

Server Update

For eRAD RIS
Version 2.0
Build 45.1
Update 45.1.3

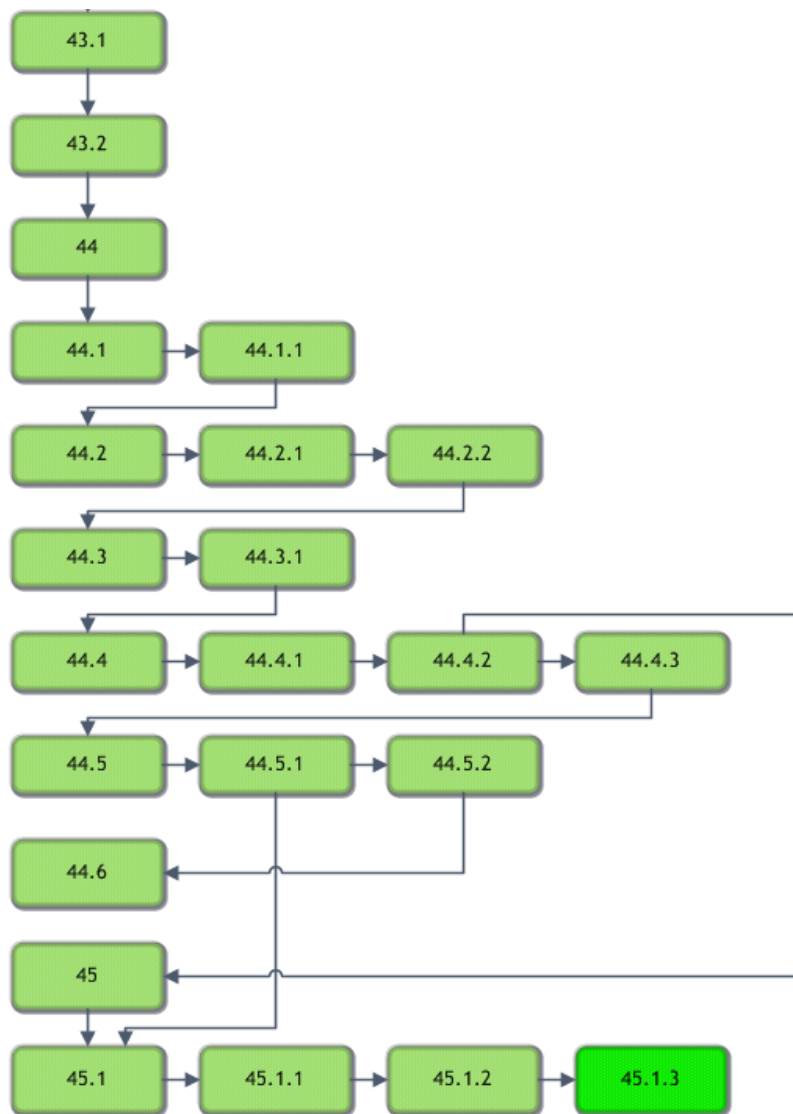
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Resolved Items

Redmine #	Subject	Priority
12004	Appointment book load times to slow	Urgent
12002	CD Import or Legacy Data can overwrite the system MRN	Urgent
12001	CD Import thows exception if DOS on disk cannot be found and time format is not dd-mm-yyyy	Urgent
11984	Using the "Print Forms" context menu causes error "The UTC time represented when the offset is applied must be between year 0 and 10,000". Auto printing forms simply do not appearthe .	Urgent
12023	questionnaires should not reference CSS files from CDN servers	High
12011	Report Rendering (SSRS) - Reports with tables have an extra line after every row data element	High
12009	Questionnaire - Expressions are not evaluated after visiblity changes on source questions	High
12003	Citrix Bridge Installer adds CitrixBridge.exe to HKLM\Software\Microsoft\Window\Run but the path is missing so it fails to start on boot.	High
11972	Diagnostic report editor not keeping right to left document text flow.	High
11969	Linked Questionnaire checkboxes don't fire change event	High
11967	Questionnaires should not be editable after report signature	High
11958	error logging in to questionnaires from browser using domain auth for some users	High
11955	Alternate name search feature is causing an exception to be thrown if it finds a matching name	High
11954	Excessive lines added into the diagnostic reports (nugget and SSRS) after going through RTF to CDA converter	High
11953	Questionnaire - Users do not get prompted on questionnaire not saving	High
11944	Ability to configure questionnaires to display in specific screens	High
11936	Poor performance switching between questionnaire tabs for large questionnaires	High
11997	Questionnaire expressions cannot refer to other expressions	Normal
11965	Reporting Radiology - RTF to CDA converter bolding text when not bolded in source system	Normal
11964	Questionnaire Expression Editor allows the user to make over 26 variables, but does not support more than 26	Normal
11952	Questionnaire answers are saved to the database even when no answer is provided	Normal
11951	Report Assistant is saving all questionnaires regardless of changes	Normal

Code Stream



Legend:








Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

eRAD RIS Server Update

Package Contents

 _ReleaseNotes	21/10/2015 22:31
 DB	20/10/2015 22:22
 PACS Citrix Bridge	20/10/2015 22:24
 Questionnaires	20/10/2015 22:23
 rRISService	20/10/2015 22:21
 SQLReporting	20/10/2015 22:22
 ThickClient	20/10/2015 22:20

Intended Audience

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

Who is affected

Build 45.1 installs. This server update must be applied to 45.1

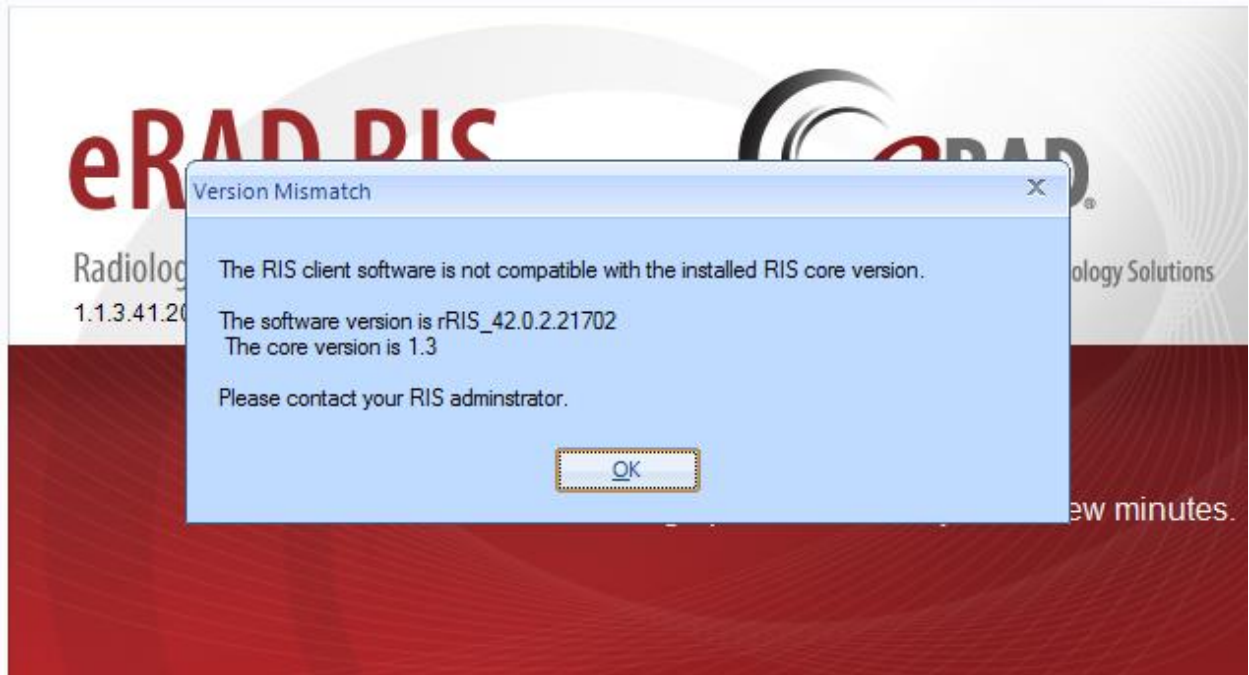
eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
43	-	2.43.0.0.23715(3GB)	2.43.0.0.23171	2.43.0.0.23715	2.43.0.0.23743	Full Version Release
43	1	2.43.0.1.23798(3GB)	2.43.0.0.23171	2.43.0.1.23798	2.43.0.1.23770	GUI.zip, Web Service, DB updates
43	2	2.43.0.2.24017(3GB)	2.43.0.0.23171	2.43.0.2.24017	2.43.0.2.24023	GUI.zip, Web Service, DB updates and Management Report Deployment
43	3	2.43.0.3.24298(3GB)	2.43.0.0.23171	2.43.0.3.24298	2.43.0.3.24283	GUI.zip, Web Service, DB updates and SSRS Deployment
43	3.1	2.43.0.3.24450(3GB)	2.43.0.0.23171	2.43.0.3.24298	2.43.0.3.24421	GUI.zip, and DB updates
43	3.2	2.43.0.3.24450(3GB)	2.43.0.0.23171	2.43.0.3.24298	2.43.0.3.24421a	DB updates
43	4	2.43.0.4.24447(3GB)	2.43.0.0.23171	2.43.0.4.24447	2.43.0.4.24442	GUI.zip, Web Service, DB updates and SSRS Deployment
43	5	2.43.0.4.24632(3GB)	2.43.0.0.23171	2.43.0.4.24632	2.43.0.4.24560	GUI.zip, Web Service and DB updates
43	6	2.43.0.4.24(3GB)	2.43.0.0.23171	2.43.0.4.24	2.43.0.4.24	GUI.zip, Web Service and DB updates
43	6.1	2.43.0.6.24937(3GB)	2.43.0.0.23171	2.43.0.6.24937	2.43.0.6.24914	GUI.zip, Web Service
43	6.2	2.43.0.6.24970(3GB)	2.43.0.0.23171	2.43.0.6.24970	2.43.0.6.24914	GUI.zip, Web Service
43	7	2.43.0.7.25258(3GB)	2.43.0.0.23171	2.43.0.7.25258	2.43.0.7.25226	GUI.zip, Web Service, DB updates and SSRS Deployment
43	8	2.43.0.8.25440(3GB)	2.43.0.0.23171	2.43.0.8.25440	2.43.0.8.25425	GUI.zip, Web Service, DB updates and SSRS Deployment
43	9	2.43.0.9.25477(3GB)	2.43.0.0.23171	2.43.0.9.25477	2.43.0.8.25425	GUI.zip and Web Service
43	10	2.43.0.9.25477(3GB)	2.43.0.0.23171	2.43.0.10.25477	2.43.0.8.25425	Web Service
43	11	2.43.0.11.25512(3GB)	2.43.0.0.23171	2.43.0.11.25512	2.43.0.8.25425	GUI.zip and Web Service
43	12	2.43.0.12.25554(3GB)	2.43.0.0.23171	2.43.0.12.25554	2.43.0.12.25536	GUI.zip Web Service and DB Updates
43	13	2.43.0.12.25610(3GB)	2.43.0.0.23171	2.43.0.12.25610	2.43.0.12.25536	GUI.zip and Web Service
43	14	2.43.0.14.25644(3GB)	2.43.0.0.23171	2.43.0.13.25610	2.43.0.12.25536	GUI.zip
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

Installing

Client/GUI

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.45.1.3.31452.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_45.1.3.31452→ rRIS_1.3.45.1.3.31452

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)

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Web Service

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 88 files in the rRISService folder and 2 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).

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, services as well as a copy of the rRISServices.exe configuration file. The contents of this folder should not be required to be touched.

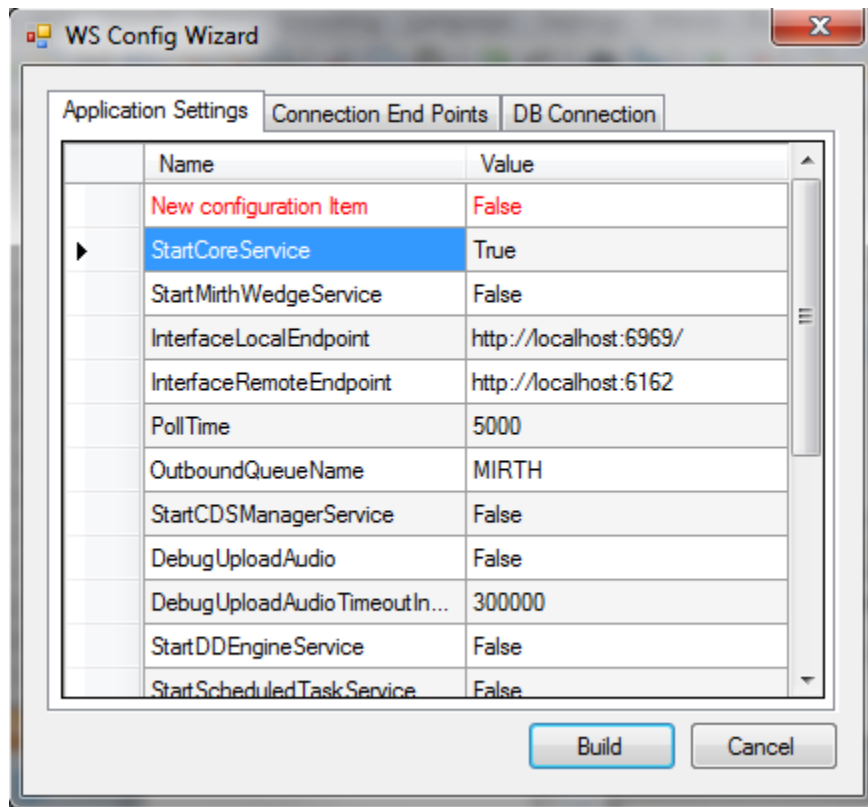
On the install of a new service, all files will be copied to the appropriate locations on the server (no configurations will be over written). If instructed or to confirm no new configurations have been added the user can run the new application “ServicesConfigWizard.exe”

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.

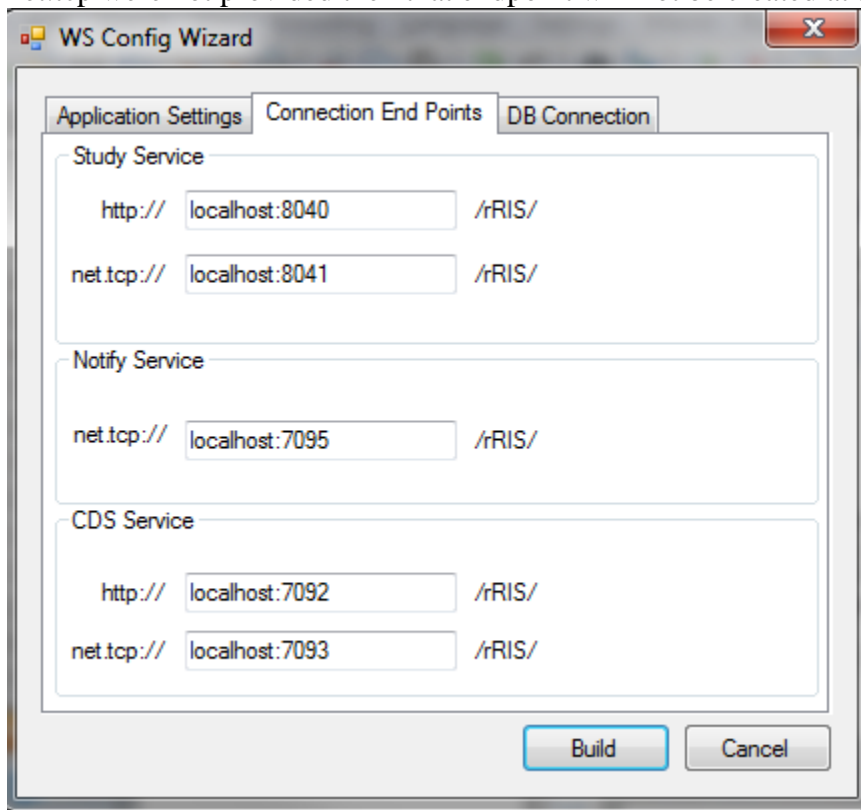
NOTE: the rRISServices.exe.config file is also included in the deploy folder. If this file has changes it **will not** update your current file in the Web Service directory. Any changes to this file will require a manual update of the rRISServices.exe.config and rRISServicesx64.exe.config files.

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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.

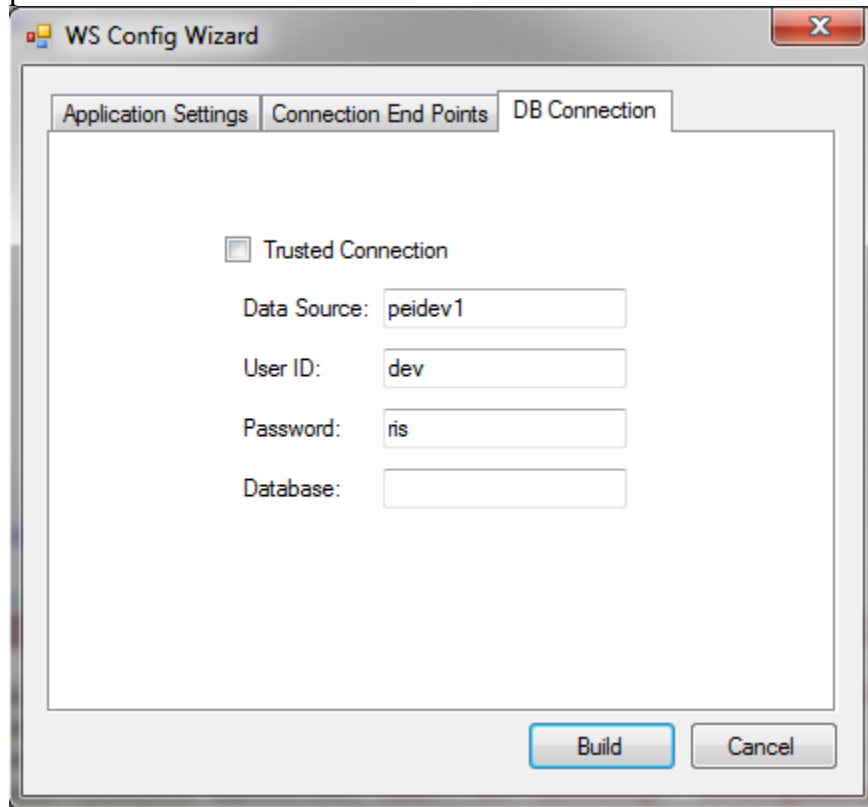


The screenshot shows the 'WS Config Wizard' dialog box with the 'Connection End Points' tab selected. The dialog has three tabs: 'Application Settings', 'Connection End Points', and 'DB Connection'. The 'Connection End Points' tab contains three sections: 'Study Service', 'Notify Service', and 'CDS Service'. Each section has two rows of input fields for 'http://' and 'net.tcp://' endpoints, followed by a '/rRIS/' label. The 'Study Service' section has 'localhost:8040' and 'localhost:8041'. The 'Notify Service' section has 'localhost:7095'. The 'CDS Service' section has 'localhost:7092' and 'localhost:7093'. At the bottom right, there 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/
	http://		
CDS Service	http://	localhost:7092	/rRIS/
	net.tcp://	localhost:7093	/rRIS/

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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.

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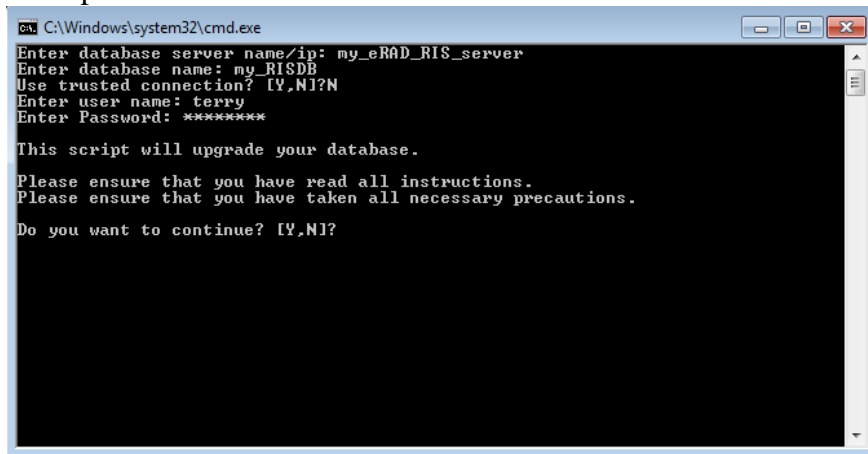
Database Updates

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]?
```

- 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

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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]
-

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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]