

1.0 Introduction

This document is provided to give a quick overview of the new features of the Application Synchronization version 2.1 option for the SecurView DX Diagnostic Workstation Version 5-x (or higher) or SecurView RT Technologist Workstation Version 6-x (or higher), which includes TechMate.

The Application Synchronization interface has been expanded to support more RIS, reporting, dictation and voice recognition applications. When an application supports synchronization protocols with a SecurView workstation, a patient needs to be selected only once, and both the SecurView workstation and the other application will synchronize to the same patient automatically. The interface works unidirectional or bidirectional, depending on the capabilities of the third-party application.

The third-party application can run on a separate computer or as a thin client on the SecurView workstation. Synchronization can happen for example via network (TCP/IP, shared file) or RS-232 serial interface. The section below (*Supported Application Synchronization 2.1 Applications*) provides a list of applications supported by Application Synchronization version 2.1.

2.0 Supported Application Synchronization 2.1 Applications

2.1. Hologic Interface Partners

Hologic Partners are applications that have implemented one of the three available Hologic partner interfaces (Command Line Proxy, SharedFile, or TCP/IP), and use the corresponding general application type.

Hologic Proxy Partner

A Hologic Proxy Partner is one that uses the Hologic Command Line Proxy interface.

- NBSS British Screening RIS
 - NHSBSP NBSS British Screening RIS can be run on the SecurView workstation or on a separate computer.
- syngo Workflow (Europe)
 - Siemens syngo Workflow (Europe) browser version VB30 or higher
 - Siemens syngo Workflow (Europe) can be run on the SecurView workstation or on a separate computer.

Table 1-1: Hologic Proxy Partners

	Receives				Sends			
	Login	Logout	Open Patient		Login	Logout	Open Patient	
Hologic Proxy Partner+	-	-	-		✓	✓	✓	
NBSS British Screening RIS	-	-	-		-	-	✓	
syngo Workflow (Europe)	-	-	-		-	-	1	

+ Denotes available functionality

Hologic SharedFile Partner

A Hologic SharedFile Partner is one that uses the Hologic XML SharedFile interface.

- WinScribe Internet Author
 - WinScribe Internet Author version 3.8 or higher
 - Internet Author can be run on the SecurView workstation or on a separate computer.
- Dataworxs AudioWav Mic
 - Dataworxs AudioWav Mic version 2.00.017 or higher
 - AudioWav Mic can be run on the SecurView workstation or on a separate computer.
- MagView
 - MagView version 6.3 or higher
 - MagView can be run on the SecurView workstation or on a separate computer.
- Sclmage Picom Client
 - ScImage Picom Client version 3.03.059 or higher
 - Picom Client can be run on the SecurView workstation or on a separate computer.

Table 1-2: Hologic SharedFile Partners

	Receives				Sends			
	Login	Logout	Open Patient		Login	Logout	Open Patient	
Hologic SharedFile Partner+	✓	✓	✓		✓	✓	✓	
WinScribe Internet Author	✓	1	✓		-	-	-	
Dataworxs AudioWav Mic	-	-	✓		-	-	-	
MagView	-	-	✓		-	-	✓	
ScImage Picom Client	-	-	-		✓	✓	✓	

+ Denotes available functionality

SecurView TCP/IP Partner

A SecurView TCP/IP Partner is one that has implemented the SecurView TCP/IP AS Adapter interface.

- Avreo InterWorks PACS
 - Avreo InterWorks PACS version 4.6 or higher
 - Avreo InterWorks can run only on a separate computer.
- Carestream RIS
 - Carestream RIS (2010) version 10.x
 - Carestream RIS can be run on the SecurView workstation or on a separate computer.

- Commit MIS
 - Commit MIS version 2.2.4 or higher
 - Commit MIS can be run on the SecurView workstation or on a separate computer.
- Compressus MEDxConnect VM2
 - o Compressus MEDxConnect VM2 version 2.0.0 or higher
 - MEDxConnect can be run on the SecurView workstation or on a separate computer.
- Eclipsys Sunrise Radiology
 - Eclipsys Sunrise Radiology version 5.6 w/SP3 or higher
 - Sunrise Radiology can be run on the SecurView workstation or on a separate computer.
- HSS CRIS
 - HSS CRIS version 1.06.12 n or higher
 - HSS CRIS can be run on the SecurView workstation (without Speech Recognition or Digital Dictation) or on a separate computer (with Speech Recognition or Digital Dictation).
- peerVue qiVue
 - o peerVue qiVue version 6.3.3 or higher and QICS version 7.0.2 or higher
 - o qiVue can run only on a separate computer.
- SERGAS SIDI
 - SERGAS SIDI (Spain) version 2.10 or higher
 - SERGAS SIDI can run only on a separate computer.
- SESCAM Dulcingest RIS
 - SESCAM Dulcingest RIS version 7.8.3.1 or higher
 - Dulcingest RIS can be run on the SecurView workstation or on a separate computer.

Table 1-3: SecurView TCP/IP Partners

	Receives				Sends			
	Login	Logout	Open Patient		Login	Logout	Open Patient	
SecurView TCP/IP Partner+	✓	1	✓		✓	✓	✓	
Avreo InterWorks PACS	-	-	-		✓	~	*	
Carestream RIS	-	-	-		✓	✓	4	
Commit MIS	-	-	-		-	-	✓	
Compressus MEDxConnect	-	-	-		✓	✓	✓	
Eclipsys Sunrise Radiology	-	-	-		✓	~	~	
HSS CRIS	✓	✓	√		✓	√	✓	
peerVue qiVue	✓	✓	√		-	-	✓	
SERGAS SIDI	-	-	-		✓	-	✓	
SESCAM Dulcingest RIS	-	-	-		✓	✓	1	

+ Denotes available functionality

2.2. Other Interface Partners

Each of these interfaces has its own specific application type, with a default configuration that matches the implementation.

- Agfa TalkStation
 - Agfa TalkStation version 3.2 or higher
 - TalkStation can be run on the SecurView workstation or on a separate computer.
- Amicas Vision Series v4.0-5.1
 - Amicas Vision Series PACS version 4.0–5.1
 - Vision Series can run only on a separate computer.
- Amicas Vision Series v5.5
 - Amicas Vision Series PACS version 5.5 or higher
 - Vision Series can run only on a separate computer.
- Dolbey FusionDictate
 - o Dolbey FusionDictate version 1.4.28 (a.k.a. version 8) or higher
 - FusionDictate can be run on the SecurView workstation or on a separate computer.
- Dolbey FusionExpert
 - Dolbey FusionExpert version 5.1.30 or higher
 - FusionExpert can be run on the SecurView workstation (with or without front-end speech recognition module) or on a separate computer.
- Epic Radiant RIS
 - Epic Radiant RIS version Spring 2006 or higher
 - Radiant RIS can be run on the SecurView workstation or on a separate computer.
- G2 Speech MediSpeech
 - o G2 Speech MediSpeech version 5.0 or higher
 - MediSpeech client can be run on the SecurView workstation or on a separate computer.
- GE/IDX Imagecast
 - o GE/IDX Imagecast (a.k.a. Centricity RIS-IC) version 10.3.9 or higher
 - Imagecast client can be run on the SecurView workstation or on a separate computer.
- GE Centricity RIS-IC
 - o GE Centricity RIS-IC version 10.5 SP25 or higher
 - Centricity RIS-IC client can be run on the SecurView workstation or on a separate computer.

- Lanier Serial
 - o MedQuist/Lanier VoiceWriter Digital Stations
 - Application runs on separate hardware, with a serial cable connecting the SecurView workstation and the Lanier station.
 - MedQuist DocQvoice Workstation (formerly DocQment Ovation) version 1.1.5 or higher
 - DocQvoice can be run on the SecurView workstation or on a separate computer.
- MagView
 - MagView version 5.3.500 or higher
 - MagView can be run on the SecurView workstation or on a separate computer.
- MammaSoft
 - KVB MammaSoft (Germany) version 1.0 or higher
 - MammaSoft can be run on the SecurView workstation or on a separate computer.
- MaSc RIS
 - KVWL MaSc RIS (Germany) version 2.0 or higher
 - MaSc RIS can be run on the SecurView workstation or on a separate computer.
- MedOutlook RIS
 - Keymind Computing MedOutlook RIS (Norway) version 1.0.0.1 or higher
 - MedOutlook can run only on a separate computer.
- MedQuist SpeechQ V1.2
 - MedQuist SpeechQ for Radiology version 1.2 or 1.3
 - SpeechQ can be run on the SecurView workstation or on a separate computer.
- MRS
 - MRS Mammography Reporting System version 6.6.46 or higher
 - MRS client can be run on the SecurView workstation or on a separate computer.
- PenRad
 - PenRad version 5.1.84 or higher
 - PenRad can be run on the SecurView workstation or on a separate computer.
- PowerScribe or EWS
 - Nuance/Dictaphone PowerScribe version 4.6 or higher with PACSBridge 4.7 1009
 - Nuance Enterprise Workstation (EWS) version 3.0 with PACSBridge 6.5.1
 - PowerScribe or EWS client can be run on the SecurView workstation or on a separate computer.

- PowerScribe bi-directional
 - Nuance/Dictaphone PowerScribe version 4.7 or higher with PACSBridge 4.7 1021 supports bi-directional open patient
 - PowerScribe client can be run on the SecurView workstation or on a separate computer.
 - Nuance RadWhere version 3.0.18.14 or higher
 - RadWhere client can be run on the SecurView workstation or on a separate computer.
 - Nuance PowerScribe 360 version 4.0.3.0 or higher
 - PowerScribe 360 (including Dragon SDK client edition 10) can be run on the SecurView workstation or on a separate computer.
- QDoc StudyViewer
 - Agfa QDoc StudyViewer version 5.5.1 or higher
 - StudyViewer client can be run on the SecurView workstation or on a separate computer.
- RadNet VDI
 - o Cerner Millenium RadNet VDI version 2007.18 or higher
 - RadNet VDI can be run on the SecurView workstation or on a separate computer.
- RadNet VDI prior to version 2007.18
 - o Cerner Millenium RadNet VDI versions prior to version 2007.18
 - RadNet VDI can be run on the SecurView workstation or on a separate computer.
- SecurView
 - SecurView DX Diagnostic workstation version 5-0-0 or higher
 - SecurView RT Technologist workstation version 6-0-0 or higher
- SecurView Serial Partner
 - o Currently, these partners include PenRad, MRS, and MagView.
 - Third-party application runs on a separate computer, with a serial cable connecting the SecurView workstation and the third-party application computer.
- Selenia AWS
 - Hologic Selenia Acquisition workstation version 3.3 or higher
 - Selenia AWS can run only on a separate computer.
- Spantel Audio Recorder
 - o Spantel Audio Recorder version 2.0 or higher
 - Audio Recorder can be run on the SecurView workstation or on a separate computer.

- syngo Workflow Portal Radiologist
 - Siemens syngo Workflow Portal Radiologist (with optional Voice) version 30 or higher
 - Portal Radiologist can be run on the SecurView workstation or on a separate computer.
- syngo Workflow ReadExam
 - Siemens syngo Workflow (formerly Novius RIS) ReadExam (with optional Voice) version 27.1 or higher
 - ReadExam can be run on the SecurView workstation or on a separate computer.

Table 1-4: Other Interface Partners

	Receives				Sends			
	Login	Logout	Open Patient		Login	Logout	Open Patient	
Agfa TalkStation*	✓	✓	✓		-	-	-	
Amicas Vision Series (v4.0-5.1, v5.5)	-	-	-		-	-	~	
Dolbey FusionDictate	-	-	✓		-	-	-	
Dolbey FusionExpert	-	-	✓		-	-	-	
Epic Radiant RIS*	✓	✓	✓		-	-	✓	
G2 Speech MediSpeech*	✓	✓	✓		-	-	-	
GE/IDX Imagecast*	1	✓	✓		-	-	-	
GE Centricity RIS-IC*	✓	1	1		-	-	✓	
Lanier Serial	-	-	✓		-	-	-	
MedQuist DocQvoice	-	-	√		-	-	-	
MagView	-	-	✓		-	-	✓	
MammaSoft	-	-	-		-	-	✓	
MaSc RIS	-	-	-		-	-	✓	
MedOutlook RIS	-	-	✓		-	-	✓	
MedQuist SpeechQ V1.2*	1	✓	✓		-	-	✓	
MRS	1	✓	✓		✓	✓	✓	
PenRad	-	-	✓		-	-	✓	
PowerScribe or EWS	✓	✓	✓		-	-	-	
PowerScribe bi-directional	✓	✓	✓		-	-	✓	
Nuance RadWhere	✓	✓	✓		-	-	-	
PowerScribe 360	✓	✓	✓		-	-	✓	
QDoc StudyViewer	✓	1	1		✓	✓	✓	
RadNet VDI*	1	✓	✓		-	-	-	
RadNet VDI prior to version 2007.18*	~	✓	~		-	-	-	
SecurView	✓	1	✓		1	1	✓	
SecurView Serial Partner	-	-	✓		-	-	-	
Selenia AWS	-	-	-		-	-	✓	
Spantel Audio Recorder*	-	-	1		-	-	-	
syngo Workflow Portal Radiologist*	_	-	-		-	-	✓	
syngo Workflow ReadExam	-	-	-		-	-	✓	

* Application Synchronization must be installed on the same computer as this third-party application. Application Synchronization can be installed and configured on a computer other than SecurView if necessary. m **Note:** Third-party application versions listed are the earliest versions of software validated by Hologic, usually the earliest version of the third-party application that supported the interface. Several third-party applications have more recent versions available that may not have been validated by Hologic.

While synchronization with newer versions of third-party applications is expected to work, their usage on the SecurView workstation may result in performance degradation, or there may be interface incompatibilities. If you have questions regarding support of a particular third-party application version, contact Hologic service.

m **Note:** If SecurView is running Windows 7 and you want to run an approved third-party application on SecurView, contact the third-party application vendor or Hologic service to determine if that specific third-party application is validated to run on Windows 7.

m **Note:** Additional interfaces are currently in development. Please consult your Sales Account Manager to check on a third-party application that is not shown above.

3.0 Configuring Synchronization on the SecurView

Below is an overview of the synchronization features in the SecurView 7-x workstation. Previous versions of SecurView support a subset of these features. For complete information on configuring synchronization within the SecurView workstation, please consult the SecurView User's Manual. For information on configuring a third-party application, please consult the appropriate documentation from the third-party.

For each user, automatic synchronization with a third-party application can be configured in the User Preferences by selecting the **User Profile** tab. The options on the tabs are as follows:

Patient Ma	anager l	Jser Prefe	rences	About			
Workflow	Image Pres	entation	Tools an	d Overlays	User Profile		
User P User N Last Na First Na E-mail Passwo Confirm	rofile ame (*) ame (*) ame (*) Address ord (*) n Password (*)	testuser User Demo Immediate Manual M			Synchronizatio User Name (*) Password (*) Confirm Password Synchronize w Con login and When openi When closin Ask me to se	externaluser	
Help			200	9-05-11 18:06	:40 User Name	: testuser	OK Cancel Apply

3.1. Synchronize with External Application (When opening a patient)

This section is relevant only if the third-party application supports receiving **Open Patient** messages (See tables above).

- If a user wants to trigger an **Open Patient** message to be sent from the SecurView workstation to the other application automatically, immediately upon opening every patient, then select the **When opening a patient** check box. Each user must decide if he/she wants to enable this automatic synchronization.
- If a user would prefer to control the timing of the sending of an **Open Patient** message from SecurView to the other application, there are a few other options:
 - Use the ReportFlow functional step Synchronize ReportFlow with external application. The Open Patient message to the other application will be triggered by the FlowNext key when the synchronize step is the next step in the ReportFlow.
 - After a patient is open for display on SecurView, press **R** on the keyboard.
 - After a patient is open for display on SecurView, click **Synchronize** on the toolbar to trigger opening the patient on the other application.
 - From the Administration **Patient List**, right-click a patient and then click **Synchronize Patient** in the context menu.

3.2. Synchronize with External Application (Ask me to select the study to synchronize)

This section is relevant only if the third-party application supports receiving **Open Patient** messages (See tables above).

- When this check box is checked, each time the Open Patient message is triggered on SecurView a dialog appears containing a list of studies available for that patient on SecurView. The user must select one study from the list to send in the Open Patient message.
- This setting is useful when more than one unread study for a patient is a common occurrence (e.g., mammography and ultrasound), and the user wants to control which study is sent in each Open Patient message.

3.3. Incoming Synchronization Requests (Notify if patient not available)

This section is relevant only if the third-party application supports sending **Open Patient** messages (See tables above).

- SecurView 6-0-6 introduced a new user preference to enable or suppress the display of an error message when an Open Patient message is received from a third-party application for a patient that is not available on SecurView.
- When this check box is unchecked, the review module will be closed with no warning message displayed if an Open Patient message is received for a patient that is not on SecurView.

3.4. Synchronize with External Application (When closing a study)

Currently there are no third-party application partners that can receive the Update Patient State message from SecurView.

At this time, do not check the When closing a study check box.

3.5. Synchronize with External Application (On login and logout)

If the third-party application supports receiving login and logout messages (See tables above), the **On login and logout** check box can be checked. Each user must decide if he/she wants to enable this automatic synchronization. The effect is that every time the user logs in or logs out of SecurView, a message will be sent to perform that operation automatically on the other application.

If synchronized login/logout is supported in either direction, <u>and the user name and</u> <u>password are different on the other application than on the SecurView</u>, enter the user name and password used on the other application in the **Synchronization Credentials** section. This section is enabled independent of the checked/unchecked status of the corresponding check box, in case SecurView is only going to receive login and logout messages from the other application.

3.6. SecurView and Third-Party Application Sharing a Monitor

When an approved third-party application is running on SecurView and is displayed on an additional monitor that is shared with the SecurView Patient List and/or the SecurView Multimodality Viewer, use <Alt+Tab> to toggle through the applications.

4.0 Enhancements and Corrected Problems

APPSYNC-162 – Application Synchronization 2.1.2 supports a configurable option for the Hologic SharedFile Partner application type, whether or not to delete a received XML file after reading it. The default configuration is not to delete the file, which means the sending application is expected to overwrite the file to send the next message.

APPSYNC-154 – Application Synchronization 2.1.1 corrected a socket cleanup issue that caused the software to consume an increasing amount of CPU time.

APPSYNC-41 – Application Synchronization 2.1 supports receiving OpenPatient messages from GE Centricity RIS-IC, allowing a RIS-driven workflow.

APPSYNC-56 – Application Synchronization 2.1 supports additional fields in the OpenPatient message sent to a Hologic SharedFile Partner. The fields to include are configurable.

APPSYNC-69 – The behavior for sending an OpenPatient message to Epic Radiant RIS has changed in Application Synchronization 2.1 such that Application Synchronization attempts to close all open studies in Radiant RIS before issuing the command to open the requested patient/study.

APPSYNC-70 – Application Synchronization may crash with an out of memory exception if the listening port receives random data. This is resolved in Application Synchronization 2.1.

APPSYNC-73 – Application Synchronization 2.1 supports sending and receiving OpenPatient messages with GE Centricity RIS-IC Precision Reporting.

APPSYNC-83 – Application Synchronization crashes while handling an OpenPatient message if Lanier Serial and another third-party application are configured, and the Lanier Serial Data String is configured for Patient ID only. This is resolved in Application Synchronization 2.1.

APPSYNC-142 – When Logout synchronization is requested with Epic Radiant RIS, the Epic application is terminated. In Application Synchronization 2.1, when Login synchronization is requested with Epic Radiant RIS, Application Synchronization activates a new instance of the Epic application if not already present, prior to sending the Login request. Previously, the Epic application was activated only on startup of Application Synchronization, so after a Logout synchronization, the Epic application was no longer available for future Login synchronization requests.

SCR 21970 – The operation to perform in MedQuist SpeechQ each time an Open Patient message is triggered on SecurView is configurable in Application Synchronization 2.0 and higher: Create/Add to Report or Order Selection.

SCR 20535 – If the Patient ID or Accession Number values do not match between SecurView and the third-party application, for example, if one value always has specific leading or trailing characters that the other does not have, adding and removing specific leading and trailing characters from every Patient ID or Accession Number value is configurable per connected application in Application Synchronization 2.0 and higher.

SCR 17741 – The Application Synchronization 2.0 and higher configuration user interface is a Windows user interface that is accessible whether Application Synchronization is installed on SecurView or a separate computer.

SCR 22355 – The Application Synchronization 2.0 and higher configuration user interface provides a Connected Application Tester, to test sending and receiving messages between Application Synchronization and a single connected application.

SCR 19758 – The interface with MedQuist SpeechQ version 1.1 is no longer supported in Application Synchronization 2.0 and higher.

SCR 17879 – The GE Imagecast module to activate when an Open Patient message is triggered is configurable in Application Synchronization version 1.6 and higher: Results Reporting, Clinical Exam Notes (CEN), or Clinical Information Notes (CLIN). CLIN requires GE Imagecast (Centricity RIS-IC) 10.5 or higher, and replaces CEN.

SCR 20876 – The window state to assign to a GE Imagecast module window upon opening is configurable in Application Synchronization version 1.6 and higher: Normal, Maximized, Minimized, OnTop, or TopMost.

SCR 20877 – The search strings used to identify open GE Imagecast windows are configurable in Application Synchronization version 1.6 and higher. The default GE Imagecast window title strings list contains: imagecast, centricity, ris-ic, oneview.

SCR 20372 – When a received OpenPatient message is missing the Accession Number field for one or more studies, Application Synchronization fails to pass on the message to the connected application(s). In Application Synchronization version 1.5 and higher the message is passed on if at least one study that matches the Study Filter settings contains Accession Number.

SCR 20162 – There is a known issue that causes a socket disconnect in TCP/IP based interfaces. This has been resolved in Application Synchronization version 1.5 and higher.

SCR 16277 – There is a known issue that prevents some SecurView TCP/IP Partners from sending responses to Application Synchronization. This has been resolved in Application Synchronization version 1.4 and higher.

SCR 17858 – When installing Application Synchronization version 1.2 on SecurView 6-0-x, the installer expects IIS to be enabled. In SecurView 6-0-0, IIS is disabled by default. The problem is corrected in version 1.3 and higher. Version 2.0 and higher do not use IIS.

SCR 16688 –The Lanier serial interface originally just sent accession number. In version 1.2 and higher, there is an option to select whether to send accession number only, patient ID (MRN) only or both.

SCR 16672 – When sending an OpenPatient Message from SecurView to the GE/IDX Imagecast module, the GE/IDX Results Reporting window comes up, but will always sit on top of the patient list, and/or Multi-Modality viewer. This has been corrected in version 1.2 and higher. Additionally, an enhancement was created to notify a SecurView user if the GE application does not synchronize to the next patient because sub-windows are open in the Imagecast module.

SCR 16346 – In the configuration web interface, when adding a second application of a type that does not allow more than one, after pressing the wizard's next button, the wizard becomes locked. If the user wants to go to a different part of the web site it is not allowed and must restart the configuration web interface. This has been corrected in version 1.2 and higher.

SCR 16438 – In the configuration web interface, in some instances, pressing the text 'Next' or 'Previous' instead of the arrow icon would not advance the user as expected. This has been corrected in version 1.2 and higher.

SCR 16636 – If the PowerScribe application is installed on a separate computer and the shared directory is not on the SecurView workstation, the Application Synchronization would not use the new path entered in the configuration web interface. This has been corrected in version 1.2 and higher.

SCR 16785 – When upgrading to version 1.1, not all configured applications were brought over properly. This has been corrected in version 1.2 and higher.

SCR 15893 – When sending an open patient message to a third-party Application that can accept multiple accession numbers, all of the accession numbers for the current patient would be sent instead of just the accession numbers for the unread studies. In version 1.1 and higher, there is a service option to configure whether to send all studies or just unread studies.

5.0 Known Issues

SCR 16294 – There is a known issue running the MaSc as the SCR user on the SecurView. The SCR user should be given Administrator rights in Windows before installing the MaSc.

SCR 23834 – During the first login to the SecurView application as the service user after a reboot, if the Configure button on the Settings tab is used to open the Application Synchronization Configuration Interface, the interface will be hidden behind the SecurView application. Click **OK** at the bottom of the SecurView Settings tab to bring the interface to the forefront.

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