

# Server Update

For eRAD RIS  
Version 2.0  
Build 43  
Update 43.0.7

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## 1. New Features

### Zotec TOS Inegration

For Zotec enabled sites, the “Add” button in the payments section will connect with the Zotec TOS portal, passing all relevant information, which includes: patient demographics, CPT codes, insurance and the amount to collect. Zotec will match the patient and display the Zotec TOS portal in a modal dialog as shown in the following:

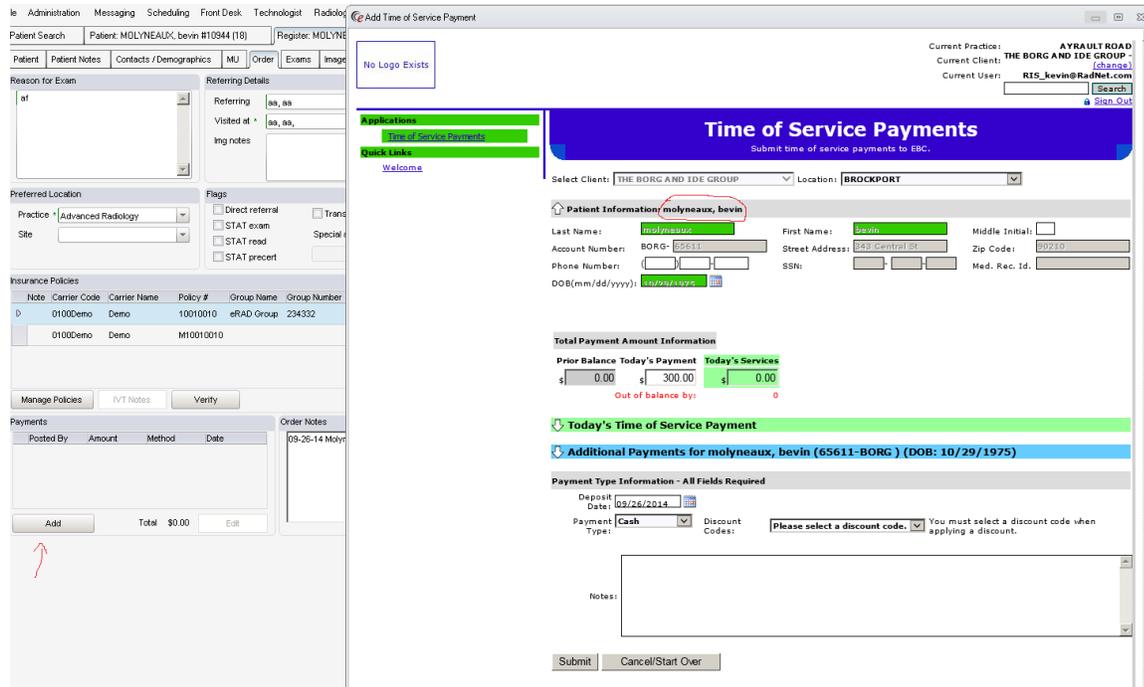


Figure 1.1 – Adding payment via Zotec TOS payment window

To record payments for Medical Records services, such as the cost of burning a CD, access the menu “Front Desk / Add Medical Record Payment” as shown in the following:

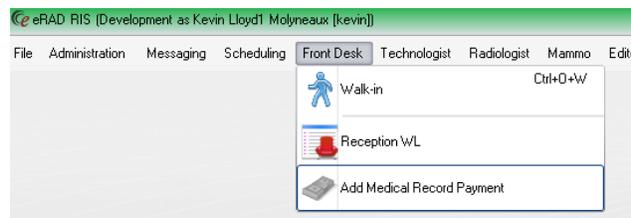


Figure 1.2 – Add Medical Record Payment access

When the user clicks on “Add Medical Record Payment”, a screen will display, asking the user for the site where the payment will be received. The user will have the option to select any Zotec enabled site for their practice but will default to their “Reception WL” preferred site.

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Figure 1.3 – Selecting site to add medical record payment

When these choose “OK” to the Add Medical Record Payment, the Zotec TOS web site will display with an extra message at the top of the screen, warning that they are processing a medical record payment. Medical record payments will be processed with following account:

Last Name: MedicalRecords

First Name: <PracticeCode>\_<SiteCode>

Address: <site address information>

DOB: Site’s Zotec activation date

MRN (not seen on the TOS portal): z<space><PracticeCode>\_<SiteCode>

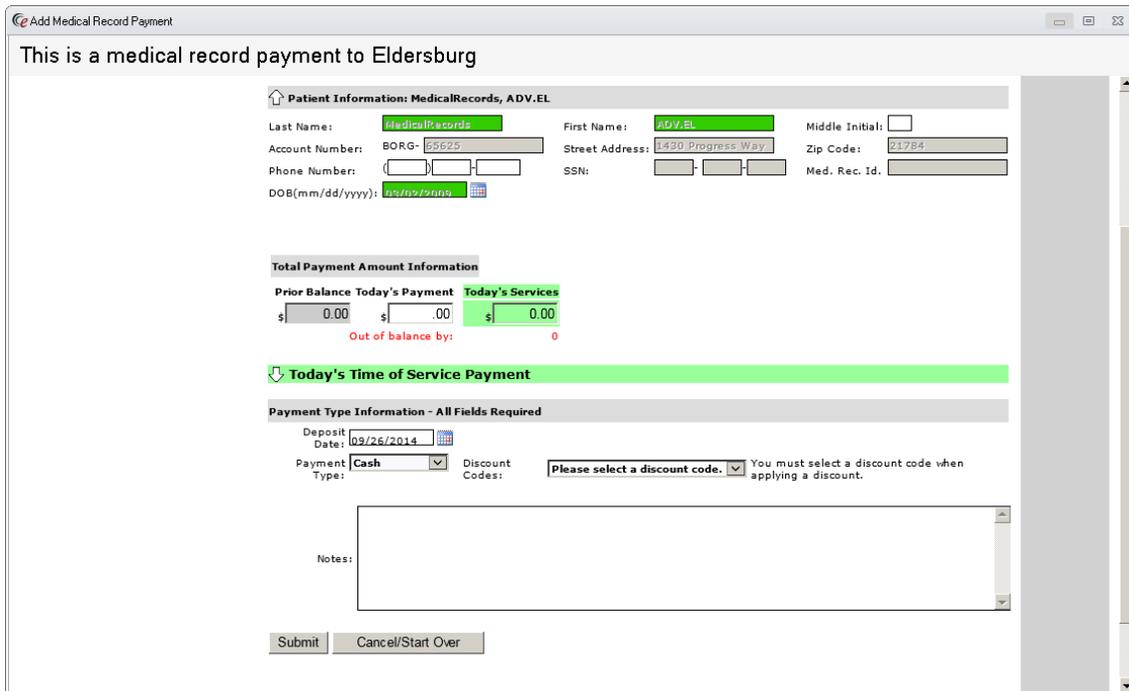


Figure 1.4 - Zotec TOS payment window

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### 2. Changes to Configuration

| Setting Placeholder                    | Setting  | Default                           | Purpose / Controls Access to   |
|--|--|-----------------------------------|--|
| Applicationsetting.config              | "StartInsuranceEligibilityService"<br><br>Setting looks like this in the .config file<br><br><pre>&lt;setting name="StartInsuranceEligibilityService" serializeAs="String"&gt;   &lt;value&gt;False&lt;/value&gt; &lt;/setting&gt;</pre> | False                             | This setting originally had a default of True, Changed to false in this build.<br><br>If the current value of this setting is True when you run the ServicesConfigWizard.exe it will keep the current setting. |
| AccessString and UserGroup Permissions | Zotec.AllowDiscount  | None                              | Allows the user to add a medical record payment, via "Add Medial Record Payment" from the "Front Desk" main menu.  |
| AccessString and UserGroup Permissions | Zotec.AllowRefund  | None                              | Allows the user to give refunds in the Zotec time-of-service website   |
| AccessString and UserGroup Permissions | Zotec.AddMedicalRecordPayment  | Full                              | Allows the user to add a medical record payment, via "Add Medial Record Payment" from the "Front Desk" main menu.  |
| SystemConfig settings                  | ZotecAmountPaidPrefixString  | Amount Paid:<br><td align='left'> | string in the Zotec receipt, just before the amount paid, which will be reported back to the RIS   |
| SystemConfig settings                  | ZotecTOSPassword   | None                              | Password for Zotec TOS (time of service) integration   |
| SystemConfig settings                  | ZotecTOSUrl  | None                              | URL to the Zotec TOS portal  |
| SystemConfig settings                  | ZotecTOSUser   | None                              | Username for Zotec TOS integration   |

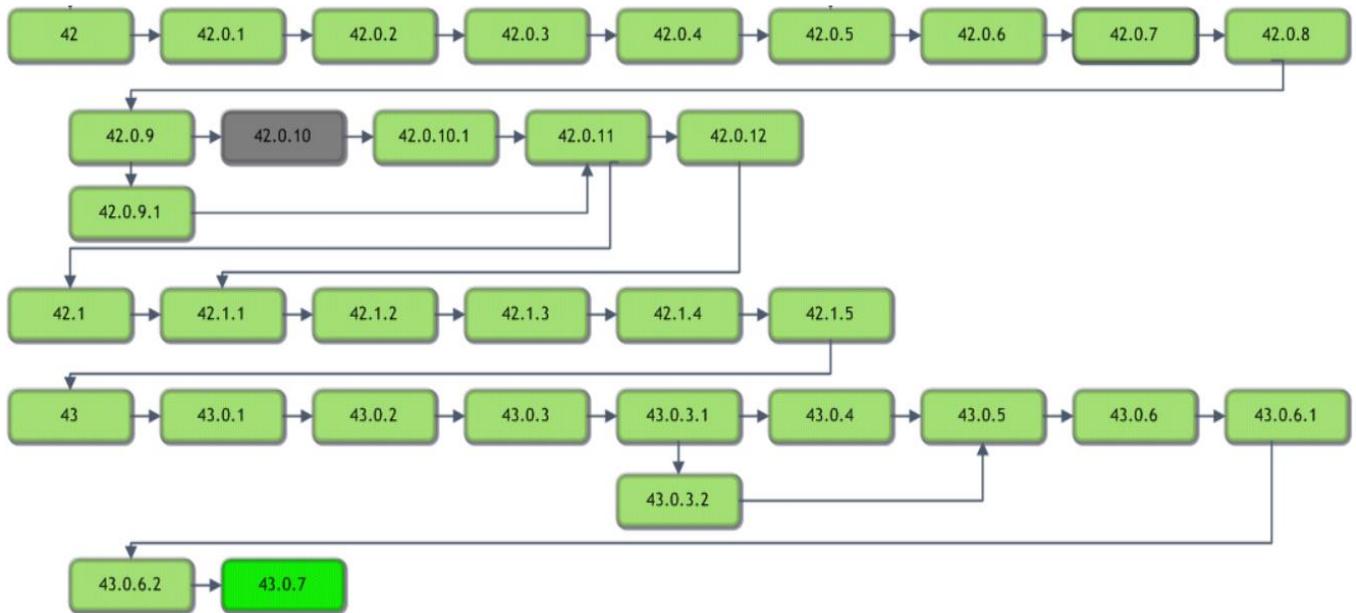
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### 3. Defects Resolved

| Redmine # | Tracker | Subject  | Priority  |
|-----------|---------|--|-----------|
| 7671      | Bug     | internal dataset properties not correctly set  | Immediate |
| 7398      | Feature | RIS Integration with Zotec payment portal (TOS)  | Urgent    |
| 7604      | Bug     | Insurance Eligibility Pilot - Invoice Inconsistency  | High      |
| 7584      | Bug     | IVT workflow can cause studies to be moved to Exam Done  | High      |
| 7455      | Bug     | Patient Merge with 1 external MRN is being merged into itself  | High      |
| 7721      | Slush   | Insurance Eligibility Pilot - Should not have pre transaction fee charged to eRAD_Demo payer id  | Normal    |
| 7716      | Slush   | Null exception on login for zotec integration, preventing other code from running, no exception shown to user.   | Normal    |
| 7715      | Slush   | Insurance Eligibility - Zotec integration  | Normal    |
| 7713      | Slush   | Insurance Eligibility - subreport needed to identify patients on the Carriers Not Using Insurance Eligibility report   | Normal    |
| 7709      | Slush   | Zotec integration - after submitting a payment in Zotec, the payment can be deleted in RIS   | Normal    |
| 7691      | Bug     | Alternate MRN's don't display in patient search window   | Normal    |
| 7680      | Bug     | Unable to cancel exam done studies for outside read sites  | Normal    |
| 7669      | Bug     | Insurance Eligibility - IVT screen issue when no insurance is specified.   | Normal    |
| 7666      | Feature | Enhanced patient search in walk-in screen to include more than just internal persons   | Normal    |
| 7645      | Bug     | StartInsuranceEligibilityService should be turned off by default   | Normal    |
| 7636      | Bug     | Possible search returns as valid, when the start and end time straddle a closure start date.   | Normal    |
| 7633      | Bug     | Problem List Error on Scheduling Outside Read  | Normal    |
| 7514      | Bug     | Help -> Refresh Configuration required on new builds   | Normal    |
| 7484      | Bug     | Document distribution - sites with no printer configured in RIS can still have jobs printed to other sites.  | Normal    |
| 7435      | Bug     | IVT WL - Precert required and Insurance required - changing to an insurance that eligibility is checked, the required value is not removed from WL (timng issue) | Normal    |
| 7255      | Bug     | CD Burning - Improve PACS failed to export message   | Normal    |
| 7166      | Bug     | Report deployment - MQSA folder really should be called Mammography  | Normal    |
| 7015      | Bug     | MU - A requested lab order can be entered with a blank observation and return an error   | Low       |

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## 4. Code Stream



### **Legend:**

Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

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### 5. Package Contents

Files included for this server update:

1) GUI ZIP Updates folder contains:

- rRIS\_1.3.43.0.7.25258.zip

2) RIS\_Service\_Updates contains:

|   |                                    |
|---|------------------------------------|
| ABCpdf.dll  | Radar.DirectMessaging.Model.dll    |
| ABCpdf9-32.dll                                    | Radar.DirectMessaging.Model.pdb    |
| ABCpdf9-64.dll                                    | rRISServices.exe                   |
| Antlr3.Runtime.dll                                | rRISServices.pdb                   |
| CDSJobManager.dll                                 | rRISServicesx64.exe                |
| CDSJobManager.pdb                                 | ScheduledTaskManager.dll           |
| CdsLib.dll  | ScheduledTaskManager.pdb           |
| CdsLib.xml  | ServicesConfigWizard.exe           |
| CdsLib.XmlSerializers.dll                         | ServicesConfigWizard.pdb           |
| CommonLib.dll                                     | SignatureApprovalService.exe       |
| CommonLib.pdb                                     | SignatureApprovalService.pdb       |
| contents.txt                                      | System.Net.Http.dll                |
| DDEngine.dll                                      | System.Net.Http.Formatting.dll     |
| DDEngine.pdb                                      | System.Net.Http.xml                |
| DiffPlex.dll                                      | System.Web.Http.dll                |
| Interop.ANYMODALCAPTURECTRLLib.dll                | System.Web.Http.SelfHost.dll       |
| Interop.FAXCOMEXLib.dll                           | System.Web.Http.SelfHost.xml       |
| Microsoft.Practices.EnterpriseLibrary.Caching.dll | System.Web.Http.WebHost.dll        |
| Microsoft.Practices.EnterpriseLibrary.Caching.pdb | System.Web.Http.WebHost.xml        |
| Microsoft.Practices.EnterpriseLibrary.Common.dll  | System.Web.Http.xml                |
| Microsoft.Practices.EnterpriseLibrary.Common.pdb  | System.Web.Mvc.dll                 |
| Microsoft.Practices.EnterpriseLibrary.Logging.dll | System.Web.Mvc.xml                 |
| Microsoft.Practices.EnterpriseLibrary.Logging.pdb | System.Web.Optimization.dll        |
| Microsoft.Practices.ServiceLocation.dll           | System.Web.Razor.dll               |
| Microsoft.Practices.ServiceLocation.pdb           | System.Web.Razor.xml               |
| Microsoft.Practices.Unity.dll                     | System.Web.WebPages.Deployment.dll |
| Microsoft.Practices.Unity.Interception.dll        | System.Web.WebPages.Deployment.xml |
| Microsoft.Practices.Unity.Interception.pdb        | System.Web.WebPages.dll            |
| Microsoft.Practices.Unity.pdb                     | System.Web.WebPages.Razor.dll      |
| Microsoft.ReportViewer.Common.dll                 | System.Web.WebPages.Razor.xml      |
| Microsoft.ReportViewer.WinForms.dll               | System.Web.WebPages.xml            |
| Microsoft.ReportViewer.WinForms.xml               | Tourreau.Gilles.FaxDotNet.dll      |
| Newtonsoft.Json.dll                               | Tourreau.Gilles.FaxDotNet.pdb      |
| Newtonsoft.Json.xml                               | Tourreau.Gilles.FaxDotNet.xml      |
| NLog.dll  | WCFSservice.dll                    |
| O2S.Components.PDFRender4NET.dll                  | WCFSservice.pdb                    |
| PDFToImages.exe                                   | WCFSserviceTests.dll               |
| Radar.Common.dll                                  | WCFSserviceTests.pdb               |
| Radar.Common.pdb                                  | WebApi.dll                         |
| Radar.Common.WebClient.dll                        | WebApi.pdb                         |
| Radar.Common.WebClient.pdb                        | WebGrease.dll                      |
| Radar.DirectMessaging.Client.dll                  | Wedge.exe                          |
| Radar.DirectMessaging.Client.pdb                  | Wedge.pdb                          |

## eRAD RIS Server Update

The rRIS\_Service\_Updates also contains to subfolders:

- A. Deploy folder contains
  - a. Applicationsettings.config
  - b. ReleaseVersion-connectionstrings.config
  - c. rRISServices.exe.config
  - d. services.config
  
- B. XSL subfolder contains:
  - a. Subfolder titled “Stylesheets” which contains:
    - a. CDAToHTMLCompleteReport.xslt
    - b. CDAToHTMLCompleteReportDark.xslt
    - c. CDAToHTMLImpressionSection.xslt
    - d. CDAToRIS.xslt
    - e. CDAToTxt.xslt
    - f. DocumentModelReport.xslt
    - g. DocumentModelReportAsXml.xslt
  
  - b. CDA Subfolder contains

|  |   |
|--|---|
| <ol style="list-style-type: none"><li>a. C-CDA.xsl</li><li>b. eRadStylesheet.xsl</li><li>c. generalTemplates.xsl</li><li>d. header.xsl</li><li>e. QRDA.xsl</li><li>f. QrdaLevel3_Cypress2.4.0.xsl</li><li>g. QrdaLevel3_ViewHtml.xsl</li><li>h. sectionAdministeredMedications.xsl</li><li>i. sectionAllergies.xsl</li><li>j. sectionEncounters.xsl</li><li>k. sectionFindings.xsl</li><li>l. sectionFuncCogStatus.xsl</li><li>m. sectionImmunizations.xsl</li></ol> | <ol style="list-style-type: none"><li>n. sectionInstructions.xsl</li><li>o. sectionMedications.xsl</li><li>p. sectionPlanOfCare.xsl</li><li>q. sectionProblemList.xsl</li><li>r. sectionProcedures.xsl</li><li>s. sectionQRDAMEasures.xsl</li><li>t. sectionQRDAPatientData.xsl</li><li>u. sectionQRDAREporting.xsl</li><li>v. sectionReasonForVisit.xsl</li><li>w. sectionResults.xsl</li><li>x. sectionSocialHistory.xsl</li><li>y. sectionVitalSigns.xsl</li></ol> |
|--|---|

3) SQL Folder contains:

- B43.0.7.sql

4) **SSRSDeployment** folder contains 7 subfolders, a batch file for deploying the reports and a help file for deploying the reports.

4.1. **Backups** folder is empty

4.2. **Fonts** folder contains 4 files:

- 4.1.1. FRE3OF9X
- 4.1.2FRE3OF9x\_0
- 4.1.3FREE3OF9

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4.1.4FREE3OF9\_0

- 4.3. **ParentFolder** folder contains 7 subfolders
  - 4.3.1. **Chair** folder contains 1 .rdl file
  - 4.3.2. **Dashboards** folder contains 9 .rdl files
  - 4.3.3. **Forms folder** contains sub folder and 2 .rdl files
    - 4.3.3.1. **SubReports** contains 10 .rdl files
  - 4.3.4. **Management Reports** folder contains 9 sub folders, these subfolders contain the core management report files (.rdl) to be deployed.
  - 4.3.5. **Marketing** folder contains 5 .rdl files
  - 4.3.6. **Order Templates** contains 1 file (Default.rdl)
  - 4.3.7. **SubReports** contains 13.rdl files
  - 4.3.8. **Verbal Order** contains 4 .rdl files
- 4.4. **Scripts** folder contains 9 .rss files. These files are used with the DeployReports.bat utility to deploy the reports.
- 4.5. **Upload Custom Mangement Reports** is empty
- 4.6. **Upload Diagnostic Templates** folder contains 1 subfolder
  - 4.6.1. **SubReports** folder is empty
- 4.7. **Upload Forms** folder contains 1 subfolder.
  - 4.7.1. **SubReports** folder is empty
- 4.8. **eRADDeployReports.bat** - batch file for deploying reports to report server for eRAD customers
- 4.9. **RadnetDeployReports.bat** - batch file for deploying reports to report sever for RadNet
- 4.10. **Adding reports for Deployment.docx** document to assist in added a report to the install process when deploying the reports.

## **eRAD RIS Server Update**

### **6. Intended Audience**

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

### **7. Who is affected**

Build 43 installs. Server updates are not cumulative. This server update must be applied to 43.0.6

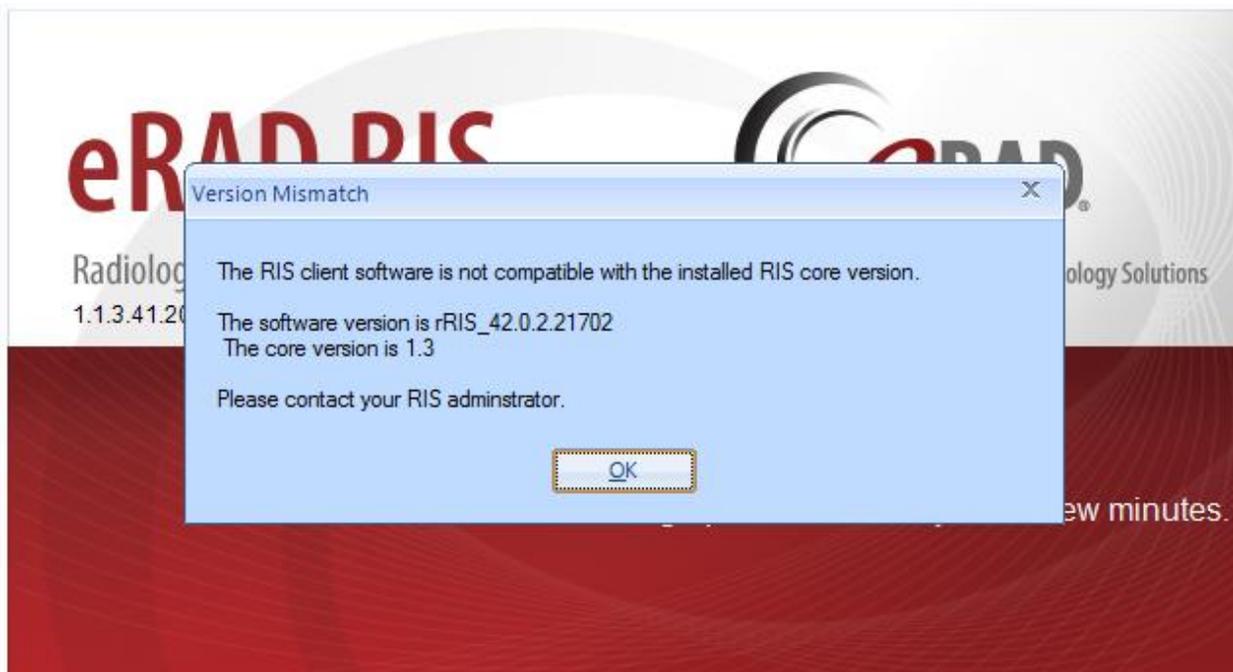
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## 8. eRAD RIS Release Version Numbers

| Build     | Patch    | UI Version          | Core Version   | WS Version     | DB Version      | Notes   |
|-----------|----------|---------------------|----------------|----------------|-----------------|---|
| 42.1      | -        | 2.42.1.0.22744(3GB) | 2.42.0.0.21261 | 2.42.1.0.22744 | 2.42.1.0.22736  | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 42.1      | 1        | 2.42.1.1.2296(3GB)  | 2.42.0.0.21261 | 2.42.1.1.22963 | 2.42.1.1.22864  | GUI.zip, Web Service, DB updates                                  |
| 42.1      | 2        | 2.42.1.2.23007(3GB) | 2.42.0.0.21261 | 2.42.1.2.23007 | 2.42.1.2.23007  | GUI.zip, Web Service, DB updates                                  |
| 42.1      | 3        | 2.42.1.2.23237(3GB) | 2.42.0.0.21261 | 2.42.1.2.23237 | 2.42.1.2.23007  | GUI.zip, Web Services   |
| 42.1      | 4        | 2.42.1.4.23348(3GB) | 2.42.0.0.21261 | 2.42.1.4.23348 | 2.42.1.2.23007  | GUI.zip, Web Services   |
| 42.1      | 5        | 2.42.1.5.23406(3GB) | 2.42.0.0.21261 | 2.42.1.5.23406 | 2.42.1.2.23007  | GUI.zip, Web Services   |
| 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 Management Report 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 Management Report Deployment |
| 43        | 5        | 2.43.0.5.24632(3GB) | 2.43.0.0.23171 | 2.43.0.5.24632 | 2.43.0.5.24560  | GUI.zip, Web Service and DB updates                               |
| 43        | 6        | 2.43.0.6.24914(3GB) | 2.43.0.0.23171 | 2.43.0.6.24914 | 2.43.0.6.24914  | 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  |
| <b>43</b> | <b>7</b> | 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 Management Report Deployment |

### 9. Installing

- 1) Copy and replace the current rRIS...zip file with the rRIS\_1.3.43.0.7.25258.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\_43.0.7.25258 → rRIS\_1.3.43.0.7.25258

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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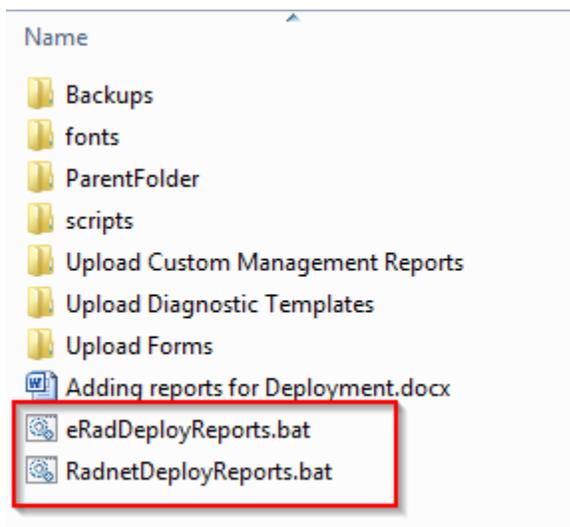
- 2) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService. Be sure to make backup of all files, but especially the rRISServices.exe.config and rRISServices.vshost.exe.config files.

*rRISService directories include:*

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

**Restart each service.**

- 3) Run the B43.0.7.sql file against the eRAD RIS database instance.
- 4) Management Reports Deployment / SSRSDeployment - There are 2 utilities called **RadnetDeployReports.bat** and **eRadDeployReports.bat** that will deploy the reports to a SQL Server Report Service. This utility is found in the **Build X\SSRSDeployment** folder. Below are the steps on how to use this utility. The purpose for the 2 .bat files are the RadNet one deploys a few extra reports specific to RadNet.



1. Launch the DeployReports.bat file.
2. **Enter report server name [default:<computer\_name>]:**
  - a. A script will run against the server and return a list of all the root folders on that report server  
\*\*By Default this will pull the computer\_name environmental variable from the machine running the script. I suggest running this from the report server for performance anyway.
3. **Enter root folder to deploy reports [default: production]:**

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- a. This will create a new root if the name you give doesn't exist, or it will simply publish below the root of the folder if it does already exist. We typically will use "production" for the installation folder. Note: The script forces the root name to be lowercase.  
\*\*Default is suggested to be production, but you may need to change it based on the environment you are deploying to. Ie: testserver might be called something else.
4. **Do you wish to create a backup of the existing reports?:**
  - a. This will create a file backup of the report directory specified in the same directory deploy.bat is being run from inside a folder called Backups where it will create a folder based on datetime of backup. Ie: 04172014\_110605 (MMDDYYYY\_HHMISS).
5. **Do you wish to deploy core management reports?**
  - a. If you enter "y", it will redeploy the core management reports
6. **Do you wish to upload Forms?**
  - a. If you enter "y", the script will deploy any .rdl files into the installations Forms folder that you have previously saved into the script folder called "Upload Forms" including the folder below it called SubReports.
7. **Do you wish to upload Diagnostic Templates?**
  - a. If you enter "y", the script will deploy any .rdl files into the installations Diagnostic Templates folder that you have previously saved into the script folder called "Upload Diagnostic Templates" including the folder below it called SubReports.
8. **Do you wish to upload Custom Management Reports?**
  - a. Entering "Y" will copy any .rdl files you've copied under the deployment folder called Upload Custom Management Reports onto the server under Management Reports\Custom\Uploads directory
9. **Do you wish to create a datasource?**
  - a. If you select "y" you will get prompted for more information about the datasource you wish to create. You only need to create a datasource, if this is a new installation. No need to do this if you are upgrading an existing installation. The datasource gets created in the root of the folder from step 3. The datasource will be called RISDataSource.

If you chose to create a datasource, the following steps will be requested to complete the connection string.

1. **Enter database server name:**
    - a. This is the name of the physical database server  
ex. MYSERVER-1
  2. **Enter database name:**
    - a. This is the name of the database on the database server  
ex. rRIS\_Site
-

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3. **Enter report schema user name:** ex. The account that the datasource will use to connect to the database ie: SA. (For security reasons “sa” is not recommended)
4. **Enter report schema password:**

The results of deployment will be written to log.txt in the same folder as the DeployReports.bat file.