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 the introduction of Hologic 3D Mammography and the resulting large datasets, 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. 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. SecurXchange Router utilizes DICOM Modality Worklist 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, then 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 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 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.

Please contact your Hologic Account Manager for more details.
A Hologic Sales Connectivity Specialist is available to help you evaluate how SecurXchange Router could facilitate workflow at your facility.
Specifications

Capabilities:
• Compatible with all DICOM objects
• Image lossless compression, transmission, and decompression
• Pre-fetching and routing of prior images
  – Including Multi-modality
  – From multiple PACS
  – To unlimited Remote AE titles

System Hardware Specifications:
• Intel® Xeon® E5-2620 2.00 GHz, 15 M cache,
• 7.2 GT/s QPI, turbo, 6 C, 95 W, max mem 1333 MHz
• At least 16 GB memory 2x 8 GB RDIMM, 1333 MT/s, low volt, dual rank, x4 data width
• Dual hot-plug redundant power supply
• Redundant fan
• Near line SAS hard drives
• Integrated RAID 1 (mirrored) with 1 TB usable storage capacity

Software Specifications:
• LINUX OS

Hologic Connect:
All SecurXchange Routers are equipped with Hologic Connect™, which provides a secure, remote connection between Hologic’s Technical Assistance Center and the customer.

Options:
• HL7 license
• 3DView mammography viewer

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Physical Specifications:
• 2U Rack Mountable Head Unit
  – D x W x H with bezel attached
  29.75” x 17.48” x 3.44”
  75.58 cm x 44.40 cm x 8.73 cm
  – Rack Weight: 64.37 lbs (29.2 Kg)*
• Power Supply
  – APC Smart-UPS 1500VA USB & Serial RM 2U 120V
• Voltage
  – 100-240 VAC, autoranging, 50/60 Hz
• Wattage
  – 750 W (per power supply)

Environmental Specifications:
• Heat Dissipation
  – Heat Dissipation: 2891 BTU/hr maximum
    (750 W power supply)
• Operating Environment
  – 50°F to 95°F (10°C to 35°C)
  – 10% to 80% humidity (non-condensing)
  – Altitude: -50 ft to 10,000 ft (-15.2 m to 3,048 m)
• Non-Operating Environment
  – -40°F to 149°F (-10°C to 60°C)
  – 5% to 95% humidity (non-condensing)
  – Altitude: -50 ft to 35,000 ft (-15.2 m to 10,668 m)

*Maximum configuration