

Server Update

For eRAD RIS
Version 2.0
Build 43
Update 43.0.1

Table of Contents

| | |
|--|----|
| 1. New Features | 3 |
| Ability to Add Site Code in Drop Down Lists..... | 3 |
| Site Column Added to Work Lists..... | 5 |
| Support International Phone Numbers..... | 6 |
| 2. Defects Resolved | 7 |
| 3. Changes to Configuration | 8 |
| 4. Code Stream..... | 9 |
| 5. Package Contents | 10 |
| 6. Intended Audience | 12 |
| 7. Who is affected | 12 |
| 8. eRAD RIS Release Version Numbers | 13 |
| 9. Installing | 14 |

eRAD RIS Server Update

1. New Features

Ability to Add Site Code in Drop Down Lists

Currently eRAD RIS supports practice and site names of 500 characters. The drop down fields that display these values typically only allow for 20-30 characters. Issues with the practice or site name may be very similar in the first 20 characters. To help the users differentiate between the practices/sites we have added a new system configuration setting of **“LocationLayoutFormatString”** with a default value of {description}. This default value means that it will display the Practice/Site description in the drop down list box. The user will have the option to have both the description and code displayed.

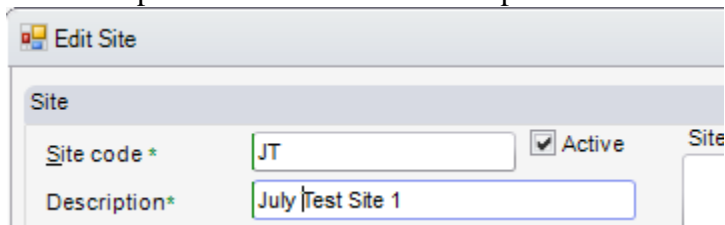
The screenshot shows a web application window titled "Edit Site". Inside, there's a section labeled "Site". It contains two text input fields: "Site code *" with the value "JT" and "Description*" with the value "July Test Site 1". To the right of the "Site code" field is a checkbox labeled "Active" which is checked. There is also a "Site" label to the right of the "Active" checkbox.

Figure 1.1 – Displaying site example

In the systemconfig table I add values for both the site code and the description. The value looks like ({code}) {description}.

| System Config Code | Value | Default |
|----------------------------|------------------------|---------------|
| Contains: locatio | Contains: | Contains: |
| LocationLayoutFormatString | {{code}} {description} | {description} |

Figure 1.2 – New configuration setting

The supporting fields will display these values as displayed in the following screenshot.

Example of the site displayed

(JT) July Test Site 1

eRAD RIS Server Update

The screenshot shows a web application window titled "Schedule Order * x". It has three tabs: "Patient", "Patient Notes", and "Contacts / Demographics". The "Reason for Exam" section is a large text area. The "Preferred Location" section has two dropdown menus: "Practice" with the value "(JTEST) Janet Test" and "Site" with the value "(JT) July Test Site 1". The "Insurance Policies" section is at the bottom.

Figure 1.3 – Displaying values configured for `LocationLayoutFormatString`

The configuration setting will allow for the display of the code, description or a combination of both.

- `{{code}}`
- `(description)` – this is the default value
- `{{code}} (description)`
- `(description) {{code}}`

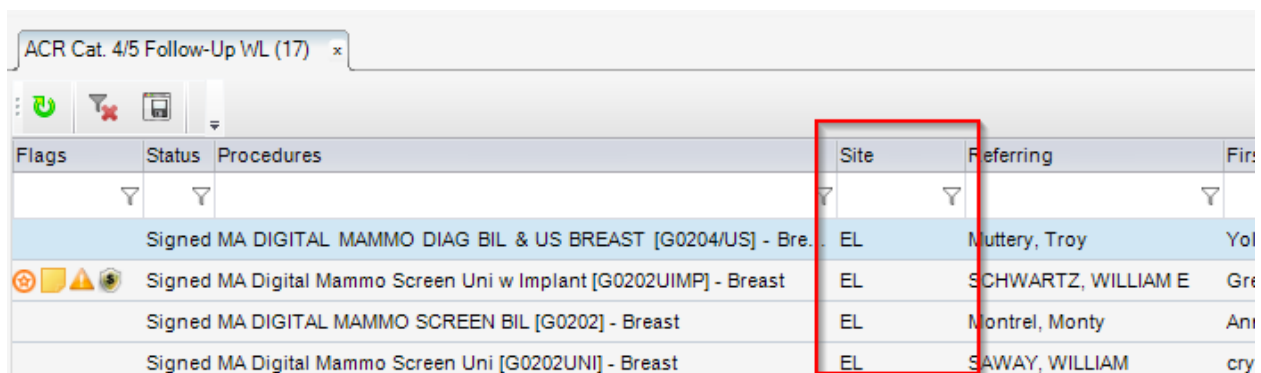
If any extra characters or spelling mistakes are included in the value the system will return an error when accessing a window that has the practice and/or site field

eRAD RIS Server Update

Site Column Added to Work Lists

The site column has been requested to be added to various work lists in which it didn't currently exist. The following is a list of work lists in which it was added.

- Billing Exception WL
- Confirmation WL
- Closed Rooms Reschedule WL
- No Show WL
- Distribution WL
- Distribution History by Date WL
- Mammo Follow Up Orders WL
- Mammo Letters WL
- ACR Category 0 Follow Up WL
- ACR Category 4/5 Follow Up WL



| Flags | Status | Procedures | Site | Referring | First Name |
|-------|--------|---|------|---------------------|------------|
| | | Signed MA DIGITAL MAMMO DIAG BIL & US BREAST [G0204/US] - Breast | EL | Muttery, Troy | Yol |
| ⚠ | | Signed MA Digital Mammo Screen Uni w Implant [G0202UIMP] - Breast | EL | SCHWARTZ, WILLIAM E | Gre |
| | | Signed MA DIGITAL MAMMO SCREEN BIL [G0202] - Breast | EL | Montrel, Monty | Ani |
| | | Signed MA Digital Mammo Screen Uni [G0202UNI] - Breast | EL | SAWAY, WILLIAM | cry |

Figure 1.4 – Site column added to various work lists

eRAD RIS Server Update

Support International Phone Numbers

In previous builds the phone number fields automatically supply the phone number mask for North America. The mask was input the number as (902) 555-5555. This works great for North American customers/patients.

We will now allow for a leading + or 0 in the phone number field. When a leading + or 0 is added the mask will not be used allowing the user to input the number unformatted.

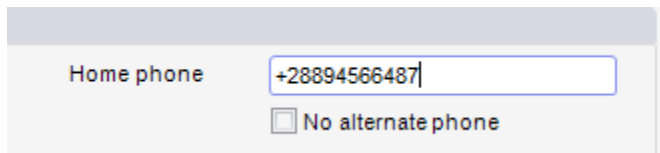
A screenshot of a web form. The label 'Home phone' is on the left. To its right is a text input field containing the value '+28894566487'. Below the input field is a checkbox with the label 'No alternate phone'. The checkbox is currently unchecked.

Figure 1.5 – Phone number with leading plus symbol

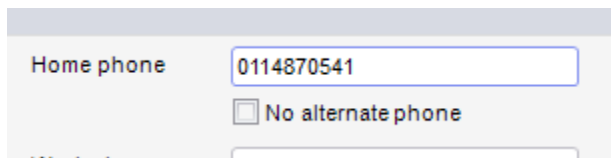
A screenshot of a web form. The label 'Home phone' is on the left. To its right is a text input field containing the value '0114870541'. Below the input field is a checkbox with the label 'No alternate phone'. The checkbox is currently unchecked.

Figure 1.6 – Phone number with leading 0 (zero)

This is applied to all phone number fields.

2. Defects Resolved

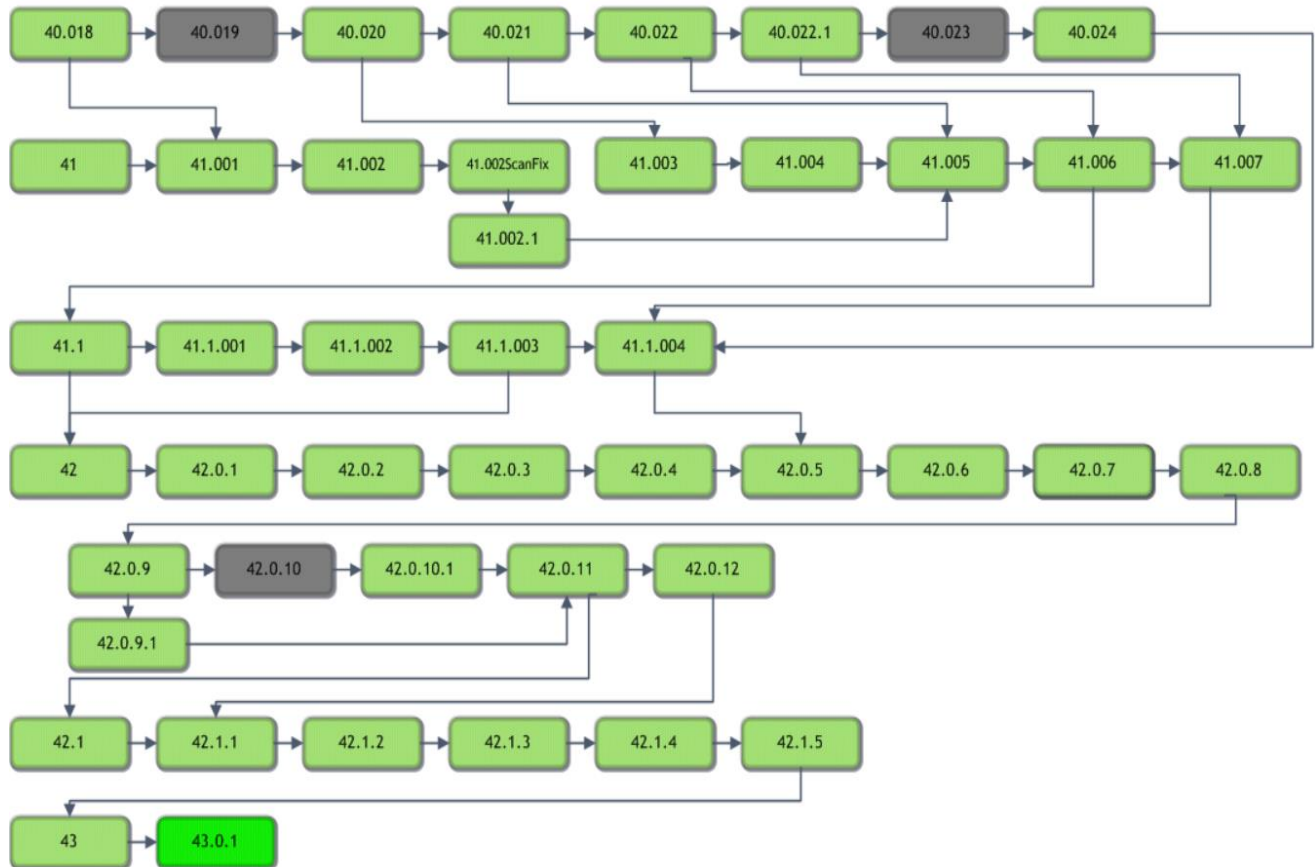
| Redmine # | Tracker | Subject | Priority |
|-----------|---------|--|----------|
| 7190 | Bug | Dictated by user id changes to editor's id in PowerScribe 360 | High |
| 6894 | Bug | Memory leak in insurance control | High |
| 6856 | Bug | CD Import - PACS Send fails due to compression | High |
| 6540 | Bug | Leading + sign in phone number field no longer disables the format mask | High |
| 7193 | Bug | MU Lab Screen Clean up | Normal |
| 7183 | Bug | maxConnections may be too low for large production environments | Normal |
| 6968 | Bug | DataStoreBase uses non thread safe dictionaries for storing credentials and connections | Normal |
| 6967 | Bug | CommonLib Config class uses non thread safe dictionaries for storing system and user configuration | Normal |
| 6908 | Bug | MU Quick Add Edit Dialog makes 30 consecutive service calls each time it is opened | Normal |
| 7204 | Feature | Site code needed in drop downs to support sites with long names | Urgent |
| 6541 | Feature | Phone number should allow leading 0 | Urgent |
| 7056 | Feature | Worklists - Add site column to various mammo worklists to allow for better filtering | Normal |

3. Changes to Configuration

| Setting Placeholder | Setting | Default | Purpose / Controls Access to |
|--|--|---------------|--|
| rRISService.exe.config and rRISService64.exe.config | <p>Change to the <system.serviceModel> section of the rRISServices.exe.config and rRISServicesx64.exe.config file</p> <p>Before: <binding name="netTCPBinding" maxReceivedMessageSize="50000000" maxBufferSize="50000000" maxBufferPoolSize="50000000" maxConnections="3000" listenBacklog="3000"></p> <p>After: <binding name="netTCPBinding" maxReceivedMessageSize="50000000" maxBufferSize="50000000" maxBufferPoolSize="50000000" maxConnections="5000" listenBacklog="100000"></p> | | <p>Changes are made under the <system.serviceModel> section of the file. Changes to be made in 2 places in the file</p> <p>The changes can be found in the deploy folder > rRISService.exe.config file. Compare with your current file in your rRISService folder. This applies to the rRISService.exe.config and the rRISService64.exe.config files</p> <p>Manual edit required.</p> |
| Systemconfig setting | LocationLayoutFormatString | {description} | <p>Desired layout for site and practice/site drop down fields such as Preferred location on order tab, search options on schedule tab and Site field on Import CD window. Possible values are {description} and {code}. The values can be used individually or together. Example: {code} {description}</p> |

4. Code Stream

eRAD RIS - Source Code Evolution



Legend:

Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

5. Package Contents

Files included for this server update:

1) GUI ZIP Updates folder contains:

- rRIS_1.3.43.0.1.23798.zip

2) RIS_Service_Updates contains:

- ABCpdf.dll
- ABCpdf9-32.dll
- ABCpdf9-64.dll
- Antlr3.Runtime.dll
- CDSJobManager.dll
- CDSJobManager.pdb
- CdsLib.dll
- CdsLib.xml
- CdsLib.XmlSerializers.dll
- CommonLib.dll
- CommonLib.pdb
- contents4301.txt
- DDEngine.dll
- DDEngine.pdb
- DiffPlex.dll
- Interop.ANYMODALCAPTURECTRLLib.dll
- Interop.FAXCOMEXLib.dll
- Microsoft.Practices.EnterpriseLibrary.Caching.dll
- Microsoft.Practices.EnterpriseLibrary.Caching.pdb
- Microsoft.Practices.EnterpriseLibrary.Common.dll
- Microsoft.Practices.EnterpriseLibrary.Common.pdb
- Microsoft.Practices.EnterpriseLibrary.Logging.dll
- Microsoft.Practices.EnterpriseLibrary.Logging.pdb
- Microsoft.Practices.ServiceLocation.dll
- Microsoft.Practices.ServiceLocation.pdb
- Microsoft.Practices.Unity.dll
- Microsoft.Practices.Unity.Interception.dll
- Microsoft.Practices.Unity.Interception.pdb
- Microsoft.Practices.Unity.pdb
- Microsoft.ReportViewer.Common.dll
- Microsoft.ReportViewer.WinForms.dll
- Microsoft.ReportViewer.WinForms.xml
- Newtonsoft.Json.dll
- Newtonsoft.Json.xml
- NLog.dll
- O2S.Components.PDFRender4NET.dll
- PDFToImages.exe
- Radar.Common.dll
- Radar.Common.pdb
- Radar.Common.WebClient.dll
- Radar.Common.WebClient.pdb
- Radar.DirectMessaging.Client.dll
- Radar.DirectMessaging.Client.pdb
- Radar.DirectMessaging.Model.dll
- Radar.DirectMessaging.Model.pdb
- rRISServices.exe
- rRISServices.pdb
- rRISServicesx64.exe
- ScheduledTaskManager.dll
- ScheduledTaskManager.pdb
- ServicesConfigWizard.exe
- ServicesConfigWizard.pdb
- SignatureApprovalService.exe
- SignatureApprovalService.pdb
- System.Net.Http.dll
- System.Net.Http.Formatting.dll
- System.Net.Http.xml
- System.Web.Http.dll
- System.Web.Http.SelfHost.dll
- System.Web.Http.SelfHost.xml
- System.Web.Http.WebHost.dll
- System.Web.Http.WebHost.xml
- System.Web.Http.xml
- System.Web.Mvc.dll
- System.Web.Mvc.xml
- System.Web.Optimization.dll
- System.Web.Razor.dll
- System.Web.Razor.xml
- System.Web.WebPages.Deployment.dll
- System.Web.WebPages.Deployment.xml
- System.Web.WebPages.dll
- System.Web.WebPages.Razor.dll
- System.Web.WebPages.Razor.xml
- System.Web.WebPages.xml
- Tourreau.Gilles.FaxDotNet.dll
- Tourreau.Gilles.FaxDotNet.pdb
- Tourreau.Gilles.FaxDotNet.xml
- WCFService.dll
- WCFService.pdb
- WCFServiceTests.dll
- WCFServiceTests.pdb
- WebApi.dll

eRAD RIS Server Update

- WebApi.pdb
- WebGrease.dll
- Wedge.exe
- Wedge.pdb

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:

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
- h. CDA Subfolder contains
 - a. C-CDA.xsl
 - b. eRadStylesheet.xsl
 - c. generalTemplates.xsl
 - d. header.xsl
 - e. QRDA.xsl
 - f. QrdaLevel3_Cypress2.4.0.xsl
 - g. QrdaLevel3_ViewHtml.xsl
 - h. sectionAdministeredMedications.xsl
 - i. sectionAllergies.xsl
 - j. sectionEncounters.xsl
 - k. sectionFindings.xsl
 - l. sectionFuncCogStatus.xsl
 - m. sectionHospitalDischarge.xsl
 - n. sectionImmunizations.xsl
 - o. sectionInstructions.xsl
 - p. sectionMedications.xsl
 - q. sectionPlanOfCare.xsl
 - r. sectionProblemList.xsl
 - s. sectionProcedures.xsl
 - t. sectionQRDAMeasures.xsl
 - u. sectionQRDAPatientData.xsl
 - v. sectionQRDAREporting.xsl
 - w. sectionReasonForVisit.xsl
 - x. sectionResults.xsl
 - y. sectionSocialHistory.xsl
 - z. sectionVitalSigns.xsl

3) SQL Folder contains:

- B43.0.1.sql

6. Intended Audience

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

7. Who is affected

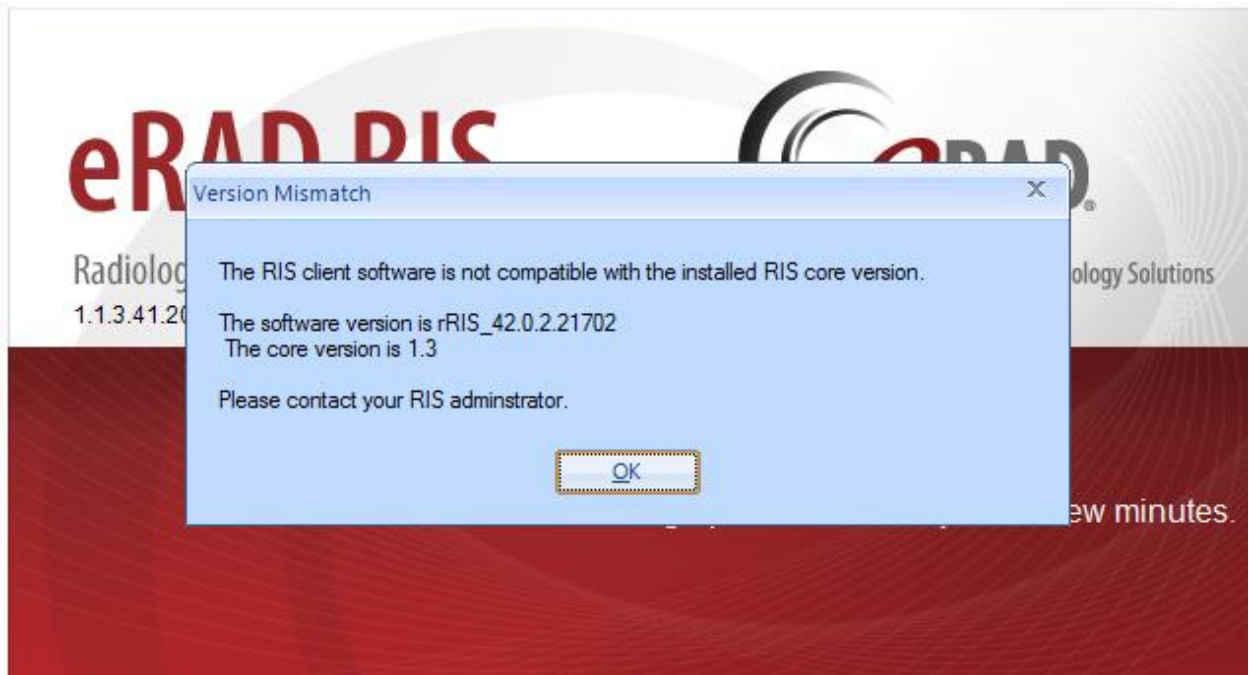
Build 43 installs. Server updates are not cumulative. This server update must be applied to 43

8. eRAD RIS Release Version Numbers

| Build | Patch | UI Version | Core Version | WS Version | DB Version | Notes |
|-------|-------|---------------------|----------------|-----------------|-----------------|--|
| 41.1 | - | 1.3.41.20918(3GB) | 1.3.41.20791 | 1.3.41.20918 | 1.3.41.20739 | GUI.zip, Core install, Web Service and DB updates, Help files |
| 41.1 | 1 | 1.3.41.20987(3GB) | 1.3.41.20791 | 1.3.41.20918 | 1.3.41.20739 | GUI.zip |
| 41.1 | 2 | 1.3.41.21162(3GB) | 1.3.41.20791 | 1.3.41.21162 | 1.3.41.21150 | GUI.zip, Web Service and DB updates, |
| 41.1 | 3 | 1.3.41.21264(3GB) | 1.3.41.20791 | 1.3.41.21162 | 1.3.41.21150 | GUI.zip |
| 42 | - | 2.42.0.0.21261(3GB) | 2.42.0.0.21261 | 2.42.0.0.21261 | 2.42.0.0.21187 | Full version release |
| 42 | 1 | 2.42.0.1.21597 | 2.42.0.0.21261 | 2.42.0.1.21597 | 2.42.0.0.21187 | GUI and Web Service updates |
| 42 | 2 | 2.42.0.2.21702 | 2.42.0.0.21261 | 2.42.0.2.21702 | 2.42.0.0.21187 | GUI and Web Service updates |
| 42 | 3 | 2.42.0.2.21806 | 2.42.0.0.21261 | 2.42.0.2.21806 | 2.42.0.0.21187 | GUI and Web Service updates |
| 42 | 4 | 2.42.0.2.21862 | 2.42.0.0.21261 | 2.42.0.2.21806 | 2.42.0.4.21870 | GUI and Database updates |
| 42 | 5 | 2.42.0.5.21924 | 2.42.0.0.21261 | 2.42.0.2.21806 | 2.42.0.4.21870 | GUI |
| 42 | 6 | 2.42.0.5.22009 | 2.42.0.0.21261 | 2.42.0.5.22009 | 2.42.0.4.21870 | GUI and Web Service updates |
| 42 | 7 | 2.42.0.7.22090 | 2.42.0.0.21261 | 2.42.0.6.22009 | 2.42.0.4.21870 | GUI.zip updates |
| 42 | 8 | 2.42.0.7.22090 | 2.42.0.7.22150 | 2.42.0.6.22009 | 2.42.0.4.21870 | Web Service updates |
| 42 | 9 | 2.42.0.9.22203 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | GUI and Web Service updates |
| 42 | 9.1 | 2.42.0.9.22203 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | Web Service updates |
| 42 | 10 | 2.42.0.10.22232 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | GUI.zip |
| 42 | 10.1 | 2.42.0.10.22420 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | GUI.zip updates |
| 42 | 11 | 2.42.0.11.22495a | 2.42.0.0.21261 | 2.42.0.11.22471 | 2.42.0.11.22527 | GUI.zip, Web Service, Database updates. Management Report Deployment |
| 42 | 12 | 2.42.0.12.22982 | 2.42.0.0.21261 | 2.42.0.12.22982 | 2.42.0.12.22911 | GUI.zip, Web Service, Database updates. |
| 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 |

9. Installing

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.43.0.1.23798.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_43.0.1.23798 → rRIS_1.3.43.0.1.23798

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)

eRAD RIS Server Update

- 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 B43.0.1.sql file against the eRAD RIS database instance.