Server Update

For eRAD RIS
Version 1.0
Build 40
Update 40.020

Table of Contents

1. New Features

## Reporting - Limit or convert special characters in cue names, macros and templates

Conversion of special characters in cue names, macros and templates.
In a template if you have a field with a value in the cue like this "Technique :"
When you save the template and reopen it, the : is converted as follows "Technique %colon%".

This feature does the following, while dictating an exam and you say the words Technique colon, your cursor will be brought to the field that has a value of "Technique %colon%" in the cue.

NOTE: The user preference "Aggressive field navigation" must be checked for this feature to work, after checking this preference, a restart of RIS is required.
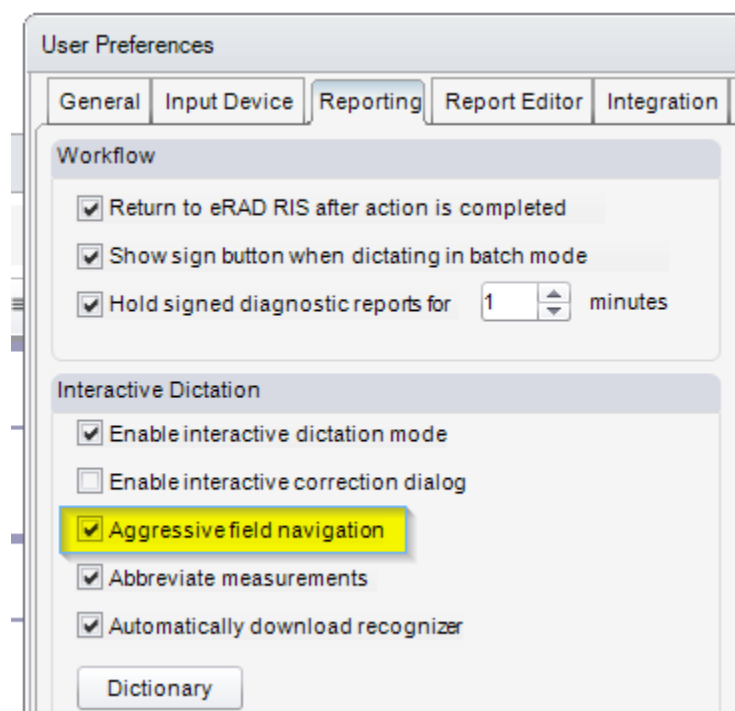
Figure 1.1 – User preference "Aggressive field navigation"

NOTE: the user preference "Aggressive field navigation" will need to be selected for "No Wait Navigate". We had issues in the past when dictating in Field 1 and before the text was inserted the command for next field was issued. The text that had not yet been inserted in Field 1 would appear in Field 2. This has been addressed, but as mentioned above the Aggressive field navigation user preference needs to be enabled.

Reporting - Ability to map "delete last word" to input devices

This new feature titled "DeleteWordLeftOfCursor" can be mapped as SpeechMike button, keyboard left/right arrow key, Foot Pedal button and also implemented as an xKeys command manually using the preexisting xKeys set up.
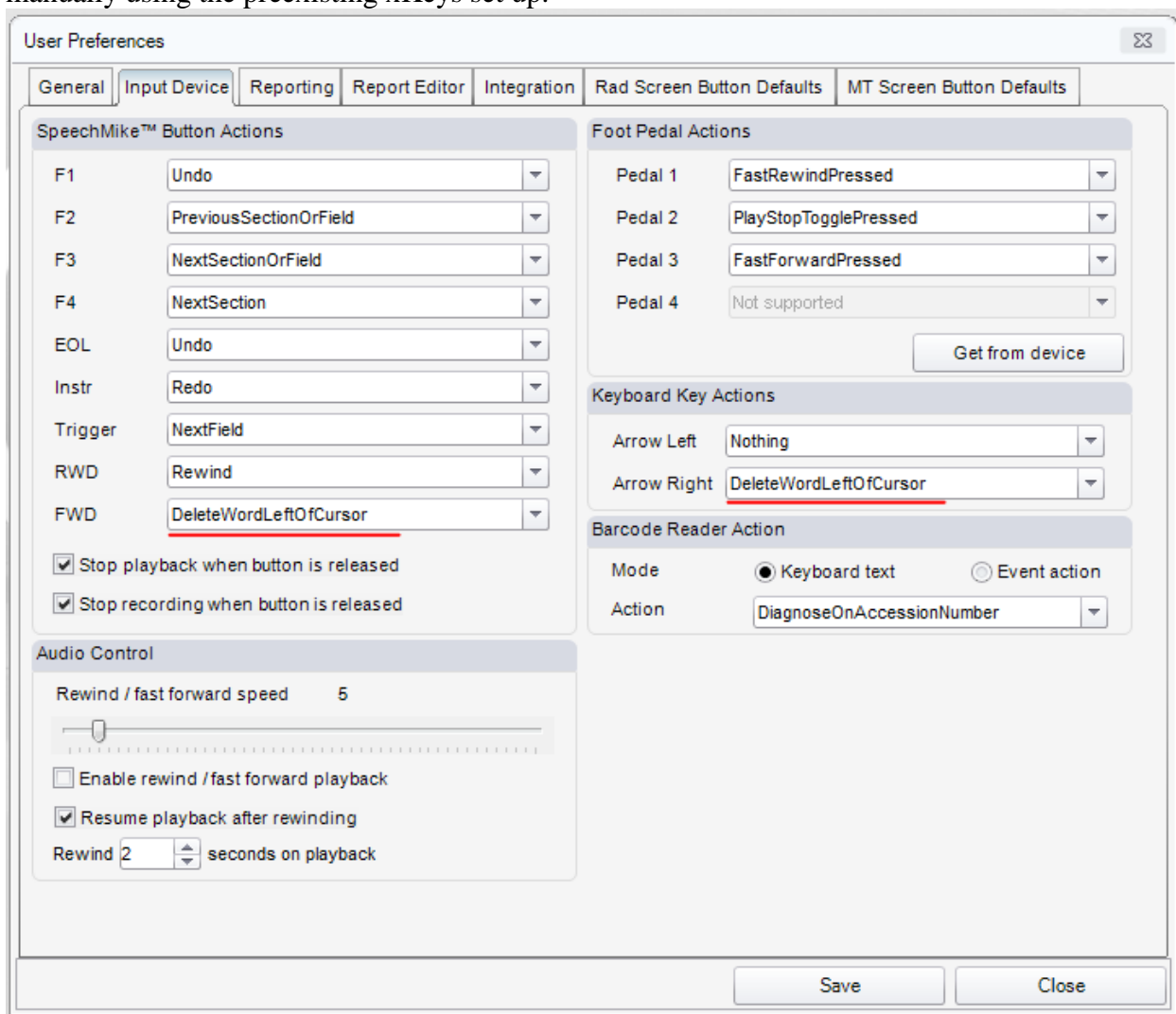
Figure 1.2 - **DeleteWordLeftOfCursor function in user preferences**

Support has been added for itemized lists. If you reach the end of a list item while deleting the last word, the empty item will be removed and the cursor will go to the end of the previous item.

Known limitation: At some point we were able to delete last word multiple times, then redo each word individually. But if the input devices are set up to perform these actions, the Undo and Redo does nothing after executing this action.

Reporting - Ability to map "Redo" and "Undo" to input devices

We have added two new SpeechMike function key options that can be assigned. The options of Undo and Redo have been added. These new options can also be made the default action of the keyboards left and right arrow keys.
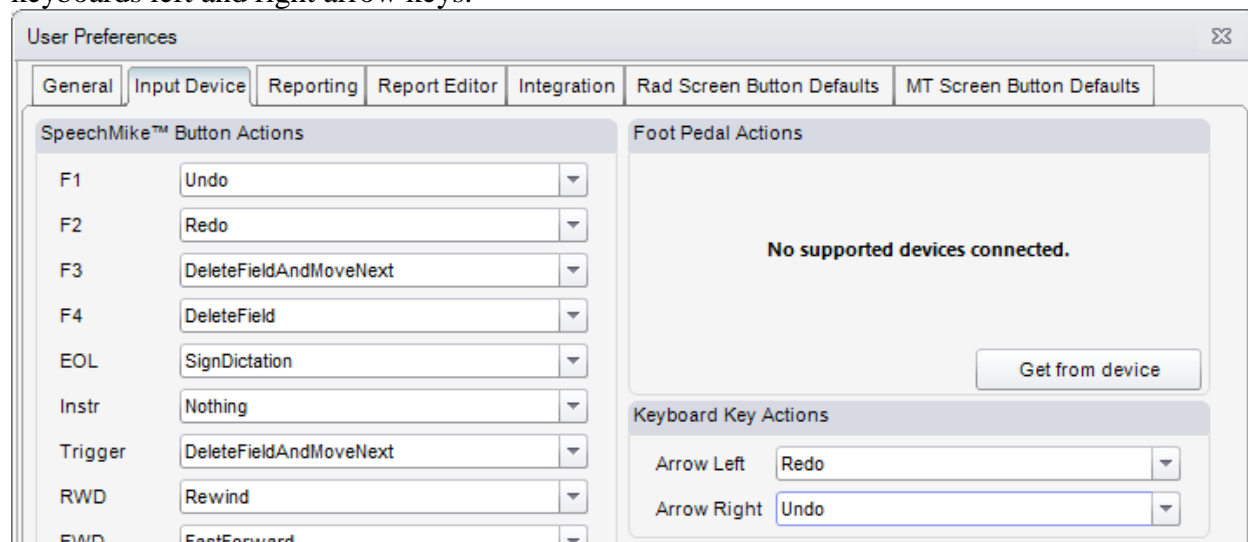
Figure 1.3 – The Undo and Redo options added for SpeechMike buttons and Keyboard arrow actions

It should be noted that these options can also be set as default Foot Pedal Actions and also mapped as an xKey command manually using the existing xKeys set up.

Reporting - Radiologist edit text color

Within the reporting window, the user can open the context menu (right click) on the editor. This will present the user with a list of options. Selecting the "Editor Appearance" option will open the "Editor Appearance" window. A new option has been added.
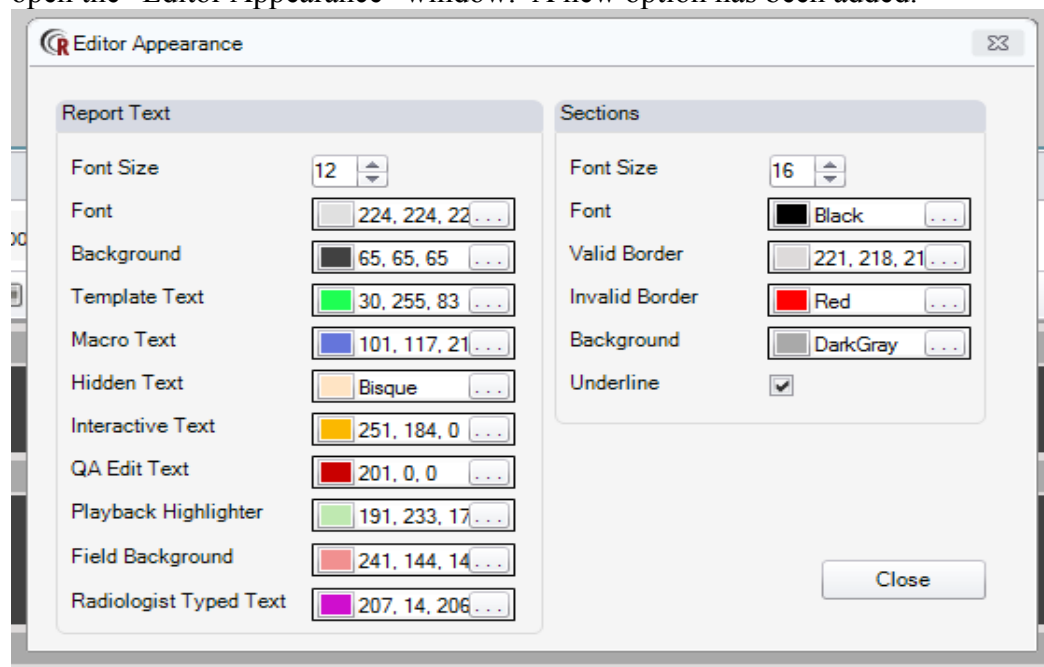
Figure 1.4 – Editor Appearance window with new Radiologist Typed Text option

This new option controls the color of the manually entered/edited text by the radiologist
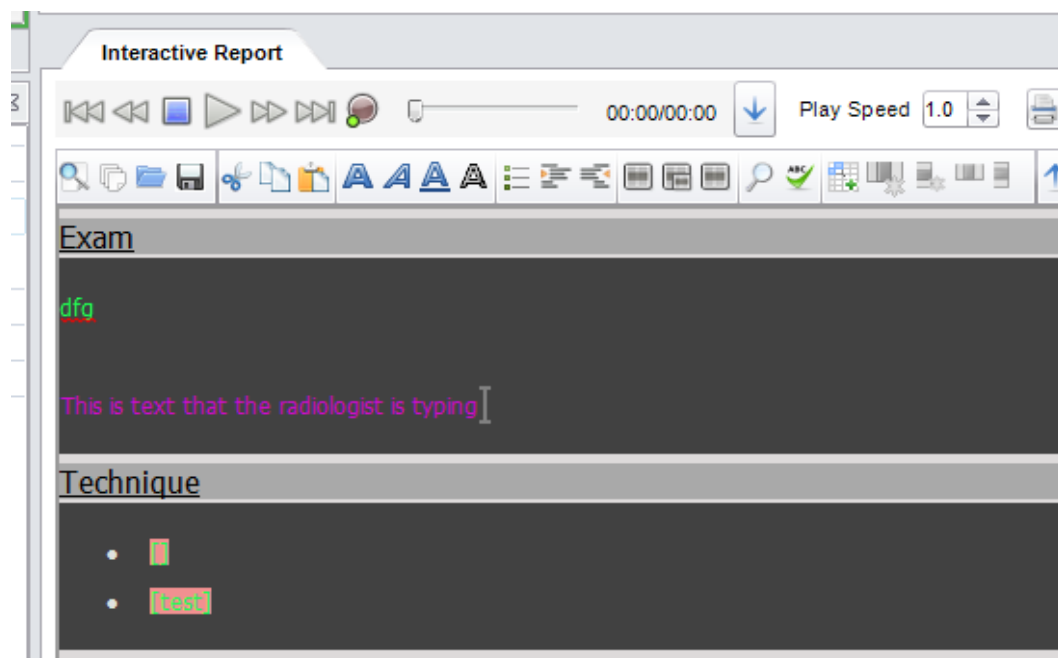
Figure 1.5 – Editor displaying the text color when manually entered by the radiologist.

Reporting - field tooltips staying on top of other screens after displaying

Templates used in the reporting window can have navigational fields pre-defined in the template. Each of these fields has a name associated with it. If the mouse pointer hovers over a field it will display the field name in a tooltip.
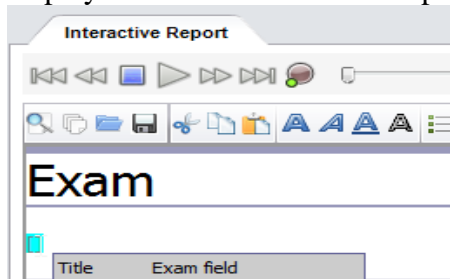
Figure 1.6 – Reporting field tooltip.

A new user preference on the Report Editor tab called "Show report field tooltips" will enable/disable the tooltip from displaying.
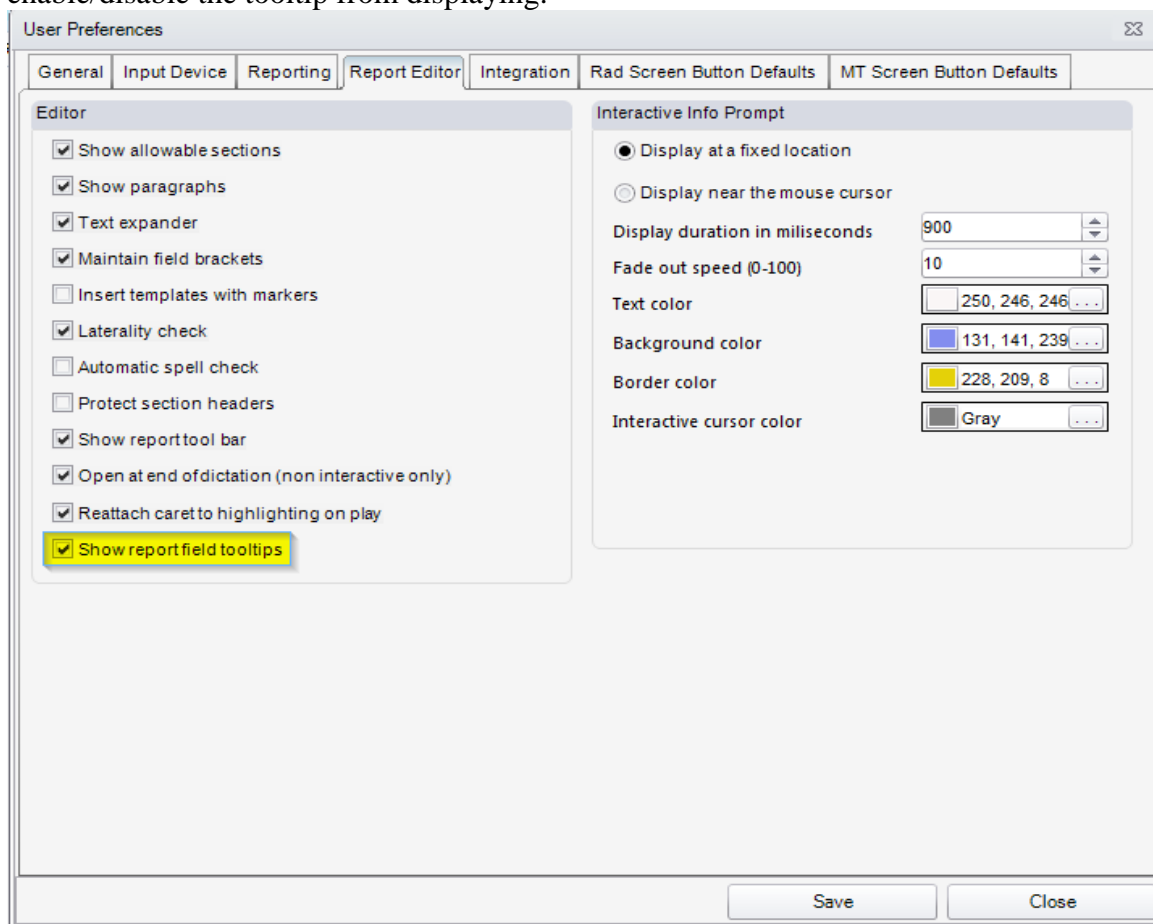
Figure 1.7 – New User Preference "Show report field tooltips"

2. Defects Resolved

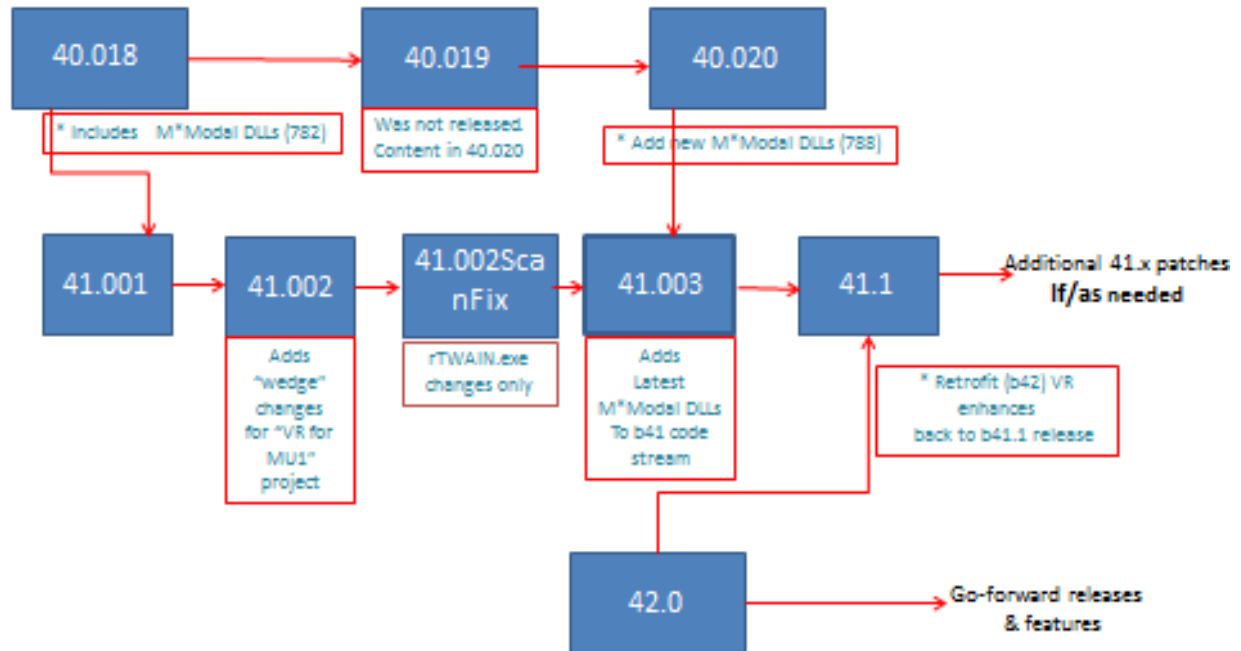| Redmine #	Subject	Priority
4857	Wrong document model is loading in template editor	Urgent
4952	Reporting - ability to navigate cued fields without pausing	High
4798	Reporting - 7.82+ Numbering paragraphs creates an unwanted list	High
4740	Reporting - playback is not in order of dictated	High
4717	Sections from incorrect practice loading into template editor	High
3767	Using next field button while dictating (Fisher site visit)	High
1441	Interactive VR - Voice Commands not recognized efficiently	High
5148	Reporting - speech mics 3500 and 3600 showing incorrectly in Help>About	Normal
5048	Reporting - New recognizer for 7.88	Normal
4975	Next field voice command, showing field popup for one field too far	Normal
4961	Reporting - improper capitalization of measurements outside of a field	Normal
4960	Reporting - structured lists splitting when dictating next item in the middle of an existing item	Normal
4959	Reporting - ability to dictate 'next item' without pausing	Normal
4958	Reporting - integrate M*Modal 7.88 release into 40.019 code stream.	Normal
4957	Reporting - negative two views rendering	Normal
4954	Reporting - ability to dictate negative or minus numbers	Normal
4732	Reporting - AudioReplacementEnabled on causes "undo that" to malfunction	Normal
3838	Improve performance of "next field" (CRA site visit)	Normal
3072	Reporting - Not a field exception causing application hang	Normal
2981	M*Modal - select command will not select first or last word in a field	Normal
2520	Reporting - interactive number lists are not consistent	Normal
3840	Unable to dictate "+" into a report (CRA site visit)	Low

3. Code Stream

eRad RIS – code merge

40.018	**40.019**	**40.020**
* Includes M*Model DLLs (782)	Was not released. Content in 40.020	* Add new M*Model DLLs (788)

41.001	**41.002**	**41.002ScanFix**	**41.003**	**41.1**
	Adds "wedge" changes for "VR for MU1" project	rTWAIN.exe changes only	Adds Latest M*Model DLLs To b41 code stream	* Retrofit (b42) VR enhances back to b41.1 release

Additional 41.x patches
If/as needed

42.0

Go-forward releases & features

4. Package Contents

Files included for this server update:

1) GUI ZIP Updates folder contains
   a) rRIS_1.3.40.20086(3GB).zip

2) RIS Service Updates folder contains the following files.
   a) CDSJobManager.dll
   b) CDSJobManager.pdb
   c) CommonLib.dll
   d) CommonLib.pdb
   e) DDEngine.dll
   f) DDEngine.pdb
   g) rRISServices.exe
   h) rRISServices.pdb
   i) rRISServicesx64.exe
   j) ScheduledTaskManager.dll
   k) ScheduledTaskManager.pdb
   l) SignatureApprovalService.exe
   m) SignatureApprovalService.pdb
   n) WCFService.dll
   o) WCFService.pdb
   p) WebApi.dll
   q) WebApi.pdb
   r) Wedge.exe
   s) Wedge.pdb

3) Recognizer folder contains:
   a) 7~Recognizer.MtiRecognitionUS.Radiology_Interactive_v13_v5_401.12965.xc
   b) 7~Recognizer.MtiRecognitionUS.Radiology_Interactive_v13_v5_401.12965-descriptor.xc

5. Intended Audience

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

6. Who is affected

Build 40 installs. This server update must be applied directly to the build 40 core install. Server updates are not cumulative. Any previous server updates must be applied before this one.

7. eRAD RIS Release Version Numbers

Build	Patch	UI Version	Core Version	WS Version	DB Version	Notes
39	-	1.3.39.15389	1.3.39.15389	1.3.39.15377	1.3.39.15355	Full version release
39	1	1.3.39.16026	1.3.39.15943	1.3.39.15943	1.3.39.15957	Requires Core Install. GUI.zip, Web Service, and Database updates
40	-	1.3.40.16628	1.3.40.16628	1.3.40.16628	1.3.40.16628	Full version release
40	1	1.3.40.16849	1.3.40.16659	1.3.40.16744	1.3.40.16727	GUI.zip, Web service, database updates and SQL Management reporting
40	2	1.3.40.16868	1.3.40.16659	1.3.40.16868	1.3.40.16727	GUI.zip and Web Service
40	3	1.3.40.16868	1.3.40.16659	1.3.40.16868	1.3.40.16727	DB updated only
40	4	1.3.40.16967	1.3.40.16659	1.3.40.16932	1.3.40.16961	GUI.zip, Web service, database updates
40	5	1.3.40.17087	1.3.40.16659	1.3.40.17069	1.3.40.17087	GUI.zip, Web service, database updates
40	6	1.3.40.17146	1.3.40.16659	1.3.40.17146	1.3.40.17146	GUI.zip, Web service, database updates
40	7	1.3.40.17268	1.3.40.16659	1.3.40.17268	1.3.40.17259	GUI.zip, Web service, database updates
40	8	1.3.40.17364	1.3.40.16659	1.3.40.17362	1.3.40.17343	GUI.zip, Web service, database updates
40	9	1.3.40.17370	1.3.40.16659	1.3.40.17370	1.3.40.17370	GUI.zip, Web service, database updates
40	10	1.3.40.17435	1.3.40.16659	1.3.40.17435	1.3.40.17370	**64 BIT web service**. GUI.zip, Webservice.
40	11	1.3.40.17435	1.3.40.16659	1.3.40.17525	1.3.40.17370	Web service update
40	12	1.3.40.17685	1.3.40.16659	1.3.40.17685	1.3.40.17648	GUI.zip, Web service, database updates
40	13	1.3.40.17776	1.3.40.16659	1.3.40.17776	1.3.40.17648	GUI.zip, Web service
40	14	1.3.40.18063(3GB)	1.3.40.16659	1.3.40.18063	1.3.40.18063	GUI.zip, Web service, database updates
40	14.1	1.3.40.18063(3GB)	1.3.40.16659	1.3.40.18107	1.3.40.18063	Web service
40	15	1.3.40.18127(3GB)	1.3.40.16659	1.3.40.18127	1.3.40.18127	GUI.zip, Web service, database updates
40	16	1.1.3.40.18585 (3GB)	1.3.40.16659	1.3.40.18585	1.3.40.18646	GUI.zip, Web service, database updates
40	16.1	1.3.40.18705 (3GB)	1.3.40.16659	1.3.40.18585	1.3.40.18646	GUI.zip
40	17	1.3.40.18780 (3GB)	1.3.40.18756	1.3.40.18756	1.3.40.18646	**Core install required** for Radiologist User Group. GUI.zip, Core setup, and Web Service updates
40	18	1.3.40.19253(3GB)	1.3.40.18756	1.3.40.18756	1.3.40.19253	GUI.zip, Web Service and database updates
40	19	1.3.40.19909 (3GB)	1.3.40.18756	1.3.40.19831	1.3.40.19253	GUI.zip, Web services, Recognizer files

8. Installing

1) Copy and replace the current rRIS…zip file with the rRIS_1.3.40.20086.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.

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) Copy the Recognizer files to your local machine to the following folder.
Note: this could be a hidden folder.
C:\ProgramData\RadNet\Recognizer\2.16.840.1.113883.3.21\

9. Known Limitations
Known limitations listed in this document may not have been introduced in 40.020, but have been discovered during testing of 40.020.

Redmine #	Subject	Info
5245	Reporting - Spine navigational cues are not recognized	My cues were configured as 1. C two dash three colon 2. C three dash four colon 3. C four dash five colon I changed them to be 1. C two colon 2. C three colon 3. C four colon The change in cues names worked much better
5248	Reporting - Edit template from reporting window error	This was only occurring with one of my templates. If this occurs try "refresh configuration". If that does not work

		open the same template in the TemplateMacro editor and save.
5249	Reporting - Shift Tab in the template editor or reporting editor will return error	
5219	Reporting - Function key action DeleteWordLeftOfCursor will delete fields and section titles	If you continue to select the function key after the text has been removed it will jump to the section title and can also delete it as well
5220	Reporting - Interactive Info Prompt can show fields that have been jumped over when using Next Section command	If in a section that has multiple field with default text, issue the command Next Section, the interactive info prompt will display the text from the fields that were skipped.
5254	Reporting - using the undo feature, the cursor is not following the text that is being removed.	Seems to occur when the "undo" feature is used multiple times concurrently.