SOLUTION

Image Routing & Prefetching

ImageGrid's enterprise class super router and data manager increases a facility's efficiency especially in heavy image volume environments where the central system is overloaded by routing tasks, tag conflicts, and MRN reconciliation issues.

Overview

In today's medical facilities, there are a wide variety of modalities from multiple vendors, each with their own proprietary software which does not communicate well with the other third-party systems.

When time is of the essence for making a diagnosis, experiencing delays in reading both screening and diagnostic exams because of image routing is harmful to productivity. In Radiology, the quest for the most rapid turnaround time is integral to workplace optimization.

Candelis's ImageGrid streamlines facility workflow and provides a strong, fast solution for routing and prefetching studies

Candelis's ImageGrid acting as a uniform platform where all the medical images can easily flow between different providers, while saving valuable time during transfer.

DICOM Router

ImageGrid acts as an enterprise class super router and has been widely recognized by end-users as well as top-tier OEMs as the most robust and feature-rich DICOM Router available in the market.

Any facility that moves a high volume of studies, whether within the same, external, or unaffiliated facilities, can now move images more efficiently, simultaneously, and in parallel.
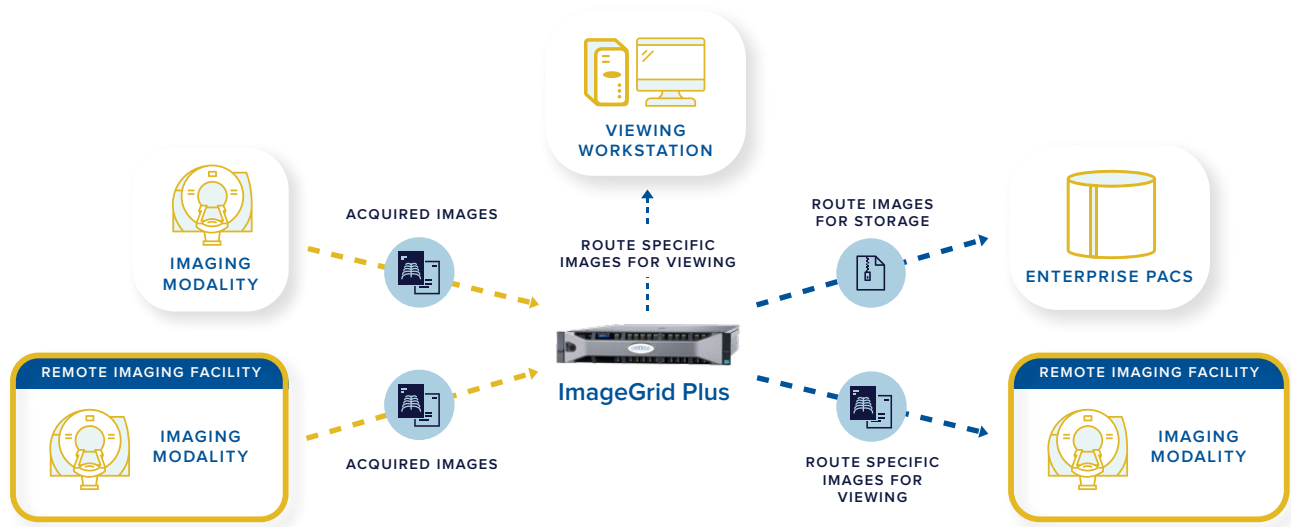
ImageGrid enables users to easily establish any number of DICOM routing rules and automatically route studies or images to any number of DICOM destinations. Many customers have found ImageGrid's DICOM routing engine to be significantly more powerful and feature-rich than that of their legacy PACS.

ImageGrid's DICOM routing engine can route large volumes of studies to multiple workstations, PACS systems or tele-radiology service providers.

ADDITIONAL IMAGEGRID FEATURES INCLUDE:

- Enhanced Prefetching
- Dynamic Tag Morphing
- Quality Control/Reconciliation Workflow
- Track workloads and tasks and provide improved statistical reports

All this will improve the system's efficiency and increase the workflow speed.

ACQUIRED IMAGES

IMAGING MODALITY

ROUTE SPECIFIC IMAGES FOR VIEWING

VIEWING WORKSTATION

ROUTE IMAGES FOR STORAGE

ENTERPRISE PACS

REMOTE IMAGING FACILITY

IMAGING MODALITY

ACQUIRED IMAGES

ImageGrid Plus

ROUTE SPECIFIC IMAGES FOR VIEWING

REMOTE IMAGING FACILITY
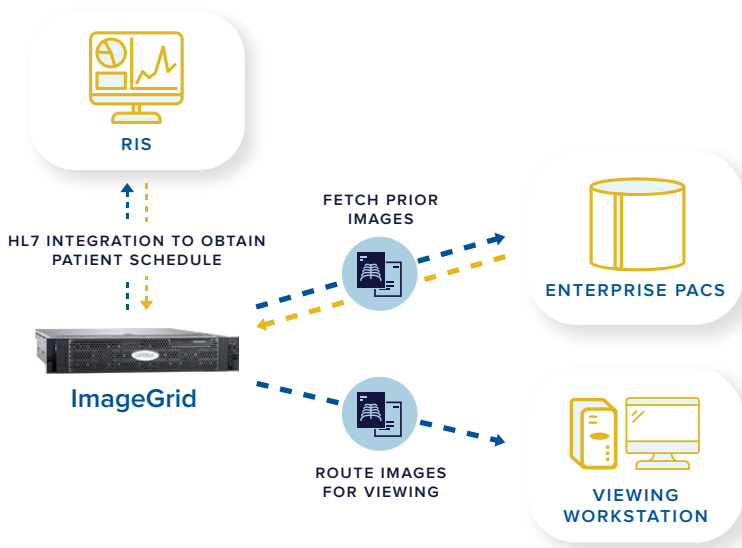
IMAGING MODALITY

DICOM Prefetching Server

ImageGrid has also received recognition by end-users and top-tier OEMs as a robust and feature-rich prefetch server. ImageGrid's prefetch engine can be easily configured to query and route relevant priors from any number of PACS systems and to any number of DICOM destinations. The ImageGrid can be integrated with an existing RIS, HIS, or EMR via HL7. This integration will allow the prefetch command to be triggered by incoming HL7 messages.

In mammography, prefetch of studies prior to the patient's arrival for their current exam study is essential to an efficient workflow. ImageGrid is able to fetch prior mammography and tomosythesis images the night before from an existing PACS or archive and sending them to the radiologist reading workstation for immediate review once the current exam is acquired.

Fully Integrated Workflow

ImageGrid is the ideal and most cost-effective solution for multi-location, multi-physician and multi-modality Diagnostic Imaging Centers and clinics. Any number of modalities at any number of locations can easily send images and patient data to their respective storage/server system for archiving and subsequent routing (push and pull) to/from workstations on the local area network (LAN) or between different locations securely. A bi-directional automated routing policy allows for two ImageGrid systems to perform back-up of all studies efficiently during off-hours to optimize bandwidth utilization between locations. In this scenario, each facility has a full-scale ImageGrid on-site and ImageGrid's intelligent software manages the flow of data between facilities based upon policies and guidelines.

RIS

HL7 INTEGRATION TO OBTAIN PATIENT SCHEDULE

FETCH PRIOR IMAGES

ENTERPRISE PACS

ImageGrid

ROUTE IMAGES FOR VIEWING

VIEWING WORKSTATION

Efficiency Tools

ImageGrid's workflow efficiency tools include:

- Easy integratation with multiple clinical IT environments (RIS/HIS/EMR/PACS)
- Self-monitoring, automated reporting
- Proven ability to handle hundreds of millions of images
- Web-based system administration, dashboard, and operator interface

- SSL Connection Support
- DICOM encapsulation to attach non-DICOM files (PDFs, JPEGs, TIFFs, etc.) to studies
- Patient merge / split / linking capability
- Seamless, graceful handling of same MRN, different patient
- Offline routing facility