

ImageGrid™ Plus

INFO SHEET

Candelis Creates an Enterprise Class Router and Data Management Server



Overview

Healthcare providers today need access to more and higher resolution images across their health network. While these modern modalities generate images of unprecedented quality, the large data size of these images can overwhelm existing infrastructure and compromise networks and legacy PACS systems. The latest Candelis platform helps meet that demand – driving productivity and innovation across the network.

Multimodality imaging has become increasingly important in medical imaging to improve diagnostic accuracy. Yet, the traffic of images going through your healthcare network is incredibly high and can impair your facility network.

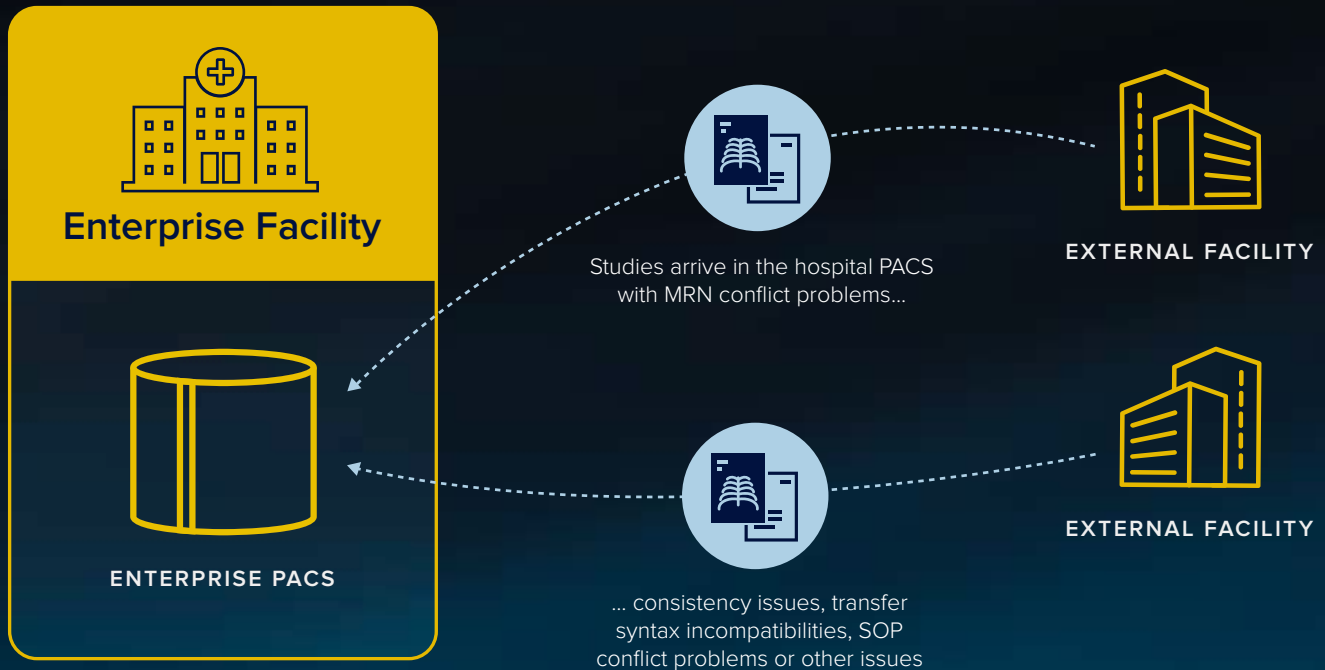
“Our entire healthcare system was transformed due to Candelis. From once being burdened with multiple facilities with numerous modalities and sometimes different patient data, we have now been able to streamline at one central data center, and increased our efficiency and accuracy.”

– **KIMBERLY MCKISSON,**
Image Management and Radiant Services,
Duke University Hospitals



INTRODUCING IMAGEGRID PLUS

Developed as a high-throughput router, Candelis’s new ImageGrid Plus server can accommodate extreme workloads at busy high-volume sites. ImageGrid Plus is an optimized, ultra-high performance server especially designed to accommodate environments with images from 1 to over 1,000 modalities. If you have a heavy image volume environment and the central system is overloaded by routing tasks, tag conflicts, and MRN reconciliation issues, a faster server will not only make your environment more efficient, but will ultimately save you operating costs too.



Benefits



ELIMINATE DELAYS

Capable of handling a massive number of concurrent requests, Candelis's new ImageGrid Plus ensures fast, efficient and reliable delivery of images.

Using solid state disk technology and a ultra-fast network card (10 GbE), healthcare organizations will be able to transfer images and data extremely fast and gain a competitive advantage from a clinical, security, financial, and operational perspective.

The new ImageGrid Plus server enables fast and concurrent delivery of even the largest studies across the entire health system and provides organizations the ability to achieve the highest levels of business continuity. Gone are the complexities of traditional routing – and the manual tasks required to cope with them. It is the perfect solution for enterprises that experience high traffic, and heavy file loads for multiple, simultaneous jobs.

ATTRIBUTES

- Ultra high-performance software & hardware
- Rule-based tag morphing capabilities to address MRN consistency issues, automated Quality Control, and anonymization profiles
- Extensive parallelization configurability to accommodate system load-balancing
- Focal point for modifying study metadata and ensuring transfer syntax consistency
- Intelligent parsing and routing of studies, series, and individual instances
- Extensive notification infrastructure – text or email – to provide timely notification concerning workflow, hardware, and software issues
- Cost-effective, and efficient solution for sharing data with radiologists, surgeons, physicians, nurses, and technologists
- ImageGrid Plus server can function as one point of change for multiple modalities

EASY AND EFFORTLESS TAG MORPHING

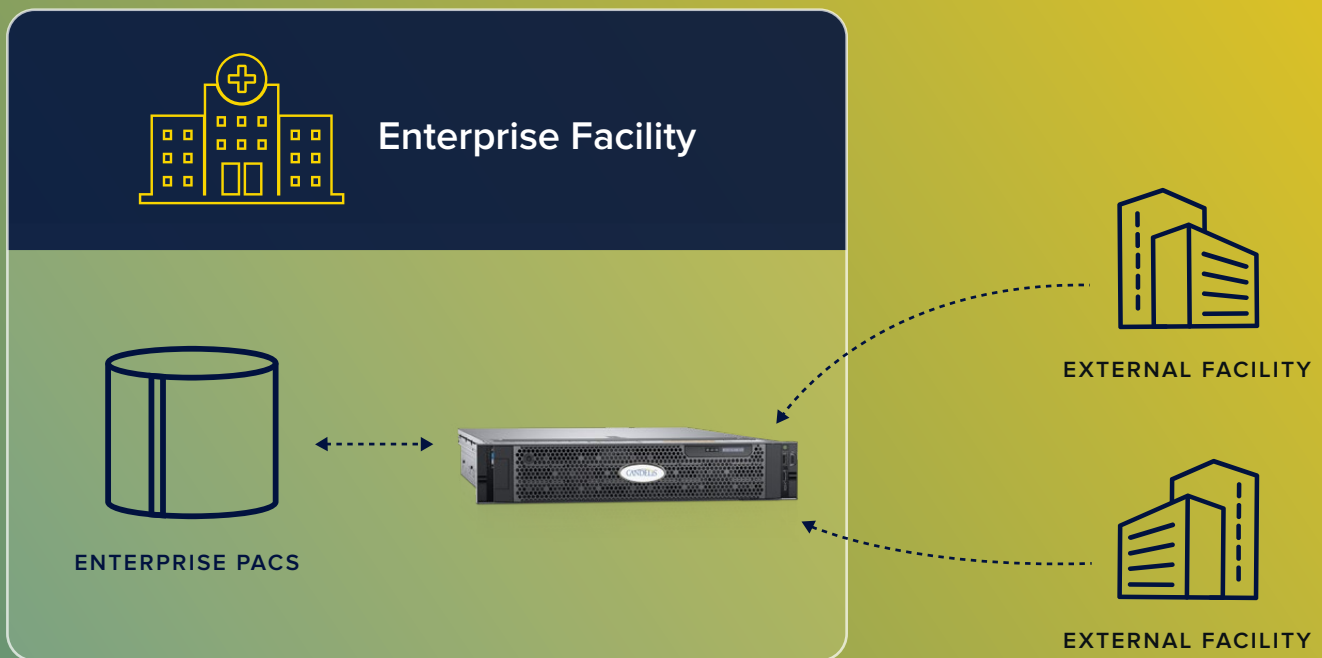
ImageGrid Plus has policy-based tag morphing capabilities to address a large number of customer needs. Automatically changing externally generated studies meet your healthcare network's conventions will eliminate the hassle of administering individual workflows at your modalities. The proprietary Dynamic Tag Morphing feature enables the retrieval of prior images using domain-sensitive policies and reconciles all relevant images for consistency, thereby ensuring that physicians possess all of the relevant files for their diagnosis.

At the heart of the system is a sophisticated rule-based engine, enabling you to define and apply one or more rules to collections of studies. Tag morphing capabilities include pre/post-fetch dynamic morphing, inbound and outbound morphing, QC-related morphing and anonymization templating.

For example, if particular tags create issues on your PACS and cause the study to be rejected, Candelis's powerful policy-based morphing facility can modify the tags in those studies without losing critical information in the study (e.g., originating facility). This is especially useful for facilities obtaining many external studies that wish to permanently mark studies to help them identify the originator.

Candelis's tag morphing capabilities are generalized for anonymization. Profiles are provided for industry-standard anonymization, but they can also be customized for particular scenarios. Since they are rule-based, different rules can be applied to different study types or configured on a by-destination basis.

ImageGrid Plus off-loads the burden from your existing systems, and ensures that the right studies are in the right place at the right time, eliminating MRN conflicts.



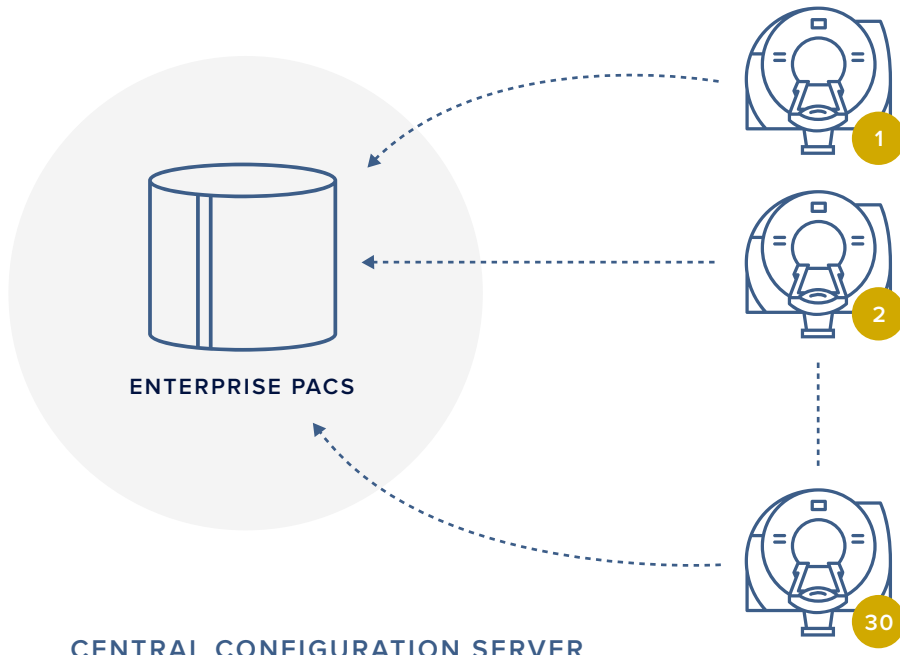


Self-Managing

ImageGrid Plus manages itself with intelligent software. The self-monitoring system will deliver continuous operations throughout your entire healthcare network. The extensive notification infrastructure either via SMTP or ASTRA™, which supports text or email messages, provides information concerning any hardware or software issues requiring attention.

ImageGrid Plus's capabilities can be leveraged to split-off specific objects (e.g., SR objects) that are rejected by some PACS systems and deliver those objects to a different destination.

Configuring a single CT
is not difficult



CENTRAL CONFIGURATION SERVER

The ImageGrid Plus can become your central configuration server for your enterprise, effectively enabling you to administer your modalities and other DICOM systems from a single server. Instead of the hassle of making the same changes at multiple modalities when problems arise at your PACS, you can let the modalities generate data how you choose and administer and shape the data that reaches your PACS at one point only - the ImageGrid Plus.

Configuring 30+ of them
separately is impractical



Candelis ImageGrid™ Plus Specifications

System Features

BUILT-IN STORAGE

- Head Unit
 - 2-drive standard
 - 8-drive capacity

SETUP AND CONFIGURATION

- Comprehensive web-based user interface for system administration

NETWORK CONNECTION

- Quad-Port Gb
- Dual-Port 10 Gigabit SFP+

OPTIONAL FEATURES

- HL7 Support for integration with 3rd party RIS, HIS or EMR
- ASTRA integration for transfer, sharing, report and key image distribution, browser-only study visualization, backup/restore, archive/retrieve, and disaster recovery

CPU & MEMORY (MINIMUM CONFIGURATION)

- Standard Dual Processor
- 2x 12-core / 24-thread Intel Gold family
 - 16.5 MB L3 cache
- 256 GB DDR4 2666 MT/s

WARRANTY

- 1 Year Hardware with Next Business Day on-site (US and in over 100 countries)
- 1 Year Software telephone and e-mail support
- Extended Service program providing both Updates and Upgrades to in-service customers

STORAGE CAPACITIES

- Head Unit

Specifications

- 2.9 TB Raw (1.4 TB Usable) RAID 1 to 27.9TB Raw (21.0 TB Usable) RAID 6 configurations

REGULATORY CERTIFICATIONS

Candelis products have the following certifications:

- Electromagnetic Compatibility (EMC) and Product Safety compliance based on International (IEC and CISPR standards) and applicable national standards
- Compliant with the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU and REACH regulations
- CE certification through NSAI
- Candelis Inc. is certified to ISO 13485:2016 as well as MDSAP requirements through NSAI

CHASSIS

- 2U Rack Mountable Head Unit
 - 3.42" H x 17.09" W x 26.72" D (in)
 - 86.8 H x 434.0 W x 678.8 D (mm)
 - Rack Weight: 73 lbs (33.1 Kg) maximum configuration

POWER

- Power Rating: 100 - 240 VAC, 50 – 60 Hz (input range 90 – 264 V, 47 - 63 Hz)
- Input Current: 2A at 220 VAC, 4.1A at 110 VAC, 50 - 60 Hz
- Head Wattage: 444 W input, 637.4 W maximum

HEAT DISSIPATION

- Head: 1515 btu/h, 2174.9 btu/h (maximum configuration)

OPERATING ENVIRONMENT

- 50°F to 95°F (10°C to 35°C)
- 10% to 80% relative humidity with 84.2°F (29°C) maximum dew point (non-condensing)
- Altitude: 10,000 ft (3,048m) maximum
 - For altitudes above 3117 ft, maximum operating temperature is de-rated 1°F/547 ft (1°C/300 m)



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