

# 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)

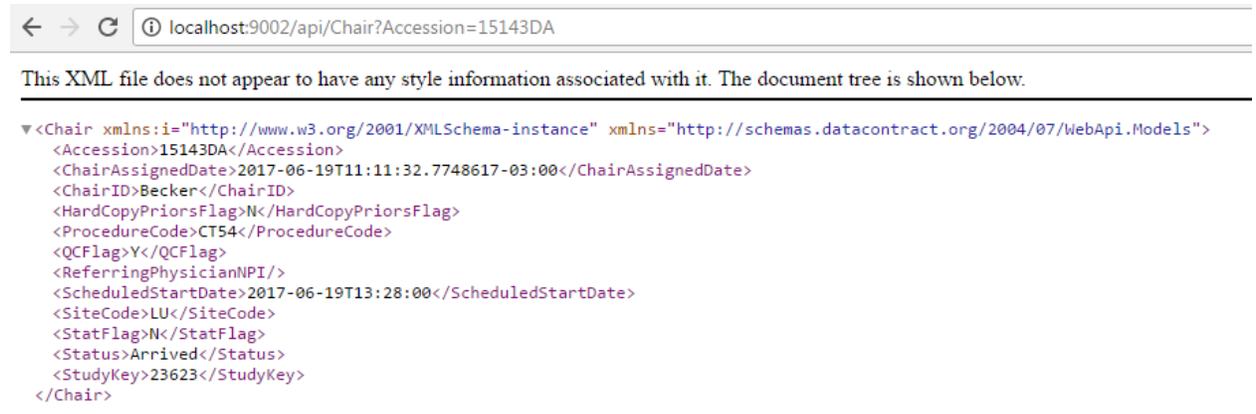


Figure 3 - Get Chair Data by Accession

---

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.



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. <b>Update: Enable Extra Compression will be disabled until further changes are made.</b>
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 <b>or</b> 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> .

---

No part of this material may be published, reproduced, stored in a retrieval system, or transmitted

in any form or by any means without the prior written permission from eRAD.

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.

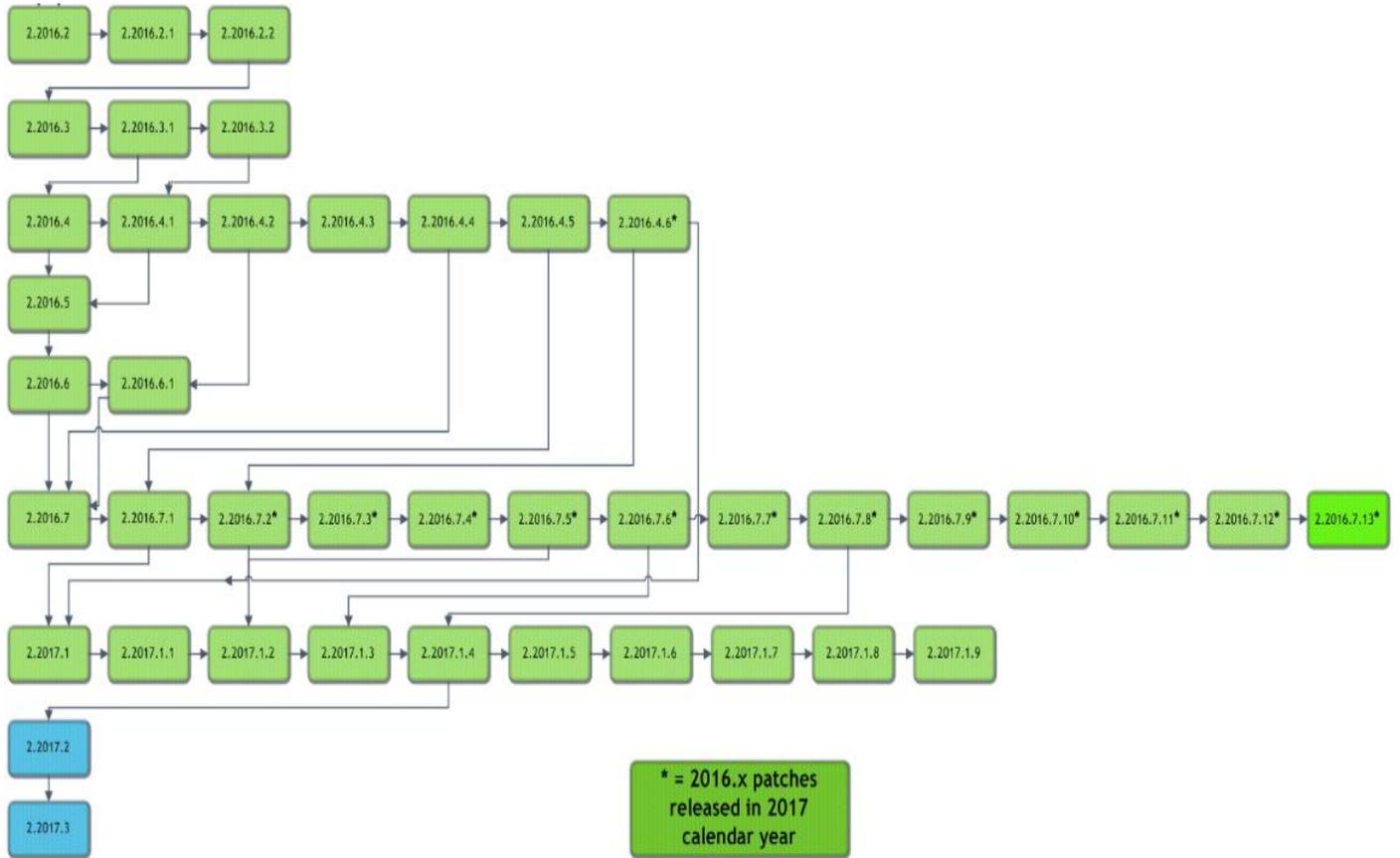
Redmine #	Subject	Original Resolved Version
17839	Resolved an intermittent issue with RIS Crashing between scheduling under particular circumstances (Object reference not set to an instance of an object).	2017.1
17354	<b>New Feature:</b> Option to deploy multiple report server data sources.	2017.1
17353	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	<b>New Feature:</b> 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	<b>New Feature:</b> Client side setting to optimize calls to UpdateStudy. (See New Features section titled "New RIS settings to reduce bandwidth for updates.") <b>Update: Enable Extra Compression will be disabled until further changes are made.</b>	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**



**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
2016.2	-	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"

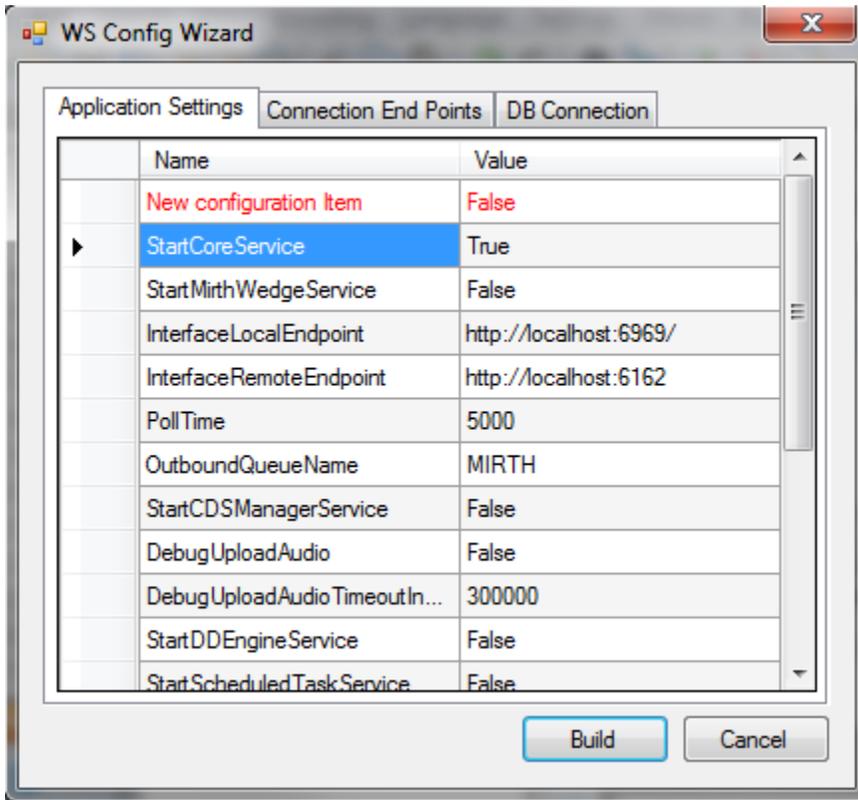
This application will read the existing configuration file(s) (if files exist), and compare to the provided new configuration files then will display three tabs, for each configuration file:

---

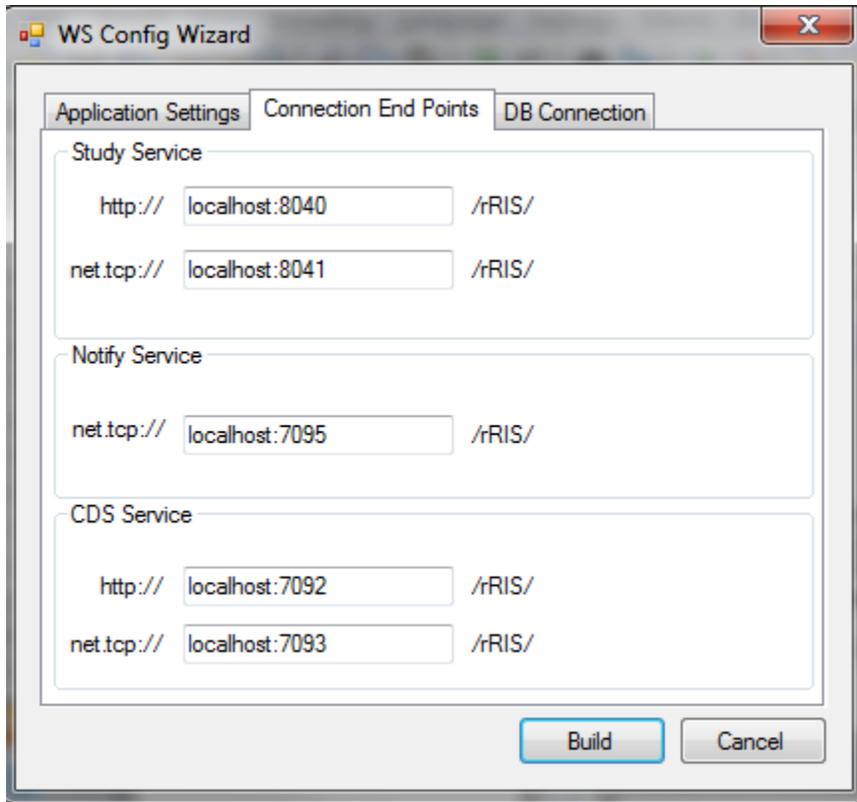
No part of this material may be published, reproduced, stored in a retrieval system, or transmitted

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.

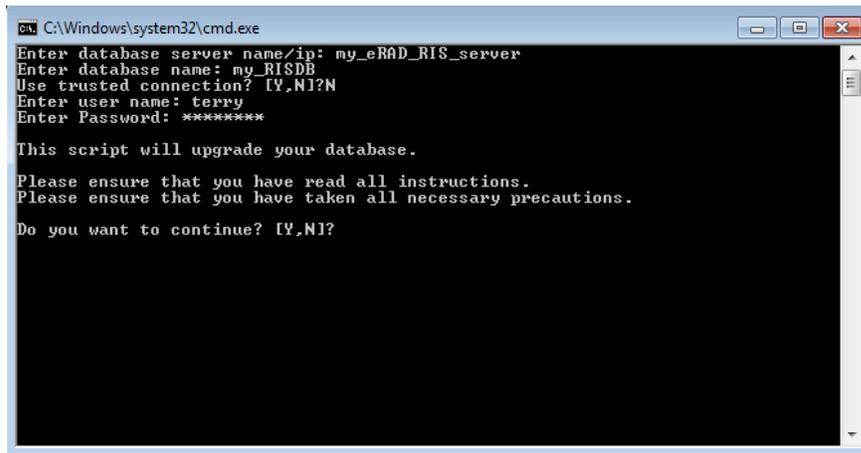
---

No part of this material may be published, reproduced, stored in a retrieval system, or transmitted

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]? 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]?
```

- 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