ImageGrid™ PACS

Highlights

- RAID 5 archiving with initial capacity ranging from 1.5 terabytes (TB) to 12.75 TB, easily expandable to the tens of terabytes

- Optional web-based DICOM viewer

- Multiple AE titles on the system for archive partitioning

- Manual and Automated routing: DICOM, ftp, rcp, sftp

- No additional licensing for adding modalities and workstations

- Embedded database with a proven ability to handle 100 million images

- Ability to attach encapsulated user documents (e.g. a PDF report) in DICOM format to the study and archiving

- Automatic rule-based and HIPAA-compliant storage retention

- Automated "pre-fetching" of studies

- Optional Modality Worklist (MWL), Modality Performed Procedure Step (MPPS) and Departmental Scheduling System (DSS) support

- Optional embedded HL7 support for integration with RIS/ HIS

- Integration with Sony AIT tape library as an option for back-up for HIPAA Compliance

- Web-based system administration and operator interface

ImageGrid™ PACS Appliance

Price, Performance and Reliability

The paradigm shift that was needed to significantly lower the cost of PACS has occurred. Introducing the ImageGrid™ PACS Appliance: A fully integrated multi-modality PACS, compatible with most DICOM viewing workstations, including leading volumetric imaging workstations. With the feature-rich ImageGrid PACS Appliance, you can reduce your IT costs while benefiting from many of the features and capabilities that are important to your operations.

64-Slice CT & MRI Studies

With ImageGrid, managing and archiving studies from data intensive modalities like 64-Slice CT and MRI has become easier and less costly, allowing imaging centers to focus on patient care and profitable growth. ImageGrid's integrated platform and embedded database has been optimized for large 64-slice CT studies, some of which can be as large as 5 gigabytes.
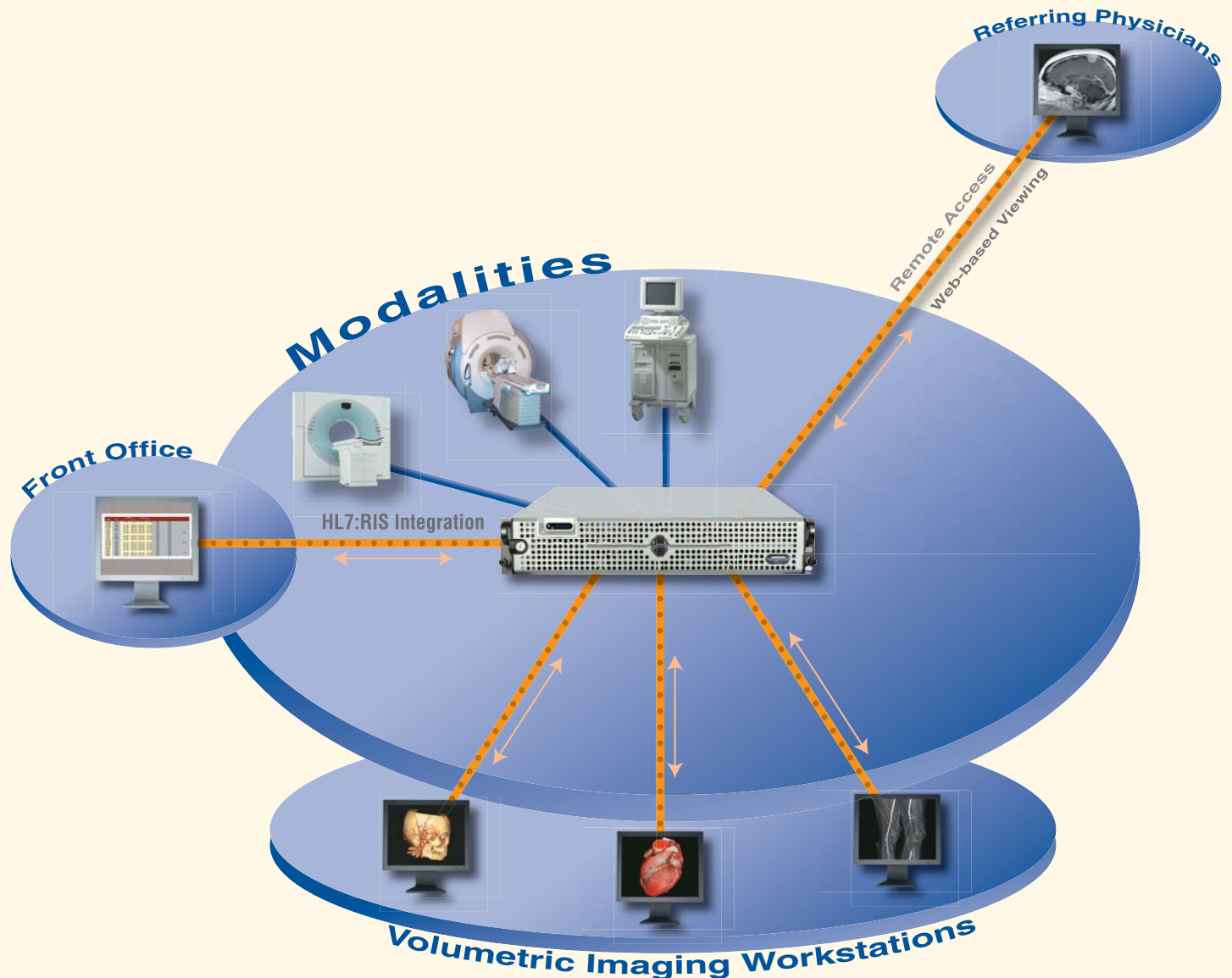
Versatility

ImageGrid PACS Appliance is extremely versatile. With ImageGrid, hospitals, diagnostic imaging centers, multi-location practices and multi-physician clinics as well as breast imaging centers have been able to cost-effectively implement PACS and keep more and more studies on-line and therefore easily accessible to physicians. In hospitals or facilities with an existing PACS, ImageGrid has also been deployed as a "dedicated" PACS for 64-Slice CTs, fully compatible with an enterprise PACS.
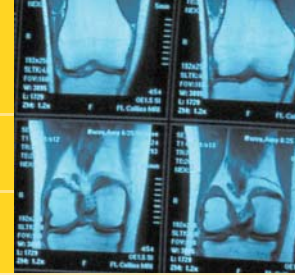
CANDELiS™

Single Location Multi-Modality Diagnostic Imaging Centers and Clinics

ImageGrid can be an ideal cost-effective PACS for multi-modality Diagnostic Imaging Centers and clinics. Any number of modalities can easily send images to ImageGrid for archiving and subsequent routing (push and pull) to/from workstations on the network. A fully integrated optional web-based DICOM viewer can also provide referring physicians with non-diagnostic viewing capabilities. With HIPAA mandating duplicate copies of patient files including imaging studies, a second ImageGrid can be deployed at a secure off-site locations and a copy of all studies can be routed to the second system automatically based on rules, policies and guidelines, which can easily be set up through the web-based user interface.

Referring Physicians

Remote Access
Web-based Viewing

Modalities

Front Office

HL7:RIS Integration

Volumetric Imaging Workstations

"Dedicated" PACS for a 64-Slice CT in facilities with or without PACS

ImageGrid has a well established track record as a "dedicated PACS" for the data intensive 64-slice CT in environments with or without PACS. A 64-slice CT can generate several times more data as compared to most other modalities, and in facilities with PACS, this has led to the rapid filling of the costly yet meager archive. By "isolating" or "decoupling" the 64-slice CT from the legacy PACS and routing it instead to the significantly more cost-effective and always-online ImageGrid PACS, administrators are able to extend the life of their legacy PACS' costly storage. The legacy PACS can still DICOM query/retrieve the 64-Slice CT studies if necessary.
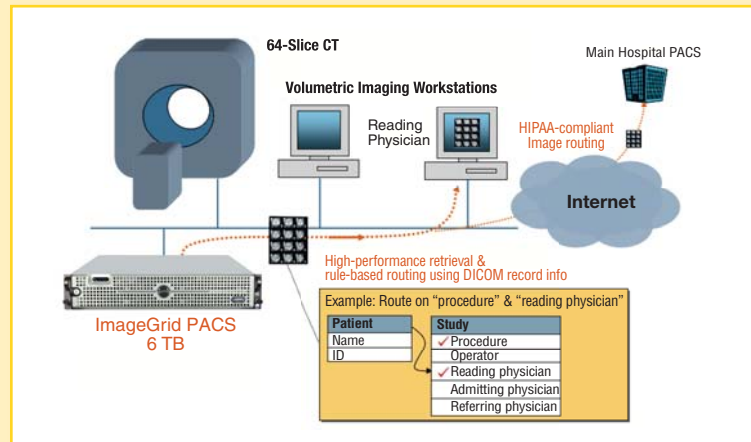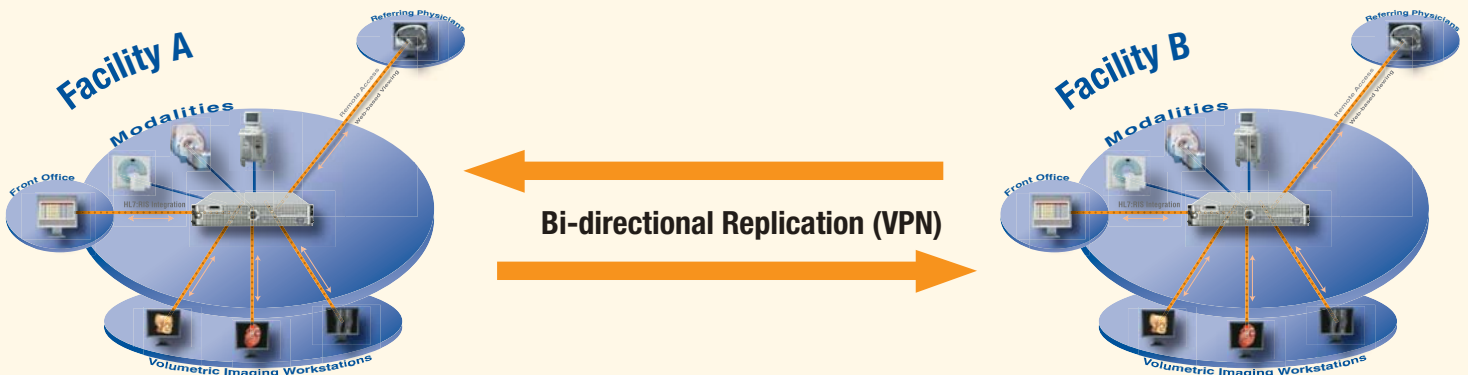

Figure 1: "Dedicated" PACS for a 64-Slice CT in a large university hospital with existing enterprise PACS

Multi-Location, Multi-Physician and Multi-Modality Diagnostic Imaging Centers and Clinics

ImageGrid can be an ideal cost effective PACS and teleradiology server 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 to their respective ImageGrid for archiving and subsequent routing (push and pull) to/from workstations on the local area network (LAN) or between different locations via Virtual Private Networks (VPN) connectivity. All studies can be effectively backed up for HIPAA compliance through the automated, rule-based routing to the second system or designated system if there are more than two systems. In this scenario, each facility has a full-scale ImageGrid PACS on-site and ImageGrid intelligent software manages the flow of data between facilities based on rules and guidelines. A fully integrated optional web-based DICOM viewer can also provide referring physicians with non-diagnostic viewing capabilities.

System Features

Built-in Storage
- 6-drive RAID 5 disk array for head unit
- 15-drive RAID 5 disk array for expansion units
- CD reader/writer–for file transfers and backup

Setup and Configuration
- Complete Web-based user interface for system administration

Network Connection
- Dual NIC

Optional Kits & Features
- Web-based DICOM Viewer
- Uninterruptible Power Supply (UPS)

3D Viewing
- Compatible with most leading 3D Volume Rendering workstations

CPU & Memory
- Dual Core Intel® Xeon® 5140
- 4GB 667 MHz Dual Ranked DIMMs
- 1333 Mhz front side bus
- 4MB of level-2 cache

Warranty
- 1 Year Hardware with Next Business Day on-site (US and in over 100 countries)
- 1 Year Software telephone/email support including updates
- Hardware and Software Extended Service programs are available

Specifications

Storage Capacities
- 1.5 TB Raw (0.9 TB Usable) to 12.75 TB Raw (9.8 TB Usable) RAID 5 configurations expandable to tens of terabytes

Agency Certifications
- BSMI (Taiwan), CCC (China), CAN/CSA, CSAus, FCC (U.S.), CE Mark, C-Tick (Australia/New Zealand), ICES (Canada), MIC (Korea), SABS (South Africa), VCCI (Japan), UL 60950-1, ISO 9001

Chassis
- 2U Rack Mountable Head Unit
  - 29.31" (74.4 cm) D x 17.5" (44.43 cm) W x 3.4" (8.64 cm) H with bezel attached
  - Rack Weight: 50.71 lbs (23 Kg) Maximum configuration
- 3U Rack Mountable Expansion Units
  - 18.9" (48.01 cm) D x 17.57" (44.63 cm) W x 5.16" (13.11 cm) H with bezel attached
  - Rack Weight: 78 lbs (35.37 Kg) Maximum configuration

Power
- Power Rating: 100-240 VAC (actual 90-264 V), 47-63 Hz, auto-sensing
- Input Current: 7.2A (RMS)/100 VAC, 3.6A (RMS)/200VAC
- Wattage: 488 W Maximum continuous; 550 W peak

Heat Dissipation
- 1440 BTU/hr (maximum)

Operating Environment
- 50ºF to 95ºF (10ºC to 35ºC)
- 20% to 80% humidity (non-condensing)
- Altitude: -50 ft to 10,000 ft (-16m to 3,048m)

Non-operating Environment
- -40ºF to 149ºF (-10ºC to 60ºC)
- 5% to 95% humidity (non-condensing)
- Altitude: -50 ft to 35,000 ft (-16m to 10,600m)