Release Subject	**SIF-761C** Synapse **4.2.100** Release	Release Notes #	**SIF-761C**
		Date	**Aug 7, 2013**

Release Type Release ID	Software Synapse 4.2.100EN
Classification	As Needed (High Priority)
Applicable to	Applicable Product Versions: • New Installation. • Upgrades from Synapse 4.1 (4.1.000, 4.1.100, 4.1.200, & 4.1.300) • Upgrades from Synapse 4.2 (4.2.000, 4.2.010, 4.2.011) Note: Synapse 4.1.400 and Synapse 4.1.500 cannot be upgraded to Synapse 4.2.100 Additional Applicable Criteria: • Applies to both 32-bit and 64-bit Synapse Servers
Release Files	Release Files Identification: **DVD** for English: Synapse 4.2.100: NMFSDVD32SY42100-1 (32-bit) SAP#: 800043471 Synapse 4.2.100: NMFSISO32SY42100-1 (32-bit) SAP#: 800043472 Synapse 4.2.100: NMFSDVD64SY42100-1 (64-bit) SAP#: 800043469 Synapse 4.2.100: NMFSISO64SY42100-1 (64-bit) SAP#: 800043470 **.ISO Image** for English: Synapse 4.2.100EN: NMFS-SY42100_RF32-1.iso (32-bit) Synapse 4.2.100EN: NMFS-SY42100_RF64-1.iso (64-bit) Details including file name contained and component version number if necessary: Synapse 4.2.100EN software includes the following: - Synapse 4.2.100EN Software (English) - ENG-0025837-A: Synapse Implementation Manual - ENG-0025838-A: Synapse User Manual - English - ENG-0027740-A: Synapse 4.2 Product Release Specification - ENG-0025736-B: Synapse Service Manual - ENG-0027227-A: Synapse Third Party Integration Specifications - ENG-0027022-A: Synapse RIS Interface Specification - ENG-0026793-A: Synapse DICOM Conformance Statement - ENG-0023616-A: HIIS User Manual - ENG-0027226-A: Synapse System Administration Manual - ENG-0027224-A: Synapse Advanced SWAT Manual - ENG-0026499-B: Synapse IHE Integration Statement - ENG-0027225-A: Synapse SetEdit Configuration Manual - ENG-0027690-A: Synapse ESWAT Service Manual - ENG-0027689-A: Synapse Concepts

Source Ref #	13406(NCR-0002616), 14283, 20745, 23046(NCR-0003453), 23321, 23827(NCR-0003452), 24001(CN-0004445), 24113(CN-0004450), 24464, 24517, 24554, 24754(NCR-0003544), 25011(CN-0004201), 25130, 25448, 25647(CN-0004634), 25703, 25880(CN-0004677), 26142(CN-0004672), 26143(CN-0004731), 26231(CN-0004737), 26292(CN-0004754), 26436, 26626(CN-0004822), 26670(CN-0004834), 26697, 26699(CN-0004842), 26744, 26769(CN-0004837), 26877(CN-0004863), 26926, 27522(CN-0004980, CN-0005006), 27637, 27647(CN-0005016), 27685, 27761, 27771(CN-0005066), 27846(CN-0005096), 27885(CN-0005101), 27905, 27977, 28039(CN-0005115), 28059(CN-0005134), 28102, 28168(CN-0005166)

Blue text has been added or updated.

1. Purpose of Release

Synapse 4.2.100 is a release that replaces Synapse 4.2.000 and Synapse 4.2.010. Synapse 4.2.100 has the same features as Synapse 4.2.000, which includes new features and corrections of known issues that were discovered with previous Synapse releases.   Synapse 4.2.100 also contains this list of fixes that were fixed in Synapse 4.1.400 and Synapse 4.1.500 that were not included in Synapse 4.2.000 and Synapse 4.2.010:

- **REF# 26231: Synapse Workstation Responds Intermittently and Needs to Restart Explorer**

- **REF# 26744: The Location of Ruler Annotation Becomes Different in a Printout from Print Composer**

- **REF# 26769: Existing Image Skewed after Synapse 4.1.200 Upgrade**

- **REF# 26926: Synapse 4.1 - Default AON Factor Does Not Work in "Today's Studies by Modality"**

- **REF# 27522: Synapse 4.1 - Slow Performance by PatientCreateUpdate(HIIS) Database Command**

- **REF# 27647: Images in the Same Series Are Listed in Separate Series after Upgrade to Synapse 4.x**

- **REF# 27771: Synapse 4.1 - Patient Age on PowerJacket Is 0 Days when Patient Is Younger than 3 Days**

Synapse 4.2.100 also contains this list of fixes that where found in Synapse 4.2.000 and Synapse 4.2.010:

- **REF# 27905 & 27846: Synapse 4.2:Unable to migrate Reading Protocols when modality name has leading or trailing spaces**

- **REF# 27885: Cannot Get "seriesDescription" when Data Contains Hex Escape Sequence for "Ü" Character**

- **REF# 27977: Data for "Area of Interest" Is Missing in Migrated Reading Protocols**

- **REF# 28059: Associated Procedure Code for DX Modality Is Missing in "procedure_info" Table**

- **REF# 28102: Error Detected During New Installation**

- **REF# 28168: Unable to Save All Annotations when Multiple Annotations Are Created on Different Images**

A list of supporting documents and manuals is provided in the **Details of Release** section of this document.

Synapse 4.2.100 is a replacement of Synapse 4.2.000 and 4.2.010.

Note: Synapse 4.1.400 and Synapse 4.1.500 cannot be upgraded to Synapse 4.2.100 until further notice. There is a check in the installer that prevents the install from progressing.

Please download or order Synapse 4.2.100.

2. Detail of Release

All Synapse components for English are included within the following DVD or ISO images:

-	NMFS-DVD32-SY42100-1	(32-bit)	flat file system on DVD
-	NMFS-ISO32-SY42100-1	(32-bit)	.ISO image on DVD
-	NMFS-DVD64-SY42100-1	(64-bit)	flat file system on DVD
-	NMFS-ISO64-SY42100-1	(64-bit)	.ISO image on DVD
-	NMFS-SY42100_RF32-1.iso	(32-bit)	.ISO file downloaded
-	NMFS-SY42100_RF64-1.iso	(64-bit)	.ISO file downloaded

The folder structure is different between the 32-bit and 64-bit release:

Synapse 4.2.100 32-bit	Synapse 4.2.100 64-bit
Documentation Volume	Documentation Volume
VOL1	VOL1
VOL4	VOL2
	VOL3

2.1 Product Documentation

Product documents for Synapse 4.2.100 have been included in the DVDs and the .ISO images in these folders:

- folder: Documentation Volume
  - folder Service Manual
    - ENG-0025736-B: Synapse Service Manual
    - ENG-0025837-A: Synapse Implementation Manual
    - ENG-0027225-A: Synapse SetEdit Configuration Manual
  - folder Software Document
    - ENG-0026793-A: Synapse DICOM Conformance Statement
    - ENG-0023616-A: HIIS User Manual
    - ENG-0027740-A: Synapse 4.2 Product Release Specification
    - ENG-0026499-A: Synapse IHE Integration Statement
    - ENG-0027224-A: Synapse Advanced SWAT Manual
    - ENG-0027022-A: Synapse RIS Interface Specification
    - ENG-0027226-A: Synapse System Administration Manual
    - ENG-0027689-A: Synapse Concepts
    - ENG-0027690-A: Synapse ESWAT Service Manual
    - ENG-0027227-A: Synapse Third Party Integration Specifications
  - folder User Manual
    - ENG-0025838-A: Synapse User Manual – English

2.2 Other Releases

The DVDs and the .ISO images contain install sets for:

- Synapse PD-S Viewer 1.0.1 in the folder: **VOL1 > OtherReleases**
- Synapse CD Import 1.1.0.3 in the folder: **VOL1 > OtherReleases**
- Synapse Acceleration Service – 32bit in the folder: **VOL1 > OtherReleases**
- Synapse Acceleration Service 4.2 – 64bit in the folder: **VOL1 > OtherReleases**
- Oracle Fail Safe 3.4.2.0 (32-bit) in the folder: **VOL4 > Oracle_Failsafe_3.4.2 > 32bit**
- Oracle Fail Safe 3.4.2.0 (64-bit) in the folder: **VOL2 > Oracle_Failsafe_3.4.2 > 64bit**
- Oracle Advanced Data Guard (32-bit & 64-bit) in the folder: **VOL1 > DBOptional > DataGuard**
- Additional DB Tools in the folder: **VOL1 > DB_Tools**

Folder name	Description
Common	This is not a tool. It is common code.
DBCleanup(T96)	SR-1000096 Database Cleanup Tool
Enable_SQL_Signature	Disallows a user from accessing the database via SQL statements using DBCMDS
Folder Caching	Batch files are used to disable and enable the internal Synapse workstation folder enterprise tag mechanism.
Invalidate_ImageVersions(T91)	SR-1000091 Invalidation of Image Version of Selected Storage for a Specific Study Date Range
MRN_Consolidation(T80)	SR-1000080 Conversion of MRN values using Customer Provided Mapping File
ProcedureCode_Consolidation(T85)	SR-1000085 Procedure Code Cleanup Tool
Report_Clean_AbsoluteXrefs	Only use on Synapse 4.0
ServerRenameTool	Used when a DB Upgrade is brought to a Test Server.
User_Consolidation(T77)	SR-1000077 Consolidation of Duplicate RIS User Euids
Visit_Number_Consolidation(T78)	SR-1000078 Bulk Visit Number Update

Note: The above tools identified in **Red** text are not supported in Synapse 4.2.100 and cannot be used in any version of Synapse 4.2.xxx until further notice.

Notes for Synapse integrations:

- Synapse Cardiovascular version 4.0.8 or later must be used with Synapse 4.2.100
- Synapse MPR/Fusion version 2.6 or later must be used with Synapse 4.2.100

3. New Features

3.1 New Features and Specification Changes in Synapse 4.2.100

- For end-user related additions and modifications, refer to the "What's New" topic in the *Synapse User Manual - English*
- For Administration-related additions and modifications, refer to:

  o ENG-0027224: Synapse Advanced SWAT Manual

  o ENG-0025736: Synapse Service Manual

  o ENG-0025838: Synapse User Manual – English

  o ENG-0027227: Synapse Third Party Integration Specifications

  o ENG-0025837: Synapse Implementation Manual

  o ENG-0027226: Synapse System Administration Manual

  o ENG-0027225: Synapse SetEdit Configuration Manual

  o ENG-0027690: Synapse ESWAT Service Manual

  o ENG-0026499: Synapse IHE Integration Statement

  o ENG-0027740: Synapse 4.2 Product Release Specification

  o ENG-0027689: Synapse Concepts

3.2 Reading Protocol Editor

Synapse 4.2.100 introduces a graphical user interface to create and edit the following types of Reading Protocols:

- Modality-Match
- Procedure-Match
- MG Stack-Match

For details of the Reading Protocol Editor, please refer to *Synapse User Manual (ENG-0025838):*

  Reading Protocols > Reading Protocol Configuration > Using the Reading Protocol Editor

3.3 Extra Series Handling

This feature allows "Extra" Series to go into blank Viewports to simplify navigation and to establish more consistency of the display when an exception to the exact match protocol is handled by Near Match Reading Protocol.

For details of Reading Protocol Editor, please refer to *Synapse User Manual (ENG-0025838):*

  Reading Protocols > Reading Protocol Overviews > Extra and Missing Series Overview

3.4 Series Description Handling

The DICOM Series Description element and the related Synapse Series Standards are the properties that drive the existing RP matching and determine the series content of each Viewport. A SWAT-based series standardization mapping editor was created to replace the current spreadsheet-based tool. Also, allow Administrators and Radiologist an option in the Series Editor to apply the change selected during QA or during reading using the workstation via Ctrl-Shift modifier keys during drag-and-drop of a series from the series picker to Missing Series view, or during selection of a series from the Series Selection Menu in a Missing Series view, which will be reflected in the Series Standards table when new matches are subsequently made.

For details, please refer to *Synapse Advanced SWAT Manual (ENG-0027224):*

  System > Mapping > Series Standardization

3.5 Series Order

Provide the ability to change the order of series display for Modality-match and Procedure-match protocols using the series picker. Re-ordering the series thumbnail images in the Series Picker (SP) or Series Picker Toolbar (SPT) will affect the order that the series are displayed in the Standard View for Modality-match and Procedure-match Reading Protocols, as well as the order of each series in the All Images series.

For details, please refer to *Synapse User Manual (ENG-0025838):*

Reading Protocols > Reading Protocol Overviews > Series Order Overview

3.6 DICOM Properties

Currently in Synapse, a Viewport that displayed a specific series identified the series using the DICOM Series Description field or the configured Standard Series Description value that the scanner value maps to. This feature provides the option to use other DICOM properties in addition to Series Description to identify series

For details, please refer to section *Series Properties Rules* in *Synapse User Manual (ENG-0025838):*

Reading Protocols > Reading Protocol Configuration > Using the Reading Protocol Editor

3.7 Auto Compare

Synapse users have the option to automatically display comparison studies when a "current" study is displayed. Flexibility will be increased by supporting a sequence of user-selectable rules that can be evaluated in order. If a prior study cannot be found that meets the first rule, a second rule can be applied, and so on.

For details, please refer to *Synapse User Manual (ENG-0025838):*

Workstation Property Setting > Synapse Reading Protocols > Auto-Compare Options

3.8 Page Layout

This feature allows for the application of Page Layout changes across multiple monitors.

For details, please refer to *Synapse User Manual (ENG-0025838):*

Synapse Toolbar and Icons > Setting the Number of Series to be Displayed

3.9 No Duplicate Protocol Name

This change is to alert the user when a duplicate reading protocol name is attempted to be saved. It will require the user to enter a different name.

3.10 Series Rename for MG

This change will allow customers to correct MG image properties in the Synapse database that were sent incorrectly from the acquisition device.

For details, please refer to following:

Synapse User Manual (ENG-0025838)

Using PowerJacket and CommonView > Using the Series Picker > Change the Series Name

Synapse Advanced SWAT Manual (ENG-0027224)

System > Mapping > MG Series Names

3.11   MG Stacking

"MG Stack-Match" protocols are intended to optimize interpretation of MG studies by displaying mixed sets of images from different MG series, and across comparison studies, in one Viewport. . For example, images from multiple prior studies can be displayed in one Viewport as a stack.

For details, refer to *Synapse User Manual (ENG-0025838):*

> *View/Manipulating Series and Image > Image Modification and Manipulation > Mammography > MG Image Grouping*

> *Workstation Property Settings > Synapse Reading Protocols > MG Stack Options*

> *Workstation Property Settings > Series Settings > MG Series Options*

> *Reading Protocols> Reading Protocol Configuration > Creating Mammography Stack Reading Protocol*

3.12   Maintains View State

Currently, when loading a comparison study or navigating to another reading protocol step, Synapse reloads the study using the most recently saved study properties. As such, any temporary change made by the user is lost, which is undesirable to the end user. Synapse 4.2.100 will add the support of a temporary view state. The Maintain View State feature loads the initial state of the image(s) from the temporary view state, when it exists, instead of using the persistent saved view state, as was done in previous releases.

For details refer to *Synapse User Manual (ENG-0025838):*

> *View/Manipulating Series and Image > View State Overview*

> *Keyboard Shortcut Reference > Refreshing the View State*

3.13   Enhanced Cleanup Reports

Synapse 4.2.100 provides two additional reports:

1) Re-forward Cleanup Report, which lists studies needing to be re-forwarded, allows the PACS administrator to reschedule all found items for forwarding.

2) Verification Cleanup Report lists studies needing to be verified, and allows the PACS administrator to reschedule all found items for verification only.

For details refer to:

> *Synapse System Administration Manual (ENG-0027226)*

> *Synapse Advanced SWAT Manual (ENG-0027224)*

>> *Clients > DICOM > Event Based Forwarding > Partial Re-forward Cleanup Report by Date*

>> *Clients > DICOM > Event Based Forwarding > Partial Re-forward Cleanup Report*

>> *Clients > DICOM > Event Based Forwarding > Partial Verification Cleanup Report by Date*

>> *Clients > DICOM > Event Based Forwarding > Partial Verification Cleanup Report*

>> *Clients > DICOM > Event Based Forwarding > Re-forward Cleanup Report by Date*

>> *Clients > DICOM > Event Based Forwarding > Re-forward Cleanup Report*

>> *Clients > DICOM > Event Based Forwarding > Verification Cleanup Report by Date*

>> *Clients > DICOM > Event Based Forwarding > Verification Cleanup Report*

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(Template/Form Number: ENG-0005360-B)

3.14 GE ViewPoint Integration

The GE ViewPoint Desktop Integration provides a way for third party systems to communicate with a GE ViewPoint installation on the local computer. GE ViewPoint Desktop Integration is based on a command line interface tool, which returns values indicating success or failure.

For details, refer to *Synapse Implementation Manual (ENG-0025837):*

IM-110: GE View Point Integration

3.15 Configurable Mouse

There will be two modes of mouse operation in Synapse:

- Classic Mode: All user input operations are backwards compatible with versions of Synapse prior to Synapse 4.2.100.
- Mouse Button Down Operation Mode (MBDO): With MBDO, left mouse button down and drag will enter Stack in Place Scroll mode. With MBDO, right mouse button down and drag will enter Window Level mode.

For details, refer to *Synapse User Manual (ENG-0025838):*

Workstation Property Settings > Image Display Settings

View/Manipulating Series and Images > Configuring the Mouse Buttons

3.16 Short-cut Keys Update

In Synapse 4.2.100, the following short-cut keys are change or introduced because of functional changes:

NumPad +	Positive incremental Preset Adjustment
NumPad -	Negative incremental Preset Adjustment
NumPad /	Go Back in View State History in current tile.
NumPad *	Go Forward in View State History in current tile.
W + drag image	Window levels without linking.
Shift + Z + drag image	Zooms without linking.
Shift + X + drag image	Pans without linking.

3.17 Workstation Image Cache

Synapse Workstation has been using the Internet Explorer cache. A much larger cache is needed to accommodate workstation operations. There is a new caching mechanism, called Workstation Image Cache (WIC), which the workstation will use for caching images.

Caution: If a site has implemented a policy or installed anti-virus software that restricts disk access on Synapse Workstations, then Synapse may encounter issues to create the following factory default folders for WIC:

- Windows XP:

        C:\Documents and Settings\All Users\Application Data\WIC

- Windows Vista or Later:

```
C:\ProgramData\WIC
```

To alleviate the issue:

- Contact service engineer to change the path of Workstation Image Cache to an authorized location through the SetEdit tool, or

- Change anti-virus software or folder permissions to allow Synapse to create/modify these folders mentioned above.

For details, refer to *Synapse User Manual (ENG-0025838):*

Workstation Property Settings > Image Display Settings

Also, please refer to the following sections for restriction on this feature:

- DicomServer Storage Overwrite Mode

- Remote Workstation Image Cache

Note for Service Engineers only: The cache is located under the folder:

```
…\WIC\{datasourcename}
```

It can be accessed only via an Administrator command line prompt, e.g., for datasource URL http://Synapse:

```
dir /s C:\Documents & Settings\All Users\Application Data\WIC\Synapse
```

3.18   Missing Series

A Near Match Reading Protocol can have view ports that do not show a series because it is not in the displayed study. In this case a message will appear in the view port stating "Missing Series". The Series Description of the missing series is also displayed. The series selection menu will be provided in each Viewport that allows selecting a different series for display.

For details, refer to *Synapse User Manual (ENG-0025838):*

Reading Protocols > Reading Protocol Overview > Extra and Missing Series Overview

4.   Pre-Installation

4.1   REF# 26619: Synapse 4.0.100: Synapse Forklift Upgrade from Synapse 3.2.1 Hangs at Configuring DicomSCU Settings

If the server name is "Synapse", there is a problem since it is going to search and replace the string in DicomHosts.Config.xml file.

Workaround: Change the name of any Codebase Server at the operating system level (before starting a Forklift Upgrade) from "SYNAPSE" to the actual name of the installation target server.

4.2   REF# 24584: Error while Importing/Exporting Reading Protocol on 32 bit 2008 server with Synapse 4.2

An "Invalid JSON: Server Error404" error may occur when Importing and/or exporting Reading Protocols on 32-bit Windows 2008 Servers.

Workaround: A Microsoft hotfix (KB980368) will address this issue:

http://support.microsoft.com/kb/980368

4.3   REF# 27466: Synapse Workstation Install

For sites that received and have installed a Synapse 4.2 test version on their Synapse Workstation the following shall be done on each workstation prior to installing the Synapse 4.2 release version:

1. Locate **WicNew.xml** on the workstation via search.
2. Delete any occurrences of such file.
3. Locate **WicActive.xml** on the workstation via search.
4. Delete any occurrences of such file.

4.4 Migrating Synapse 32-bit Servers to Synapse 4.2.100 64-bit Servers

All 32-bit servers (including Codebase Server) need to be upgraded to Synapse 4.2.100 32-bit before migrating them to new Synapse 4.2.100 64-bit hardware. If this step is not done, then Reading Protocol migration will not occur with installation of Synapse 4.2.100 Codebase Server on 64-bit hardware.

Follow these steps:

1. Upgrade 32-bit Database Server from any version of Synapse 4.1 32-bit to Synapse 4.2.100 32-bit.
2. Upgrade 32-bit Codebase Server (all Synapse components except Database) from any version of Synapse 4.1 to Synapse 4.2.100 32-bit.
3. Execute a new installation of Synapse 4.2.100 Database Server on 64-bit hardware using Horizontal Migration.
4. Execute a new installation of Synapse 4.2.100 Codebase Server (all Synapse components except Database).
5. Copy all storage/image files and configuration files/settings from the 32-bit Codebase Server to the 64-bit Codebase Server.
6. Update SWAT configuration with new server names.

If step 2 is skipped, then there won't be any Reading Protocols in the Database Server on 64-bit hardware.

5. Installation Procedure

The installation takes place on the Server side and Workstation side.

Notes:

- For sites that have Synapse 3.2.1 installed and Synapse 4.0.100, they must be upgraded to Synapse 4.1.000 or higher before being upgraded to 4.2.100.

- For sites that have Synapse 4.1.400 installed, until further notice, the site cannot be upgraded to Synapse 4.2.100.

- When installing Synapse components on a system with a Content Switch, see one or more of the following sections of the *Integration Manual* (INT-0007128): 1.7-2, 1.7-3, 1.7-4, and 1.7-5.

- For installation instructions, refer to ENG-0025736: *Synapse Service Manual* found in the Documentation Volume.

- To upgrade Synapse on a workstation, refer to the topic, *IM-102: Workstation Software Installation* in ENG-0025837: *Synapse Implementation Manual* found in the Documentation Volume.

- REF# 25569: Server Setup May Hang at the End of Installation on a 64 bit 2008 Server

  At the end, wait for "Restart Server" page. If page does not display and server installation script is on the same page for some time, start Task Manager and end the installation program.

  Restart the server.

- REF# 27397: Database Tool MRN_Consolidation(T80) Limited Use Notification

  Be sure to read and understand the contents of SIF-786.

6. Configuration and Administration Changes

For the configuration procedures, refer to the *Synapse Service Manual*, the *Synapse Implementation Manual*, and the *HIIS User Manual*. The following sections are late-breaking updates that are not included in the initial release of these manuals.

6.1 Support Platform

If there have been modifications to the Synapse supported platforms and configuration, refer to the *Synapse 4.2 Product Release Specification* (ENG-0027740) for details.

6.2 Servers

6.2.1 IIS Configuration with Basic Authentication

REF# 26745: With Basic Authentication Enabled, Two Authentication Prompts for Same Server in One Session Occur

When the Codebase Server has **Basic Authentication** enabled and when a user attempts to open Synapse, Synapse may prompt with two authentication dialog boxes. Use the following steps to remove this symptom:

Part 1: Modifying IIS Settings Using the IIS GUI

For Codebase Servers with IIS 7.0:
1) Go to Start > Run, and type "inetmgr" and click OK.
2) In the left pane, browse to SERVERNAME > Sites > Default Web Site.
3) In the middle pane, double-click the Authentication icon.
    a) Right-click Basic Authentication, and select Enabled.
    b) Right-click Windows Authentication, and select Disabled.
4) In the left pane, expand the Default Web Site structure by clicking the + sign.
5) Select the "Services /ReadingProtocols" web app in the left pane, and double click authentication.
    a) Right click Windows Authentication, and select Disabled.
6) Select the "Services/DscuReadingProtocols" web app in the left pane, and double click authentication.
    a) Right click Windows Authentication, and select Disabled.
7) Select the "entDstor" web app in the left pane, and double click authentication.
    a) Right-click Windows Authentication, and select Disabled.
8) Select the "dataSourceDstor" web app in the left pane, and double click authentication.
    a) Right-click Windows Authentication, and select Disabled.
9) Select the "ippsetDstor" web app in the left pane, and double click authentication.
    a) Right-click Windows Authentication, and select Disabled.
10) Select the "dbLocalizationUploadTool" web app in the left pane, and double-click authentication.
    a) Right-click Windows Authentication, and select Disabled.

For Codebase Servers with IIS 6.0:
1) Go to Start > Run, and type "inetmgr" and click OK.
2) In the left pane, browse to SERVERNAME > Web Sites > Default Web Site.
3) Right-click Default Web Site and select "Properties".
4) Select the "Directory Security" tab and click "Edit" under Authentication and access control.
5) Uncheck "Integrated Windows Authentication", and check "Basic authentication".
6) Click Yes on the "Are you sure you want to continue?" dialog box.
7) Click OK to confirm changes on the "Authentication Methods" dialog box.
8) Click Apply on the "Default Web Site Properties" dialog box.
9) On the "Inheritance Overrides" dialog box, select the following child nodes to be updated:
    a. dataSourceDstor
    b. DicomHTML
    c. DicomHTML/SynapseScripts

    d.   [DicomSCU_AETitles]
    e.   [DicomSCU_AETitles]/dataSourceDstor
    f.   entDstor
    g.   Services
    h.   XdsConsHTML
    i.   XdsConsumerDefault
    j.   XdsConsumerDefault/dataSourceDstor

10) Click OK on the "Inheritance Overrides" dialog box.
11) Click OK on the "Default Web Site Properties" dialog box.

Part 2: Manual Modification of Configuration Files

1) In left pane of IIS, browse to Default Web Site > Services > ReadingProtocols web app.
    a) Right-click and select "Explore".
    b) Make a backup of the web.config file and call it web.config.old.
    c) Open the web.config file in a text editor and search for "EnableBasicAuth".
    d) Replace the "false" value with "true" in the <value> element.
    e) Save the modified file.
2) In left pane of IIS, browse to Default Web Site > Services > DscuReadingProtocols web app.
    a) Right-click and select "Explore".
    b) Make a backup of the web.config file and call it web.config.old.
    c) Open the web.config file in a text editor and search for "EnableBasicAuth".
    d) Replace the "false" value with "true" in the <value> element.
    e) Save the modified file.
3) In left pane of IIS, browse to Default Web Site > WCF web app.
    a) Right click and select "Explore".
    b) Make a backup of the web.config file and call it web.config.old.
    c) Open the web.config file in a text editor.
    d) Search for <authentication mode="Windows"/> and delete that line from the file.
    e) Search for 2 instances of clientCredentialType="Windows", and change Windows to Basic.

Save the modified file.

6.2.2   REF# 27744: IIS Configuration with Windows Authentication

When the IIS is configured to use Windows authentication, the NTAuthenticationProviders contains list of Windows authentication provider that can be used, including NTLM and Kerberos. The following cases occur:

1. "NTAuthenticationProviders" = " Negotiate,NTLM"
    No further action is needed under this setting.
    NTAuthenticationProviders is set to "Neogotiate, NTLM", is to allow IIS attempt to use Kerberos for authentication if it is available.

2. "NTAuthenticationProviders" = "NTLM"
    If NTAuthenticationProvider is set to "NTML", the following services (ReadingProtocols services and DscuReadingProtocols) configuration needs to be updated. (Regardless of IIS version)

    In these two files:
        `D:\Services\ReadingProtocols\Web.config`
           and
        `D:\Services\DscuReadingProtocols\Web.config`

    the four (4) instances of:
        `clientCredentialType="Windows"`
    need to be replaced with:
        `clientCredentialType="Ntlm"`

```xml
<system.serviceModel>
...
<bindings>
      <basicHttpBinding>
        <binding name="basicHttpBindingHttps">
          <security mode="Transport">
            <transport clientCredentialType="Windows"/>
          </security>
        </binding>
        <binding name="basicHttpBindingHttp">
          <security mode="TransportCredentialOnly">
            <transport clientCredentialType="Windows" />
          </security>
        </binding>
        <binding name="basicHttpBindingBasicAuth">
          <security mode="Transport">
            <transport clientCredentialType="Basic"/>
          </security>
        </binding>
        <binding name="basicHttpBindingBasicAuthHttp">
          <security mode="TransportCredentialOnly">
            <transport clientCredentialType="Basic"/>
          </security>
        </binding>
      </basicHttpBinding>
      <webHttpBinding>
        <binding name="webHttpBindingHttps">
          <security mode="Transport">
            <transport clientCredentialType="Windows"/>
          </security>
        </binding>
        <binding name="webHttpBindingHttp">
          <security mode="TransportCredentialOnly">
            <transport clientCredentialType="Windows" />
          </security>
        </binding>
        <binding name="webHttpBindingBasicAuth">
          <security mode="Transport">
            <transport clientCredentialType="Basic"/>
          </security>
        </binding>
        <binding name="webHttpBindingBasicAuthHttp">
          <security mode="TransportCredentialOnly">
            <transport clientCredentialType="Basic"/>
          </security>
        </binding>
      </webHttpBinding>
    </bindings>
</system.serviceModel>
```

6.2.3   REF# 28103: Reading Protocol Service Configuration on SSL Servers
For details, see SIF-785: Enable/Disable SSL Synapse Servers.

6.2.4 REF# 27822: Script Mapping for Reading Protocols

There could be a scenario where script mapping is missing from IIS configuration. Perform the following steps to create the mapping:

1. Navigate in the left hand tree in IIS manager to:
   ```
   Web Sites\Default Web Site\Services\ReadingProtocols
   ```
2. Right-click on ReadingProtocols and select Properties.
3. Select Virtual Directory tab.
4. Click Configuration... button.
5. Click the Add.. button below Application extensions list.
6. Enter (without the quotes):

   Executable = "C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_isapi.dll"

   Extension = ".svc"
7. Select **All verbs** radion button
8. Make sure "Script engine" is checked.
9. Make sure that "verify that file exists" is not checked.

6.2.5 REF# 26697: Migration of Some Reading Protocols Fail after 32-Bit 2003 Codebase Server Is Upgraded to Synapse 4.2.100

Instance Reading Protocols may fail to migrate due to a missing datasource in the study specification in the legacy XML. Check this log file on the Codebase server:
```
D:\SynapseLogs\Migration.log
```
for the above mentioned failure.

If the migration failed, then follow these steps on the Codebase Server:

1. Navigate to the folder:
   ```
   D:\Services\ReadingProtocols\bin
   ```
2. Open the file:
   ```
   AssemblyCall.exe.config
   ```
3. Added the **(Servername)** as follows:

```
<applicationSettings>
    […]
    <ReadingProtocols.Xml.Properties.Settings>
      <setting name="DefaultIRPDatasourceTemplate" serializeAs="String">
        <value>//dataSource=http%3A%2F%2F{0}&amp;{1}</value>
      </setting>
      <setting name="DefaultIRPDatasourceName" serializeAs="String">
        <value> (Servername)</value>
      </setting>
    </ReadingProtocols.Xml.Properties.Settings>
  </applicationSettings>
```

4. Save the file with the change.
5. Run the .bat batch file without arguments:
   ```
   D:\Services\ReadingProtocols\ImportProtocols.bat
   ```
6. Check for any errors or failures in:
   ```
   D:\SynapseLogs\Migration.log
   ```
Note: Additional information about the use of this tool can be found by using the /**help** argument:

```
ImportProtocols /help
```

6.2.6   REF# 27359: Enable Localized GUI for XDS Consumer or DicomSCU Data Source when Accessing Synapse Codebase Server via SSL

In SIF-785, see the instructions in these sections:

- Additional Steps on Synapse Codebase Servers for localization on Windows 2003
- Additional Steps on Synapse Codebase Servers for localization on Windows 2008

6.2.7   (REF# 26052) Cleanup Incorrect Reading Protocol Settings (Internal Service Engineer)

See SIF-783 for details.

6.2.8   DicomServer Storage Overwrite Mode

If the "Image File Store" property of DicomServer is configured as Overwrite mode, it may happen that the first instance of an image is cached in the Workstation Image Cache or in Synapse Acceleration Service (SAS), and then the image is overwritten in Synapse Storage with a resend. At this point, Workstation Image Cache or SAS may return the first image if the image size is the same or it will fail if the image size has changed.

Note: Check the "Image File Store" setting in DicomServer Properties. Do NOT use Workstation Image Cache or SAS if mode is Overwrite. If Overwrite is required then use IE cache instead.

6.3   Workstation

6.3.1   REF# 25646: Opening Study URL in IE9 Crashes the Video Driver if GPU Is Not Turned Off

This crash is caused by issues with various video card drivers.

To work around this issue, turn off the IE 9.0 GPU rendering feature by selecting:

> Tools > Internet Options > Advanced > Accelerated graphics > Use software rendering instead of GPU rendering

For further details, refer to:

> http://blogs.msdn.com/b/ieinternals/archive/2011/02/17/ie9-benchmark-tests-and-gpu-fallback-to-software-rendering-mode.aspx

6.3.2   Remote Workstation Image Cache

Synapse Workstation Image Cache configuration allows a user to configure a Microsoft Windows UNC path to store cache on another machine. However, this configuration is not supported because the purpose of Workstation Image Cache is to improve performance of retrieving images from a Synapse Server.

If customers request remote cache, Synapse Acceleration Service (SAS), which is designed to support multiple users simultaneous access to a shared server based cache, can be applied. Follow these steps to configuration remote image cache:

1. Open Synapse Properties.
2. Click on the Data Source Settings tab.
3. Check the box "Use cache server for images."
4. Enter the URL of the SAS Server in the "Cache address" box, e.g., SASserver:8080
5. Click on the Image Display Settings tab.
6. Select one of the following:
   - Synapse image caching

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- IE cache
- no cache.

Note: With cache server configured, no-cache on client gives better performance by avoiding redundant image caching to the client disk.

6.4 Third-Party Integration

The Synapse Windows Explorer API is introduced by Synapse to allow third-party software access to Synapse features. For integration details, refer to:

ENG-0027227: *Synapse Third Party Integration Specifications*

7. Installation Verification Procedure

For the installation verification procedure, refer to ENG-0025736: *Synapse Service Manual.*

8. Uninstallation

N/A

9. Synapse Information (SIF)

The following SIFs (which were released before Synapse 4.2.100 also apply to Synapse 4.2.100):

SIF	Title
13	Please be careful for QA771 setting with Synapse
120	Plasmon DVD library initial setup specification and DVD drive firmware
133	Notes when digitizing the film and sending to Synapse
137	FCR Image Processing parameter handling in Synapse
140	Important Configuration of OTG DIskXtender2000 with Synapse
162	Scanning Oracle Database by anti-virus software
183	Important Instructions to prevent data loss
186	VPN on BB network connection may not work with Synapse
243	Area Near Cursor Not Repainted in Image
245	IIS Configuration for Notes and Reports
266A	DicomServer IP Address Name Resolution
267	Workstation Cannot Read XML Files
273	The Proper Configuration of MFP within Synapse
275	Synapse Document Scanning Tool
279	DicomServer Configuration Using File Share Resources
292	Internet Explorer Shortcuts Not Working with IE Removed from Desktop
293	DicomServer Logs Erroneous Error in the Event Viewer Log when .DLLs are Missing
295	Test Server Usage During Upgrade
296C	Synapse Workstation Cannot Access Images when SWAT is Configured to Point to a Remote Share
323	Clarification of Instructions for Installation of Microsoft Message Queuing
333	Studies Being Dictated More Than Once from Unread Studies Folder
334	Synapse Accepted Images that have a SOP Instance UID larger than 64 Characters

341	Oracle Listener Security Enhancement: Synapse3.1.0 and Higher
342	Database Backup Scheduling
344	ECN 2005-E-0101 for FCR CR CL Conflicts with Synapse Workstation Dimpl8.dll Version
345	Some Modalities Send Images with Alphanumeric Accession Numbers which are Intended to be Case Sensitive
349	Database Performance Issue with Study Deletion
361	GE DX Imager Pixel Spacing Field (0018,1164) Causes Synapse Workstation to Lockup
367	Instructions for Creating Film Format with 15:1 Up-Count (3 x 5)
377	Internet Explorer ActiveX Update (Microsoft KB912945)
401A	Increasing the Application Virtual Memory Using BOOT.INI Switch
402A	McAfee Memory Leak
420	Query Error When Filtering Apostrophe in a Filter
425	VeriSign Changes Their Way of Signing Certificates
432D	Cumulative Security Update for Internet Explorer (KB-918899)
436	MultiPage Scan Functionality Does Not Work on Scanners with Page Feed Time Delays
448	Patient Middle Initial Cannot be Removed in Synapse with the RIS Scheduler
450	Reading Protocols Cannot Use Factory Image Preset "Invert"
460A	Obliquus Engineering Change Notice ECN No. 2006-E-0816
479	Voice Notes Administration
507	Viewing Objects from Synapse
508A	Synapse TIFF Document Viewer
584	Minimum Width Requirement for PowerJacket
589A	Windows Explorer Toolbars Inaccessible in Theater Mode with High-Resolution Monitors
596	Operating System & IE Crashed while Performing Drag & Drop on Vista Home Premium & Vista Business
622	Images Will Be Skipped When "Stack-in-Place" Is Used
629	Synapse Toolbars May Be Missing if Synapse Is Launched Via URL Link
671	Using IISADMPAD Virtual Directory Options with Synapse
700	How To Make Another Application Go Full Screen Mode at the Same Time with Synapse URL Integration
708	Image Retrieve Failure when Trying to Display 85MB Digitized Image
714	Accession Number Truncated When Scanned Via Barcode Reader
716	Drag/Drop Function in Synapse Copies the File to the Destination Folder
728	Synapse Image Display Order Rules
732	Configuring DICOM Server Backfill Feature for Multiple CommonView Data Sources or Third-Party PACS Applications
733	Word 2003 Documents Open in Read-Only Mode on System with IE7 (or Higher) & SR-356 (or Higher)
734	Synapse Date/Time Field Definitions
737	Synapse Zoom To Breast Borders (ZTBB) Is Not Calculated for Some MG Studies
739	Windows Explorer Setting "Launch folder windows in a separate process" Should Not Be Used on Windows 7
742	Unable to Keep the Change for Patient History List Panel on SPT with Auto-Hide Enabled

748	Synapse Workstation Does Not Function on Windows Server Machines while IE Enhanced Security Configuration Is On
751	All TCP/IP Ports that Are in a TIME_WAIT Status Are Not Closed after 497 Days from System Startup
752	Certain Versions or Patches of Symantec Anti-virus Are Causing Cluster and Performance Issues
753	Setting Monitor Location and Resolution for Synapse 3D V2.6
756	Machine Name Is Not Displayed for HIIS Monitoring Tool and Synapse HIIS Monitoring Tool when 15 Characters or More
757	Error Message Displays when User Attempts DICOM Transfer
763	HIIS Order Failure Due to Duplicate Priority Codes
766	Ad Hoc Deletion Does Not Purge Studies Permanently from Removed Items Folder Even after Purge Due Date in Synapse
768	Keyboard Shortcuts Design Change from Synapse 3.2.1 to Synapse 4.0.100
772	Adjustments to Font Size, Font Color, and Background Colors to Improve Legibility of PowerJacket
773	Synapse HIIS Bi-Directional Message Does Not Get Sent from Synapse to the RIS System
774	Data Sources Are Not Retained after Synapse 4.0 Upgrade
775	Only Unread Studies and All Reservations Folders Should Be Added into My Works Folder
778	MS Internet Explorer 10 Release
779	Pop-Up Menu Text Clipped When Display Monitor DPI Setting Is Greater than 100%
780	FUJIFILEISAPI.DLL Is Not Triggering DiskXtender to Fetch a Purged File
782	Synapse Workstation Installation / Uninstallation Issue with Google Chrome
784	CT Preset Is Not Displayed on a CT Image in a CT / Secondary Capture Mixed Study

10. Fixed Issues

Refer to the Synapse Knowledge Base Contents tab under the Synapse 4.2 Fixed Issues label. (See file Synapse4_2_000_Fixed_Issues.htm in ENG-0027703.)

REF# 13406: Text Size Is Small and Unreadable in "Import Reading Protocol" Window of Batch Import on Low-Res Monitor

REF# 14283: Selecting Back Button from Context Menu on Navigation Buttons Blanks SPT Thumbnails Area

REF# 20745: User Role Defaults: Technologist Has "Manage Conference Folder"

REF# 23046: Problems with Testsecureurl.asp when Pointing to a Localized Folder Containing Localized Characters

REF# 23321: QBE for Assigned to Field Not Working Correctly for Single Study with Multiple Reservations

REF# 23827: In Multi-Monitor Systems, the Number of Monitor Options Does Not Decrease by One on Each Consecutive Monitor when Hovering Mouse over the "1x1" Icon in Page Layout Toolbar

REF# 24001: Few Studies in Verifying Status in the Forward Queue Interrupted Teramedica

REF# 24113: Ultrasound Studies Have Study Status of Sent but Never Get Finalized

REF# 24464: IE8 Is Slower than IE9 Because of Centralized Settings Javascript Calls

REF# 24517: Synapse RIS Report Is Not Written to Media while Performing Dicom Transfer to Media for a Study with a Synapse Report via XDS Consumer

REF# 24554: Manually Stopping HIISRouter and HIISRouterBidirectional Services on 32-bit HIIS Server during Horizontal Migration Displays an Error

REF# 24754: Duplicate Series Redisplays Last Duplicate in Multiple View Ports

REF# 25011: Study Deletion: Preserving the Last Version of an Image Configuration Is Confusing in SWAT

REF# 25130: Localization Versions Failed to Update i18n Localization Files

REF# 25448: XDSConsumer HTTP Timeout for Studies with Large Volume of Documents

REF# 25647: Incremental Backups Will Not Work Correctly on the Standby Dataguard Server

REF# 25703: If "Reject" Is Chosen in Synapse Dictation Dialog Box and, when Prompted, the User Returns to Enter a Reason, Reservation Does Not Change as Expected

REF# 25880: Error Performing Dicom Transfer when There Is a Structured Report

REF# 26231: Synapse Workstation Responds Intermittently and Needs to Restart Explorer

REF# 26142: BEE Images Containing UT Elements Are Corrupted and Cannot Be Opened in Synapse

REF# 26143: SWAT Admin Folder/Admin/Study Analysis/Monthly Study Volume Fails with ORA-00904 "STUDYMONTH" Invalid Identifier Error

REF# 26292: Synapse Cannot Display Images due to Images Missing in the Local Storage Server

REF# 26436: Unable to Launch eSWAT when Upgrading from Synapse 4.0.1 to 4.1, Leaving the Wrong ODP.NET on Codebase Server

REF# 26626: In Synapse 4.1, Cannot Display the Deleted Studies in Admin > Manage Content > Removed Items & Recent Removed Items

REF# 26670: eSWAT and Setadmin Issue after Forklift Upgrade

REF# 26697: Migration of Some Reading Protocols Fail after 32-Bit 2003 Codebase Server Is Upgraded to Synapse 4.2.000

REF# 26699: Unread Study Custom Folder Does Not Show Reservation Filter Metrics

REF# 26744: The Location of Ruler Annotation Becomes Different in a Printout from Print Composer

REF# 26769: Existing Image Skewed after Synapse 4.1.200 Upgrade

REF# 26877: The Storage Commitment N-Action Request Contains References to Deleted Images in a Study that Was Forwarded

REF# 26926: Synapse 4.1 - Default AON Factor Does Not Work in "Today's Studies by Modality"

REF# 27522: Synapse 4.1 - Slow Performance by PatientCreateUpdate(HIIS) Database Command

REF# 27637: Migration Failure for Some Protocols when Upgrading to Synapse 4.2

REF# 27647: Images in the Same Series Are Listed in Separate Series after Upgrade to Synapse 4.x

REF# 27685: Synapse 4.2 Installation Error for New Database Installation
New installations of Synapse 4.2.000 report an error during database resizing on the Database Server, making the database unusable.

The installation of Synapse 4.2.000 as a "New" installation reports the following error message in the db_sizing.log during Synapse 4.2.000 database creation:

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ERROR: Objects exist in the original tablespaces. Call Synapse Support

Recreate any unusable indexes

This error leaves the Synapse 4.2.000 Database in an unusable state.

The above error occurs with these Synapse 4.2.000 Release File images:

- NMFS-SY42000_RF32-1.iso   Dated: 5/13/2013)
- NMFS-SY42000_RF64-1.iso   Dated: 5/13/2013)

This issue has been fixed in Synapse 4.2.010 - SIF-761B.

REF# 27761: Invalid Study or Series in Series Reference In Synapse 4.2.000

REF# 27771: Synapse 4.1 - Patient Age on PowerJacket Is 0 Days when Patient Is Younger than 3 Days

REF# 27846: Unable to Migrate Reading Protocols when Modality Name Has Leading or Trailing Spaces

If a Modality name contains a leading or trailing space in the Database, then the migration of Reading Protocols will fail during the Synapse 4.2.100 upgrade. The names must be corrected prior to starting the Synapse 4.2.100 upgrade.

To check for leading and trailing space characters, use Service Tool:

SR-1000166: Pre-Synapse 4.2.x Upgrade Tool to Detect Modality Names with Spaces and Delete the Modality when Not Used

REF# 27885: Cannot Get "seriesDescription" when Data Contains Hex Escape Sequence for "Ü" Character

REF# 27905: Database Server Cannot Accept Modality Names with Space Character from HL7 Messages

REF# 27977: Data for "Area of Interest" Is Missing in Migrated Reading Protocols

REF# 28039: Page-Layout Dialog Window Does Not Open in Full View

REF# 28059: Associated Procedure Code for DX Modality Is Missing in "procedure_info" Table

REF# 28102: Error Detected During New Installation

REF# 28168: Unable to Save All Annotations when Multiple Annotations Are Created on Different Images

11. Known Issues

Refer to the Synapse Knowledge Base Contents tab under the Synapse 4.2 Known Issues label. (See file Synapse4_2_000_Known_Issues.htm in ENG-0027703.)

REF# 27635: After Save and Exit, Spine Labels Are Not Displayed when Selecting 'No' to CTRL + F5

REF# 27616: Certain Studies are Missed Out by Any Cleanup Reports and Could Remain Unforwarded

REF# 27615: SWAT Forwarding Queue Delete Function May Cause a Study to Remain Unforwarded

REF# 27481: Pressing F5 to Refresh the Series Picker Toolbar (SPT) Causes the Series Not to Repaint

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REF# 27452: Series Selection Menu Does Not Correctly Reflect Series Being Displayed When Using Double Click 1-up

REF# 27243: Cannot Reverse the Reading Laterality of a Reading Protocol Without Losing any Non-Default Orientation/Justification Values it Had

REF# 27231: Dragging and Dropping Images from One Tile to Another Does Not Work Sometimes if MBDO Is Enabled

REF# 27164: Script Error Occurs when Using MG Series Rename or Series Editor from QuickView

REF# 27132: Protocol List in Reading Protocol Menu Is Not Refreshed Correctly with Manual Comparison and Studies Are Displayed Using Unexpected Protocol

REF# 27113: Reading Protocol Editor View Port Shakes when Resizing Window to Specific Height or Width

REF# 26997: Images in Stack Can Come from Different Patients when Match Criteria Are Not Properly Defined

REF# 26925: Same Shortcut Name Is Created from Studies Opened via Encrypted URL

REF# 26890: WindowLevel and WindowCenter Parameters in WADO URLs Have No Effect

REF# 26852: New Reading Protocol Editor Is Created Every Time when Clicking Reading Protocol Editor Button

REF# 26849: Exporting Factory Reading Protocol of Stack or Same Series for Any Procedure Causes Unnecessary Warning

REF# 26704: Cannot View/Edit Threshold Values when Dashboard Rows Have Blank Count

REF# 26701: Dismissing Page Settings Dialog Box Causes Previously Active PrintView Window to Become Non-Active

REF# 26619: Synapse 4.0.100: Synapse Forklift Upgrade from Synapse 3.2.1 Hangs at Configuring DicomSCU Settings
If the server name is "Synapse", there is a problem since it is going to search and replace the string in DicomHosts.Config.xml file.
Workaround: Change the name of any Codebase Server at the operating system level (before starting a Forklift Upgrade) from "SYNAPSE" to the actual name of the installation target server.

REF# 26467: Invert Not Maintained on Linked MG Images by MVS after Saved Instance Reading Protocol with Image Preset Option Checked

REF# 26448: Under IE9, Synapse Cannot Change into Theater Mode and Synapse Toolbar Is Absent when Accessing Study via URL Link the First Time

REF# 26363: Intermittent MG Position Shifting and Shifting Back Is Observed during Saving IRP with All Options Checked

REF# 26324: During Initial Loops, Synapse Exporter Cannot Display All Images

REF# 26266: Trigger Backfill Is Not Supported for Some Modality Types

REF# 26238: Administrator Can Save a Template Reading Protocol with the Same Name in System Reading Protocol Folder Previously Used by a Radiologist to Save in User's Folder

REF# 26206: Synapse Properties Opened from Windows Explorer Prevent Synapse from Auto Logoff

REF# 26199: When Pressing F11 and Changing Synapse from Theater Mode to Non-Theater Mode on Multi-Monitor System, Precache Status Indicator Changes to "Disk Precaching: No Images"

REF# 26171: Clinician Can Rename Non-Factory Protocols in System Reading Protocols Folder

REF# 26135: Dragging & Dropping Studies into a User's Review Reservation Folder Creates a Read Reservation Instead of Review Reservation

REF# 25975: Synapse Exporter Window Fails to Load All Images when Synapse Is Loading Images

REF# 25956: Unexpected Zoom after Saving Instance Reading Protocol

REF# 25939: Changing Server Name During Upgrade from 4.x Causes Error when Opening Study via URL Link the First Time

REF# 25869: Double-Clicking 1-up and Back Causes Lost Image Zoom State

REF# 25860: Wrong Migration Behavior when IE Cache Is Not Cleaned Up Before Migration

REF# 25684: XDS Consumer Does Not Properly Handle Repository Error

REF# 25646: Opening Study URL in IE9 Crashes the Video Driver if GPU Is Not Turned Off

REF# 25336: Pressing Menu Key when Context Menu Is Open Causes Last Executed Command to Execute Again

REF# 25307: Reading Protocol Can Be Renamed with Space Characters Only

REF# 25241: Middle Mouse Clicking within Protocols Menu or Ctrl+Left-Click in Menu Item Edges Opens an Empty IE Window

REF# 25210: Dashboard Unreadable on Dual 8-Bit Static Gray High-Res Monitor

REF# 24966: Export Image of Series also Includes Images Not in Current Study

REF# 24951: User Can Delete an Instance Reading Protocol Created by Others

REF# 24926: Script Error Occurs when Clicking Active Overlay to Launch PowerJacket from Summary View

REF# 24808: Study Opened Through URL, PowerJacket Auto-Opens to Notes with Blank Notes Page when IE Cache Is Empty

REF# 24426: Extras Step Location Is Incorrect when Step Names Do Not Follow the Pattern

REF# 24166: Reading Protocol Editor Does Not Work Well in Full Screen Mode/Theater Mode

REF# 24145: No Warning when Exiting Reading Protocol Editor with Unsaved Changes

REF# 23637: Reading Protocol Editor Window Does Not Resize when Dragged to Hi-Res Monitor

REF# 23198: Pre-Cached Indicator of a Study Can Only Exist in One Folder

REF# 22711: Populating Extra Series when Performing a Study Comparison

REF# 21597: Impact of DicomServer Overwrite Mode on SAS and Workstation Image Cache (WIC)

If the "Image File Store" property of DicomServer is configured as Overwrite mode, it may happen that the first instance of an image is cached in the Workstation Image Cache or in Synapse Acceleration Service (SAS), and then the image is overwritten in Synapse Storage with a resend. At this point, Workstation Image Cache or SAS may return the first image if the image size is the same or it will fail if the image size has changed.

Note: Check the "Image File Store" setting in DicomServer Properties. Do NOT use Workstation Image Cache or SAS if mode is Overwrite. If Overwrite is required, then use IE cache instead.

REF# 28058: DBOptional Tool DBCleanup(T96) Does Not Reset Dashboard Folder Counts Properly

REF# 28062: CRDX Option in Series Picker Toolbar Properties Is Not Getting Saved

REF# 28202: Error Bringing Up Reading Protocol Editor when Monitors Are Not Top-Aligned

12. Feature Limitations

Refer to the Synapse Knowledge Base Contents tab under the Synapse 4.2 Feature Limitations label. (See file Synapse4_2_000_Feature_Limitations.htm in ENG-0027703.)

REF# 27411: Reading Protocol Editor Preset Drop Down List Does Not Support Multi-Modality Images

REF# 27029: Synapse Workstation Version Should Match with Synapse Servers

REF# 26207: Data Source Names Should Not Contain Characters that Are Invalid in the Windows File System

REF# 26118: The Reservation List Should Update Immediately Every Time a Reservation Filter Is Checked or Unchecked

REF# 25921: Synapse Text Report of a Study Cannot Be Verified Against Third Party Archive in Image Study Synchronization

REF# 25404: Windows Themes Causes Screen Tearing Related Issues

REF# 25346: Both Re-forward and Verification Cleanup Report Did Not Consider Profile Event & Rules when Calculating Number of Qualified Studies when F&R Profile Is Inactive

REF# 24991: Default Image Cache Is Displayed as Empty String

REF# 24897: When RP Editor Is Invoked from StandardView, Read Contents from Saved Reading Protocol