SecurXchange® Router
Streamline your digital mammography workflow

Streamline your digital mammography workflow with the SecurXchange Router

Many sites face workflow challenges related to the transmission of DICOM objects. Complex environments that include multiple acquisition gantries, additional modalities and a distributed reading environment demand sophisticated image routing tools. With Hologic 3D Mammography™ systems and Hologic Clarity HD™ high-resolution 3D™ imaging, it becomes even more critical that sites manage image distribution efficiently and minimize the burden on their networks.

The SecurXchange Router offers solutions to complex workflow needs, including pre-fetching of prior studies and intelligent routing of DICOM objects.

SecurXchange features/capabilities

- Pre-fetch DICOM images or other objects from long term storage
- Post-fetch DICOM images on demand
- Route DICOM objects to configured destinations according to advanced routing rules

Obtain prior images anytime, anywhere

Radiologists must have access to prior mammography images for interpretation. Many sites rely on pre-fetching, which is the ability to automatically retrieve prior studies based upon communication with a Radiology Information System (RIS) and PACS. Typically, pre-fetching is configured to occur during non-working hours so as not to disrupt workflow or place a burden on the hospital network. This is particularly important for Hologic 3D Mammography™ studies due to the size of the datasets involved. The SecurXchange Router utilizes the DICOM Modality Worklist via the HL7 interface to allow for highly configurable pre-fetching and routing of images.
Post-fetching may be configured to allow prior studies to be retrieved on demand.

Configurable routing for optimal workflow

The SecurXchange Router can be configured for multiple functions. It can pre-fetch from multiple archives and route those images to several locations. This allows facilities to customize the flow of images according to their individual needs. SecurXchange Router can route DICOM objects to any configured destination based on the content of DICOM attributes.

Options for advanced workflow and visualization

- **HL7:** The HL7 option allows for pre-fetching of prior images the night before an exam when advanced communication with Radiology Information Systems (RIS) or Electronic Medical Record (EMR) systems is required. For instance, if information about an exam is not available through DICOM Modality Worklist until the time a patient checks in, the HL7 option allows for communication with the RIS or EMR so that pre-fetching can be scheduled at a configurable time before the exam.

  The HL7 option can also be used to create a DICOM Modality Worklist for sites that have a scheduling system that does not have this capability but that supports HL7 communication.

- **3DView™ mammography viewer:** 3DView is a licensed web-based viewer that supports display of mammography images for use by technologists, surgeons or referring physicians. It can be added to the SecurXchange Router to view either 2D or 3D™ images (in BTO format) that are resident on the router from any suitable computer. Note 3DView is not intended for primary interpretation.

SecurXchange Specifications

Due to the customizable nature of this product, specifications can vary slightly based on the final configuration.

Capabilities:

- Compatible with all DICOM objects, multi-modality, vendor-agnostic
- Image lossless compression, transmission and decompression
- Pre-fetching and routing of prior images
- Support of multiple MWL
- Prioritization of prior sources when retrieving from multiple sources

The Hologic Connect™ and Network Connection:

The SecurXchange Router is equipped with Hologic Connect, providing a secure, remote connection to the Hologic Technical Assistance Center. Network connection via quad Gb NIC.

Service and Support:

- Warranty: 5-year hardware and limited telephone/software support
- Optional Service: Comprehensive software support and upgrades

Hardware Specifications:

- Processor: Intel® Xeon® 2600 v3 (6-core / 12-thread)
- Chipset: Intel C612 series
- Memory: 64GB RAM
- Redundant fan and hot plug power supply
- Near-line SAS hard drives
- Integrated RAID storage

Physical specifications:

- Form factor: 2U rack mountable
- 3.44" H (8.73 cm) x 17.49" W (44.4 cm) x 26.92" (68.4 cm)
- Rack weight: 64.3 lbs (29.2 kg)
- Voltage: 100–240 VAC, autoranging, 50/60 Hz
- Wattage: 750 W (per power supply)

Software specifications:

LINUX OS

Options:

HL7 integration and license

- Additional 3DView™ viewer licenses
- MRN configuration
- Data migration