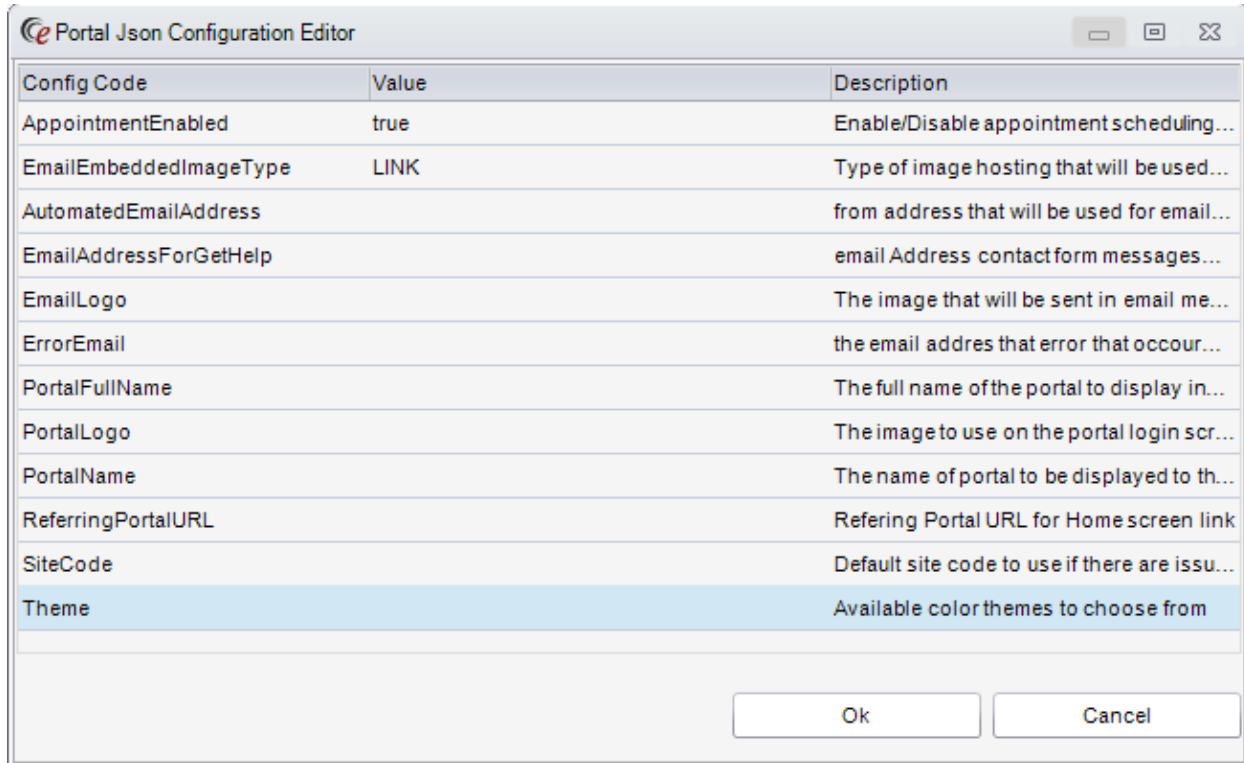
[To take advantage of this feature, please contact eRAD Support.](#)

13851 – PATIENT PORTAL CONFIGURATION HELPER

The patient portal uses a format called JSON to configure various portal features. This is a complex structure, and a simple typing error can invalidate the configuration. To simplify maintenance and prevent errors, eRAD RIS now has an editing tool that will allow the JSON to be edited without requiring knowledge of JSON and without needing to worry about simple errors.



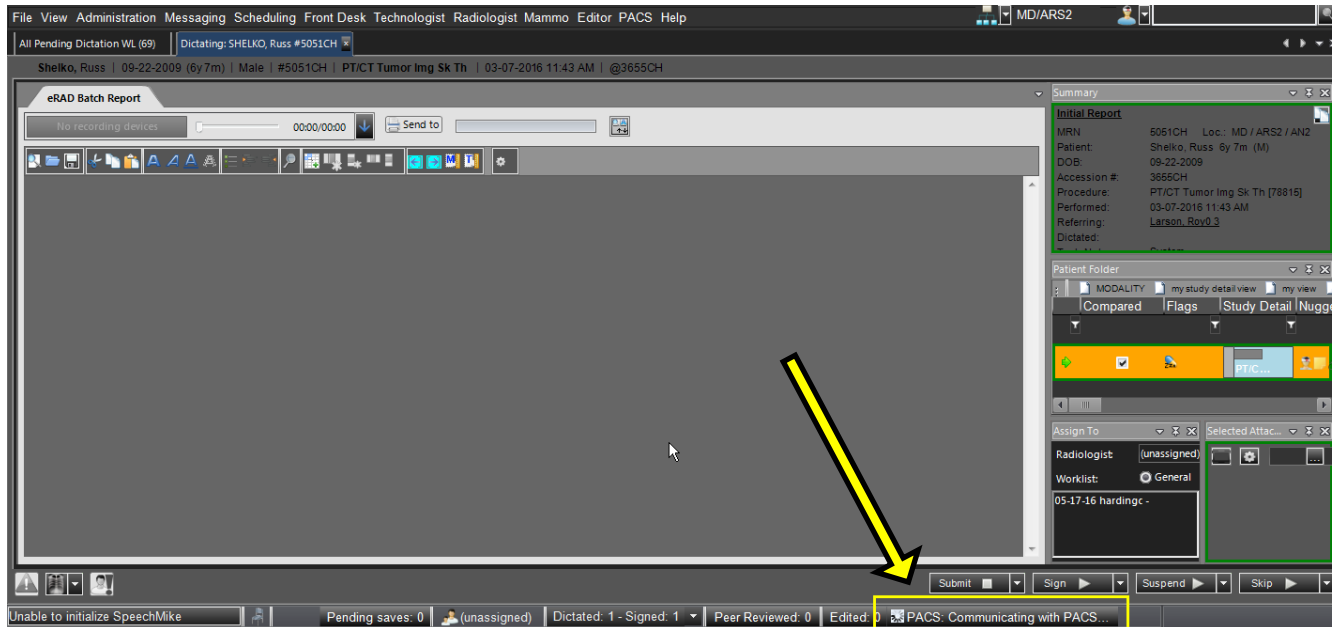
Selecting the [...] button will invoke the editor.



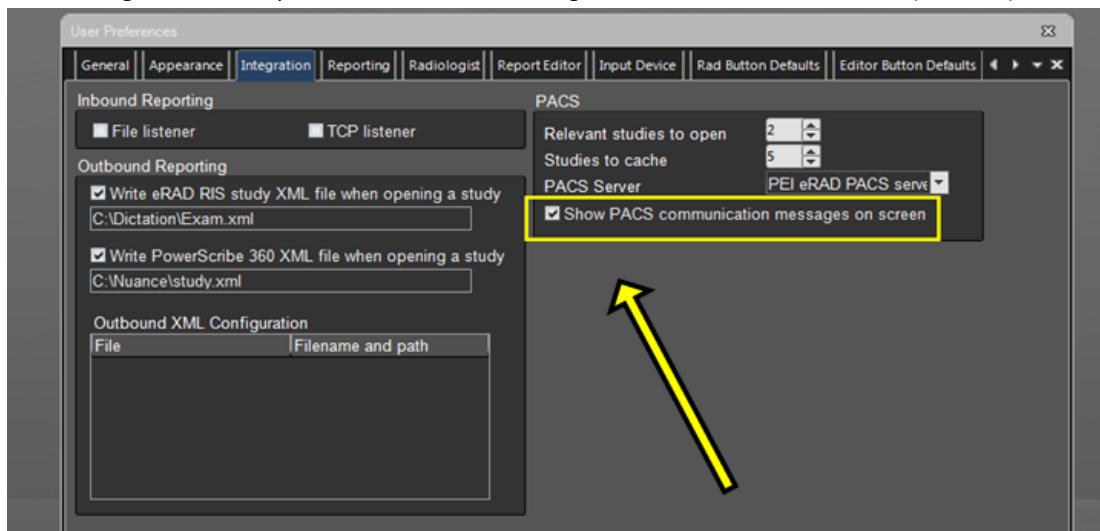
RADIOLOGIST

#13849 - ADD PACS DIALOG MESSAGES TO ERAD RIS STATUS BAR

eRAD RIS has had many recent enhancements to radiologist messaging when the RIS is communicating to the PACS. The purpose of these messages is to prevent the radiologist from dictating on a new patient before the previous patient's images have been cleared from the PACS viewer. Some radiologists expressed the desire to move the messages to a static notification area instead of a pop-up message. The RIS now has an option to display these PACS status messages to the radiologist in the status strip at the bottom of the RIS screen.



In addition, eRAD RIS has a new user preference to turn off the PACS communication dialog. Users can turn off the PACS dialog in their user preferences under the Integration tab. The default is true (checked).



RESOLVED DEFECTS

Bugs and support issues resolved in build 2.2016.3.

Bug #	Category	Subject
13517		Concurrency violation on delete all patients phone numbers from the Phone number edit screen
13291	Access strings	Access string Clinical.RadarMessage is not in use can be removed
13605	Admin-Other	Timeout Errors when viewing audit log of changes for Personnel dataset
9283	Audit History	Assign to Chair context menu creating misleading audit history entries
2862	Audit History	Request for images (Image Request) are not being audited
13266	Billing	Editing billing codes issue
13217	Billing	Aborting a started study can result in an error on the billing codes tab
13485	CD Burning	Horizontal scroll bar for included studies section in CD Burning window is missing
14055	Client Install	Core install issue when upgrading from 16.2 to 16.3
13465	Dark Mode/Theming	Dark mode - Phone number and Email fields on Patient Tab display white text on white background if more than one option listed
13833	DB	L_person_address_x_referring_practice is missing FK constraint to l_referring_practice
13636	DB	Queries to c_study table cannot be optimized by DOS or modality code
13562	DB	Database trigger performance issues
13455	DB	SQL Assessment - deprecated SET options found
4749	DB	The scan document archive process is taking a long time to find scan documents to archive
4747	DB	Missing index on c_interpretation_quality_review when joining to c_interpretation table
13892	DB Upgrade scripts	Upgrade Script for RISOutputFilePath
13840	Digital Forms	Exception occurring when scheduling an order that was previously saved as order when digital form has required field
13311	Digital Forms	ObjectReference error working with digital forms
13271	Digital Forms	Digital Forms Editor hang during save on large digital form
11069	Digital Forms	Digital Form Editor - Session Timeout is too short
13505	Document Distribution	Document Distribution Engine ignores LegacyInterfaceMode unless the Wedge is also enabled

5839	Embedded Reporting	Edit Templates and Macros icons enabled toggle is backwards
13744	EMR	External patients can be scheduled in RIS without matching or creating a new internal patient record
13737	eRAD Editor	eRAD Reporting mode - Conditional fields that are type macro, get error 'Unable to open macro' when opening the dictation window if macro tool window is not loaded.
12942	eRAD Editor	Inserting a text macro into a field may produce different results if the field is selected from the report tool window rather than the fields tool window.
13486	Image request	Missing horizontal scroll bar in Image Request screen and window is not resizable
8562	Image request	Image Request Status column on Patient Folder WL doesn't display status
5943	Image request	Image Request does NOT show referring doctor's name
13764	Insurance Eligibility	Error when working with multiple exams at the same time in the perform exam window
13711	Insurance Eligibility	Excessive audit logging by a "system" service for retrievals
13557	Insurance Eligibility	Unexpected error processing submit insurance queue
13479	Insurance Eligibility	Insurance Eligibility - Ignore deductible entry, if remaining and total are both zero
13215	Insurance Management	Self Pay - changing to a non-NPD enabled site doesn't clear the amount to collect field
10714	Interfaces	External Scheduling Interface - Issue with GetBookingLock and Expiry
10676	Interfaces	Assuta External Scheduling Interface - Issue with EndDate
13723	IVT / Precert	Patient is removed from IVT WL when Precert status is not the same for all exams on the order and one is rescheduled
11992	IVT / Precert	Precert status doesn't save changes when changed from Schedule Order and View/Edit
13724	Localization	Messages not localized: 1. User is not logged into PACS, 2. Cannot save because lock is required.
13619	Localization	When in Scheduling and Front Desk, order tab screen has a word cut off in version QE_HE_2016.2 .
13339	Localization	PACS login dialog is not localized nor does it support RTL
13338	Localization	Request to rename field/checkbox in Hebrew under the documentation tab in view/edit
12038	Localization	Buttons are misleading and inverted for Next/Previous field and Next/Previous portal tab
12586	Mammography	Manually create reminder window hidden close button when font size set to Large
13819	Meaningful Use	MU Tab - Allergies Pane - Error appears if Status is

		selected before Severity
13595	Meaningful Use	NPI Invalid message should give more detail
13551	Meaningful Use	Invalid object name 'c_patient_problem_list' when two users update the same patient's problem list
11363	Meaningful Use	Height/Weight not required while going through Existing Orders prompt
8516	Meaningful Use	Direct Message - Issue attaching CCD document to New Patient
13740	Mgt Reports	Core report: RTAT by Radiologist procedure group issue
13855	PACS (eRAD) Int - RIS only	PACS Bookmark remains when closing non-focused tab
11760	PACS (eRAD) Int - RIS only	PACS integration - Unable to reopen a study using View Images button if PACS is closed after initial open
13801	PACS (eRAD) Integration	RIS not connecting with PACS when using SSO with RTL localization
13794	PACS (eRAD) Integration	ERAD PACS - gets confused and displayed incorrect images.
13784	PACS (eRAD) Integration	Getting messages that aren't correct and images eventually get out of sync when PACS Viewer is not displayed
13604	PACS (eRAD) Integration	PACS sync issue when switching between multiple tabs under certain circumstances
13482	PACS (eRAD) Integration	PACS sync - PACS is unable to open current study message displayed too many times
13296	PACS (eRAD) Integration	PACS prefetching: ArgumentOutOfRangeException
14091	PACS (Non - eRAD) Integration	UV PACS over Citrix - Mini patient folder and main patient folder not appending images correctly
13717	PACS (Non - eRAD) Integration	In the XML Integration Lookup table cannot select a file with the xml and save to an existing row
13716	PACS (Non - eRAD) Integration	Outbound XML configuration grid - the drop down column header should not be displayed and you should not be able to add multiple identical rows
12497	PACS (Non - eRAD) Integration	IW PACS Integration - When a study cannot be loaded the 'Study loading problem' message is hidden, instead 'Waiting for PACS' message is displayed
13725	Patient Management	MRNs for New Appointments with existing patients - system does not release generated MRN
13553	Patient Management	System generated MRN not automatically advancing for new patients under some circumstances
12918	Patient Merge	Patient merge - Phone numbers and email addresses not selected if patient merge is opened when patient folder is open
13401	Patient Search	When using Patient Search with Last Name ending with the letter 'n' and DOB, the letter 'n' is ignored
13760	Payment control	Foreign Key constraint error when calculating cost of procedure

13559	Payment control	Payment calculator error: object reference not set to an instance of an object
13615	Portal Viewer	Portal windows are leaking memory
13330	PowerScribe Integration	PS360 - 'Thread was being aborted' message - inaccurate message and meaningless to user
13587	Radiology Peer Review	Peer review - the Organization settings do not seem to be saving correctly
13407	Radiology Peer Review	Peer Review - Value for Notes required at score is affecting what appears on All Peer Review Pending Action WL
13815	Radiology Reporting	TCP listener (Inbound Reporting) doesn't work when SSO used
13762	Radiology Reporting	Clinical.OpenStudySuspendedByOtherUser set to NONE, getting different behavior in create/edit window vs dictate window vs sign window.
13746	Radiology Reporting	Send report option is available on Exam Done studies without a report
13743	Radiology Reporting	Infinite loop possible when updating supporting reporting files such as text expander, author playback settings, etc.
13730	Radiology Reporting	RIS produces 2 errors related to 'c_client_worklist' then crashes.
13634	Radiology Reporting	Radiologist reporting screens hanging when closing from PS360
13630	Radiology Reporting	Memory leak in digital form answer view
13628	Radiology Reporting	M*Modal - edited auto macros reset to the default on subsequent open
13592	Radiology Reporting	Getting a "ResolveInputOutputDevice" error when opening the dictation window
13437	Radiology Reporting	When clicking 'Send for dictation' will get prompted that all sections must be entered
13315	Radiology Reporting	Patient history control error: Cannot access a disposed object
13263	Radiology Reporting	Template editor lookup, result tab, filter the grid by default = Y, edit one of the templates, get error when saving the template
13251	Radiology Reporting	Auto Hide for docked patient folder not staying persistent in dictating view
7422	Radiology Reporting	County Picker does not take in to account the fact that the same county name can exist in multiple states
13531	Reception	Exception occurs when saving study extra info
13520	Reception	When changing a Primary/non Primary linked Exam the linking stays intact, Flag isn't removed.
7400	Reception	Foreign key constraint when checking studies and adding insurance or self pay at time of registration
13566	Scheduling	When creating a new appointment or new walk in, the

		MU pop-up window will not save or close when clicking OK
13563	Scheduling	From the patient folder, when an ordered study is selected, get an unexpected error when opening the walk-in window
13538	Scheduling	The start time of a schedule restriction cannot be less than the shortest duration of an exam for that modality after the hour (any hour)
13466	Scheduling	Phone Number is not copying for "Same as Patient" when Self, Spouse, or Child is selected
13303	Scheduling	Error loading schedule order
12949	Scheduling	Referring physician alert not being displayed on Schedule Order/Registration/Walk-In
13809	Technologist	Get an error in the Technologist WL - Object reference not set to an instance of an object and exam status does not change
13519	Technologist	Assigned Rad list in Perform Exam window is reordered after initial selection.
13518	Technologist	Assigned Radiologist is not retained if referrer has preferred radiologist and included study is toggled
13495	Technologist	When in Perform Exam, clearing Procedure name from Procedure picker and continuing evokes an error message
13359	Technologist	Exam with contrast that is aborted has contrast removed
13586	Thick Client GUI	Null reference error after double click on worklist
13567	Thick Client GUI	PACS Login dialog resize issues
13434	Thick Client GUI	County information should be cached
13331	Thick Client GUI	Radgridview / gridflagcellement memory leak
13299	Thick Client GUI	Error clearing old trace logs
10394	Thick Client GUI	eRAD RIS lock screen is only hiding RIS, not technically locking. Shortcut commands and actions in third party systems can still occur
9616	Thick Client GUI	Referring Preferences - Add Radiologists drop down shows duplicates
2601	Thick Client GUI	Referring detail on Order tab - add suffix
2350	Thick Client GUI	No Show WL missing patient folder from context menu
14043	UI Look and feel	Change text on personnel address from "Marketing fax opt-out" to "Prohibit marketing faxes"
13792	UI Look and feel	SystemConfig spelling and grammar errors - PortalSchedulingBookingLockTimeout & SchedulingBookingLockTimeout
13625	UI Look and feel	Improve message given to user for failed MRN mask
13491	UI Look and feel	Navigation buttons on Portal data pane are disabled
13224	UI Look and feel	When Phone number mask is disabled, the phone numbers are displayed in a mask in the referring

		addresses lookup table
13475	View Edit	Problems with billing code adding/editing on View/Edit screen
13710	Web Services	Excessive posting to c_action and c_action_data tables
13608	Web Services	RIS is marking rows as having changes even when the user didn't make any changes, which causes problem with last_updated_by_user_id
13540	Web Services	C_GetCancelsByReasons performance issues
13536	Web Services	Daily cleanup job should purge all expired locks
13089	Web Services	Problem flag and QA flags do not display correctly on the worklist
6104	Web Services	Scan document archive services fails access check if temp file already exists
5146	Web Services	ServicesConfigWizard is not clear that you need to enter the endpoint information in the format protocol://ipaddress:port/rRIS
13751	Worklists	The TestWorklistExecutionTimes unit test case for GetWLSignedByDateMy is taking longer than expected
13260	Worklists	Assign to radiologist context menu on worklist does not show for addendum requests


KNOWN LIMITATIONS

The following are new bugs found in build 2.2016.3. Bugs reported in previous versions are not captured as Known Limitation in this document.

#	Priority	Category	Subject
13992	Normal	Audit History	Audit History is not recording the county and zip code for the signed exam
14052	Normal	Client Install	Core install - after a successful install, should have a message stating 'install completed successfully'
13886	Low	Digital Forms	Do not try to save digital forms from RIS when trying to 'Save As Order'
13971	Low	Documentation	Assigned Radiologist not showing as a required field until you hit save
13983	Normal	Image request	Navigating from one view to another in the Image request WL
14005	Normal	IVT / Precert	Verification of Insurance remains after changing insurance companies
14001	Normal	IVT / Precert	Insurance verification is showing as required when it's approved through an eligibility check
13998	Normal	IVT / Precert	When changing insurance companies at scheduling, there is an error after verifying another insurance in the order process
13938	Normal	Localization	Couple of items not localized to Hebrew
13870	Low	Meaningful Use	eRx - Throws exception if patient's primary phone number starts with "+"
14003	Normal	MModal	Conditional fields - value is not retained when 'sent to VR' if option is a macro
13967	Normal	PACS (eRAD) Int - RIS only	On initial opening of a study, should the 'Communicating with PACS' dialog or status bar message be displayed?
13961	Normal	PACS (eRAD) Int - RIS only	Status bar is displaying incorrect message when waiting for PS360
14058	Normal	PACS (eRAD) Integration	PACS images are not getting released when skipping through in 'All Peer Review Pending Action WL'
14025	Low	PACS (eRAD) Integration	When closing RIS from the Locked screen, images do not close
13953	Normal	PACS (eRAD)	PACS status bar message is different than PACS dialog message

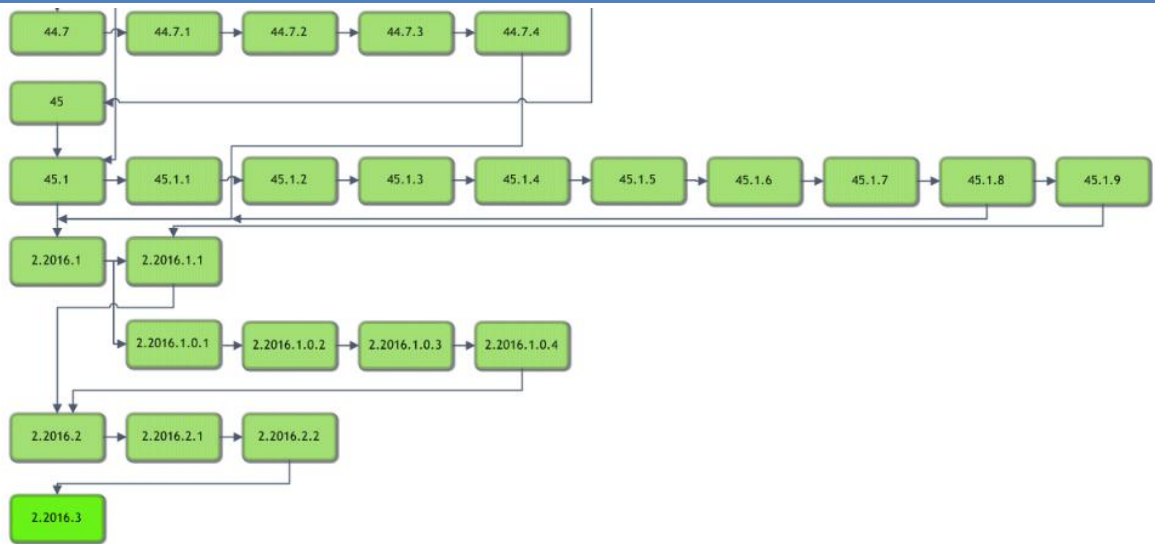
		Integration	
13945	Normal	PACS (eRAD) Integration	RIS fails to display message for missing priors when the bookmark is not lost
14093	Low	PACS (Non - eRAD) Integration	CSH PACS - will log you out if it is not chosen upon login to RIS
14039	Low	PACS (Non - eRAD) Integration	Integration Manager - Add close requested error
13928	Low	Patient Folder	Required indication (red exclamation) not updating after Patient Race is added
13974	Normal	Scheduling	Error for 1 patient with 2 procedures at the same time in the same room
13926	Normal	Scheduling	Required indication (red exclamation) not updating after None is selected for Medications/Allergies/Medical History on the MU tab
14002	Normal	Service Tools - Installer	RIS Thick Installer Wix Project cleanup

RIS RELEASE VERSION NUMBERS

This Version 

Version Hotfix	2016.1	2016.2	2016.2	2016.2	2016.3
	-	-	1	2	
Window UI	2.16.1.0.33419 (3GB)	2.16.2.0 (3GB)	2.16.2.1 (3GB)	2.16.2.2 (3GB)	2.16.3.0 (3GB)
Core	2.16.1.0.33079	2.16.2.0	2.16.2.0	2.16.2.0	2.16.2.0
WS	2.16.1.0.33419	2.16.2.0	2.16.2.0	2.16.2.0	2.16.3.0
DB	2.16.1.0.33416	2.16.2.0.00172540	2.16.2.0.00172540	2.16.2.2.00243102	2.16.3.0.00257101
Digital Forms					
Patient Portal					
Referring Portal					
Notes	Management Reports, Questionnaire and Citrix Bridge		Citrix Bridge	Citrix Bridge	
Legend	This Release	New changes	Unchanged		

CODE STREAM DIAGRAM



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.4
Update 2.2016.4.1

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

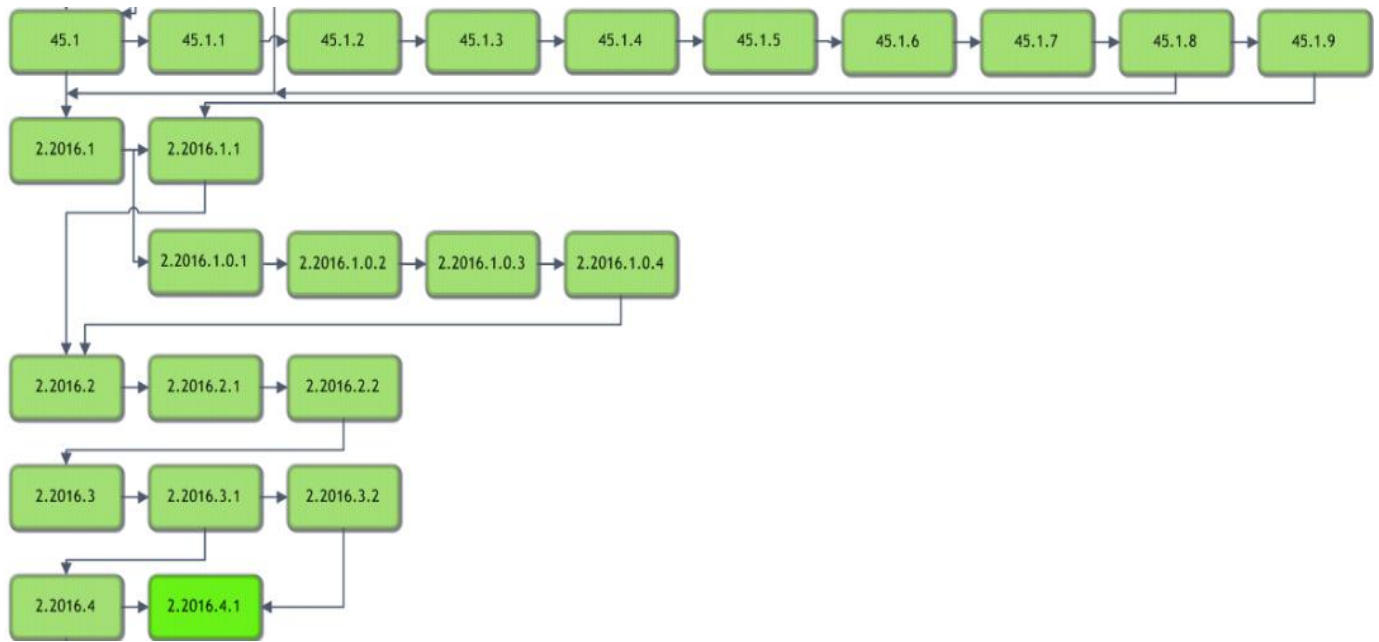
eRAD RIS Server Update

Resolved Items

Redmine #	Subject
14977	PACS Caching is not caching priors in reverse chronological order

eRAD RIS Server Update

Code Stream









Legend:

Light Green = Previously Released software

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _ReleaseNotes	10/05/2016 3:59 PM
 PACS Citrix Bridge	10/05/2016 3:56 PM
 rRISService	10/05/2016 1:29 PM
 Service Tools	10/05/2016 1:29 PM
 ThickClient	10/05/2016 1:30 PM
 RISServerMasterCert.pfx	03/31/2016 1:38 PM

Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

Who is affected

Build 2016.4 installs. This server update must be applied to 2016.4

eRAD RIS Server Update

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1 (3GB)	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2 (3GB)	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service
2016.4	-	2.16.4.0 (3GB)	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.4	1	2.16.4.1 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Web Service updates

eRAD RIS Server Update

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.4.1.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 99 files in the rRISService folder and 6 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

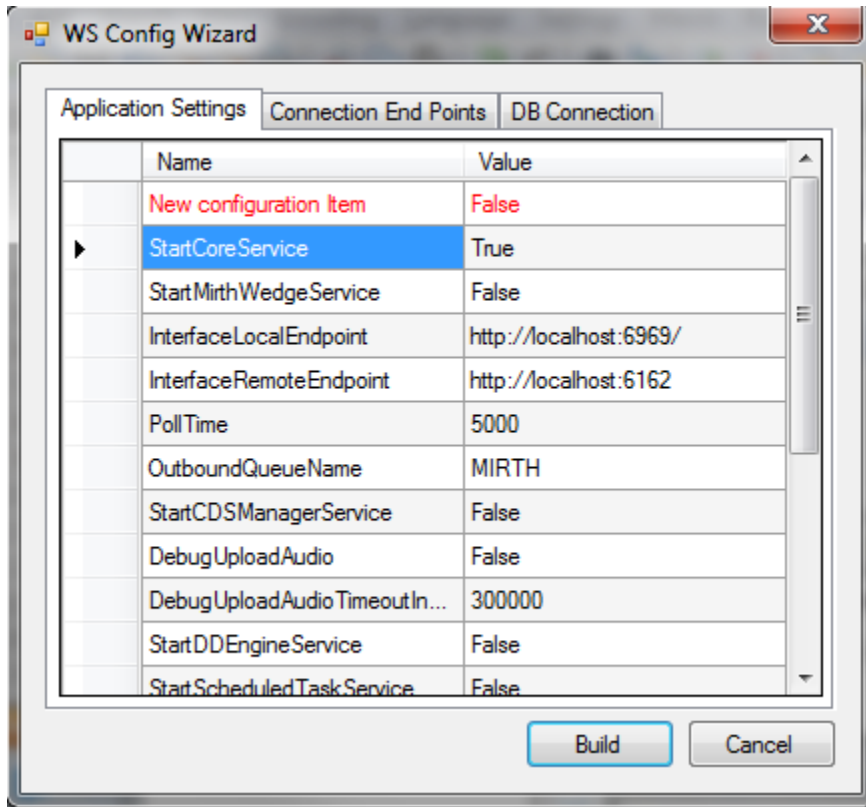
With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.

eRAD RIS Server Update



eRAD RIS Server Update

Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.

WS Config Wizard

Application Settings | **Connection End Points** | DB Connection

Study Service

http:// localhost:8040 /rRIS/

net.tcp:// localhost:8041 /rRIS/

Notify Service

net.tcp:// localhost:7095 /rRIS/

CDS Service

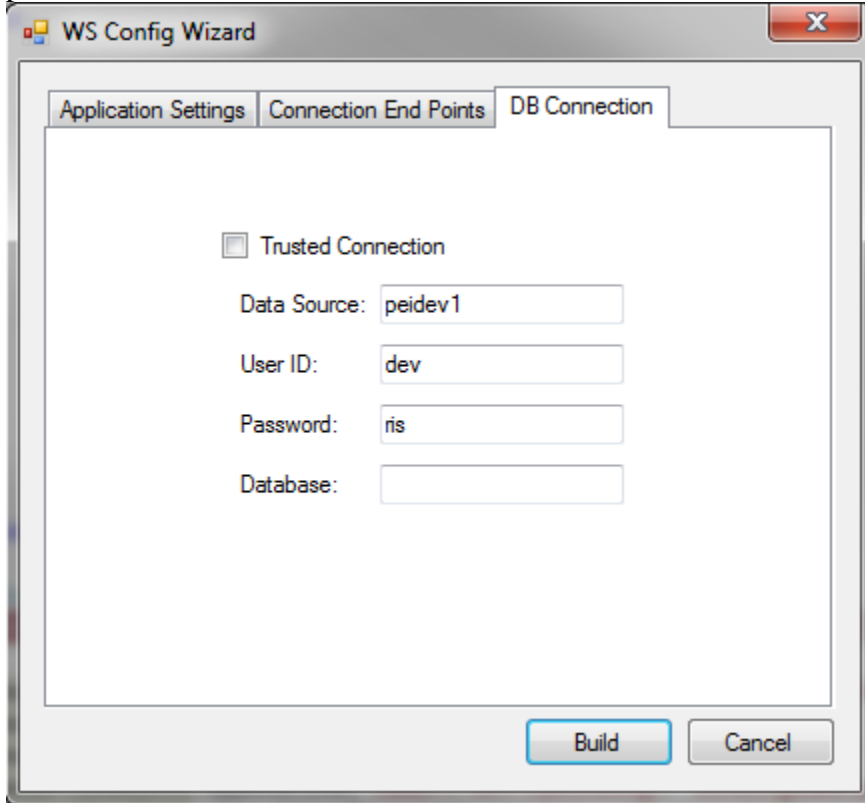
http:// localhost:7092 /rRIS/

net.tcp:// localhost:7093 /rRIS/

Build Cancel

eRAD RIS Server Update

DB Connection: will display the existing configuration, if the Connection is to be used as a trusted connection, then the user ID and password will become disabled and will not be used, and will rely on the provided database value, When not using the trusted connection, The Database value is not needed but can be used to force a specific database connection as long as the provided user has access to that database.



It is always good practice to do a compare of the .config files.

- 1) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService.

rRISService directories include:

- a) *rRISService*
- b) *CDS rRISService*
- c) *Wedge rRISService*
- d) *DDE rRISService*

Restart each service.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.4
Update 2.2016.4.2

Table of Contents

Resolved Items.....	3
Code Stream.....	4
Package Contents	5
Intended Audience	5
Who is affected	5
eRAD RIS Release Version Numbers	6
Installing	7
Client/GUI.....	7
Patient Portal.....	7

Resolved Items

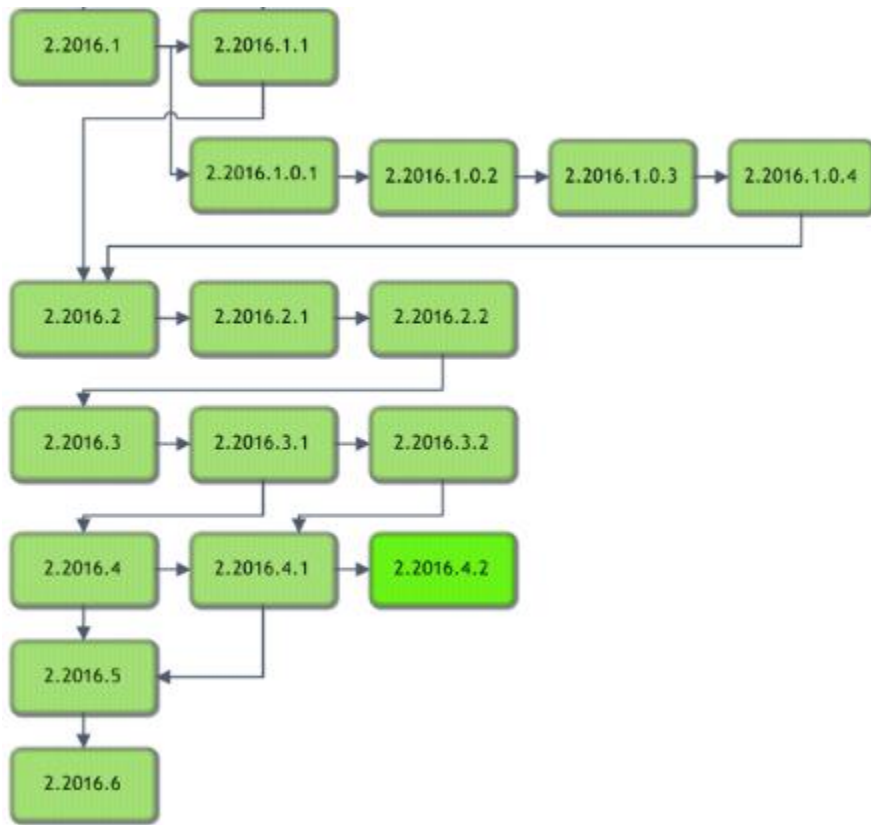
eRAD RIS

Redmine #	Subject
15289	It is now possible to arrive or cancel appointments made as a guest in the Patient Portal.
15288	Ris.exe is once again marked as LARGEADDRESSAWARE.

Patient Connect

Redmine #	Subject
15282	Preparation instructions have been added to the Appointment Summary Tab.
15281	An occasional issue with the next button not advancing through the workflow after selecting the provider has been resolved.
15280	Activity logs are now time stamped with the server time, eliminating a 4-hour discrepancy.
15279	A change has been made to eliminate rounding up to the next day, in order to prevent additional delay to the report being displayed in the portal.
15278	The Images tab now disappears when PACS is not defined.
15277	A message that images are not available is now displayed when eRAD PACS is not defined.
15276	Both phone and email are now required when using the Get Help form.

Code Stream







Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _Documentation	11/14/2016 2:21 PM
 _ReleaseNotes	3/26/2012 11:02 AM
 PatientConnect	11/14/2016 1:09 PM
 ThickClient	11/15/2016 9:46 AM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.4 installs. This server update must be applied to 2016.4.1.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Patient Portal updated

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.4.2.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Patient Portal

The RIS Patient Portal deployment folder contains a sub folder called “PatientPortalAppFolder.” The “PatientPortalAppFolder” contains the complete set of files necessary for the RIS Patient Portal to run.

To deploy the RIS Patient Portal files, run the “DeployPatientPortal.bat.” This batch program is located inside the “PatientPortalAppFolder.” Following is some information about this batch program:

- It needs to be run on the server containing the RIS Patient Portal web site.
- It will present the person running the program (installer) a list of web sites on the current server.
- The installer will have to enter the web site for which they want to deploy the patient portal files.
- The program will present details of what it is about to do and ask the installer to confirm in order to proceed.
- The program will write to a log file in the same folder as the DeployPatientPortal.bat.
- It will replace the bin, content, view and scripts folder in the specified web site path.
- It will also replace the web.config and packages.config files.
- It will add applicationsettings.config, connectionstrings.config and rewriteRules.config if any of those files are not present.
- It will add applicationsettings.config.vx.x.x.x, connectionstrings.config.vx.x.x.x and rewriteRules.config.vx.x.x.x so the installer can review if there are any changes in these files that may need to be implemented in actual .config file.

You can use this batch program to redeploy new releases of the RIS Patient Portal. Please ensure to review the new .config.vx.x.x.x files and release notes to ensure you take advantage of new configuration settings.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.4
Update 2.2016.4.3

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7
 Database Updates..... 11
 Patient Portal..... 12

Resolved Items

eRAD RIS

Redmine #	Subject
15583	Insurance Eligibility - Pin is now only passed to Eligible when appropriate.
15537	An issue that could prevent a worklist from refreshing under certain conditions was resolved.
14744	Exams scheduled in the Patient Portal using Guest mode now remain visible in the portal after being merged with internal patient ID.

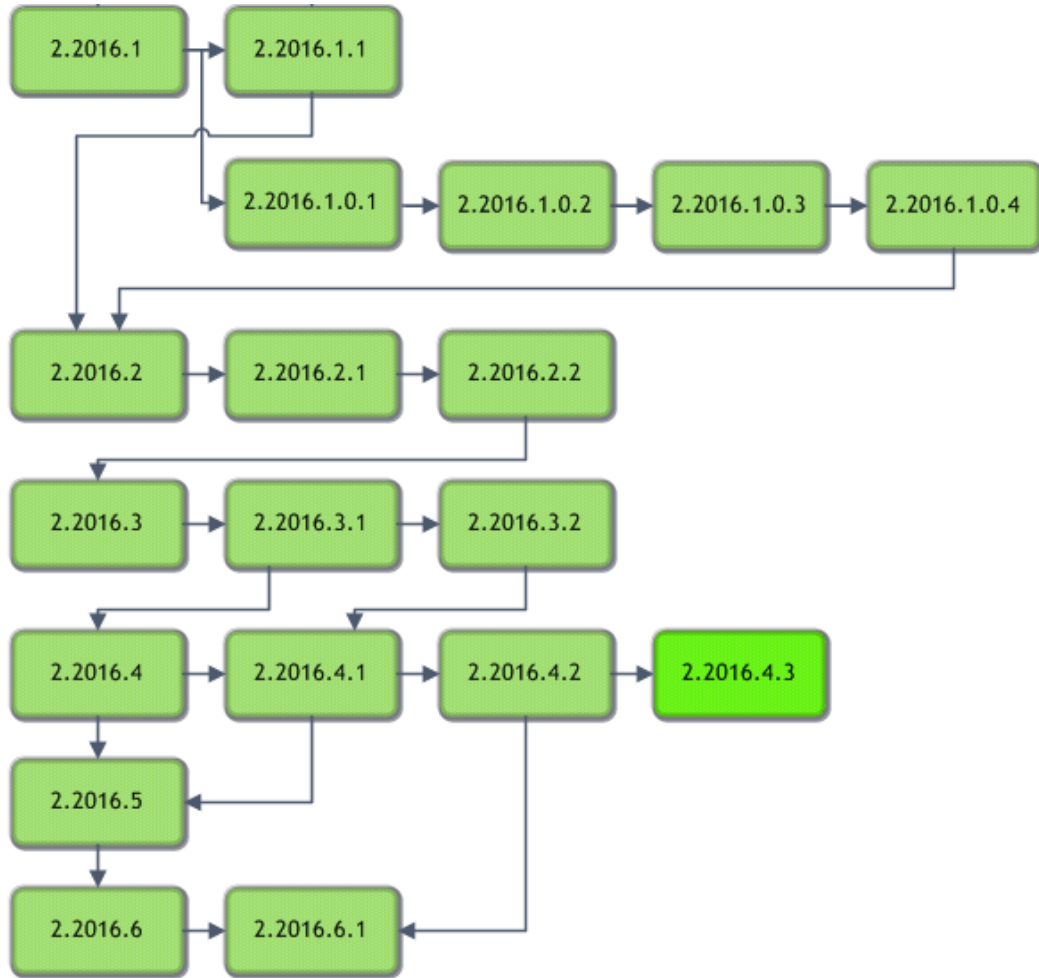
The following are bugs identified and fixed in a newer version and the changes were brought back and fixed in 2016.4.3.

Redmine #	Subject	Original resolved version
15602	Inconsistencies with displaying referring alerts when scheduling appointments with multiple orders have been resolved.	2016.6
15542	Setting the referring physician alert checkbox will no longer prompt that "Another user may have made conflicting changes" when making future updates to the referring physician's account.	2016.5
15541	The referring physician alert is displaying properly when the registration window is opened.	2016.6

Patient Connect

Redmine #	Subject
15623	A small verbiage change was made for the Prescription step (capitalization).
15622	A verbiage change was made for the "Select your provider" step.
15540	Creating a Patient Portal account is possible without timing out when using verification code.
15535	Some messaging changes were made for the Create Appointment workflow.

Code Stream









Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	03/26/2012 11:02 AM
 DB	12/06/2016 3:52 PM
 PatientConnect	12/06/2016 3:52 PM
 rRISService	12/06/2016 3:52 PM
 Service Tools	12/06/2016 3:52 PM
 ThickClient	12/06/2016 3:53 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.4 installs. This server update must be applied to 2016.4 →2016.4.2.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2	-	2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Patient Portal updated
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI, Web Services, DB and Patient Portal updated

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.4.3.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 107 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

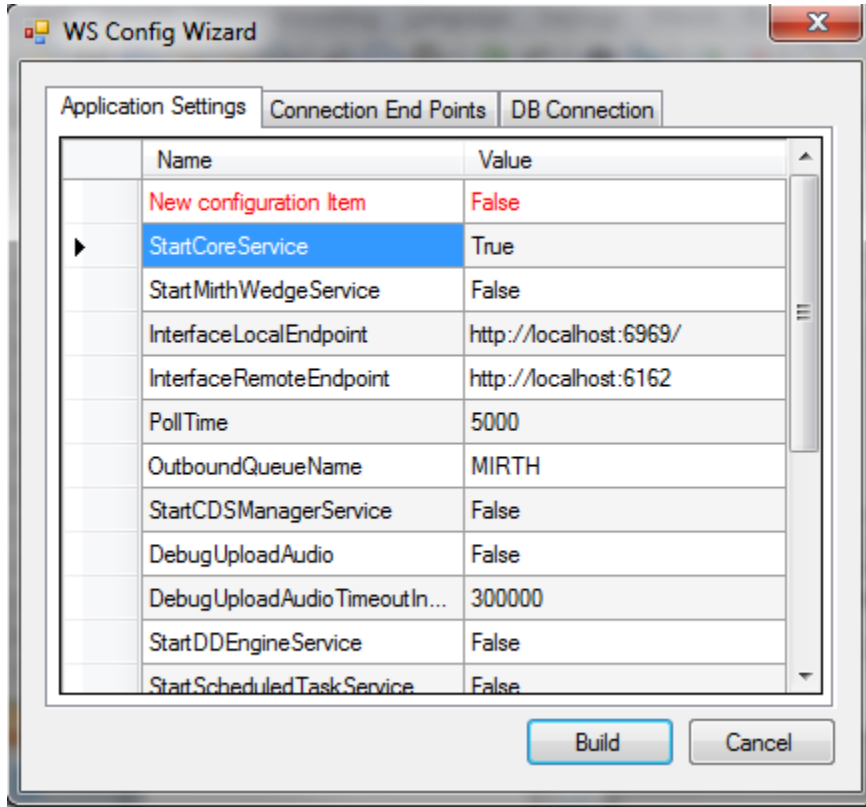
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

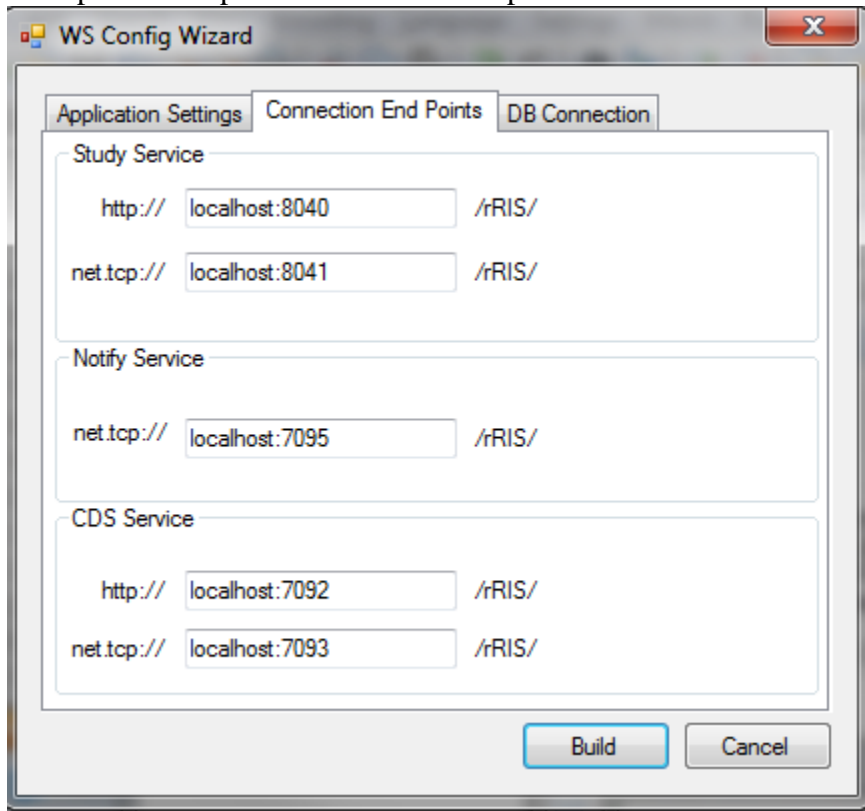
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

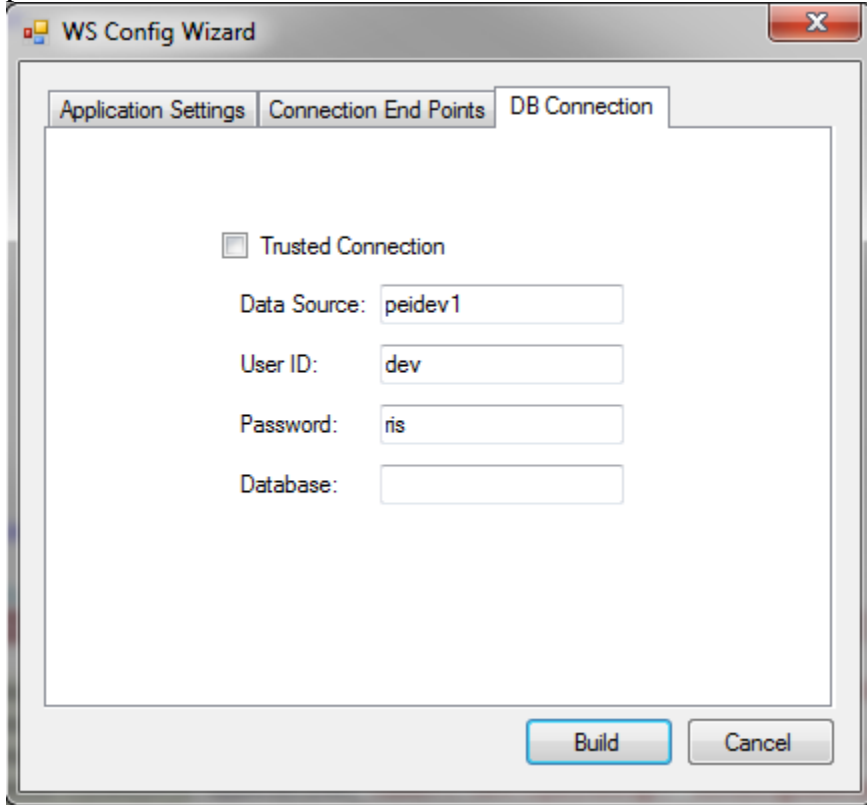
Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



DB Connection: will display the existing configuration, if the Connection is to be used as a trusted connection, then the user ID and password will become disabled and will not be used, and will rely on the provided database value, When not using the trusted connection, The Database value is not needed but can be used to force a specific database connection as long as the provided user has access to that database.



It is always good practice to do a compare of the .config files.

- 1) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService.
rRISService directories include:
 - a) *rRISService*
 - b) *CDS rRISService*
 - c) *Wedge rRISService*
 - d) *DDE rRISService*

Restart each service.

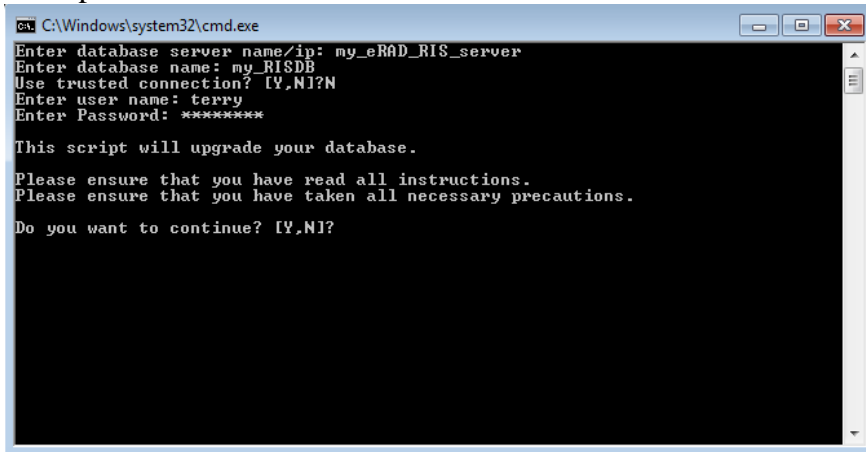
Database Updates

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

- 1) From the upgrade folder, double click the "RunUpgrade.bat" command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.
- 3) You can choose to use "Trusted connection". Using this option will pass the identity of the currently logged on user. If this user has "db_owner" access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use "Trusted connection" then you will be prompted for user id and password.

Example:



- 5) After the upgrade program has finished you can find the upgrade logs in the "log" folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team

Patient Portal

The RIS Patient Portal deployment folder contains a sub folder called “PatientPortalAppFolder.” The “PatientPortalAppFolder” contains the complete set of files necessary for the RIS Patient Portal to run.

To deploy the RIS Patient Portal files, run the “DeployPatientPortal.bat.” This batch program is located inside the “PatientPortalAppFolder.” Following is some information about this batch program:

- It needs to be run on the server containing the RIS Patient Portal web site.
- It will present the person running the program (installer) a list of web sites on the current server.
- The installer will have to enter the web site for which they want to deploy the patient portal files.
- The program will present details of what it is about to do and ask the installer to confirm in order to proceed.
- The program will write to a log file in the same folder as the DeployPatientPortal.bat.
- It will replace the bin, content, view and scripts folder in the specified web site path.
- It will also replace the web.config and packages.config files.
- It will add applicationsettings.config, connectionstrings.config and rewriteRules.config if any of those files are not present.
- It will add applicationsettings.config.vx.x.x.x, connectionstrings.config.vx.x.x.x and rewriteRules.config.vx.x.x.x so the installer can review if there are any changes in these files that may need to be implemented in actual .config file.

You can use this batch program to redeploy new releases of the RIS Patient Portal. Please ensure to review the new .config.vx.x.x.x files and release notes to ensure you take advantage of new configuration settings.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.4
Update 2.2016.4.4

Table of Contents

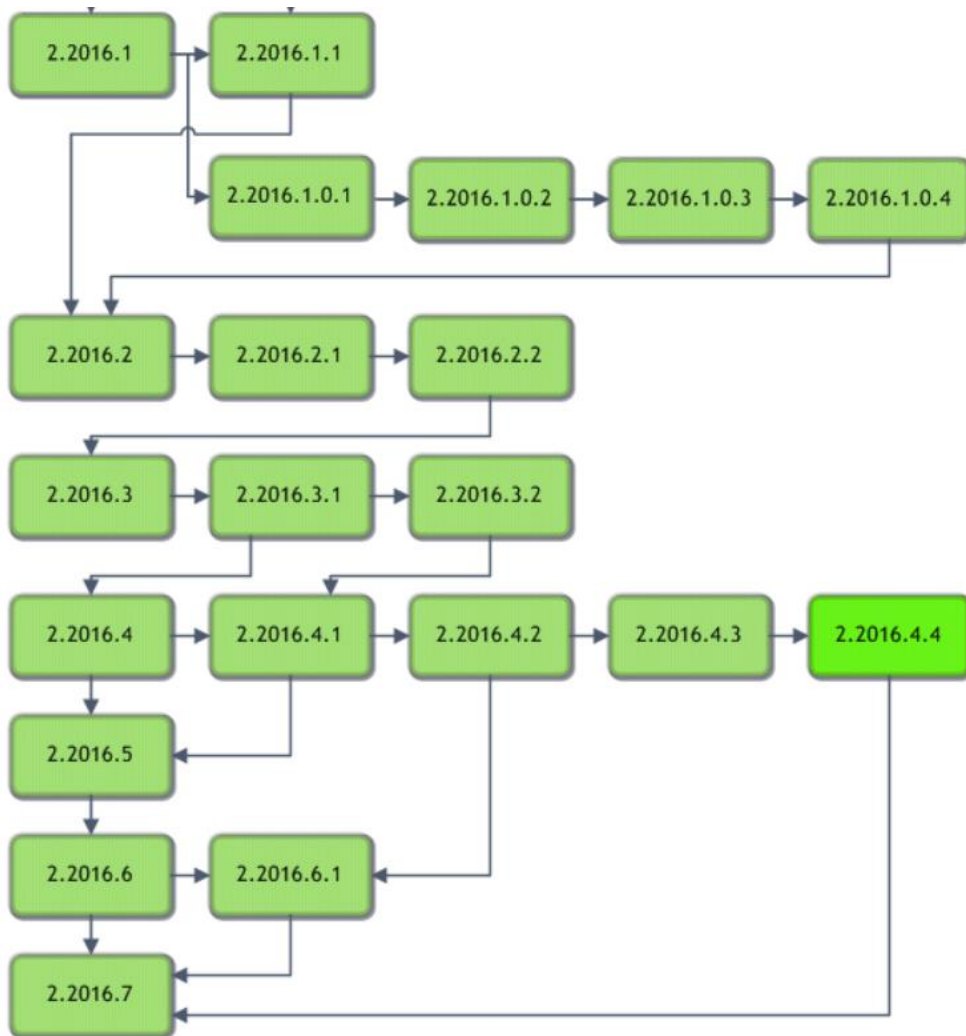
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7

Resolved Items

eRAD RIS

Redmine #	Subject
15719	When Reason for Exam is changed from a Log Control to a Text Box, previously entered text is no longer displayed in the field

Code Stream



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	12/14/2016 3:56 PM
 ThickClient	12/14/2016 3:56 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.4 installs. This server update must be applied to 2016.4 →2016.4.3.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Patient Portal updated
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI, Web Services, DB and Patient Portal updated
2016.4	3	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.4.4.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.4
Update 2.2016.4.5

Table of Contents

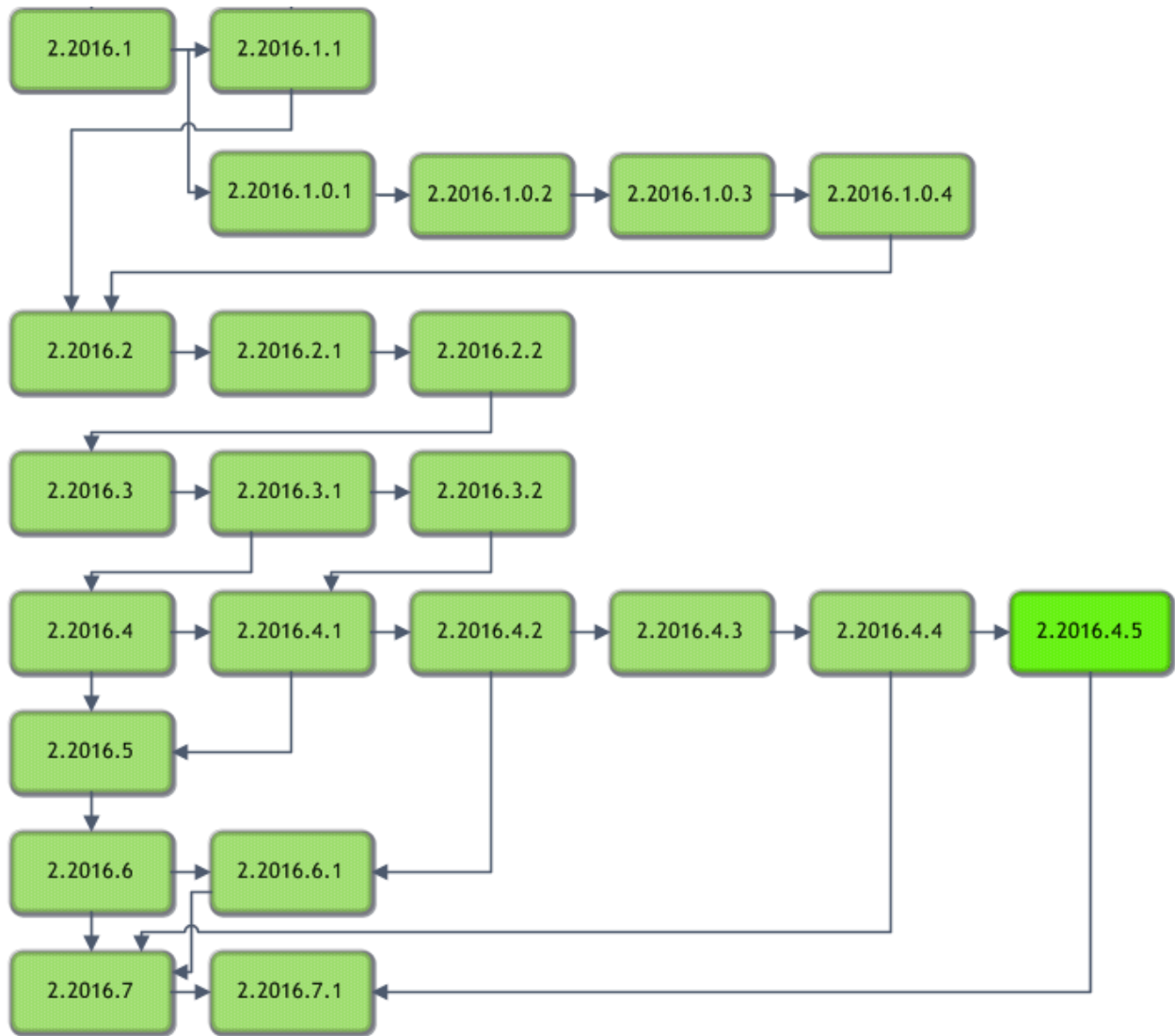
Resolved Items.....	3
Code Stream.....	4
Package Contents	5
Intended Audience	5
Who is affected	5
eRAD RIS Release Version Numbers	6
Installing	7
Client/GUI.....	7

Resolved Items

eRAD RIS

Redmine #	Subject
15832	Voiding payments made in the Imagine Payment Portal no longer generates an error when multiple Dataset IDs (tax IDs) are configured.

Code Stream




Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	12/23/2016 2:34 PM
 ThickClient	12/22/2016 12:15 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.4 installs. This server update must be applied to 2016.4.4. The resolved defect impacts customers using the Imagine Payment Portal, only if they have multiple Dataset IDs configured.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Patient Portal updated
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI, Web Services, DB and Patient Portal updated
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.4.5.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.4
Update 2.2016.4.6

Table of Contents

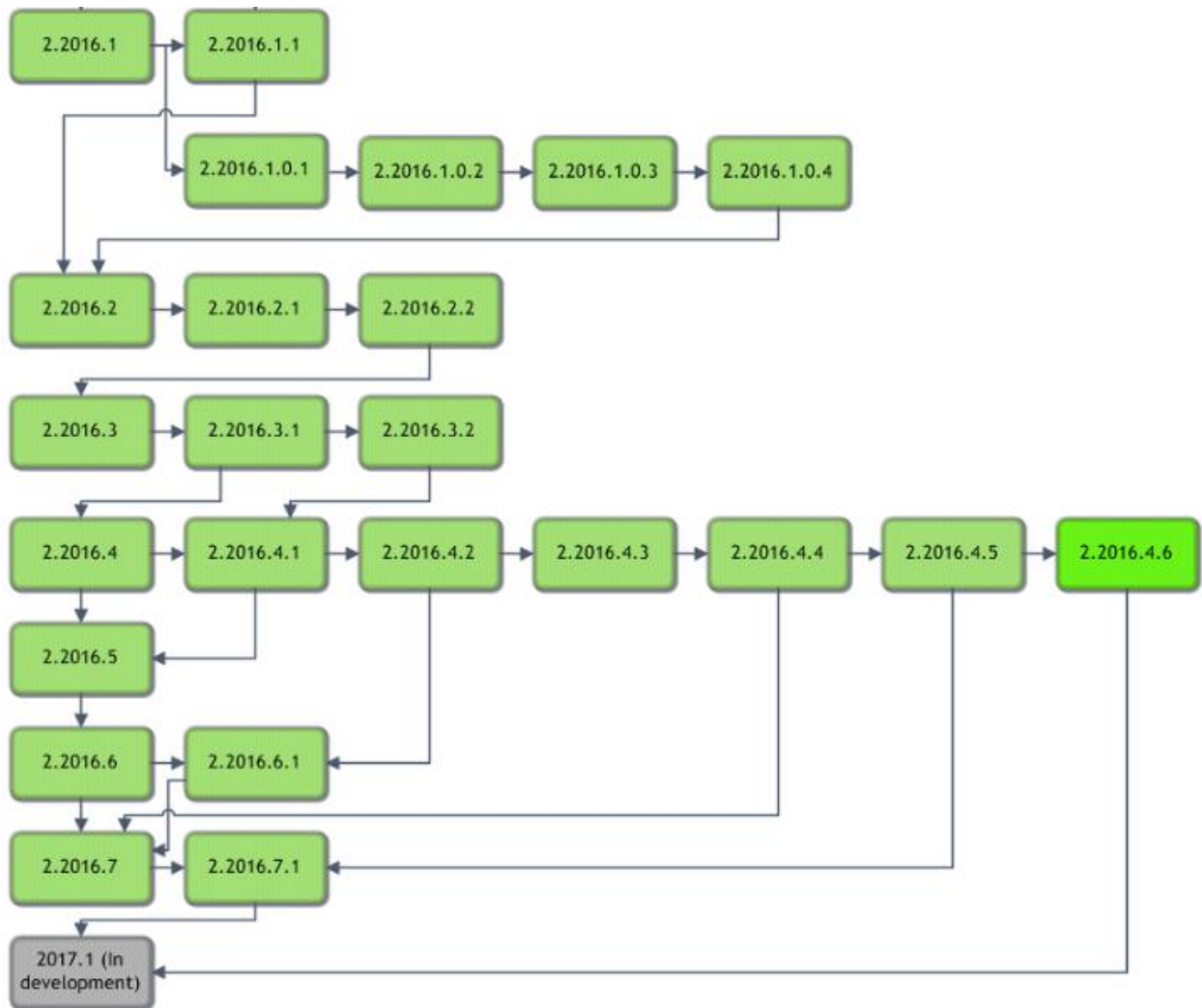
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7

Resolved Items

eRAD RIS

Redmine #	Subject
15925	Spell checker dictionaries not loading for all eRAD RIS users unless they open a reporting screen
15955	Spell check suggestions on context menu are less that helpful (may not be coming from the selected dictionary)
15923	Log Control context menu not showing when in textbox only mode

Code Stream



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	1/18/2017 2:30 PM
 ThickClient	1/18/2017 2:29 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.4 installs. This server update must be applied to 2016.4.3 as this version had DB and Web Service updates. Versions 2016.4.4 and 2016.4.5 were GUI only releases.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
43.1	-	2.43.1.0.25850(3GB)	2.43.0.0.23171	2.43.1.0.25850	2.43.1.0.25771		GUI.zip Web Service and DB Updates
43.2	-	2.43.2.0.26864(3GB)	2.43.0.0.23171	2.43.2.0.26864	2.43.1.0.25771		GUI.zip and Web Service
44	-	2.44.0.0.26570(3GB)	2.44.0.0.26405	2.44.0.0.26570	2.44.0.0.26475		Full Version Release
44.1	-	2.44.0.0.26984(3GB)	2.44.0.0.26405	2.44.0.0.26984	2.44.0.0.26906		Gui.zip, Web Service, and DB
44.1	1	2.44.1.1.27093(3GB)	2.44.0.0.26405	2.44.1.0.26984	2.44.1.0.26906		Gui.zip
44.2		2.44.2.0.27410(3GB)	2.44.0.0.26405	2.44.2.0.27410	2.44.2.0.27365		Gui.zip, Web Service, and DB
44.2	1	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.1.27959	2.44.2.1.27909		Gui.zip, Web Service, and DB
44.2	2	2.44.2.1.27959(3GB)	2.44.0.0.26405	2.44.2.2.28094	2.44.2.1.27909		Web Service
44.3	-	2.44.3.0.28292	2.44.0.0.26405	2.44.3.0.28277	2.44.3.0.28138		Gui.zip, Web Service, and DB
44.3	1	2.44.3.1.28535(3GB)	2.44.0.0.26405	2.44.3.1.28535	2.44.3.0.28138		Gui.zip and Web Service
44.4	-	2.44.4.0.28762(3GB)	2.44.0.0.26405	2.44.4.0.28762	2.44.4.0.28676		Gui.zip, Web Server, DB, SSRS Deployment
44.4	1	2.44.4.1.28953(3GB)	2.44.0.0.26405	2.44.4.1.28953	2.44.4.0.28676		Gui.zip and Web Service
44.4	2	2.44.4.2.29327(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.4	3	2.44.4.2.29722(3GB)	2.44.0.0.26405	2.44.4.2.29327	2.44.4.0.28676		Gui.zip and Web Service
44.5	-	2.44.5.0.30022(3GB)	2.44.0.0.26405	2.44.5.0.30022	2.44.5.0.29976		Gui.zip, Web Server, DB
44.5	1	2.44.5.1.30451(3GB)	2.44.0.0.26405	2.44.5.1.30451	2.44.5.1.30449		Gui.zip, Web Server, DB
44.5	2	2.44.5.2.30705(3GB)	2.44.0.0.26405	2.44.5.1.30705	2.44.5.1.30554		Gui.zip, Web Server, DB
45	-	2.45.0.0.29559(3GB)	2.45.0.0.26107	2.45.0.0.29559	2.45.0.0.29558		Full Version Release
45.1	-	2.45.1.0.30774(3GB)	2.45.0.0.26107	2.45.1.0.30774	2.45.1.0.30738		Gui.zip, Web Service, DB, SQLReporting, Questionnaire, Citrix support
45.1	1	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.1.31175	2.45.1.1.31174		Gui.zip, Web Service, DB, SQLReporting, Questionnaire
45.1	2	2.45.1.1.31175(3GB)	2.45.0.0.26107	2.45.1.2.31378	2.45.1.1.31174		Web Service and Citrix Bridge
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599		GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771		GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
45.1	9	2.45.1.9.33573(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936		GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	GUI and Patient Portal updated
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI, Web Services, DB and Patient Portal updated
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	GUI

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.4.6.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Customer Release Notes

for eRAD RIS
Version 2
Build 2016.4

Important Notes: This version requires a Core Install. Also, any M*Modal files will need to be manually copied to the new home location for Feature #7572 (see page 36-38).

TABLE OF CONTENTS

Table of Contents 2

 Purpose..... 4

 Intended Audience 4

New Settings..... 5

 New access strings..... 5

 New system configuration settings 5

New Features..... 7

 Scheduling and Registration 8

 11925 – Responsible Party’s date of birth can now be captured 8

 13103 – Procedure Plans can now book rooms simultaneously 9

 Insurance Eligibility..... 11

 13611 – Eligible API integration now allows exceptions for collecting funds based on Payer (or Carrier) and Billing Modality Type 11

 Imagine Payment Portal 14

 13902 – Imagine Payment Portal integration now supports configuring TSYS account identifiers at a Site level 14

 Forms and Labels..... 15

 12043 – A default quantity can be set for printing forms and labels 15

 11490 – Automated Form and Label printing now supports additional criteria including exam status, preferred language, contrast, and billing code 16

 Digital Forms..... 17

 11514 – Digital Forms questions that have been removed can now be restored 17

 Meaningful Use 18

 13659 – Implantable Devices can now be documented in accordance with upcoming MU Requirements 18

 13844 – A section for Implantable Devices in now displayed in the C-CDA 22

 Outside Reads..... 23

 13733 – Indication Codes can now be added when creating an Outside Read 23

 Work Lists 24

 13803/13804 – Work Lists can now be configured to refresh at different intervals..... 24

 Interfacing 26

 8666 – Messages transmitted via Mirth can be filtered to decrease unnecessary messaging..... 26

 Infrastructure 27

 7572 – RIS now supports installation to a shared location on the workstation (as opposed to individual Windows user profiles) 27

 Referring Physician Management..... 28

 9522 – Marketing representatives can now be associated to a referring physician 28

 RIS Administration 29

 3667 – Log controls and text boxes support spell check 29

 13935 – System Configuration table now enforces more streamlined data entry 30

 13818 – Opening the Patient Folder is now shown in the Audit History..... 31

 Document Management 32

13808 – Users can now “print” from other applications and automatically save the document as an attachment in RIS (No paper or scanner required).....	32
RADAR	34
13438 – RADAR Nudge Integration	34
Resolved Defects	44
Known Limitations	47
RIS Release Version Numbers.....	48
Code Stream Diagram.....	49

PURPOSE

This is the Customer Release Notes document for eRAD RIS Version 2016.4.

Not every feature will be described in this document. Typically, only features which can be visually demonstrated are outlined here.

INTENDED AUDIENCE

This document was created by the eRAD RIS Development team and Product Management team for eRAD RIS customers.

NEW SETTINGS

NEW ACCESS STRINGS

Setting	Default	Purpose
REMOVED Clinical.DeleteDictationReportAndReset		N/A
REMOVED Clinical.PingMessage		N/A
REMOVED Config.LookupEditor.UMCommonLanguage		N/A
Clinical.RADARSecureMessage	None	Controls access to the Nudge message feature.
Config.LookupEditor.EligibilityLimitPayment	None	Controls access in the look-up table editor for Eligibility Limit Payment.
Config.LookupEditor.WorklistPreference	None	Controls access to the look-up table for WorklistPreference.

NEW SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
DefaultWorklistRefreshInterval	5	(value = int in minutes) Default minutes between work list refreshes. If 0, work list refreshes are disabled.
EnableLimitedDBUpdates	True	(value = bool) If enabled, only data rows that contain data different from original values will be updated to the database.
MUImplantableDeviceUrl	https://accessgudid.nlm.nih.gov/api/v1/	(value = string) GUDID Base URL.
OptimizedDataSetAssignments	True	(value = bool) It is recommended to keep this set to true. If true, internal assignments only happen when there is an actual difference in the data; otherwise, RIS will always perform the assignment, which will trigger extra events to fire.
RADARSecureMessagePort	0	(value = int) Configure the port number for the Nudge integration.
RADARSecureMessageReportDisclaimer	This report is not for treatment	(value = string) Defines the disclaimer sentence to the report in Nudge integration.

	purposes.	
RADARSecureMessageServer		(value = string) Configure the server for the Nudge integration.
RADARSecureMessageTitle	<last_name>, <first_name> #<patient_id> @<accession_number>	(value = string) Configure the subject line for a RADAR Nudge conversation.



eRAD. RIS 2016.4 Feature Highlights

Upgrade to eRAD RIS 2016.4 and our New Features will allow you to:

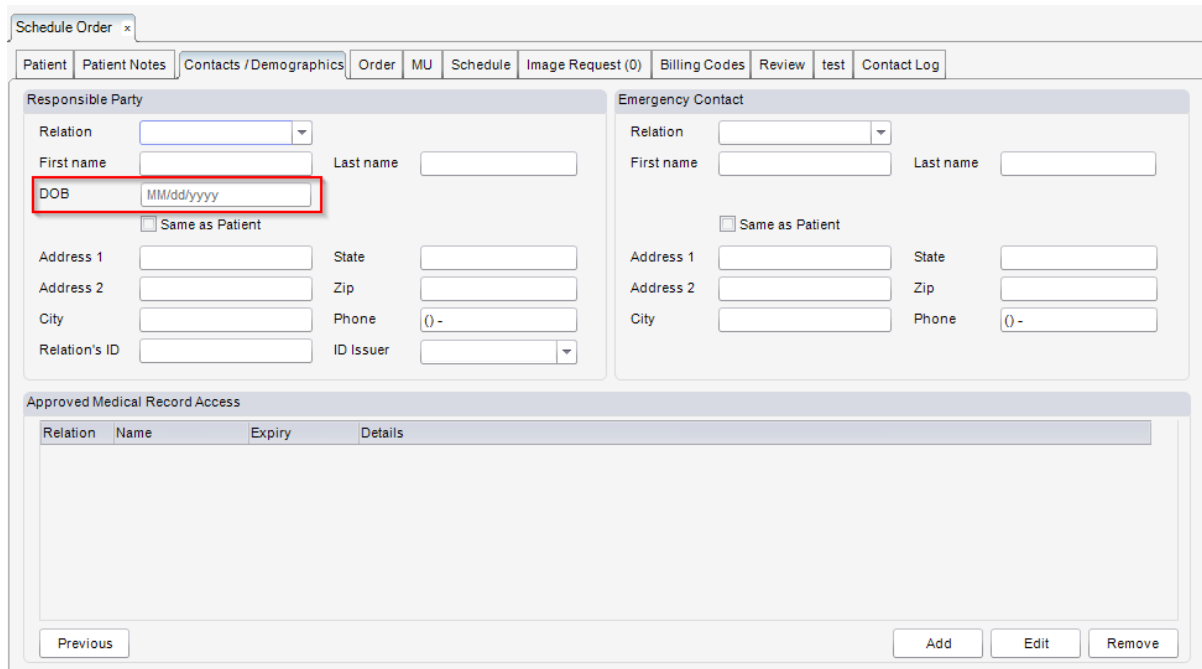
- Send “documents” (emails, excerpts from websites, etc.) from external applications to a patient’s Attachments in RIS without physically printing and scanning.
- Utilize spell checking for notes fields throughout eRAD RIS, especially those that are mapped into diagnostic reports.
- Allow radiologists to securely and efficiently communicate with staff and referring providers via an integrated RADAR Nudge instant messaging application.
- Install RIS to a shared location on the workstation (instead of individual Windows user profiles).
- Book time for a patient in multiple rooms simultaneously to prevent overbooking a shared radiologist or technologist resource.
- Improve system performance.
 - Configurable work list refresh intervals
 - Behind the scenes adjustments to database performance factors
- Enjoy smoother and more efficient RIS workflow with over 50 resolved defects.

NEW FEATURES

SCHEDULING AND REGISTRATION

11925 – RESPONSIBLE PARTY’S DATE OF BIRTH CAN NOW BE CAPTURED

A field for the Responsible Party’s DOB has been added to the Contact/Demographics tab in the Responsible Party section.



The screenshot shows the 'Schedule Order' window with the 'Contacts / Demographics' tab selected. The 'Responsible Party' section includes fields for Relation, First name, Last name, DOB (highlighted with a red box), Same as Patient checkbox, Address 1, Address 2, City, State, Zip, Phone, and ID Issuer. The 'Emergency Contact' section has similar fields. Below is the 'Approved Medical Record Access' table with columns for Relation, Name, Expiry, and Details. Buttons for 'Previous', 'Add', 'Edit', and 'Remove' are at the bottom.

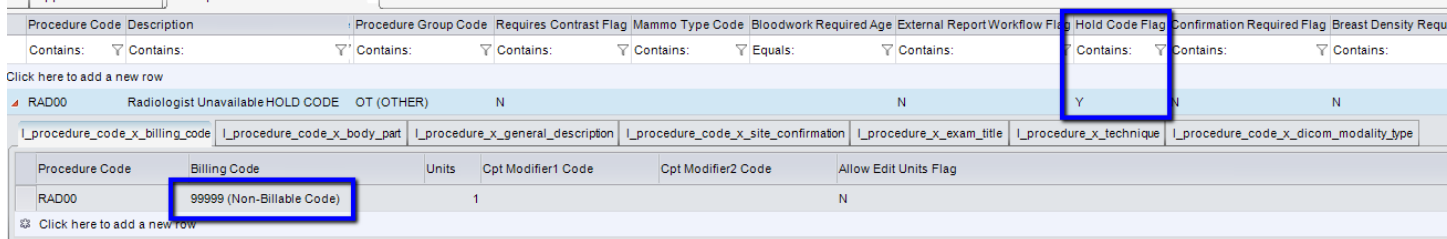
Some customers require this information for billing purposes and the new field will allow interested customers to capture this data. If you would like to make this a required field, please let the eRAD Support team know that you would like to configure a Validation Rule to require Responsible Party DOB.

13103 – PROCEDURE PLANS CAN NOW BOOK ROOMS SIMULTANEOUSLY

In some cases, it is desirable to book a patient in two rooms at the same time. Perhaps the patient is having a biopsy in one room, but the mammography room needs to be available for a period of time in the middle of that biopsy, in order for the technologist to take an image of the specimen on the mammo unit. Or perhaps a patient is scheduled for a Fluoroscopy exam and a “Hold Code” is needed in the site’s biopsy room, in order to avoid having multiple radiologist-assisted exams at the same time.

In order to accommodate this workflow, it is now possible to add negative values in the Min/Max Wait Times when creating Procedure Plans.

Example #1: An administrator wants to create a procedure plan for a Fluoro exam that requires a radiologist; it is important to ensure that simultaneous appointments are not scheduled in the biopsy room. Before creating the procedure plan, an appropriate Hold Code should be created to block the biopsy room. When setting up the procedure, the administrator marks the Hold Code as *Hold Code Flag = Y* and associates a No Charge Billing Code, like so:

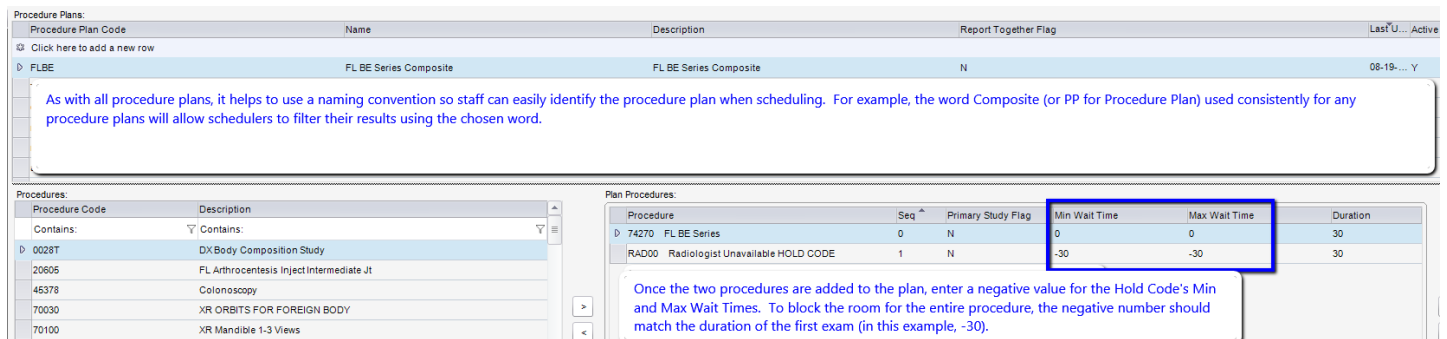


Procedure Code	Description	Procedure Group Code	Requires Contrast Flag	Mammo Type Code	Bloodwork Required	Age	External Report Workflow Flag	Hold Code Flag	Confirmation Required Flag	Breast Density Req
RAD00	Radiologist Unavailable HOLD CODE	OT (OTHER)	N		N			Y	N	N

Procedure Code	Billing Code	Units	Cpt Modifier1 Code	Cpt Modifier2 Code	Allow Edit	Units Flag
RAD00	99999 (Non-Billable Code)	1			N	

In order for the Time Slot Search to find appointment slots where both the Fluoro Room and the Biopsy Room are available, the new Hold Code is added to the appropriate Schedule Group for the room to be blocked.

Next, the Procedure Plan is created as demonstrated in the image below:



Procedure Plan Code	Name	Description	Report Together Flag	Last U... Active
FLBE	FL BE Series Composite	FL BE Series Composite	N	08-19... Y

As with all procedure plans, it helps to use a naming convention so staff can easily identify the procedure plan when scheduling. For example, the word Composite (or PP for Procedure Plan) used consistently for any procedure plans will allow schedulers to filter their results using the chosen word.

Procedure Code	Description	Seq	Primary Study Flag	Min Wait Time	Max Wait Time	Duration
74270	FL BE Series	0	N	0	0	30
RAD00	Radiologist Unavailable HOLD CODE	1	N	-30	-30	30

Once the two procedures are added to the plan, enter a negative value for the Hold Code's Min and Max Wait Times. To block the room for the entire procedure, the negative number should match the duration of the first exam (in this example, -30).

Now, if the procedure plan “FL BE Series Composite” is used when scheduling, it will expand out to include the two procedures (the Fluoro and the Hold Code for the Biopsy Room), the Time Slot Search will automatically find appointment slots where there is availability in both the Biopsy and Fluoro rooms, and exams will be booked for the same period of time in both rooms like so:

Interval	MA3FH	Saturday, 08-20-2016	XR1FH
8:00			
9:00	Test, Hilary Radiologist Unavailable HOLD CODE (RAD00)	Test, Hilary FL BE Series (74270)	

Example #2: An administrator wants to create a Procedure Plan that books a Specimen exam in the Mammo Room during the middle of an MRI Guided Breast Biopsy to ensure that the Mammo unit is available when the biopsy tech needs to obtain a specimen image. Both exams are billable, so a Hold Code is not needed. This procedure plan will be set up to book the Specimen exam in the Mammo room after the biopsy has been in progress for 30 minutes and it will take the technologist 15 minutes to perform the Specimen image. The procedure plan would look like this:

Procedure Plans:

Procedure Plan Code	Name	Description	Report Together Flag	Last U... Act
MRBK	MR Breast Biopsy Composite	MR Breast Biopsy Composite	N	08-19-... Y

To schedule the Specimen exam 30 minutes after the biopsy begins, subtract 30 from the biopsy duration of 90. There is a 60 minute difference, so the Min and Max Wait Times for the Specimen will be -60. In other words, it will be scheduled 60 minutes before the end of the biopsy procedure.

Procedures:

Procedure Code	Description
0028T	DX Body Composition Study
20606	FL Arthrocentesis Inject Intermediate Jt

Plan Procedures:

Procedure	Seq ^	Primary Study Flag	Min Wait Time	Max Wait Time	Duration
MR77 MR Breast Biopsy Unilateral	0	N	0	0	90
MASP MA Specimen Imaging	1	N	-60	-60	15

Here's how the scheduled procedure plan looks in the Appointment Book:

Interval	MA3FH	Tuesday, 08-23-2016	MR1FH
8:00			
9:00	Test, Hilary	Test, Hilary MR Breast Biopsy Unilateral (MR77) 08-23-2016 08:00 REQ: TheClown Boss Accession: 1036837PE MRN: 34689PE Scheduled	

Please note that the Min/Max Wait Time should never be set to cause the second exam to occur *before* the beginning of the first exam. If this is done, schedulers will not find results when searching for appointment slots. In other words, don't make the negative Min/Max Wait Times higher than the exam duration for the first exam.

Don't do this:

Plan Procedures:

Procedure	Seq ^	Primary Study Flag	Min Wait Time	Max Wait Time	Duration
MR77 MR Breast Biopsy Unilateral	0	N	0	0	90
MASP MA Specimen Imaging	1	N	-100	-100	30

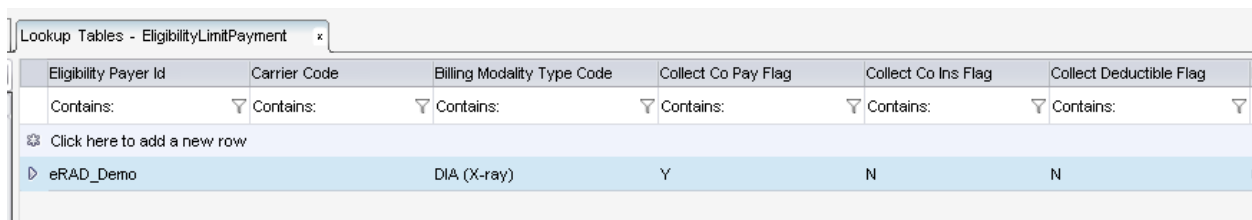
Recommendation: when using this workflow, it is advisable to set the exam Duration on the Procedure Plan, as shown in the examples above. If it is left blank, the default duration on the Procedure Code will be applied, unless there is an override set for the room. However, setting the Duration within the Procedure Plan will override everything else when the Procedure Plan is used. This will be helpful in avoiding unintentional variations caused by room duration overrides that are not obvious from within this table.

INSURANCE ELIGIBILITY

13611 – ELIGIBLE API INTEGRATION NOW ALLOWS EXCEPTIONS FOR COLLECTING FUNDS BASED ON PAYER (OR CARRIER) AND BILLING MODALITY TYPE

This feature is for clients taking advantage of our automated insurance eligibility feature via Eligible API. Some payers or insurance carriers make exceptions when collecting co-pays, co-insurance, or deductible for certain modality types. For example, it is common for some payers to waive the co-pay for x-ray exams.

To accommodate for this, a new look-up table named *Eligibility Limit Payment* was added. This table allows for the configuration of exclusions based on modality type and payer/carrier.

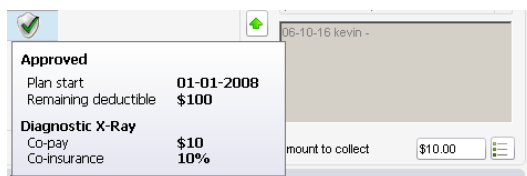


Eligibility Payer Id	Carrier Code	Billing Modality Type Code	Collect Co Pay Flag	Collect Co Ins Flag	Collect Deductible Flag
Contains:	Contains:	Contains:	Contains:	Contains:	Contains:
Click here to add a new row					
eRAD_Demo		DIA (X-ray)	Y	N	N

In the above example, for all visits with a carrier using the “eRAD_Demo” Eligibility payer id, RIS will not collect co-insurance or deductible when the modality type is X-ray. Only co-pay will be collected (i.e. the value in the Amount to Collect field will only include the amount for co-pay).

Notice that the Carrier Code column in the example above is blank. When configuring rules, it is possible to either fill in the Carrier Code **or** the Eligibility Payer ID. When evaluating which rules to use, the system will first attempt to find a matching *carrier_code* rule. If none exist, it will look for a rule by *payer_id*.

The values for any collection categories will still be visible in the information returned from Eligible, even if a limitation rule applies (as displayed below).

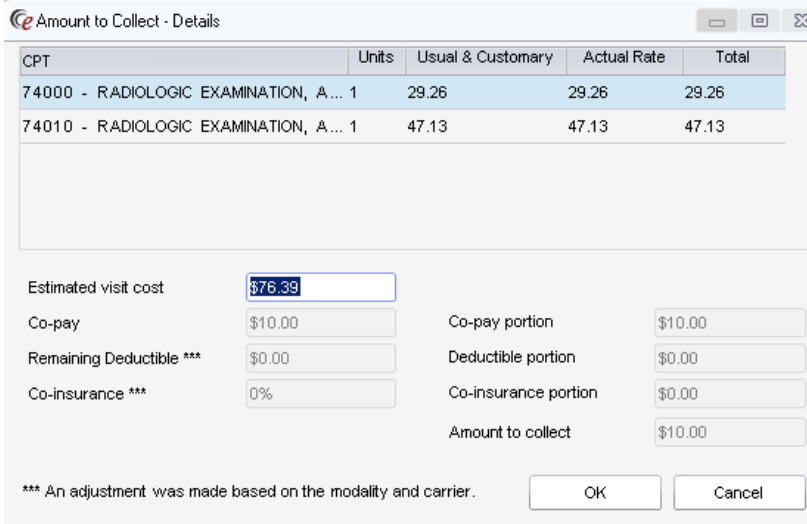


Approved	
Plan start	01-01-2008
Remaining deductible	\$100
Diagnostic X-Ray	
Co-pay	\$10
Co-insurance	10%
Amount to collect	\$10.00

However, despite the remaining deductible and 10% co-insurance requirement listed in the above example, the sample rule configured in the *EligibilityLimitPayment* table will prevent that amount from being added to the Amount to Collect and only the co-pay will apply.

The “Amount to Collect – Details” screen shows the actual values that were used in the calculation. Because the information from Eligible will differ from the values displayed in the Amount to Collect – Details screen when a rule

is in effect to ignore a particular payment category, a note will be displayed to indicate that an adjustment was made:



CPT	Units	Usual & Customary	Actual Rate	Total
74000 - RADIOLOGIC EXAMINATION, A...	1	29.26	29.26	29.26
74010 - RADIOLOGIC EXAMINATION, A...	1	47.13	47.13	47.13

Estimated visit cost	<input type="text" value="\$76.39"/>		
Co-pay	<input type="text" value="\$10.00"/>	Co-pay portion	<input type="text" value="\$10.00"/>
Remaining Deductible ***	<input type="text" value="\$0.00"/>	Deductible portion	<input type="text" value="\$0.00"/>
Co-insurance ***	<input type="text" value="0%"/>	Co-insurance portion	<input type="text" value="\$0.00"/>
		Amount to collect	<input type="text" value="\$10.00"/>

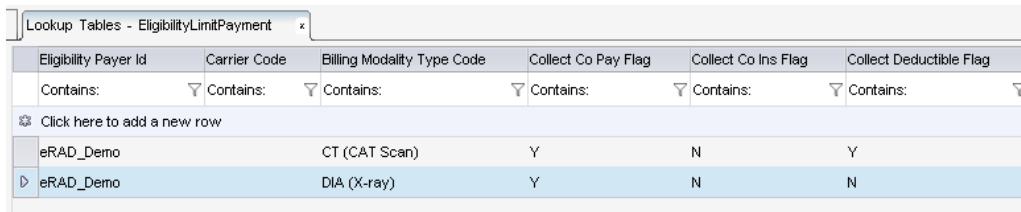
*** An adjustment was made based on the modality and carrier.

OK Cancel

The deductible and co-insurance have been zeroed out above, and the asterisks and corresponding note indicate that an adjustment was made for each.

If a CT study is added to the same visit, the 10% co-insurance or deductible would no longer be suppressed since there are no "Eligibility Limit Payment" rows configured for the CT modality type.

When multiple modality types are scheduled, such as an X-ray and a CT, the system will only prevent collections if an 'N' exists on **all** matching "Eligibility Limit Payment" rows. For example, in the following image, there is now an additional rule to not collect the co-insurance for a CT study.



Eligibility Payer Id	Carrier Code	Billing Modality Type Code	Collect Co Pay Flag	Collect Co Ins Flag	Collect Deductible Flag
Contains: Contains: Contains: Contains: Contains: Contains:					
Click here to add a new row					
eRAD_Demo		CT (CAT Scan)	Y	N	Y
eRAD_Demo		DIA (X-ray)	Y	N	N

If a patient is scheduled for an X-ray and a CT, the rules are combined; and the only value prevented for collection is the co-insurance (both modality types list N for co-insurance).

In that case, Amount to Collect – Details would look like so:

eRAD Amount to Collect - Details

CPT	Units	Usual & Customary	Actual Rate	Total
74000 - RADIOLOGIC EXAMINATION, A...	1	29.26	29.26	29.26
74010 - RADIOLOGIC EXAMINATION, A...	1	47.13	47.13	47.13
70482 - CT ORBIT SELLA/POST FOSS...	5	430.17	430.17	2150.85
74170 - COMPUTED TOMOGRAPHY, A...	50	387.56	387.56	19378.00

Estimated visit cost:

Co-pay: Co-pay portion:

Remaining Deductible: Deductible portion:

Co-insurance ***: Co-insurance portion:

Amount to collect:

*** An adjustment was made based on the modality and carrier.

Note that the co-insurance is excluded, but the co-pay and remaining deductible are applied.

IMAGINE PAYMENT PORTAL

13902 – IMAGINE PAYMENT PORTAL INTEGRATION NOW SUPPORTS CONFIGURING TSYS ACCOUNT IDENTIFIERS AT A SITE LEVEL

In eRAD RIS, the *DataSet ID* used for the Imagine Payment Portal integration is a global setting in the system configuration table. The DataSet relates to the TSYS account identifier, which sometimes needs to be configurable at the site level.

To resolve this issue, eRAD RIS will specify the DataSet ID at the site level when required using the Imagine Site Code field. If the Imagine Site Code contains a colon (:), the characters in front of the colon will be sent to Imagine as the DataSet ID and characters after the colon will be sent as the Online Provider ID. For example, given an Imagine Site Code of **123:ABC**, 123 is the DataSet ID and ABC will be sent as the Online Provider ID. The syntax is:

Imagine Site Code = <DataSetID>:<OnlineProviderID>

If the <DataSetID>: portion is omitted, then the default DataSet ID from the global System Configuration will be used.

FORMS AND LABELS

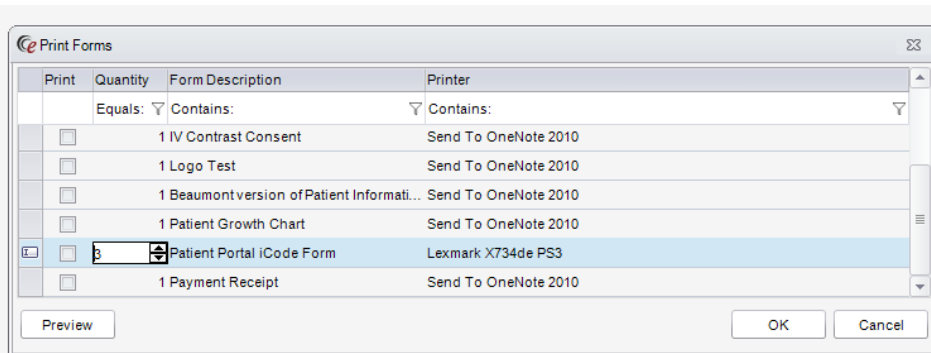
12043 – A DEFAULT QUANTITY CAN BE SET FOR PRINTING FORMS AND LABELS

Sometimes labels or forms require multiple printed copies. Today this is supported by adding multiple copies of the same label, and mapping accordingly. To simplify this, there is now a *Quantity* field in the Forms and Labels look-up table, as well as the Print Forms dialog.

In the Forms and Labels table, a RIS Administrator can define a default quantity between 1 and 9 for each form/label.

Form	Description	Last Updated	Active	Form Category	Pp Friendly Description	Pp Visible	Quantity
Contains:	Contains:	No filter:	Cont	Contains:	Contains:	Contain	Equals:
Click here to add a new row							
/rRIS_dev2/Forms/Patient Portal Invitation w iCode	Patient Portal iCode Form	06/13/2016 09:06	Y	Exam		N	2
/rRIS_dev2/Forms/BEAUMONT Patient Information	sdfa	11/03/2015 09:23	Y	Call Back Letter1		N	1
/rRIS_dev2/Forms/BIRADS 0 Lay Letter	BIRAD 0 Layletter	11/03/2015 09:23	Y	Layletter		N	1
/rRIS_dev2/Forms/BIRADS 1-2 Concerning Lay Letter	testb40	11/03/2015 09:23	N	testb40		N	1
/rRIS_dev2/Forms/BIRADS 3 Lay Letter	BIRAD 3 Layletter	11/03/2015 09:23	Y	Layletter		N	1
/rRIS_dev2/Forms/BIRADS 6 Lay Letter	BIRAD 6 Layletter	11/03/2015 09:23	Y	Layletter		N	1
/rRIS_dev2/Forms/Clinical Summary	Clinical Summary	11/03/2015 09:23	Y	Exam		Y	1
/rRIS_dev2/Forms/CT History Sheet	Ct history Sheet 2	11/03/2015 09:23	Y	Exam	How's the PP going	Y	1
/rRIS_dev2/Forms/DarcyATestForm	DarcyATestForm	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/Exam form w pin barcode	Barcode dude!	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/Generic Mammogram Lay Letter	GenericMammo Lay letter	11/03/2015 09:23	Y	Layletter		N	1
/rRIS_dev2/Forms/HIPAA Consent	Test Beaumonth HIPAA	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/IV Contrast Consent	IV Contrast Consent	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/JeremyTest	test	11/03/2015 09:23	Y	Reminder Letter 1		N	1
/rRIS_dev2/Forms/logoTest	Logo Test	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/Mammo/Overdue Physician	Overdue Physician Letter	11/03/2015 09:23	Y	Short Term Followup 3		N	1
/rRIS_dev2/Forms/ODC Patient Information	Beaumont version of Patient Information	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/Patient Growth Chart NEW	Patient Growth Chart	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/Patient Registration	Patient Registration	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/Payment Receipt	Payment Receipt	11/03/2015 09:23	Y	Exam		N	1
/rRIS_dev2/Forms/ShortTermFollowUpLetter1	Short Term Follow Up Letter1	11/03/2015 09:23	Y	Short Term Followup 1		N	1

When printing, the user has the option to adjust the default. This is done by changing the number in the Quantity column from within the Print Forms dialog box.



Adjustments in this dialog are **not** saved and the default will be listed when next displayed.

11490 – AUTOMATED FORM AND LABEL PRINTING NOW SUPPORTS ADDITIONAL CRITERIA INCLUDING EXAM STATUS, PREFERRED LANGUAGE, CONTRAST, AND BILLING CODE

Additional criteria for triggering Forms and Labels have been added to allow for filtering based on Exam Status, Preferred Language, Contrast Required, and Billing Code.

In the Forms and Labels configuration table, the new columns are now available and all criteria columns are alphabetized.

Printing Criteria														
Biopsy Enabled	Action	Billing Code	Birad	Body Part	Carrier	Carrier Type	Contrast	Gender	Language	Modality Type	Practice	Procedure	Site	Status
Contains: ▾														
Click here to add a new row														
D	N	(none)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)

Just as with the existing criteria types, click the cell to open the criteria selection window. Use the arrow buttons to add or remove values.

DIGITAL FORMS

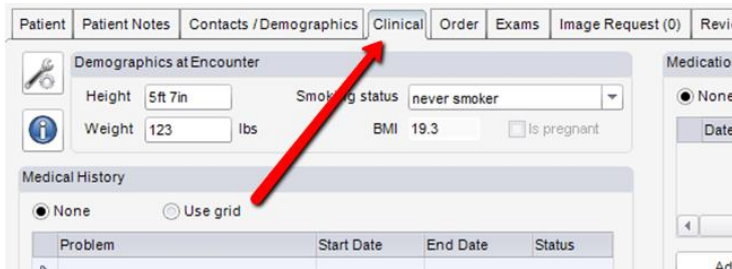
11514 – DIGITAL FORMS QUESTIONS THAT HAVE BEEN REMOVED CAN NOW BE RESTORED

There is now a process that will enable eRAD Support to restore questions that have been removed from a Digital Form. The process will also restore the question's connection with previously collected data.

MEANINGFUL USE

13659 – IMPLANTABLE DEVICES CAN NOW BE DOCUMENTED IN ACCORDANCE WITH UPCOMING MU REQUIREMENTS

As our U.S. customers are likely aware, the Meaningful Use (MU) program will be evolving into a different form and the Meaningful Use name will no longer be the most accurate way to refer to information collected on this tab. The MU tab will continue to exist in eRAD RIS, indeed it will expand to incorporate other functions required by regulatory programs; however, it will now be renamed as the “Clinical” tab.



As part of preparation for eRAD RIS to obtain its 2017 ONC Health IT Certification, eRAD RIS will now comply with the following requirements.

The application must:

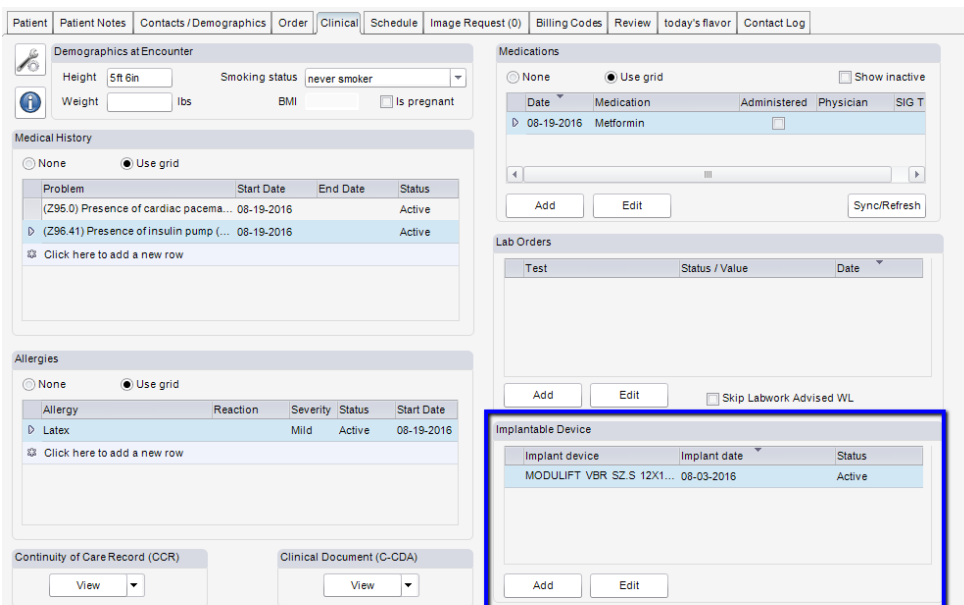
- **Enable a user to record and access a list of Unique Device Identifiers (UDIs) associated with the patient’s Implantable Device(s).**
- **The following identifiers from a Unique Device Identifier (UDIs) must be parsed.**
 - **Device Identifier**
 - **Identifiers from the Production Identifier:**
 - **Batch/lot number**
 - **Serial Number**
 - **Expiration Date**
 - **Date a specific device as manufactured; and**
 - **For an HCT/P regulated as a device, the distinct identification code.**
- **Retrieve the following attributes associated with a UDI, from the Global Unique Device Identification Database (GUDID) using one of the methods under the FDA’s GUDID guidance, which includes but not limited to the GUDID’s web interface, web services, and downloadable module:**
 - **Description of the implantable device referenced by at least one of the following:**
 - **“GMDN PT Name” attribute associated with the Device Identifier in the Global Unique Device Identification Database OR**
 - **“SNOMED CT® Description” (mapped to the “GMDN PT Name” attribute)**
 - **The following Global Unique Device Identification Database entries:**
 - **Brand Name**
 - **Version or Model**
 - **Company Name**
 - **What MRI safety information does the labeling contain; And**
 - **Device required to be labeled as containing natural rubber latex and dry natural rubber.**
- **UDI Issuing Agencies currently use three different formats for UDIs. Test data will be provided to accommodate each format type. For more information on these issuing agencies, please see:**

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/UniqueDeviceIdentification/UDIIssuingAgencies/default.htm>

- **Display to a user an Implantable Device List consisting of:**
 - **Active Unique Device Identifiers for a patient; and**
 - **For each active Unique Device Identifier recorded for a patient, the description of the implantable device using “GMDN PT Name” or “SNOMED CT Description”**
 - **A method to access all Unique Device Identifiers recorded for a patient.**
- **For each Unique Device Identifier recorded for a patient, enable a user to access:**
 - **Unique Device Identifier**
 - **Description of the implantable device (using either “GMDN PT Name” or “SNOMED CT Description”)**
 - **Identifiers associated with the Unique Device Identifier (using the “Device and Product Identifiers” described above)**
 - **Attributes associated with the Unique Device Identifier (using “Global Unique Device Identification Database” entries described above)**
- **Enable a user to change the status of a Unique Device Identifier recorded for a patient**
- **Unique Device Identifier(s) part of the Common Clinical Data Set.**

In this context, “implantable device” is defined (as it is in 21 CFR 801.3) as a device that is intended to be placed in a surgically or naturally formed cavity of the human body. A device is regarded as an implantable device for the purpose of this feature only if it is intended to remain implanted continuously for a period of 30 days or more, unless the Commissioner of Food and Drugs determines otherwise in order to protect human health.

There is a new section in the “Clinical” tab called *Implantable Device*, which is used to display the active and inactive implant devices recorded for a patient. An **important distinction** is that the Implantable Device Section is intended, per CEHRT requirements, to include qualifying devices that are to be implanted during the patient’s procedures **at your facility**, such as the placement of a biopsy marker, drain, or stent. Recording the patient’s **history** of having a device, such as a pacemaker, implanted at an *outside* medical institution should continue to be done in the Medical History section.

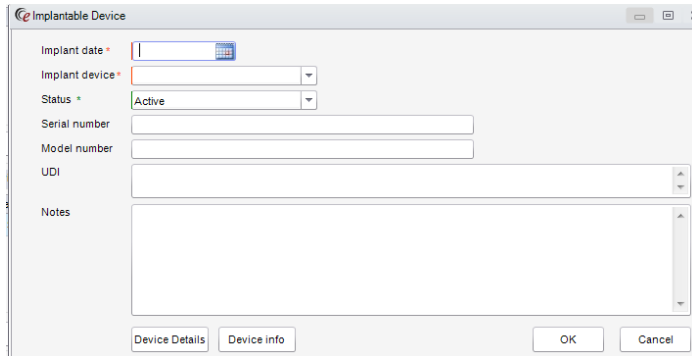


The screenshot shows the eRAD clinical interface with the 'Implantable Device' section highlighted. The interface includes tabs for Patient, Patient Notes, Contacts / Demographics, Order, Clinical, Schedule, Image Request (0), Billing Codes, Review, today's flavor, and Contact Log. The 'Implantable Device' section is located at the bottom right and contains a table with the following data:

Implant device	Implant date	Status
MODULIFT VBR SZ.S 12X1...	08-03-2016	Active

*Note that some pre-existing grids have been shifted to allow for the new Implantable Device grid.

Users can click the Add button to add new implantable devices to the patient’s record or they can click the Edit button to edit any implantable devices that are already associated to the patient.



The implant device is selected from a new lookup *ImplantDevice* and the user must enter at a minimum the implant date, implant device, and the status of the implant. Serial number, model number, and UDI of the device can optionally be added, along with any notes. The UDI field can store either the DI (Device Identifier) or the UDI which consists of two parts: the DI (Device Identifier) and PI (Product Identifier). Note: if the user enters the device UDI (DI + PI), it is possible to see additional information by clicking the *Device Info* button, which will show the batch/lot number, serial number, expiration date, manufactured date and the device identifier which is retrieved via a call to the Global Unique Device Identification Database (GUDID).

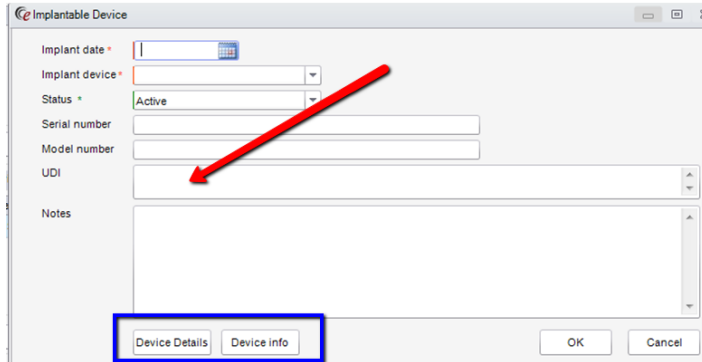
There is a new system configuration setting for *MUImplantableDeviceUrl* which will be used to store the URL to the Global Unique Device Identification Database (GUDID), in order to display the device details or to parse the UDI (Unique Device Id).

Examples:

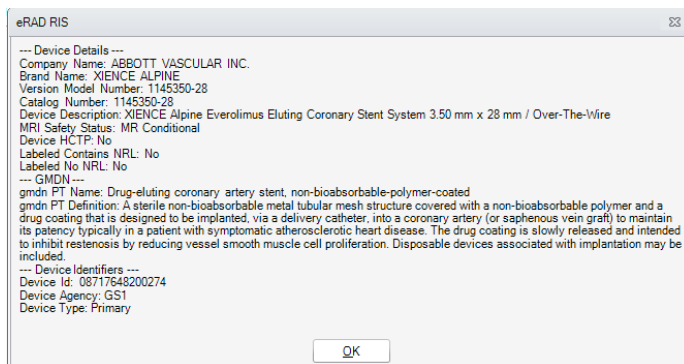
- Device Identifier (DI)
 - 08717648200274
- Unique Device ID (UDI)
 - =/08717648200274=,000025=A99971312345600=>014032=}013032&,100000000000XYZ123

There are currently three FDA accredited issuing agencies for UDI numbers (GS1, HIBCC, and ICCBBA) and all three have different formats for displaying the UDI. eRAD RIS is capable of handling all three formats.

Once either the DI or UDI is entered in the UDI field, the user will also be able to view the device details by clicking the *Device Details* button which will display to the user the brand name, version or model number, company name, MRI safety information and information about the device such as whether it contains natural rubber latex. This information can be copy/pasted into the Notes section if desired.



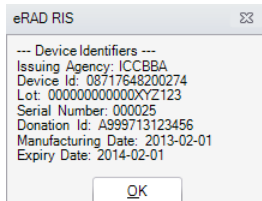
Example of Device Details results when the UDI is entered:



```

--- Device Details ---
Company Name: ABBOTT VASCULAR INC.
Brand Name: XIENCE ALPINE
Version Model Number: 1145350-28
Catalog Number: 1145350-28
Device Description: XIENCE Alpine Everolimus Eluting Coronary Stent System 3.50 mm x 28 mm / Over-The-Wire
MRI Safety Status: MR Conditional
Device HCTP: No
Labeled Contains NRL: No
Labeled No NRL: No
--- GMDN ---
gmdn PT Name: Drug-eluting coronary artery stent, non-bioabsorbable-polymer-coated
gmdn PT Definition: A sterile non-bioabsorbable metal tubular mesh structure covered with a non-bioabsorbable polymer and a drug coating that is designed to be implanted, via a delivery catheter, into a coronary artery (or saphenous vein graft) to maintain its patency typically in a patient with symptomatic atherosclerotic heart disease. The drug coating is slowly released and intended to inhibit restenosis by reducing vessel smooth muscle cell proliferation. Disposable devices associated with implantation may be included.
--- Device Identifiers ---
Device Id: 08717648200274
Device Agency: GS1
Device Type: Primary
    
```

Example of Device Info results when the UDI is entered:



```

--- Device Identifiers ---
Issuing Agency: ICCBBA
Device Id: 08717648200274
Lot: 000000000000XYZ123
Serial Number: 000025
Donation Id: A999713123456
Manufacturing Date: 2013-02-01
Expiry Date: 2014-02-01
    
```

Consistent with the policy that UDI's should not be deleted from the implantable device list or from a patient's electronic health record, a UDI that has been designated inactive must still be accessible so that users can view information about the device, even if it was explanted or recorded in error.

The *Device Details* and *Device Info* buttons are hidden if the system configuration setting *MUImplantableDeviceUrl* is empty.

13844 – A SECTION FOR IMPLANTABLE DEVICES IS NOW DISPLAYED IN THE C-CDA

An Implantable Device section has been added to the C-CDA to record any materials placed during the procedure, such as stents, tubes, or drains.

Table of Contents

- [ALLERGIES \(MEDICATIONS\)](#)
- [ENCOUNTERS](#)
- [FUNCTIONAL AND COGNITIVE STATUS](#)
- [IMMUNIZATIONS](#)
- [IMPLANTABLE DEVICE](#)
- [INSTRUCTIONS](#)
- [MEDICATIONS ADMINISTERED](#)
- [MEDICATIONS](#)
- [PLAN OF CARE](#)
- [PROBLEMS](#)
- [PROCEDURES](#)
- [REASON FOR VISIT](#)
- [RESULTS](#)
- [VITAL SIGNS](#)

ALLERGIES (MEDICATIONS)

Description	Start Date	Reaction	Severity	Status
Aspirin	05-30-2016	hives	Mild	Active

ENCOUNTERS

Encounter	Date	Practice	Location	Performed Procedures
Patient Visit	06-27-2016	Get Well Clinic	Get Well Clinic	(99201) - OFFICE OR OTHER OUTPATIENT VISIT FOR THE EVALUATION AND MANAGEMENT OF A NEW PATIENT

FUNCTIONAL AND COGNITIVE STATUS

No functional status recorded

IMMUNIZATIONS

No immunizations recorded

IMPLANTABLE DEVICE

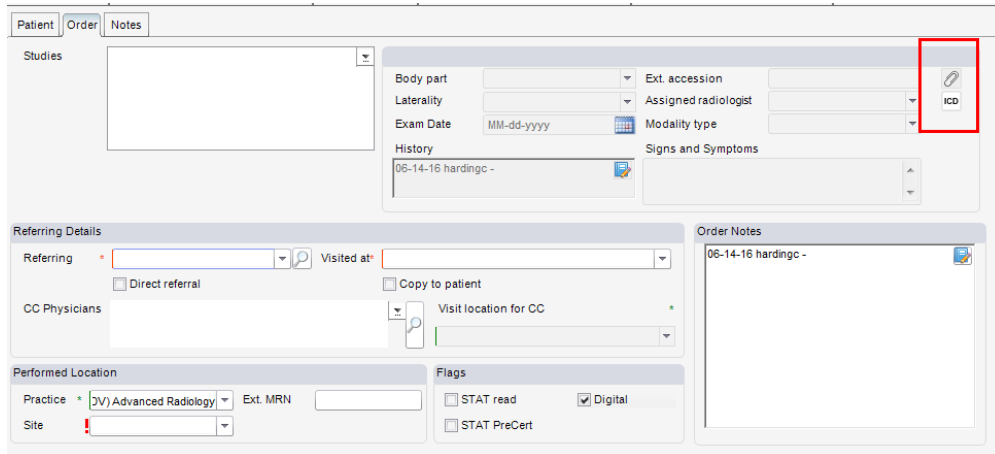
No implants recorded



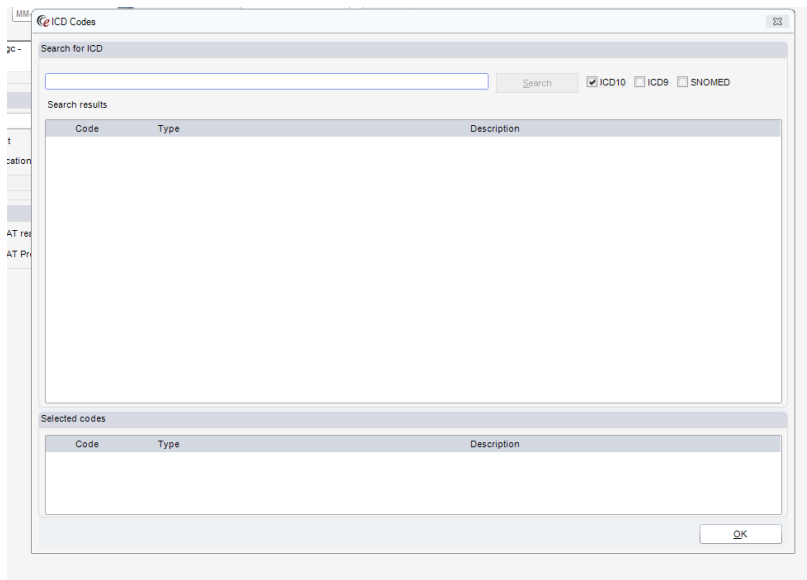
OUTSIDE READS

13733 – INDICATION CODES CAN NOW BE ADDED WHEN CREATING AN OUTSIDE READ

Previously, indication codes (e.g. ICD-10 codes) could not be added to an Outside Read until after it was created, via the View/Edit screen. To make this process more efficient, an ICD button has been added to the Outside Read Order tab.



This button is controlled by the existing access string *Clinical.Schedule.AssignIcdCode*. The ICD Codes pop-up window will function as it does in other areas of the application, except that Reason for Exam is not visible, as it is not a part of the Outside Read process. ICD codes will be applied to the selected study. The ICD button will be disabled until a study has been added.



WORK LISTS

13803/13804 – WORK LISTS CAN NOW BE CONFIGURED TO REFRESH AT DIFFERENT INTERVALS

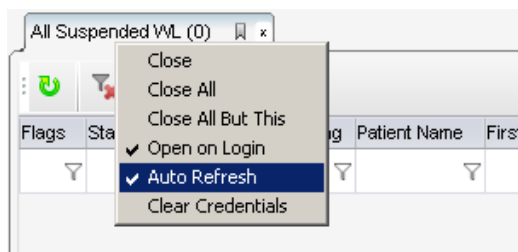
Large work lists with frequent refreshes, such as the IVT WL, create a significant impact on system performance. To alleviate this, a System Configuration setting named *DefaultWorklistRefreshInterval* and a new look-up table named *Worklist Preference* have been added to allow a RIS Administrator to configure a longer interval between automatic work list refreshes.

System Config Code	Value	Default	Description
Contains: defaultwork	Contain	Contains:	Contains:
DefaultWorklistRefreshInterval	5	5	(value = int in minutes) default minutes between worklist refreshes, if 0 worklist refreshes are disabled.

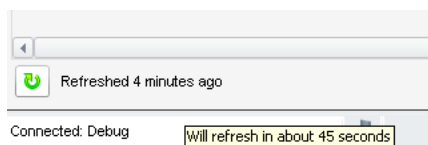
Worklist Name	Refresh Interval	Last Updated	Active
IVT WL	0	06-14-2016 12...	Y
Reception WL	1	06-14-2016 12...	Y

The work list refresh interval is specified in minutes. When set to **zero or less**, the work list refreshes are disabled and users must click the refresh button to refresh manually. Work list refresh intervals should typically be in the 1-10 minute range, though they can be set for longer. Previously, all work lists would refresh every minute.

The “Auto Refresh” checkbox that allowed a user to turn off the refresh has been moved to the work list tab’s context menu.



Beneath the work list on the left, there is now a label explaining when the last work list refresh took place, whether automatic or manual. Hovering the cursor over this label will display a tooltip that indicates when the next automatic refresh will occur. There is also an additional Refresh button next to this label, in case the user does not want to wait for the next auto-refresh. Clicking the button will refresh the work list immediately.



The label updates every 5 seconds and the times listed are rounded as follows:

- Just now
- 15 seconds
- 30 seconds
- 45 seconds
- a minute
- x minutes
- an hour
- x hours

The tooltip explaining when the next refresh will occur is rounded as follows:

- x minutes
- a minute
- 45 seconds
- 30 seconds
- 15 seconds
- Soon

If the work list is not configured to auto-refresh, the tooltip will indicate: "This work list does not auto refresh."

As before, auto-refresh will not occur under some circumstances even if the designated interval has elapsed. The following scenarios will prevent a work list refresh:

- RIS is locked.
- RIS is minimized.
- Work list has received mouse or keyboard activity in the past 15 seconds. Previously, mouse movements would also cause a delay, but this has been changed to only include click events.

If the user continues to type or click items on the work list and does not move away from that work list, then the work list will not auto-refresh and hovering will display the message "Will refresh soon." This is done to prevent a work list refresh from changing the list just as a user is clicking on an item, which could result in the wrong item inadvertently being opened.

The following permission string has been added to control access to the new WorklistPreference editor:

Config.LookupEditor.WorklistPreference.

INTERFACING

8666 – MESSAGES TRANSMITTED VIA MIRTH CAN BE FILTERED TO DECREASE UNNECESSARY MESSAGING

In order to allow for more granular filtering in Mirth, a new function will allow for message filtering based on logic surrounding metadata. This will allow the ability to suppress messages due to metadata changes that are not deemed significant.

INFRASTRUCTURE

7572 – RIS NOW SUPPORTS INSTALLATION TO A SHARED LOCATION ON THE WORKSTATION (AS OPPOSED TO INDIVIDUAL WINDOWS USER PROFILES)

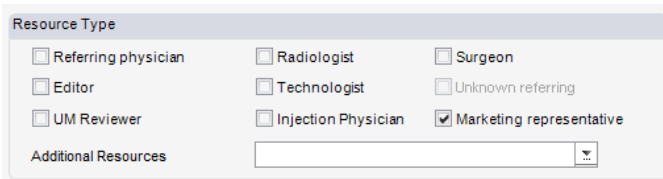
This feature includes two major changes for installation file management. The directory which is used to store the build zips and installed build files has been relocated, so these files can be shared among the various users of a system. Secondly, there is a process to cleanup old RIS builds, anything older than the last 2 builds (including the current build). As this cleanup previously only occurred when switching systems, this will reduce the footprint of the install directory if the user is only ever using one system.

The user should not experience any change in the usage of the system, other than perhaps noticing a reduction of hard drive space required for installation of the RIS GUI. Users also may notice a slight delay in startup if there are multiple old builds which need to be removed.

REFERRING PHYSICIAN MANAGEMENT

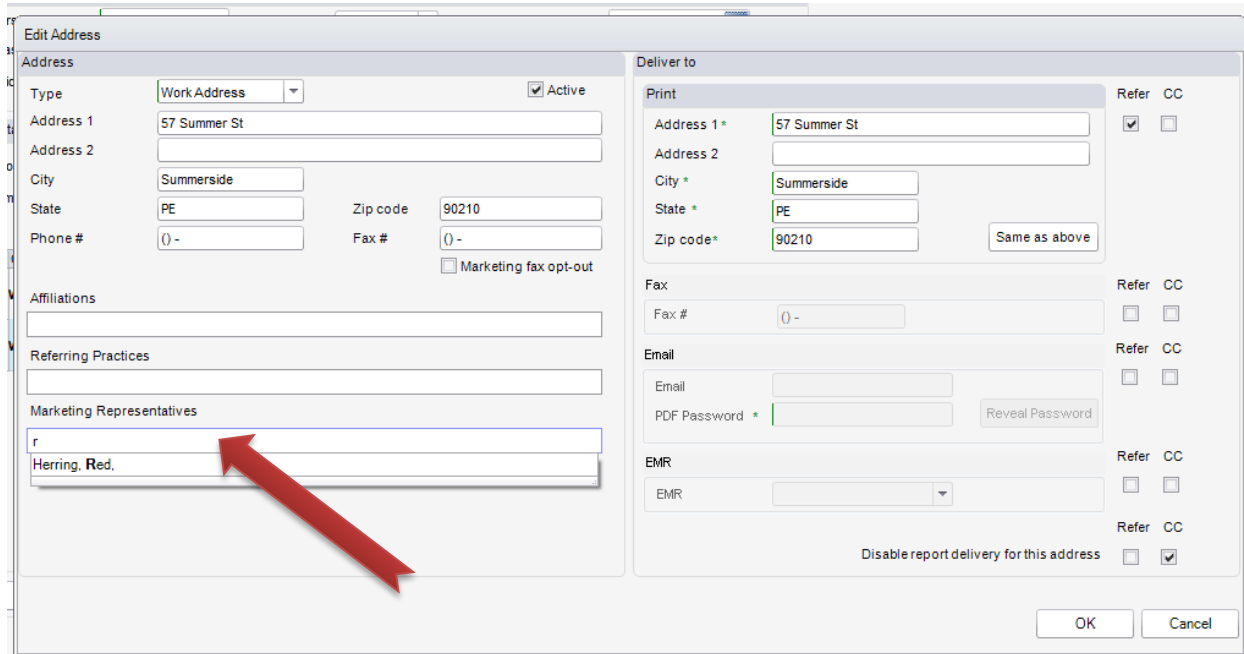
9522 – MARKETING REPRESENTATIVES CAN NOW BE ASSOCIATED TO A REFERRING PHYSICIAN

To support the need for more informative management reports, there is a new Resource Type titled *Marketing representative*.



The 'Resource Type' dialog box contains several checkboxes: Referring physician, Radiologist, Surgeon, Editor, Technologist, Unknown referring, UM Reviewer, Injection Physician, and Marketing representative (which is checked). There is also an 'Additional Resources' field with a dropdown arrow.

Each referring address will have a setting for marketing representatives, which will be selected via a multi-select type-ahead. This multi-select will only display users with a resource type of *Marketing representative*.



The 'Edit Address' dialog box is split into two main sections: 'Address' and 'Deliver to'. The 'Address' section includes fields for Type (Work Address), Address 1 (57 Summer St), Address 2, City (Summerside), State (PE), Zip code (90210), Phone #, Fax #, and a 'Marketing fax opt-out' checkbox. The 'Deliver to' section includes 'Print' (Address 1*, Address 2, City, State, Zip code), 'Fax' (Fax #), 'Email' (Email, PDF Password), and 'EMR' (EMR dropdown). Each section has 'Refer' and 'CC' checkboxes. A 'Marketing Representatives' list is shown at the bottom left of the 'Address' section, containing 'r' and 'Herring, Red.', with a red arrow pointing to it. 'OK' and 'Cancel' buttons are at the bottom right.

RIS ADMINISTRATION

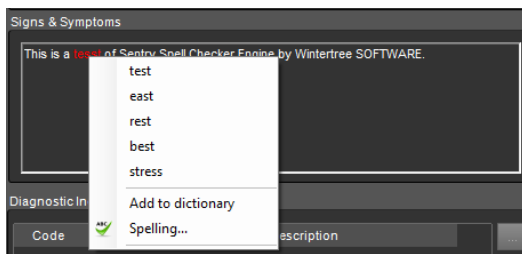
3667 – LOG CONTROLS AND TEXT BOXES SUPPORT SPELL CHECK

A spell check feature has been added to some of our controls, in order to provide users with spell checking when typing in a variety of notes fields. This is particularly helpful when turned on for text boxes that are pulled into report templates. “Sentry Spell Checker Engine” (Wintertree) has been implemented in eRAD RIS, which is the same spell checker as is used by the M*Modal editor. It will also use the same dictionaries as configured for M*Modal today, reflecting any changes made in the M*Modal editor that affect the dictionary.

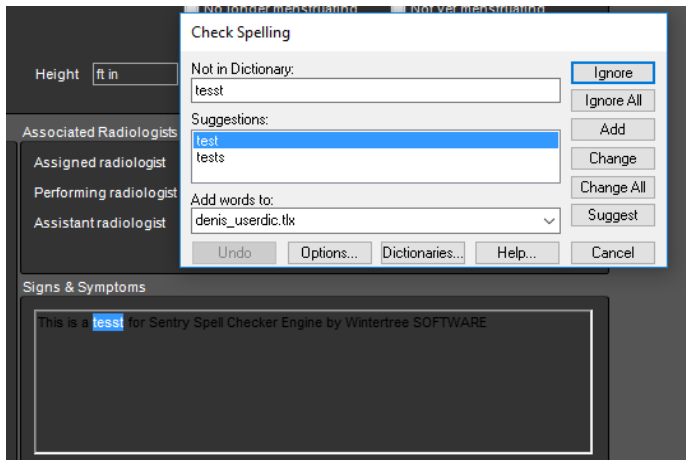
Spelling errors are indicated as the user types with misspelled words displayed in red text.

In order to enable the feature, the *spellcheck_enabled_flag* on the *LogControl* look-up table needs to be set to “Y” for the controls in question.

Right clicking on the misspelled words will show a context menu of up to 5 suggestions, as well as an option to add the word to the dictionary and an option to open the “Spelling...” dialog.



The Spelling dialog shows additional information.

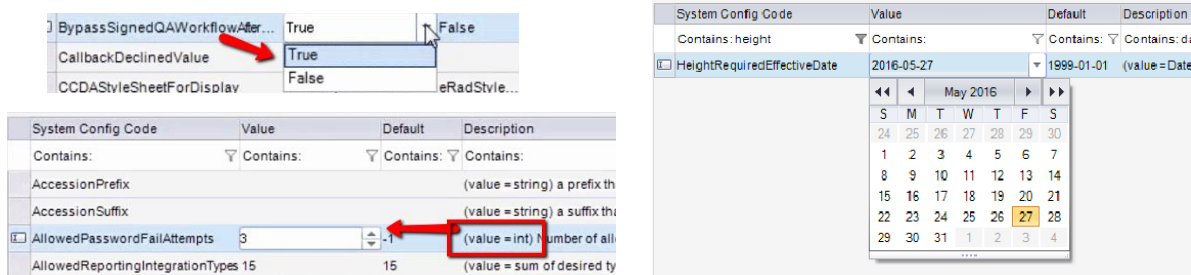


If the control already had a context menu defined, the spell checker options will be shown above the existing items.

13935 – SYSTEM CONFIGURATION TABLE NOW ENFORCES MORE STREAMLINED DATA ENTRY

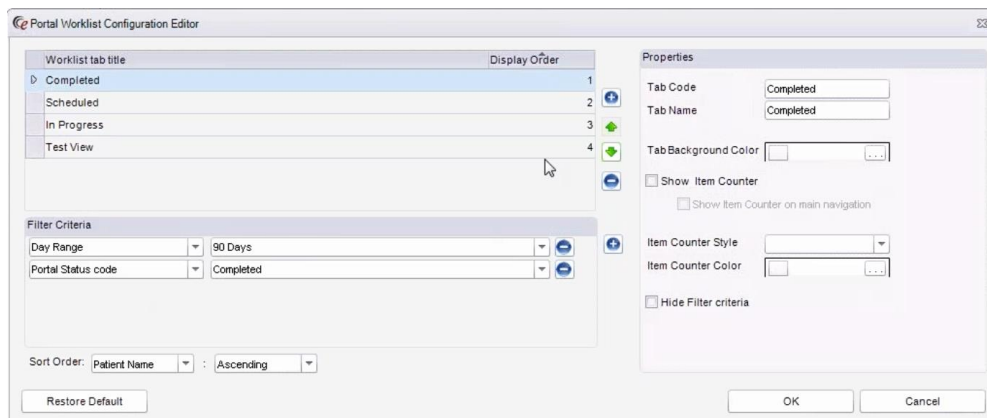
When choosing system values in the System Configuration look-up table, administrators are required to enter a variety of types of data. Sometimes it is a Date or Time value, a true or false selection, or even a code from another look-up table, such as the Procedure Code table. Historically, system values were entered in a text field and it was up to the administrator to follow the required format when creating their text entry. As eRAD RIS continues to evolve, the values entered into the System Configuration table will grow more complex. In order for the administrator to more efficiently enter this information, and to drive consistency, eRAD RIS will now offer more advanced controls when entering values in System Configuration.

Version 2016.4 will introduce some basic controls such as: numeric spinner controls for values that should be a number (integer), calendar controls for dates, and drop-down selections for True/False selections.



True/False options may have previously been represented by a Y or N value, as opposed to True or False. Any data that was previously entered as Y or N will **not** need to be updated and will behave just as before. However, if the value is edited, the administrator will at that time be forced to select True or False in accordance with the new control.

While the above controls are simple, future controls will launch their own editor to allow a variety of selections in an easy to understand display. These selections will then be formatted and stored in the Value field without requiring the administrator to follow complicated format rules.



Future SystemConfiguration controls may launch multi-step editors like the one above.

13818 – OPENING THE PATIENT FOLDER IS NOW SHOWN IN THE AUDIT HISTORY

When users open the Patient Folder in eRAD RIS, it is desirable to audit who opened it and when. There is a new web service method created, *GetPatientFolderWithAudit*, that will write an audit entry in the audit table.

eRAD RIS will write a new entry in the audit table when opening the Patient Folder and when previewing the Patient Folder in the patient search results screen. This new entry is called *Patient folder retrieved*.

When looking for the audit message, users must check the *Include retrievals* option.

Patient Search Patient: HARDING, luca #2490 (45) Audit: HARDING, luca #2490 x

Filters
 Patient Order Study Include retrievals

Date	Action	Description	User	Linked Id	Accession #	Order #	Status
06-03-2016 12:27 PM	Accessed audit history		D'Harding, Clifton (hardingc)				
06-03-2016 12:25 PM	Patient folder retrieved		D'Harding, Clifton (hardingc)				
06-03-2016 12:23 PM	Study retrieved		D'Harding, Clifton (hardingc)				
06-03-2016 12:23 PM	Patient folder retrieved		D'Harding, Clifton (hardingc)				
06-03-2016 12:12 PM	Accessed audit history		D'Harding, Clifton (hardingc)				
06-03-2016 12:12 PM	Patient folder retrieved		D'Harding, Clifton (hardingc)				
06-03-2016 12:12 PM	Study retrieved		D'Harding, Clifton (hardingc)				
06-03-2016 12:12 PM	Patient folder retrieved		D'Harding, Clifton (hardingc)				
06-03-2016 12:08 PM	Accessed audit history		D'Harding, Clifton (hardingc)				

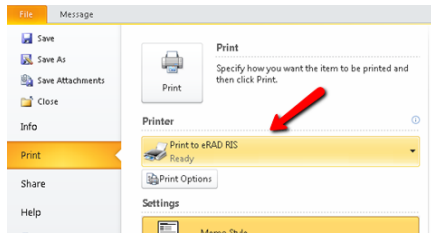
Event Time: 06-03-2016 12:23:05.508 PM Client IP Address: ::1

DOCUMENT MANAGEMENT

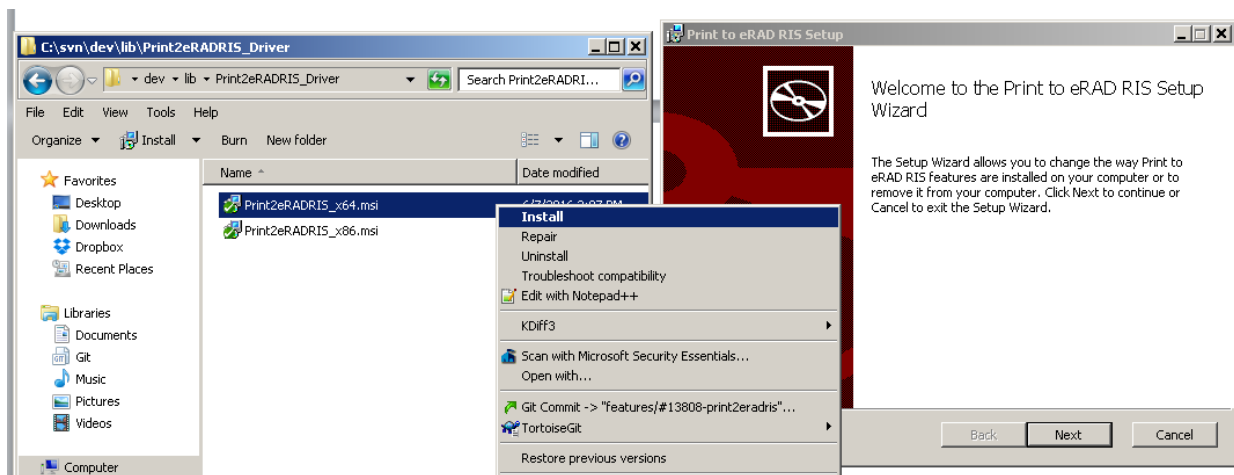
13808 – USERS CAN NOW “PRINT” FROM OTHER APPLICATIONS AND AUTMOMATICALLY SAVE THE DOCUMENT AS AN ATTACHMENT IN RIS (NO PAPER OR SCANNER REQUIRED)

In an effort to eliminate a tedious task in which users print content from other applications, such as Internet Explorer, and then manually scan that paper back into RIS, an eRAD RIS print driver has been created, which will print directly into a patient's Attachments.

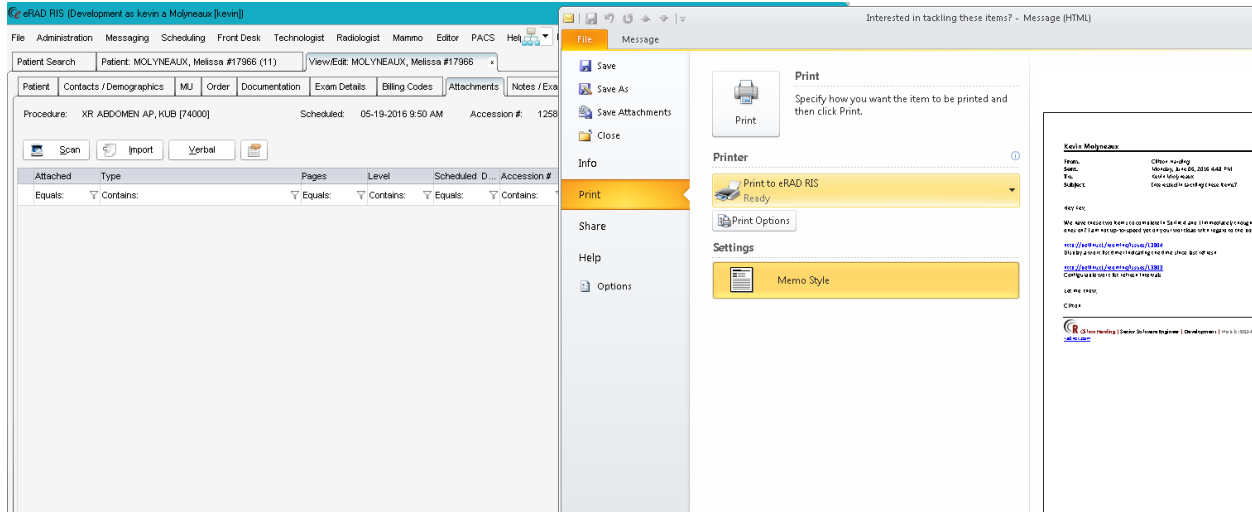
Users can install the optional *Print to eRAD RIS* print driver. When RIS is open and the current screen has an Attachments tab, or if an attachment pop-up dialog is open, the user can print from another application (Outlook, Internet Explorer, Word, etc.) to the *Print to eRAD RIS* option (instead of a physical printer), which will send the pages to RIS as attachments for the currently selected patient.



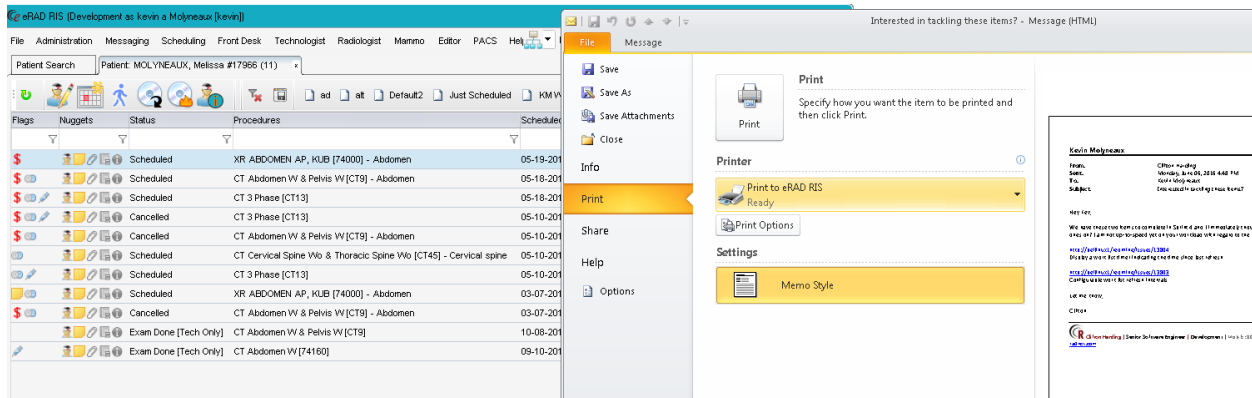
There are 64 and 32 bit versions of the *Print to eRAD RIS* virtual print driver. These will be provided to customers with the intent that local IT staff will install the print driver. You can install the driver manually as shown in the following screenshot:



The following screenshot illustrates printing from MS Outlook directly into the RIS attachments:



If a user attempts to use Print to RIS when they do not have an attachments screen open in RIS (either an open attachments window or a screen with an Attachments sub-tab—e.g. View/Edit, Perform Exam, etc.), Print to RIS will not allow the user to proceed.



The user will receive a warning explaining that a qualifying screen must be open in eRAD RIS before initiating the Print to RIS process.

13438 – RADAR NUDGE INTEGRATION

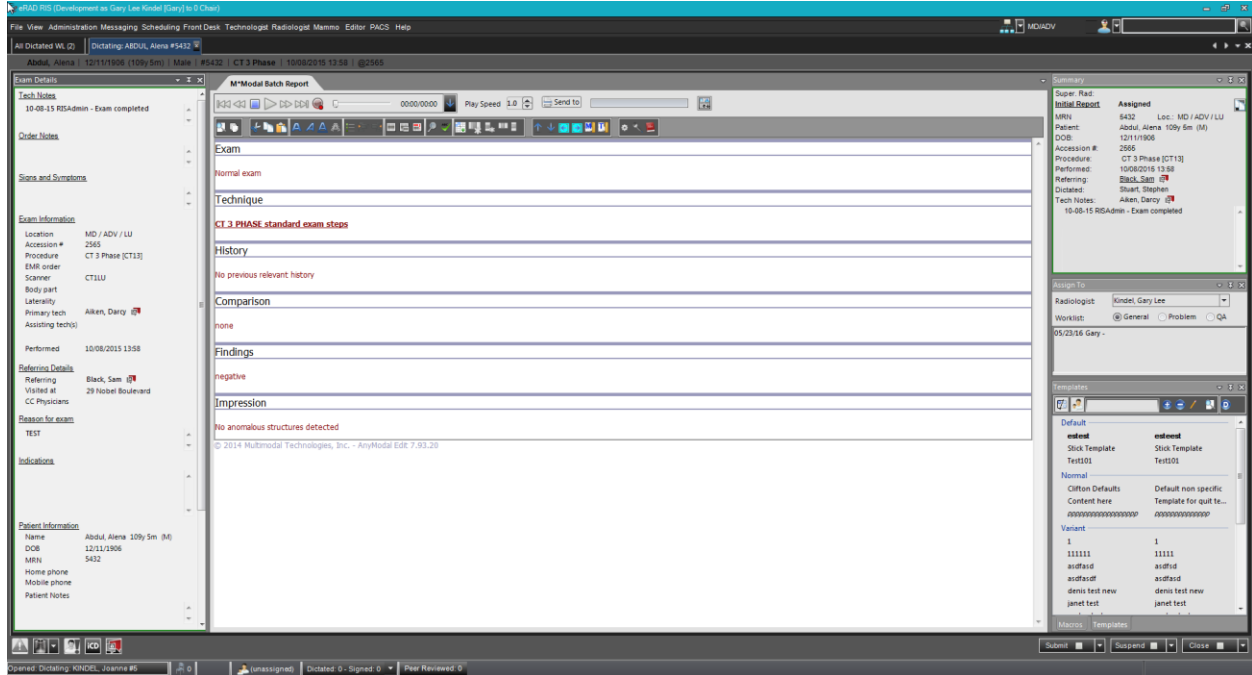
The goal of this feature is to integrate eRAD RIS with the RADAR Nudge desktop application. RADAR Nudge is a stand-alone secure instant messaging system. It supports secure communication across multiple client applications. The integration to eRAD RIS will be seamless (appear to be a single application) and will allow a radiologist who is logged into eRAD RIS to quickly and securely initiate a Nudge conversation with the study-appropriate referring doctor, transcriptionist, primary technologist or even the contributing, dictating or signing radiologist. The conversation can be supplemented with a one-button insertion of the exam summary, the impression from the diagnostic report, or even the full report (if available). Nudge's screen capture tools will even allow the capture and transmission of an image to supplement the conversation.

The integrated solution will permit the radiologist to find the appropriate person with whom to communicate without having to search from a large list of Nudge users; instead he/she will be able to select the correct person from a short list of people who are related to the current study. Opening a "new" conversation from the same study and to the same recipient will in fact re-open and continue the original conversation.

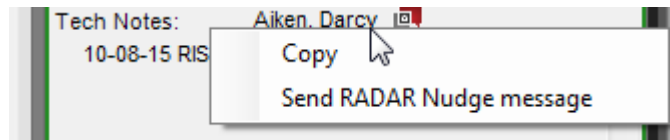
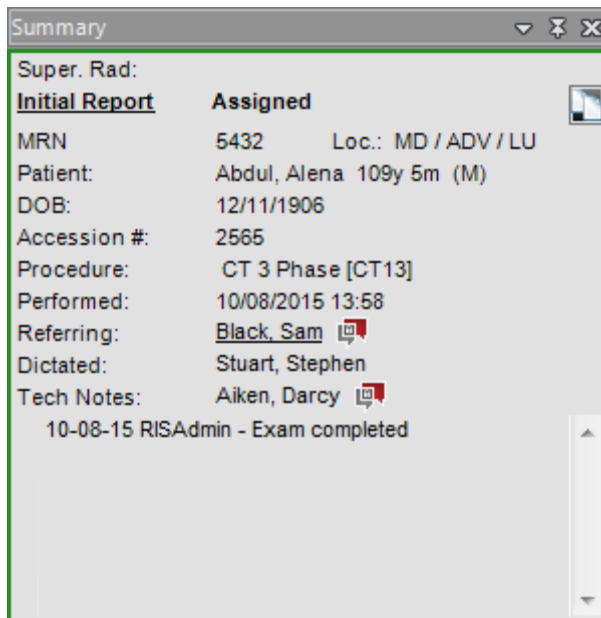
Based on the features of the RADAR Nudge application itself, the contents of a conversation that is initiated from eRAD RIS is maintained and viewable regardless of how the conversation continues: on an Apple device via the Apple IOS application, the Android application, the internet web application, or even the Windows application. The entire conversation is viewable at all times from all devices. Once initiated, the conversation is retained forever within the Nudge application in relation to the study. Therefore at any time, the relevant conversation can be opened and reviewed.

General Workflow

The following image shows a typical radiologist reporting screen. Notice there are three new components: Nudge icons on the Summary and Exam Details panels, as well as a Nudge button at the bottom of the reporting screen.



In the Summary tool window, there is a RADAR Nudge icon beside each Nudge-enabled user. In the example below, the referring doctor and the technologist are both registered Nudge users, and are the relevant individuals in this study. Therefore the icon becomes visible. If the radiologist wishes to initiate a conversation with these users, he/she simply clicks on the icon, or can right-click and select **SEND RADAR NUDGE MESSAGE**.

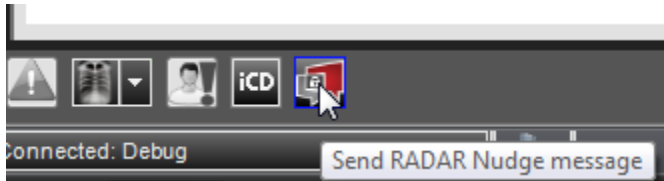


Notice as well that the Exam Details panel has been modified to support the same icon when the appropriate user is Nudge-enabled. The difference is that this panel can support additional user types. It will include:

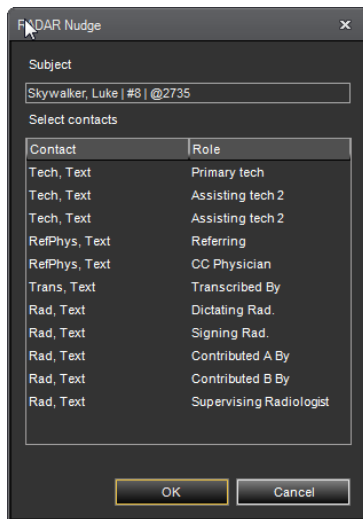
- Referring physician
- Transcriptionist

- Primary technologist
- Assisting technologists
- CC Physicians
- Dictating Radiologist
- Signing Radiologist
- Supervising Radiologist
- Contributing Radiologist

At the bottom of the radiologist screen is a Nudge icon.

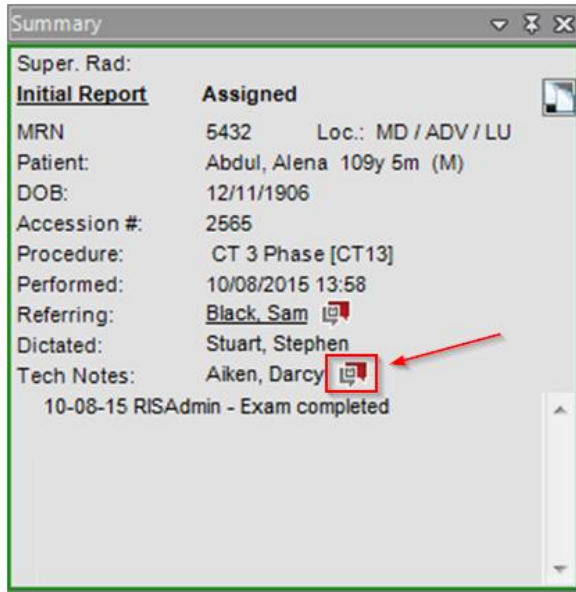


Selecting this icon will load a form that shows all of the Nudge users who are associated to this study. This will permit a group chat, as multiple people can be selected from this list.

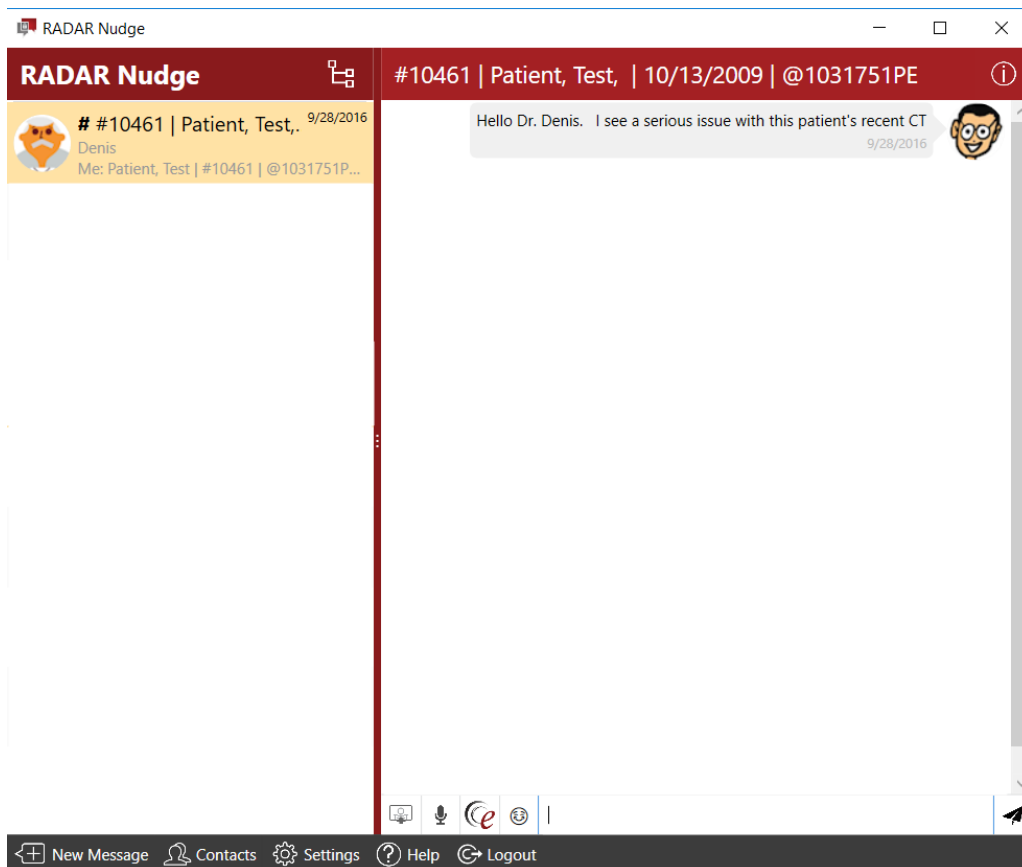



[Interacting with Nudge via eRAD RIS](#)

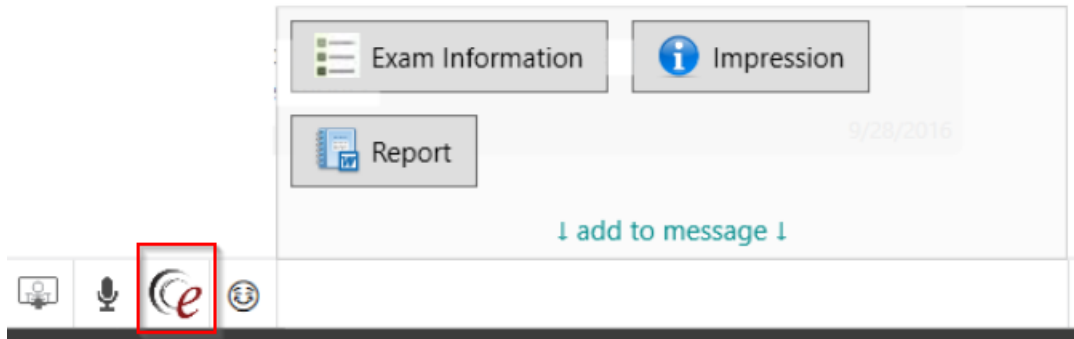
Select the Nudge application via the Nudge Icon:



Type a message to the recipient in the messaging pop-up window:



Pressing the  button to the left of the text entry area will activate a panel to display additional input buttons.



Exam Information button: Adds exam summary from current study in dictation/reporting screen to the Nudge message.

The text automatically includes:

- Exam summary header: last name, first name | #patient id | @accession number | date time (when text was generated).
- Exam summary: patient name, age, accession, procedure, and when procedure was performed.

```
Caflife, Bernie | #36634PE | @1031610PE | 10/11/2016 9:15 AM
Patient: Caflife, Bernie 40y 4m (M)
Accession #: 1031610PE
Procedure: US Abdominal Ltd Or Fu [76705]
Performed: 09-08-2016 10:20 AM
10/11/2016
```

Impression button: Adds the Impression section of the report from the current study in dictation/reporting screen to the Nudge message, if available.

The text added includes:

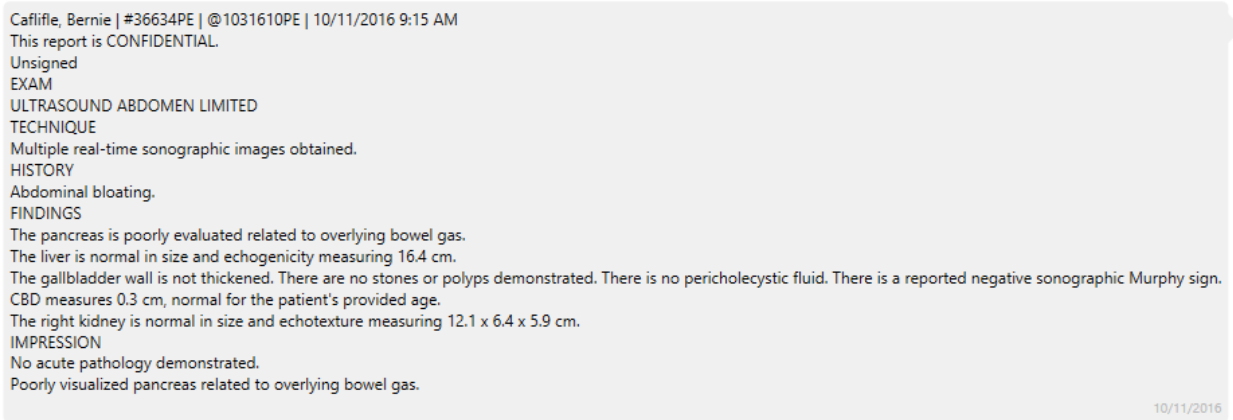
- Exam summary header: last name, first name | #patient id | @accession number | date time (when text was generated).
- Disclaimer text. (See the “How to enable this feature” section for instructions on modifying the disclaimer.)
- Report signature status: either “Unsigned” or “Signed by [name] on [date, time]”
- Impression text from report in plain text format.

```
Caflife, Bernie | #36634PE | @1031610PE | 10/11/2016 9:15 AM
This report is CONFIDENTIAL.
Unsigned
IMPRESSION
No acute pathology demonstrated.
Poorly visualized pancreas related to overlying bowel gas.
10/11/2016
```

Report button: Adds the report text from current study in dictation/reporting screen to the Nudge message, if available.

The text added includes:

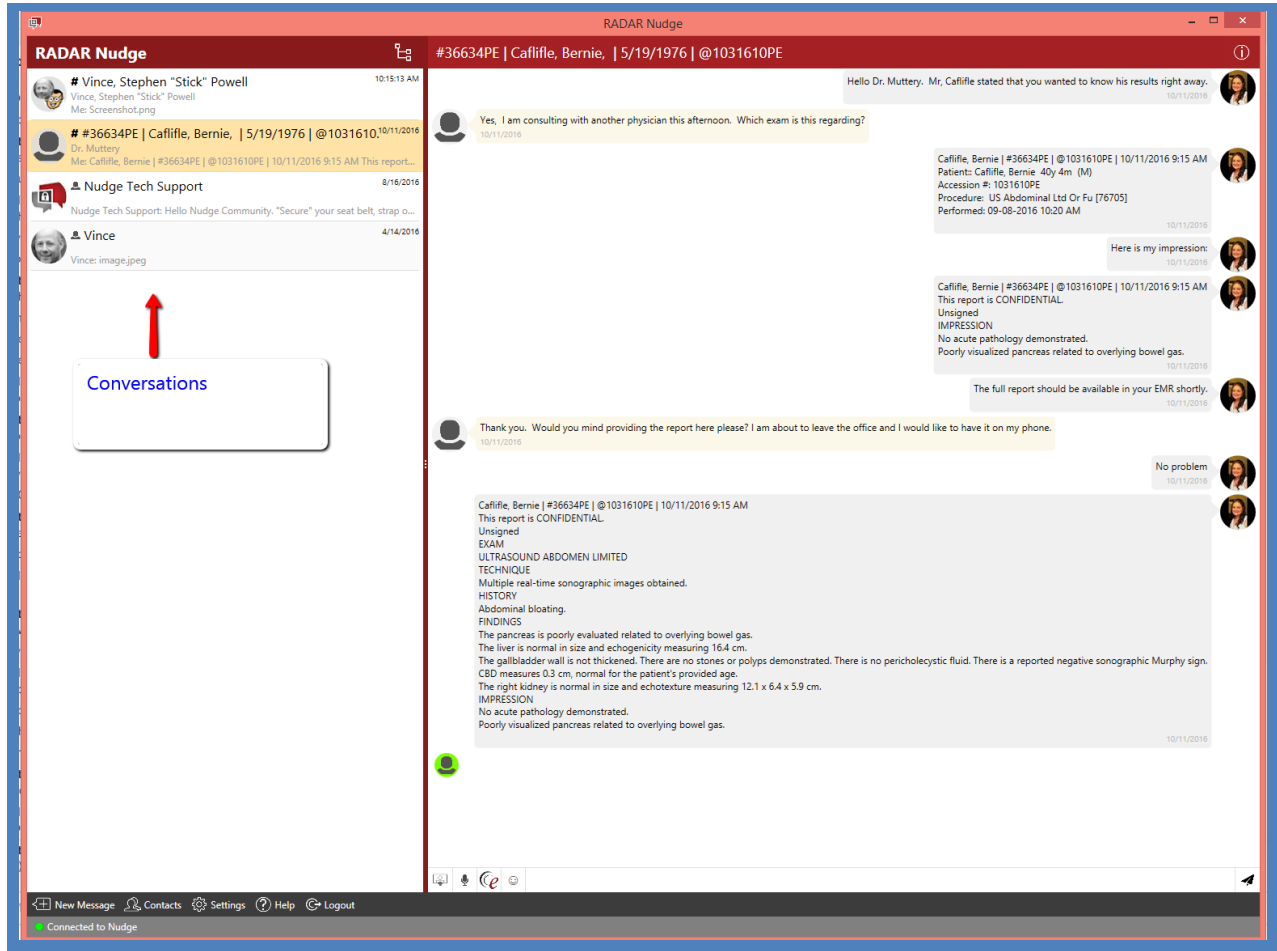
- Exam summary header: last name, first name | #patient id | @accession number | date time (when text was generated).
- Disclaimer text. (See the “How to enable this feature” section for instructions on modifying the disclaimer.)
- Report signature status: either “Unsigned” or “Signed by [name] on [date, time]”
- Report text in plain text format.



Caflifle, Bernie | #36634PE | @1031610PE | 10/11/2016 9:15 AM
This report is CONFIDENTIAL.
Unsigned
EXAM
ULTRASOUND ABDOMEN LIMITED
TECHNIQUE
Multiple real-time sonographic images obtained.
HISTORY
Abdominal bloating.
FINDINGS
The pancreas is poorly evaluated related to overlying bowel gas.
The liver is normal in size and echogenicity measuring 16.4 cm.
The gallbladder wall is not thickened. There are no stones or polyps demonstrated. There is no pericholecystic fluid. There is a reported negative sonographic Murphy sign.
CBD measures 0.3 cm, normal for the patient's provided age.
The right kidney is normal in size and echotexture measuring 12.1 x 6.4 x 5.9 cm.
IMPRESSION
No acute pathology demonstrated.
Poorly visualized pancreas related to overlying bowel gas.

10/11/2016

After the initial message is initiated from RIS, the radiologist can continue the conversation in the separate Nudge window. It is possible to have multiple conversations regarding different patients at once. They can be managed from the Nudge application as shown below.



How to enable the feature

Please contact eRAD Support if you are interested in RADAR Nudge, or if you are an existing user of the stand-alone RADAR Nudge and would like the integration.

New System Configuration settings are available for the following:

RADARSecureMessageServer = (the name of the RADAR server)

Example: ReleaseServer

This will be provided by eRAD Support and is required for RADAR Nudge integration.

RADARSecureMessagePort = (port number)


Example: 14093

This will be provided by eRAD Support and is required for RADAR Nudge integration.

RADARSecureMessageReportDisclaimer = (string to append to the Nudge conversation when the user clicks the 'report' button)

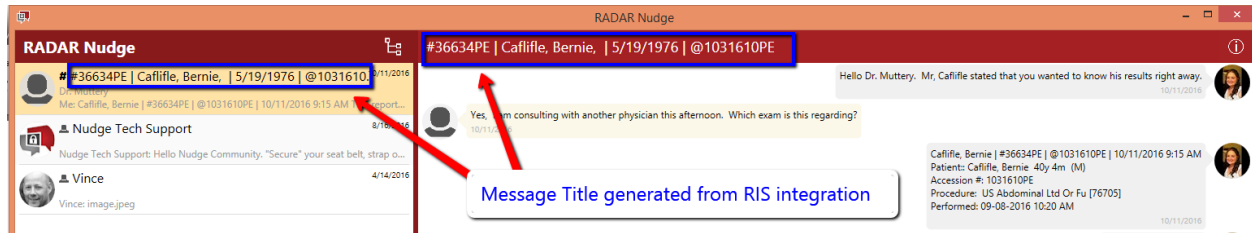
Default: This report is not for treatment purposes.

System Config Code	Value	Default	Description
Contains:	Contains:	Contains: tr	Contains: nudge
RADARSecureMessageReportDisclaimer	This report is CONFIDENTIAL.	This report is not for treatment purposes.	(value = string) Defines the disclaimer sentence to the report in Nudge integration.

Cafilife, Bernie | #36634PE | @1031610PE | 10/11/2016 9:15 AM
 This report is CONFIDENTIAL. 
 Unsigned
 EXAM
 ULTRASOUND ABDOMEN LIMITED
 TECHNIQUE
 Multiple real-time sonographic images obtained.
 HISTORY
 Abdominal bloating.
 FINDINGS
 The pancreas is poorly evaluated related to overlapping bowel gas

RADARSecureMessageTitle = (configuration parameter for conversation title).

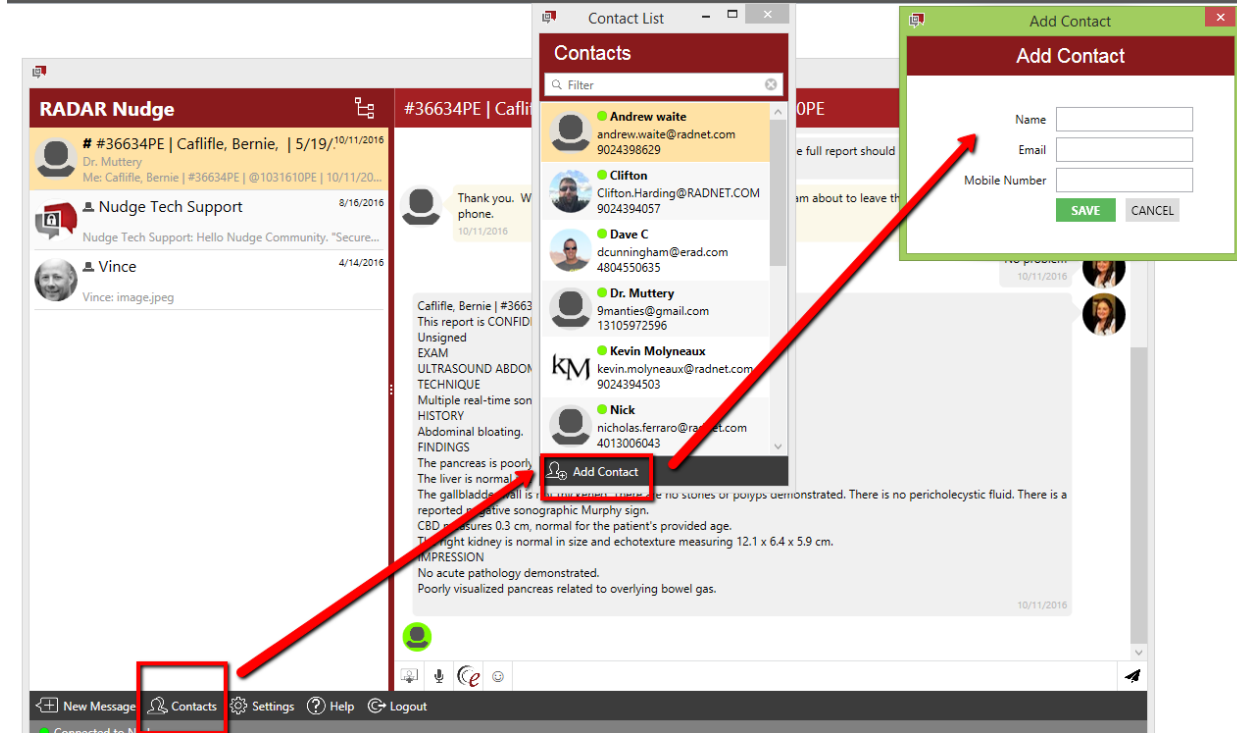
Default: <last_name>, <first_name> | #<patient_id> | @<accession_number>'



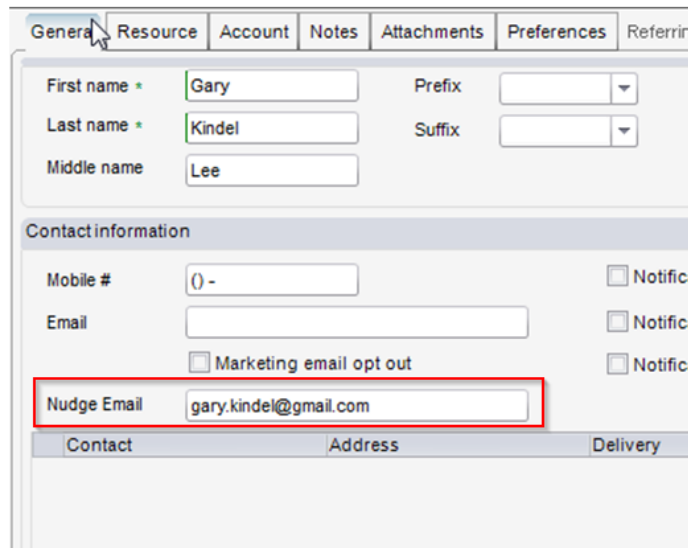
How to configure a User to use Nudge integration

In order to take advantage of RADAR Nudge, referring physicians, as well as internal users such as radiologists, will need to be registered for a RADAR Nudge account and the Nudge client will need to be installed on their workstation.

- Register each user with a RADAR Nudge account. Current Nudge users can send an invitation to join by adding a contact and providing the name and email or mobile number.
 - <https://messaging.myradarconnect.com/registration>



- Install the RADAR Nudge Client on the appropriate workstations.
 - <https://messaging.myradarconnect.com/>
- Configure the Nudge email in eRAD RIS's Personnel manager:



- Set the access string to *Clinical.RADARSecureMessage* to Full for any pertinent User Groups.

Troubleshooting

The Nudge button at the bottom of the screen should be visible when:

- Current eRAD RIS user has a Nudge email address configured in Personnel editor.
and
- User has access string *Clinical.RADARSecureMessage* set to Full.

The Nudge icon in the Summary tool window (beside the person hyperlink) is visible when:

- Current eRAD RIS user has a Nudge email address.
and
- User has access string *Clinical.RADARSecureMessage* set to Full.
and
- Person related to the hyperlink has a Nudge email configured in Personnel editor.

RESOLVED DEFECTS

Bugs and support issues resolved in build 2.2016.4.

Bug #	Category	Subject
14346	Admin-Clinical Data	Cannot add new rows to PrintConfig look-up table
3066	Admin-Other	When editing the referring address, the close button is almost hidden
6979	Admin-Other	Unable to save business hour templates to organization site
14198	Admin-Other	Practice and site logos are deleted on save of look-up table
13818	Audit History	Audit opening patient folder
13902	Billing	Imagine Payment Portal - Mapping issue with DataSet ID
13927	Billing	Studies that fail to post to billing still get the 'coding submitted date' populated
14203	Build	Missing DLL error when converting HTML to a PDF
13313	CD Import	NullReference error during CD Import
13806	CD Import	Making a site inactive will not make it disappear from the CD Import list
6767	Dark Mode/Theming	Dark mode - Buttons seem to have 2 disabled states
13445	DB	c_audit (transaction history) query for user id and date is slow
13446	DB	SQL Assessment - duplicate indexes
13590	DB	Inbox messages work list stored procedure always has 0 rows retrieved
13936	DB	Database triggers should check to see if data has changed before firing its logic
13973	DB	Trigger [c_order_set_unknown_carrier_flag] could be setting the _unknown_carrier_flag incorrectly due to multiple carriers being returned by the trigger's query
14032	DB	IVT WL doesn't update Carrier column when carrier is removed
13023	DB Upgrade scripts	Some configuration settings are not populating default values in an upgrade or new install
13786	Digital Forms	When creating rule sets in Digital Forms, the Action defaults to Hide Page 1
13920	Digital Forms	Script error on Digital Forms with autotext boxes when IE 8 is used

13735	IVT / Precert	IVT items stay on work list if there is a failed eligibility response and then the carrier's eligibility-payer-id is removed
13993	IVT / Precert	When a Billing code's precert status is changed to Required via ViewEdit, the item does not fall to the IVT WL or update the IVT flags
13612	Meaningful Use	Direct Message - 'problems importing patient information' message should include more information
13614	Meaningful Use	Exporting a C-CDA file and running it through the XDS toolkit should not produce any errors
14004	Outside Read	Outside read with exception is possible after study deletion
13312	PACS (eRAD) Integration	NullReference error in PACSFormHelper
14169	Patient Merge	Patient merge - preferred order of phone and email now associated with source patient
13861	Radiology Peer Review	Peer review button should not be available on the 'All peer review pending action WL' -> Peer review window.
5188	Radiology Reporting	"Delete previous list" and "delete next list" no longer supported M*Modal commands
11521	Radiology Reporting	Template editor - Assignments - Modality type, Procedures or Users Windows - Hitting the Cancel button actually saves the changes
13301	Radiology Reporting	Object reference error in Transcription/Editor screen
13805	Scanning	Scanned document association - patient level attachment changed to order level remains associated with other studies
6722	Scheduling	Site Group feature - fails to include Site Group in list in some cases
14018	Scheduling	Auto-fill of first name and last name for responsible party not working if Self is chosen and previous data present
13839	Service Tools - Installer	The db installation / upgrade program logs the user id and pw in plain text
13843	Service Tools - Installer	RIS DB Installer - Error when installing MU Data
6196	Thick Client GUI	Tech Status Change is not applied if the front desk has the study open
13988	Thick Client GUI	RIS marks some rows as "Modified" even when there are no changes
14035	Thick Client GUI	Out of Memory exception
13745	User Views	Order # column not visible with existing my views

11956	Patient Search	Combining an alternate first name and regular last name is not returning the expected search results
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KNOWN LIMITATIONS

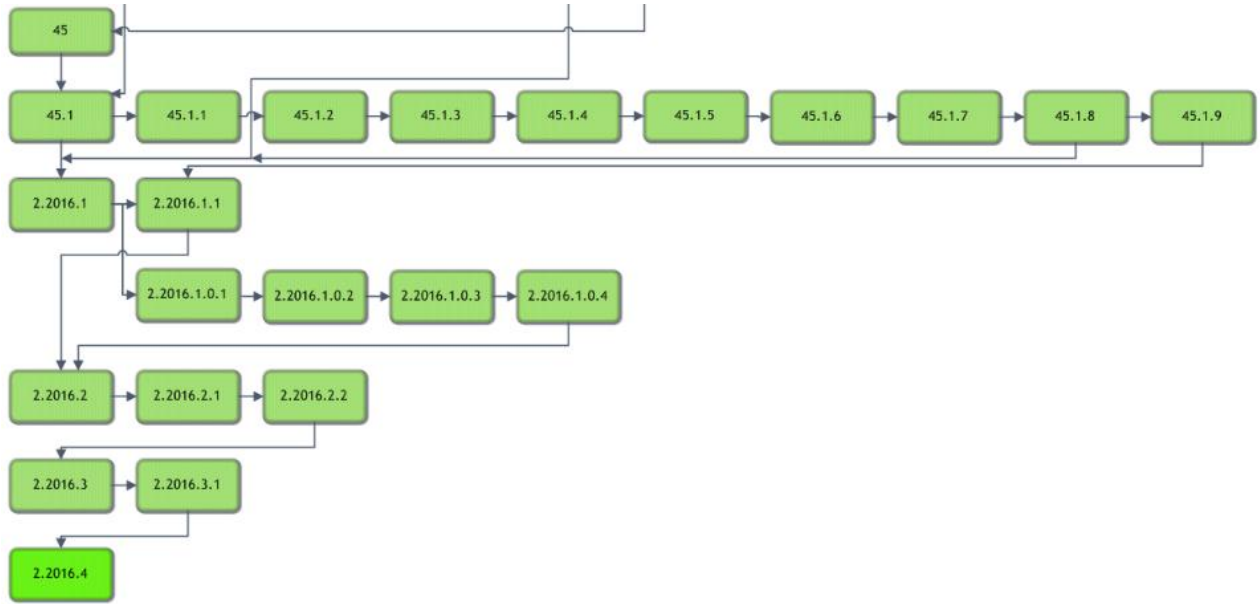
The following are new bugs found in build 2.2016.4. Bugs reported in previous versions are not captured as Known Limitations in this document.

#	Category	Subject
14153	Digital Forms	When trying to delete a digital form question that already has saved answers, the displayed error message is missing clarifying text.
14170	Reception	When text already exists in responsible party but the relation is changed, the text remains the same (the only time change occurs is when self is the option and then name and family name changes).
14201	Patient Merge	Patient Merge preferred order phone number and email buttons are enabled and will raise an exception.
14222	Service Tools	The Edit window displays an error if tabs are closed.
14239	Forms	The Last Updated field is not updating in the Printing Criteria Grid.
14295	Meaningful Use	Exporting a C-CDA file and running it through the XDS toolkit produces errors related to Implant.
14296	Meaningful Use	Exporting a C-CDA file and running it through the XDS toolkit produces ethnic group errors if Ethnicity = Unknown.
14312	Scanning	Windows 10 – “Photos” application not compatible with "Print to eRAD RIS" feature.
14313	CD Import	Exception error logged when importing files from CD.
14321	CD Import	Loading From CD progress bar cut off in Windows 10.
14356	Outside Read	When creating an outside read, there is no validation on Exam Date.
14406	Citrix Bridge	When using RIS over Citrix, if RIS locks up unexpectedly, the user cannot terminate the session and gets an error instead.
14416	Radiology Reporting	QA Workflow - Send for Dictation and Close moves study to Report Drafted status.
14419	Image request	Image request window displays intermittent errors.
14424	Insurance Eligibility	Cannot remove eligibility override unless carrier is removed from "in use."
14426	Service Tools - Installer	Current core install issues - Windows 10.
14429	UI Look and feel	The log control Autotext inserts text after manually entered text even though the cursor was in front.
14487	Radar - Nudge	Nudge Impression and Report button do not work with PS360.

RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release

CODE STREAM DIAGRAM



Customer Release Notes

for eRAD RIS

Version 2

Build 2016.5

TABLE OF CONTENTS

Table of Contents 2

 Purpose..... 3

 Intended Audience 3

New Settings..... 4

 New access strings..... 4

 New system configuration settings 5

New Features..... 6

 PowerScribe Integration..... 6

 Feature #13721 – Prompt the radiologist to discard or save when closing a draft after using interrupt workflow 6

 General Worklist enhancements 7

 Feature #14138 – Add Attachments more efficiently from the All Problem work list 7

 Feature #7125 – View patient’s preferred language from Orders to Schedule, Reception, and Technologist work lists 8

 Feature #7500 – View whether a patient has an Amount to Collect from the Reception and Confirmation work lists 9

 RIS Administration 10

 Feature #14150 – New Access String designed to prevent User Groups created for the upcoming Provider Portal from logging into the RIS client..... 10

Resolved Defects 11

Known Limitations 13

RIS Release Version Numbers..... 14

Code Stream Diagram..... 15

PURPOSE

This is the Customer Release Notes document for eRAD RIS Version 2.2016.5.

Not every feature will be described in this document. Typically, only features which can be visually demonstrated are outlined here.

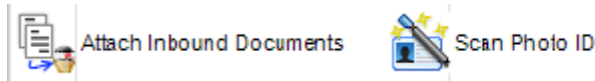
INTENDED AUDIENCE

The intended audience for this document is the RIS Administration team for eRAD RIS customers.

NEW SETTINGS

In 2016.5, development was initiated for some feature sets that will be available in the next version of eRAD RIS. The following settings are related to this functionality. Please leave the default settings at this time; more information regarding these features will be available for your next upgrade.

Note that there are two new menu items that will only be visible to full RIS Administrators. These menu items are for functionality that will be available in the next eRAD RIS upgrade.



NEW ACCESS STRINGS

Setting	Default	Purpose
Clinical.ACRSelect	None	This will allow access to use the ACR Select functionality for the upcoming Utilization Management workflow.
Clinical.AttachInboundDocuments	None	Access to the Attach Inbound Documents screen.
Clinical.AttachInboundDocuments.BreakLock	None	Access to Break Lock functionality on the Attach Inbound Documents screen.
Config.LookupEditor.DocumentDeleteReason	None	Look-up table access for Document Delete Reason (options displayed to user when deleting a document from the Inbound Documents workflow).
Config.LookupEditor.ReportingOption	None	Access to look-up table for Reporting Options.
RIS.WindowsClient.Login	Full	Allows access to the RIS Windows client application.

NEW SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
ACRSelectToken		(value = string) Token for ACR Select to identify which site is contacting them.
ACRSelectURL		(value = string) URL for ACR Select site.
REMOVED LimitOpenReportingWithPowerScribe Count		

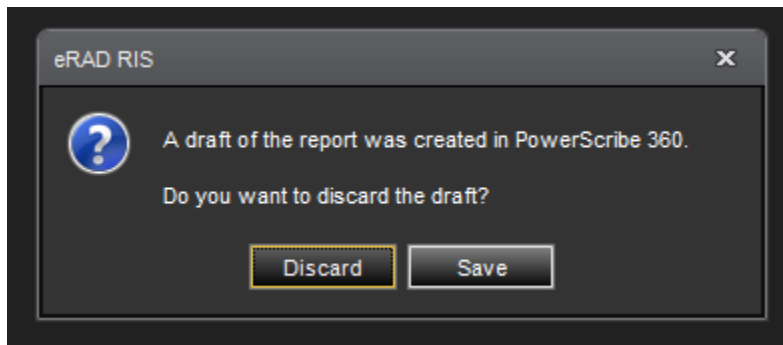
NEW FEATURES

POWERSCRIBE INTEGRATION

FEATURE #13721 – PROMPT THE RADIOLOGIST TO DISCARD OR SAVE WHEN CLOSING A DRAFT AFTER USING INTERRUPT WORKFLOW

When dictating with PowerScribe 360, opening a new report or otherwise switching to a different report tab (also known as the interrupt workflow) will automatically create a draft in PowerScribe 360 so that the radiologist can resume the draft after clicking back to that tab in RIS. If nothing has been changed on the first report and the tab is eventually closed without any changes, the draft in PowerScribe 360 is unnecessary as no changes were made to the report.

To decrease the number of unwanted PowerScribe 360 drafts, RIS will now present a prompt to save or discard drafts that are created in this fashion.



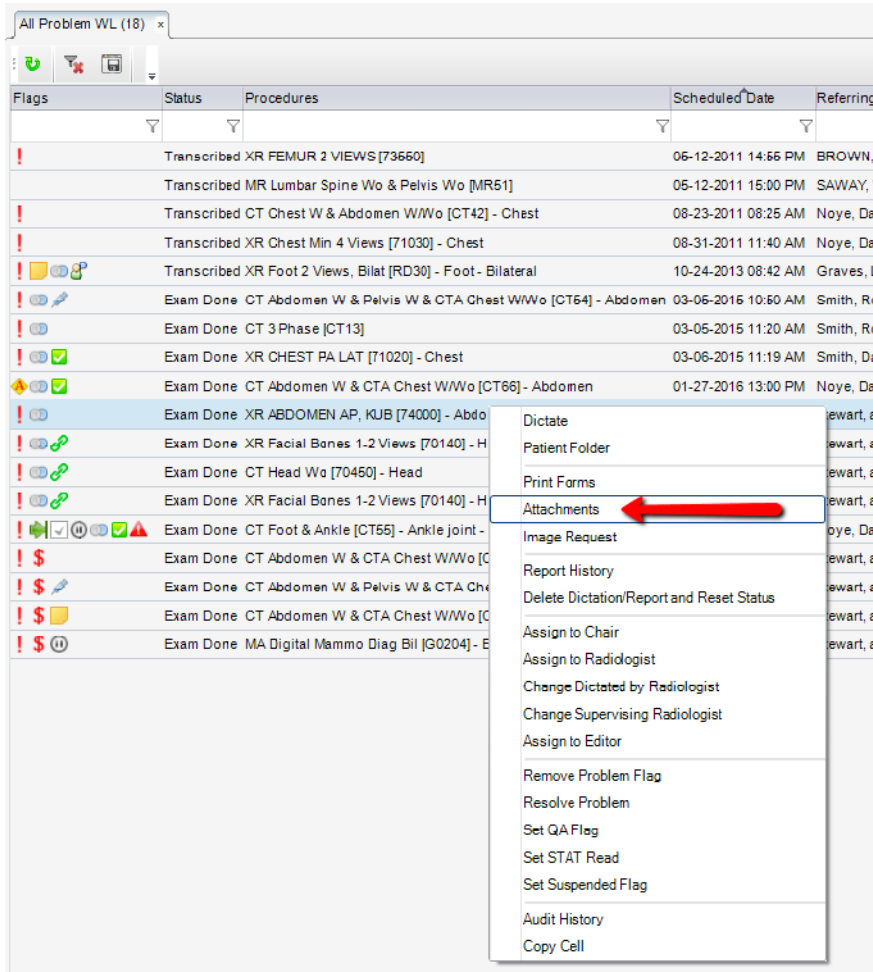
The prompt will only occur if the draft was forced when the radiologist switched report tabs *and* the radiologist closes the report tab in RIS without taking another action on the report in PowerScribe.

Please note that if the report is closed from PowerScribe 360, then the prompt will not display in RIS.

GENERAL WORKLIST ENHANCEMENTS

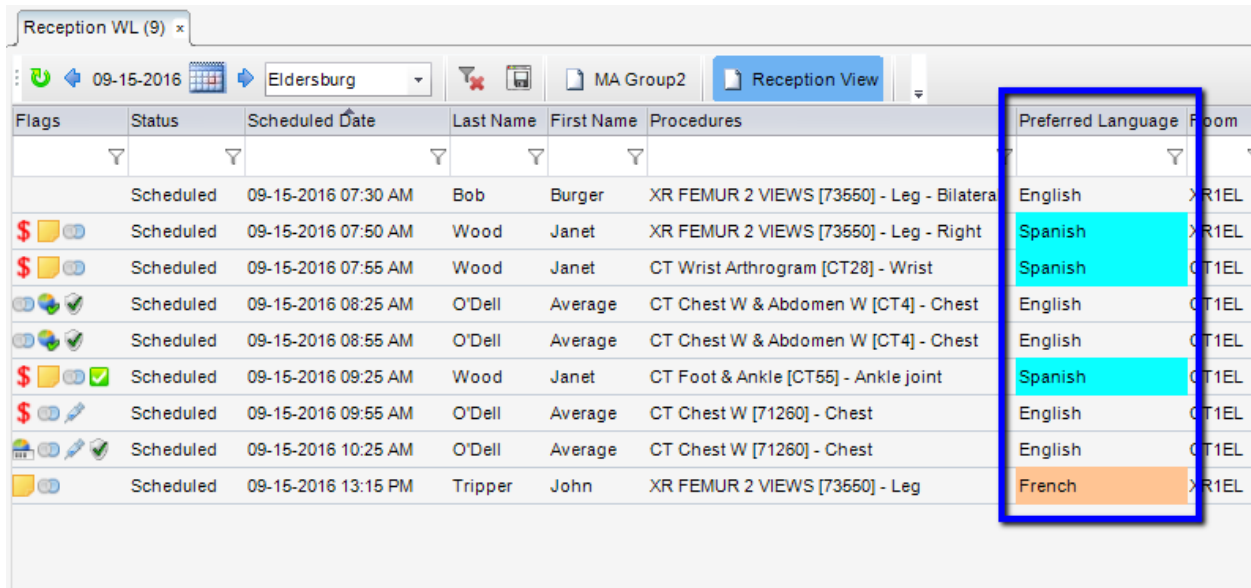
FEATURE #14138 – ADD ATTACHMENTS MORE EFFICIENTLY FROM THE ALL PROBLEM WORK LIST

Radiologists often add a study to the Problem WL because a scanned document, such as a technologist worksheet, is either missing from the Attachments or is incomplete and requires additional information. In those cases, users working the Problem WL often need to scan new documents. Therefore, it is now possible to open the Attachments screen directly from the All Problem work list by right-clicking on a study and choosing the Attachments option from the context menu.



FEATURE #7125 – VIEW PATIENT’S PREFERRED LANGUAGE FROM ORDERS TO SCHEDULE, RECEPTION, AND TECHNOLOGIST WORK LISTS

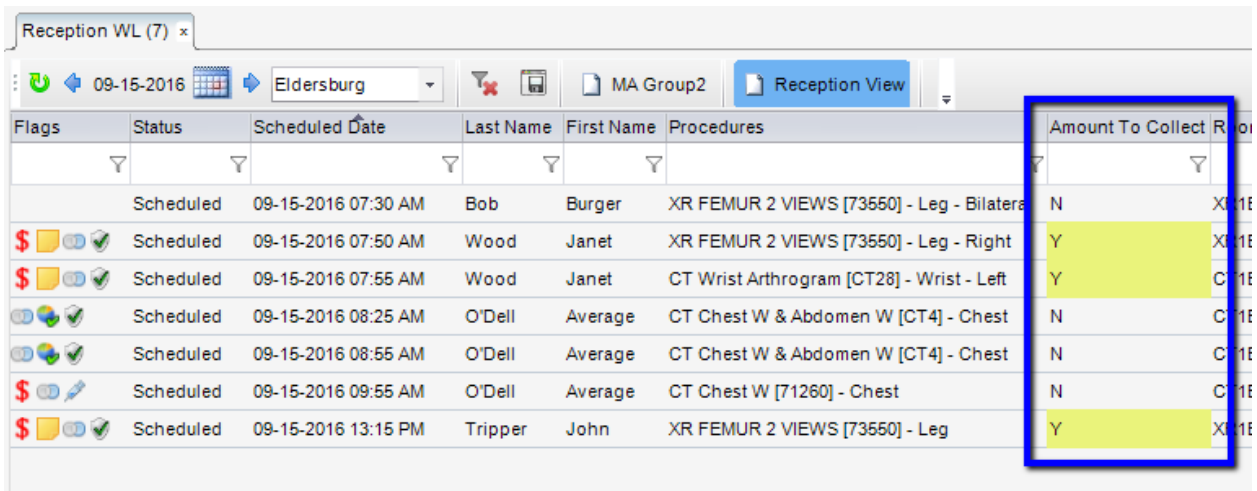
Users often find it helpful to know a patient’s preferred language while viewing a work list. Filtering, sorting, or creating Custom Views to highlight specific languages makes it easy to match up a patient with the staff member who speaks the preferred language, or calls attention to a potential need for an interpreter service. For these reasons, a column to display the patient’s preferred language is now available on the Orders to Schedule, Reception, and Technologist work lists.



Flags	Status	Scheduled Date	Last Name	First Name	Procedures	Preferred Language	Room
	Scheduled	09-15-2016 07:30 AM	Bob	Burger	XR FEMUR 2 VIEWS [73550] - Leg - Bilatera	English	XR1EL
\$	Scheduled	09-15-2016 07:50 AM	Wood	Janet	XR FEMUR 2 VIEWS [73550] - Leg - Right	Spanish	XR1EL
\$	Scheduled	09-15-2016 07:55 AM	Wood	Janet	CT Wrist Arthrogram [CT28] - Wrist	Spanish	CT1EL
	Scheduled	09-15-2016 08:25 AM	O'Dell	Average	CT Chest W & Abdomen W [CT4] - Chest	English	CT1EL
	Scheduled	09-15-2016 08:55 AM	O'Dell	Average	CT Chest W & Abdomen W [CT4] - Chest	English	CT1EL
\$	Scheduled	09-15-2016 09:25 AM	Wood	Janet	CT Foot & Ankle [CT55] - Ankle joint	Spanish	CT1EL
\$	Scheduled	09-15-2016 09:55 AM	O'Dell	Average	CT Chest W [71260] - Chest	English	CT1EL
	Scheduled	09-15-2016 10:25 AM	O'Dell	Average	CT Chest W [71260] - Chest	English	CT1EL
	Scheduled	09-15-2016 13:15 PM	Tripper	John	XR FEMUR 2 VIEWS [73550] - Leg	French	XR1EL

FEATURE #7500 – VIEW WHETHER A PATIENT HAS AN AMOUNT TO COLLECT FROM THE RECEPTION AND CONFIRMATION WORK LISTS

When viewing the Confirmation or Reception work lists, it can be helpful to see whether or not there is an amount listed in Amount to Collect. This allows staff to more quickly identify whether payment needs to be collected. A new column titled *Amount to Collect* will simply display a Y or N to indicate if there is an amount listed in the Amount to Collect field. Y will show for Yes when there is a value. N will display for No when there is no value or the value is \$0.00. Conditional formatting can be applied to draw attention to patients who need to make a payment. Please note that the column will only indicate that there is a value in the Amount to Collect field; it does not update when a payment has been made.



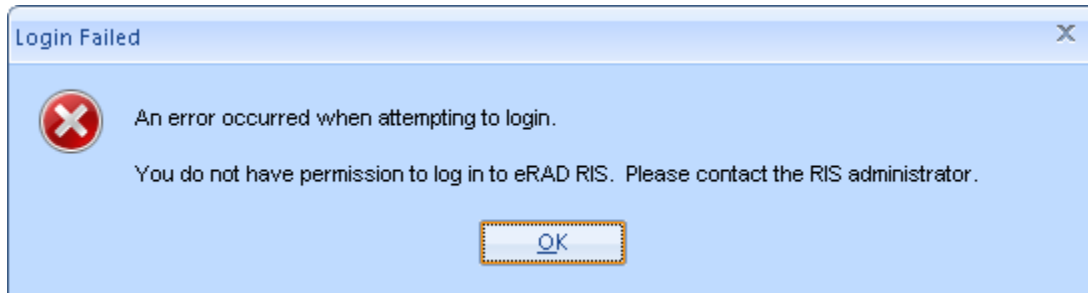
Flags	Status	Scheduled Date	Last Name	First Name	Procedures	Amount To Collect	Reception
	Scheduled	09-15-2016 07:30 AM	Bob	Burger	XR FEMUR 2 VIEWS [73550] - Leg - Bilateral	N	X
\$	Scheduled	09-15-2016 07:50 AM	Wood	Janet	XR FEMUR 2 VIEWS [73550] - Leg - Right	Y	X
\$	Scheduled	09-15-2016 07:55 AM	Wood	Janet	CT Wrist Arthrogram [CT28] - Wrist - Left	Y	C
	Scheduled	09-15-2016 08:25 AM	O'Dell	Average	CT Chest W & Abdomen W [CT4] - Chest	N	C
	Scheduled	09-15-2016 08:55 AM	O'Dell	Average	CT Chest W & Abdomen W [CT4] - Chest	N	C
\$	Scheduled	09-15-2016 09:55 AM	O'Dell	Average	CT Chest W [71260] - Chest	N	C
\$	Scheduled	09-15-2016 13:15 PM	Tripper	John	XR FEMUR 2 VIEWS [73550] - Leg	Y	X

RIS ADMINISTRATION

FEATURE #14150 – NEW ACCESS STRING DESIGNED TO PREVENT USER GROUPS CREATED FOR THE UPCOMING PROVIDER PORTAL FROM LOGGING INTO THE RIS CLIENT

In the near future, eRAD RIS will release the fully integrated referring portal. To ensure the referring users will only be allowed to access the portal and not the main RIS application, a new access string has been created. The new access string is: *RIS.WindowsClient.Login*

If a regular RIS user does not have FULL permission for this access string, they will be unable to login to the RIS Windows Client and will receive the following error message:



RESOLVED DEFECTS

Bugs and support issues resolved in build 2.2016.5.

Bug #	Category	Subject
8211	Admin-Other	Log file reader displayed a decryption error despite accurately decrypting logs.
14079	Admin-Other	Certain keys acting as shortcuts in the Organization table were removed.
14375	Admin-Rooms	Closed Rooms Reschedule WL showed exams scheduled outside of a room closure under certain conditions.
14292	Digital Forms	Warning for blank required fields in Digital Form did not display properly.
14195	eRAD Service Tools	Standard look-up table editors and custom editors that have a code column as unique identifier had potential to have child table rows moved from existing parent row to newly created row.
14005	IVT / PreCert	Insurance verification was not resetting appropriately after carrier was changed under certain conditions.
14236	IVT / PreCert	PreCert status updates were reverting back to previous status if an insurance carrier was added from the IVT screen.
13859	Legacy Reports	When using the PDF viewer for legacy reports, the window is cleared but not closed when the viewer is opened for a second patient.
14041	Localization	Payments could not be recorded in currencies other than dollars or shekels.
2262	PACS (eRAD) Int - RIS only	When a technologist clicked View Images, there was no indication that the request was being processed.
6538	Powerscribe Integration	The User Group setting for maximum number of open PowerScribe dictation tabs was overridden by the System Configuration setting.
14271	Powerscribe Integration	PowerScribe dictation screen sometimes closes when opening/viewing another PowerScribe 360 report after modifying the first.
14207	Radar - Nudge	Impression input button in RADAR Nudge was not including impression text in the Nudge message if report mode was eRAD or PS360.
3681	Radiology Reporting	Interactive Info Prompt sizing issue for M*Modal reporting.

13501	Radiology Reporting	When reporting mode is PS360, clicking Dictate on a signed report that was created using eRAD or M*Modal reporting would issue a PowerScribe prompt to create a temporary order, instead of RIS prompting the user to choose to dictate an addendum or open in Read Only.
13510	Radiology Reporting	Restored the ability to multi-select exams in the Patient Folder and Assign to Radiologist.
13515	Radiology Reporting	Report history was showing addendum in the version view.
13782	Radiology Reporting	eRAD Reporting mode was formatting text as a field when immediately outside the field.
13820	Radiology Reporting	"Specified cast is not valid" error was occurring when signing in next workflow.
14094	Radiology Reporting	"Object reference" error was occurring in Edit Templates and Macros from Radiologist menu.
14140	Radiology Reporting	If a referring was also a surgeon, the referring name did not display in the radiologist's summary window.
14158	Radiology Reporting	In Exam Details in the reporting screen, "Assisting Tech 2" was displayed instead of "Assisting Tech 1."
14402	Radiology Reporting	Opening the report data nugget was not possible when the interpretation type was null.
13837	Scanning	Order level Scan Types could not be assigned in Attachment viewer.
14081	Scanning	Imported or scanned attachments could not be saved from the Image Request WL.
10721	Scheduling	Multiple consecutive availability template time blocks were not treated as one merged block.
11978	Scheduling	When force scheduling from the appointment book, any procedure could be scheduled in any room.
13810	Scheduling	Cancelling an order twice would result in a blank procedure field when scheduling it again.
14214	Scheduling	Studies could continue to be added to the same order by canceling and rescheduling with the original canceled study repeatedly, instead of using the most recent canceled exam.
14361	Scheduling	Studies were incorrectly remaining on the Labwork Advised Work List when the "Skip Labwork Advised WL" checkbox was checked.
14635	Technologist	Object reference error was occurring for some EMR exams when starting or completing exam.

KNOWN LIMITATIONS

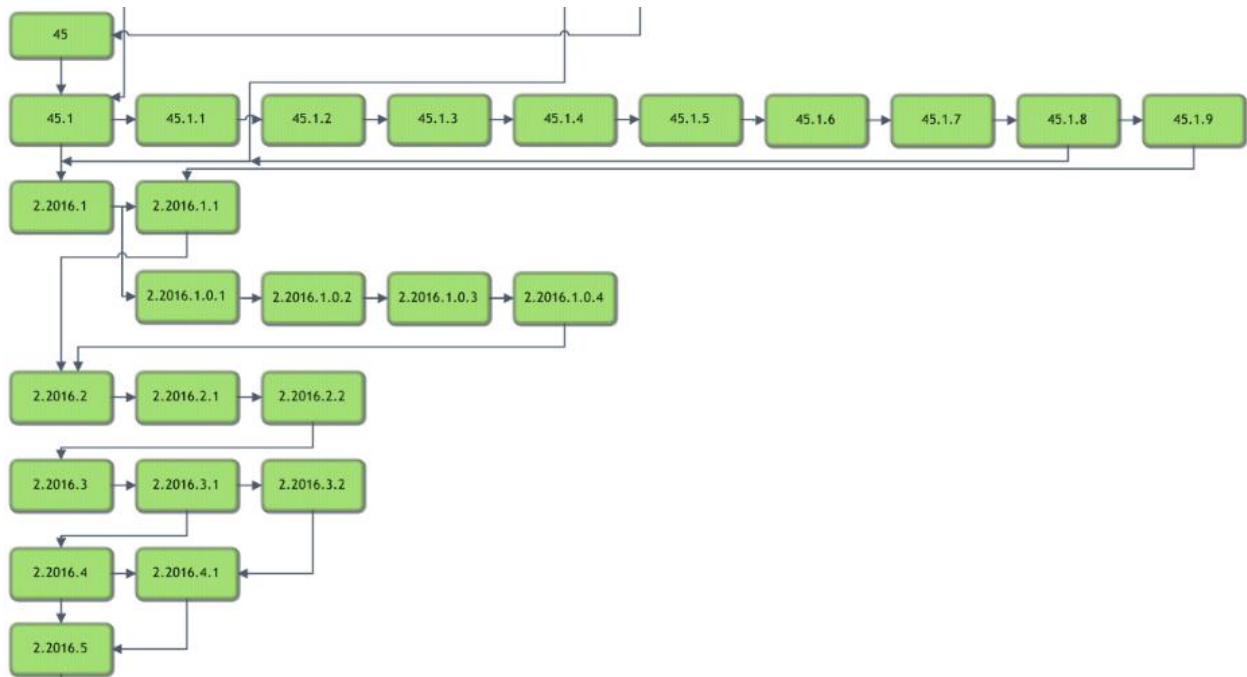
The following are new bugs found in build 2.2016.5. Bugs reported in previous versions are not captured as Known Limitation in this document.

#	Subject
14754	Report history audio control is shared between tabs.
14504	Exams are not getting locked at Started status.
14520	Fields are overwritten when inserting macros containing fields.
14533	Using PowerScribe 360, RIS can crash under certain conditions when using skip and continue and ignoring PS prompt.
14622	Template/Macro look-up editor's grid becomes un-editable if editing a row before saving previous changes in the grid.
14636	When viewing images in IW PACS from the Patient Folder and switching to another tab, images are not redisplayed after switching back to the Patient Folder.
14645	The Register option should not be available for unscheduled Reminder – Callback exams. An error will occur if the option is selected. (Using the Reminder from the Existing Orders prompt when doing a new Walk In functions appropriately.)
14646	PACS Integration – when switching between multiple open dictations with priors manually appended to the PACS Viewer, some of the manually added priors do not stay in the viewer when returning to the tab.
14723	Mark as Read - creates an interpretation row if marked as read from within dictation window, but does not create a row if marked as read from context menu.
14676	Scanning and Attachments – When changing the scan type on a previously saved attachment using the "Classify Remaining As..." option, the scan type will change but the document level may not automatically change.
14696	MFN Update for Personnel only updates based on person_key.
14794	Patient Merge does not mark as duplicate if a reverse merge is suggested for the same two patient accounts.
14528	RADAR Nudge causes a Windows error when Cancel is selected at Nudge login.
14498	Print to eRAD RIS - Output directory only cleans up print jobs/images when RIS is running.
14617	When editing an unknown Referrer via the Unknown Reconciliation WL and then changing to a known Referrer, a message prompt is asking for the unknown referring's address.
14624	Temporary issue displaying Patient Folder information on tab title after selecting a previous Personnel merge from the Recent Actions list.
14657	Manually changing an exam to Report Drafted should not be allowed.
14729	When using the "Chair Selector" hotkey (F12) while a context menu is open, RIS will crash.
14225	Legacy report does not properly support .docx files.
14241	Report data nugget immediately closes when viewing a legacy PDF report a second time.
14482	Ctrl + S shortcut does not behave as expected in several look-up editors.
14590	Error in message resolver when Condition Code is invalid.
14627	When importing an electronic order to an existing eRAD RIS order that has a cancelled procedure, the electronic order will not display as Order Canceled in the Patient Folder.

RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416		GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416		Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918		GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918		GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540		GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102		GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0	Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0	GUI.zip, Web Service and DB
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	Full Version Release
2016.5	-	2.16.5.0	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	Full Version Release

CODE STREAM DIAGRAM



Customer Release Notes

for eRAD RIS

Version 2

Build 2016.7

(includes features from 2016.6)

TABLE OF CONTENTS

Table of Contents	2
Purpose.....	4
Intended Audience	4
New Settings.....	5
New access strings.....	5
New system configuration settings	7
Web Service Changes	Error! Bookmark not defined.
New Features.....	10
Scheduling and Registration	10
Feature #14663 – Ability to replicate an existing order to schedule a new appointment	10
feature #14829 – Display Existing Orders reminder when scheduling from an item already in an Ordered status.....	11
Feature #7302, 8006 – Use data from driver’s license 2D Barcode to optimize reception workflow	12
PreCertification Rules	17
Feature #11048, 14724 – PreCert Rules Editor Redesign: Manage PreCert Groups	17
Insurance Eligibility.....	23
Feature #14509 – Ability to Override the Total Visit Cost	23
Insurance Management.....	24
feature #8755 – Employer Direct functionality for special contracts.....	24
Technologist Workflow.....	26
Feature #14569 – Display Injection Signed date and time stamp on the Notes/Exam Times tab.....	26
Feature #14567 – Filter Contrast options by Modality Type	27
Radiologist Workflow	28
Feature #14571 – Active Billing Codes added to the Exam Details panel	28
Feature #14144 – Report Editor, PACS server, and number of priors to load/cache are now configurable for a variety of criteria	29
Feature #8547, 15123 – Redesign of Critical Result Management (Phase 1)	35
Feature #14502, 3723 – Folder structure for collecting cases of interest, teaching files, and other reference needs	40
Feature #14775 – Read Only Reporting screen for radiologists and other staff	43
Feature #10370 – Support for reverse chronological image caching and loading	45
General Worklist Enhancements	46
Feature #14634 – New columns for Reception and Technologist Worklists: Checked In Time and Arrived Time	46
Feature #14541, 14572, 14808 – New columns added to several Radiologist worklists.....	47
Feature #7091 – IVT option added to context menu on Orders to Schedule WL.....	48
Feature #14813 – Ability to set the Assistant Radiologist via context menu from Pending Dictation and All Pending Dictation Worklists.....	49
Document Management: Inbound document process (Inbound Faxing Support)	50
Feature #7395 – Receive and process Inbound Documents (such as faxes) via RIS.....	50
RADAR Communication	56
Feature #14145 – Integration with RADAR SecurePIC	56
PACS Integration.....	61
Feature #13720 – Sectra PACS Integration	61



Feature #13256 – INFINITT PACS Viewer Integration.....	62
RIS Administration	63
Feature #6391 – Grant access to create Room Closures or Restrictions on a per Practice basis	63
Feature #14458 – Restrict access to enable/disable Domain Authentication.....	64
Patient Management.....	65
Feature #14818 – Control which screens display Patient Flag Alerts.....	65
Feature #13812 – Support for PIX / PDQ.....	67
Miscellaneous User Experience	68
Feature #14341 – Ability to copy from MRN grid.....	68
Feature #13909 – Enable Billing Notes field when an insurance carrier is selected	68
Resolved Defects - 2.2016.6	69
Resolved Defects - 2.2016.7	72
Known Limitations - 2.2016.6.....	74
Known Limitations - 2.2016.7	75
RIS Release Version Numbers.....	77
Code Stream Diagram.....	78

PURPOSE

This is the Customer Release Notes document for eRAD RIS Version 2.2016.7. It includes features for 2.2016.7 and 2.2016.6.

Not every feature will be described in this document. Typically, only features which can be visually demonstrated are outlined here.

INTENDED AUDIENCE

This document was created by the eRAD RIS Development team and Product Management team for eRAD RIS customers.

NEW SETTINGS

Please see accompanying document for Utilization Management settings.

NEW ACCESS STRINGS

Setting	Default	Purpose
Clinical.ExternalSearch	None	Allows a user to perform an external patient search.
Clinical.PIXQuery	None	Allows a user to perform an identifier query.
Config.LookupEditor.PIXPDQServers	None	Controls access to the look-up table PIXPDQServers.
Clinical.ScheduleFrom	None	Controls access to the "Schedule From" menu item for scheduling a new exam using information from the selected row on the Patient Folder.
Clinical.Visit.Cost.Override	None	Allows a user to override the total visit cost.
Config.LookupEditor.DocumentType	None	Controls access to the look-up table for Document Type.
Config.LookupEditor.EmployerDirect	None	Controls access to the look-up table for Employer Direct.
Config.LookupEditor.Personnel.DomainAuthentication	Full	Functionality to enable/disable the ability to change a user's authentication type.
WL.Folders	None	Allows access to Folder worklists under the File menu -> Folders option.
Config.LookupEditor.Modality.ViewAllPractices	None	Allows a user of the modality editor to see/edit all rooms across all practices.
Config.LookupEditor.Modality.PracticeSpecific	N/A	Removed from the application. Replaced with Config.LookupEditor.Modality.ViewAllPractices.
Config.LookupEditor.Modality.ViewAll	N/A	Removed from the application.

WL.CriticalResults	None	Allows access to the All Critical Results WL via the Administration menu.
WL.Rad.MyCriticalResults	Full	Allows access to the (My) Critical Results WL.
WL.Rad.CriticalResults Replaced with WL.Rad.CriticalResultsAll	None	Allows access to the All Critical Results WL via the Radiologist menu.
Config.LookupEditor.CTRMCategory	None	Allows access to the look-up table for CTRM Category.
clinical.CTRMNotification Replaced with Clinical.CTRMNotification	None	Allows user to add a critical result notification.

Config.LookupEditor.ContactLogMethod	None	Allows access to the look-up table for Contact Log Method.
Clinical.ChangeAssistantRadiologist	None	Allows user to access the Change Assistant Radiologist context menu option.
Clinical.RADARSecurePIC	None	Allows user to send a RADAR SecurePIC request.
Clinical.ScanDocs.AllowMarkAsReviewed	None	Allows user to modify the Reviewed status of an attachment received via SecurePIC.
Clinical.ViewStudy	None	Allows user to open the View Study screen.
Config.LookupEditor.ImplantDevice	None	Allows access to the look-up table for Implant Device.
Config.LookupEditor.PreCertGroups	None	Allows access to the look-up table for PreCertGroups.

NEW SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
PIXPDQCurrentServer		(value = string) The full URL for the Mirth channel handling the PIX and PDQ queries.
PIXPDQQueryTimeout	10	(value = int) Number of seconds of timeout before RIS considers the request in error.

CTRMEnabled		This setting has been removed.
AttachmentResolutionWhenSizeExceedsMax	150	When an attachment page exceeds the 'MaxAttachmentSizeKB' the image will be resized based on this value.
EnableRADARInboundMessageProcessing	False	Enables inbound RADAR messages.
MaxAttachmentSizeKB	50	If an attachment page is larger than this amount in KB, then RIS will resize the resolution of the image based on a 11in high document at the resolution of 'AttachmentResolutionWhenSizeExceedsMax.'
RADARInboundMessageClientId	No default	The RADAR account for the RADAR SignalR inbound message channel.
RADARInboundMessagePassword	No default	The RADAR account password for the RADAR SignalR inbound message channel.
RADARInboundMessageServerUrl	No default	The URL for the RADAR SignalR inbound message channel.
RelevanceWeightingFactorBodyPart	20	When calculating a relevance score, this is the weight that will be applied to the body part matches (that are not part of the keyword matching). If all relevance weighting factors are set to zero, the relevant scores will only include the date.
RelevanceWeightingFactorContrast	4	When calculating a relevance score, this is the weight that will be applied to the contrast part of the procedure. If all relevance weighting factors are set to zero, the relevant scores will only include the date.
RelevanceWeightingFactorKeywords	15	When calculating a relevance score, this is the weight that will be applied to the relevant keyword matches. If all relevance weighting factors are set to zero, the relevant scores will only include the date.
RelevanceWeightingFactorLaterality	50	When calculating a relevance score, this is the weight that will be applied to the laterality matches. If all relevance weighting factors are set to zero, the relevant scores will only include the date.
RelevanceWeightingFactorModality	8	When calculating a relevance score, this is the weight that will be applied to the modality type matches. If all

		relevance weighting factors are set to zero, the relevant scores will only include the date.
RelevanceWeightingFactorOtherWords	3	When calculating a relevance score, this is the weight that will be applied to any other words that happen to match. If all relevance weighting factors are set to zero, the relevant scores will only include the date.
UseUTF8ForWedgeOutboundEncoder	False	Determine whether the Wedge encodes items using the utf-8 character set or uses the system default (likely Windows-1255).



eRAD[®] RIS

Feature Highlights for 2016.6-2016.7

Upgrade to eRAD RIS release, 2016.7, and New Features will allow you to:

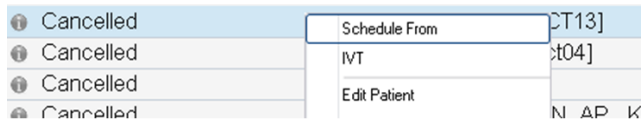
- Read **driver's license barcodes** with a document scanner to launch registration workflow for the appropriate RIS patient.
- Manage PreCertification Rules in groups instead of individual carriers with a **redesigned PreCertification configuration** framework.
- Capture **inbound faxes** and other documents in the RIS with worklist-based document routing workflow.
- Configure options to **automatically launch** the appropriate PACS viewer and reporting mode, plus preferences about how many priors to launch or cache, based on a variety of study criteria.
- Organize **studies of interest** into a folder structure for future reference—great for teaching files, tumor boards, and more.
- Initiate a text message to a patient's phone and securely receive a picture message back in the RIS using **RADAR SecurePIC**—particularly helpful to review referrals and insurance cards when scheduling over the phone.
- Integrate **utilization management** workflow for evaluating appropriate use criteria and medical necessity.

NEW FEATURES

SCHEDULING AND REGISTRATION

FEATURE #14663 – ABILITY TO REPLICATE AN EXISTING ORDER TO SCHEDULE A NEW APPOINTMENT

Often a patient needs to schedule a follow-up exam or an annual screening exam that shares all or most of the same information with an exam they have had in the past. In these cases, copying the information from a previous exam can be a time saver: if the referring provider, insurance, special accommodations, reason for exam, etc., are the same as before, the scheduler can more quickly create an appointment for the patient if those items can be copied over. To accomplish this, a new "Schedule From" option is available in the right click menu (context menu) in the Patient Folder.



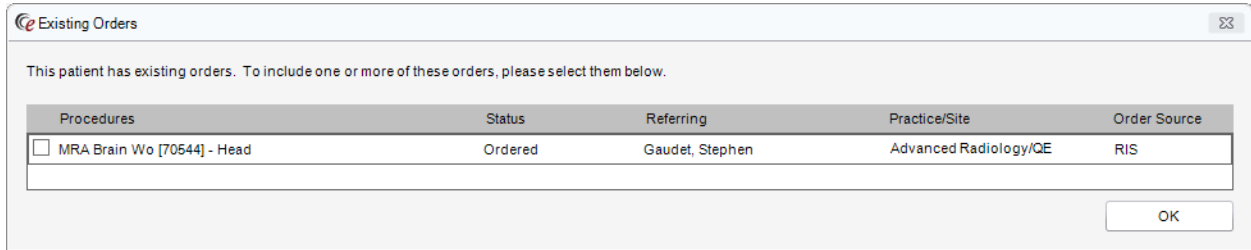
Selecting this option allows a user to initiate a Scheduling event that copies (clones) all of the data from the selected row (referring and CC doctors, Reason for Exam, insurance information, procedure, etc.). This menu option is available for any study in the Patient Folder, regardless of status. After the exam information is copied to the new order, there is no longer a link between the new order and the original order. The scheduler can make updates to the new order with no impact on the order from which it was initiated.

The data from the selected study will be used to load the "Schedule Order" screen. From here, the scheduler can make any necessary changes and either save as an order or proceed to schedule an appointment.

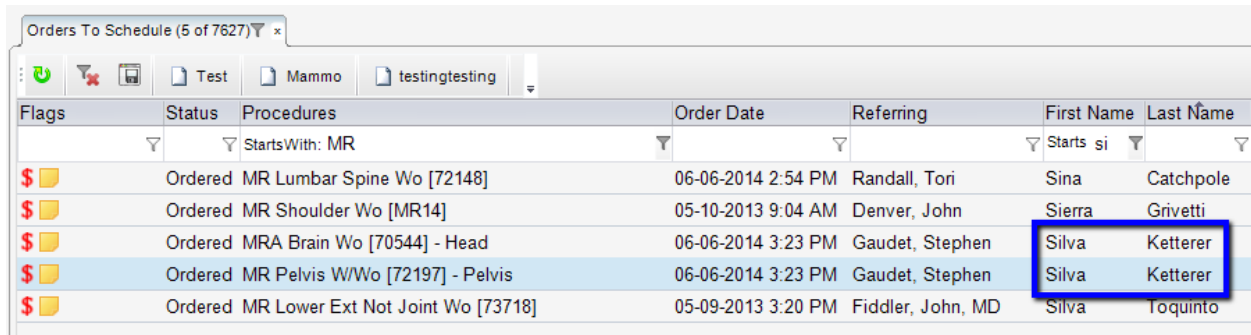
To utilize this feature, a user must belong to a User Group with FULL access to the new access string: *Clinical.ScheduleFrom*.

FEATURE #14829 – DISPLAY EXISTING ORDERS REMINDER WHEN SCHEDULING FROM AN ITEM ALREADY IN AN ORDERED STATUS

Previously, the Existing Orders reminder only occurred when scheduling a new Order or Walk In. However, even if scheduling from the Patient Folder or the Orders to Schedule worklist, schedulers can sometimes miss that there is more than one Order available. eRAD RIS will now display the Existing Orders reminder when scheduling a *different* existing order.



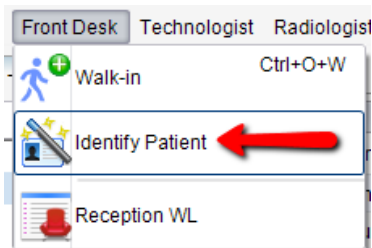
When opening an Order from the Orders to Schedule WL or Patient Folder, the reminder will display for the scheduler to choose whether or not they would like to also schedule the other order(s).



FEATURE #7302, 8006 – USE DATA FROM DRIVER’S LICENSE 2D BARCODE TO OPTIMIZE RECEPTION WORKFLOW

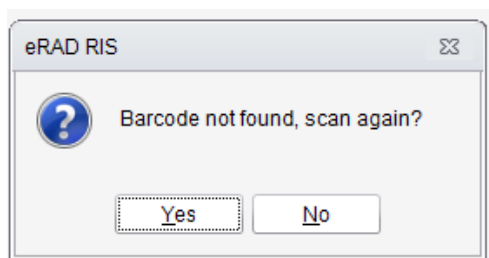
In order to improve the check-in times at the front desk, eRAD RIS will now provide an option to locate a patient by scanning a driver’s license and using the image of the 2D barcode on the back of the license to identify and search by key demographics for that license to find likely matches.

To begin, place the patient’s driver’s license in the scanner and select the *Identify Patient* option under the Front Desk menu.



RIS will immediately proceed to scan the license, which will initiate a search using the name and birth date from the barcode on the driver’s license. RIS will categorize the results such that matching patients who are scheduled for today will be presented first, as the most likely match. If there is only one exact match for a patient and that patient has an exam scheduled for today, RIS will automatically open the exam in Registration mode. If there are multiple matches, the user will be presented with a summary of the information from the card, the search results, and a list of actions that can be taken.

If the barcode could not be read, the following message will be displayed.



When the barcode is successfully interpreted, the following screen will display.



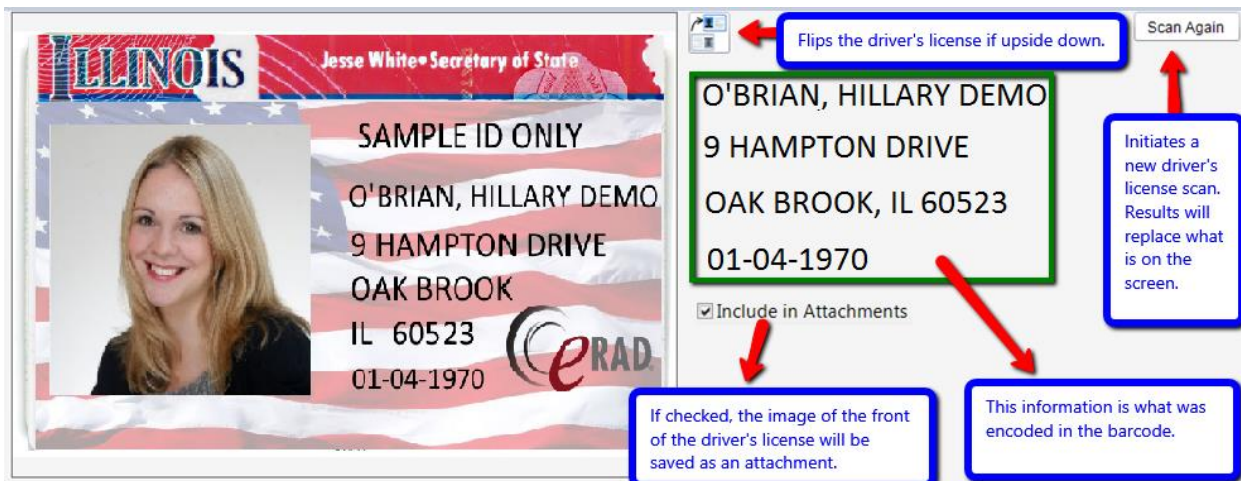
The following patients have appointments scheduled for today:

- Hillary O'Brian - #z20000002 - 01-04-1970 - 9 Hampton Dr - CT Cervical Spine W/WO - 1:00 PM - FH-FH 

Possible matches without appointments scheduled for today:

- Hilary O'Brien - #542997800DA - 01-04-1970 - 91 Jacksonville Heights Circle 

The image below describes various components visible on the top section of the screen.



SEARCH RESULT PRESENTATION

The search result entries are broken up into two categories, those with scheduled exams for today and those without scheduled exams for today. Those patients with one or more scheduled exams today will be displayed as follows:

<First name> <Last name> - #<MRN> - <DOB> - <street address> - <first procedure description> - <first procedure start time> - <first procedure's site_code>

Below those results, patients without exams scheduled for today will be displayed as follows:

<First name> <Last name> - #<MRN> - <DOB> - <street address>

If no matches are found, a message will be displayed in the search results area that no matches were found.

If any of the matching patients have a driver's license on file as an attachment, the camera icon will display next to the patient's information.



Clicking that button will open a small window with an image of the most recent scanned driver's license for easy comparison to the current driver's license.

SEARCH RESULT SORT ORDER

Within each category, patient search results are sorted based on a point system that attempts to ensure the most relevant patients are at the top of the list. Relevancy points are assigned as follows:

Description	Points
Exams scheduled at currently selected site	20
Exams scheduled today (regardless of location)	20
Exact match on last name	10
Exact match on first name	10
Exact match on street address	10

Any results with the same relevancy score will be sorted alphabetically by last name and then first name.

ACTION BUTTONS

The following buttons are displayed at the bottom of the patient search results. Only the buttons relevant to the results selected will be active.

Button	Description
Register	Opens the first scheduled order in registration mode. A study selection dialog box may be displayed if there are multiple orders to be registered for the patient. This button is only enabled if the selected patient has exams

	that are Scheduled, Checking In, or Arrived for today.
New Walk-in	Opens the walk-in screen. If the user first selects a patient, the screen will open the existing patient, otherwise it will be opened in “new patient” mode with information pre-filled from the driver’s license (name, DOB, partial address info, etc.). This button is always enabled.
New Appointment	Opens the schedule order screen. If the user first selects a patient, the screen will open the existing patient, otherwise it will be opened in “new patient” mode with information pre-filled from the driver’s license. This button is always enabled.
Patient Folder	Opens the Patient Folder of the selected patient. This button is only enabled if a patient is selected.
Close	Closes the Identify Patient screen.

“INCLUDE IN ATTACHMENTS” CHECKBOX

If the “Include in Attachments” checkbox is checked, New Walk-In, Register, and New Appointment will launch a screen with the Verified ID box checked and the scanned copy of the photo ID (front and back) attached to the scanned documents and automatically categorized as the corresponding *PhotoIDScanDocumentType*.

If a patient has a photo ID on file, the user is able to uncheck this box if attaching another copy is undesired. There is a new Practice-level setting that controls the default value of this checkbox.

VARIATION IN NORTH AMERICAN DRIVER’S LICENSES

This feature was designed using driver’s licenses from the United States and Canada. The technology may need to be adjusted to support other international barcodes. There are a few states or provinces that encrypt information on the barcode or store it in a different format. These are exceptions to the rule, but testing with local driver’s licenses prior to implementing the workflow is recommended.

A NOTE ON SCANNER EQUIPMENT

Two popular types of document scanners have been tested with this workflow: the Canon DR-2010C and the Fujitsu fi-6110. Other duplex scanners are also likely to successfully handle the barcode, but would require some initial testing before implementing the workflow.

At this time, testing/workflow modification has not taken place for scanners that do not support duplex (two-sided) scanning.

HOW TO ENABLE THE FEATURE

1. Associate the access string *Clinical.ReceptionBarcodeWorkflow* with one or more User Groups set to Full.
2. The Scan Type identified by the existing system configuration setting for *PhotoIDScanDocumentType* is used to govern the configuration of the photo ID scan. In order to reduce the risk of a failure to scan, the following settings may override the configuration specified in the Scan Type configuration:
 - a. Resolution – if RIS is configured with less than 210 DPI, then RIS will override to use 210.
 - b. Duplex Flag – if RIS is configured with duplex flag = “N”, then RIS will override to use “Y.”
 - c. Auto Deskew Flag – if RIS is configured with auto deskew flag = “N”, then RIS will override to use “Y.”
 - d. In testing, 4”x 2.75” was used on *PhotoIDScanDocumentType* .

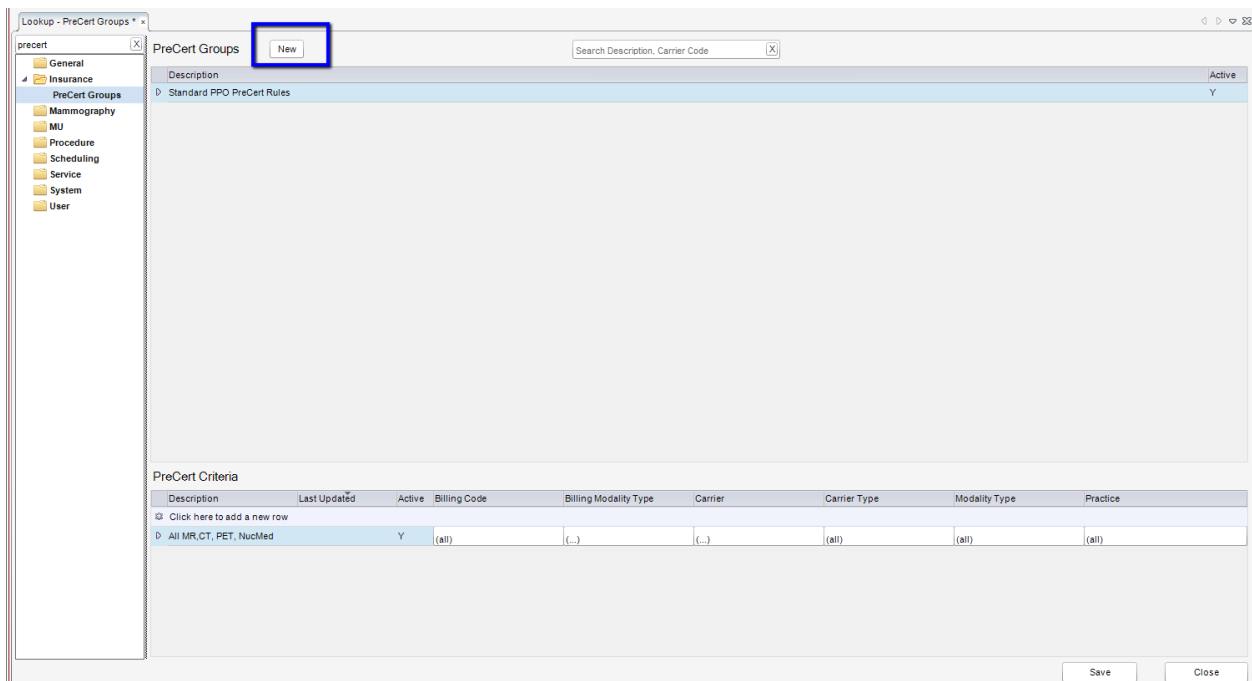
PRECERTIFICATION RULES

FEATURE #11048, 14724 – PRECERT RULES EDITOR REDESIGN: MANAGE PRECERT GROUPS

PreCertification rules have historically been difficult to manage because they had to be configured separately for every insurance carrier. Not only was this time consuming to manage, but the number of PreCert Rules a RIS Administrator was required to build for every carrier could sometimes slow down system performance, particularly if every carrier had very granular, Billing Code level rules. This method of managing PreCert rules was not reflective of the fact that large groups of carriers have the same PreCert rules, and any future changes to PreCert Rules would likely apply to every carrier in that group.

eRAD RIS now has a new editor to reflect this fact: *PreCert Groups*. An administrator can now create and name groups of carriers which fall under the same PreCert requirements, then create rulesets for the entire group to define those requirements. A PreCert Group can have one or more rulesets that include the following criteria: billing code, billing modality type, carrier, carrier type, modality type, and practice. If an order or study matches the criteria for any rulesets based on its insurance carrier, it will be marked as PreCert Required.

The new editor can be found under Administration -> Configuration -> Insurance -> PreCert Groups. PreCert Groups can include as many insurance carriers as necessary, or can be as small as just one carrier.



The screenshot shows the 'PreCert Groups' editor interface. A 'New' button is highlighted with a blue box. The interface includes a tree view on the left, a main table for PreCert Groups, and a table for PreCert Criteria.

Description	Last Updated	Active	Billing Code	Billing Modality Type	Carrier	Carrier Type	Modality Type	Practice
D Standard PPO PreCert Rules		Y						

Description	Last Updated	Active	Billing Code	Billing Modality Type	Carrier	Carrier Type	Modality Type	Practice
D All MR, CT, PET, NucMed		Y	(all)	(...)	(...)	(all)	(all)	(all)

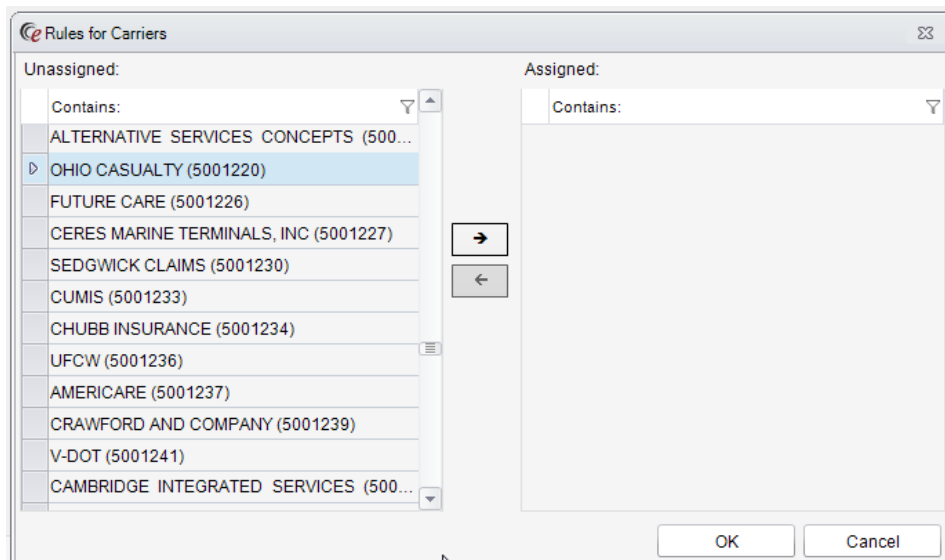
To create a new PreCert Group, click “New” and then enter a useful description to identify the new PreCert group. Note that any word added to the description can be used to find the group later via the search bar.

Next, create the criteria under which PreCert should be required in the bottom section of the screen. This works in the same fashion as creating criteria for printing Forms.

PreCert Criteria									
Description	Last Updated	Active	Billing Code	Billing Modality Type	Carrier	Carrier Type	Modality Type	Practice	
Click here to add a new row									
All MR,CT, PET, NucMed	12-29-2016 4:24 PM	Y	(all)	(...)	(...)	(all)	(all)	(all)	(all)

Because there may be multiple rulesets for the PreCert Group, it is helpful to give each ruleset a Description. The criteria will initially default to include “All,” meaning PreCert would be required for every exam under any circumstance. To narrow the criteria under which an exam would fall to the IVT worklist for PreCertification, first choose one of the categories: billing code, billing modality type, carrier, carrier type, modality type, or practice.

Selecting the “Carrier” category will open a new window with a full list of available carriers on the left (Unassigned) and a blank list on the right. Any Carriers to be associated with the rule will be selected and moved to the right side in the Assigned column, using the arrow pointing right. Carriers can be multi-selected by holding down the CTRL key while clicking the desired carriers, then clicking the arrow pointing to the right.



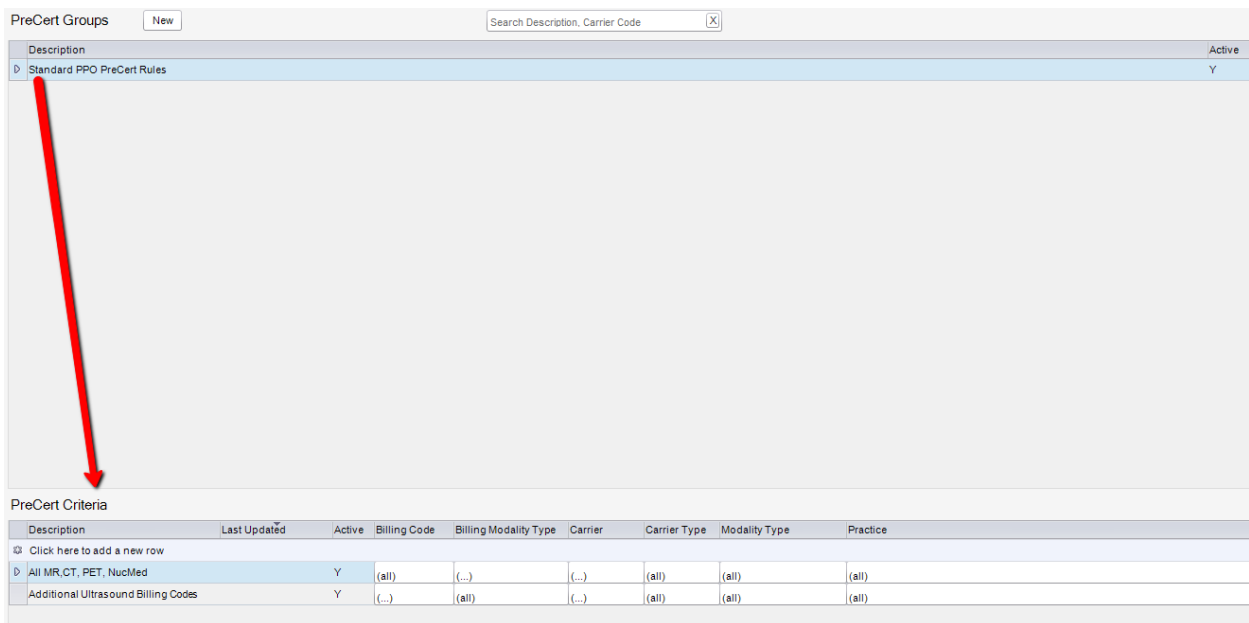
The filter row can be useful for quickly finding carriers of a certain type. For example, to create a rule for Attorney accounts, filtering by ATTY or Attorney or Law may help to quickly identify a chunk of carriers to move to the Assigned column. Alternatively, if all of the desired carriers are included in a particular Carrier Type, such as Attorney, leave the Carrier category as is and instead use the Carrier Type category.

After configuring the ruleset to constrain it to a set of carriers, either using Carrier or Carrier Type, the administrator can then select one of three ways to determine which orders/studies will require PreCertification: Billing Code, Modality Type Code, and Billing Modality Type Code.

Modality Type Code and Billing Modality Type Code are two similar concepts, though the former is attached to a modality and the latter to a billing code. Billing Modality Type codes provide another means to group billing codes together in a way that may be more useful for billing purposes.

Billing Code is the most granular method for describing PreCert rules and would ideally be used only in cases where Modality Type Code and Billing Modality Type Code are too broad. For example, some contracts require PreCertification for only certain types of Ultrasound studies. In that case, select the Billing Code category and choose only those billing codes that require PreCert.

A PreCert Group can have multiple rulesets. If any rulesets match, then the given order or study will require PreCertification. In the following example, two rulesets have been configured for a PreCert Group named "Standard PPO PreCert Rules."



The screenshot shows the 'PreCert Groups' interface with a search bar and a 'New' button. Below the search bar is a table with one row: 'Standard PPO PreCert Rules' with an 'Active' status of 'Y'. A red arrow points from this row to the 'PreCert Criteria' table below.

The 'PreCert Criteria' table has the following columns: Description, Last Updated, Active, Billing Code, Billing Modality Type, Carrier, Carrier Type, Modality Type, and Practice.

Description	Last Updated	Active	Billing Code	Billing Modality Type	Carrier	Carrier Type	Modality Type	Practice
Click here to add a new row								
All MR, CT, PET, NucMed		Y	(all)	(...)	(...)	(all)	(all)	(all)
Additional Ultrasound Billing Codes		Y	(...)	(all)	(...)	(all)	(all)	(all)

The first ruleset was configured to include all MR, CT, PET and Nuclear Medicine procedures based on Billing Modality Type. The second ruleset was added to include some specific Ultrasound Billing Codes. Adding the Ultrasound using Billing Codes instead of one of the Modality Type options prevents situations where all codes for a Modality Type fall to the IVT WL when only a small portion actually need PreCertification. Both rulesets were configured to use the same Carriers and were applied to all Practices.

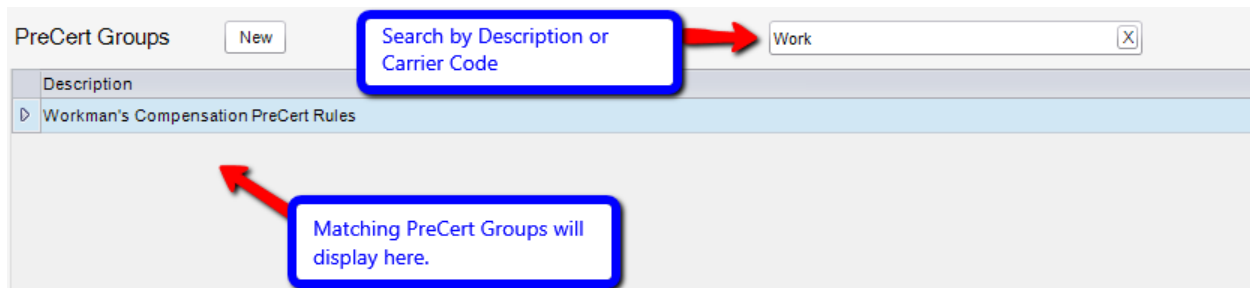
When looking at rulesets that have already been configured, the "(...)" indicates that selections were made and clicking will open a window to view or change the selections. Otherwise, "(all)" means that no filtering has been done using that category.

The following requirements must be followed:

- 1) A ruleset must include one of the following types of filters: Billing Code, Modality Type Code, or Billing Modality Type Code.
- 2) A ruleset must also include either a Carrier filter or a Carrier Type filter.
- 3) A carrier can only be included in one PreCert group.

PRECERT GROUP SEARCH

A search bar at the top of the screen allows the user to search for PreCert Groups based on any words in the description. It is also possible to search by Carrier Code, which is helpful when the PreCert Group to which a carrier belongs is not known by the user. A carrier code search will show all matching rulesets for the PreCert Group that includes the specified carrier.



ACCESSING PRECERT GROUPS FROM THE CARRIER LOOK-UP TABLE

The Carrier look-up table can be used to launch the PreCert Groups editor and automatically apply a filter to find the PreCert Group to which the carrier belongs. For example, if an administrator is making a change to a carrier in the Carrier table and also need to adjust the PreCert Rules at that time, they can right click the carrier in the Carrier look-up table and choose PreCert Group in order to open the PreCert Groups editor.



A temporary PreCert Group description will be assigned, which simply lists the Carrier codes included: “Carriers: 01254, 841211, 55229.” At their convenience, RIS Administrators will likely want to evaluate these groups. Perhaps some carriers have matching PreCert requirements today, but should actually be split into two groups because they are likely to be handled differently in the future. Or perhaps some carriers had been given the same PreCert rules in the past, but some of those carriers may benefit from some fine tuning by Billing Code, now that the PreCert Group editor makes this possible. It is also possible that more meaningful descriptions may be created by looking at the carriers that were grouped together and identifying that they share some common characteristic, such as “Workman’s Compensation” carriers.

Any questions regarding this new PreCert Group pattern or the migration process can be directed to eRAD Support for clarification.

INSURANCE ELIGIBILITY

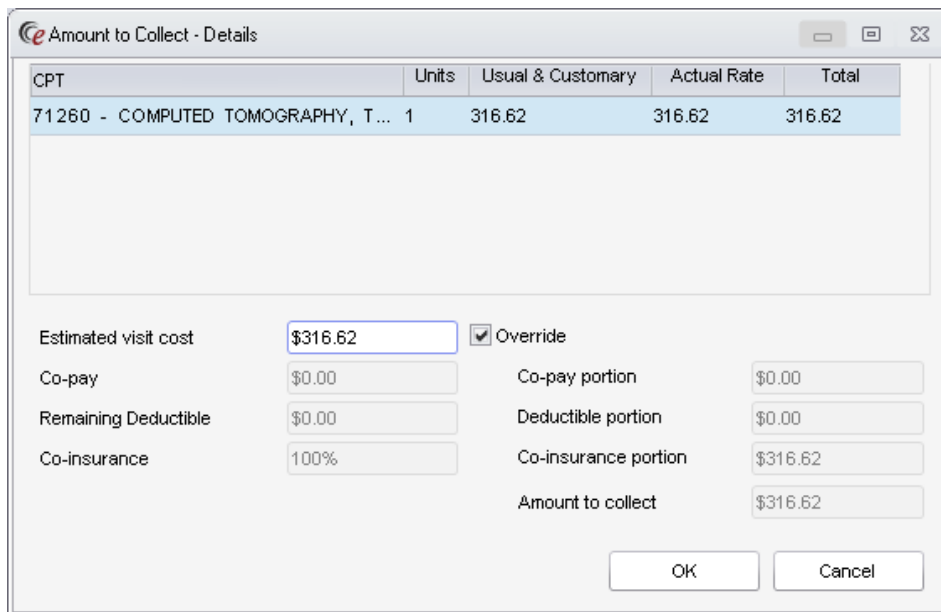
FEATURE #14509 – ABILITY TO OVERRIDE THE TOTAL VISIT COST

When using the Eligible API integration and utilizing National Payor Database for pricing information, there is sometimes a need for users to override the Total Visit Cost. For example, the visit cost for Medi-cal patients needs to be calculated from a website, instead of the NPD. In cases such as these, a user needs to override the visit cost with the correct amount in order for financial reports to properly balance.

There is now an Override checkbox that can be accessed under the following conditions:

- The user belongs to a User Group with Full access to a new Access String labeled *Clinical.Visit.Cost.Override*.
- The insurance is configured to be validated via Eligible API.
- The National Payor Database is used for cost.

Clicking the Override checkbox will allow the user to specify an alternate estimated visit cost, as shown below.



CPT	Units	Usual & Customary	Actual Rate	Total
71260 - COMPUTED TOMOGRAPHY, T...	1	316.62	316.62	316.62

Estimated visit cost: Override

Co-pay: Co-pay portion:

Remaining Deductible: Deductible portion:

Co-insurance: Co-insurance portion:

Amount to collect:

OK Cancel


If a user does not have Full access to the *Clinical.Visit.Cost.Override* access string, they will only see the Override checkbox if it has already been checked by a user with the permission. This will indicate to the user that the estimated visit cost has been altered, but they will not have permission to uncheck the box or alter the amount in the estimated visit cost field.

INSURANCE MANAGEMENT

FEATURE #8755 – EMPLOYER DIRECT FUNCTIONALITY FOR SPECIAL CONTRACTS

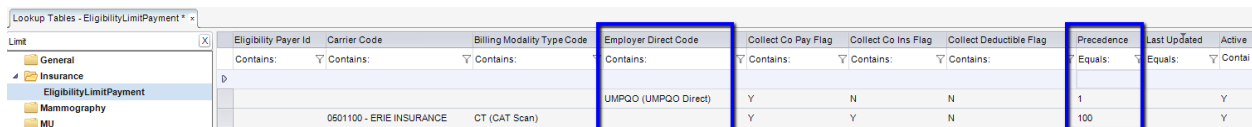
A request was made to support marketing efforts to offer employer groups special contracts to redirect imaging from high cost environments to lower cost imaging centers/departments. When referred via a contracted employer group, the contracted pricing will need to override the standard pricing for a patient’s insurance carrier. In order to support this pricing in the billing extract and allow for data mining to evaluate the success of these marketing efforts, eRAD RIS now has the ability to capture a new attribute within RIS, attached to the insurance at the patient level. This attribute, called *Employer Direct*, allows an administrator to override the *Eligibility Limit Payment* settings, if the requirement to collect co-pay, co-insurance or deductible differs as part of the contract, and allows for the configuration to pass an alternate insurance code in the billing extract to ensure that the contracted pricing is applied.

Employer Groups participating in the Employer Direct program can be added in a new Employer Direct look-up table.



Employer Direct Code	Description	Display Order	Last Updated	Active
JOHNSTON	Johnston Inc Direct	1	12-28-2016 11:36 AM	Y
STEEL	Steel Workers Direct	1	12-28-2016 11:36 AM	Y
UMPQO	UMPQO Direct	1	12-28-2016 11:36 AM	Y

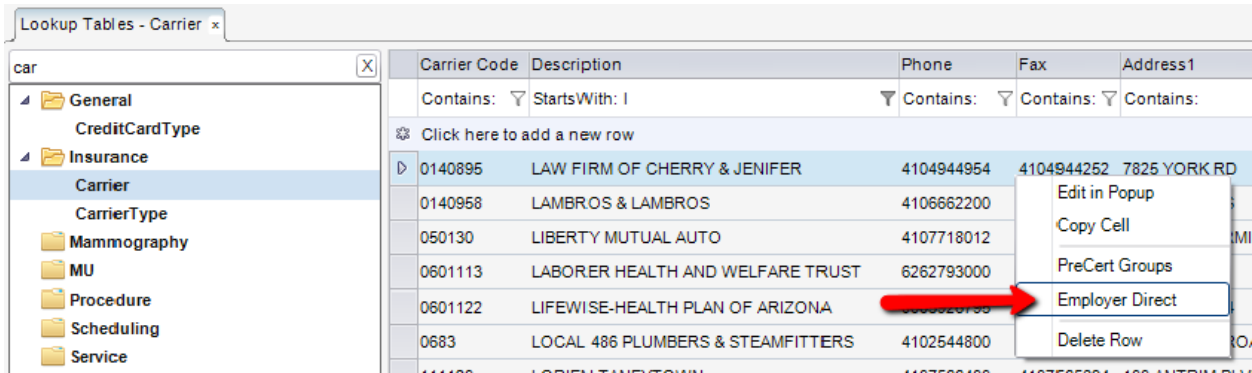
The Eligibility Limit Payment look-up table has a new column to select an Employer Direct Code, in case it is necessary to alter whether co-pay, co-insurance, or deductible are collected based on the contract.



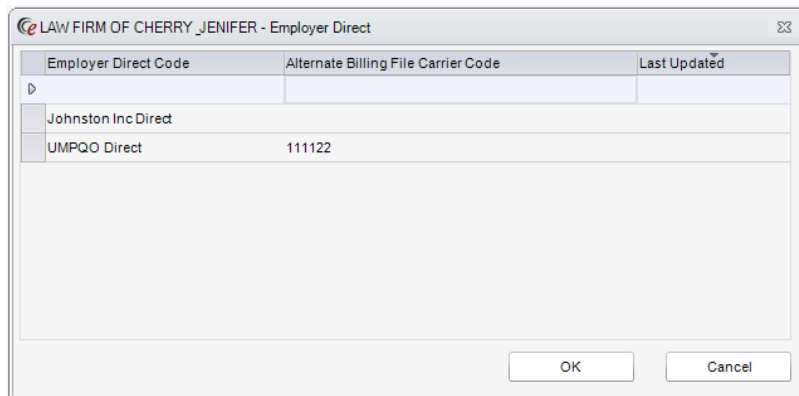
Eligibility Payer Id	Carrier Code	Billing Modality Type Code	Employer Direct Code	Collect Co Pay Flag	Collect Co Ins Flag	Collect Deductible Flag	Precedence	Last Updated	Active
			UMPQO (UMPQO Direct)	Y	N	N	1		Y
	0601100 - ERIE INSURANCE	CT (CAT Scan)		Y	Y	N	100		Y

Using this table, there are several ways to configure limited payments. In the example pictured above, Erie Insurance should not collect the deductible for exams with a Billing Modality Type Code of CT, but should collect co-insurance and co-pay. However, if a patient with that same insurance carrier is referred by the UMPQO Employer Direct group, the contract specifies that only the co-pay should be collected, regardless of the insurance carrier. To handle this level of specificity, the Eligibility Limit Payment table now has a *Precedence* column. By giving a rule a **lower** Precedence number, that rule will be evaluated and applied first. Because the Precedence value for the rule for the Employer Direct group UMPQO is lower than the value for the rule for Erie Insurance CTs, the UMPQO rule would be applied first and the co-insurance *and* deductible would be ignored when calculating the Amount to Collect.

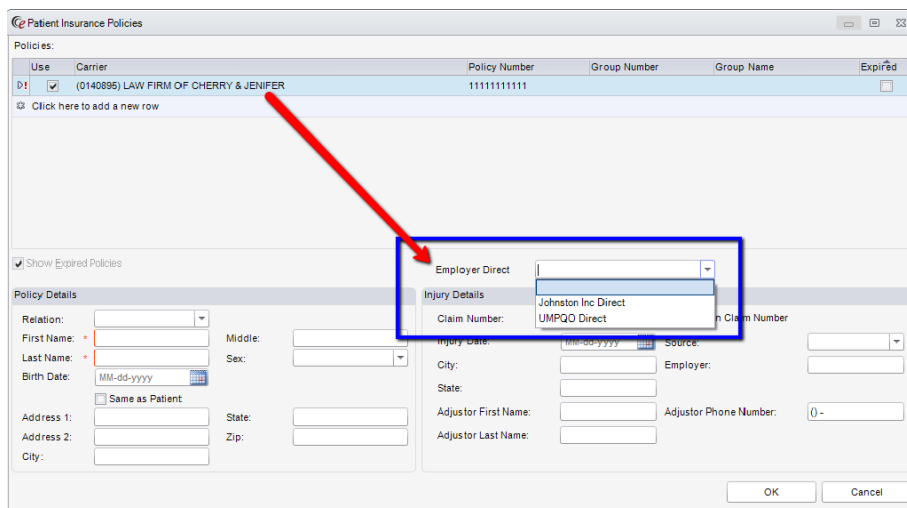
To specify which *Employer Direct* codes are applicable to an insurance carrier, the child look-up table *_carrier_x_employer_direct* was added to the Carrier editor. This mapping is accessible by right clicking on a carrier and choosing “Employer Direct” as shown in the following screenshot.



A new window will open to add the applicable Employer Direct codes; it is also possible to specify an alternate Carrier Code that should be substituted in the billing extract.



When an order has been referred by an Employer Direct group, the RIS user now has the ability to specify the correct Employer Direct code, in order to drive the appropriate workflow. When the user selects an insurance carrier in the Manage Policies window, an *Employer Direct* dropdown will display as shown in the following screenshot. This dropdown will only appear if one or more Employer Direct codes are associated to the insurance carrier. If there are no associated Employer Direct codes, then the dropdown will not be displayed.



TECHNOLOGIST WORKFLOW

FEATURE #14569 – DISPLAY INJECTION SIGNED DATE AND TIME STAMP ON THE NOTES/EXAM TIMES TAB

In some countries, contrast injections are performed by an individual other than the technologist. The individual performing the contrast injection is required to separately verify the patient’s identity and then sign off on the injection when it is complete. This workflow has been accommodated in eRAD RIS, but the time stamps were not previously included on the Notes / Exam Times tab. The information has now been added to that tab as displayed below.

Patient	Contacts / Demographics	Clinical	Order	Documentation	Exam Details	Billing Codes	Attachments	Notes / Exam Times	Rep
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Place billing on hold

Billing Notes

12-29-16 hilarys -

09-22-16 - Insurance is required

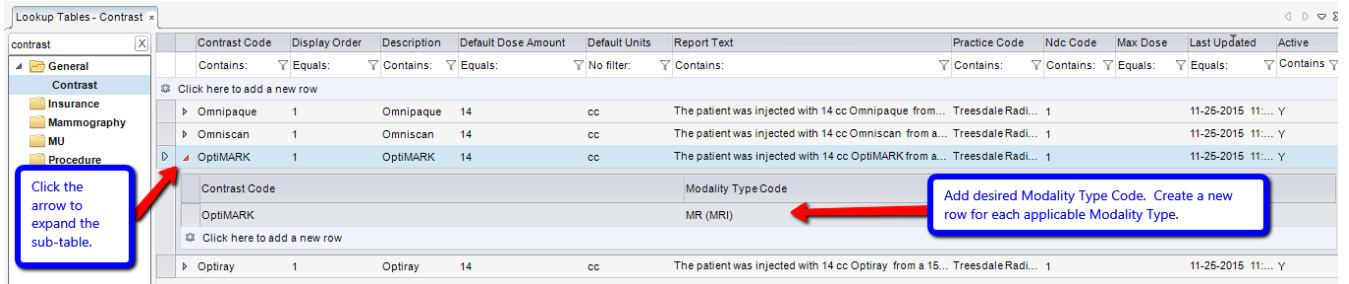
Exam Details

Scheduled time	* 08-22-2016 1:00 PM	Scheduled by	stewart. avelet, MD (902) 393-6377
Arrival time	08-22-2016 8:18 AM	Arrived by	stewart. avelet, MD (902) 393-6377
Arrival early/late	4 hours 42 minutes early	Primary tech	Admin, Darcy
Start time	08-22-2016 8:19 AM	ID verified by tech	08-22-2016 12:19 PM stewart. avelet, MD (902) 393-6377
Completed time	08-22-2016 8:19 AM	ID verified by injector	12-29-2016 8:57 PM Saltmarsh, Hilary
Start early/late	4 hours 41 minutes	Injection signed	12-29-2016 8:58 PM Saltmarsh, Hilary
Exam duration	0 minutes	Cancel reason	N/A
Accession #	1031149PE	Cancelled by	N/A
		Discontinue reason	N/A
		Edited by	N/A
		Signed by	stewart. avelet, MD (902) 393-6377

FEATURE #14567 – FILTER CONTRAST OPTIONS BY MODALITY TYPE

When a technologist enters contrast for an exam on the Exam Details tab, they were previously presented with a list of all of the Contrast options listed in the Contrast look-up table. Some contrast options will never be used in a given modality, so it is now possible to only present the contrast options that are relevant for the exam being performed, based on the Modality Type.

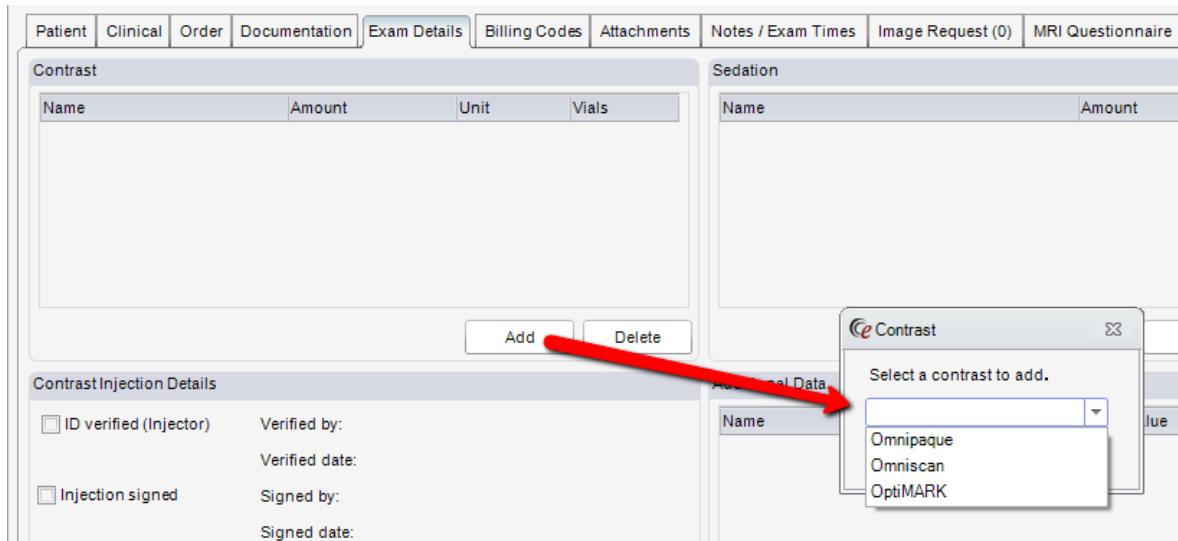
To configure the applicable Modality Types in the Contrast look-up table, click the arrow next to the Contrast to expand the sub-table.



The screenshot shows the 'Lookup Tables - Contrast' window. A table lists contrast options with columns: Contrast Code, Display Order, Description, Default Dose Amount, Default Units, Report Text, Practice Code, Ndc Code, Max Dose, Last Updated, and Active. The 'OptiMARK' row is expanded to show a sub-table with a 'Modality Type Code' dropdown menu. Two callout boxes provide instructions: one points to the expand arrow and another points to the dropdown menu.

Contrast Code	Display Order	Description	Default Dose Amount	Default Units	Report Text	Practice Code	Ndc Code	Max Dose	Last Updated	Active
OptiMARK	1	OptiMARK	14	cc	The patient was injected with 14 cc OptiMARK from a...	TreesdaleRadi...	1		11-25-2015 11:...	Y
					Modality Type Code					
OptiMARK					MR (MRI)					

Add each desired Modality Type on a new row by selecting the Modality Type Code from the dropdown list. The Contrast will now only display as an option when choosing contrast for exams in the associated Modality Types, making the technologist's selection more efficient and less prone to error.

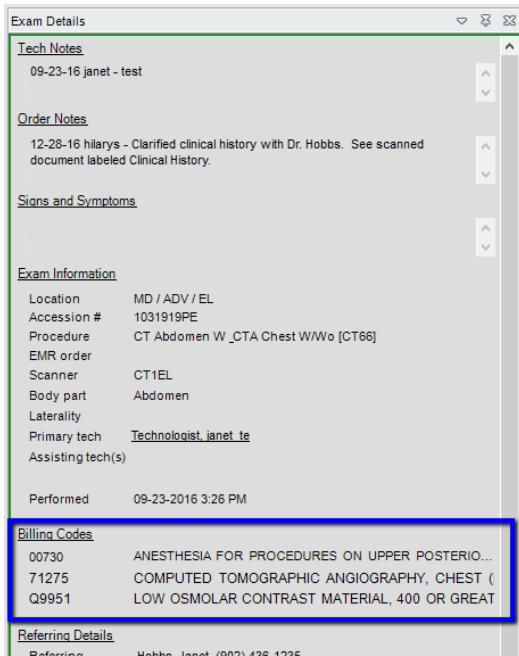


The screenshot shows the 'Exam Details' tab in the software. It features a 'Contrast' table with columns for Name, Amount, Unit, and Vials. Below it is the 'Contrast Injection Details' section with checkboxes for 'ID verified (Injector)', 'Injection signed', and fields for 'Verified by:', 'Verified date:', 'Signed by:', and 'Signed date:'. A red arrow points from the 'Add' button to a dropdown menu that lists 'Omnipaque', 'Omniscan', and 'OptiMARK'.

RADIOLOGIST WORKFLOW

FEATURE #14571 – ACTIVE BILLING CODES ADDED TO THE EXAM DETAILS PANEL

Customers have requested the ability for the radiologist to view the active Billing Codes from within the Reporting screen. The Exam Details data pane now has a section which lists the exam’s active billing codes. The information is Read Only and displays both the code and the description for each active billing code on a new line. If more than three billing codes are listed, a vertical scroll bar will appear so that the radiologist can scroll down to view additional codes. The width of the panel can be stretched to see longer descriptions if needed.



FEATURE #14144 – REPORT EDITOR, PACS SERVER, AND NUMBER OF PRIORS TO LOAD/CACHE ARE NOW CONFIGURABLE FOR A VARIETY OF CRITERIA

Radiologists may need the flexibility of using a different PACS server or report editor depending on the type of study they are reading or where it was performed. It is also often desirable to define a different number of priors to load or to cache depending on the type of study. In order to accommodate these needs, a new configuration editor has been created: *ReportingOptions*.

The configuration allows the administrator to optionally set the following values:

- PACS server
- Number of Priors to Load
- Number of Priors to Cache
- Reporting Editor

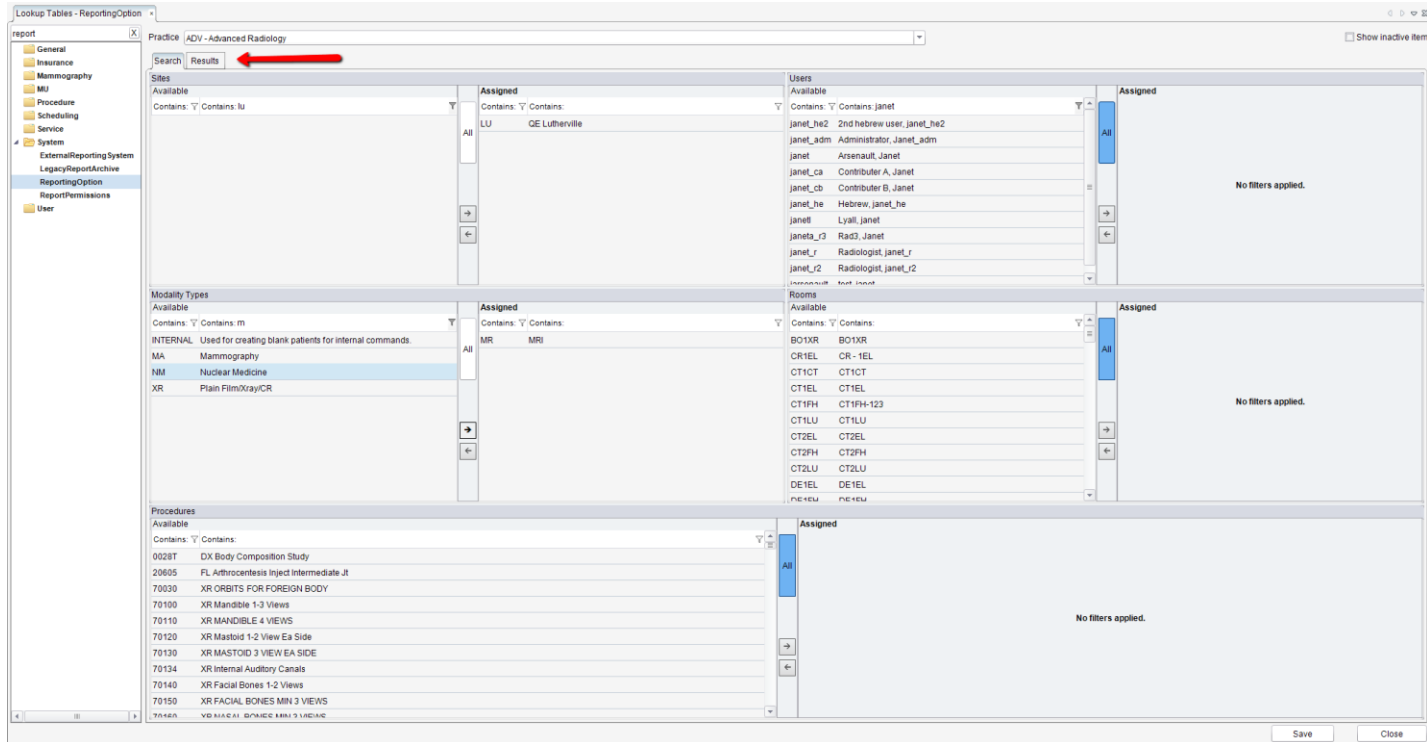
Based on these criteria:

- Practice
- Site
- Modality Type
- Modality
- Procedure Code
- User

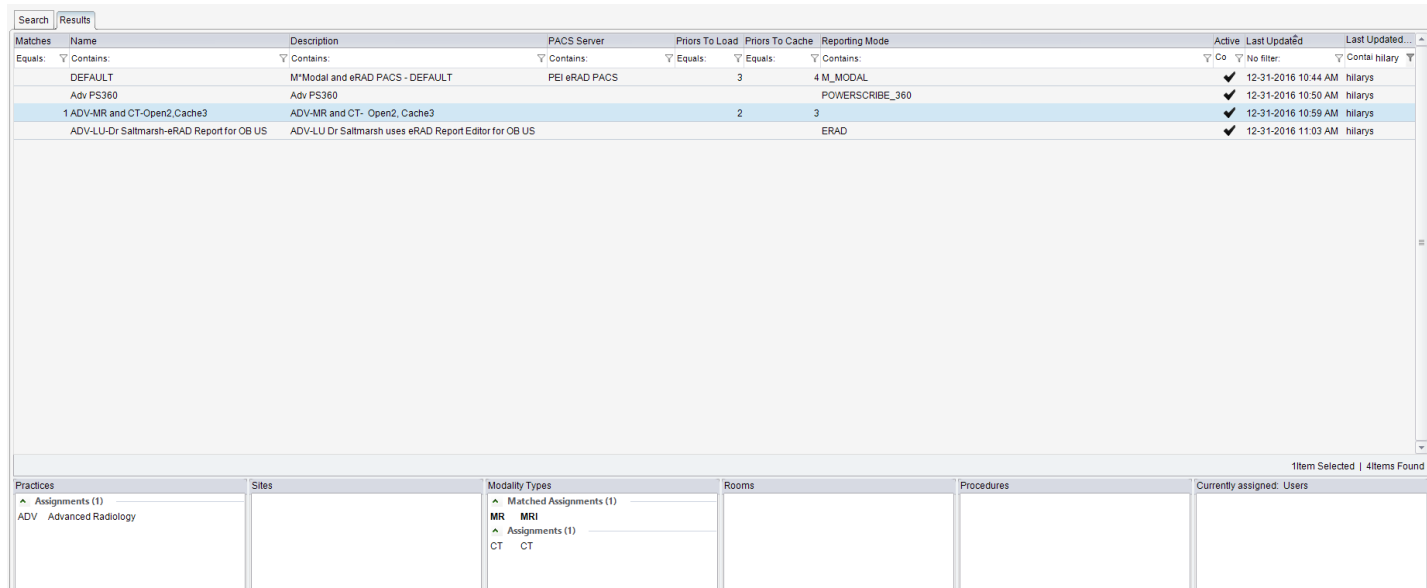
Based on the settings defined in the Reporting Options editor, the RIS will evaluate which PACS server and reporting editor to launch for each study as the radiologist moves through their Pending Dictation worklist. The number of priors to load and cache will automatically adjust as well, if the indicated PACS server supports caching. Automatically adjusting these factors according to the study will create a more efficient radiologist experience.

The Reporting Options look-up table editor is used to overlay more specific criteria on top of the existing general settings. These rules can specify a combination of PACS server, report editor and number of priors *and* the situations in which they should be used. The editor follows the same pattern as the Template/Macro editor, with a Search tab and a Results tab.

To view all of the settings that are applicable to the MRI modality type at the Lutherville site, on the Search tab select MRI and Lutherville on the Sites and Modality Types sections.



Then switch to the Results tab to see any matching rules.



Matches	Name	Description	PACS Server	Priors To Load	Priors To Cache	Reporting Mode	Active	Last Updated	Last Updated...
Equals	Contains	Contains	Contains	Equals	Equals	Contains	Co	No filter	Contal history
	DEFAULT	M*Modal and eRAD PACS - DEFAULT	PEI eRAD PACS	3	4	M_MODAL	✓	12-31-2016 10:44 AM	hilarys
	Adv PS360	Adv PS360				POWERSCRIBE_360	✓	12-31-2016 10:50 AM	hilarys
	1 ADV-MR and CT-Open2.Cache3	ADV-MR and CT- Open2_ Cache3		2	3		✓	12-31-2016 10:59 AM	hilarys
	ADV-LU-Dr Saltmarsh-eRAD Report for OB US	ADV-LU Dr Saltmarsh uses eRAD Report Editor for OB US				ERAD	✓	12-31-2016 11:03 AM	hilarys

1Item Selected | 4Items Found

Practices: Assignments (1)
ADV Advanced Radiology

Sites: (Empty)

Modality Types: Matched Assignments (1)
MR MRI
Assignments (1)
CT CT

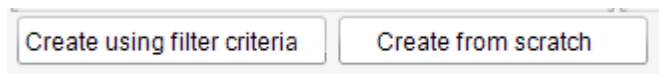
Rooms: (Empty)

Procedures: (Empty)

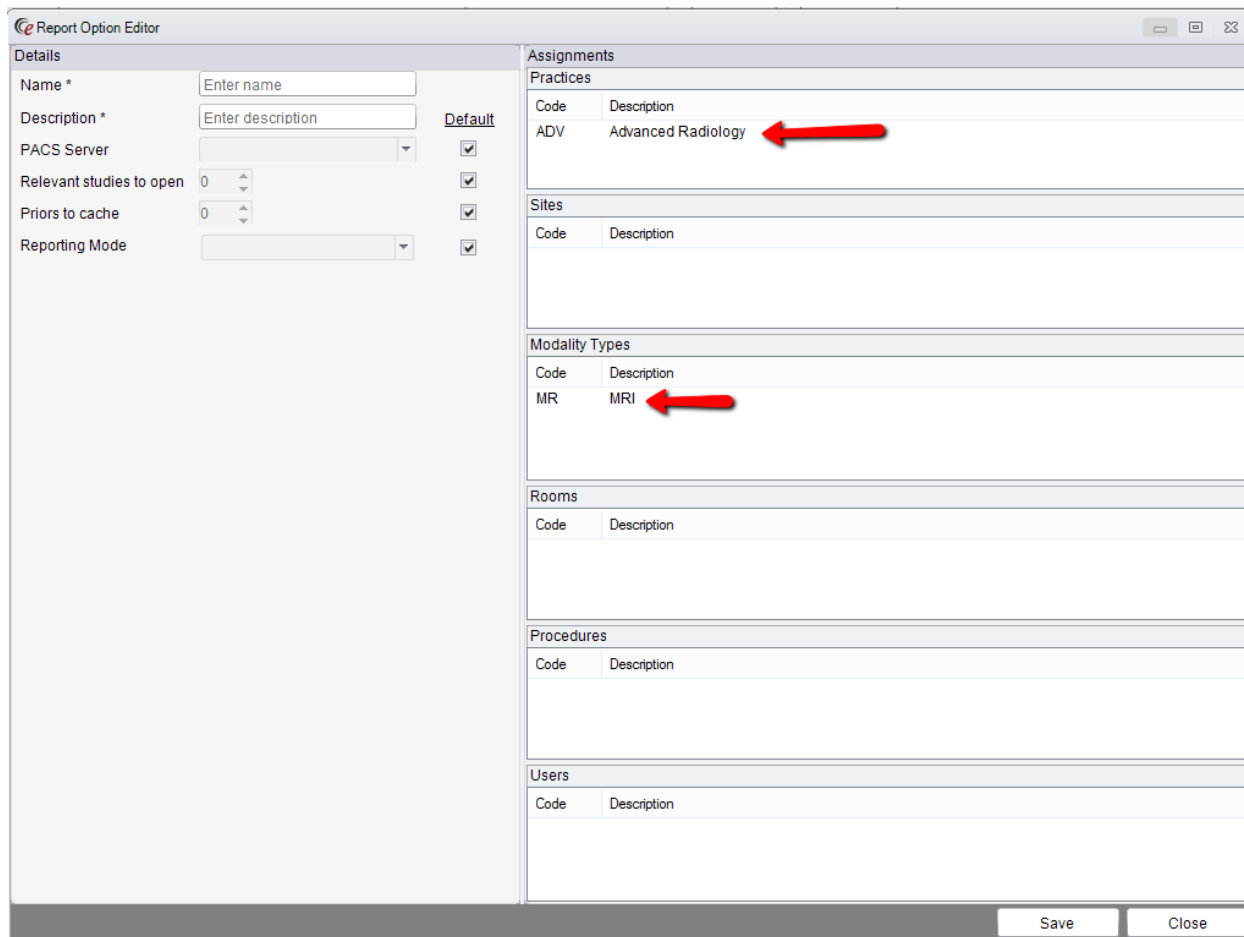
Currently assigned: Users

The four entries on the Results tab are either specific to MRI or do not have a Modality Type filter at all. Information about the rule can be seen in the columns and also in the criteria boxes at the bottom of the screen. For instance, the selected rule shows that 2 priors will load and 3 priors will cache for all sites at the Advanced practice when the modality type is MRI or CT.

To create a new rule, click one of the buttons at the bottom of the screen:



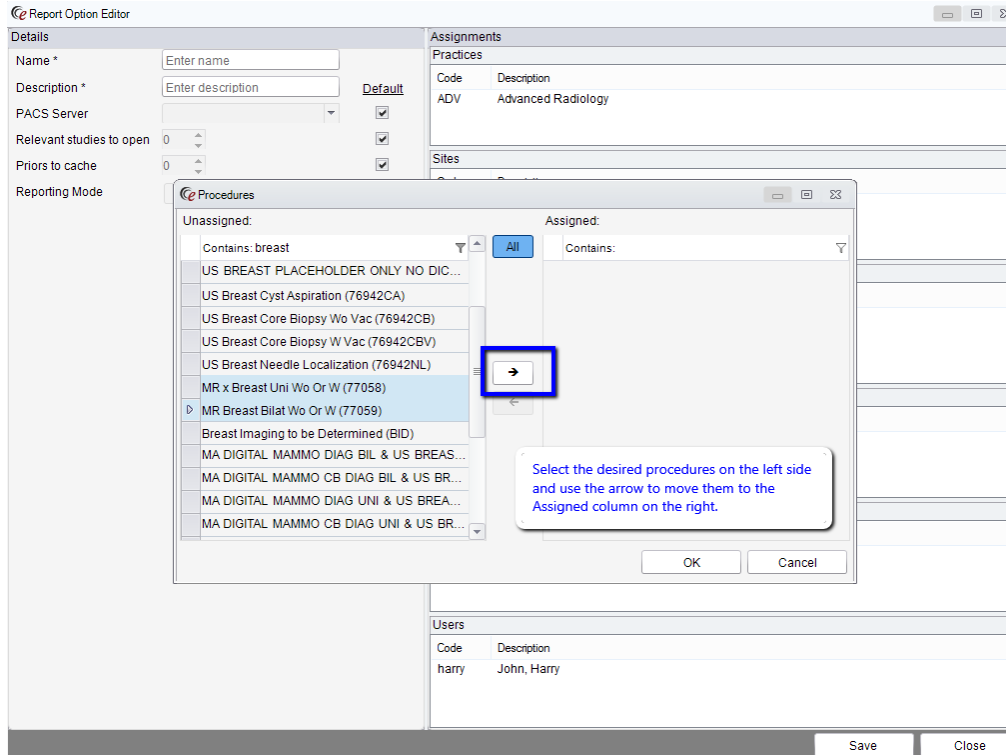
“Create using filter criteria” will automatically apply the criteria used on the Search tab to the new rule (e.g. MRI at the Advanced practice). “Create from scratch” will start without any criteria applied for the rule.



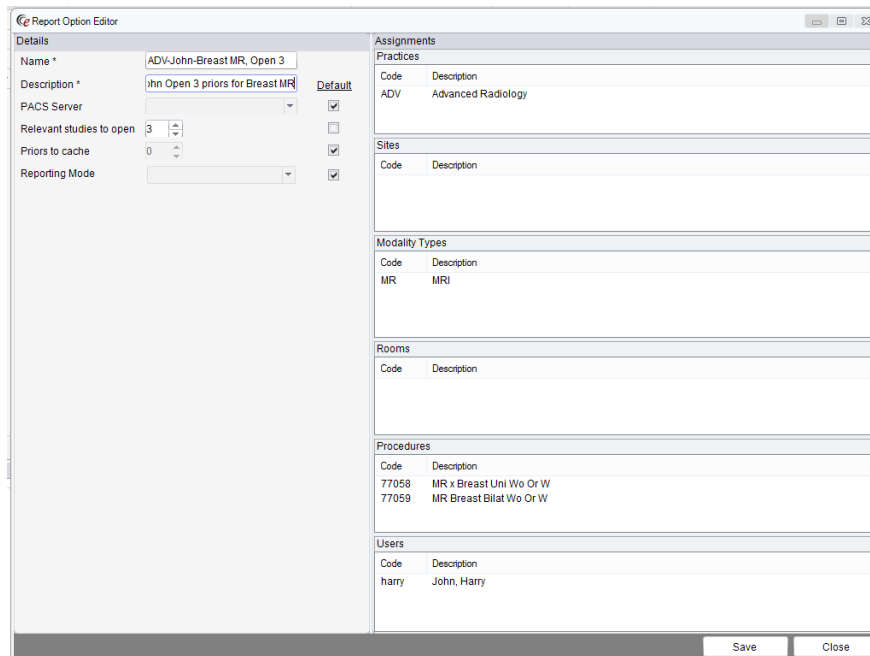
The above editor was opened with the “Create using filter criteria” option, so the Practice and Modality Types sections are prepopulated with Advanced and MRI. The next step is to give the new rule a Name and Description. In case it is not desirable to create a more detailed description, the description field will default to the Name text and can be updated to a full description when desired.

The PACS Server, Relevant studies to open, Priors to cache, and Reporting Mode start out with the Default box checked. To adjust any of the factors for the current rule, uncheck the box and enter the desired value. To create a rule for Dr. John to have 3 relevant priors open for MRI (different than the Practice-level rule to open 2 priors), set Relevant studies to open to 3 and add Dr. John to the Users box (right click the box to open the selection window).

To further define the rule to only apply for Breast MRI, select the desired procedures in the Procedures box.



When all of the criteria are entered for the rule, click Save to finalize.



The rule will now appear on the Results tab.

Matches	Name	Description	PACS Server	Priors To Load	Priors To Cache	Reporting Mode	Active	Last Updated	Last Updated...
Equals: ▾	Contains: ▾	Contains: ▾	Contains: ▾	Equals: ▾	Equals: ▾	Contains: ▾	Co ▾	No filter: ▾	Contal history ▾
	DEFAULT	M*Modal and eRAD PACS - DEFAULT	PEI eRAD PACS	3	4	M_MODAL	✓	12-31-2016 10:44 AM	hilarys
	Adv PS360	Adv PS360				POWERSCRIBE_360	✓	12-31-2016 10:50 AM	hilarys
	1 ADV-MR and CT-Open2,Cache3	ADV-MR and CT- Open2, Cache3		2	3		✓	12-31-2016 10:59 AM	hilarys
	ADV-LU-Dr Saltmarsh-eRAD Report for OB US	ADV-LU Dr Saltmarsh uses eRAD Report Editor for OB US				ERAD	✓	12-31-2016 11:03 AM	hilarys
	1 ADV-John-Breast MR, Open 3	ADV- Dr. John Open 3 priors for Breast MR		3			✓	12-31-2016 11:41 AM	hilarys

Practices	Sites	Modality Types	Rooms	Procedures	Currently assigned: Users
^ Assignments (1) ADV Advanced Radiology		^ Matched Assignments (1) MR MRI		^ Assignments (2) 77058 MR x Breast Uhi Wo Cr W 77059 MR Breast Bilat Wo Cr W	^ Assignments (1) hary John, Harry

Because the rule for Dr. John is more specific than the general rule for opening 2 priors for MRI, when Dr. John opens a Breast MRI procedure, eRAD RIS will automatically request that PACS opens 3 priors.

The same strategy can be applied to dynamically open a different PACS or reporting editor depending on the defined rules.

To use this Reporting Option look-up table editor, a user must belong to a User Group with Full access to the new Access String: *Config.LookupEditor.ReportingOption*.

DYNAMIC PACS

As the user moves through the Pending Dictation worklist, each study is evaluated and the proper PACS opened. If multiple dictation tabs are opened, the proper PACS viewer is opened for each one and any other PACS view sessions are hidden or closed, regardless of whether or not they are from the same type of PACS.

DYNAMIC REPORTING MODES

Up until now, when a user needed to switch reporting modes, for example, from M*Modal to PowerScribe360, they needed to change their user preference, save, and restart RIS. This feature will allow a user to move through a worklist which necessitates multiple types of reporting modes using Next workflow and the Reporting screen will display in the appropriate mode as they action and continue through the worklist.

ALLOWABLE REPORTING MODES BASED ON SYSTEM CONFIG AND ACCESS STRINGS

The modes that are allowed to open are those included in the system configuration setting

AllowedReportingIntegrationTypes, as long as the user has access to the mode based on the corresponding pre-existing access strings:

- *Config.AllowPowerScribeReportingIntegration*
- *Config.AllowMModalReportingIntegration*
- *Config.AllowEradReportingIntegration*
- *Config.AllowExternalReportingIntegration*

Note that if a reporting mode is turned off, or disallowed, any users that are still set up to use that mode as their primary mode will still have access to its corresponding editor. This allows users to complete existing cases and be switched over when they are ready and trained on the new mode.

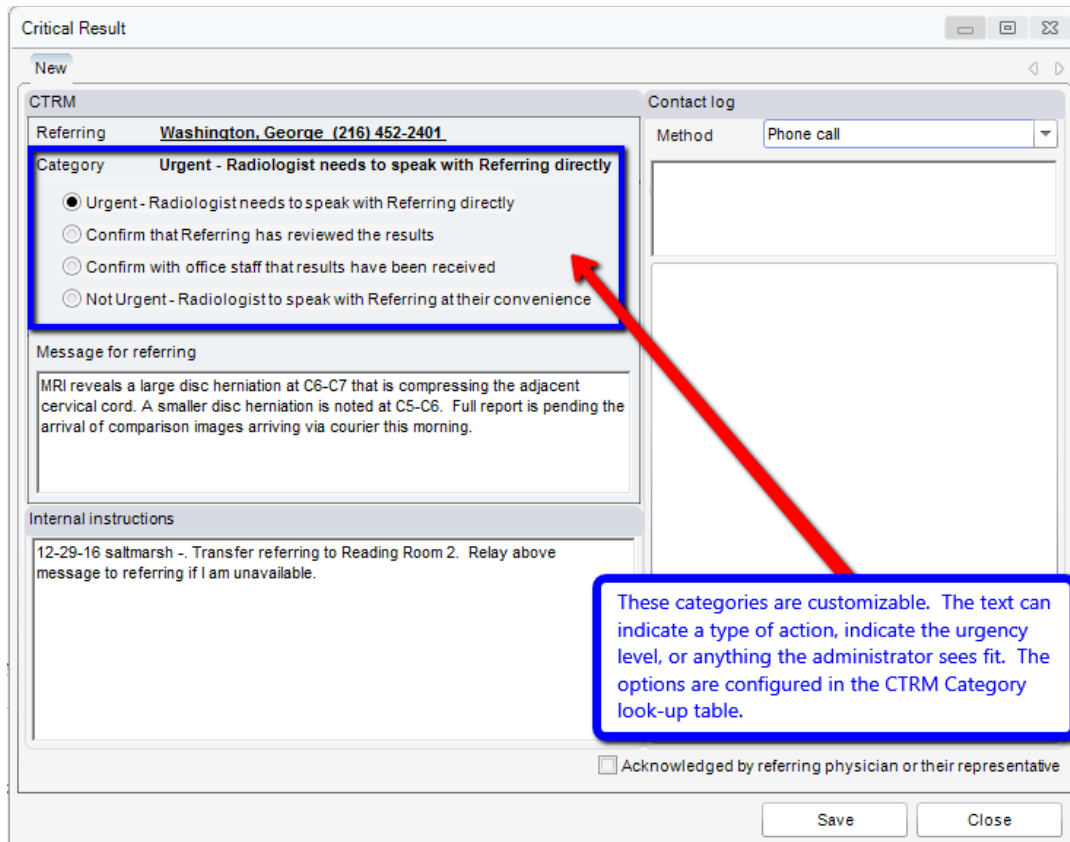
FEATURE #8547, 15123 – REDESIGN OF CRITICAL RESULT MANAGEMENT (PHASE 1)

In preparation for the addition of some advanced Critical Result Management options, including the ability to resolve critical notifications via RADAR Nudge and the Connect Provider Portal (to be incorporated in a future phase of development), some of the base functionality of CTRM workflow has been redesigned.

Critical Results are still initiated from the Reporting screen using the button in the bottom left corner of the screen, as indicated below.



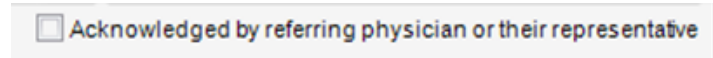
There have been a number of changes to the Critical Result entry screen, pictured below. One new option is the ability to define custom critical result categories. Use the new look-up table, *CTRM Category*, to create options to fit any workflow, whether they are longer descriptions defining an action plan for result communication or short descriptions of the level of urgency.



These categories are customizable. The text can indicate a type of action, indicate the urgency level, or anything the administrator sees fit. The options are configured in the CTRM Category look-up table.

There are also separate notes fields to include internal instructions for radiology staff or a message to be shared with the referring.

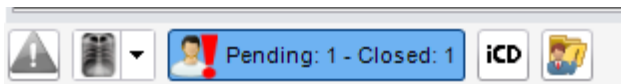
For recording contact attempts, there is a new Contact Log section and a checkbox to resolve the critical result notification when it is acknowledged by the referring physician or their representative (previously, this checkbox was labeled Resolve, which could be misleading).



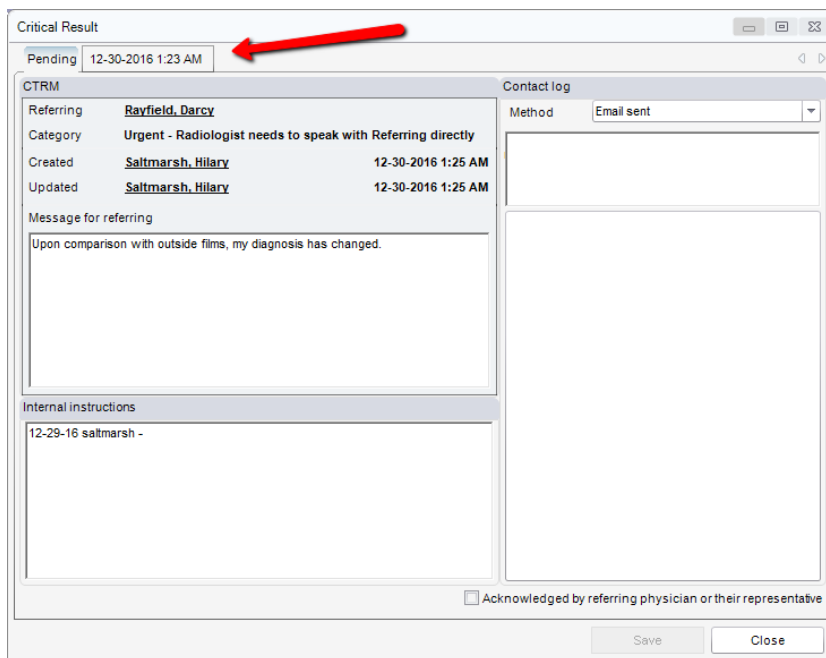
Attention was given to require as little input as possible when creating the Critical Result. The only required input is the selection of the Critical Result Category. The critical result will automatically be associated with the patient's referring physician, and all other fields are optional. It is possible for the radiologist to create the critical result and mark immediately mark it as acknowledged in the event that they make contact with the patient's provider at that time.

Another important difference is that the critical result will be saved as soon as the Save button is clicked, without a need for the report to be dictated or signed. Upon clicking Save, the critical result will immediately fall to the Critical Results WL and All Critical Results WL.

It is possible for more than one Critical Result to be created for the same study, however, only one **pending** critical result can exist at one time. If a critical result is acknowledged, but further developments require another critical result notification for that study, a new critical result can be created and all critical results will be separately recorded and viewable. Previous critical results are Read Only once they have been acknowledged. Example:



Critical Result button, displaying multiple critical results.

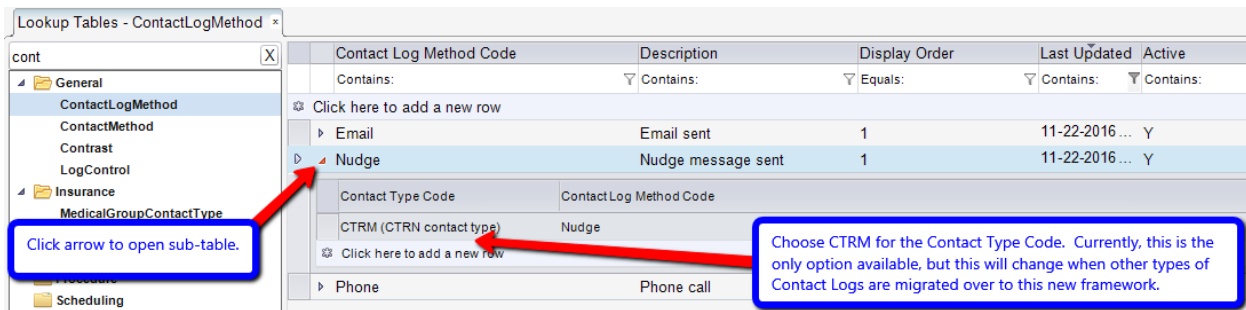


Critical Result entry screen with multiple tabs for the two critical results created for the study.

CONTACT LOG CHANGES FOR CTRM

The Contact Log in the CTRM redesign works similarly to the Contact Log in other areas of the application. However, some key differences exist because a new framework has been applied to the CTRM Contact Log which separates it from all other Contact Logs in RIS. Eventually, other types of Contact Logs will migrate to the new framework. The main goal of the change in the Contact Log pattern is to keep the CTRM options separate from other Contact Log options, thereby providing a shorter list of CTRM specific Contact Types to choose from, as well as segregating the messages themselves, so that all Contact Log entries viewed in the Critical Result workflow are applicable and not mixed in with contacts regarding scheduling or mammography follow-up, for example.

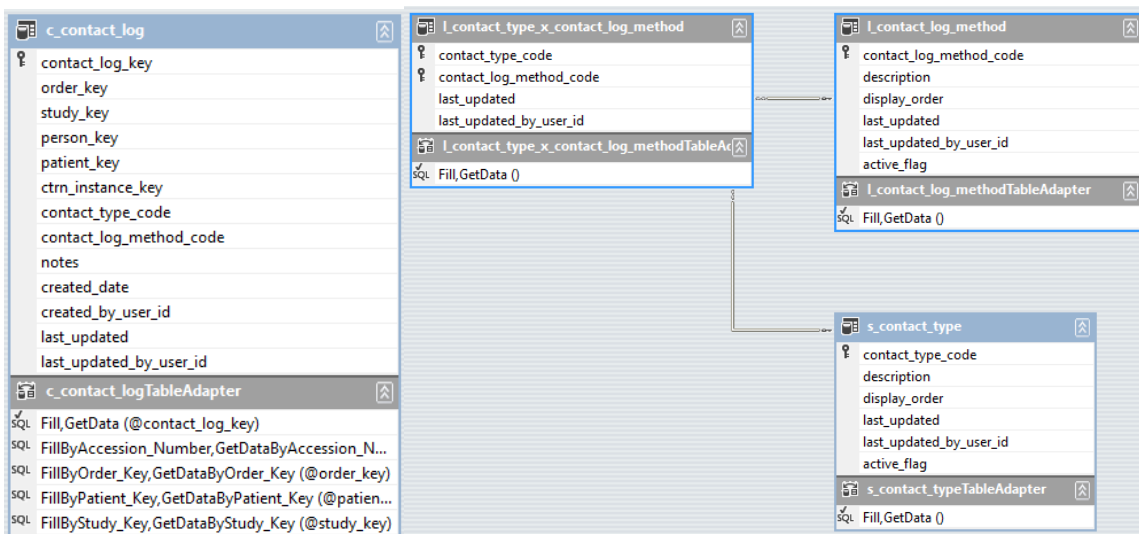
To do this, a new look-up table was created: *Contact Log Method*. Create entries for any Contact Log Methods that are pertinent to Critical Results workflow, then click the arrow to the left of each entry to open the sub-table.



Contact Log Method Code	Description	Display Order	Last Updated	Active
Click here to add a new row				
▶ Email	Email sent	1	11-22-2016 ...	Y
▶ Nudge	Nudge message sent	1	11-22-2016 ...	Y
Click here to add a new row				
Contact Type Code		Contact Log Method Code		
CTRM (CTRN contact type)		Nudge		
Click here to add a new row				
▶ Phone	Phone call			

In the sub-table, choose a Contact Type Code of CTRM, as described in the picture above.

Here is a look at the data structures:



```

classDiagram
    class c_contact_log {
        contact_log_key
        order_key
        study_key
        person_key
        patient_key
        ctrn_instance_key
        contact_type_code
        contact_log_method_code
        notes
        created_date
        created_by_user_id
        last_updated
        last_updated_by_user_id
    }
    class I_contact_type_x_contact_log_method {
        contact_type_code
        contact_log_method_code
        last_updated
        last_updated_by_user_id
    }
    class I_contact_log_method {
        contact_log_method_code
        description
        display_order
        last_updated
        last_updated_by_user_id
        active_flag
    }
    class s_contact_type {
        contact_type_code
        description
        display_order
        last_updated
        last_updated_by_user_id
        active_flag
    }
    c_contact_log --> I_contact_type_x_contact_log_method
    I_contact_type_x_contact_log_method --> I_contact_log_method
    I_contact_type_x_contact_log_method --> s_contact_type
  
```

CRITICAL RESULTS WL AND ALL CRITICAL RESULTS WL

There are now three different ways to access or monitor critical results via worklist. Under the Radiologist menu, it is possible to review outstanding critical results created by the logged in user on the Critical Results WL or to review all outstanding critical results (regardless of who initiated them) on the All Critical Results WL. Because the All Critical Results WL is likely monitored by administrative personnel, it is also accessible under the Administration menu.

There are some helpful columns to be aware of for managing these worklists:

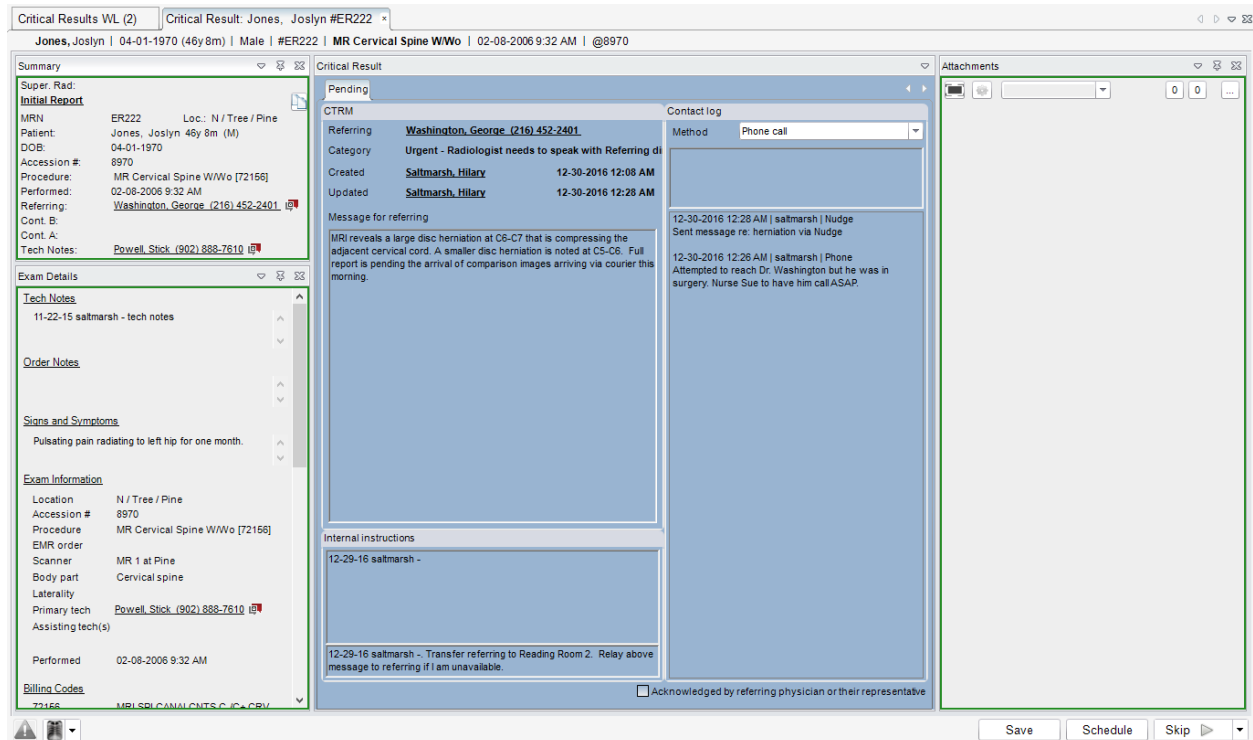
Last Contact Log Date	Last Contact Log Method	Last Contact Log Note	Contact Log Count
12-30-2016 12:28 AM	Nudge	Sent message re: herniation via Nudge	2

Elapsed Time Since Created
4h 1m
2h 44m

CRITICAL RESULTS SCREEN

From any of these worklists, clicking the *Edit* button opens a new Critical Result screen which allows the user to edit the notes, record contact attempts, and mark the critical result as Acknowledged.

Modeled off of the Reporting screen, this screen has a number of tool panels which can be arranged according to preference and saved as a layout with a type of "Critical Results." Even administrators without reporting permissions have the ability to create these layouts for managing the All Critical Results WL from the Administration menu.



If a report is available for the study, it will be displayed as an HTML version (like the Report Nugget) in a panel.

Note that in this screen, there is not a separate Save button within the Critical Result tool panel (unlike the tool panel in the Reporting screen). To save changes in this screen, the parent screen must be saved by clicking the Save button in the bottom right corner. In the event that an urgent follow-up exam is required, a Schedule button is provided from this screen as well. In an effort to save time, the originating study's information will be cloned for the new Schedule Order event, which can be updated as needed.

The Skip button works in the same way as in the Reporting screen, allowing the user to move to the next item on the Critical Results WL.

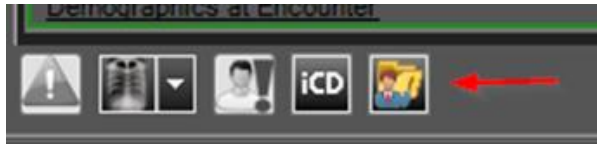
HOW TO ENABLE THE FEATURE

- 1) Add some CTRM Categories in the look-up table.
- 2) Add some Contact Log Methods in the look-up table.
 - a) Associate these to the "CTRM" Contact Log Type by clicking the arrow to expand the sub-table.
- 3) Provide any pertinent User Groups with the required access strings:
 - a) WL.CriticalResults --Provides access to the All Critical Results WL from "Administration" menu.
 - b) WL.Rad.CriticalResultsAll --Provides access to **All** Critical Results WL from "Radiologist" menu.
 - c) WL.Rad.MyCriticalResults --Provides access to the Critical Results WL from "Radiologist" menu to view critical results created by the logged in user.
 - d) Config.LookupEditor.CTRMCategory --Provides access to the CTRM Category look-up editor.
 - e) Config.LookupEditor.ContactLogMethod --Provides access to the Contact Log Method look-up editor.

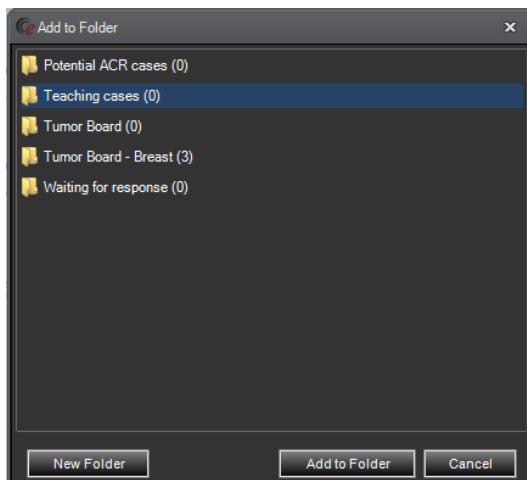
FEATURE #14502, 3723 – FOLDER STRUCTURE FOR COLLECTING CASES OF INTEREST, TEACHING FILES, AND OTHER REFERENCE NEEDS

Radiologists participating in Tumor Boards or presenting teaching cases have asked for a method to store studies in a folder structure by category for future reference. Radiologists can now create folders by category and select studies to add to those folders without leaving normal workflow.

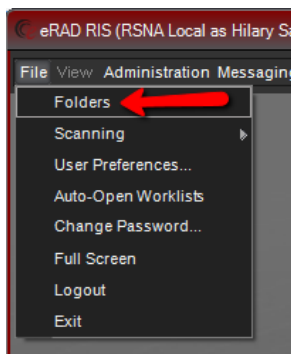
From the Reporting screen, a radiologist can add the current study to a folder by clicking the button below.



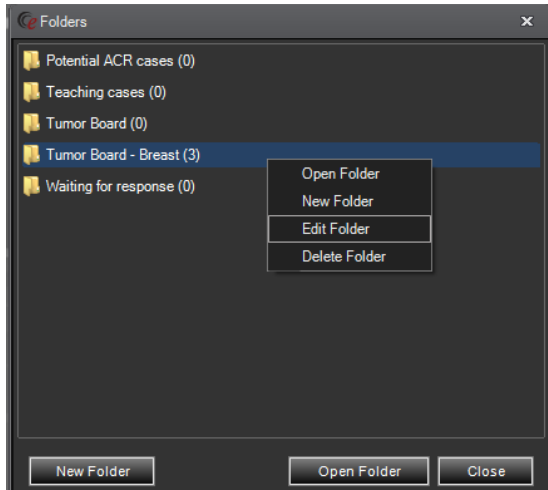
This button will launch a window for the radiologist to select one of their existing folders or create a new folder.



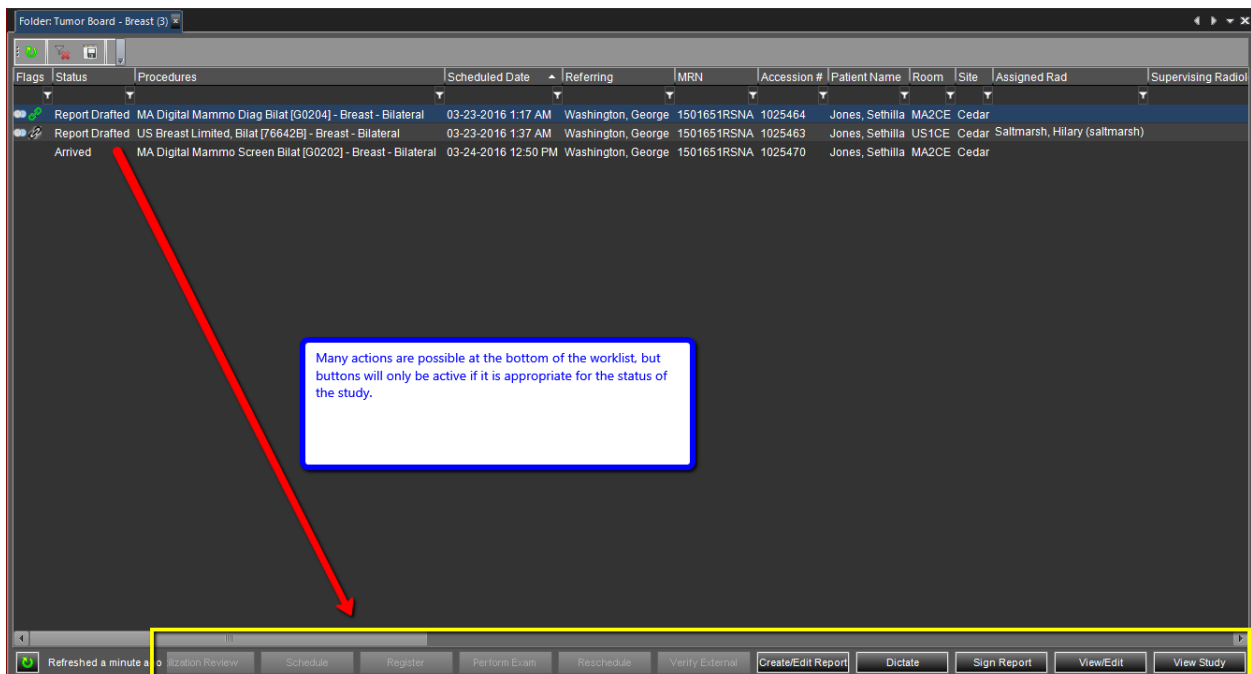
If a user wishes to view the contents of a folder, or simply wants to manage their folders, this can be done by clicking the File menu, then selecting Folders.



The resulting pop-up window will allow the user to open any folder with studies associated, or they can right click for additional options, such as Delete Folder or Edit Folder, which allows editing of the Folder name.



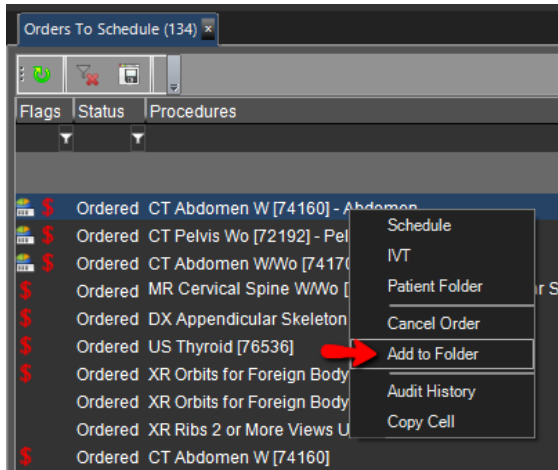
When a folder is opened, any studies that were assigned to that folder will be listed on a worklist in a new tab. The tab name will be “Folder: [Name of Folder].”



A wide variety of actions are possible via the buttons at the bottom of the worklist or the right click menu options. Depending on the status of the exam and the user’s permissions, only applicable buttons or menu items will be available.

Folders aren’t just for radiologists. Any user can create folders that are useful for their particular needs, such as a lead technologist looking for images with ideal positioning for ACR testing or a scheduling manager gathering a list of examples to use for a staff training session. To add a study (or an order) to a folder from outside of the

Reporting screen, simply right click on an item from a worklist or from the Patient Folder and look for a context menu option called “Add to Folder.” Almost all worklists will have this option.



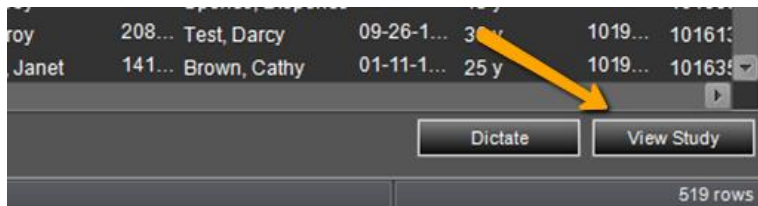
To remove an item from a folder, simply right click the item from the Folder worklist and select the option Remove from Folder.

To grant access to this feature, a user must belong to a User Group with Full access to the new Access String, *WL.Folders*.

At this time, the folders are personal folders only, but the ability to create shared folders or sub-folders will be added in the near future. There is not a limit to the number of folder categories a user can create.

FEATURE #14775 – READ ONLY REPORTING SCREEN FOR RADIOLOGISTS AND OTHER STAFF

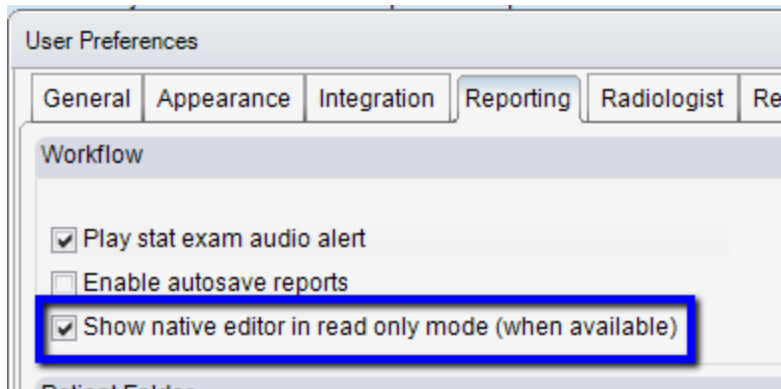
Radiologists and other staff members require an option to open reports in a Reporting screen mode without automatically creating an addendum or launching the full dictation process. This can now be accomplished via a new button called **View Study** which will bypass the create addendum prompt and cleanly open the reporting screen (read only) with PACS images.



The new *View Study* button and context menu have been added to all worklists where the “Dictate” button existed. This new button will open the dictate screen in a read only mode, without prompting the user.

A new *Read Only Report Viewer* has been created which will show the report as it would be shown in the report data nugget: it doesn’t show an audio control and it will display instead of the native report editor. This viewer will be shown by default all the time for every reporting mode. For example, if an exam was dictated in PowerScribe and the report is opened with View Study, the report will be displayed in a panel in the View Study screen, as opposed to launching PowerScribe.

The user can change a user preference called *Show native editor in read only mode (when available)* which is available on the Reporting tab in the User Preference screen.



When this is checked, the native editor will be used in read only mode and will have the audio control available. If the user is not allowed to use the native editor due to access string or system configuration settings, then the *Read Only Report Viewer* will be shown in its place.

The button and context menu item will be enabled on all studies from Exam Done forward, as long as there is an interpretation on the study. There is a feature logged to expand this functionality.

In order to access the View Study option, a user must belong to a User Group with an access level of Full for the new access string *Clinical.ViewStudy*.

eRAD RIS (Development as Denis Doiron [denis])

File View Administration Messaging Scheduling Front Desk Technologist R: MD/ADV

All Pending Dictation WL (519) View Study: TEST, Template #12233

Test, Template | 06-09-1969 (47y 4m) | Male | #12233 | XR Chest Min 4 Views | 08-30-2012 15:52 | @1011419

M*Modal Batch Report

Unsigned

EXAM

Testing number format

Test A Separate every 1000 by comma

Start of sentence: Numeric

Number format: Numeric

Single space

January 2nd, 2010 +

sdf

TECHNIQUE

HISTORY

testing

Summary

Initial Report	Assigned	STAT
MRN:	12233	Loc.: MD / ADV / EL
Patient:	Test, Template 47y 4m (M)	
DOB:	06-09-1969	
Accession #:	1011419	
Procedure:	XR Chest Min 4 Views [71030]	
Performed:	08-30-2012 15:52	
Referring:	Aiken, Darcy J	
Dictated:		
Tech Notes:	MacInnis, Parker	
06-29-16 denis - test tes dfgdf gdf gdfg This better be the correct one		

Sign Skip

Saved: Dictating: WAITE, andrew #4542 Pending Saves: 0 (unassigned) Dictated: 1 - Signed: 1

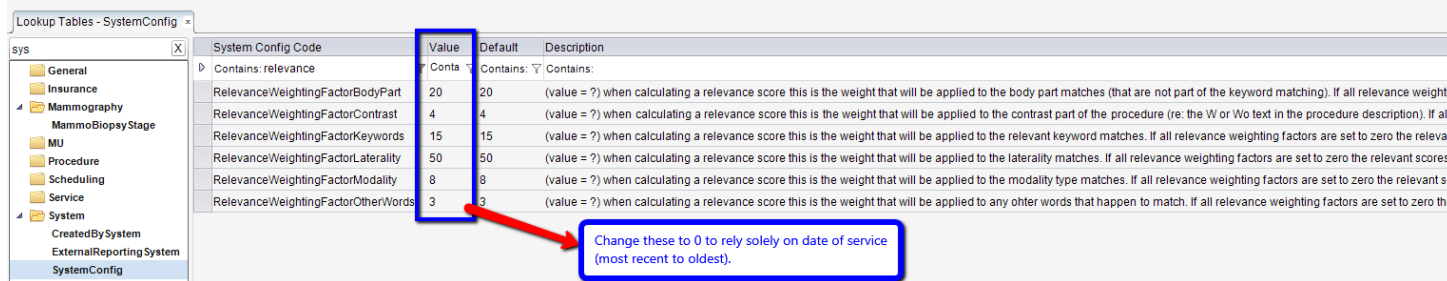
FEATURE #10370 – SUPPORT FOR REVERSE CHRONOLOGICAL IMAGE CACHING AND LOADING

Previously, relevancy rules discounted the importance of chronology when scoring prior studies to display the most relevant priors regardless of when they were performed. Radiologists have requested that caching be based on relevancy + chronology to ensure that the most recent exams are cached first.

To accomplish this, it is now possible to adjust how various factors are weighted when calculating relevancy. There are six relevancy factors listed in the System Configuration table:

- (1) *RelevanceWeightingFactorBodyPart*
- (2) *RelevanceWeightingFactorContrast*
- (3) *RelevanceWeightingFactorKeywords*
- (4) *RelevanceWeightingFactorLaterality*
- (5) *RelevanceWeightingFactorModality*
- (6) *RelevanceWeightingFactorOtherWords*

Set each weighting factor to zero to rely solely on the date of service, from the most recent study to the oldest.



System Config Code	Value	Default	Description
RelevanceWeightingFactorBodyPart	20	20	(value = ?) when calculating a relevance score this is the weight that will be applied to the body part matches (that are not part of the keyword matching). If all relevance weighting factors are set to zero the relevant scores are based on the date of service.
RelevanceWeightingFactorContrast	4	4	(value = ?) when calculating a relevance score this is the weight that will be applied to the contrast part of the procedure (re: the W or Wo text in the procedure description). If all relevance weighting factors are set to zero the relevant scores are based on the date of service.
RelevanceWeightingFactorKeywords	15	15	(value = ?) when calculating a relevance score this is the weight that will be applied to the relevant keyword matches. If all relevance weighting factors are set to zero the relevant scores are based on the date of service.
RelevanceWeightingFactorLaterality	50	50	(value = ?) when calculating a relevance score this is the weight that will be applied to the laterality matches. If all relevance weighting factors are set to zero the relevant scores are based on the date of service.
RelevanceWeightingFactorModality	8	8	(value = ?) when calculating a relevance score this is the weight that will be applied to the modality type matches. If all relevance weighting factors are set to zero the relevant scores are based on the date of service.
RelevanceWeightingFactorOtherWords	3	3	(value = ?) when calculating a relevance score this is the weight that will be applied to any other words that happen to match. If all relevance weighting factors are set to zero the relevant scores are based on the date of service.

Change these to 0 to rely solely on date of service (most recent to oldest).

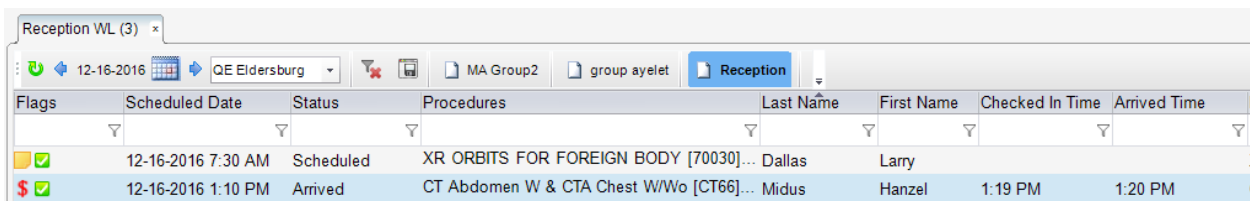
Sometimes, setting the Modality and OtherWords factors to zero will make a notable difference, while leaving the other relevancy settings intact.

At this time, these settings must be changed for the entire system and do not allow for individual user preferences. To leave Relevancy as it has been in the past, no changes are necessary.

GENERAL WORKLIST ENHANCEMENTS

FEATURE #14634 – NEW COLUMNS FOR RECEPTION AND TECHNOLOGIST WORKLISTS: CHECKED IN TIME AND ARRIVED TIME

When technologists share patients between rooms or scheduled patients arrive early or late for their appointments, it can be helpful to know the times the patient was marked as Checked In or Arrived. New columns for *Checked In Time* and *Arrived Time* have been added to the Reception and Technologist worklists. These columns can also be helpful for identifying if an unusually long amount of time has passed since a patient was marked as Checking In but has not yet been Arrived, which can indicate that the patient may need assistance with registration questions or that a step was missed in the Registration process.



Flags	Scheduled Date	Status	Procedures	Last Name	First Name	Checked In Time	Arrived Time
🟡	12-16-2016 7:30 AM	Scheduled	XR ORBITS FOR FOREIGN BODY [70030]...	Dallas	Larry		
🟢	12-16-2016 1:10 PM	Arrived	CT Abdomen W & CTA Chest W/Wo [CT66]...	Midus	Hanzel	1:19 PM	1:20 PM

FEATURE #14541, 14572, 14808 – NEW COLUMNS ADDED TO SEVERAL RADIOLOGIST WORKLISTS

When radiologists receive calls from providers wishing to discuss a patient's results, they often utilize worklists to locate the study. Providers commonly have the patient's date of birth handy and radiologists indicated that they would like to see this information on the worklists in order to quickly confirm that they are selecting the correct patient. A DOB column has therefore been added to the following worklists that are commonly used for this purpose:

- Dictated by Date WL
- All Dictated WL
- Finding Follow-up WL

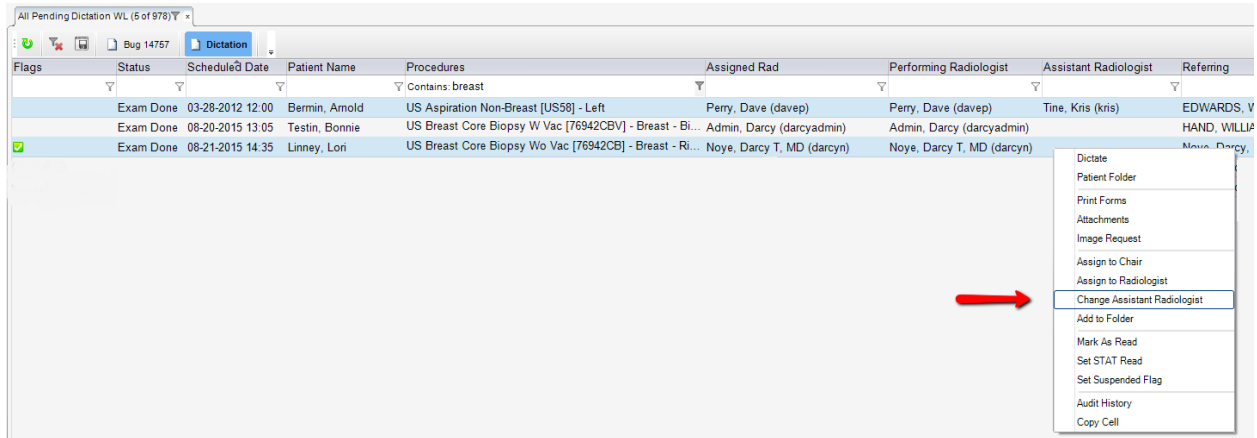
Additionally, columns to indicate the *Performing Radiologist* and the *Assistant Radiologist* have been added to the All Pending Dictation and Pending Dictation worklists.

FEATURE #7091 – IVT OPTION ADDED TO CONTEXT MENU ON ORDERS TO SCHEDULE WL

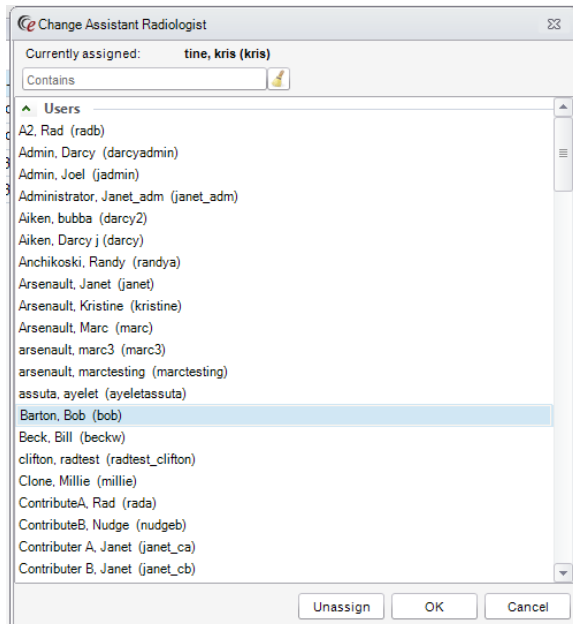
Schedulers sometimes need to launch the IVT workflow directly from the Orders to Schedule worklist. It is now possible to right click a row on the Orders to Schedule worklist and select *IVT*.

FEATURE #14813 – ABILITY TO SET THE ASSISTANT RADIOLOGIST VIA CONTEXT MENU FROM PENDING DICTATION AND ALL PENDING DICTATION WORKLISTS

Some users need to multi-select studies from the Pending Dictation WL or All Pending Dictation WL and set the Assistant Radiologist. It is now possible to right click a row on these worklists and select *Change Assistant Radiologist*. Multi-select can be accomplished by holding the CTRL key, selecting the desired rows, and then right clicking any highlighted row to select *Change Assistant Radiologist*.



A new window will open to allow the selection of the Assistant Radiologist. It functions in the same way as the Assign Radiologist window. A radiologist can be selected from the list or the filter can be used to search for a radiologist. Click the Unassign button to clear the Assistant Radiologist without replacing with a new name.



In order to access the Change Assistant Radiologist in the context menu, users must belong to a User Group with Full access to the new access string: *Clinical.ChangeAssistantRadiologist*.

DOCUMENT MANAGEMENT: INBOUND DOCUMENT PROCESS (INBOUND FAXING SUPPORT)

FEATURE #7395 – RECEIVE AND PROCESS INBOUND DOCUMENTS (SUCH AS FAXES) VIA RIS

There is a desire to streamline the process of receiving sensitive documents, such as referrals or clinical documentation, and matching them with the appropriate patient and order. eRAD RIS's new Inbound Document module will allow for the elimination of paper faxes and the frustrations caused when an important document is not easily available from anywhere in your organization. Patient satisfaction, scheduling hold times, and appointment turnaround time will benefit from minimizing the time spent physically scanning in faxed documentation or searching for a referral that could have been faxed to a number of physical fax machines.

Even if your organization already uses an external electronic fax system, the efficiencies gained by a streamlined process of associating the faxes to the correct patient/order in RIS and the option of immediately launching the corresponding task that is prompted by the incoming document (such as scheduling an appointment) make this new RIS feature a step towards further gains in productivity.

In order to display electronic faxes and other incoming documents in eRAD RIS, a new screen called **Attach Inbound Document** was created. The new screen is accessible from the Administration menu and consists of the inbound document worklist, a document viewer, and some controls to search for patients and associate inbound documents to a patient, order or exam.

These 3 main areas of the Attach Inbound Document screen are displayed in the image below: (1) the Inbound Document WL, (2) the Inbound Document Actions panel, and (3) the Document Viewer. The three panels can be positioned separately, allowing the user to select their preferred layout for the information presented.

The screenshot displays the eRAD interface with three numbered callouts:

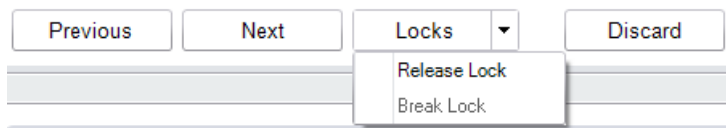
- Area 1:** The 'Inbound Document WL (7)' panel, which is a table listing incoming documents. The table has columns for 'Age in Hours', 'Date Received', 'Site', 'Practice', 'Document Type', and 'Locked By'. The first row shows a document received at 10:28-2016 12:11 AM, associated with the 'Saltmarsh, Hilary (saltmarsh)' practice.
- Area 2:** The 'Patient Details' panel, showing information for 'Rhonda O'Neil' with ID #250000005, born 01-04-1970, at 9 Hampton Drive. Below this is a 'Patient History' table with columns for 'Flags', 'Nuggets', 'Status', 'Procedures', 'Scheduled Date', 'Referring', 'MRN', and 'Accession #'. It lists various medical procedures such as 'CT Head W & Sinus W [CT22] - Head' and 'XR Orbits for Foreign Body [70030] - Head'.
- Area 3:** The 'Document Viewer' panel, displaying an 'MRI Requisition' form from 'Treedale Radiology'. The form includes patient details (Last Name: O'Neil, First Name: Rhonda), address (9 Hampton Dr., Oak Brook, IL 60451-7800), and a 'PHYSICIAN DETAILS' section with the name 'James Madison' and a signature.

SECTION #1 - INBOUND DOCUMENT WL PANEL

The Inbound Document WL (area #1) is a panel that can be positioned inside the main RIS window. Each fax that is routed to a specific inbound fax folder will generate a row on this worklist. There is a column to show the age in hours of the selected document (i.e. how many hours it has been since the fax was received), the site and practice (if any) to which the document is associated, an indication of the document type, if known, and a column that identifies the user who has the current document locked.

The Inbound Document service uses the settings on the fax server to determine the practice, site, and document type settings for a fax (e.g. a fax routed to the TREE folder will be associated with the Treedale Radiology practice, and a fax saved in the TREE/MP folder will be associated with the Treedale Radiology practice and Mapleton site). If a specific fax device is configured on the fax server for faxes designated to a particular department or function, these incoming documents can be saved to a separate folder which can set the value of the Document Type column accordingly. For example, a dedicated fax for a consolidated PET/CT scheduling department that covers three sites in a geographical area could be configured, which would have a Document Type of PET/CT. These settings allow users to filter the Inbound Document WL to see particular types of faxes.

There are several buttons in the worklist panel to assist in processing the documents on the worklist:



- **Previous** – Moves upwards on the worklist towards the older documents. If the previous document is locked by another user, it will be skipped and other documents will be attempted until one is found that is not locked. When the screen initially loads, RIS will attempt to open the oldest document. Clicking the previous button when the oldest document is already loaded will make the screen cycle to the other end of the worklist and attempt to load the newest document.
- **Next** – Moves downwards on the worklist towards the newer documents. If the next document on the worklist is locked by another user, it will be skipped and other documents will be attempted until one is found that is not locked. Clicking next when the most recent document is loaded will make the screen cycle to the other end of the worklist and attempt to load the oldest document.
- **Locks** – Dropdown button containing two options: Release lock and Break lock. When a document is opened, a lock is granted and will be displayed to other users in the “Locked By” column on the worklist. If a user has a lock, they can release it by selecting a different row on the worklist, by closing the screen, or by clicking “Locks -> Release lock.”
 - The *Release lock* button will clear the lock from the database so the document can be processed by another user. Additionally, the document will disappear from the Document Viewer portion of the screen and the “Locked by” column will be cleared.
 - The *Break lock* button is used to release a lock in the event that a lock is held by another user who is no longer at their computer (e.g. they left for lunch without closing the Attach Inbound Document screen and still hold a lock on one of the documents).
- **Discard** – Some documents will not be processed and attached to a patient record, such as unsolicited advertising or faxes that are illegible. The discard button will delete the document after prompting the user to specify one of the reasons that are stored in the configurable *DocumentDeleteReason* look-up table. The discard button is disabled if the user clicks on a row that is locked by another user.

SECTION #2 - INBOUND DOCUMENT ACTIONS PANEL

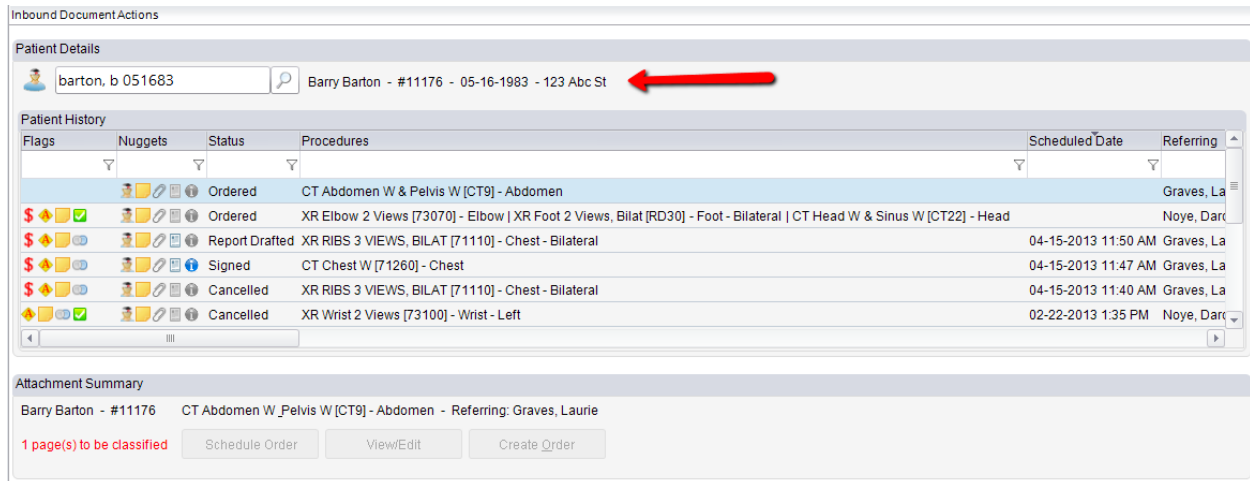
The Inbound Document Actions panel is where the processing of the selected document occurs. It has two sections: a *Patient Details* section to search for a patient and view the orders and exams in their Patient Folder *and* an *Attachment Summary* section which displays a summary of how the document will be processed given the patient and order/exam selected, as well as the Action buttons. The Action panel pictured below shows the initial state of the screen *before* a patient is selected and before the user has classified any of the document pages.



The screenshot shows the 'Inbound Document Actions' window. It is divided into two main sections: 'Patient Details' and 'Attachment Summary'. The 'Patient Details' section contains a search bar with a magnifying glass icon and a dropdown menu. The 'Attachment Summary' section displays the text 'No patient selected' in red. Below this text are three buttons: 'Schedule Order', 'View/Edit', and 'Create Order'.

Patient Search:

The patient search area contains search controls that are designed to appear similar to the Quick Search box in the upper right corner of RIS. The user can enter name details and optionally a birth date to perform a search, or they can search with #MRN or \$AuthNumber. Once the search criteria have been typed in the box, the user can press enter or click the magnifying glass to launch the search and a pop-up window will display the search results. The user can then double click the most appropriate result to make their selection or choose “New Patient.”



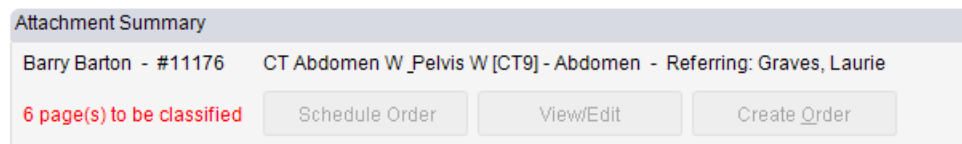
In the screen capture above, the user performed a search for “barton, b 051683” to search for patients with last name Barton, first initial B, and a date of birth of May 16, 1983. In the search results window, the user then double clicked one of the patient search results to select the patient who matches the document to be processed. To the right of the search box, a patient summary will display the patient’s name, MRN, date of birth, and street address after the selection has been made.

Patient History:

After a patient is selected, all of the patient’s exams and unscheduled orders are displayed. The user will examine the selected document and then choose the applicable order or exam in the patient history section to which the document should be attached by single clicking the row. The selected row will be highlighted in blue. To unselect a row, either single click on a different order or exam in the history section, or click into the white filter row to deselect all rows. It is not a requirement to choose an order/exam in the Patient History section, as the document may be for a new exam. Selecting an order or exam in the history section will update the Attachment Summary section described below.

Attachment Summary:

The attachment summary area provides information about what has been done to the current document and what actions still need to be taken.



There are two lines of information: the top line indicates the patient and the order or exam that was selected in the patient history (if applicable). The top line will initially show a message in a red font that indicates “No patient selected.” After a patient is selected, the top line will use a black font that indicates the patient’s name and MRN,

as well as the procedure and referring physician information for the currently selected item on the patient history grid. If the user performs a patient search and clicks the New Patient button, this label will indicate “New patient” in a black colored font.

The last line in the attachment summary uses a red colored font to indicate the number of pages that remain to be classified. This action takes place in the Document Viewer, described in the next section. Once complete, a black font will indicate that “all pages have been classified.” When the user sees that no red font appears in the summary, they can move forward by double clicking a row on the worklist or selecting an action button which will now be available.

Action Buttons:

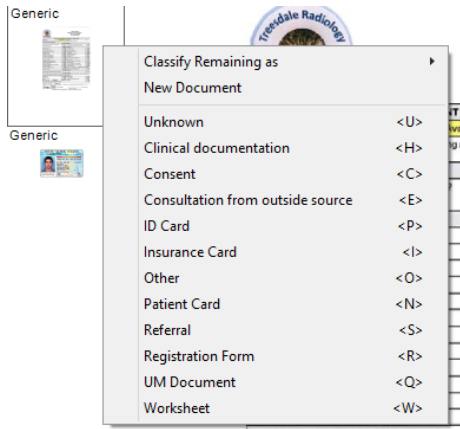
Action buttons become enabled once all of the pages have been classified in the Document Viewer section. Only buttons that are relevant to the selected row in the Patient History will be active.

- **Schedule Order** – If an exam in Ordered status is selected in the Patient History section, this button will be available. Clicking this button will launch the selected order to be scheduled and the document will be added to the Attachments for that order. The user can either proceed with scheduling the order or can click Save as Order to simply save the inbound document as an attachment for the order.
- **View/Edit** – If an exam in any status other than Ordered (e.g. Scheduled, Cancelled, Exam Done, etc.) is selected, the View/Edit button is available. Click this button to open the View/Edit screen for the selected exam. The user may take any action in this screen that may be indicated by the received document or simply click the save button to attach the inbound document to the selected exam.
- **Create Order** – This option will ignore the row selected in the Patient History and will open a new Schedule Order screen for the selected patient, so that a new order can be created for the document that was received, such as a new referral. The inbound document will be loaded as an attachment. The user can proceed to schedule or can enter enough information to Save as Order.

For all options, once the selected screen is saved, the document will fall of the Inbound Document WL and the next document will be loaded.

SECTION #3 - DOCUMENT VIEWER

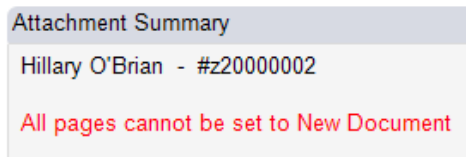
The Document Viewer initially shows the first page of the loaded document in the main area, with a thumbnail of each page to the left. By right clicking a thumbnail, the user can choose the type of document. Each active *ScanType* is displayed in the context menu and the user can either classify one page at a time or use “Classify Remaining as” to classify the current page and those that come after it with the same ScanType.



New Document:

Some faxes may come in with information for multiple patients as part of the same transmission. When this occurs, the user can select a patient for one or more of the pages and then apply a scan document type of “New Document” to the other pages. When the user then associates the document to a patient and saves, a new entry will be created for all pages that were classified as “New Document” and this new document can then be processed and associated with a different patient.

At least one page must have a classification other than “New Document” for the user to save. If the user attempts to use “New Document” as the type for all pages, the Attachment Summary will inform the user that it is not possible to associate all pages as a New Document.



ATTACH INBOUND DOCUMENT SCREEN LAYOUT

Each user is free to reposition the 3 portions of the screen according to their preference, optionally dragging some portions to other monitors. The screen’s layout will be saved when the screen closes and re-applied the next time the user opens the screen. The layout can be reset to the default by right clicking the “Attach Inbound Document” tab title and choosing “Reset Layout.”

HOW TO ENABLE THE FEATURE

- 1) Configure the inbound document service.
- 2) Assign permission strings to appropriate User Groups:
 - *Clinical.AttachInboundDocuments*
 - *Clinical.AttachInboundDocuments.BreakLock*
 - *Config.LookupEditor.DocumentDeleteReason*

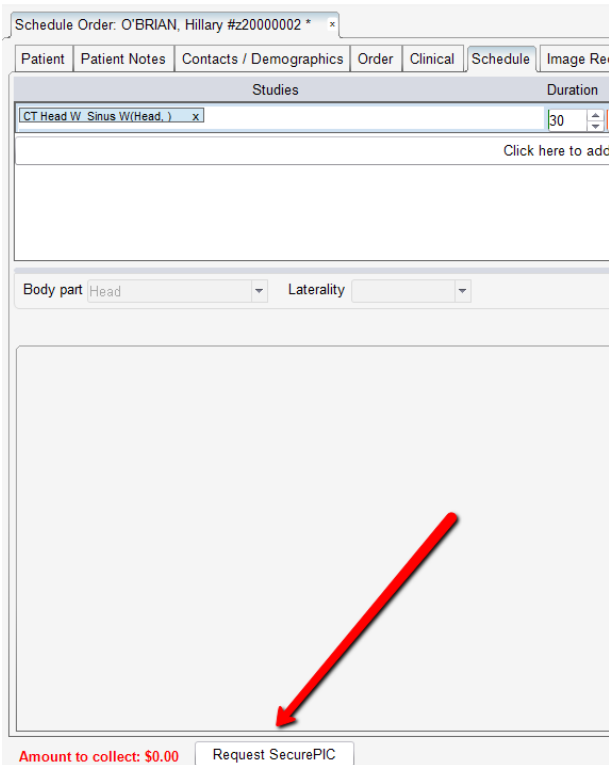
FEATURE #14145 – INTEGRATION WITH RADAR SECUREPIC

Integration with RADAR SecurePIC gives RIS users the ability to initiate a text message to a patient's mobile phone and securely receive a picture message back from the patient. Anticipate a decrease in scheduling minutes spent asking the patient what they see on their insurance card or referral **and** an increase in the accuracy of information entered at the time of scheduling.

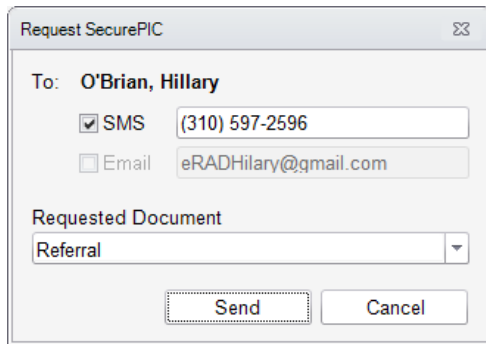
Other users will benefit from SecurePIC as well when they need to see something that the patient has in their hands when they are not in the center: whether it is an insurance card, a referral, a pathology report, etc. If a patient shows up at the center and left their referral at home, a SecurePIC can be sent to their family member at the house to securely message a picture of the referral into the patient's RIS account. Some customers are even discussing the option of using mobile phones as an inexpensive scanner substitute for users who don't have a lot of documentation to scan. The possibilities are many.

A new button labeled *Request SecurePIC* is located in the bottom left corner of the following screens:

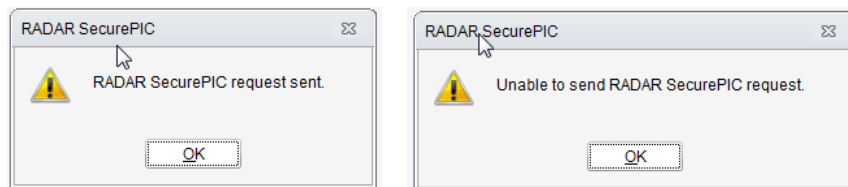
- New appointment
- Walk-in appointment
- Reschedule / Schedule From
- Confirmation
- IVT
- Registration
- View/Edit
- Edit Billing



When the *Request SecurePIC* button is clicked, a dialog opens displaying the mobile number on file for the patient and allowing the user to select the type of document to request. The document type will be used in the text message to the patient explaining what is being requested.

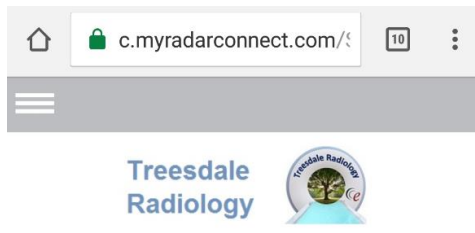


Upon clicking Send, the RIS user will receive a confirmation or failure message:



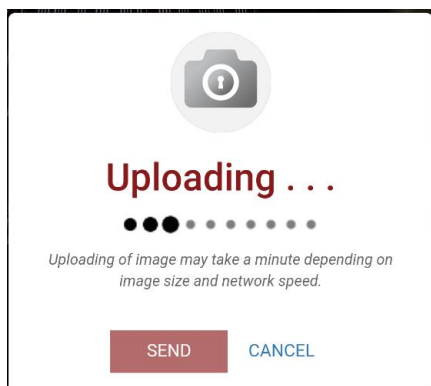
The patient will receive an SMS text message that will include information such as the name of the facility, the type of document requested, and instructions to click a URL link to the RADAR SecurePIC web page. Patients should be encouraged, via the message text and any conversation that takes place with the patient prior to sending the message, that they should click the URL link, **not** reply back via text message.

The URL link will open a secure web page on the patient's phone, as in the example below:



Clicking on the red "Take Pic" button or clicking the large gray camera logo will initiate a dialog specific to the patient's phone to either take a picture of the requested document or upload an existing image of the document.

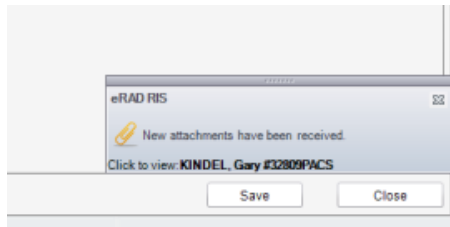
Upon following the prompts, the image will be securely uploaded to RADAR. The upload speed can vary depending on the resolution/size of the picture and the patient's internet connection. While it uploads, the patient will briefly see the following on their screen:



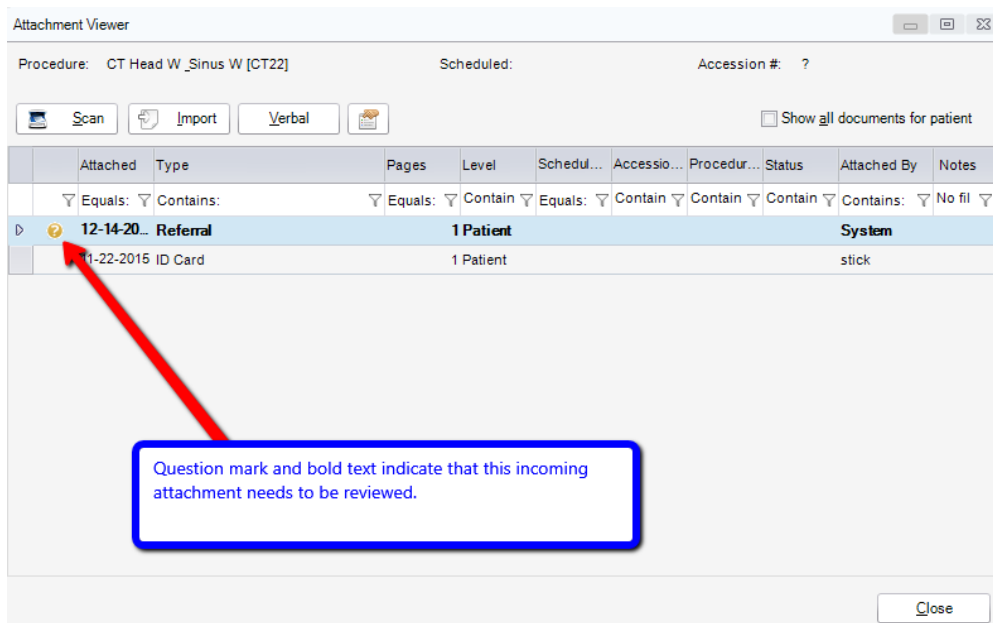
After the image has uploaded, the patient will have the option to send another picture, helpful when they are sending a multi-page document or the front and back of an insurance card.

Once the document is uploaded to RADAR, an inbound SignalR message notification will be pushed to the eRAD RIS services and the photo attachment will be automatically downloaded and added to the database as a scanned document associated with the patient who uploaded it. It will also be labeled with the ScanType the RIS user selected when sending the SecurePIC request.

After RIS receives the photo of the document and it has been converted into an associated scanned document, a desktop alert will appear in eRAD RIS for the user who initiated the SecurePIC request.



Clicking on the desktop alert message will open the Attachment screen for the patient, regardless of whether the user still has the patient’s tab open in RIS. Prior to the new document being opened for review, the attachment will be listed in bold and a yellow question mark will be displayed to indicate that it has not yet been verified.



Upon opening the attachment, the user will have access to all of the usual Attachment tools and can relabel pages, rotate images, and so on. After the user opens the document, if the user has Full access to a new Access String, *Clinical.ScanDocs.AllowMarkAsReviewed*, then it is assumed that the image has been verified and the bold text and question mark are removed. The user can also right click and select *Mark as Reviewed*. It is possible to *Mark as Unreviewed* if necessary.

Attached	Type	Page:
10-07-2016	Worksheet	
10-07-2016	Worksheet	
10-04-2016	ExamC	

Attached	Type
10-07-2016	Worksheet
10-07-2016	Worksheet
10-04-2016	ExamC

Documents that are not reviewed will not display in the Data Nuggets and will not display in the Radiologist specific screens.

If the attachment is not reviewed by the user who initiated the request (perhaps they have left for the day), then the image will fall to the Inbound Document WL for verification. It will maintain all of the associations to the proper patient and ScanType, so a quick review is all that will be needed to process the document from that workload.

A NOTE ABOUT FILE SIZE

The size of incoming attachments sent via SecurePIC can be quite large. An attachment from a photo library might be a 10MB panoramic or a large 3MB snapshot. A series of such large files could be problematic for RIS, therefore a check has been added to compact the size of attachments when their size exceeds the value set for the new System Configuration setting: *Config.MaxAttachmentSizeKB*. The image will be resized to the resolution configured for *Config.AttachmentResolutionWhenSizeExceedsMax*.

HOW TO ENABLE THE FEATURE

To use the RADAR SecurePIC messaging feature:

1. This feature requires that a RADAR account be configured for each Practice.
2. The following system configuration codes must be configured in System Config:
 - o *RADARInboundMessageServerUrl* – URL for the RADAR SignalR event broker.
 - o *RADARInboundMessageClientId* - <clientid> provided by RADAR.
 - o *RADARInboundMessagePassword* - <password> provided by RADAR.
3. The eRAD RIS user must belong to a User Group that has Full access to the new access string: *Clinical.RADARSecurePIC*.
4. In order to mark a SecurePIC attachment as reviewed, the user must also belong to a User Group with Full access to the new access string: *Clinical.ScanDocs.AllowMarkAsReviewed*.
5. Inbound RADAR message processing must be enabled via the System Configuration setting: *EnableRADARInboundMessageProcessing*.
6. An instance of Wedge Service must be running using WedgePlugin for RADAR.

FEATURE #13720 – SECTRA PACS INTEGRATION

eRAD RIS now supports integration with Sectra PACS, validated against IDS7 Version 18.1. eRAD RIS is able to drive Sectra PACS using URL calls in a manner similar to the other PACS integrations in RIS.

Due to the URL-based integration used with Sectra, RIS receives no response indicating that the URL call was successful or even an indication that it has completed. This results in the need for RIS to assume any URL call to Sectra completes successfully. Because it is not possible to confirm that images from a previous patient are not left on the screen when the radiologist moves to the next report, it is possible for RIS and PACS to become out of sync and display different patients; this is a possibility to be aware of while dictating.

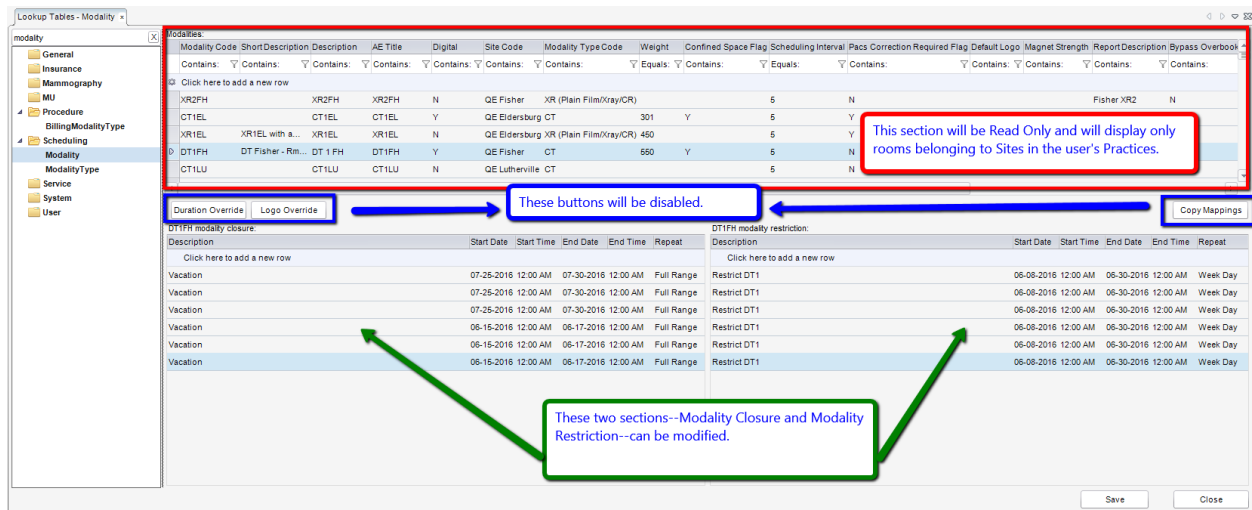
FEATURE #13256 – INFINITT PACS VIEWER INTEGRATION

eRAD RIS now supports integration with the INFINITT PACS viewer. eRAD RIS is able to drive the INFINITT Viewer using URL calls, including launching and closing images via actions in the RIS.

Due to the URL based integration used with INFINITT, RIS receives no response indicating that the URL call was successful or even an indication that it has completed. This results in the need for RIS to assume any URL call to INFINITT completes successfully. Because it is not possible to confirm that images from a previous patient are not left on the screen when the radiologist moves to the next report, it is possible for RIS and PACS to become out of sync and display different patients; this is a possibility to be aware of while dictating.

FEATURE #6391 – GRANT ACCESS TO CREATE ROOM CLOSURES OR RESTRICTIONS ON A PER PRACTICE BASIS

Many times a RIS Administrator would like to give a group of users access to create Modality Closures and Restrictions, but without granting access to the entire Modality table. RIS now has the ability to allow users with limited privilege levels to access only those two functions without the ability to edit other aspects of the Modality table. Furthermore, the access is limited to Practices that are assigned to that user in the Personnel table. These limitations will help to ensure that accidental modality modifications are less likely to occur.



The access string *Config.LookupEditor.Modality.ViewAllPractices* (previously labeled *Config.LookupEditor.Modality.ViewAll*) can now be set to NONE to disable all controls in the Modality look-up editor other than creating Modality Restriction and Modality Closure *and* will restrict the modalities returned to those that are part of the Practice(s) to which the current user is assigned in the Personnel table. The user will have the ability to create room restrictions and room closures, without modifying any other Modality data.

Limited permission users should have the following Access Strings:

Config.LookupEditor.Modality	Full
Config.LookupEditor.Modality.ViewAllPractices	None

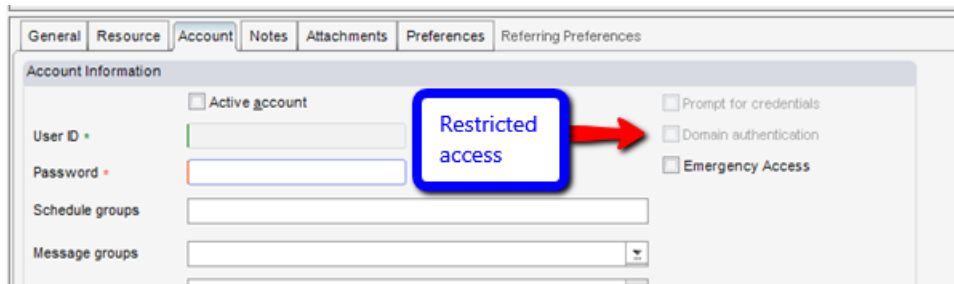
RIS Administrators requiring access to edit any aspect of the Modality table for all Practices should have the following Access Strings:

Config.LookupEditor.Modality	Full
Config.LookupEditor.Modality.ViewAllPractices	Full

FEATURE #14458 – RESTRICT ACCESS TO ENABLE/DISABLE DOMAIN AUTHENTICATION

RIS Administrators need to be able to grant access to editing personnel without always granting the ability to change the authentication type for users.

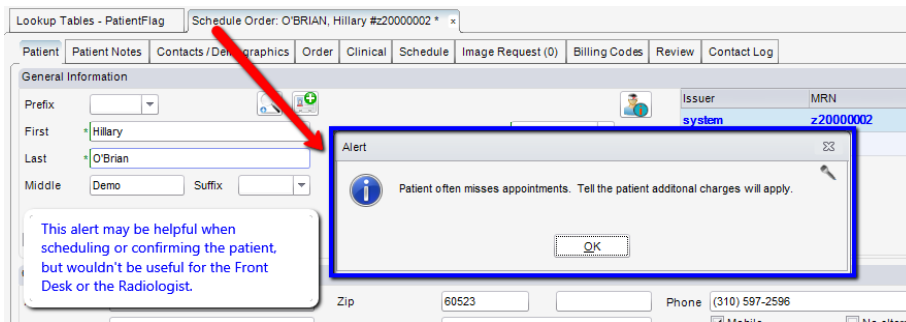
A new access string, *Config.LookupEditor.Personnel.DomainAuthentication*, can be set to None to restrict this access for a given User Group. The system default is Full.



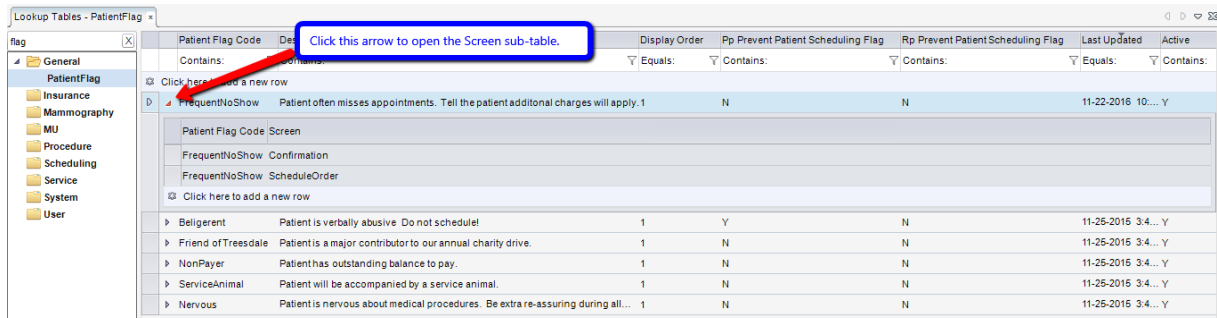
PATIENT MANAGEMENT

FEATURE #14818 – CONTROL WHICH SCREENS DISPLAY PATIENT FLAG ALERTS

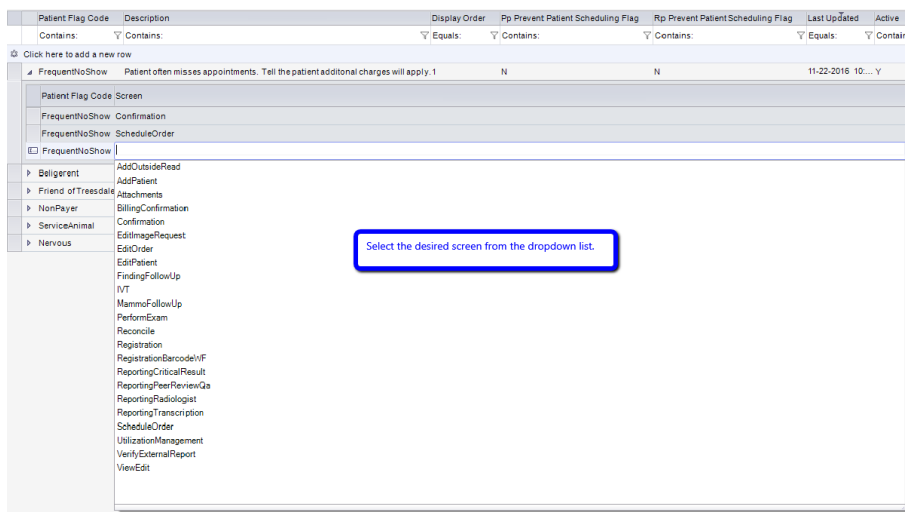
Some messages that are set up as Patient Flag alerts are only applicable at certain points in the workflow. For example, a message that the patient has an overdue balance would be helpful during registration, but not during radiologist workflow.



To increase the flexibility of Patient Flag alerts, it is now possible to configure the messages to display for individual screens. From the Patient Flag look-up table, click the arrow head next to the Patient Flag to be edited. This will open the sub-table where the desired screens can be selected.



Under the Screen column, choose the desired screen from the list provided in the dropdown.





Any Patient Flags that were created prior to this new functionality will automatically be applied to all available screens, in order to maintain the existing behavior. To make adjustments, simply delete the row in the Screen sub-table for any screens which should not show the alert.

FEATURE #13812 – SUPPORT FOR PIX / PDQ

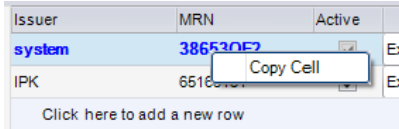
This feature is still under development, but the initial phase of PIX / PDQ (Patient Identity Cross-referencing and Patient Demographics Query) is available for anyone interested in an early implementation of the feature. Please inquire for details if interested.

Special Note: As has been recommended previously, RIS administrators are advised to create a User Group with a copy of the RIS Administrator settings, instead of using the User Group labeled RIS Administrator in order to avoid seeing fields that have been hidden and features that have not been activated for your RIS instance.

MISCELLANEOUS USER EXPERIENCE

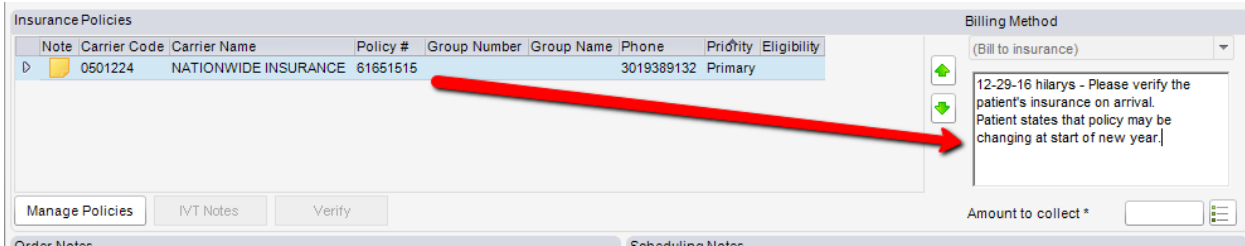
FEATURE #14341 – ABILITY TO COPY FROM MRN GRID

After recent changes to the MRN grid on the Patient tab, some customers remarked that they no longer had the ability to copy/paste from the MRN grid due to the Read Only nature of the fields in the grid. It is now possible to right-click and choose Copy Cell for any of the MRNs listed in the grid.



FEATURE #13909 – ENABLE BILLING NOTES FIELD WHEN AN INSURANCE CARRIER IS SELECTED

Previously, the Billing Notes field was disabled after an insurance carrier was selected. It is now available for data entry at any time.



RESOLVED DEFECTS - 2.2016.6

Bugs, support issues, and design optimizations resolved in build 2.2016.6.

Bug #	Category	Subject
14472	Alerts	Referring physician alerts are once again displayed in Registration workflow.
14204	Billing	Imagine Payment Portal - Addition of a field to collect internal notes on a payment to be visible in RIS.
14659	Billing	The repost to billing feature now properly sends a message to Mirth.
14256	Cancel	Cancelling a study via the context menu no longer causes a retrieve of all studies that are part of the order, causing a message backlog.
13314	CD Import	Resolved CD Import error: Input string was not in a correct format.
14027	Document Distribution	Updates to document distribution jobs, such as a change in fax number, are now audited.
14615	Drawing Tool	Breast Diagram Drawing Tool - Drawings started prior to starting the exam are now updated with changes made after the exam is started.
14604	Insurance Eligibility	Insurance's Eligibility is no longer marked as not requiring IVT based on previously selected carrier.
14051	Insurance Management	Resolved an issue with self pay insurance and study level locking.
14753	Insurance Management	Resolved an NPD performance issue.
14510	IVT / PreCert	Amount to collect field no longer clearing out when opening IVT or View/Edit on a patient with only one non-Eligibility insurance.
14621	IVT / PreCert	Resolved an issue with exams not falling to the IVT WL on PreCert status update under certain conditions.
14675	IVT / PreCert	Resolved an issue with Precert not updating to Required after insurance carrier change (billing code level PreCert rules).
14722	IVT / PreCert	Replacing multiple procedure codes using the red X, no longer causes a residual PreCert setting to prevent PreCert required on billing codes from being marked as required (multi study container issue).
14725	IVT / PreCert	Setting the Portal Verified flag now removes the study from the IVT worklist appropriately when no other requirements remain.
13968	Localization	Empty curly brackets no longer cause errors during registration in Hebrew.
14058	PACS (eRAD) Integration	PACS images are not getting released when using Skip and

		Continue in All Peer Review Pending Action WL.
14350	PACS (eRAD) Integration	Resolved an issue where RIS told PACS to cache a less relevant exam.
14325	Patient Folder	MRN now appropriately displays on Patient Folder tab when searching by accession.
14630	Patient Folder	In the Patient Folder, Ordered exams no longer throw an error when using the context menu to Print Forms.
14305	Patient Search	Searching by DOB only no longer results in the search populating the date to the Last Name field.
14685	Patient Search	Optimized the query when search for patients by phone number only.
14163	Problem Workflow	Resolve Problem window - fixed an issue with the display of radiologist names.
14345	Radar - Nudge	Outside reads where 'Performed start and end date' and 'Performed by user id' are blank will no longer produce an error when opened in Signing screen.
13049	Radiology Reporting	Inserting a macro containing a picklist with default macro option multiple times can now be done successfully.
14371	Radiology Reporting	External_report_flag no longer displaying incorrect value in audit history when a study is in Exam Done status and the procedure is changed.
14495	Radiology Reporting	PerformExam and View/Edit will display information about images loading in PACS but will not lock the RIS screen while images load.
14327	Reception	Added null check for subscriber DOB to eliminate errors during registration for Self Pay patients.
14407	Reception	Arriving second study from same order will no longer change Exam Done study to Arrived.
14326	Scheduling	If an exam is changed from Order B to Order A during rescheduling, the new appointment is created successfully <i>and</i> the previous appointment is appropriately Canceled.
14376	Scheduling	When re-saving as Order, no longer prompted to fill in Body Part unnecessarily.
14489	Scheduling	Resolved an issue where breast imaging Reminders could not be canceled under certain conditions.
14605	Scheduling	Solved an issue with foreign-key constraints on schedule of Follow-up order when the original exam had a CPT level payment.
14625	Scheduling	On Reschedule, changes made in Patient tab are now saving appropriately.
14682	Scheduling	When using a combination of Red X and Black X in the

		Registration screen, the cancelled Procedure Code is no longer visible in the Patient Folder column and attempts to View/Edit will not cause an error.
14527	Technologist	In Perform Exam window, the correct images are displayed when there are 2 orders.
14601	Thick Client GUI	Switching a WL tab while the context menu is open no longer has a risk of impacting the wrong study.
14677	Thick Client GUI	MU tab label is now replaced with the new Clinical tab label in Reschedule mode.
14704	Thick Client GUI	Resolved an issue with protected text in LogTextBox.
14773	Thick Client GUI	LogTextBox protected text can no longer be altered under certain conditions.
14374	Unknown Reconcile	Reconcile from Reconciliation WL is now working properly for unknown carriers.
14733	Web Services	Resolved an exception that had been occurring when saving after adding Billing Codes on View/Edit screen, when EnableLimitedDBUpdates was set to True.
9317	Worklists	Conditional formatting on worklists can now set the back color for the entire row.
14584	Worklists	Orders do not appear in the Patient Folder if all of the associated studies have been signed or cancelled.
14831	Worklists	Exams requiring Portal Verification without also requiring PreCert or Insurance Verification will now fall to the IVT WL as designed.

RESOLVED DEFECTS - 2.2016.7

Bugs, support issues, and design optimizations resolved in build 2.2016.7.

Bug #	Category	Subject
14786	Access strings	Look-up editors FollowUpResolvedReason and ImplantDevice access string changes.
14835	Admin-Clinical Data	Adjustment made to fix an issue with an invalid date/time entry when stopping the Oral Contrast Timer
14762	Admin-Other	Procedure Plan Description can no longer be left blank and a previous exception has been resolved.
14485	Billing	Issue with CPT codes not updating/retaining when changing procedure codes has been resolved.
15054	Digital Forms	Digital forms button on Walk-in and Registration screens is no longer showing forms that are inactive.
15516	Digital Forms	Trace data for digital forms now saves to database.
5666	Embedded Reporting	Resolved an issue with double clicking normal browser which led to "0 is not a valid index exception."
14830	eRAD Editor	Right to left with punctuation characters is now formatting correctly.
14603	Exam Search Worklist	An issue with certain filters in Exam Search has been resolved.
14763	Insurance Eligibility	Function for medical group string is now customer specific.
15490	IVT / Precert	Studies with manual insurance verification do not lose IVT flag after reschedule.
14827	Log Control	Reason for Exam field is now available on the Log Control look-up table.
15502	Log Control	Spell check suggestions on context menu have been optimized.
14606	Mammography	Assigned Pending Biopsy Notifications are functioning properly.
14295	Meaningful Use	Exporting a CCD file and running it through the XDS toolkit no longer produces errors related to Implant.
14296	Meaningful Use	Exporting a CCD file and running it through the XDS toolkit no longer produces errors when Ethnicity is Unknown.
6467	PACS (eRAD) Int - RIS only	Disabling PACS via the menu item stays disabled after user preference or organization change.
14644	PACS (eRAD) Integration	PACS caching - When relevant studies set to 0, no longer caching 2 studies.
15115	Patient Management	On the MRN grid on Patient tab, after selecting a value for the Issuer the value no longer defaults back when clicking back into the field.
15120	Patient Management	Adding a new Issuer in lookup editor no longer adds the suffix '-'

		EMR ¹ in the Issuer in MRN grid.
14243	Patient Merge	Restored ability to suggest a duplicate Patient Merge.
14794	Patient Merge	Patient Merge will be marked as duplicate if a reverse merge is suggested for the same two patient accounts.
14909	Payment control	Imagine payment receipts are now storing the amount to collect in the payment row.
14910	Payment control	Resolved an issue with Imagine integration null exceptions.
14987	Peer Review	Peer Review verbiage update.
15061	Radar - Nudge	Nudge: the value entered in SystemConfig <i>RADARSecureMessageTitle</i> is now displaying correctly in the subject line for new conversations.
15067	Radar - Nudge	Nudge: creating a Nudge conversion for 2 studies for the same patient, keeps the conversations separate.
13305	Radiology Reporting	Resolved a concurrency error when saving config file.
14599	Radiology Reporting	When user preference is PS360, the fields explorer is blank in the template editor.
14754	Radiology Reporting	Report history audio control is no longer shared between tabs.
14676	Scanning	Issue with classification levels when using "Classify Remaining As..." option was resolved.
14706	Scheduling	Resolved issue with scheduling restriction not always being enforced for rescheduling multiple studies in the same order.
14707	Scheduling	Modality Open error was resolved - Object reference not set to an instance of an object.
14887	Scheduling	Issue resolved when adding another study, then removing it with no study selected (i.e. blank).
15474	Technologist	Accidental status change can now be reverted.
15072	Thick Client GUI	Autosaved report recovery issues have been resolved.
7029	UI Look and feel	AccessionXMLDrop button now displays only when appropriate for reporting mode.
14788	UI Look and feel	Report Assistant panel colors can now be adjusted as with other tool panes in the Reporting screen.
15302	UI Look and feel	Databound dropdown controls no longer allow free text to be typed.
15346	Web Services	External patient can now match to an internal patient when SystemConfig for EnableLimitedDBUpdates is set to true.
14848	Worklists	Resolved an issue with new Orders not setting IVT Required WL flag appropriately.
14850	Worklists	PreAuth WL flag now updating under previously problematic circumstances.

KNOWN LIMITATIONS - 2.2016.6

The following are new bugs found in build 2.2016.6. Bugs reported in previous versions are not captured as Known Limitations in this document.

#	Subject
15104	If scheduled as an Order B (or C, D, etc.), the information on the Clinical (MU) tab will not be copied over from Order A. This is not visible in the Scheduling workflow, but if a user opens the Order B exam by itself after scheduling, the Clinical tab fields will be blank and will need to be filled in again if they are set as required fields.
14971	Under some circumstances, the RIS application is still visible behind the locked screen.
15099	RADAR Nudge – When using PS360, the last saved impression and/or report is inserted into the conversation when the Report and Impression Nudge buttons are used. If changes have been made to the report without saving, these changes will not be reflected in the text added to Nudge.
14804	Claustrophobic checkbox value is not copying over to Order B.
14845	Foreign key exception when adding "Additional Data" to a procedure during scheduling.
14846	Error saving when a procedure code does not have a description in the Procedure Code table.
14889	CSH PACS - Study loaded by External Study Identifier doesn't close correctly.
14941	Birth date column is not populating for some worklists under Editor menu.
14948	It is possible for a user who does not have permission to reschedule a study to do so by using the context menu.
14993	When typing addresses in English(LTR) in the Hebrew RIS (RTL), numbers are placed incorrectly.
15063	Error occurs when the 'New Patient' button is used after already selecting an existing patient.
15069	Eligibility shield will disappear from the insurance grid if the carrier's priority is changed during scheduling. The shield will reappear next time the study is opened and is still visible on work lists.
15077	When removing an exam from a multi-study appointment, the associated Digital Form may remain.
14857	Occasional error when saving change to a macro.

KNOWN LIMITATIONS - 2.2016.7

The following are new bugs found in build 2.2016.7. Bugs reported in previous versions are not captured as Known Limitations in this document.

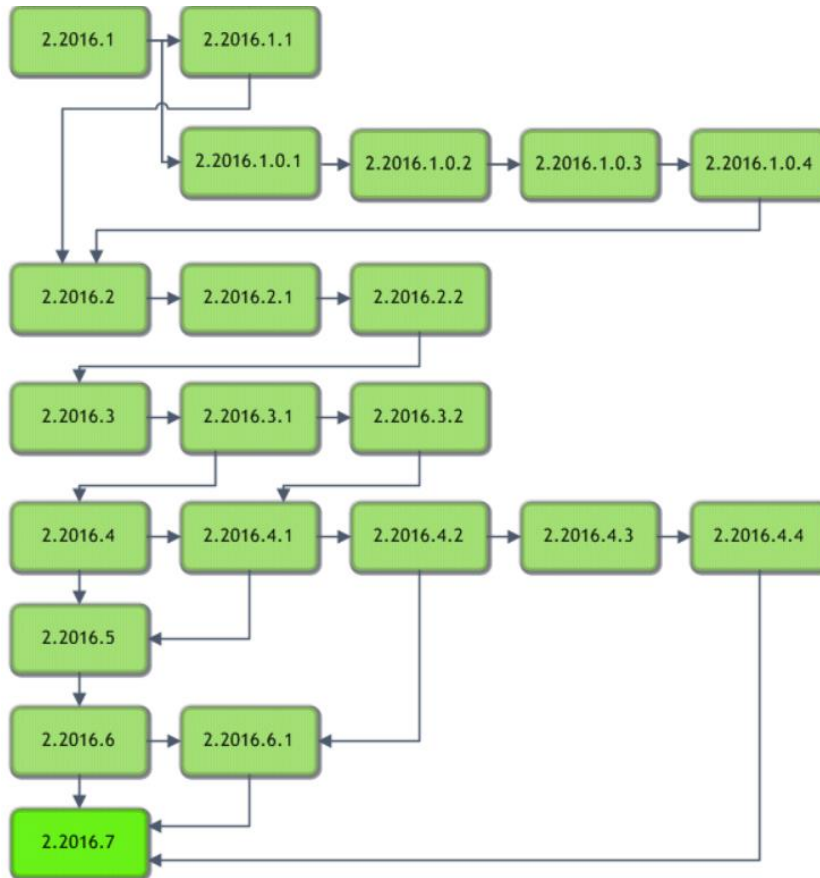
#	Subject
15777	Reason for exam text box will allow more than 1,000 characters (more than is permitted by the database) causing an error on save.
15724	Addendum Request control in reporting screen does not use LogControl.
15569	Increasing Exam Duration from Schedule tab is not adjusting returned time slot options for multi-study appointments.
15591	Some driver's licenses from Arizona and Maryland have different formatting on the first and last name fields, which is not handled by Identify Patient workflow.
15454	In Digital Form Editor, New Image button is not working properly.
15269	DOB is sometimes formatted differently for driver's licenses from Prince Edward Island, which causes an issue with Identify Patient workflow.
15236	View Study opens the same study twice when using Skip and Continue while reviewing studies within a Folder.
15055	Under certain circumstances, an error occurs when working with scanned documents from the Attachments context menu on a worklist.
15632	When Scheduling from ACR Category 0 Follow-Up WL, Height and Smoking Status should be cloned from the original order, but the user is forced to re-enter the information.
15575	Inbound document service should ignore files with an extension that is not an image file.
15526	When Rescheduling a study in Checking In or Arrived status, the site search should default to the original site.
15337	RADAR Quick Message - Email option should not be available when the patient does not have an email address listed.
15198	When dictating with "and Continue" and the reporting mode switches from PS360 to something else and then back to PS360, the AutoFeed option does not reappear in the status bar.
15101	Setting the background color for Reporting screen data panes to transparent causes an error.
15098	DBNull error when opening Registration when an implant device with a Null (blank) description is entered for the patient.
15676	Merging external MRN patients with internal patients fails during rescheduling workflow, impacting patients who have scheduled via the Patient Portal using Guest mode.
15559	Error when requesting a SecurePIC from IVT screen for an Order.
15393	CSH PACS - from Patient Folder, when viewing a 2nd study, the Accession # is not displayed in the simulator.
15268	SecurePIC – Need optional ris.exe.config setting for <i>DBActionSignalRServiceEndpoint</i> for cases when the IP address used for hosting on the server is different than the IP address used on the client.
15232	Audit records for RADAR messaging do not include patient /order /study context due to a change with Inbound Document workflow.
15776	UM Alert should contain both the original and alternative procedure.
15552	CTRM dialog remains open when closing via PowerScribe 360.
15546	LOG FILE reader- when using Citrix bridge the log file reader continually adds the same information including the same time when refreshed.

15544	External Report Workflow checkbox triggers dialogue window in View/Edit, does not save state.
15538	Digital form data is not saving if preceded by validation failure.
15525	Configurable Reporting options should be logged in the verbose log file.
15497	Action buttons can be hidden in Inbound document workflow under certain conditions (switch tabs to restore).
15479	Infinitt PACS is not closing after RIS logout.
15468	Eligibility flag tooltip can become stuck in "In Progress" after being updated under certain conditions.
15452	A user may be prompted for PACS login credentials even after disabling PACS.
15409	Updated critical results entry screen requires localization.
15383	In Dictation window, Nudge and Folders feature items require localization.
15325	Hebrew Localization updates.
15191	Order level attachments not displaying as expected when viewed from the Attachments context menu for a single order.
15592	Signed pending QA - Verify report - reject Edit and send for dictation goes to Transcribed status and falls to Pending Signature WL.
15551	Personnel editor error when an inactive Message Group associated to the user has an apostrophe.
15550	Cannot save Procedure Plan with an apostrophe.

RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.5	-	2.16.5.0	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release

CODE STREAM DIAGRAM



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.1

Table of Contents

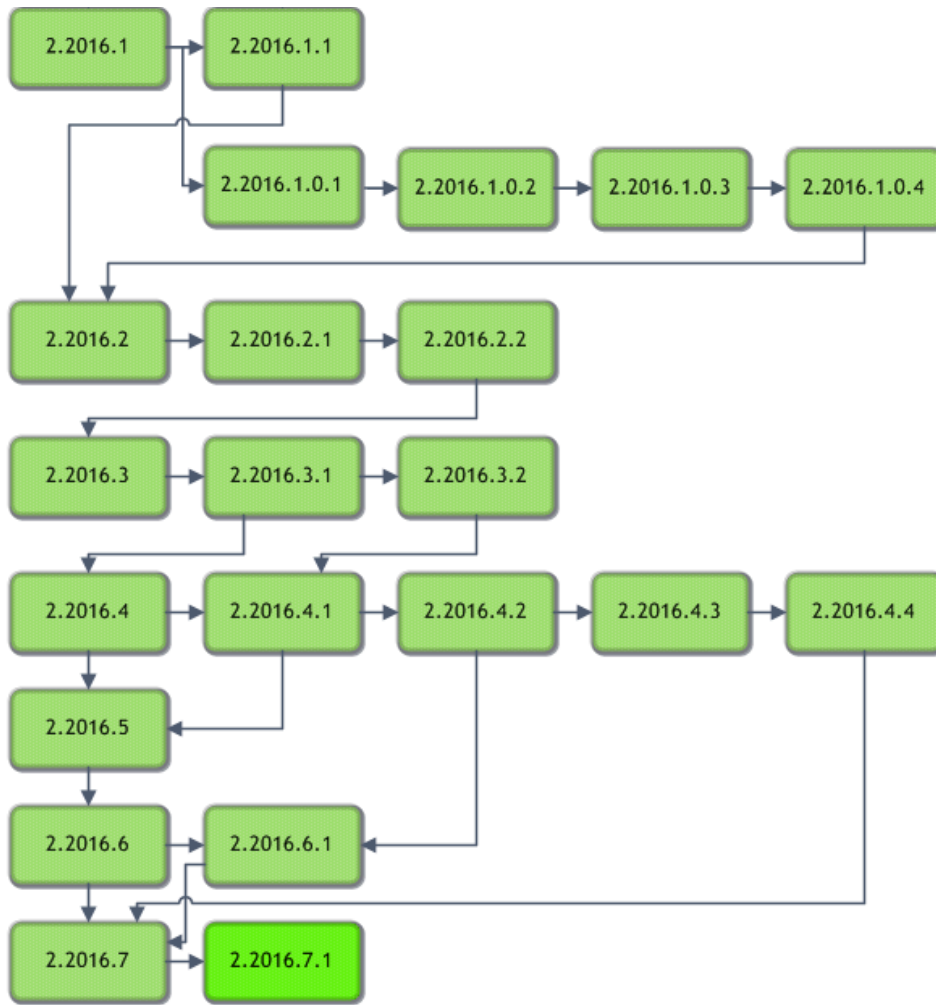
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

Resolved Items

eRAD RIS

Redmine #	Subject
15810	Voiding payments made in the Imagine Payment Portal no longer generates an error when multiple Dataset IDs (tax IDs) are configured.
15713	Caching – after signing or submitting a study, a new study immediately begins caching, instead of waiting for a work list refresh.
15653	"Resolve Problem" is now translated appropriately in Hebrew.
15690	Occasional UM Opinion Letter distribution issue has been resolved.
15658	An issue that occurred in 2016.7 with PreCert status being reset to required when changing the appointment time has been resolved.

Code Stream



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	12/22/2016 5:10 PM
 rRISService	12/21/2016 8:42 PM
 ThickClient	12/21/2016 8:41 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.7 installs. This server update must be applied to 2016.7.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.01	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.02	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.03	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.04	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.5	-	2.16.5.0	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.1.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This update is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders are (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

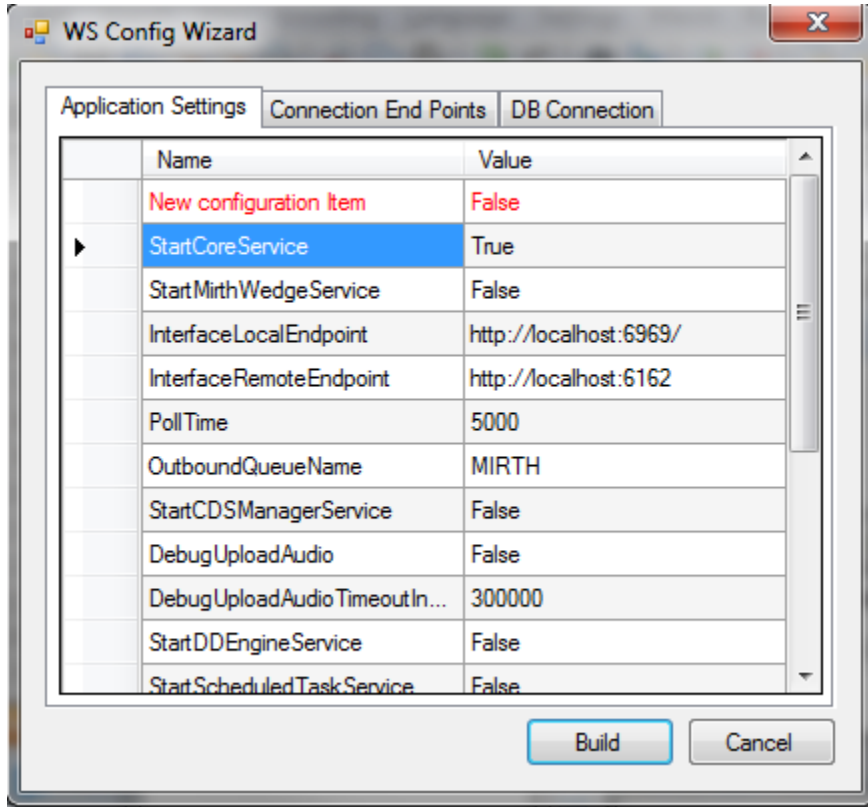
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration settings and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

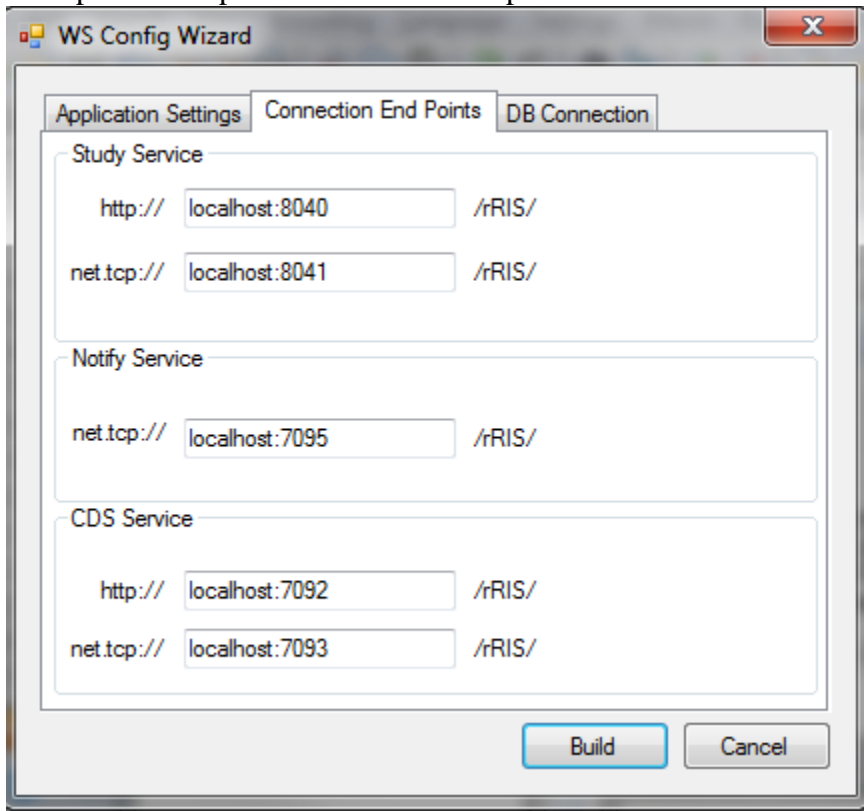
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added, the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.2

Table of Contents

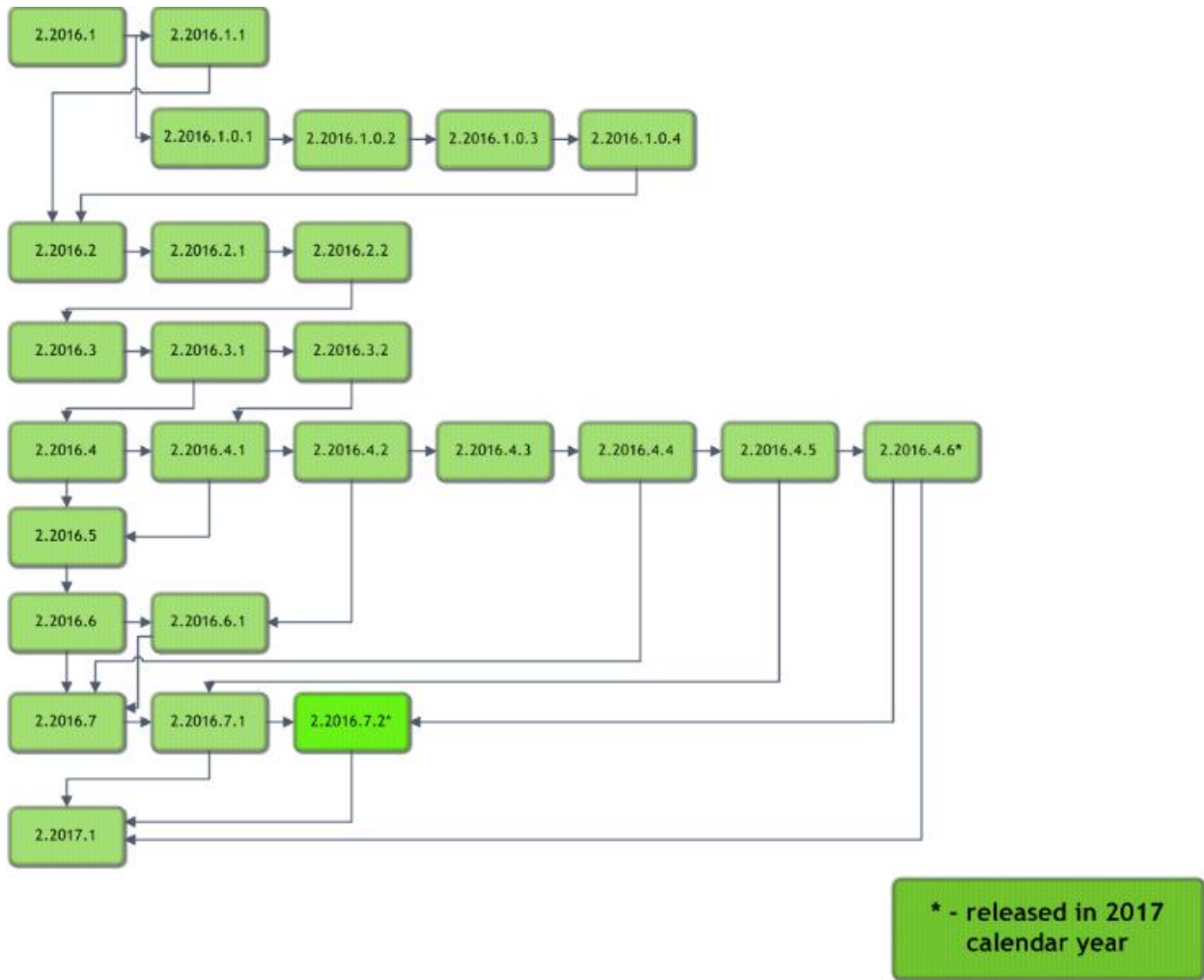
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

Resolved Items

eRAD RIS

Redmine #	Subject
16018	Wedge Deadlock in Resolution Caching issue has been resolved.
15926	Spell checker dictionaries now load for all eRAD RIS users even if they do not open a reporting screen.
15924	LogControl context menu is now available when in textbox only mode.

Code Stream



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

_ReleaseNotes	02/03/2017 3:26 PM
rRISService	02/03/2017 1:12 PM
ThickClient	02/03/2017 3:25 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.7 installs. This server update must be applied to 2016.7.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	Full Version Release

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.2.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

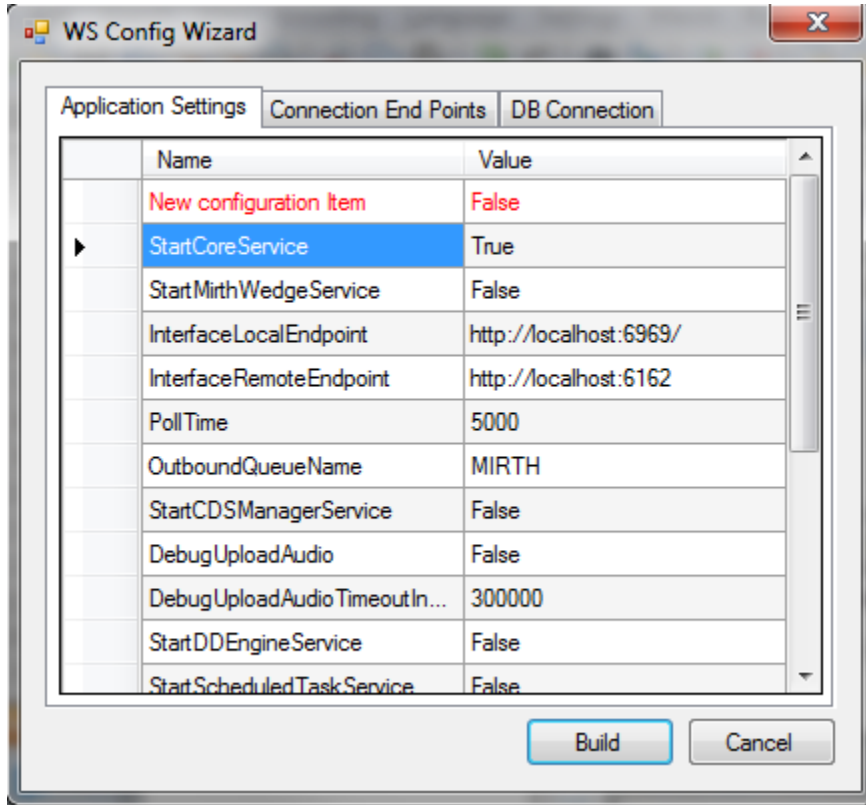
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

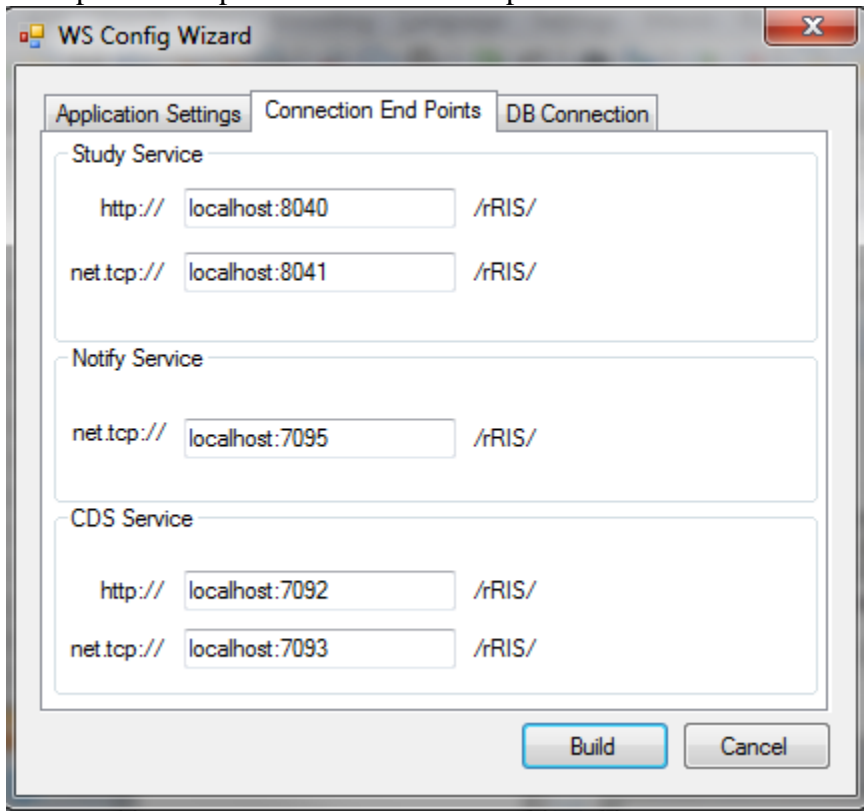
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.3

Table of Contents

Resolved Items.....	3
RIS.EXE.CONFIG.....	Error! Bookmark not defined.
Code Stream.....	4
Package Contents	5
Intended Audience	5
Who is affected	5
eRAD RIS Release Version Numbers	6
Installing	7
Client/GUI.....	7
Web Service	7

Resolved Items

eRAD RIS

Redmine #	Subject
16238	The Print Forms option in the context menu is once more available for exams in an Ordered status.
16237	Resolved issue with fields in older M*Modal templates being regenerated causing navigation and playback issues.
16223	Resolved issue with optional fields from older M*Modal templates being replaced with required fields.
16276	Additional logging has been added for worklist refresh.

Configuration Updates

The following setting is an edit to pre-existing setting in the RIS.EXE.CONFIG file for Bug #16276 for eRAD RIS Support team to gather additional logging information. These changes will not affect functionality of eRAD RIS or alter the workflow user experience.

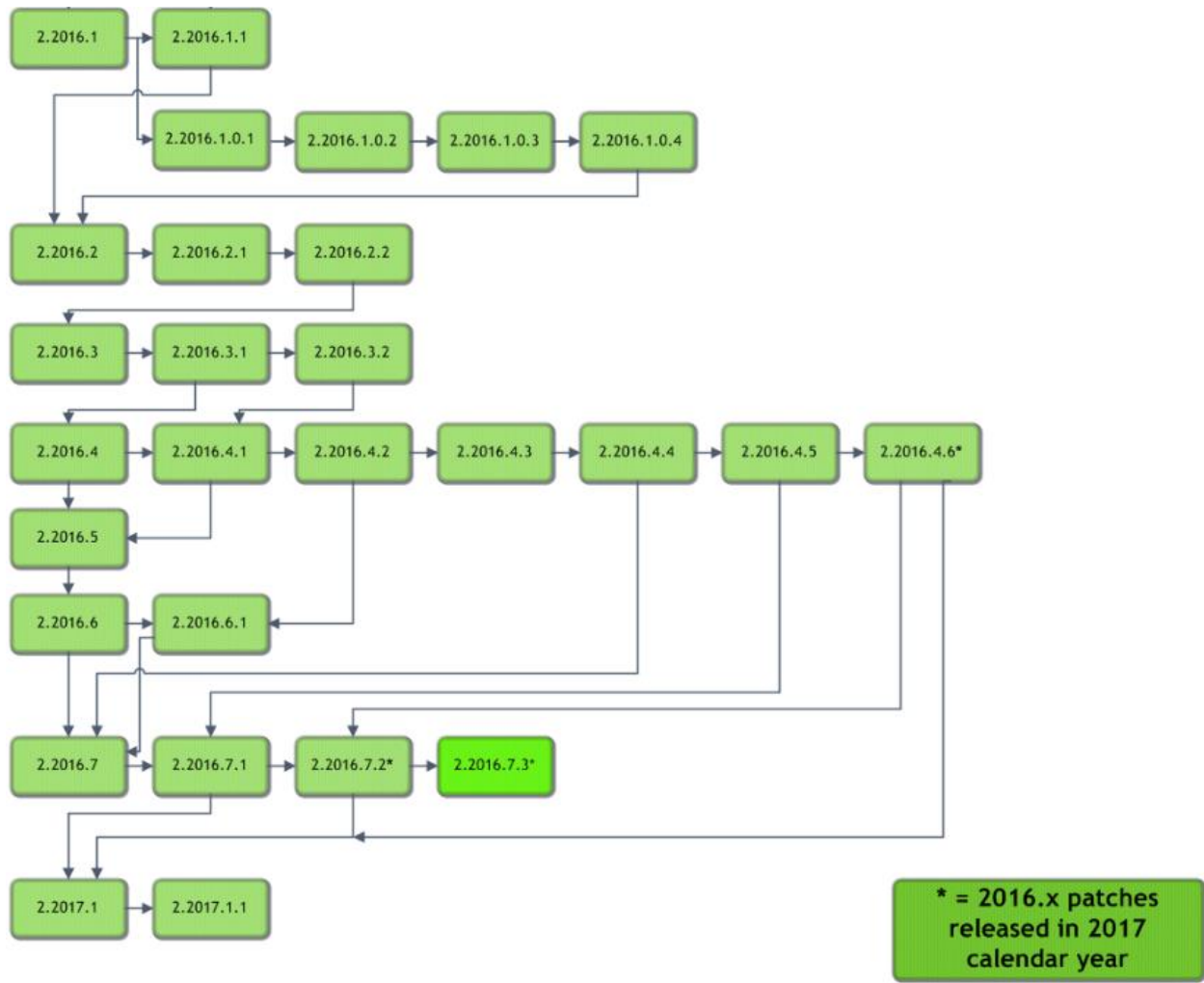
RIS.EXE.CONFIG

```
Setting
<add name="Rolling Flat File Trace Listener"
type="Microsoft.Practices.EnterpriseLibrary.Logging.TraceListeners.RollingFlatFileTraceListener,
Microsoft.Practices.EnterpriseLibrary.Logging, Version=5.0.414.0, Culture=neutral"
listenerDataType="Microsoft.Practices.EnterpriseLibrary.Logging.Configuration.RollingFlatFileTraceListenerData, Microsoft.Practices.EnterpriseLibrary.Logging, Version=5.0.414.0,
Culture=neutral" rollFileExistsBehavior="Increment" rollInterval="Hour" header="" footer=""
fileName="/verbose_log/trace.log" formatter="SimpleTextFormatter" />
```

Changes to:

```
Setting
<add name="Rolling Flat File Trace Listener"
type="Microsoft.Practices.EnterpriseLibrary.Logging.TraceListeners.RollingFlatFileTraceListener,
Microsoft.Practices.EnterpriseLibrary.Logging, Version=5.0.414.0, Culture=neutral"
listenerDataType="Microsoft.Practices.EnterpriseLibrary.Logging.Configuration.RollingFlatFileTraceListenerData, Microsoft.Practices.EnterpriseLibrary.Logging, Version=5.0.414.0,
Culture=neutral" rollFileExistsBehavior="Increment" rollInterval="Hour" header="" footer=""
fileName="/verbose_log/debug.log" formatter="SimpleTextFormatter" />
```

Code Stream



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	2/28/2017 8:30 AM
 rRISService	2/28/2017 8:31 AM
 ThickClient	2/28/2017 8:27 AM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.7 installs. This server update must be applied to 2016.7.2

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.01	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.02	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.03	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.04	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.3.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 128 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

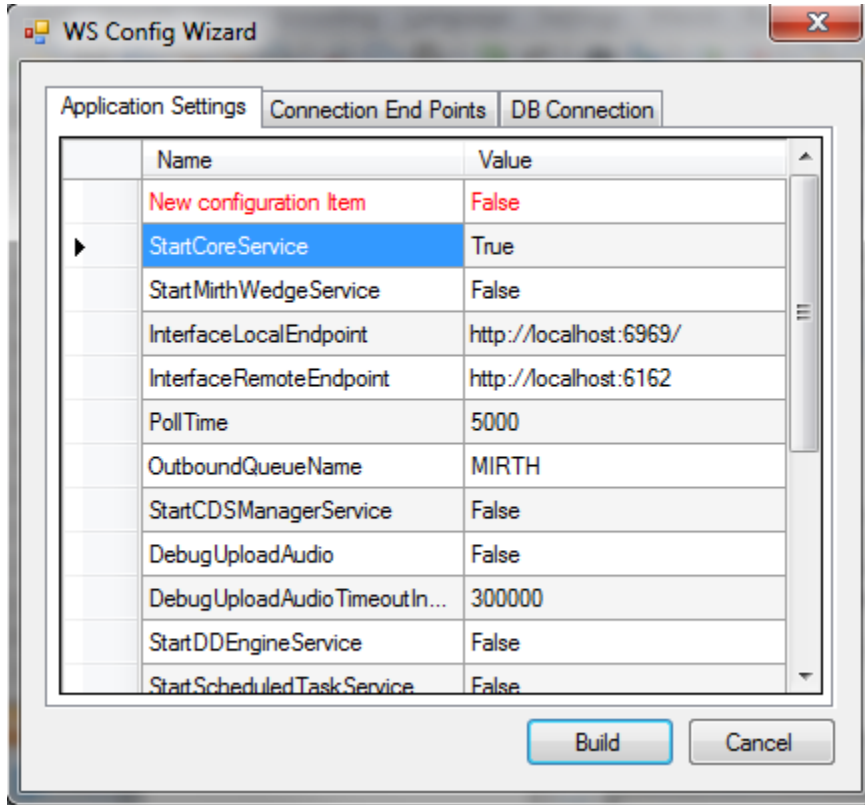
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

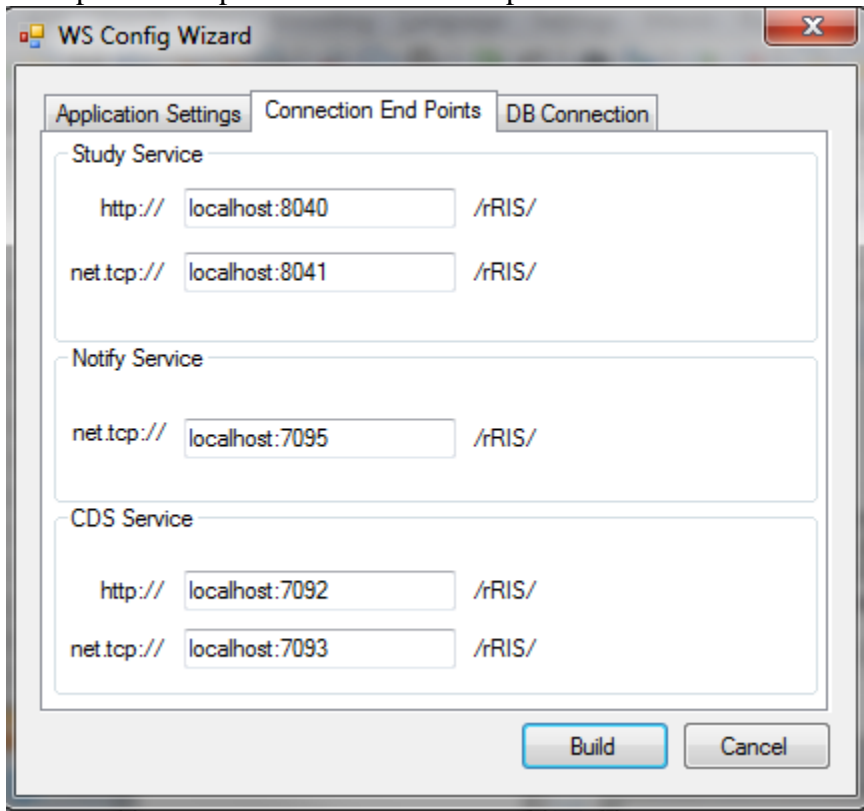
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.4

Table of Contents

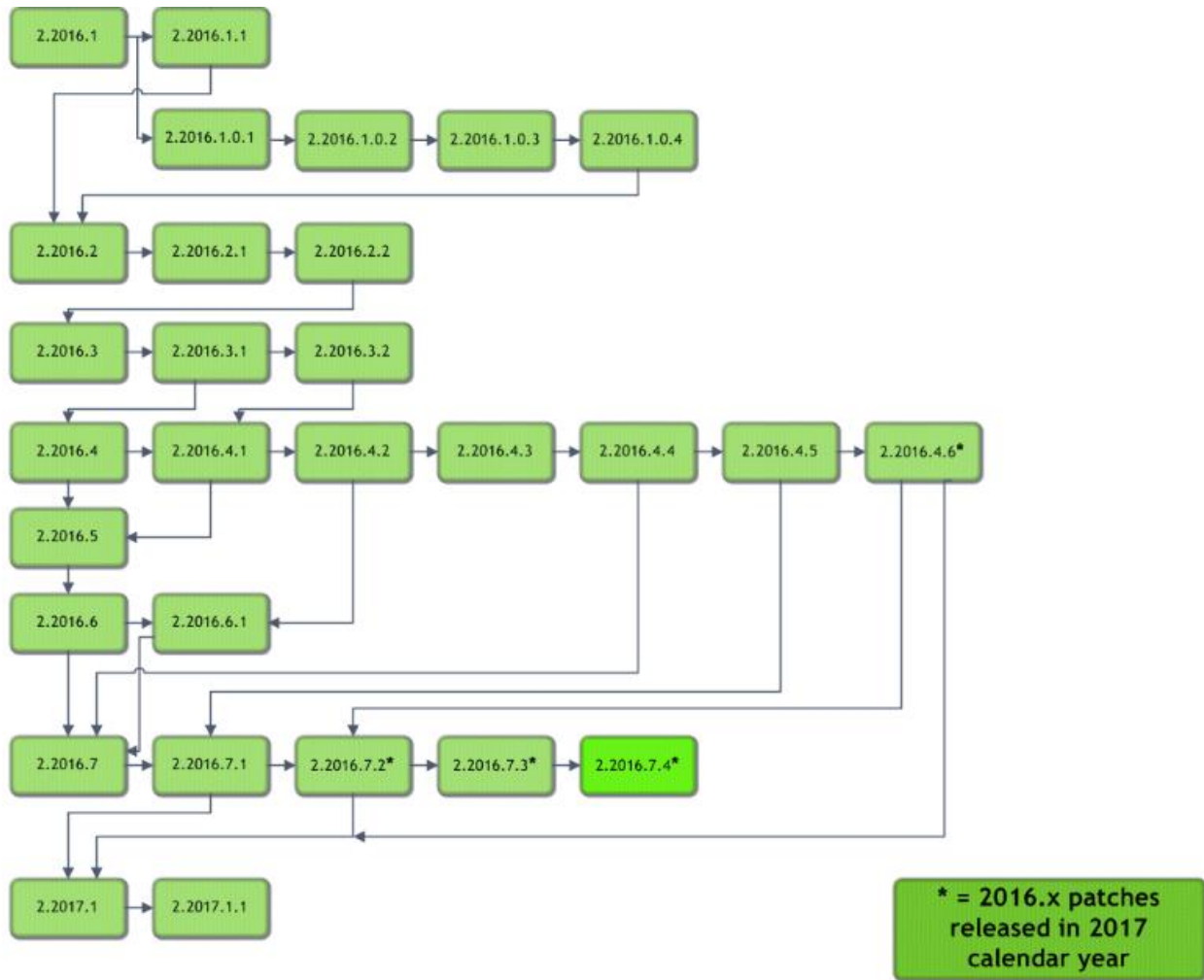
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7

Resolved Items

eRAD RIS

Redmine #	Subject
16284	Resolved an error that could occur after dictating a study from Pending Dictation WL. "Row has been removed from table."
16266	Switching between external reporting integration modes (PS360 or External) to internal reporting modes (eRAD or M*Modal) now occurs seamlessly without errors.
16265	RIS will not crash when opening multiple files (including an external file) while communicating with PACS.
16264	Next workflow will behave as expected when "Reuse Reporting Screen" is turned off.
16263	Resolved an issue with the error "Cannot access a disposed object. Object name: RadLabel" which could cause RIS to crash.
16262	When using emergency access and RIS crashes, using auto-save, clicking the emergency access button again will no longer remove the auto-saved report.
16261	Resolved an issue in which RIS would crash if unable to find the PACS window.
16260	Resolved a scenario where RIS could crash while communicating with PACS.
16259	PACS manager will no longer wait forever in certain conditions.
16257	Resolved a scenario where RIS could crash while communicating with PACS.

Code Stream



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.7 installs. This server update must be applied to 2016.7.3

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.4.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.5

Table of Contents

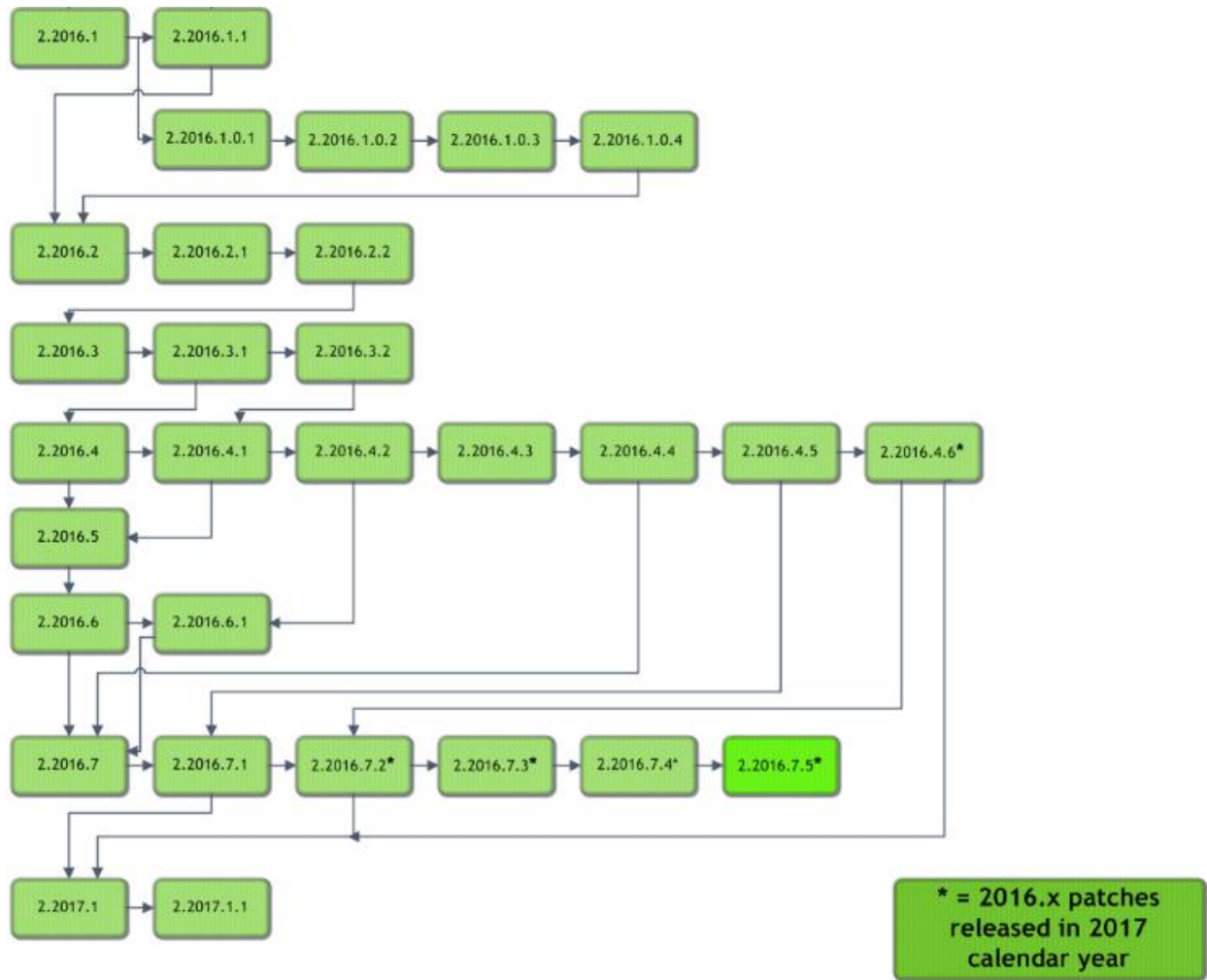
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Who is affected 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7

Resolved Items

eRAD RIS

Redmine #	Subject
16390	M*Modal macros created in earlier RIS versions now display properly in the template/macro editor when there is a field at the beginning of the macro.
16364	Resolved an issue in which template text or sections between two fields could be lost.
16346	Resolved two issues related to conflicts between Auto WL Refresh and asynchronous saving (when the WL updates the row for the patient who was modified by the current RIS user).

Code Stream




Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	3/7/2017 10:06 AM
 ThickClient	3/7/2017 10:06 AM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Who is affected

Build 2016.7 installs. This server update must be applied to 2016.7.3

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.5.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.6

Table of Contents

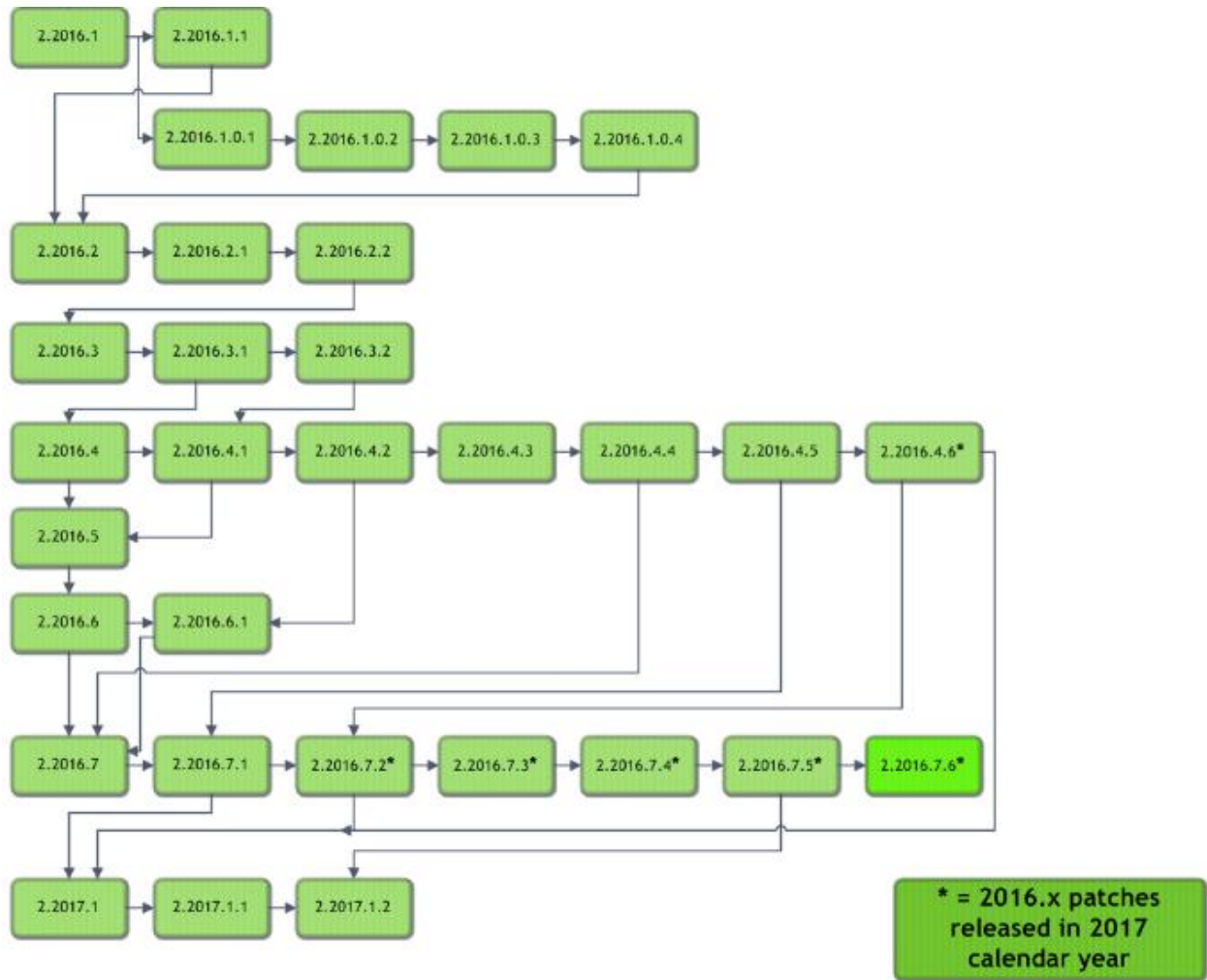
Resolved Items.....	3
Code Stream.....	4
Package Contents	5
Intended Audience	5
Affected Installs	5
eRAD RIS Release Version Numbers	6
Installing	7
Client/GUI.....	7
Web Service	7

Resolved Items

eRAD RIS

Redmine #	Subject
16457	Utilization Management: Exception no longer occurs when distributing UM Opinion Letter via RADAR password-protected PDF. (Previously the letter would distribute properly, but an exception would occur when it was recorded to the distribution history.)
16446	M*Modal Reporting: Resolved an issue where fields could be split in a way that caused issues with text highlighting during play back and extra field delimiters (square brackets). Duplicate fields are now left intact and are only fixed within the clipboard before pasting or within the macro XML before inserting.
16445	M*Modal Reporting: Resolved an issue in which submit and continue from the Dictation window could produce an error.
16437	Editing multiple reminder letter distribution jobs on the Distribution WL no longer causes exception.

Code Stream






Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	03/14/2017 10:50 AM
 rRISService	03/14/2017 9:10 AM
 ThickClient	03/14/2017 10:42 AM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Affected Installs

Build 2016.7 installs. This server update has GUI and Web Service updates. Since the previous 2016.7.X updates were also GUI or GUI and Web Service updates the minimum previous version must be 2016.7. Please note that 2016.7.1 also has an update to the Utilization Management Portal.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.6.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

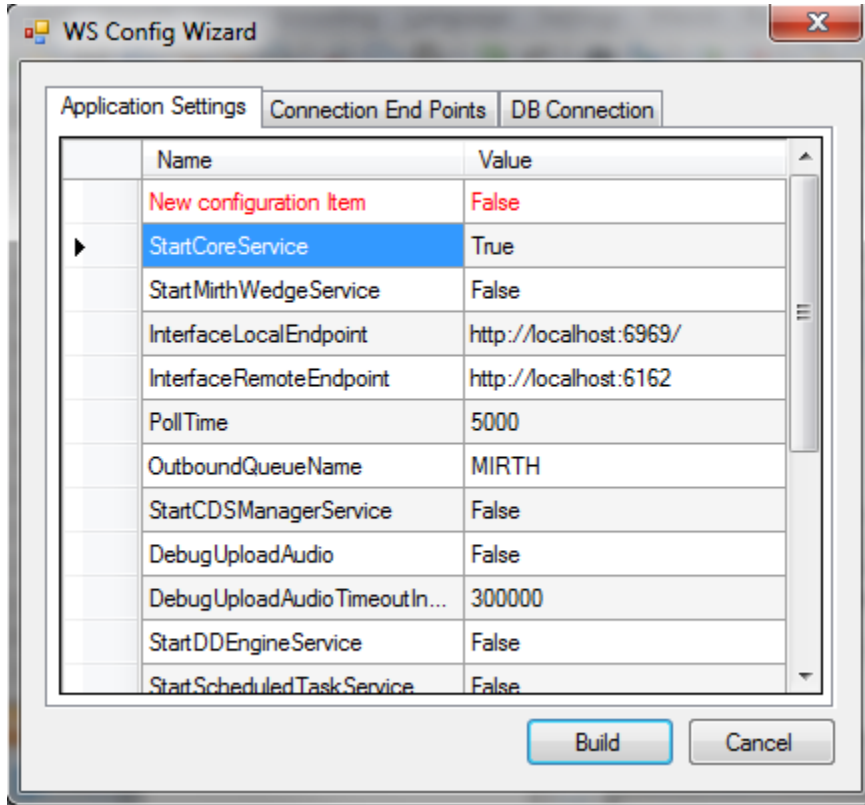
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.7

Table of Contents

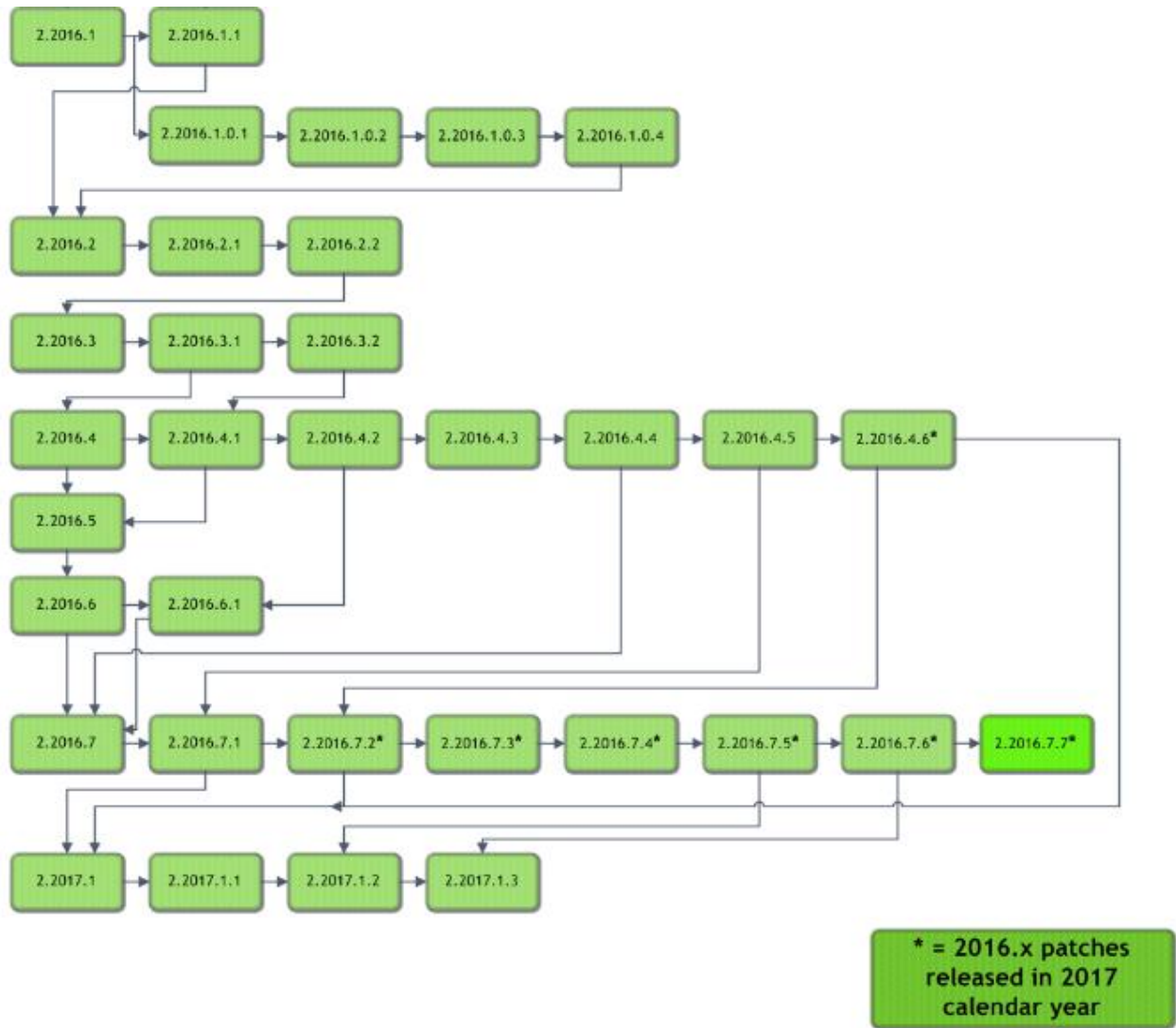
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Affected Installs 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

Resolved Items

eRAD RIS

Redmine #	Subject
16626	Resolved an issue in which certain availability templates were not applied, resulting in Appointment Slot searches with a reduced number of options.

Code Stream







Legend:

Light Green = Previously Released software

Bright Green = Current Release

Package Contents

 _ReleaseNotes	03-28-2017 4:02 PM
 DB	03-28-2017 2:47 PM
 rRISService	03-28-2017 2:47 PM
 ThickClient	03-28-2017 2:47 PM

Intended Audience

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

Affected Installs

Build 2016.7 installs. This server update has GUI and Web Service updates. Since the previous 2016.7.X updates were also GUI or GUI and Web Service updates the minimum previous version must be 2016.7. Please note that 2016.7.1 also has an update to the Utilization Management Portal.

eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
45.1	3	2.45.1.3.31452(3GB)	2.45.0.0.26107	2.45.1.3.31452	2.45.1.3.31369				GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	4	2.45.1.4.31621(3GB)	2.45.0.0.26107	2.45.1.4.31621	2.45.1.4.31599				GUI.zip, Web Service, DB, Questionnaire and Citrix Bridge
45.1	5	2.45.1.5.31773(3GB)	2.45.0.0.26107	2.45.1.5.31773	2.45.1.5.31771				GUI.zip, Web Service, DB, Questionnaire
45.1	6	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936				GUI.zip, Web Service, DB, Questionnaire, Citrix Bridge
45.1	7	2.45.1.6.32070(3GB)	2.45.0.0.26107	2.45.1.6.32614	2.45.1.6.31936				Web Service for Wedge only. Version number of Wedge is 45.1.6.32614
45.1	8	2.45.1.8.33254(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936				GUI.zip
45.1	9	2.45.1.9.(3GB)	2.45.0.0.26107	2.45.1.6.32070	2.45.1.6.31936				GUI.zip
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.003499303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000	Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000	GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000	GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000	GUI, Web Service and DB updates

Installing

Client/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.7.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Web Service

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled “XSL” that contains a sub folder and files within the subfolder. Another folder is titled “**deploy**” that contains the new .config files that will be deployed with the user of the file called “ServicesConfigWizard.exe” (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

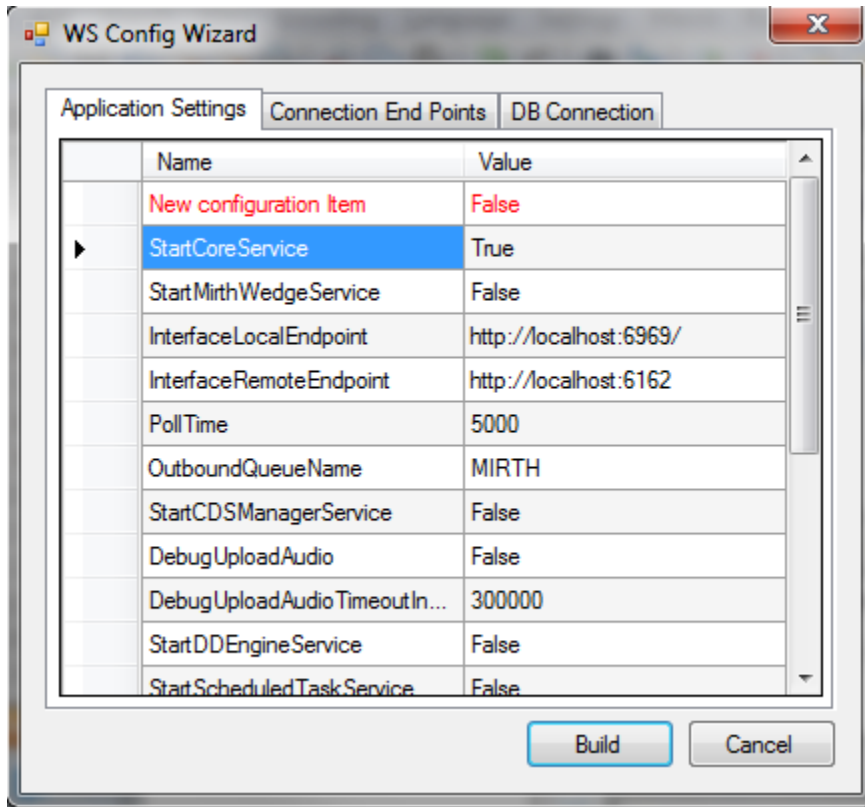
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a “deploy” folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.8

Table of Contents

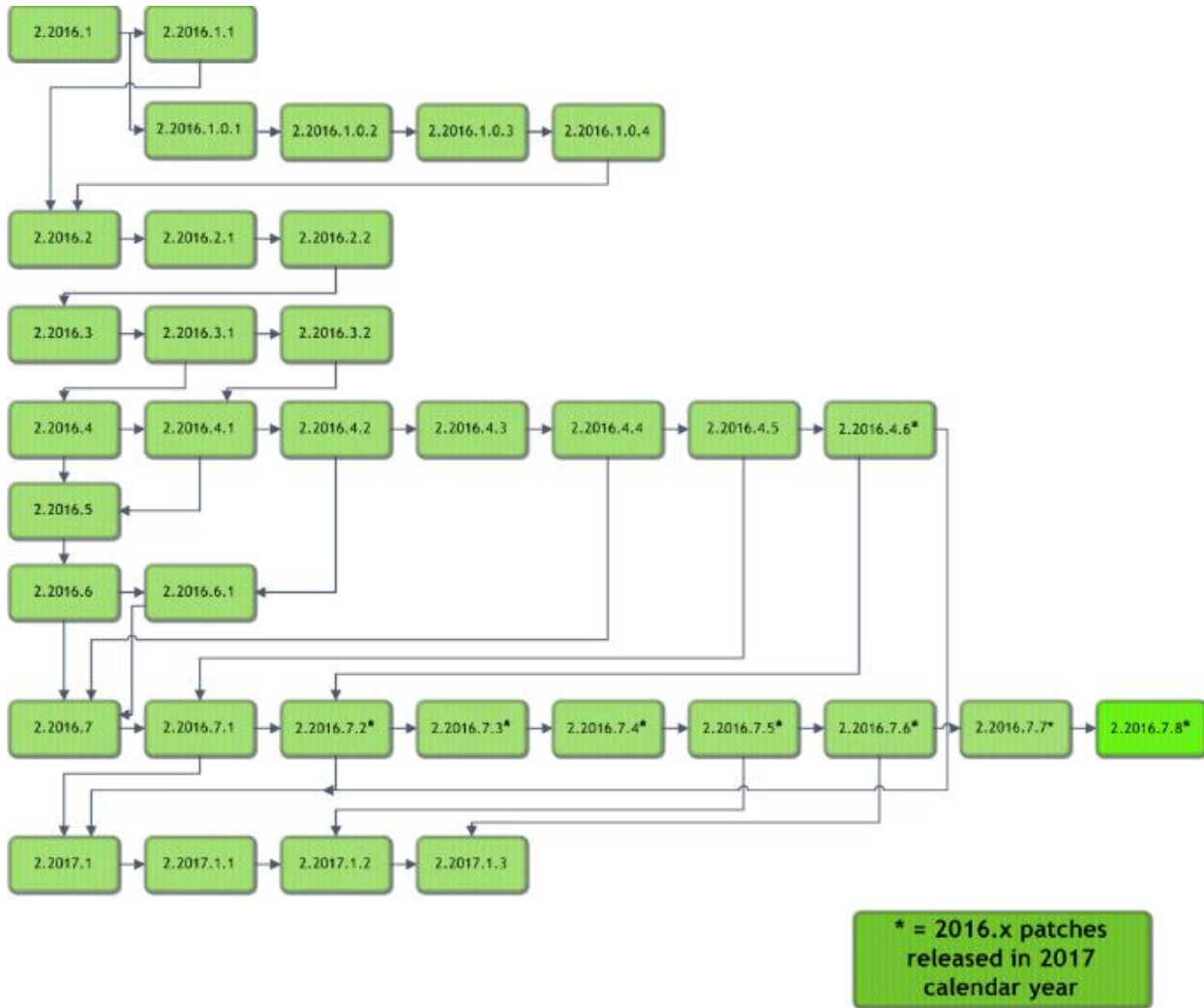
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Affected Installs 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Database Updates..... 7

RESOLVED ITEMS

eRAD RIS

Redmine #	Subject
16937	Missing indexes with 2016.7 rollout
16914	Peer review button disappearing on selected attachment datapane
16868	Region and Practice are not prepopulating when rescheduling a study
15526	When Rescheduling a study in Scheduled, Check-in or Arrived status the site search doesn't default to the original site.
16936	'Selected Report' panel not saving in personal or system layouts

CODE STREAM



Legend:

Light Green = Previously Released software

Bright Green = Current Release

PACKAGE CONTENTS

 _ReleaseNotes	04/21/2017 3:04 PM
 DB	04/21/2017 9:51 AM
 ThickClient	04/21/2017 2:59 PM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

AFFECTED INSTALLS

Build 2016.7 installs. This server update has GUI and Database updates. This update must be applied to 2016.7.7

ERAD RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Notes
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip
2016.1	.01	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416				GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.02	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416				Wedge Web Services only
2016.1	.03	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918				GUI.zip, Web Services and DB
2016.1	.04	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918				GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540				GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102				GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0			Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0			GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0			GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284		GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241		GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120		GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0			GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009		Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471		Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583		GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008	GUI and DB updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.00000	GUI, Web Service and DB updates

INSTALLING

CLIENT/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.8.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

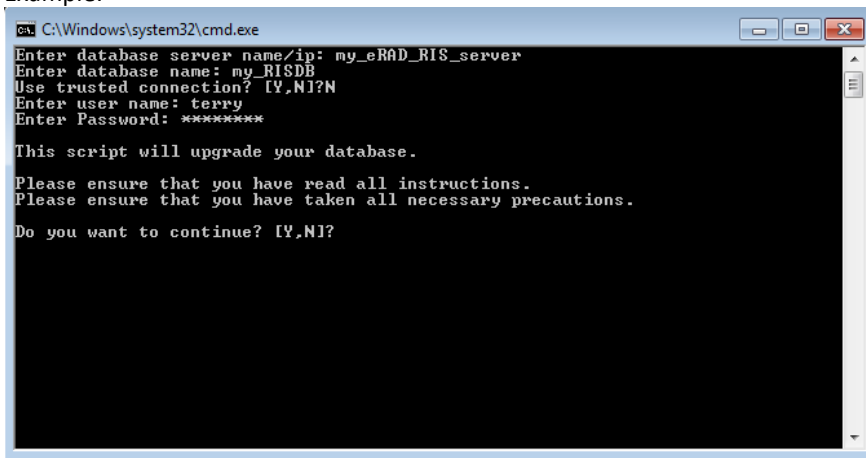
DATABASE UPDATES

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

- 1) From the upgrade folder, double click the "RunUpgrade.bat" command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.
- 3) You can choose to use "Trusted connection". Using this option will pass the identity of the currently logged on user. If this user has "db_owner" access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use "Trusted connection" then you will be prompted for user id and password.

Example:



After the upgrade program has finished you can find the upgrade logs in the “log” folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.9

Table of Contents

Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Affected Installs 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7
 Database Updates..... 8

RESOLVED ITEMS

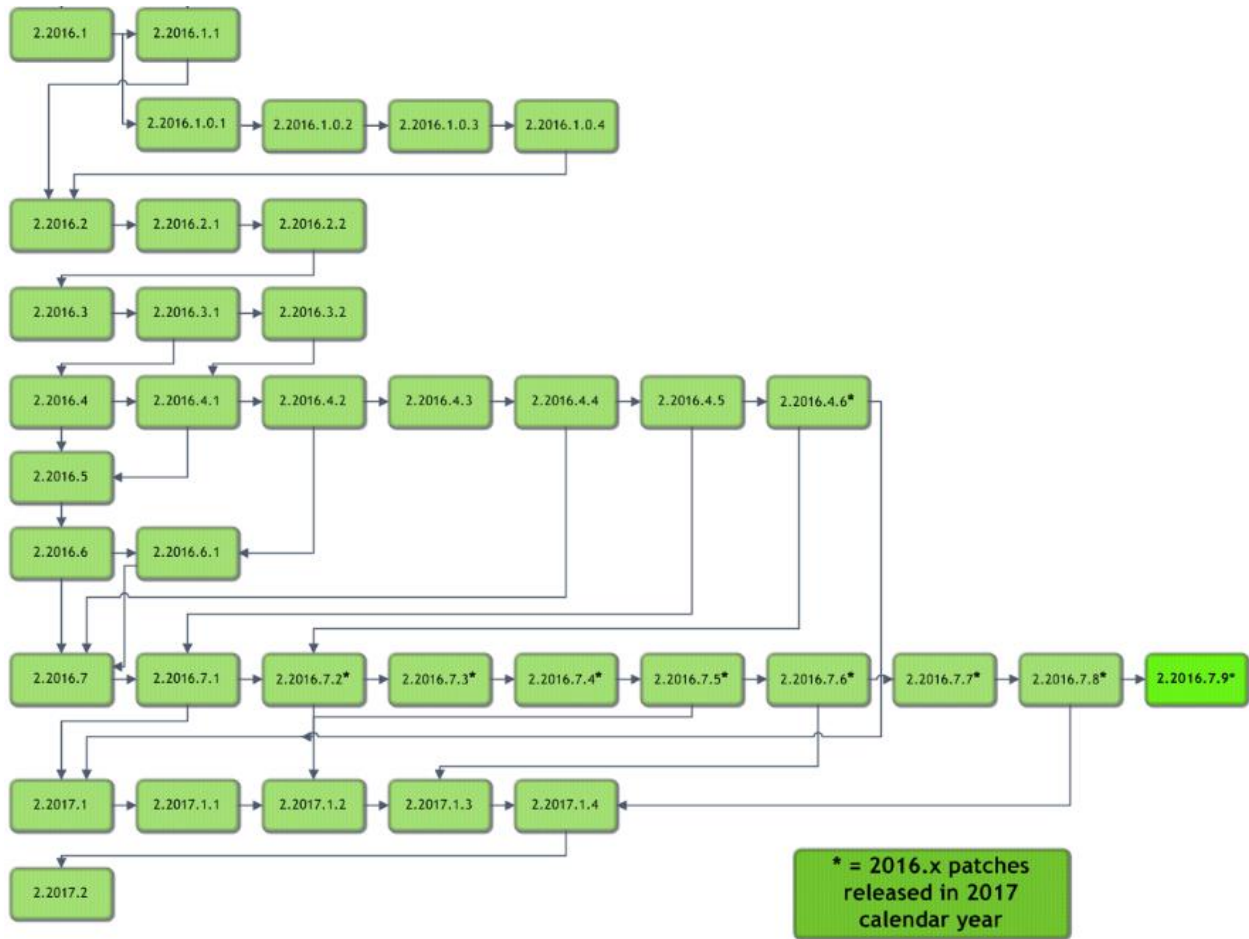
eRAD RIS

Redmine #	Subject
17209	An index change was made to resolve deadlock issues on c_locked_item.
17208	A change was made to the handling of sequence ID in the External Interface helper to allow for changes to c_order_item or c_study_item via Inbound Wedge.
17193	Resolved an issue that could cause the M*Modal text expander file to be overwritten.
17176	Region and Practice are once more prepopulating when creating a new Appointment without patient context.
17123	'Alternative' procedures added during Utilization Review now properly replace the billing codes for the original procedure.
17243	UM Portal version number is now displaying correctly.
17206	Adjusted a database upgrade script to more efficiently backfill formatted phone number.

Utilization Management Connect

Redmine #	Subject
17071	'By Status' filter is now sorting and filtering appropriately.
17207	Resolved a performance issue which could cause the application to time out.

CODE STREAM



Legend:

Light Green = Previously Released software

Bright Green = Current Release

PACKAGE CONTENTS

 _ReleaseNotes	05/17/2017 10:20 AM
 DB	05/16/2017 5:12 PM
 rRISService	05/16/2017 12:21 PM
 ThickClient	05/16/2017 5:13 PM
 UM_Portal	05/17/2017 9:42 AM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

AFFECTED INSTALLS

Build 2016.7 installs. This server update has GUI and Database updates. This update must be applied to 2016.7.8

ERAD RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416					GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416					GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416					GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416					Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918					GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918					GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102					GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0				Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0				GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0				GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241			GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009			Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471			Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583			GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and DB updates
2016.7	9	2.16.7.9 (3GB)	2.16.7.0	2.16.7.9	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Services, DB updates and UM Portal
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	4	2.17.1.4 (3GB)	2.17.1.0	2.17.1.4	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI, Web Service, DB and Patient Portal updates
2017.2	-	2.17.2.0(3GB)	2.17.2.0	2.17.2.0	2.17.2.0.00695782	2.17.2.0	2.17.2.0.702238	2.17.2.0.702213	2.17.2.0.702226	Full Version Release. First release of Provider Portal

INSTALLINGCLIENT/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.9.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

WEB SERVICE

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled "XSL" that contains a sub folder and files within the subfolder. Another folder is titled "deploy" that contains the new .config files that will be deployed with the user of the file called "ServicesConfigWizard.exe" (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

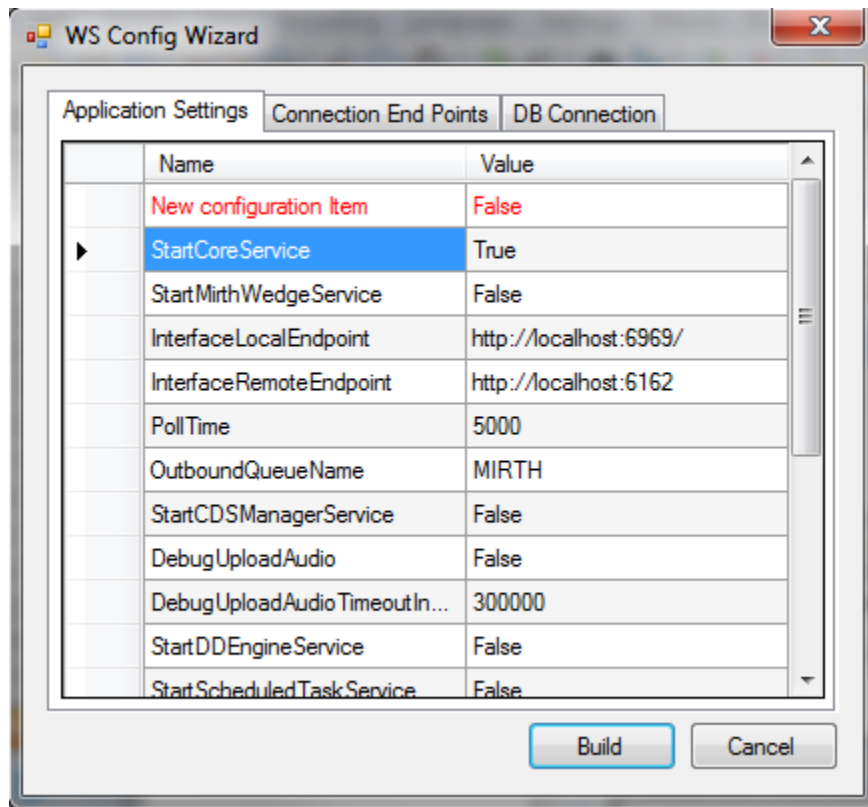
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a "deploy" folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application "ServicesConfigWizard.exe"

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



DATABASE UPDATES

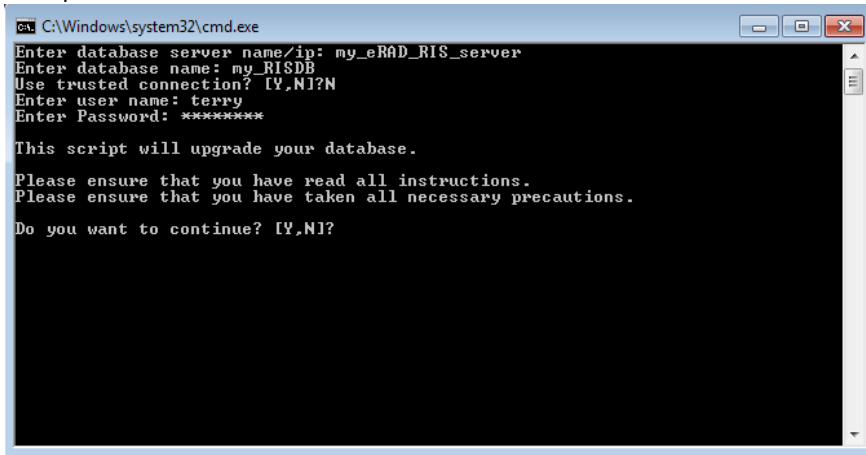
Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

- 1) From the upgrade folder, double click the "RunUpgrade.bat" command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.
- 3) You can choose to use "Trusted connection". Using this option will pass the identity of the currently logged on user. If this user has "db_owner" access to the eRAD RIS database then feel free to use this options.

- 4) If you decide not to use “Trusted connection” then you will be prompted for user id and password.

Example:



```
C:\Windows\system32\cmd.exe
Enter database server name/ip: my_eRAD_RIS_server
Enter database name: my_RISDB
Use trusted connection? [Y,N]?N
Enter user name: terry
Enter Password: *****

This script will upgrade your database.
Please ensure that you have read all instructions.
Please ensure that you have taken all necessary precautions.
Do you want to continue? [Y,N]?
```

After the upgrade program has finished you can find the upgrade logs in the “log” folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team

Server Update

For eRAD RIS
Version 2.0
Build 2.2016.7
Update 2.2016.7.10

Table of Contents

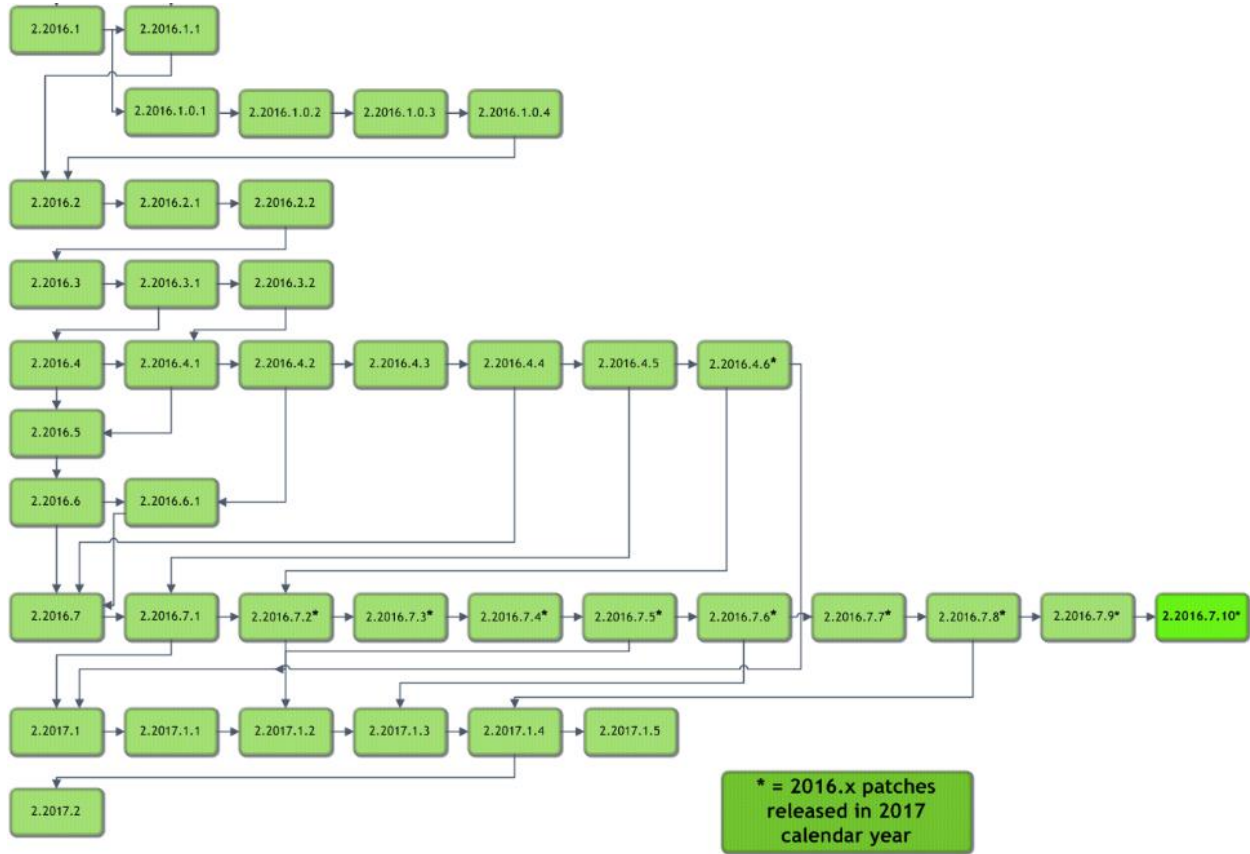
Resolved Items..... 3
Code Stream..... 4
Package Contents 5
Intended Audience 5
Affected Installs 5
eRAD RIS Release Version Numbers 6
Installing 7
 Client/GUI..... 7
 Web Service 7

RESOLVED ITEMS

eRAD RIS

Redmine #	Subject
17324	Improved core service stability by handling the ServiceHost "Faulted" event and re-creating the service object.
17327	Eliminated the queued messages that would inundate the web services when a failed web service would come back on line.
17328	Eliminated the intermittent "Service Call Aborted" exception when logging out of RIS.

CODE STREAM



Legend:

Light Green = Previously Released software

Bright Green = Current Release

PACKAGE CONTENTS

 _ReleaseNotes	05/30/2017 11:27 AM
 rRISService	05/30/2017 11:26 AM
 Service Tools	05/30/2017 11:26 AM
 ThickClient	05/30/2017 11:26 AM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

AFFECTED INSTALLS

Build 2016.7 installs. This server update has GUI and Database updates. This update must be applied to 2016.7.9

ERAD RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2016.1	-	2.16.1.0.33419 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416					GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.1	1	2.16.1.1.33672 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416					GUI.zip
2016.1	.0.1	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.33419	2.16.1.0.33416					GUI.zip (This is not included in 2016.1.1, version directly above)
2016.1	.0.2	2.16.1.0.1 (3GB)	2.16.1.0.33079	2.16.1.0.2	2.16.1.0.33416					Wedge Web Services only
2016.1	.0.3	2.16.1.0.3 (3GB)	2.16.1.0.33079	2.16.1.0.3	2.16.1.0.3.00128918					GUI.zip, Web Services and DB
2016.1	.0.4	2.16.1.0.4 (3GB)	2.16.1.0.33079	2.16.1.0.4	2.16.1.0.3.00128918					GUI.zip, Web Services
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102					GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0				Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0				GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0				GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241			GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009			Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471			Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583			GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and DB updates
2016.7	9	2.16.7.9 (3GB)	2.16.7.0	2.16.7.9	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Services, DB updates and UM Portal
2016.1	10	2.16.7.10 (3GB)	2.16.7.0	2.16.7.10	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI and Web Service updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	4	2.17.1.4 (3GB)	2.17.1.0	2.17.1.4	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI, Web Service, DB and Patient Portal updates
2017.1	5	2.17.1.4 (3GB)	2.17.1.0	2.17.1.5	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		Web Service
2017.2	-	2.17.2.0(3GB)	2.17.2.0	2.17.2.0	2.17.2.0.00695782	2.17.2.0	2.17.2.0.702238	2.17.2.0.702213	2.17.2.0.702226	Full Version Release. First release of Provider Portal

INSTALLING

CLIENT/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.10.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

WEB SERVICE

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled "XSL" that contains a sub folder and files within the subfolder. Another folder is titled "deploy" that contains the new .config files that will be deployed with the user of the file called "ServicesConfigWizard.exe" (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

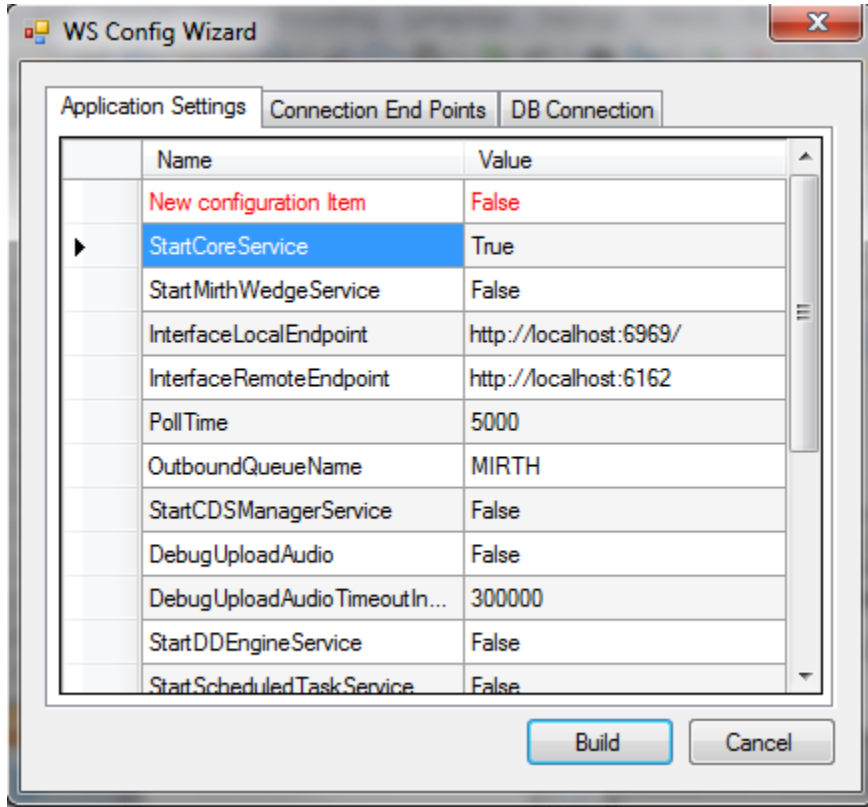
Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a "deploy" folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application "ServicesConfigWizard.exe"

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Server Update

for eRAD RIS

Version 2.0






Build 2.2016.7

Update 2.2016.7.11

Table of Contents

Package Contents	3
Intended Audience	3
Who is affected.....	3
New Features.....	4
Feature #17394 – Utilization Management Orders for gold carded physicians will automatically route to scheduling	4
Feature #17460 - UM Clock now starts counting when the order first qualifies as Utilization Review Required	6
New Configuration settings	7
System configuration settings.....	7
Resolved Items	8
Code Stream	9
eRAD RIS Release Version Numbers	10
Installing	11
Client/GUI.....	11
Web Service	11
Database Updates	13

PACKAGE CONTENTS

 _ReleaseNotes	06/19/2017 11:50 AM
 DB	06/19/2017 9:40 AM
 rRISService	06/19/2017 9:39 AM
 Service Tools	06/19/2017 9:42 AM
 ThickClient	06/19/2017 11:44 AM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

WHO IS AFFECTED

Build 2016.7 installs. This server update must be applied to 2016.7.10.

NEW FEATURES

FEATURE #17394 – UTILIZATION MANAGEMENT ORDERS FOR GOLD CARDED PHYSICIANS WILL AUTOMATICALLY ROUTE TO SCHEDULING

Previously, when a referring physician was flagged as “Gold Card” eRAD RIS would display this flag and the corresponding notes, but it was up to the UM reviewer to evaluate the notes and determine whether the order should bypass the utilization review process.

The screenshot shows the 'Referring Preferences' tab in the eRAD RIS interface. The 'Referring Flags' section is visible, containing three checkboxes: 'Direct referral program', 'Pre-auth program', and 'Gold card'. The 'Gold card' checkbox is checked, and an orange arrow points to it. Below this, the 'Resource Information' section contains various fields: NPI* (78451), UPIN, License #, Specialties (Allergist x), Medical groups (Choice x), and Contact type* (Medical Director). Other checkboxes include 'Unknown NPI', 'Registered in PECOS', 'Confirmed radiologist', 'Unknown referring', and 'Marketing representative'.

It is now possible to configure eRAD RIS to automatically bypass the Utilization Review workflow when the referring physician is flagged as Gold Card. With this configuration, schedulers can proceed immediately to schedule the procedure without waiting for the utilization review process. The order is automatically flagged as UM Complete and a UM Tracking Number is assigned.

To enable this workflow, a new system configuration value called *UMGoldCardAutoApprove* with a default value of “True” has been added to the system.

When *UMGoldCardAutoApprove* is enabled, any orders for Gold Card physicians that require utilization review will be given a new UM Tracking Number and marked as UM Complete, so they can advance to scheduling immediately.

When *UMGoldCardAutoApprove* is *disabled*, any orders for Gold Card physicians that require utilization review will be given a new UM Tracking Number and marked as UM Required, so they can advance to the Utilization Management Worklist to be reviewed.

Schedulers will be able to identify that a referring physician is part of Gold Card by looking at the label next to the referring physician's name on the Order tab. It will appear in the same location as the existing label for "Pre-auth program." A referring physician can be labeled as Gold Card, Pre-auth program, or both.

The screenshot displays the 'Order' tab for a patient named Diana. The interface is divided into several sections:

- Reason for exam:** A text area containing 'chest pain'.
- Referring Details:** This section contains:
 - Referring:** A dropdown menu showing 'Smith, Alfons.' with a '(Gold card)' label next to it, indicated by an orange arrow.
 - Visited at:** A dropdown menu showing 'Milton Road, 167 White Hague St., Seattle, Vermont, 48941'.
 - Img notes:** A text area containing 'Test Notes'.
- Preferred Location:** Contains dropdown menus for 'Practice' (ADV Advanced Radiology) and 'Site' (EL Eldersburg).
- Flags:** A collection of checkboxes and dropdown menus for 'Direct referral', 'STAT exam', 'STAT read', 'STAT PreCert', 'Transportation required', 'Special accommodations' (set to 'No'), 'Class' (Unknown), 'Sedation', 'Transition of care', and 'Provided educational res.'.
- CC Physicians:** A section for 'Visit location for CO' and a 'Copy to patient' checkbox.

FEATURE #17460 - UM CLOCK NOW STARTS COUNTING WHEN THE ORDER FIRST QUALIFIES AS UTILIZATION REVIEW REQUIRED

The UM Clock previously used an order's requested date as the start value (time stamp). Typically, this is the date the order was created in RIS. There are some scenarios where the UM Clock should not use the requested date of the order as a starting point, but rather the date the procedure became qualified for utilization review. For example, an order exists for an X-Ray (UM not required). The X-Ray is changed to a CT procedure 2 days later, which requires utilization review. Since the procedure did not require utilization review until it was changed to a CT, the UM Clock will not use the date that the original order (X-Ray) was created. The UM Clock will instead start as soon as the order first required utilization management (i.e. the date it was changed to a CT).

A new column called *um_received_date* has been added to the c_order_item table. This date/time column will get set anytime a procedure is flagged for utilization review. The UM Clock will use the Received Date as the start parameter.

If an order has multiple procedures that require utilization review, the system will use the oldest Received Date.

If for some reason there is not a Received Date available, the system will revert back to using the Requested Date at the order level which is always available.

NEW CONFIGURATION SETTINGS

SYSTEM CONFIGURATION SETTINGS

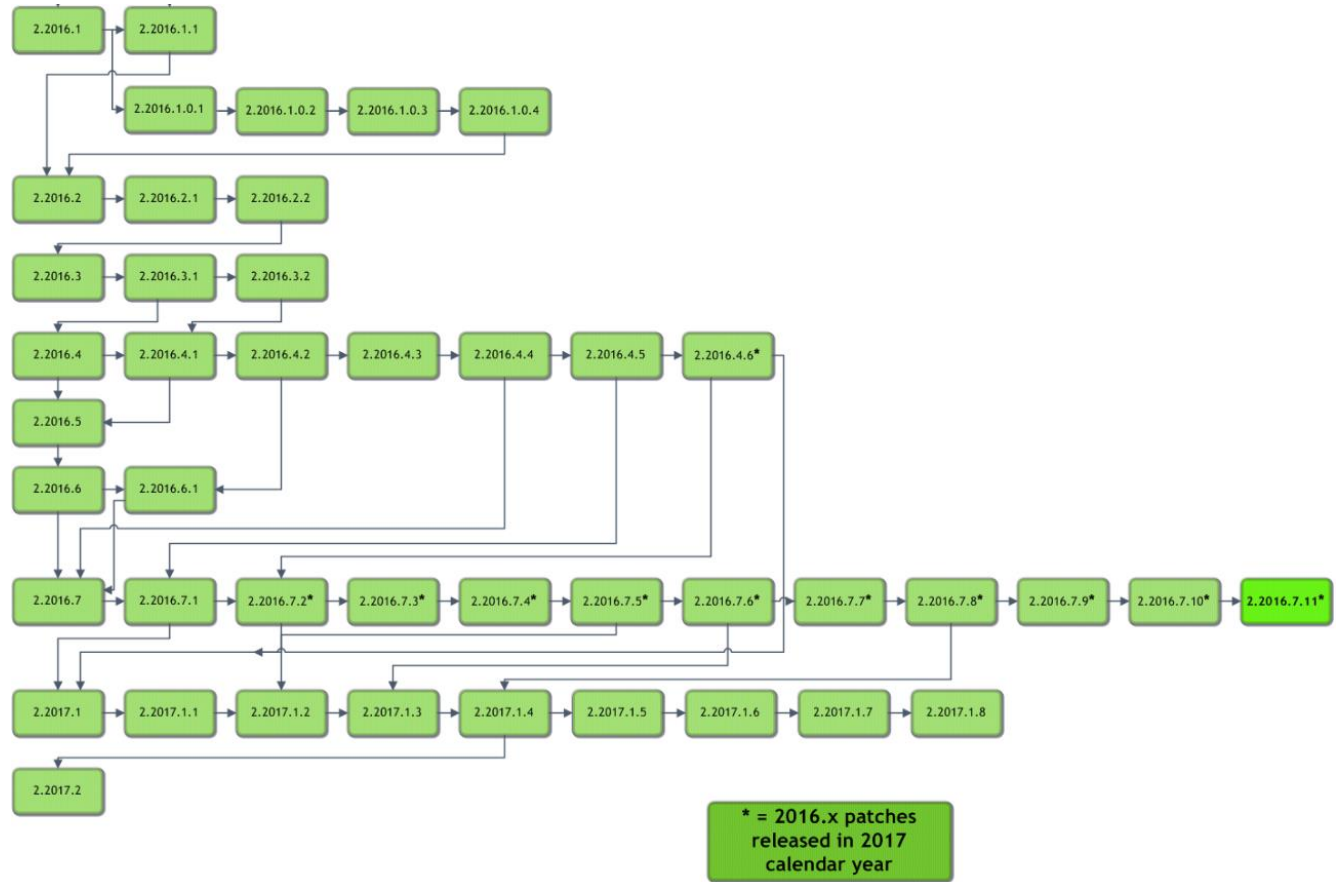
Setting	Default	Purpose
UMGoldCardAutoApprove	True	(value = True/False) Determines if gold carded providers are automatically approved by UM.

RESOLVED ITEMS

eRAD RIS

Redmine #	Subject
17525	UM External Notes are now visible to schedulers.
17524	UM - When recommending an additional procedure, the reviewer can now adjust the authorization status for the additional procedure (previously this was read-only).
17508	Opening the Scheduling screen while an IVT or Utilization Review screen is open for the patient will no longer cause an exception.
17394	Utilization Management Orders for gold carded physicians now automatically route to scheduling. (See Features section)
17460	UM Clock now starts counting when the order first qualifies as Utilization Review Required. (See Features section)
17463	Insurance Eligibility will now run as soon as the Utilization Review screen is opened. (Previously for UM workflow, Manage Policies had to be opened first.)
17461	UM Connect no longer displays cancelled orders on the Orders tab.
17429	Resolved an issue that was caused by a Follow Up Type Code with a single quote character. The "Missing operand after" exception will no longer display.
17391	Resolved an issue that could cause "DataTable internal index is corrupted" exceptions.

CODE STREAM



Legend:

Light Green = Previously Released software

Bright Green = Current Release

ERAD RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00243102					GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0				Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0				GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0				GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241			GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009			Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471			Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583			GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and DB updates
2016.7	9	2.16.7.9 (3GB)	2.16.7.0	2.16.7.9	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Services, DB updates and UM Portal
2016.7	10	2.16.7.10 (3GB)	2.16.7.0	2.16.7.10	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI and Web Service updates
2016.7	11	2.16.7.11 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Service and DB updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	4	2.17.1.4 (3GB)	2.17.1.0	2.17.1.4	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI, Web Service, DB and Patient Portal updates
2017.1	5	2.17.1.4 (3GB)	2.17.1.0	2.17.1.5	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		Web Service
2017.1	6	2.17.1.6 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI and DB Updates
2017.1	7	2.17.1.7 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	8	2.17.1.8 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.2	-	2.17.2.0(3GB)	2.17.2.0	2.17.2.0	2.17.2.0.00695782	2.17.2.0	2.17.2.0.702238	2.17.2.0.702213	2.17.2.0.702226	Full Version Release. First release of Provider Portal

INSTALLING

CLIENT/GUI

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Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

WEB SERVICE

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 134 files in the rRISService folder and 7 sub folders. Of those folders, 1 is a folder titled **"XSL"** that contains a sub folder and files within the subfolder. Another folder is titled **"deploy"** that contains the new .config files that will be deployed with the user of the file called "ServicesConfigWizard.exe" (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a "deploy" folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

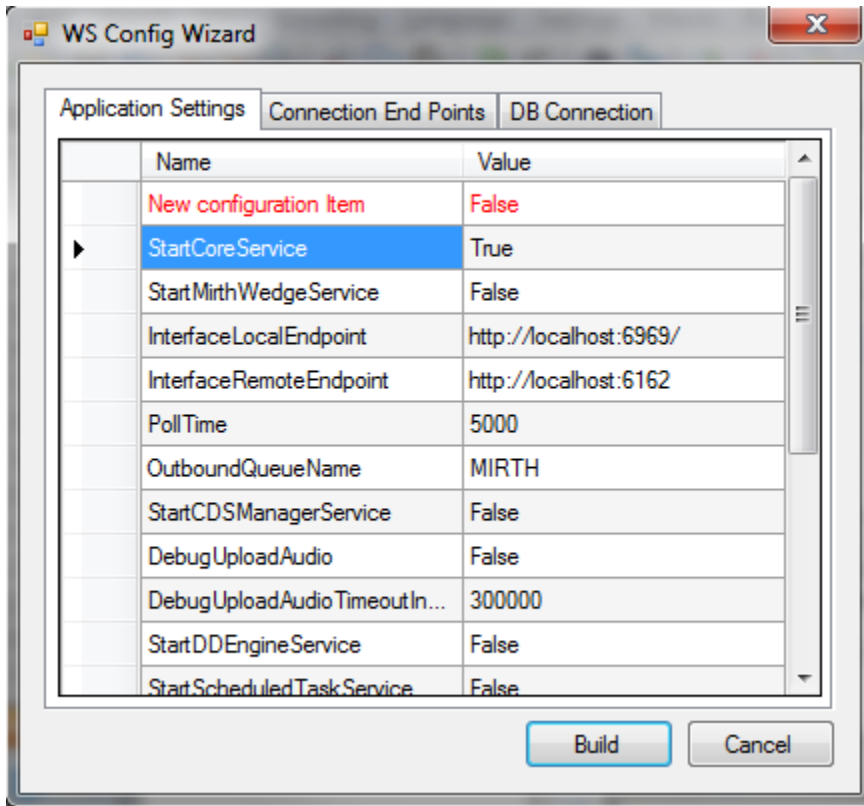
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application "ServicesConfigWizard.exe"

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

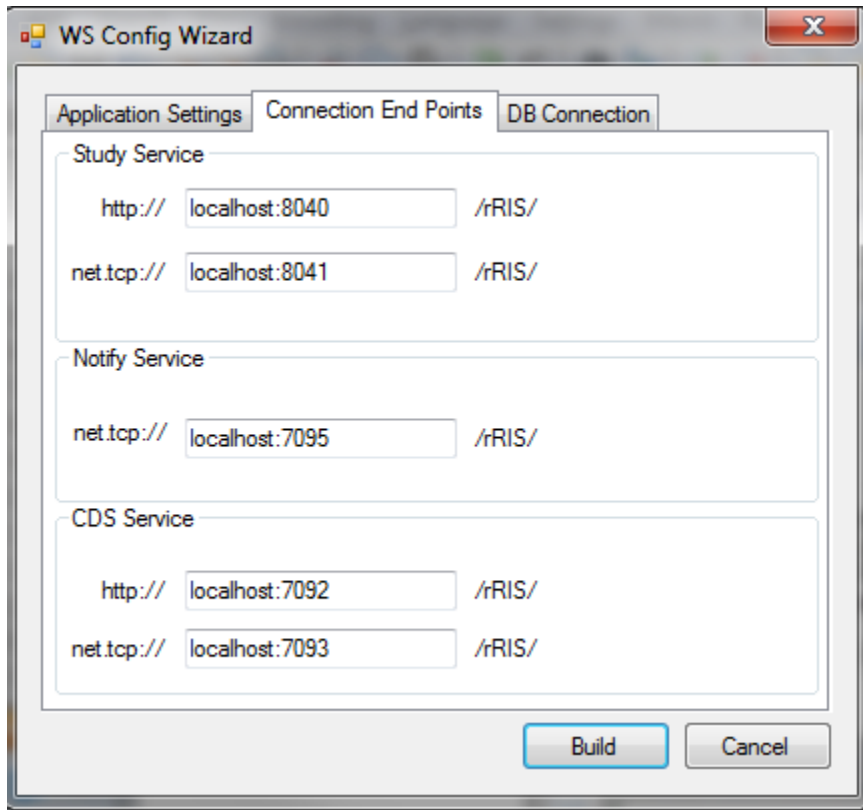
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in any form or by any means without the prior written permission from eRAD.

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



DATABASE UPDATES

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

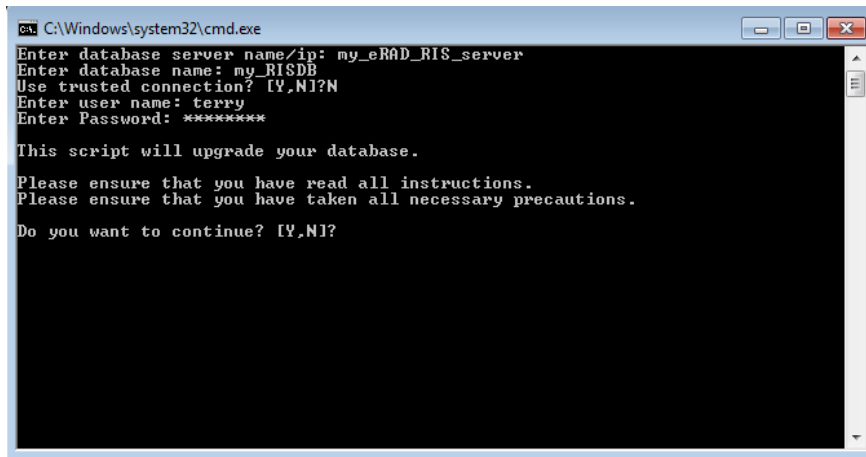
- 1) From the upgrade folder, double click the “RunUpgrade.bat” command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.

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in any form or by any means without the prior written permission from eRAD.

- 3) You can choose to use “Trusted connection”. Using this option will pass the identity of the currently logged on user. If this user has “db_owner” access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use “Trusted connection” then you will be prompted for user id and password.

Example:



```
C:\Windows\system32\cmd.exe
Enter database server name/ip: my_eRAD_RIS_server
Enter database name: my_RISDB
Use trusted connection? [Y,N]? Y
Enter user name: terry
Enter Password: *****

This script will upgrade your database.
Please ensure that you have read all instructions.
Please ensure that you have taken all necessary precautions.
Do you want to continue? [Y,N]?
```

- 5) After the upgrade program has finished you can find the upgrade logs in the “log” folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team

Server Update

for eRAD RIS

Version 2.0

Build 2.2016.7

Update 2.2016.7.12

Table of Contents

Package Contents	3
Intended Audience	3
Who is affected.....	3
Resolved Items	4
Code Stream	5
eRAD RIS Release Version Numbers	6
Installing	7
Client/GUI.....	7

PACKAGE CONTENTS

 _ReleaseNotes	06/27/2017 4:07 PM
 ThickClient	06/27/2017 4:07 PM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

WHO IS AFFECTED

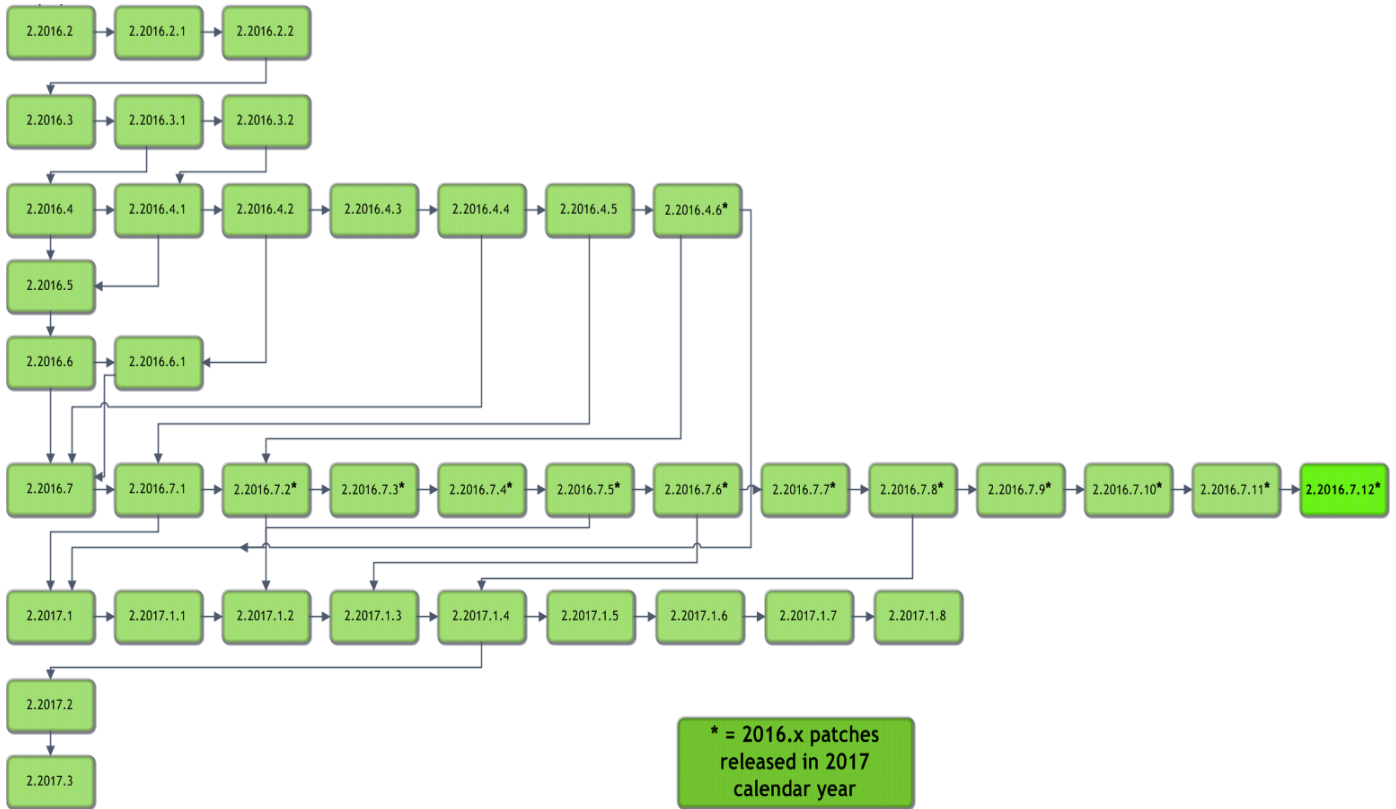
Build 2016.7 installs. This server update must be applied to 2016.7.11.

RESOLVED ITEMS

eRAD RIS

Redmine #	Subject
17598	Resolved an issue that prevented document classification from Inbound Document and Scheduling screens.

CODE STREAM



Legend:

Light Green = Previously Released software

Bright Green = Current Release

ERAD RIS RELEASE VERSION NUMBERS

A	B	C	D	E	F	G	H	I	J	K
Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102					GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0				Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0				GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0				GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241			GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009			Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471			Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583			GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		Full Version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and DB updates
2016.7	9	2.16.7.9 (3GB)	2.16.7.0	2.16.7.9	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Services, DB updates and UM Portal
2016.7	10	2.16.7.10 (3GB)	2.16.7.0	2.16.7.10	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI and Web Service updates
2016.7	11	2.16.7.11 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Service and DB updates
2016.7	13	2.16.7.12 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	4	2.17.1.4 (3GB)	2.17.1.0	2.17.1.4	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI, Web Service, DB and Patient Portal updates
2017.1	5	2.17.1.4 (3GB)	2.17.1.0	2.17.1.5	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		Web Service
2017.1	6	2.17.1.6 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI and DB Updates
2017.1	7	2.17.1.7 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	8	2.17.1.8 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.2	-	2.17.2.0 (3GB)	2.17.2.0	2.17.2.0	2.17.2.0.00695782	2.17.2.0	2.17.2.0.702238	2.17.2.0.702213	2.17.2.0.702226	Full Version Release. First release of Provider Portal
2017.3	-	2.17.3.0 (3GB)	2.17.3.0	2.17.3.0	2.17.3.0.00764112	2.17.3.0	2.17.3.0.321	2.17.3.0.321	2.17.3.0.321	Full Version Release. Including Patient, Provider and UM Portals

INSTALLING

CLIENT/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.12.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

Server Update

for eRAD RIS

Version 2.0









Build 2.2016.7

Update 2.2016.7.13

Table of Contents

Package Contents	3
Intended Audience	3
Who is affected.....	3
New Features.....	4
Feature #17597/17544 - Scheduled Start Date added to Chair API, which will sort chronologically	4
Feature #17829 - Configurable option to suppress unprinted BI-RADS 0 Lay Letters when newer BI-RADS is available for the patient.....	7
Feature #17748 – Allow eRAD RIS Service and Support to add columns to retrieve for patient folder	8
Feature #17351, 17352 – New RIS settings to reduce bandwidth for updates	9
Feature #15265 – Option to deploy multiple report server data sources	10
New Configuration settings	12
System configuration settings.....	12
Resolved Items	13
Code Stream	18
eRAD RIS Release Version Numbers	19
Installing	20
Client/GUI.....	20
Web Service	20
Database Updates	22

PACKAGE CONTENTS

 _Documentation	7/25/2017 3:50 PM
 _ReleaseNotes	7/27/2017 3:20 PM
 DB	7/25/2017 3:50 PM
 PatientConnect	7/27/2017 3:15 PM
 rRISService	7/25/2017 3:49 PM
 Service Tools	7/25/2017 3:51 PM
 ThickClient	7/25/2017 3:48 PM
 UM_Portal	7/27/2017 3:14 PM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

It is appropriate to share the document with any customers applying the patch, in order to review new feature descriptions and resolved defects.

WHO IS AFFECTED

Build 2016.7 installs. This server update must be applied to 2016.7.12.

NEW FEATURES

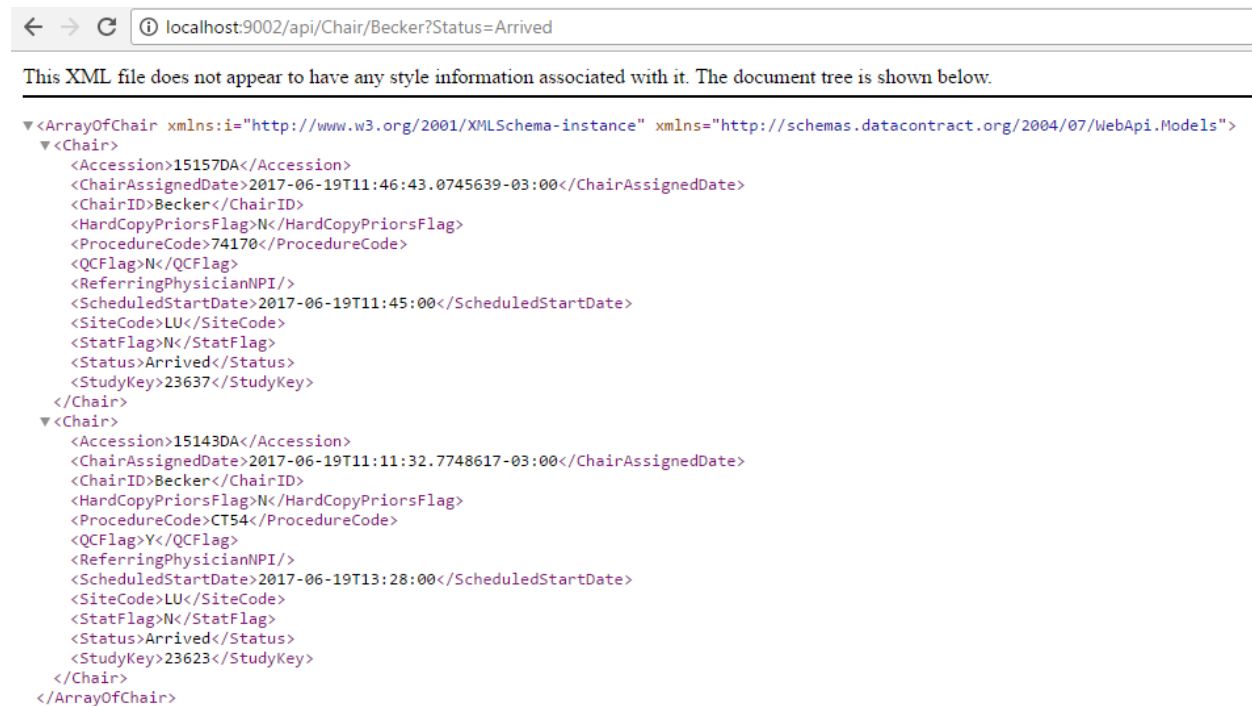
FEATURE #17597/17544 - SCHEDULED START DATE ADDED TO CHAIR API, WHICH WILL SORT CHRONOLOGICALLY

This feature is for customers using the Chair API. The Chair API now includes the Scheduled Start Date and returns the oldest studies first. This enables the Chair workflow engine to assign aging studies first.

Scheduled Start Date was added as a field in the output of two Chair API requests. Additionally, the results of any requests to obtain an exam list by chair and by status are now sorted by Scheduled Start Date, with the oldest dates listed first.

A change has also been made to make the previously hard coded "7 day filter" configurable. Previously, the Chair API limited query results by chair and status to include exams that had been scheduled within the past 7 days. An optional parameter, *IncludeAllDates*, has been added to bypass the 7 day filter on Scheduled Start Date. This parameter will default to false if not specified and the original behavior will be maintained.

Figures 1 through 3, below, illustrate the XML:



```

This XML file does not appear to have any style information associated with it. The document tree is shown below.
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<ArrayOfChair xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://schemas.datacontract.org/2004/07/WebApi.Models">
  <Chair>
    <Accession>15157DA</Accession>
    <ChairAssignedDate>2017-06-19T11:46:43.0745639-03:00</ChairAssignedDate>
    <ChairID>Becker</ChairID>
    <HardCopyPriorsFlag>N</HardCopyPriorsFlag>
    <ProcedureCode>74170</ProcedureCode>
    <QCFlag>N</QCFlag>
    <ReferringPhysicianNPI/>
    <ScheduledStartDate>2017-06-19T11:45:00</ScheduledStartDate>
    <SiteCode>LU</SiteCode>
    <StatFlag>N</StatFlag>
    <Status>Arrived</Status>
    <StudyKey>23637</StudyKey>
  </Chair>
  <Chair>
    <Accession>15143DA</Accession>
    <ChairAssignedDate>2017-06-19T11:11:32.7748617-03:00</ChairAssignedDate>
    <ChairID>Becker</ChairID>
    <HardCopyPriorsFlag>N</HardCopyPriorsFlag>
    <ProcedureCode>CT54</ProcedureCode>
    <QCFlag>Y</QCFlag>
    <ReferringPhysicianNPI/>
    <ScheduledStartDate>2017-06-19T13:28:00</ScheduledStartDate>
    <SiteCode>LU</SiteCode>
    <StatFlag>N</StatFlag>
    <Status>Arrived</Status>
    <StudyKey>23623</StudyKey>
  </Chair>
</ArrayOfChair>

```

Figure 1 – Get Exam list by chair and status

← → ↻ ⓘ localhost:9002/api/Chair/Becker?Status=Arrived&ReturnAllDates=true

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

<ArrayOfChair xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://schemas.datacontract.org/2004/07/WebApi.Models">
  <Chair>
    <Accession>15149DA</Accession>
    <ChairAssignedDate>2017-06-20T16:17:02.9579357-03:00</ChairAssignedDate>
    <ChairID>Becker</ChairID>
    <HardCopyPriorsFlag>N</HardCopyPriorsFlag>
    <ProcedureCode>72126</ProcedureCode>
    <QCFlag>N</QCFlag>
    <ReferringPhysicianNPI/>
    <ScheduledStartDate>2017-06-01T16:19:00</ScheduledStartDate>
    <SiteCode>LU</SiteCode>
    <StatFlag>N</StatFlag>
    <Status>Arrived</Status>
    <StudyKey>23629</StudyKey>
  </Chair>
  <Chair>
    <Accession>15157DA</Accession>
    <ChairAssignedDate>2017-06-19T11:46:43.0745639-03:00</ChairAssignedDate>
    <ChairID>Becker</ChairID>
    <HardCopyPriorsFlag>N</HardCopyPriorsFlag>
    <ProcedureCode>74170</ProcedureCode>
    <QCFlag>N</QCFlag>
    <ReferringPhysicianNPI/>
    <ScheduledStartDate>2017-06-19T11:45:00</ScheduledStartDate>
    <SiteCode>LU</SiteCode>
    <StatFlag>N</StatFlag>
    <Status>Arrived</Status>
    <StudyKey>23637</StudyKey>
  </Chair>
</ArrayOfChair>

```

Figure 2a – Get Exam list by chair and status with ReturnAllDates = true to include older studies

← → ↻ ⓘ localhost:9002/api/Chair/Becker?Status=Arrived&ReturnAllDates=false

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

<ArrayOfChair xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://schemas.datacontract.org/2004/07/WebApi.Models">
  <Chair>
    <Accession>15157DA</Accession>
    <ChairAssignedDate>2017-06-19T11:46:43.0745639-03:00</ChairAssignedDate>
    <ChairID>Becker</ChairID>
    <HardCopyPriorsFlag>N</HardCopyPriorsFlag>
    <ProcedureCode>74170</ProcedureCode>
    <QCFlag>N</QCFlag>
    <ReferringPhysicianNPI/>
    <ScheduledStartDate>2017-06-19T11:45:00</ScheduledStartDate>
    <SiteCode>LU</SiteCode>
    <StatFlag>N</StatFlag>
    <Status>Arrived</Status>
    <StudyKey>23637</StudyKey>
  </Chair>
</ArrayOfChair>

```

Figure 2b – Get Exam list by chair and status with ReturnAllDates = false to exclude older studies (compare to Figure 2a)



Figure 3 - Get Chair Data by Accession

FEATURE #17829 - CONFIGURABLE OPTION TO SUPPRESS UNPRINTED BI-RADS 0 LAY LETTERS WHEN NEWER BI-RADS IS AVAILABLE FOR THE PATIENT

There is now a System Configuration setting that will suppress unprinted BI-RADS 0 Lay Letters when a more current BI-RADS exists for the same patient. For example, if a patient's BI-RADS 0 Lay Letter has not been printed by the time they return for their additional imaging, the new exam's Lay Letter would effectively replace the original BI-RADS 0 Lay Letter when the BI-RADS for the new report is anything other than 0.

The default for this new setting will be False. The recommendation for U.S. customers is to leave this setting as false to ensure that patients receive Lay Letters for every BI-RADS exam.

The new System Configuration setting is named *SuppressAllUnprintedBIRADS0LayLetters*.

Please note that this setting does not impact the workflow for unprinted Lay Letters when an addendum is done for the *same* study. If a Lay Letter has not been printed and an addendum is done on that study, the Lay Letter will continue to be replaced with an updated Lay Letter if the BI-RADS information has been updated. This System Configuration setting has no impact on this workflow, which remains unchanged.

FEATURE #17748 – ALLOW ERAD RIS SERVICE AND SUPPORT TO ADD COLUMNS TO RETRIEVE FOR PATIENT FOLDER

ALERT: This feature is meant to be used by eRAD Support only. Adjustments should only be made under the direction of an eRAD Support team member.

Recently, a change was made to the way eRAD RIS retrieves data for the Patient Folder, which had been retrieving more data from the database than was necessary to display the information needed in the visible columns.

In reducing the data retrieved for the patient folder, it became evident that some information that is not displayed in the worklist columns is nevertheless used for certain functions, such as determining which context menu options should be available. If the data was not available, the user could receive an error or lose access to certain functionality that is dependent upon the data.

eRAD RIS is once again retrieving the data that was identified as supporting such functions; however, it is beneficial to have a method for eRAD Support to add additional database columns to the set for retrieval, in case it is discovered in the field that additional data is required for an unforeseen function.

To support this, a new System Configuration setting has been added: *PatientFolderExtraColumnsToGet*. This setting will allow a comma separated list of columns to retrieve from the database in addition to the hard coded set. Any column names that are not part of the *c_vw_PatientFolder* view are deemed invalid and are not retrieved. This will prevent an exception from occurring in the Patient Folder if an invalid column name is entered in System Configuration.

RIS Development should be notified anytime eRAD Support resorts to adding a column to this System Configuration setting so that adjustments can be made in the next release.

FEATURE #17351, 17352 – NEW RIS SETTINGS TO REDUCE BANDWIDTH FOR UPDATES

Two new System Configuration settings have been created in an effort to reduce the amount of bandwidth consumed by saving/uploading updates to the server. Both features will be automatically enabled at the time of the upgrade, but will present no detectable changes to the RIS user. **Update: Enable Extra Compression will be disabled until further changes are made.**

Both of these configuration options will decrease the network bandwidth utilization, which will deliver some performance benefits for networks which have slow upload speeds.

Uploading patient/order updates:

When saving edits to screens such as ViewEdit or Registration, the data is sent to the server in an XML format, which is fairly bulky and uses more bandwidth than necessary. For example, saving a change to a patient's middle name costs approximately 60KB when sent via XML. A new system configuration setting will enable a *binary serializer* to send the update data in binary format, which reduces the size of the data to be uploaded. When sending in binary format, the same update that cost 60KB when sent via XML is reduced to approximately 8KB.

To enable this feature, the new System Configuration setting, *EnableExtraCompressionOnStudyUpdates*, must be set to True. The default for this setting is True, so it will be enabled at the time of the upgrade, unless the setting is changed to False. **Update: Enable Extra Compression will be disabled until further changes are made.**

Uploading Attachments:

Another new System Configuration setting is available to reduce the size of **attachments** for upload. Attachments are typically saved as a JPEG file. However, in many cases, a smaller file size could be achieved by applying LZW compression and saving the attachment as a TIFF file. The image quality on the resulting TIFF file is typically equal or superior to the JPEG image.

When *AllowLZWImageCompression* is set to True, RIS will compress attachments twice: once as a JPEG and once, using LZW Compression, as a TIFF file. The version with a smaller file size will be used for the attachment, unless the compressed TIFF image is significantly different from the original. If 80% of the pixels are different between the JPEG and the TIFF, RIS will choose the JPEG compression for that attachment.

The default for this System Configuration setting is True, which means that this compression process will be enabled at the time of upgrade, unless the setting is changed to False.

FEATURE #15265 – OPTION TO DEPLOY MULTIPLE REPORT SERVER DATA SOURCES

When management reports do not need to display real-time data, it is beneficial to have the option for these reports to run from other data sources, such as an offline or alternate database.

Configuration for eRAD Support Only:

To provide this option, a modification has been made to the management report deployment batch file, *ReportServerDeployment.bat*, which will allow the user to create a second data source. One data source will be used for real time reporting (*RISDataSource*) and the second data source (*ReportDataSource*) will be created for reports that should be run from the alternate source. By default, reports will be deployed to the *RISDataSource*. (Technical Note: Both data sources can be pointing to the exact same database. If the user does not create the data sources, they will be created on the report server pointing to no particular database.)

```

Do you still wish to Continue, Rename or Exit? [C,R,E]?C
Do you need to create DataSources? [Y,N]?Y

*****
Enter RISDataSource information.(Real-Time Reporting)
*****

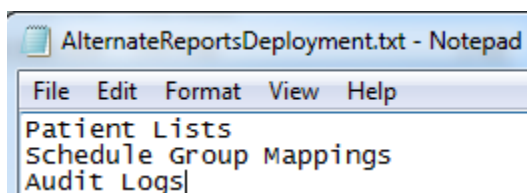
Enter destination DATABASE server name: [default:IANLAPTOP-PEI]: peidev1
Enter database name: rRIS_QE01
Enter report schema user name: qe
Enter report schema password: ris
Setup new datasource

*****
Enter ReportDataSource information. (Alternate Reporting)
*****

Enter database name:

```

The deployment script will determine which data source to use for the deployment of each report. To deploy reports to the alternate data source (*ReportDataSource*), there is a new file called *AlternateReportsDeployment.txt* in the core folder. This new file will contain a list of Report names that will point to the offline or alternate data source, formatted as displayed below.



```

AlternateReportsDeployment.txt - Notepad
File Edit Format View Help
Patient Lists
Schedule Group Mappings
Audit Logs|

```

The script will look at the list of Report Names from this file and select the appropriate data source.

At this time, there is not a GUI to allow users to easily manage moving reports between data sources. Therefore, this information is being provided to the eRAD Support/Service and Implementation teams so that assistance can be provided to any customer who wishes to take advantage of this functionality.

```

*****
                        Report Server Deployment
*****
This utility provides the following functions:
1. Deploy Reports
2. Export\Backup from a server to the backup folder within this directory.
3. Upload Forms
4. Upload Custom Management Reports
5. Upload Diagnostic Templates
6. Copy from a Report Server either the same server or another on same domain
7. Copy from a folder within this folders backup folder to a SSRS server.
*****

Choose: [1,2,3,4,5,6,7]?1
1. Deploy Reports
Is this a new deployment or redeployment? [N,R]?N
Enter destination REPORT SERVER name [default:DARCYNLPTP-PE]: gasq12014
Report Folders On Server
  BaselineDataSource
  connectreferringportal
  ge_2016.7
  ge_current_win2012
  ge_he_2012
  ge_he_win2012
The command completed successfully
Enter report server folder name:2017.1_upgrade_test

*****
CAUTION: 2017.1_upgrade_test will be overwritten.
*****

Do you still wish to Continue, Rename or Exit? [C,R,E]?C
Do you need to create a RIS DataSources? [Y,N]?Y

*****
Enter RISDataSource information.(Real-Time Reporting)
*****

Enter destination DATABASE server name: [default:DARCYNLPTP-PE]: gasq12014
Enter database name: 2017.1_upgrade_test
Enter report schema user name:
Enter report schema password:
Setup new datasource

*****
Enter ReportDataSource information. (Alternate Reporting)
*****

Do you need to create a Reporting DataSources? [Y,N]?Y

Enter destination DATABASE server name: [default:DARCYNLPTP-PE]: gasq12014
Enter database name: 2017.1_upgrade_test
Enter report schema user name:
Enter report schema password:

```

NEW CONFIGURATION SETTINGS

SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
PatientFolderExtraColumnsToGet	n/a	(value = string) Comma separated list of additional columns to retrieve for the patient folder. Columns must exist in the patient folder view. SERVICE ONLY. Please report to RIS Development when used.
SuppressAllUnprintedBIRADSOLay Letters	False	Suppresses all unprinted BI-RADS 0 Lay Letters if a new report is signed for the patient with any BI-RADS other than 0. Recommendation for this setting is False.
EnableExtraCompressionOnStudy Updates	True	(value = bool) Setting this to true will enable gzip and other compression techniques and is ideal for sites with limited upload bandwidth. Set it to false to default to the legacy Microsoft data serialization. Update: Enable Extra Compression will be disabled until further changes are made.
AllowLZWImageCompression	True	(value = bool) Setting this to true will enable LZW Image Compression when saving attachments.

RESOLVED ITEMS

eRAD RIS

Redmine #	Subject
17615	Resolved an issue with exams scheduled from Cancelled appointments inappropriately retaining their PreCert status. Also revised check on expiry date to ensure that PreCert status will be set to Required if the Expiry Date is prior to the new scheduled date or the Expiry Date was blank when rescheduling from an Approved exam.
17109	The increased time for RIS GUI GetData calls to RIS Services has been reduced.
17714	Database option pack created to backfill <code>_primary_study_key</code> prior to upgrade to prevent the upgrade from taking an excessively long time for large data centers.
17703	An alias was added for the Reading Group column in the view <code>c_vw_WL_Dictated</code> , as it was noticed that the alias had changed.
17689	Upgrade script has been added to resolve an issue with preferred radiologist not populating correctly under certain circumstances.
17632	Addressed an issue with performance problems in the PreCert Group Editor.
17613	Temporarily disabled <code>EnableExtraCompressionOnStudyUpdates</code> until further changes are made.
17519	An index was added to improve performance during a patient search (previously caused excessive IO).
17514	Changed an index to improve efficiency of a Chair workflow query.
17443	Index used by UM Management Reports is now only referencing UM Finalized dates that are not null.
17407	Added a missing index on <code>c_study_item_sedation</code> for <code>study_item_key</code> .

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17401	The study dataset has been updated to take advantage of a new computed column to increase efficiency when determining the primary study.
17390	Eliminated unnecessary database calls for linked interpretation rows to improve performance.
17389	No longer retrieving unnecessary database columns for Patient Folder.
17382	Resolved a performance issue with excessive service calls when searching for carriers.
17772	Resolved an issue with contrast requirements when patient has multiple studies.

The following list contains bugs or features that have been resolved in “future” RIS versions and have been pulled back to this earlier version of eRAD RIS. Features are also described in the New Features section.

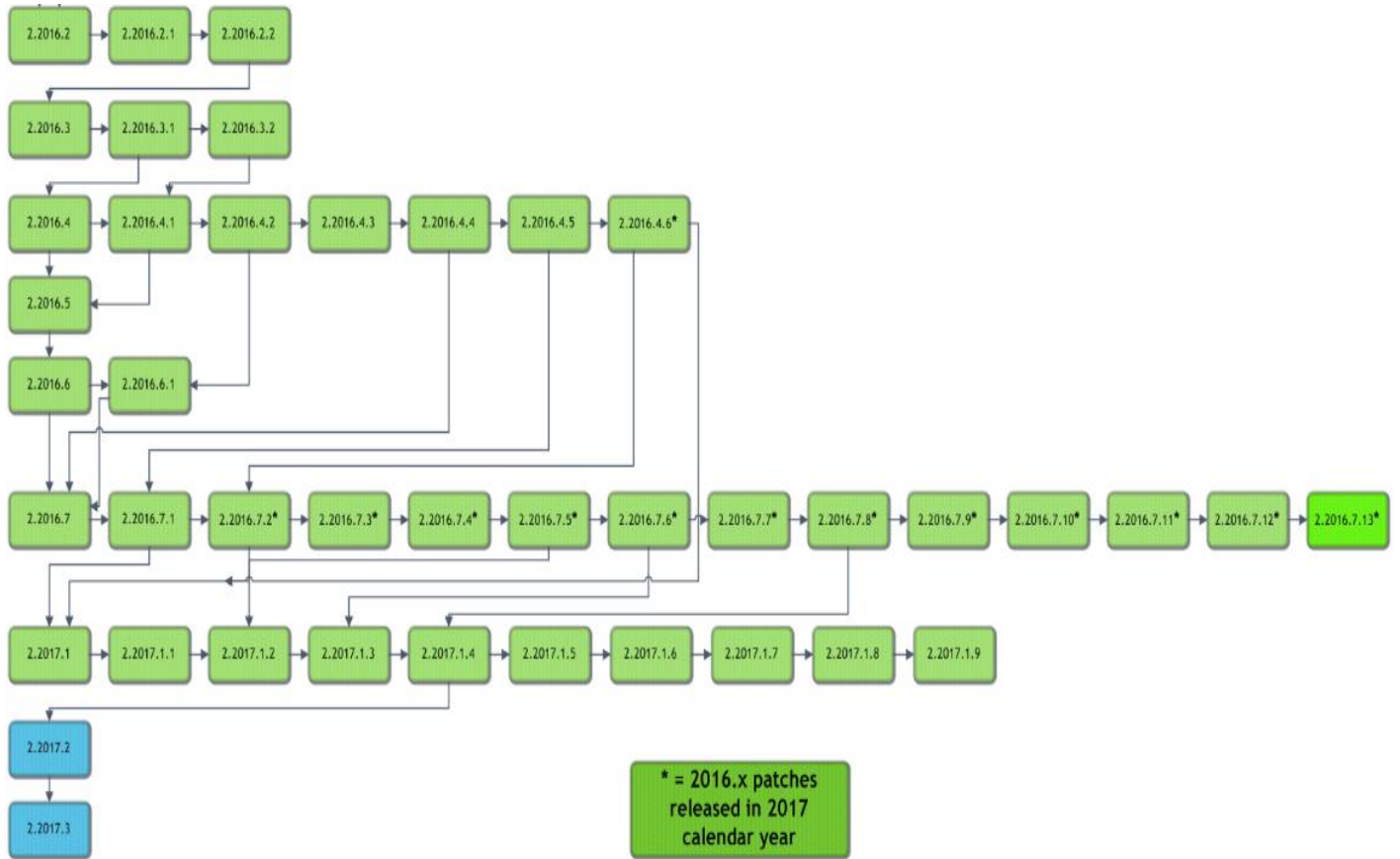
Redmine #	Subject	Original Resolved Version
17839	Resolved an intermittent issue with RIS Crashing between scheduling under particular circumstances (Object reference not set to an instance of an object).	2017.1
17354	New Feature: Option to deploy multiple report server data sources.	2017.1
17353	Changed the clustered index on c_study table to improve performance.	2017.1
17568	Closed Room Reschedule WL now supports repeat rules, resolving an issue where studies could be filtered from the Confirmation worklist.	2017.1
17565	Resolved a foreign key error when adding and saving contrast.	2017.2
17356	Changes made to increase database execution plan reuse for	2017.2

	improved performance.	
17352	New Feature: Support TIFF format with LZW compression and 8bit color depth for RIS scanned documents. (See New Features section titled "New RIS settings to reduce bandwidth for updates.")	2017.2
17351	New Feature: Client side setting to optimize calls to UpdateStudy. (See New Features section titled "New RIS settings to reduce bandwidth for updates.") Update: Enable Extra Compression will be disabled until further changes are made.	2017.2
17374	Tables without cluster indexes now have one for performance improvement.	2017.2
17612	Resolved an error occurring on the Connect Administrator - System Messages screen when saving without changes.	2017.2
17610	Patient Portal's identity verification no longer allows invalid data after receiving an invitation from the Provider Portal.	2017.2
17609	Removed unnecessary message regarding external report workflow from the View/Edit window.	2017.2
17732	Added two missing indexes for performance improvement.	2017.3
17694	When forwarding messages in the CONNECT Patient Portal Administration portal, patient information is now added above the message body.	2017.3
17691	Resolved an issue with Push Signature service.	2017.3
17596	Resolved a CONNECT Patient Portal issue with iCODE errors when multiple studies are mapped to the iCODE.	2017.3
17574	Made a change to Management Report views to improve	2017.3

	performance.	
17558	eRAD RIS reporting tab will stay in sync even if PowerScribe 360 report is closed immediately upon opening.	2017.3
17557	Resolved an issue with creating multiple addendums from the View Study screen using different reporting modes.	2017.3
17403	Implemented a new string splitting function for performance improvement.	2017.3
17373	Changed the method of calculating the Eligibility flag for performance improvement.	2017.3
17372	RIS now trims Eligibility request and response tables on a regular interval to reduce the size of the indexes and table foot prints.	2017.3
17370	Worklist views and stored procedures now use ITVF for performance improvement.	2017.3
17369	Resolved an issue with database performance related to Exam Search.	2017.3
17368	Exam Searches are now using index when doing date comparisons	2017.3
17367	RIS database compatibility mode no longer equal to SQL 2008.	2017.3
17366	Changed Linked study pattern to improve performance when solving primary study key.	2017.3
17365	Modified a stored procedure for the Pending QA WL to ensure that the correct sites are included.	2017.3
17363	New database object will concatenate the values of string expressions for improved performance.	2017.3

17361	For performance gains, scalar database functions have been replaced with ITVF replacements.	2017.3
17360	Index has been added to c_eligible_request.visit_key.	2017.3
17358	C_action_data rows can now be added without having to followup with a refresh of the dataset.	2017.3
17357	Changed the way the Legacy Report Flag is determined to improve performance.	2017.3
17355	Log file from deployment script will now differentiate which management reports use the "Real-Time" and which use the "Alternate" reporting server.	2017.4
17688	When referring physician has a Preferred Rad defined, the Assigned Rad is now consistently populating in the perform exam window (Upgrade script needed to backfill new column.)	2017.4

CODE STREAM



ERAD RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2016.2	-	2.16.2.0 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					Full Version Release - GUI.zip, Web Service, DB, Management Reports, Questionnaire and Citrix Bridge
2016.2	1	2.16.2.1 (3GB)	2.16.2.0	2.16.2.0	2.16.2.0.00172540					GUI.zip and Citrix Bridge
2016.2	2	2.16.2.2 (3GB)	2.16.2.0	2.16.2.0	2.16.2.2.00243102					GUI.zip, DB and Citrix Bridge
2016.3	-	2.16.3.0 (3GB)	2.16.3.0	2.16.3.0	2.16.3.0.00257101	2.16.3.0				Full Version Release
2016.3	1	2.16.3.1	2.16.3.0	2.16.3.1	2.16.3.1.00298834	2.16.3.0				GUI.zip, Web Service and DB
2016.3	2	2.16.3.2	2.16.3.0	2.16.3.2	2.16.3.1.00298834	2.16.3.0				GUI.zip and Web Service
2016.4	-	2.16.4.0	2.16.4.0	2.16.4.0	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			Full Version Release
2016.4	1	2.16.4.1	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.0.310284			GUI and Web Service updates
2016.4	2	2.16.4.2 (3GB)	2.16.4.0	2.16.4.1	2.16.4.0.00301943	2.16.4.0	1.16.4.2.460241			GUI and Patient Portal updates
2016.4	3	2.16.4.3 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI and Patient Portal updates
2016.4	4	2.16.4.4 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0	1.16.4.3.489120			GUI
2016.4	5	2.16.4.5 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.4	6	2.16.4.6 (3GB)	2.16.4.0	2.16.4.3	2.16.4.3.00483474	2.16.4.0				GUI
2016.5	-	2.16.5.0 (3GB)	2.16.5.0	2.16.5.0	2.16.5.0.00349303	2.16.5.0	1.16.5.0.362009			Full Version Release
2016.6	-	2.16.6.0 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.0.432471			Full Version Release
2016.6	1	2.16.6.1 (3GB)	2.16.6.0	2.16.6.0	2.16.6.0.00411295	2.16.6.0	1.16.6.1.468583			GUI and Patient Portal updated
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and DB updates
2016.7	9	2.16.7.9 (3GB)	2.16.7.0	2.16.7.9	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Services, DB updates and UM Portal
2016.7	10	2.16.7.10 (3GB)	2.16.7.0	2.16.7.10	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI and Web Service updates
2016.7	11	2.16.7.11 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Service and DB updates
2016.7	12	2.16.7.12 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI
2016.7	13	2.16.7.13 (3GB)	2.16.7.0	2.16.7.13	2.16.7.13.00823274	2.16.7.0	2.16.7.13.805715	2.16.7.13.805717		GUI, Web Service, DB, Patient and UM Portal updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	4	2.17.1.4 (3GB)	2.17.1.0	2.17.1.4	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI, Web Service, DB and Patient Portal updates
2017.1	5	2.17.1.4 (3GB)	2.17.1.0	2.17.1.5	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		Web Service
2017.1	6	2.17.1.6 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI and DB Updates
2017.1	7	2.17.1.7 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	8	2.17.1.8 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	9	2.17.1.9 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.2	-	2.17.2.0(3GB)	2.17.2.0	2.17.2.0	2.17.2.0.00695782	2.17.2.0	2.17.2.0.702238	2.17.2.0.702213	2.17.2.0.702226	Full Version Release. First release of Provider Portal
2017.3	-	2.17.3.0(3GB)	2.17.3.0	2.17.3.0	2.17.3.0.00764112	2.17.3.0	2.17.3.0.321	2.17.3.0.321	2.17.3.0.321	Full Version Release. Including Patient, Provider and UM Portals

INSTALLING

CLIENT/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.13.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

WEB SERVICE

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 136 files in the rRISService folder and 9 sub folders. Of those folders, 1 is a folder titled **"XSL"** that contains a sub folder and files within the subfolder. Another folder is titled **"deploy"** that contains the new .config files that will be deployed with the user of the file called "ServicesConfigWizard.exe" (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a "deploy" folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

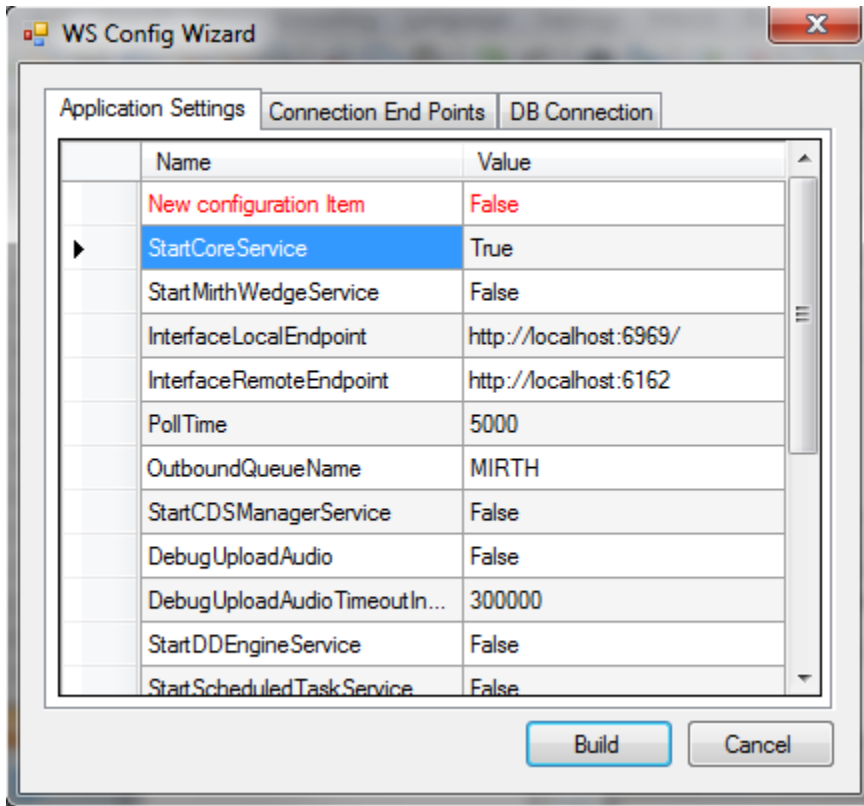
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application "ServicesConfigWizard.exe"

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

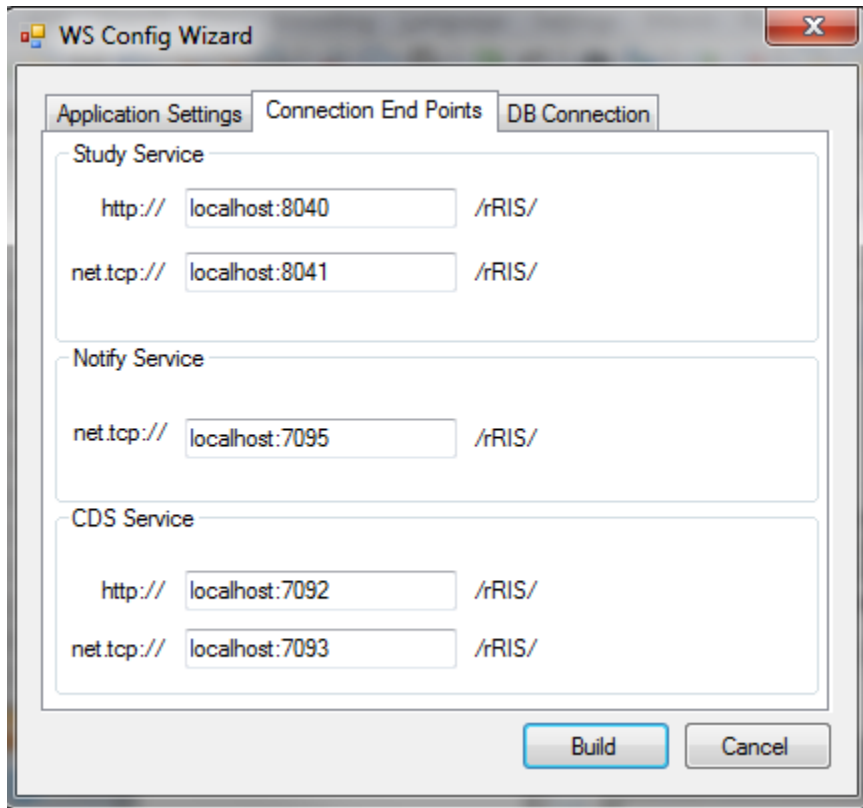
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Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



DATABASE UPDATES

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

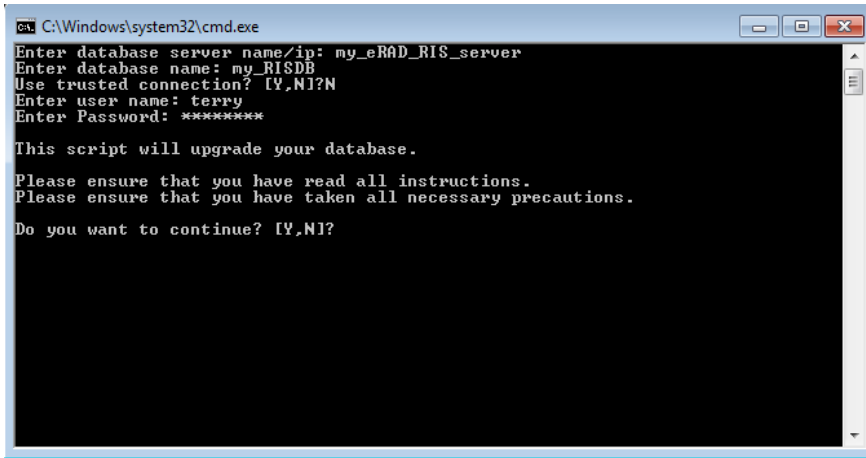
- 1) From the upgrade folder, double click the “RunUpgrade.bat” command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.

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- 3) You can choose to use “Trusted connection”. Using this option will pass the identity of the currently logged on user. If this user has “db_owner” access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use “Trusted connection” then you will be prompted for user id and password.

Example:



- 5) After the upgrade program has finished you can find the upgrade logs in the “log” folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team

Server Update

for eRAD RIS

Version 2.0









Build 2.2016.7

Update 2.2016.7.14

Table of Contents

Package Contents	3
Intended Audience	3
Who is affected.....	3
New Features.....	4
Feature #18166/17708 - UM - When specifying Gold Card or STAT orders, the system should auto-approve the order and set the UM Status and UM Resolution.....	4
Feature #18168/17580 - Automatically update Exam Status based on attributes of selected UM Status.....	5
Feature #18170/17530 – UM - RIS users require the ability to preview and distribute the UM Opinion Letter.	7
Feature #18172/17529 – UM - Reviewers require the ability to change the requested procedure	8
New Configuration settings	11
System configuration settings.....	11
Access strings	11
Resolved Items	12
Code Stream	14
eRAD RIS Release Version Numbers	15
Installing	16
Client/GUI.....	16
Web Service	16
Database Updates	18

PACKAGE CONTENTS

 _Documentation	9/15/2017 8:50 AM
 _ReleaseNotes	9/15/2017 4:22 PM
 DB	9/15/2017 8:49 AM
 PatientConnect	9/15/2017 8:48 AM
 rRISService	9/15/2017 8:48 AM
 Service Tools	9/15/2017 8:50 AM
 ThickClient	9/15/2017 4:19 PM
 UM_Portal	9/15/2017 8:47 AM

INTENDED AUDIENCE

The intended audience for this document is the RadNet Clinical Systems team and the eRAD Support/Service team.

It is appropriate to share the document with any customers applying the patch, in order to review new feature descriptions and resolved defects.

WHO IS AFFECTED

Build 2016.7 installs. This server update must be applied to 2016.7.13.

NEW FEATURES

UTILIZATION MANAGEMENT

FEATURE #18166/17708 – SET DEFAULT UM STATUS AND RESOLUTION CODES FOR GOLD CARD AND STAT ORDERS

When configured, special handling for Gold Card or STAT orders requires that the orders be advanced to scheduling, bypassing the UM process. Previously, the UM flag was set to “Y” to allow scheduling, but the order would remain in Received status.

It is now possible to configure which Status and Resolution codes will be used in these scenarios. The defaults are defined by the following System Configuration settings:

- UMDefaultSTATStatusCode
- UMDefaultSTATResolutionCode
- UMDefaultGoldCardStatusCode
- UMDefaultGoldCardResolutionCode

If either UMByPassSTAT or UMGoldCardAutoApprove is set to Y, the order’s status code and resolution code will be immediately changed to match the System Configuration values. In addition, the following values are automatically set:

- UM Finalized Date = Current Date/Time
- UM Finalized by User ID = “system”
- UM Final Status Hours = 0

FEATURE #18168/17580 - AUTOMATICALLY UPDATE EXAM STATUS BASED ON ATTRIBUTES OF SELECTED UM STATUS

Previously, when a UM Reviewer marked all procedures in an order as Not Recommended, the Patient Folder continued to display the order in an Ordered status, with the Procedure column displaying as blank due to the fact that no active procedures were associated. This could be confusing in cases where the UM Reviewer needed to go back to the case (e.g. they receive a call from the referring provider) or to other RIS users.

For this reason, a new System Configuration value has been added called *UMDefaultCancelledReasonCode*. This configuration value is dependent on a corresponding entry in the *CancelStudyReason* look-up table.

The workflow will proceed as follows: First, the system will look at the order once it is marked as UM Complete. UM Complete is determined by looking at each ordered procedure that requires utilization review to see if it is in a final UM Status. Next, the system will determine if the final UM Status can advance to scheduling or not. For example, Recommended can be scheduled while Not Recommended typically cannot. This is determined by verifying that the Final Flag on the UM Status is set to "Y" and the Schedule Flag is set to "N."

If it is determined that all the procedures for the order require utilization review and none can advance to be scheduled, the system will perform the following tasks:

1. Set the Status Code for the order to Order Cancelled.
2. Set the Cancelled by User ID field for the Order to "system."
3. Set the Cancelled Date for the order to the current date and time.
4. Set the Cancelled Reason Code for the order to the *UMDefaultCancelledReasonCode*.

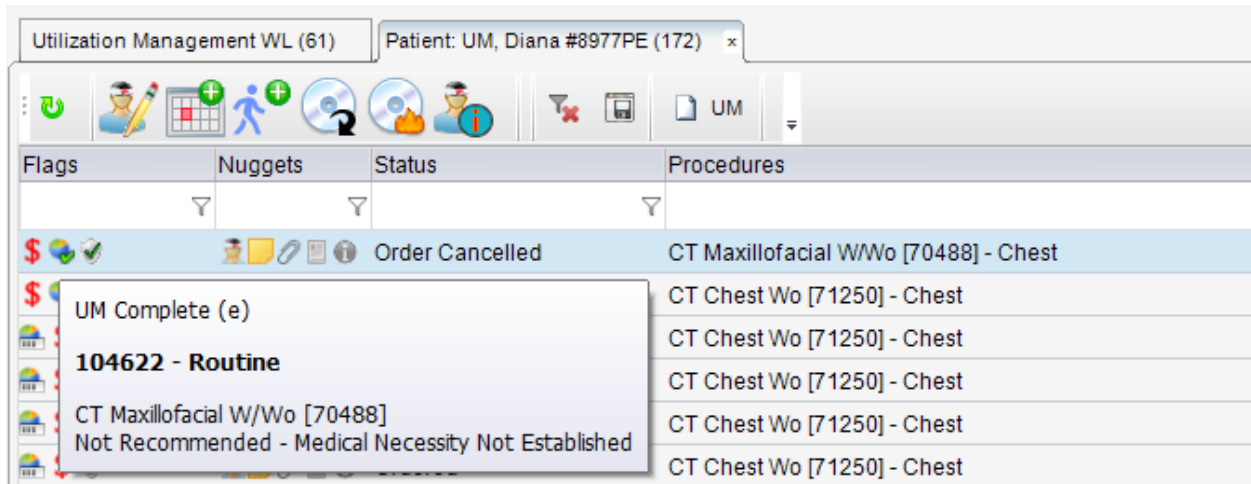
The following is an example of the audit log for the above scenario.


```

Event Time: 08-21-2017 03:38:15.836 PM Client IP Address: ::1

Changed c_order
  status_code: 'OrderCancelled' (was 'OrderSigned')
  cancelled_by_user_id: 'system' (was 'nothing')
  cancelled_reason_code: 'UMDenied' (was 'nothing')
  um_complete_flag: 'Y' (was 'N')
  um_owner_user_id: 'chasinl' (was 'nothing')
  cancelled_date: '08-21-17 3:38:14 PM -03:00' (was 'nothing')
Changed c_order_item
  procedure_code: '70488'
  um_status_code: 'NotRecommended' (was 'Received')
  um_resolution_code: 'MedNec' (was 'nothing')
  um_finalized_date: '08-21-17 3:38:14 PM -03:00' (was 'nothing')
  um_final_status_hours: '40' (was 'nothing')
  um_finalized_by_user_id: 'spencer' (was 'nothing')
  um_reviewed_date: '08-21-17 3:38:14 PM -03:00' (was 'nothing')
  um_reviewed_by_user_id: 'spencer' (was 'nothing')
  um_procedure: 'CT Maxillofacial W/Wo [70488] - Chest' (was 'nothing')
  um_status: 'Not Recommended - Medical Necessity Not Established' (was 'nothing')
  um_clock: '40 of 30' (was 'nothing')
    
```

Below is an example of a UM order for which all exams on the order are moved to a Final UM status that indicates no scheduling is possible.

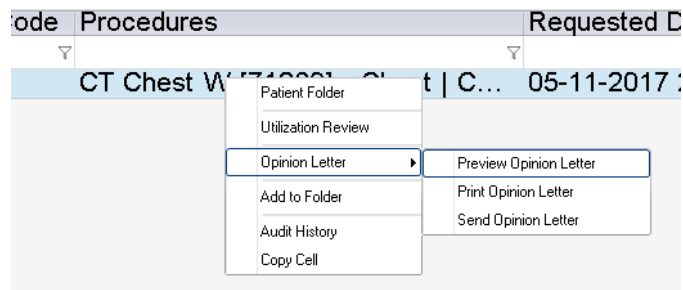


FEATURE #18170/17530 – RIS USERS CAN NOW PREVIEW AND DISTRIBUTE THE UM OPINION LETTER

Previously, the UM Opinion Letter was only available to be previewed from the Utilization Review screen via the UM Opinion Letter tab. Sometimes it is necessary for other RIS users to preview or distribute the UM Opinion Letter. To accomplish this, a new context menu item has been added to the Patient Folder and UM WL called “Opinion Letter.” This option will be available when the UM Required Flag = Y and the user has FULL access to a new access string: [Clinical.OpinionLetter](#).

The Opinion Letter context menu item will have three options:

1. Preview Opinion Letter
2. Print Opinion Letter
3. Send Opinion Letter



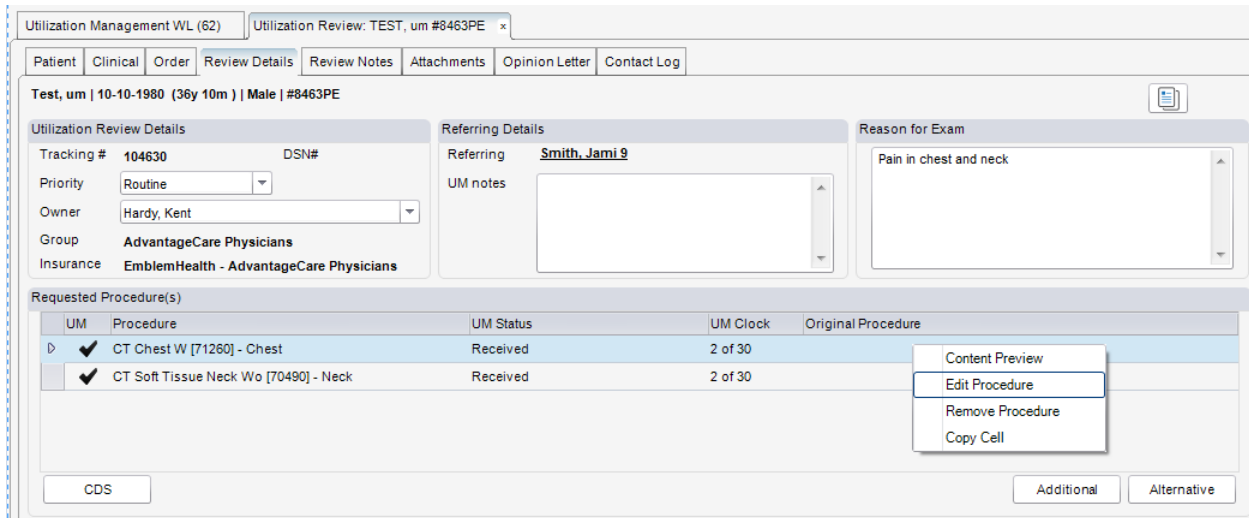
Access to these three sub-menu options can be controlled via the access strings:

- [Clinical.OpinionLetter.Preview](#)
- [Clinical.OpinionLetter.Print](#)
- [Clinical.OpinionLetter.Send](#)

FEATURE #18172/17529 – UM REVIEWERS CAN NOW CHANGE THE REQUESTED PROCEDURE

When adding UM orders to RIS, the data entry team sometimes mistakenly adds the wrong procedure to the order. The UM reviewer would previously have to modify the existing order via the Schedule Order screen because adding the correct procedure as an Alternative exam for a simple data entry error would skew the statistics. It is now possible for the reviewer to modify the ordered procedure from the Utilization Review screen.

The context menu on the Requested Procedure(s) grid on the Review Details tab has been enhanced to include both **Edit Procedure** and **Remove Procedure** menu items.



For the Remove Procedure option, the following logic is used to determine if the user can delete the procedure from the order.

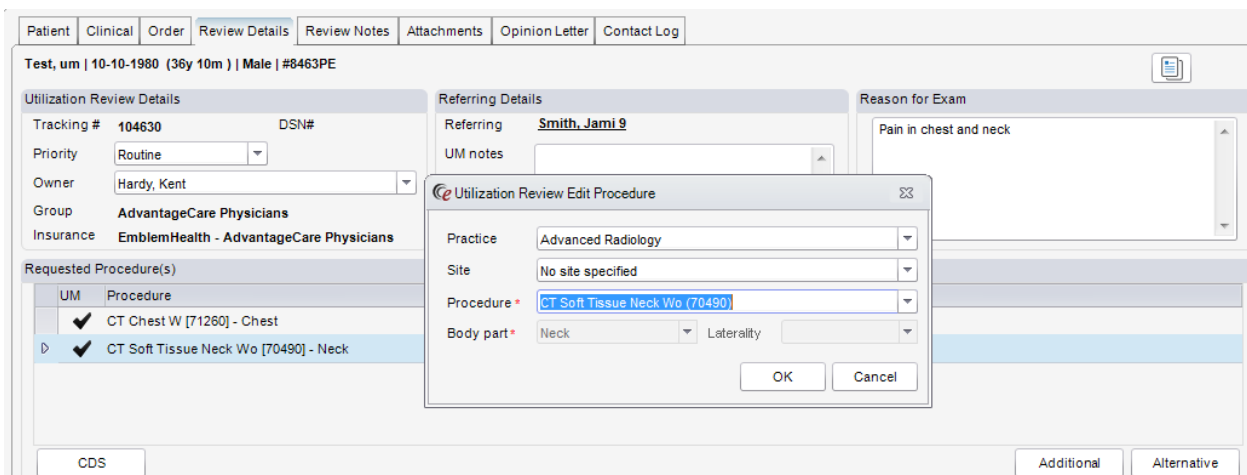
1. If the procedure is the only one for the order, the user is prevented from removing it and prompted with "At least one procedure is required."
2. If the procedure being removed already has a study associated with it (has been scheduled or is further in the workflow), the user is prevented from removing it and is prompted with "The procedure you are deleting is currently in Scheduled status. Please notify the appropriate person to make adjustments to the appointment."

For the Edit Procedure option, similar logic applies. If the procedure being removed already has a study associated with it (has been scheduled or is further in the workflow), the user is prevented from removing it and is prompted with "The procedure you are deleting is currently in Scheduled status. Please notify the appropriate person to make adjustments to the appointment". Note that the word "Scheduled" will be replaced with the actual status of the study.

While adding the above logic to not adjust ordered procedures that have studies associated, it was decided to also prevent and display a message to the user for the following scenarios:

1. When specifying an alternative procedure for an order item that already has a study associated, the user is prompted with: "The procedure you are recommending an alternative to is currently in scheduled status. Please notify the appropriate person to make adjustments to the appointment."
2. When removing an alternative procedure for an order item that already has a study associated, the user is prompted with: "The procedure you are deleting is currently in Scheduled status. Please notify the appropriate person to make adjustments to the appointment."
3. When adding an additional procedure for an order that already has at least one study associated, the user is prompted with: "The order you are adding an additional procedure to has a procedure in scheduled status. Please notify the appropriate person to make adjustments to the appointment."
4. When removing an additional procedure for an order item that already has a study associated, the user is prompted with: "The procedure you are deleting is currently in Scheduled status. Please notify the appropriate person to make adjustments to the appointment."

If the above validation passes when editing a procedure, the user is presented with a procedure picker so he or she can modify the procedure and replace it at the order item level.

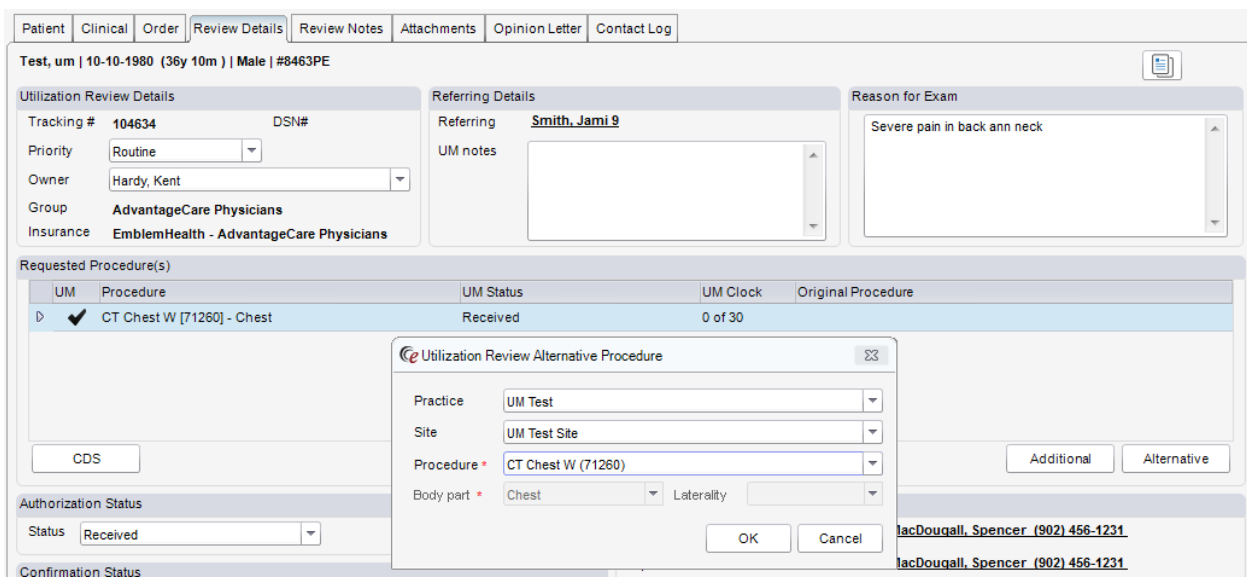


When selecting Remove Procedure, the user is prompted with "Are you sure you want to remove the procedure?" Selecting yes will delete the order item.

18169 - UM REVIEWERS CAN NOW CHOOSE ANY ACTIVE PROCEDURE, UNLIMITED BY THE CURRENT SITE'S SCHEDULE GROUP

When a UM Reviewer wishes to recommend an alternative procedure, or add an additional procedure, or edit the procedure, sometimes it is not a procedure that can be performed at the practice or site for which the order was created. Currently, there are some restrictions on what procedures are available in the dropdown when selecting Alternative or Additional procedures. The UM Reviewer should have access to any active procedure when choosing the procedure via UM workflow.

The utilization review procedure picker has been enhanced to include dropdowns for both Practice and Site. When editing the existing procedure or specifying an alternative procedure, the Procedure dropdown will default to the original ordered procedure.



If the user changes the Procedure dropdown to a procedure that cannot be performed at the site or practice specified with the order, he or she is prompted with “The selected procedure cannot be performed at this Site or Practice. Please select a new Practice and Site from the list.”

If the user changes the Procedure dropdown to a procedure that cannot be performed at the site but is available at the practice specified with the order, he or she is prompted with “The selected procedure cannot be performed at this Site. Please select a new Site from the list.”

The Practice and Site dropdowns are then filtered to present the user with only practices and sites that can perform the newly selected procedure. This is accomplished by comparing active procedure codes against the configured schedule groups.

When adding additional procedures, the reviewer is not limited by the practice and site selection and will not be prompted if the procedure cannot be performed.

NEW CONFIGURATION SETTINGS

SYSTEM CONFIGURATION SETTINGS

Setting	Default	Purpose
UMDefaultCancelledReasonCode	N/A	(value = string) The default cancelled reason code for orders denied during the utilization review process.
UMDefaultGoldCardResolutionCode	N/A	(value = string) The default gold card utilization review resolution code.
UMDefaultGoldCardStatusCode	N/A	(value = string) The default gold card utilization review status code.
UMDefaultSTATResolutionCode	N/A	(value = string) The default STAT utilization review resolution code.
UMDefaultSTATStatusCode	N/A	(value = string) The default STAT utilization review status.

ACCESS STRINGS

Setting	Default	Purpose
Clinical.OpinionLetter	Full	Controls access to the WL context menu Opinion Letter.
Clinical.OpinionLetter.Preview	Full	Controls access to the WL context menu Opinion Letter/Preview Opinion Letter.
Clinical.OpinionLetter.Print	Full	Controls access to the WL context menu Opinion Letter/Print Opinion Letter.
Clinical.OpinionLetter.Send	Full	Controls access to the WL context menu Opinion Letter/Send Opinion Letter.

RESOLVED ITEMS

eRAD RIS

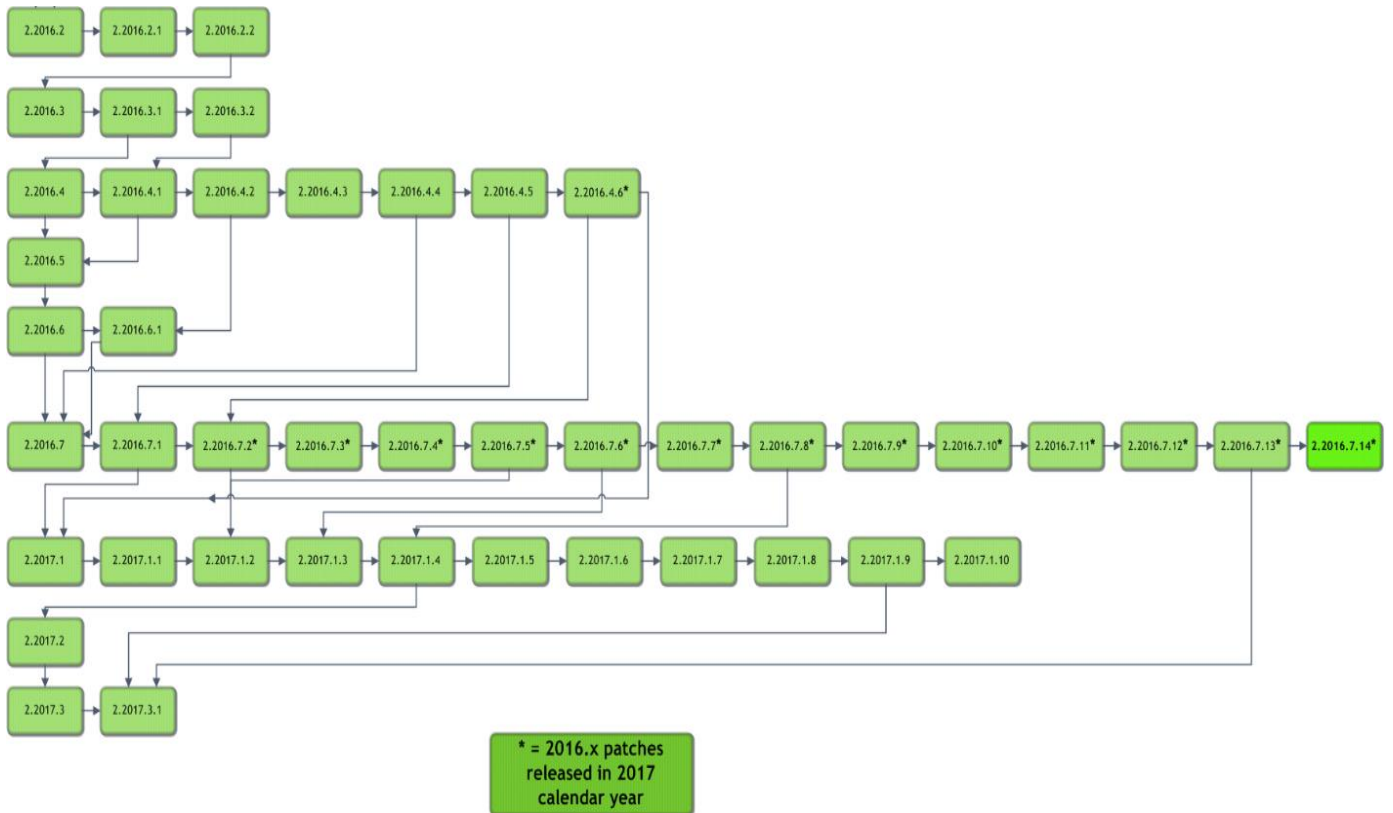
Redmine #	Subject
18267	Rejecting an addendum causes an 'object reference not set' exception.
18132	Some tables that have many updates will run out of identity values for large, high volume customers.
18104	UM Portal 'Get list of orders' stored procedure is not performance tuned.
18078	Poor system performance after updating to 2016.7.13.
18042	The EMR order is erroneously left active after using the 'existing orders prompt' and merging it into a new appointment.

The following list contains bugs or features that have been resolved in “future” RIS versions and have been pulled back to this earlier version of eRAD RIS. Features are also described in the New Features section.

Redmine #	Subject	Original Resolved Version
18172	UM Reviewers can now change the requested procedure.	3.2017.6
18170	RIS users can now preview and distribute the UM Opinion letter outside of the UM screen.	3.2017.6
18169	UM Reviewers can now choose any active procedure, unlimited by the current site's Schedule Group.	3.2017.6
18168	Automatically update Exam Status based on attributes of selected UM Status	3.2017.6

18167	UM - If during scheduling a procedure is removed via the red or black X, the UM Required Flag is changed from Y to N.	2.2017.5
18166	Set default UM status and Resolution codes for Gold Card and STAT orders.	2.2017.5
18107	External interface getting backed up causing HL7 messages to be delayed.	2.2017.5

CODE STREAM



Legend:

Light Green = Previously Released software

Bright Green = Current Release

Blue - Not commercially released

ERAD RIS RELEASE VERSION NUMBERS

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2016.7	-	2.16.7.0 (3GB)	2.16.7.0	2.16.7.0	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		Full version release
2016.7	1	2.16.7.1 (3GB)	2.16.7.0	2.16.7.1	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	2	2.16.7.2 (3GB)	2.16.7.0	2.16.7.2	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	3	2.16.7.3 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	4	2.16.7.4 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	5	2.16.7.5 (3GB)	2.16.7.0	2.16.7.3	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI
2016.7	6	2.16.7.6 (3GB)	2.16.7.0	2.16.7.6	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	7	2.16.7.7 (3GB)	2.16.7.0	2.16.7.7	2.16.7.0.00490835	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and Web Service updates
2016.7	8	2.16.7.8 (3GB)	2.16.7.0	2.16.7.7	2.16.7.8.00683507	2.16.7.0	1.16.7.0.493031	2.16.7.0.493008		GUI and DB updates
2016.7	9	2.16.7.9 (3GB)	2.16.7.0	2.16.7.9	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Services, DB updates and UM Portal
2016.7	10	2.16.7.10 (3GB)	2.16.7.0	2.16.7.10	2.16.7.9.00715012	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI and Web Service updates
2016.7	11	2.16.7.11 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI, Web Service and DB updates
2016.7	12	2.16.7.12 (3GB)	2.16.7.0	2.16.7.11	2.16.7.11.00761267	2.16.7.0	1.16.7.0.493031	2.16.7.9.723457		GUI
2016.7	13	2.16.7.13 (3GB)	2.16.7.0	2.16.7.13	2.16.7.13.00823274	2.16.7.0	2.16.7.13.805715	2.16.7.13.805717		GUI, Web Service, DB, Patient and UM Portal updates
2016.7	14	2.16.7.14 (3GB)	2.16.7.0	2.16.7.14	2.16.7.14.00888220	2.16.7.0	2.16.7.14.897644	2.16.7.14.897646		GUI, Web Service, DB, Patient and UM Portal updates
2017.1	-	2.17.1.0 (3GB)	2.17.1.0	2.17.1.0	2.17.1.0.00559886	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		Full Version Release
2017.1	1	2.17.1.1 (3GB)	2.17.1.0	2.17.1.1	2.17.1.1.00589952	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	2	2.17.1.2 (3GB)	2.17.1.0	2.17.1.2	2.17.1.2.00621962	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	3	2.17.1.3 (3GB)	2.17.1.0	2.17.1.3	2.17.1.3.00640480	2.17.1.0	2.17.1.0.572290	2.17.1.0.000000		GUI, Web Service and DB updates
2017.1	4	2.17.1.4 (3GB)	2.17.1.0	2.17.1.4	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI, Web Service, DB and Patient Portal updates
2017.1	5	2.17.1.4 (3GB)	2.17.1.0	2.17.1.5	2.17.1.4.00692239	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		Web Service
2017.1	6	2.17.1.6 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI and DB Updates
2017.1	7	2.17.1.7 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	8	2.17.1.8 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	9	2.17.1.9 (3GB)	2.17.1.0	2.17.1.5	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI update
2017.1	10	2.17.1.10 (3GB)	2.17.1.0	2.17.1.10	2.17.1.6.00745281	2.17.1.0	2.17.1.4.701924	2.17.1.0.000000		GUI and Web Service update
2017.2	-	2.17.2.0(3GB)	2.17.2.0	2.17.2.0	2.17.2.0.00695782	2.17.2.0	2.17.2.0.702238	2.17.2.0.702213	2.17.2.0.702226	Full Version Release. First release of Provider Portal
2017.3	-	2.17.3.0(3GB)	2.17.3.0	2.17.3.0	2.17.3.0.00764112	2.17.3.0	2.17.3.0.321	2.17.3.0.321	2.17.3.0.321	Full Version Release. Including Patient, Provider and UM Portals
2017.3	1	2.17.3.1(3GB)	2.17.3.0	2.17.3.1	2.17.3.1.00846328	2.17.3.1	2.17.3.1.853299	2.17.3.1.853301	2.17.3.1.856171	GUI, Web Service, DB. Including Patient, Provider and UM Portals

INSTALLING

CLIENT/GUI

Copy and replace the current rRIS...zip file with the eRAD_rRIS_2016.7.14.zip file provided with this release.

Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

WEB SERVICE

This updated is only required for the Wedge Web Services. The Core RIS Service and Document Distribution Service are not required to be updated.

1. The web service upgrade consists of replacing the files in the RIS Web Service directory with the files supplied in the rRISService folder with this build. Always create a backup of the files being replaced. This upgrade includes 136 files in the rRISService folder and 9 sub folders. Of those folders, 1 is a folder titled **"XSL"** that contains a sub folder and files within the subfolder. Another folder is titled **"deploy"** that contains the new .config files that will be deployed with the user of the file called "ServicesConfigWizard.exe" (see instructions below). Folders ar (Arabic), he (Hebrew), pt_BR (Brazilian Portuguese) and es-AR (Argentina Spanish) are localization folders. The WedgePlugins folder contains various plugin files for RADAR, MIRTH, Ensemble, etc...

Services Configuration Wizard

With the release of 42 to decrease the chance of losing configuration setting and missing new configuration options, we will no longer include the configuration files in the release in the main set of files, but they will now exist in a "deploy" folder, which will contain the three site configurable config files; applicationsettings, connectionstrings, and services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

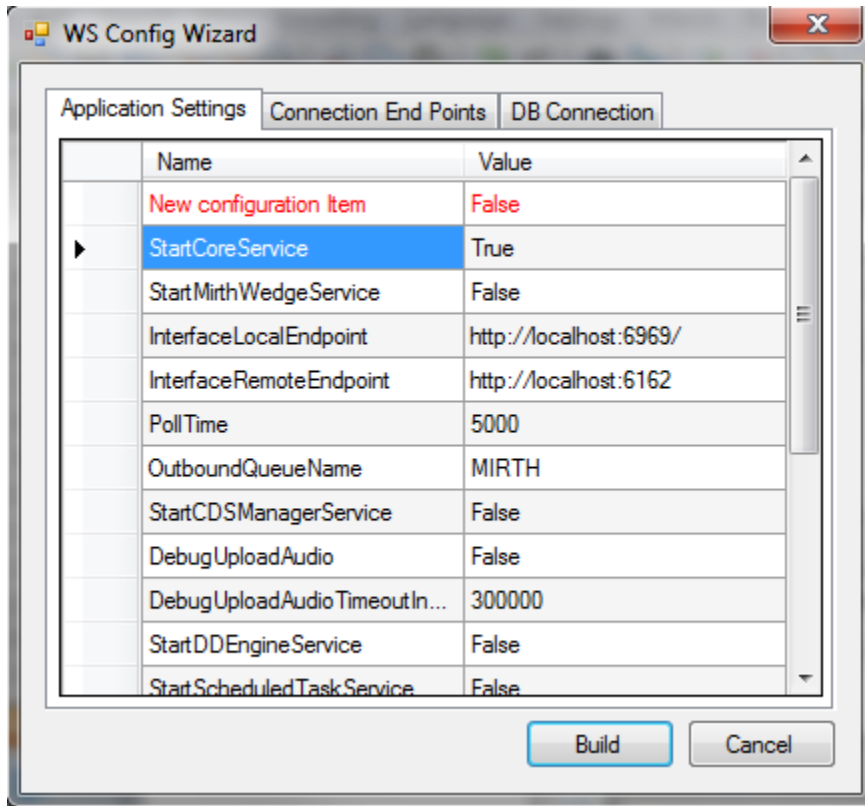
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application "ServicesConfigWizard.exe"

This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

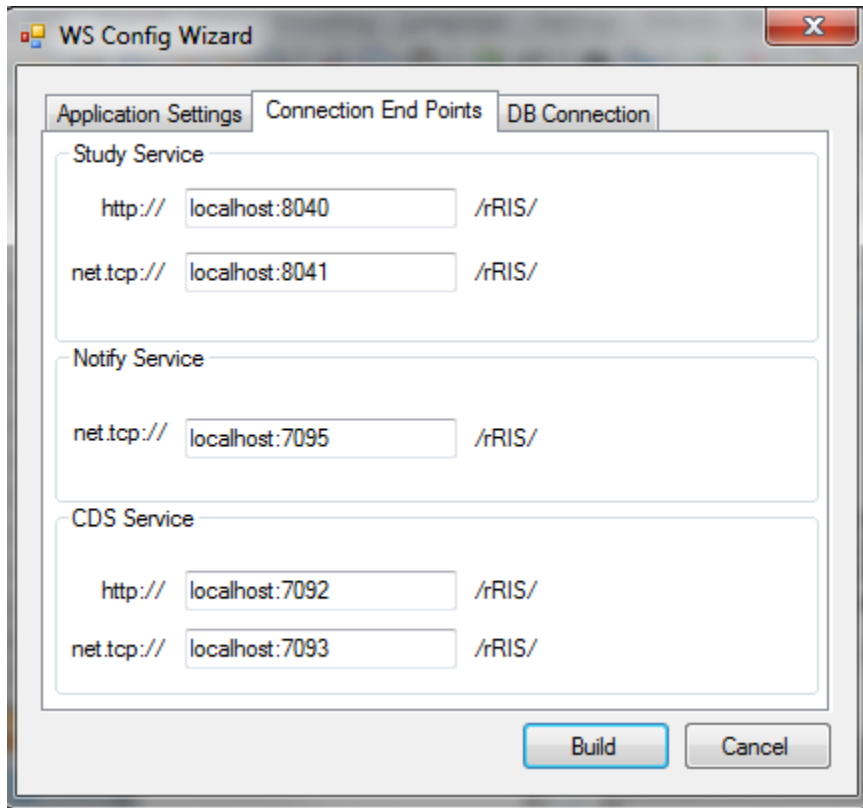
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in any form or by any means without the prior written permission from eRAD.

Application Settings: all existing configuration value will be displayed, if there are any new configuration entries they will be displayed in red.



Connection End Points: will display the existing configuration, if the value is left blank then that entry will not be created, in the case of “Study Service” or “CDS Service” if both http and net.tcp were not provided then that endpoint will not be created at all.



DATABASE UPDATES

Always run the upgrade scripts in a test environment of the actual database to make sure they run cleanly. If any errors occur please contact development.

Note: There is a new upgrade process introduced with B43.1 called "RunUpgrade.bat". The batch file will open a command window. This process will prompt you for the database server name, database name and authentication credentials. There is no need to run the database upgrade scripts manually as was done in previous releases.

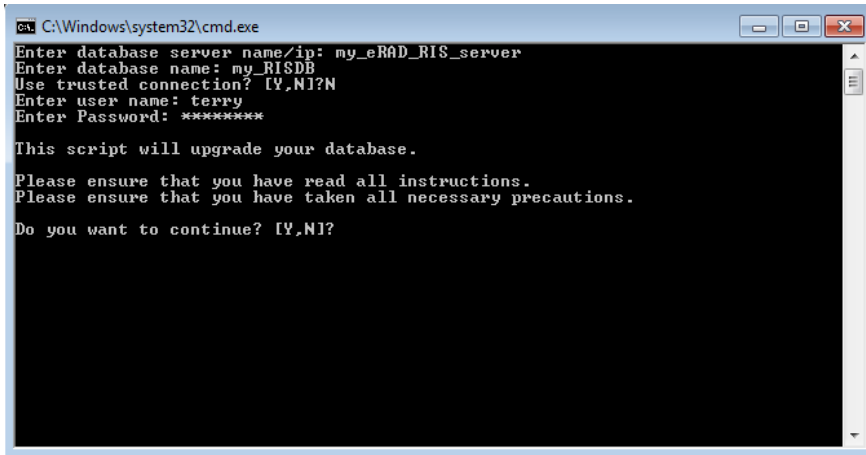
- 1) From the upgrade folder, double click the “RunUpgrade.bat” command file.
- 2) Enter the server name, database name and authentication credentials to the database. You have 2 choices for authentication credentials.

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in any form or by any means without the prior written permission from eRAD.

- 3) You can choose to use “Trusted connection”. Using this option will pass the identity of the currently logged on user. If this user has “db_owner” access to the eRAD RIS database then feel free to use this options.
- 4) If you decide not to use “Trusted connection” then you will be prompted for user id and password.

Example:



```
C:\Windows\system32\cmd.exe
Enter database server name/ip: my_eRAD_RIS_server
Enter database name: my_RISDB
Use trusted connection? [Y,N]?M
Enter user name: terry
Enter Password: *****

This script will upgrade your database.
Please ensure that you have read all instructions.
Please ensure that you have taken all necessary precautions.
Do you want to continue? [Y,N]?
```

- 5) After the upgrade program has finished you can find the upgrade logs in the “log” folder. The file name will be eRAD_RIS_db_upgrade_timestamp.log, where timestamp is a value representing the date and time the upgrade started. If you see any errors please contact the development team

Utilization Management

for eRAD RIS

TABLE OF CONTENTS

Table of Contents 2

 Summary 3

 Intended Audience..... **Error! Bookmark not defined.**

Utilization Management Configuration 4

 System Configuration Settings 4

 Lookup Tables 5

 Access Strings..... 7

Utilization Management RIS Workflow 8

 Determining if an Order requires Utilization Review 8

 Reviewer Workflow 9

 Authorization Letter Preview and Distribution 12

 ACR Select 13

 UM Alerts 14

 Searching by UM Tracking/Authorization Number 15

 Utilization Management and Scheduling 16

UM Connect Portal 17

SUMMARY

Utilization Management (UM) in radiology is the evaluation of the medical necessity and appropriateness of a requested diagnostic procedure. It is also known as Utilization Review. The goal of UM is to choose the best imaging study for the patient and contain the costs of medical care. The Utilization Management module in RIS is designed to capture the contract specific rules for Utilization Management for each participating Medical Group and to provide feedback and responses to the Medical Group administrator and the ordering provider throughout the UM process.

eRAD RIS UM will allow utilization review to be performed seamlessly in the RIS application instead of depending on an external system.

UTILIZATION MANAGEMENT CONFIGURATION

This section will outline how to configure and build the eRAD RIS UM workflow.

SYSTEM CONFIGURATION SETTINGS

The following system configuration values are related to eRAD RIS Utilization Management:

- **UMEnabled** – Determines if the UM workflow is enabled for the RIS instance (True/False).
- **UMRoutineReview** – The maximum number of UM hours for a routine exam.
- **UMUrgentReview** – The maximum number of UM hours for an urgent exam.
- **UMStartOfDayMinutes** – The start of day in minutes for calculating UM elapsed review time.
- **UMEndOfDayMinutes** – The end of day in minutes for calculating UM elapsed review time.
- **UMBypassSTAT** – Determines if utilization review is performed on STAT orders (True/False).
- **UMTrackingNumberPrefix** – A prefix that will be added to the new UM Authorization/Tracking numbers.
- **UMOpinionLetterReportPath** – The path and name of the UM Authorization/Opinion Letter.
- **UMDefaultRecommendedStatusCode** – The default UM status when recommending a procedure.
- **UMDefaultAdditionalResolutionCode** – The default UM resolution when recommending an additional procedure.
- **UMDefaultAlternativeResolutionCode** – The default UM resolution when recommending an alternative procedure.
- **UMExpirationDays** – The number of days until the utilization review expires.
- **UMAlertFromEmail** – The sender email address used for UM Alerts.
- **UMAlertFromName** – The sender email name used for UM Alerts.
- **UMAlertReportPath** – The path and name of the UM Alert SSRS Template.
- **PortalOpinionLetterUnavailableMessage** – The message to display to the web portal user when the report is not available due to unexpected error (e.g. the SSRS report server is unavailable or not configured).
- **UMPDDefaultOrderTabCriteria** – JSON value to define default filter tab view criteria for the UM portal Orders tab.
- **UMPNNewAccountRequestMessageGroup** – The message group to which New Account requests would be sent. If no message group is defined, then an email will be sent to the configured Portal's "send to" email address.
- **UMPScanDocumentType** - A list of scanned document type codes (comma separated) that will be included in the available scanned documents to display in the UM Portal.
- **UMPSystemCode** – A value to identify the default system code for the UM Portal. The value must match a value in the I_created_by_system look-up table.

LOOK-UP TABLES

The following look-up tables are utilized to build and customize the UM workflow in eRAD RIS:

UM Status – The main UM Statuses are configured here. The UM Status will determine if the procedure can proceed to be scheduled.

Um Status Code	Description	Form Content	Final Flag	Display Order	Schedule Flag	Initial Flag	Last Updated	Active
Click here to add a new row								
Hold	Hold	Review of your request is being held until information is received.	N	1	N	N	06-08-2016 11...	Y
MDReview	MD Review		N	1	N	N	07-06-2016 4...	Y
NotRecommended	Not Recommended		Y	1	N	N	06-08-2016 11...	Y
NurseReview	Nurse Review		N	1	N	N	09-20-2016 1...	Y
Received	Received		N	1	N	Y	01-15-2015 11...	Y
Recommended	Recommended		Y	1	Y	N	06-08-2016 11...	Y
Reopen	Reopen	We have received additional information and RE-OPENED this RFS for further review...	N	1	N	N	06-22-2016 1...	Y
ReturnedCompleted	Returned, Review Completed		Y	1	N	N	06-08-2016 11...	Y
ReturnedNotInitiated	Returned, Review Not Initiated	The request for service has been returned to your office. Please see above comments...	Y	1	N	N	06-08-2016 11...	Y
Withdrawn	Withdrawn		Y	1	N	N	06-08-2016 11...	Y

UM Resolution – This is a sub-status of UM Status. The UM Resolution will determine if the procedure requires confirmation from the requesting physician.

Um Status Code	Um Resolution Code	Description	Form Content	Confirmation Required Flag	Last Updated	Active
Click here to add a new row						
Recommended	AsAddedExam	As Added Exam	The reviewer recommends this PROCEDURE BE ADDED to the exam(s) yo...	Y	08-17-2016 3...	Y
Recommended	AsAlternative	As Alternative	The reviewer recommends this PROCEDURE THAT DIFFERS in some sign...	Y	08-17-2016 3...	Y
Recommended	AsRequested	As Requested	You may (now) schedule this procedure at a NJIN site.	N	06-13-2016 10...	Y
Recommended	PerMedicalGroup	Per Medical Group	This exam has been approved by the medical group.	N	06-13-2016 10...	Y
NotRecommended (Not Recommended)	MedNec	Medical Necessity Not Established		N	01-10-2014 9...	Y
NotRecommended (Not Recommended)	NotNecessary	Not Medically Necessary	The submitted clinical information does not support the medical necessity of...	N	01-10-2014 3...	Y

UM Coverage – The coverage types utilized in the authorization rules. The authorization flag determines which billing codes are required to be reviewed.

Um Coverage Code	ShortDescription	Description	Authorization Flag	Display Order	Last Updated	Active
Click here to add a new row						
A	Auth Required	Capitated service, authorization required	Y	1	02-03-2014 11...	Y
EX	Excluded	Excluded	N	1	02-19-2014 10...	Y
FFS	Fee For Service	Fee for service, authorization required	Y	1	04-11-2014 10...	Y
FFS_N	Fee For Service No Auth	Fee for service, authorization not required	N	1	05-06-2014 3...	Y
X	Auth Not Required	Capitated service, direct referral (no authorization required)	N	1	02-03-2014 11...	Y

Medical Group – A listing of the contracted medical groups. Review completion hours are defined here.

Medical Group Code	Description	Um Review Only Flag	Um Routine Review	Um Urgent Review	Default Logo	Address1
Click here to add a new row						
Vantage	Vantage Medical Group	N	30	10	Vantage	2115 Compton
CMG	Choice	Y	30	10		18564 Highway 18
MMG	McKinley	N	30	10		9496 Magnolia Avenue

UM Alerts – Available on the right-click menu of the Medical Group table. Fax and Email UM Alerts can be configured to notify a medical group when an authorization request is finalized based on the UM Status and UM Resolution.

Um Alert Type	Um Status Code	Um Resolution Code	Recipient Info	Last Updated	Active
Contains:	Contains:	Contains:	Contains:	Equals:	Cont
Click here to add a new row					
Email	NotRecommended (Not Recommended)		test@mail.com	10-20-2016 10:52 AM	Y
Fax	Recommended		111-888-4512	09-14-2016 11:23 AM	Y

OK Cancel

Authorization Rules – Available on the right-click menu of the Medical Group table. This form outlines what billing codes require utilization review based on the agreement with the medical group.

Authorization rules for Vantage Medical Group:

Code	Description
Contains:	Contains:
0001F	HRT FAILURE ASSESSED
0005F	OSTEOARTHRITIS COMPOSITE
00100	ANESTHESIA FOR PROCEDURES ON SAL...
00102	ANESTHESIA FOR PROCEDURES INVOLV...
00103	ANESTHESIA FOR RECONSTRUCTIVE PR...
00104	ANESTHESIA FOR ELECTROCONVULSIVE...

Coverage Types:
A - Auth Required
CAP - In Cap
EX - Excluded
FFS - Fee For Service
FFS_N - Fee For Service No Auth
IN - In Cap
TBD - To Be Determined
X - Auth Not Required

Code	Coverage	Description
Contains:	Contains:	Contains:
70460	A	COMPUTED TOMOGRAPHY, H...
70470	A	COMPUTED TOMOGRAPHY, H...
70480	A	COMPUTED TOMOGRAPHY, O...
70481	A	COMPUTED TOMOGRAPHY, O...
70486	A	COMPUTED TOMOGRAPHY, M...
70487	A	COMPUTED TOMOGRAPHY, M...

OK Cancel

Carrier – If a carrier requires utilization review, the UM Required Flag is enabled. The carrier is then mapped to a medical group to determine the associated authorization rules.

Carrier Code	Description	Medical Group Code	Um Required Flag	Phone
Contains:	Contains:	Contains:	Contains: Y	Contains:
Click here to add a new row				
VANC	VANTAGE MED GROUP CAP	Vantage (Vantage Medical Group)	Y	
1129	Medicare CA Southern	Vantage (Vantage Medical Group)	Y	
1486	VANTAGE MEDICAL GROUP CAP	Vantage (Vantage Medical Group)	Y	(951)280-7700
148601	VANTAGE MEDICAL GROUP INLAND EMPIRE HEALTH PLAN	Vantage (Vantage Medical Group)	Y	(951)280-7700

UM Holiday – Determines what additional dates to exclude when calculating the UM Clock.

Um Holiday Date	Name	Description	Last Updated	Active
Equals:	Contains:	Contains:	Contains:	Contains:
Click here to add a new row				
10-13-2014 12:00 AM	Thanksgiving	Thanksgiving Day	08-26-2014 2:...	Y
09-08-2014 12:00 AM	Labor Day	Labor Day	08-26-2014 2:...	Y

ACCESS STRINGS

The following access strings are related to eRAD RIS Utilization Management:

- Clinical.UtilizationManagement – Access to the Utilization Review right-click menu option on a worklist.
- WL.UtilizationManagement – Access to the Utilization Management Worklist on the Administration menu.
- Clinical.UtilizationManagement.InternalNotes – Access to utilization review Internal Notes. These notes are typically only viewed by the Utilization Management department.
- Clinical.UtilizationManagement.ScheduleOverride – Allows a user to override utilization review and proceed to schedule the order.
- Clinical.ACRSelect – Access to use the ACR Select functionality from the Utilization Review screen.
- Flag.UMComplete – Access to see the flag for UM Complete.
- Flag.UMRequired – Access to see the flag for UM Required.
- Portal.UM – Access to the UM Connect Portal.
- Portal.UM.Admin – Access to the UM Connect Portal Administration Login.

UTILIZATION MANAGEMENT RIS WORKFLOW

DETERMINING IF AN ORDER REQUIRES UTILIZATION REVIEW

Once configured, eRAD RIS UM has the ability to automatically determine which orders are required to be reviewed by the utilization management department. This is realized by looking at the primary insurance of the patient along with the CPT codes associated with the requested procedure(s). Typically, authorization requests will come into the Inbound Document workflow as a fax. If an order does require utilization review, this is clearly indicated to the RIS user by the appearance of a UM tab on RIS forms.

Schedule Order: AREN, Misha #1502894DEMO * x

Patient | Patient Notes | Contacts / Demographics | Order | Clinical | Schedule | Image Request (0) | Billing Codes | Review | Contact Log | **UM**

Aren, Misha | 11-12-1949 (67y 1m) | Female | #1502894DEMO

Utilization Review Details

Tracking # **100006** DSN#

Priority **Routine**

Owner **Saltmarsh, Hilary**

Group **Vantage Medical Group**

Insurance **Vantage Insurance**

Internal Notes

12-27-16 1:07 PM HS -

UM	Procedure	UM Status	UM Clock	Original Procedure
✓	CT Abdomen W/Wo [74170]	Recommended - As Alternative	-4 of 24	CT Abdomen W [74160] - Abdomen

ACR Select Additional Alternative

Authorization Status

Status **Recommended** As Alternative

Confirmation Status

Confirmation Required Confirmation Received

Confirmed

Authorization Dates

Created **12-27-2016 4:59 PM** [Saltmarsh, Hilary](#)

Updated **12-27-2016 5:04 PM** [Saltmarsh, Hilary](#)

Reviewed **12-27-2016 5:04 PM** [Saltmarsh, Hilary](#)

Finalized **12-27-2016 5:04 PM** [Saltmarsh, Hilary](#)

Authorization Summary

Billing Code: 74170 - COMPUTED TOMOGRAPHY, ABDOMEN; WITHOUT CONTRAST MATERIAL, FOLLOWED BY CONTRAST MATERIAL(S) AND FURTHER SECTIONS Coverage: Auth Required

The typical RIS user would see the UM tab in a read-only format. This will allow him or her to see where the order is in the utilization review process.

REVIEWER WORKFLOW

If eRAD RIS determines that an order requires utilization review, the UM Required Flag is enabled, a UM Tracking Number is assigned to the order, the requested procedure(s) is set to an initial UM Status such as Received, the UM Clock is started, and the order is pushed to the Utilization Management Worklist.

Flags	UM Priority	UM Hours	UM Owner	Requested Date	UM Status	Medical Group	Carrier	UM Tracking #	Patient Name	Procedures
Urgent	Urgent	56		11-12-2016 2:08 PM	Received	MMG	ERIE INSURANCE	100002	Cline, Scott	CT Abdomen W [74160] - Abdomen
Urgent	Urgent	56	stick	11-12-2016 2:46 PM	Hold Received	VANTAGE	Vantage Insurance	100004	Marinko, Francesca	MR Hip Wo [MR27] - Hip joint CT Chest Wo
Routine	Routine	51		11-14-2016 12:27 PM	Received	STRAND	CONSTELLATION ENER...	100005	Conroy, Martin	MR Abdomen W [74182] - Abdomen
Routine	Routine	0	stick	12-27-2016 5:12 PM	Received	MMG	ERIE INSURANCE	100007	Porter, Samantha	CT Pelvis Wo [72192] - Pelvis
Routine	Routine	0		12-27-2016 5:30 PM	Received	VANTAGE	Vantage Insurance	100008	Aren, Misha	CT Abdomen W [74160] - Abdomen

The eRAD RIS Utilization Review screen allows a reviewer to make his or her assessment of the ordered procedure(s) to determine if it is clinically appropriate and medically necessary. This is accomplished by setting the Authorization or UM Status. Once the procedure is set to a final UM Status, the UM Clock is stopped and the utilization review process is complete.

Patient
Clinical
Order
Review Details
Review Notes
Attachments
Authorization Letter
Contact Log

Aren, Misha | 11-12-1949 (67y 1m) | Female | #1502894DEMO

Utilization Review Details

Tracking # **100000** DSN#

Priority **Routine**

Owner **Saltmarsh, Hilary**

Group **Vantage Medical Group**

Insurance **Vantage Insurance**

Referring Details

Referring **Arnold, Bob (555) 123-4567**

UM notes

Reason for Exam

Diffuse abdominal pain x2 weeks.

Requested Procedure(s)

UM	Procedure	UM Status	UM Clock	Original Procedure
✓	CT Abdomen W [74160] - Abdomen	Not Recommended - Not Medically...	3 of 24	

Authorization Status

Status **Not Recommended** **Not Medically Necessary**

Confirmation Status

Confirmation Required Confirmation Received

Confirmed

Authorization Dates

Created **11-11-2016 9:23 PM** **Saltmarsh, Hilary**

Updated **12-27-2016 5:31 PM** **Saltmarsh, Hilary**

Reviewed **12-27-2016 5:31 PM** **Saltmarsh, Hilary**

Finalized **12-27-2016 5:31 PM** **Saltmarsh, Hilary**

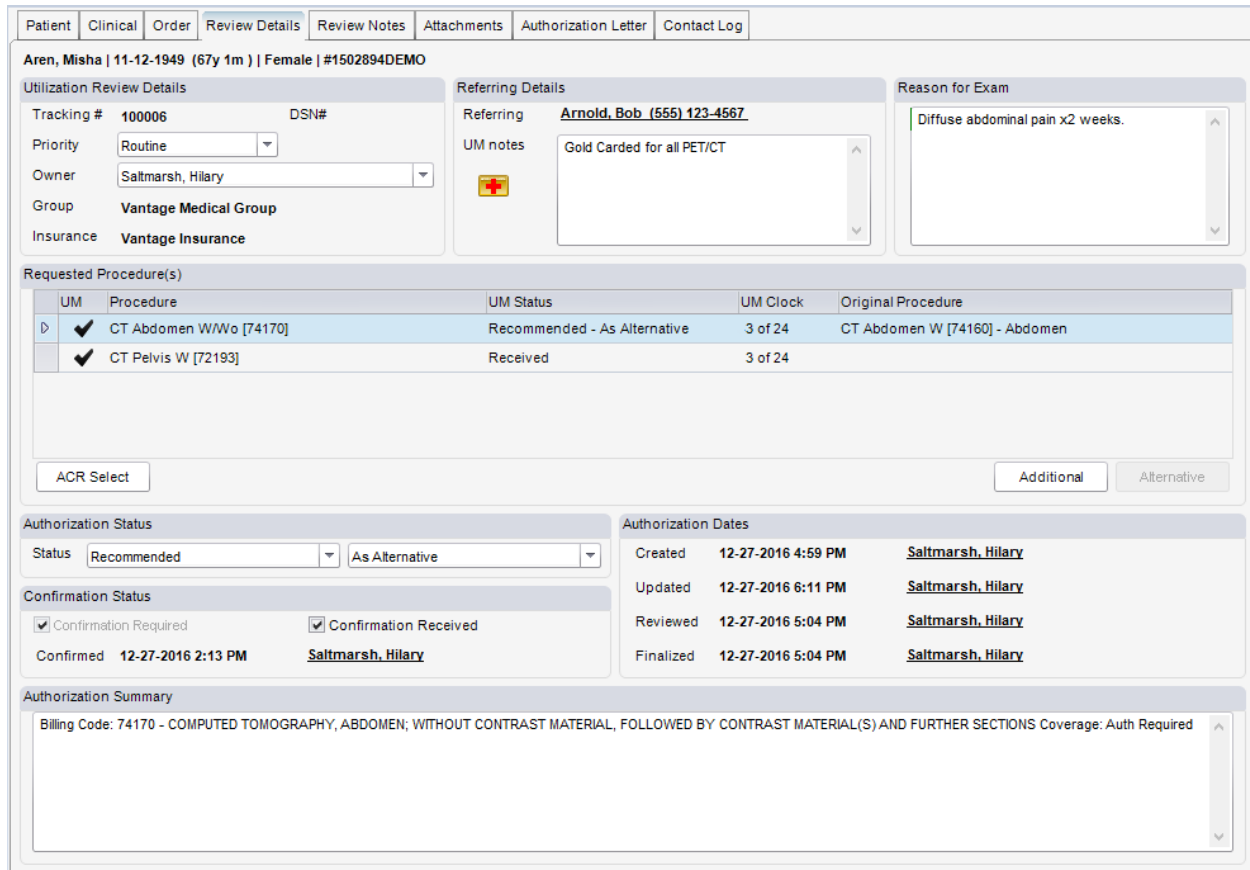
Authorization Summary

Billing Code: 74160 - COMPUTED TOMOGRAPHY, ABDOMEN; WITH CONTRAST MATERIAL(S) Coverage: Auth Required

From the Utilization Review screen, reviewers are able to recommend both additional and alternative procedures. For example, the referring physician may order a CT of the Lumbar Spine but, based on appropriateness criteria,

the reviewer may determine that an MR of the Lumbar Spine would be the better procedure for the patient. The reviewer also has the ability to recommend an *additional* procedure. For example, based on the results of the review, the reviewer may determine that an MR Pelvis should be performed in addition to the MR Lumbar Spine.

If confirmation from the referring physician is required for additional and/or alternative procedures, this can be configured in the UM Resolution look-up table. If applicable, RIS will set the confirmation required flag for the ordered procedure. Once confirmation has been received, the Confirmation Received checkbox is checked and the review is finalized.



Utilization Review Details

Tracking # 100006 DSN#
 Priority Routine
 Owner Saltmarsh, Hilary
 Group Vantage Medical Group
 Insurance Vantage Insurance

Referring Details

Referring [Arnold, Bob \(555\) 123-4567](#)
 UM notes Gold Carded for all PET/CT

Reason for Exam

Diffuse abdominal pain x2 weeks.

Requested Procedure(s)

UM	Procedure	UM Status	UM Clock	Original Procedure
<input checked="" type="checkbox"/>	CT Abdomen W/Wo [74170]	Recommended - As Alternative	3 of 24	CT Abdomen W [74160] - Abdomen
<input checked="" type="checkbox"/>	CT Pelvis W [72193]	Received	3 of 24	

ACR Select Additional Alternative

Authorization Status

Status Recommended As Alternative

Authorization Dates

Created	12-27-2016 4:59 PM	Saltmarsh, Hilary
Updated	12-27-2016 6:11 PM	Saltmarsh, Hilary
Reviewed	12-27-2016 5:04 PM	Saltmarsh, Hilary
Finalized	12-27-2016 5:04 PM	Saltmarsh, Hilary

Confirmation Status

Confirmation Required Confirmation Received
 Confirmed 12-27-2016 2:13 PM [Saltmarsh, Hilary](#)

Authorization Summary

Billing Code: 74170 - COMPUTED TOMOGRAPHY, ABDOMEN; WITHOUT CONTRAST MATERIAL, FOLLOWED BY CONTRAST MATERIAL(S) AND FURTHER SECTIONS Coverage: Auth Required

The UM Clock is used to track the turnaround time for the utilization review. It is based on a configurable workday (e.g. 10 hours). RIS can be configured to indicate what the allowable UM review hours are for both Urgent and Routine priorities. For example, a UM Clock showing 3 of 24 means that 3 hours have elapsed on the allowable 24.

The Utilization Review screen allows the reviewer to create notes to which are visible to relevant parties throughout the review process. For example, the External Notes are typically between the reviewer and the ordering physician while Internal Notes are seen by the UM Department only. eRAD RIS also supports allowing the reviewer to create notes containing instructions to the radiologist, technologist, and scheduler to ensure all recommendations based on the review are followed.

Patient	Clinical	Order	Review Details	Review Notes	Attachments	Authorization Letter	Contact Log
---------	----------	-------	----------------	--------------	-------------	----------------------	-------------

UM, Test1258094 | 01-12-1959 (57y 9m) | Female | #8986PE

External Notes

10-21-16 10:17 AM SM - To facilitate your request, we ask that you provide the following information: all current and related history and physical exam reports, follow-up notes including treatment/response, pertinent lab reports, prior related imaging reports, and any related consult reports (initial and f/u).

09-15-16 12:13 PM SM - Have recommended imaging w/o contrast as alternative study per standard protocol.

Internal Notes

10-21-16 10:17 AM SM - This will acknowledge receipt of the information we previously requested.

09-15-16 12:12 PM SM - Please review MRI C AND T SPINE ATTACHED a1 from 2014.

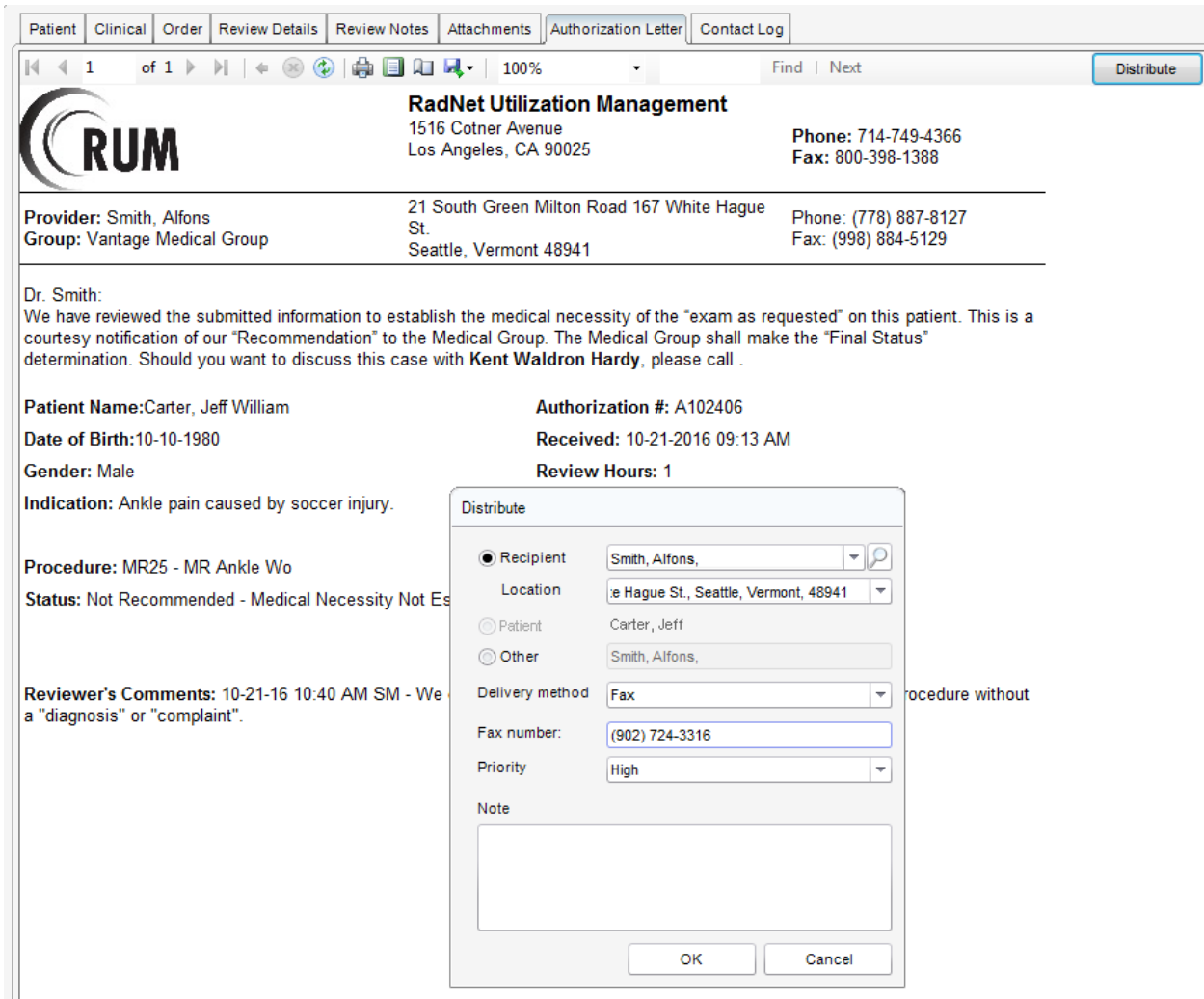
Special Instructions

Scheduler	Verify if patient wants OPEN MRI	Rad/Tech	PLEASE MARK LUMP RIGHT UPPER OUTER ARM. PACEMAKER
MD office	DR ZADEH, PLEASE SEE COMMENTS. RESPECTFULLY CONTACT ME IF YOU HAVE QUESTIONS .	Claims	

AUTHORIZATION LETTER PREVIEW AND DISTRIBUTION

eRAD RIS UM has the ability to generate and distribute a customizable authorization letter. It is up to the reviewer to decide when it is appropriate to send the letter and this can be done at any time throughout the review process. Quite often a letter will be distributed requesting additional clinical information before the review is finalized.

The distribute dialog will refer to the default delivery method of the ordering provider. This action will place the document on the Distribution Worklist with a document type of Authorization Letter.

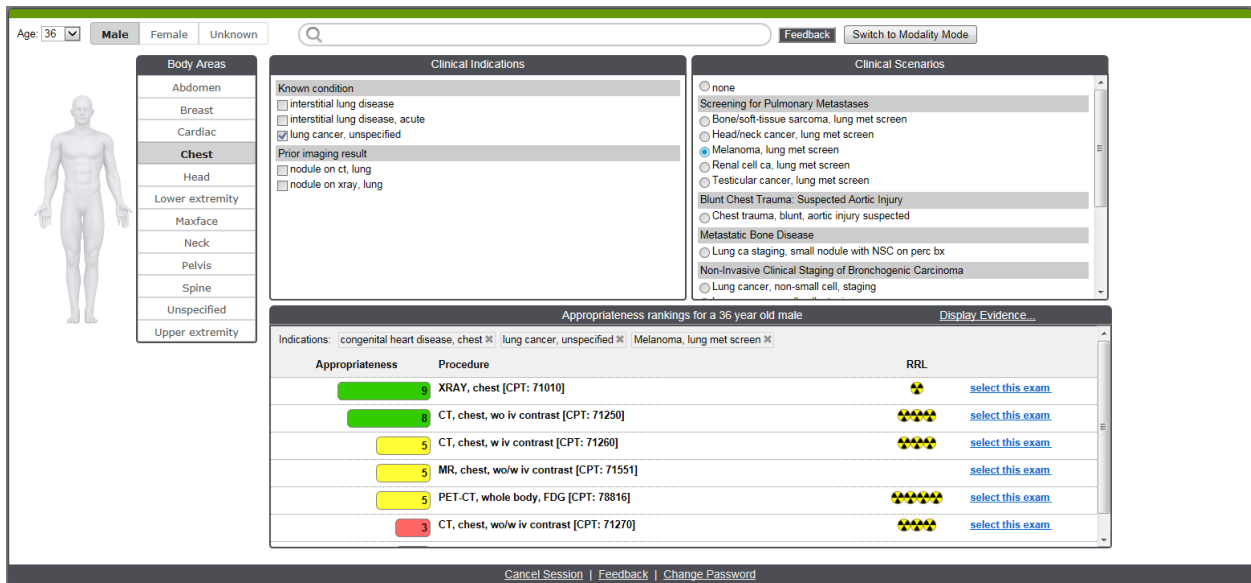


The screenshot shows the eRAD RIS UM interface with the 'Authorization Letter' tab selected. The main window displays patient information for Jeff William Carter, including his birth date (10-10-1980), gender (Male), and indication (Ankle pain caused by soccer injury). The procedure is MR25 - MR Ankle Wo, and the status is 'Not Recommended - Medical Necessity Not Es'. A 'Distribute' dialog box is open, showing the recipient as 'Smith, Alfons' at 'e Hague St., Seattle, Vermont, 48941'. The delivery method is set to 'Fax' with the number '(902) 724-3316' and a 'High' priority. The dialog also includes a 'Note' field and 'OK' and 'Cancel' buttons.

ACR SELECT

eRAD RIS UM supports integration with the National Decision Support Company’s ACR Select. ACR Select utilizes Appropriate Use Criteria (AUC) to determine the most appropriate procedure. By selecting the ACR Select button on the Review Details tab, the reviewer is able to launch ACR Select and pass in both the age and gender of the patient. The reviewer then selects one or more clinical indications and clinical scenarios. ACR Select will return a list of procedures ranked by appropriateness. The appropriate use criteria are available to the reviewer by clicking on the Display Evidence link.

Once an exam is selected, a Decision Support Number (DSN) is generated and stored with the order in eRAD RIS. The DSN proves that a Clinical Support System was consulted for the order.



The screenshot shows the ACR Select interface for a 36-year-old male patient. It includes sections for Body Areas, Clinical Indications, Clinical Scenarios, and a table of Appropriateness rankings for a 36-year-old male. The table lists various procedures with their appropriateness scores and RRL (Relative Risk Level) indicators.

Appropriateness	Procedure	RRL
9	XRAY, chest [CPT: 71010]	☠
8	CT, chest, wo iv contrast [CPT: 71250]	☠☠☠
5	CT, chest, w iv contrast [CPT: 71260]	☠☠☠☠☠
5	MR, chest, wo/w iv contrast [CPT: 71551]	☠☠☠☠☠
5	PET-CT, whole body, FDG [CPT: 78816]	☠☠☠☠☠
3	CT, chest, wo/w iv contrast [CPT: 71270]	☠☠☠☠☠☠☠

UM, Test1257618 | 10-20-1957 (59y 0m) | Male | #8987PE

Utilization Review Details

Tracking # **A102407** DSN# **11845304**

Priority: **Routine**

Owner: **Hardy, Kent**

Group: **Vantage Medical Group**

Insurance: **VANTAGE MED GROUP CAP**

UM ALERTS

UM Alerts provide the ability to notify the Medical Group via fax or email when an authorization has been distributed and is in a specified UM Status. For example, a medical group administrator may request that he or she be alerted for all procedures that are Not Recommended or Recommended as Alternative.

For fax alerts, the medical group is sent a carbon copy of the authorization letter when it is distributed to the ordering provider. Email alerts are configurable via an SSRS template.

UM Alert Regarding Authorization A102342

RadNet Utilization Management <unittest@test.radarmed.com>

[If there are problems with how this message is displayed, click here to view it in a web browser.](#)

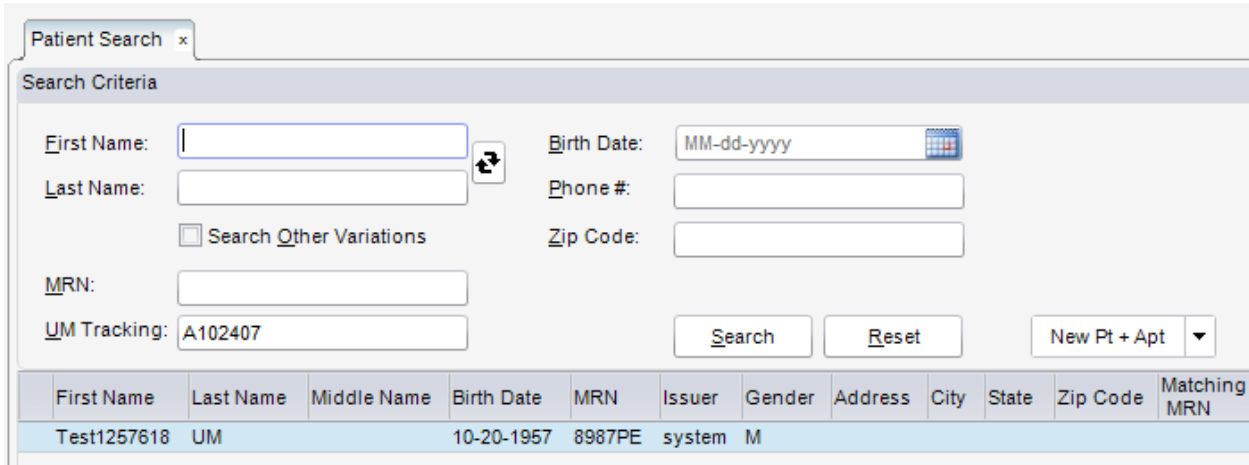
Sent: Tue 09/20/2016 3:40 PM

To: Spencer MacDougall

Medical Group:	Vantage Medical Group
Authorization Number:	A102342
Exam Requested:	MR Cervical Spine Wo
Status:	Not Recommended - Medical Necessity Not Established

SEARCHING BY UM TRACKING NUMBER

The UM Tracking Number has been added to the list of search criteria in eRAD RIS.



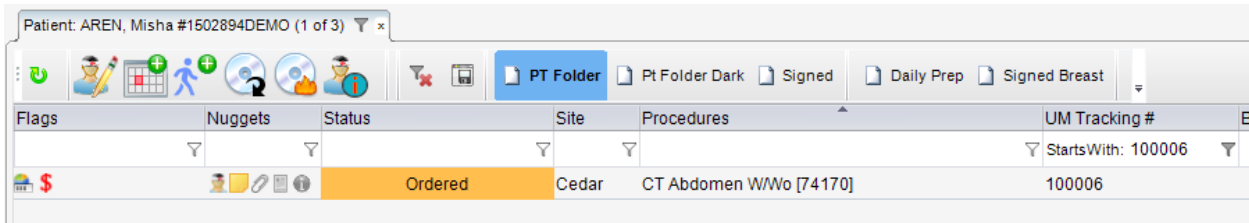
The screenshot shows a 'Patient Search' window with the following search criteria:

- First Name: [Empty]
- Last Name: [Empty]
- Birth Date: MM-dd-yyyy
- Phone #: [Empty]
- MRN: [Empty]
- UM Tracking: A102407
- Search Other Variations:
- Zip Code: [Empty]

Buttons: Search, Reset, New Pt + Apt (dropdown)

First Name	Last Name	Middle Name	Birth Date	MRN	Issuer	Gender	Address	City	State	Zip Code	Matching MRN
Test1257618	UM		10-20-1957	8987PE	system	M					

It is also available as a column in the Patient Folder and can be filtered to find UM exams for an individual patient.



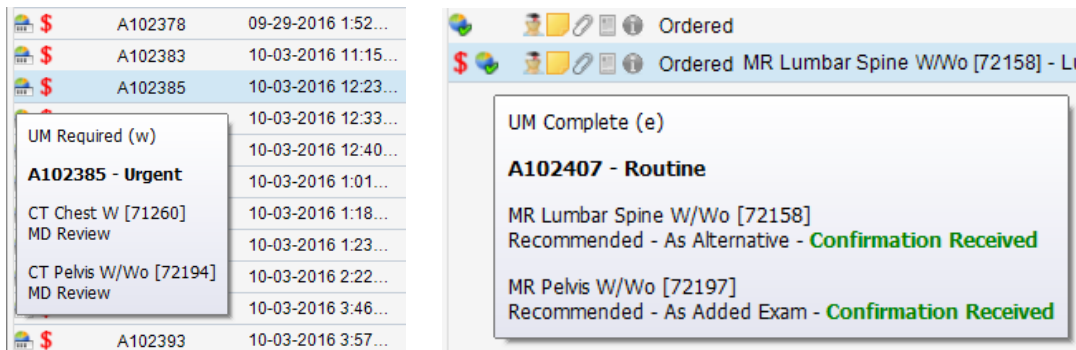
The screenshot shows a 'Patient Folder' window for 'Patient: AREN, Misha #1502894DEMO (1 of 3)'. The table below shows exam details:

Flags	Nuggets	Status	Site	Procedures	UM Tracking #
		Ordered	Cedar	CT Abdomen W/Wo [74170]	100006

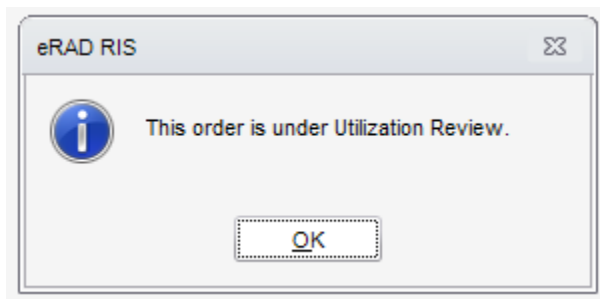
UTILIZATION MANAGEMENT AND SCHEDULING

During a typical utilization management process, the diagnostic procedure will not be scheduled until the utilization review is finalized. Having both UM and scheduling integrated into the same environment allows for a much smoother transition between workflow with much less time spent monitoring an external system.

The UM Required Flag will give a clear indication to RIS users that the order is currently with the UM department and has yet to be finalized. The UM Complete Flag is enabled for the order once all the ordered procedures that require review have reached a Final UM Status. Both of these flags have additional UM details available on the hover value.



When a user attempts to schedule an order that is still under utilization review, he or she is presented with a message stating "This order is under Utilization Review." The user can still advance to the schedule screen and the UM tab is available but both the Room Search and Schedule buttons will be disabled unless the Clinical.UtilizationManagement.ScheduleOverride access string is set to Full for the user. Determining if an ordered procedure that requires utilization review can proceed to be scheduled is based on the Schedule Flag of the UM Status, as configured in the UM Status look-up table. For example, a status of Recommended can proceed to be scheduled where a status of Not Recommended cannot.

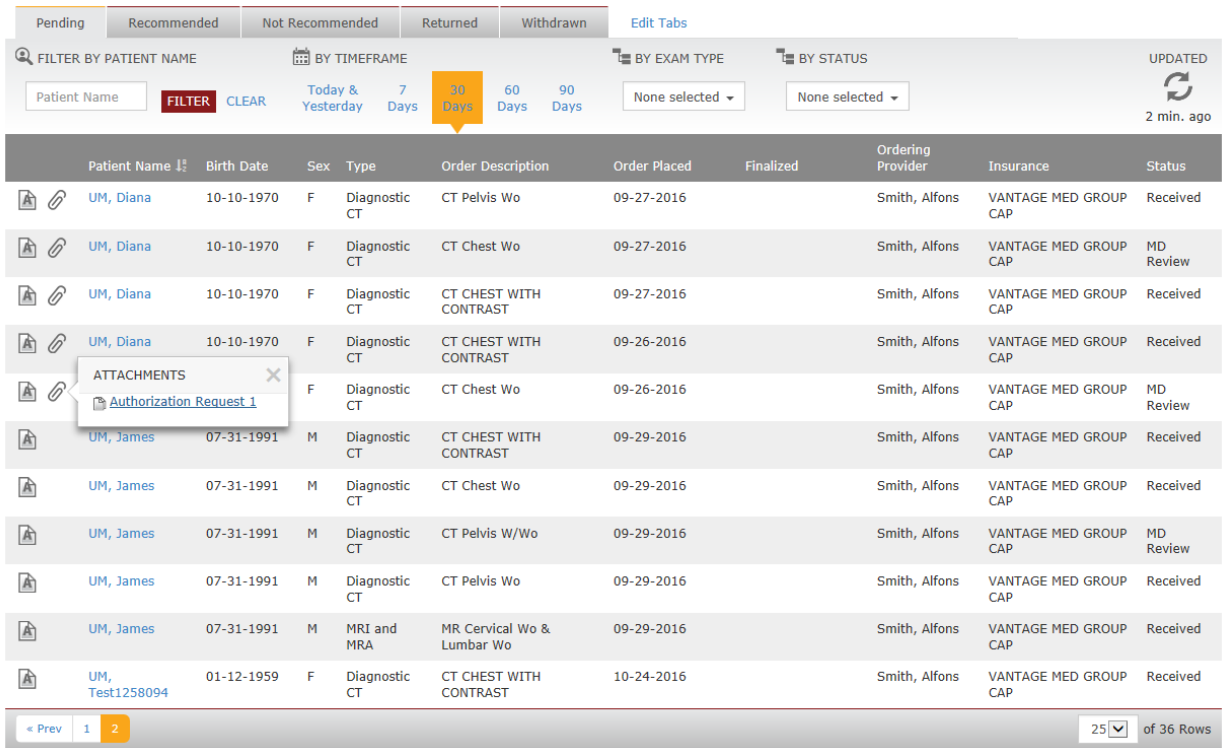


As mentioned previously, if confirmation is required from the ordering provider, the procedure cannot be scheduled until confirmation has been received. Once confirmation has been received, RIS will adjust the ordered procedure accordingly. For example, if the original request is for a CT Chest and utilization review determines that an MR Chest would be more appropriate, it is the MR Chest that the scheduler would see in the Procedure Picker. The CT Chest is stored in the database as the original procedure.

UM CONNECT PORTAL

The UM Connect Portal provides the ability for users external to the RIS to view and interact with the utilization review process. This includes medical group administrators and ordering providers. UM Connect users are setup in the RIS application, mapped to one or more medical groups, and given a contact type code such as Provider or Group Admin. Only orders that belong to the medical group(s) based on the user’s mapping will be presented and searchable.




The tab based layout of the UM Connect portal is configurable. For example, tabs can be defined by UM Statuses such as Pending, Recommended, Not Recommended, etc. From the defined worklists, the user is easily able to view the UM Status of the order. The user can also view any attachments associated with the order and preview the UM Opinion/Authorization Letter.



The screenshot displays the UM Connect Portal interface. At the top, there are tabs for 'Pending', 'Recommended', 'Not Recommended', 'Returned', and 'Withdrawn'. Below the tabs is a search and filter section with 'FILTER BY PATIENT NAME' and 'BY TIMEFRAME' options. The '30 Days' timeframe is selected. There are also 'BY EXAM TYPE' and 'BY STATUS' dropdowns. An 'UPDATED 2 min. ago' indicator is present. The main area is a table with columns: Patient Name, Birth Date, Sex, Type, Order Description, Order Placed, Finalized, Ordering Provider, Insurance, and Status. An 'ATTACHMENTS' popup is visible over the fourth row, showing 'Authorization Request 1'.



Patient Name	Birth Date	Sex	Type	Order Description	Order Placed	Finalized	Ordering Provider	Insurance	Status
UM, Diana	10-10-1970	F	Diagnostic CT	CT Pelvis Wo	09-27-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, Diana	10-10-1970	F	Diagnostic CT	CT Chest Wo	09-27-2016		Smith, Alfons	VANTAGE MED GROUP CAP	MD Review
UM, Diana	10-10-1970	F	Diagnostic CT	CT CHEST WITH CONTRAST	09-27-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, Diana	10-10-1970	F	Diagnostic CT	CT CHEST WITH CONTRAST	09-26-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, Diana	10-10-1970	F	Diagnostic CT	CT Chest Wo	09-26-2016		Smith, Alfons	VANTAGE MED GROUP CAP	MD Review
UM, James	07-31-1991	M	Diagnostic CT	CT CHEST WITH CONTRAST	09-29-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, James	07-31-1991	M	Diagnostic CT	CT Chest Wo	09-29-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, James	07-31-1991	M	Diagnostic CT	CT Pelvis W/Wo	09-29-2016		Smith, Alfons	VANTAGE MED GROUP CAP	MD Review
UM, James	07-31-1991	M	Diagnostic CT	CT Pelvis Wo	09-29-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, James	07-31-1991	M	MRI and MRA	MR Cervical Wo & Lumbar Wo	09-29-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received
UM, Test1258094	01-12-1959	F	Diagnostic CT	CT CHEST WITH CONTRAST	10-24-2016		Smith, Alfons	VANTAGE MED GROUP CAP	Received

The search capabilities of UM Connect will allow the user to search by a number of different criteria including patient name, birth date, provider, UM Tracking Number, and UM Status. The results are limited to only orders that belong to the medical groups to which the UM Connect user is mapped. This is based on the primary insurance of the order.






Patient's Last Name *
 Patient's First Name
 Patient's Birth Date 
 UM Tracking Number
 Created Date (mm-dd-yyyy): From  To  Today & Yesterday 7 Days 30 Days 60 Days 90 Days 1 Year

Hide Advanced Search Options

Ordering Provider's Last Name
 CC'd Ordering Provider's Last Name

Status 
 Exam Type 

The Authorization Letter, Order information and Attachments are available for each of the patient's UM Orders.

UM, Test1258094 01-12-1959 (58) Female MRN: 8986PE (system)	   
CT CHEST WITH CONTRAST Ordered	Authorization Letter Orders Attachments
MR Cervical Spine Wo Ordered MR Thoracic Spine Wo Ordered	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  </div> <div> RadNet Utilization Management 1516 Cotner Avenue Los Angeles, CA 90025 Phone: 714-749-4366 Fax: 800-398-1388 </div> </div> <hr/> <p> Provider: Smith, Alfons Group: Vantage Medical Group </p> <p> 21 South Green Milton Road 167 White Hague St Seattle, Vermont 48941 Phone: (778) 887-8127 Fax: (998) 884-5129 </p> <hr/> <p> Dr. Smith: We have reviewed the submitted information to establish the medical necessity of the "exam as requested" on this patient. This is a courtesy notification of our "Recommendation" to the Medical Group. The Medical Group shall make the "Final Status" determination. Should you want to discuss this case with Janet Kirkpatrick, please call . </p> <p> Patient Name:UM, Test1258094 Authorization #: A102341 Date of Birth:01-12-1959 Received: 09-15-2016 12:11 PM Gender: Female Review Hours: 1 </p> <p> Indication: 57 YO F...COMPARE 2014 MRI T SPINE REPORTED: A focal osseous hemangioma is present within the T7 vertebral body with additional small focus of osseous hemangioma present inferiorly within the T6 vertebral body. The hemangioma within the T7 vertebral body appears to be lipid poor based on imaging characteristics. There is a focal area of T2 hyperintensity seen centrally within the spinal cord beginning at T6 and extending to T10. This measures approximately 1 mm and is suggestive of a mild persistent central canal, likely of no clinical significance. </p> <p> Procedure: 72141 - MR Cervical Spine Wo Status: Recommended - As Alternative </p> <p> <small>The reviewer recommends this PROCEDURE THAT DIFFERS in some significant aspect from the exam(s) you have requested. If provider approves, he or she must sign this STATEMENT APPROVING OF ALTERNATIVE EXAM and once you have faxed this form back to us you may schedule this procedure at a RadNet site.</small> </p>