Centricity™ Universal Viewer Cross Enterprise Display:
Providing radiologists with comparison data from affiliated organizations
Solution Brief

By:
Alexander Heck
Sr. Product Manager
Cross Enterprise Display
GE Healthcare IT
Alexander.Heck@med.ge.com

Reeti Chauhan
Business Analyst
Cross Enterprise Display
GE Healthcare IT
Reeti.Chauhan@ge.com
# Table of Content

Introduction .................................................................................................................................................. 3  
Key terminology ......................................................................................................................................... 3  
Remote Study Display .................................................................................................................................. 4  
Patient Matching ......................................................................................................................................... 4  
IHE Patient Identifier Cross-referencing (PIX) ....................................................................................... 5  
Deployments supported ............................................................................................................................... 7  
Viewing images from a non-GE PACS/VNA ............................................................................................. 8  
Requestor Cache option ............................................................................................................................... 10  
Smart Relevancy ......................................................................................................................................... 11  
Cross Enterprise Display with Cross-Enterprise Document Sharing (XDS) ............................................ 11  
  HL7 CDA with XDS ..................................................................................................................................... 13  
  Role Based Access Control (RBAC) with XDS ......................................................................................... 13  
DICOM SR .................................................................................................................................................. 14  
Cross Enterprise Display Health Status Indicator .................................................................................... 14  
Patient Demographic Matching capability ................................................................................................. 14  
Cross Enterprise Display version compatibility ......................................................................................... 15  
Number of supported providers .................................................................................................................. 15  
Language support ....................................................................................................................................... 15  
Cross Enterprise Display supported configurations ................................................................................. 16  
Pre-requisites .............................................................................................................................................. 17  
Limitations in the current release ............................................................................................................... 17  
Hardware requirements and how to scale accordingly ............................................................................... 17  
FAQ ............................................................................................................................................................. 18  
Glossary ...................................................................................................................................................... 18
Introduction

Centricity™ Universal Viewer delivers a powerful unified workspace for radiologists and other clinicians. Universal Viewer brings together intelligent tools, enhanced usability and access, advanced visualization and breast imaging to help optimize productivity.

Unlike disparate PACS and 3D systems, Universal Viewer helps to increase efficiency by simplifying information access with a single image repository across 2D and 3D studies, enabling oncology and other specialty work flows, with easy access to prior exams.

Universal Viewer is available for installation in a virtual environment to help organizations optimize the use of their hardware.

Healthcare organizations across the globe have an increased need to gather a patient’s historical data, including exams across geographic regions or affiliated specialty care facilities. In today’s complex healthcare environment, patients often seek care at multiple points of service. This may result in a patient’s imaging data being stored in different DICOM™ sources, possibly with different patient identifiers.

Cross Enterprise Display provides radiologists access to the patient’s historical imaging data for comparison across affiliated organizations.

Cross Enterprise Display brings the patient’s history to the viewer and makes it available via the timeline, Study Selector and Patient Folder. From any of these locations the user can launch the image for side by side comparison with the primary exam. The viewer tools can be used on the remote comparison, however the remote comparison is read only. The remote images are streamed from the source avoiding the need to move images around the network and eliminating the need for complex synchronization techniques.

Cross Enterprise Display is a feature of Universal Viewer developed by GE Healthcare IT to help improve access to remote studies. It does this by integrating the solution into the radiologist’s existing workflows allowing them access to view images side by side without having to launch another viewer.

Key terminology:

- **Requestor**: The entity querying for patient and exam information from other sites configured in a cross-enterprise setting
- **Provider**: The entity providing patient and exam information when requested from a trusted site
- **XBUS**: Forms the communication layer used to pass information between the Requestor and Provider
- **PIX**: Patient Identifier Cross-Referencing

Figure 1.0 Basic Requestor & Provider flow
Remote Study Display
Information about remote studies is integrated into the radiologists existing workflows. Remote studies are clearly displayed within the Timeline, Study/Series Selector, Navigator, Viewport and the Patient Folder. Remote studies are indicated with an icon (see Figure 1.1, highlighted indicators). When a user hovers over the Timeline tile, the remote institution or source provider information is displayed. The institution information can be configured so that it is captured from DICOM tag (0008,0080) or a specific name can be configured for each Source. Remote comparison studies can also be saved with Bookmarks and Conference Display Protocols.

Patient Matching
Cross Enterprise Display matches patients between the Requestor and Providers by leveraging one of two methods. The first method, which is less complex, leverages a single issuing authority across all the participating sites. In this method, Cross Enterprise Display will search each Provider for an exact Patient Identifier (PID) match. If the patient has information in the remote site, Cross Enterprise Display will retrieve that patient history and present it to the viewer.

The other method addresses the needs of multiple sites with multiple issuing authorities. In this case the Cross Enterprise Display leverages an IHE PIX/eMPI for patient matching across the participating entities. Upon opening a local primary exam, Cross Enterprise Display makes an HL7 v2 query to an existing IHE PIX/eMPI passing the patient ID (PID) of the local exam. If the PIX manager has other IDs for the same patient, it will respond with the corresponding mapping of PID’s and Domains for the given patient. These mappings will then be forwarded to all configured providers and if the patient information exists in any of the providers, Cross Enterprise Display will retrieve the patient history back to the viewer.
In this example, ‘Sally James’ is at Mercy and she has a study at General under a different patient ID. The PIX manager responds with Patient ID and Domain. Cross Enterprise Display will retrieve Sally’s information from General.

Universal Viewer Web Cross Enterprise Display supports multiple domain requests that are stored in the Requesting Centricity PACS (Centricity PACS PIX in use would be an example of storing multiple domains at the Requestor). In addition, Cross Enterprise Display accommodates multiple domains stored in a single Enterprise Archive.

In this example, ‘Norah Smith’ is at Mercy and she has a study at General under a different patient ID. The PIX manager responds with Patient ID and Domain. Cross Enterprise Display will retrieve Norah’s information from General.
Cross Enterprise Display will utilize (IHE transaction ITI-9 HL7 V2) to query other patient identifiers for the patient and use the appropriate patient ID to query in individual archives (physical or virtual).

**PIX scenarios and expected behavior**

<table>
<thead>
<tr>
<th>SI NO</th>
<th>Scenario</th>
<th>Broadcast information</th>
</tr>
</thead>
</table>
| 1     | Centricity PACS-IW  
No ID registered in PIX 
No information returned from PIX | If information returned from PIX is null, nothing will be broadcast. |
| 2     | Centricity PACS-IW  
No ID registered in PIX 
PIX query time out happens | Nothing will be broadcast. |
| 3     | Centricity PACS-IW  
Local ID is present in PIX but no related IDs | Local ID that is registered in PIX (used in PIX query) and global ID (if present) will be broadcast. |
| 4     | Centricity PACS-IW  
Local ID is present in PIX with related domain IDs | Local ID registered in PIX (used in PIX query) along with global ID (if present) and related IDs will be broadcast. |
| 5     | Centricity PACS  
No ID registered in PIX 
No information returned from PIX | If information returned from PIX is null nothing will be broadcast. |
| 6     | Centricity PACS  
No ID registered in PIX 
PIX query time out happens | Nothing will be broadcast. |
| 7     | Centricity PACS  
Local ID is present in PIX but no related IDs | Local ID that is registered in PIX (used in PIX query) and global ID (if present) will be broadcast. |
| 8     | Centricity PACS  
User specific domain registered in PIX with related domains and IDs | Local ID registered in PIX (used in PIX query) along with global ID (if present) and related IDs will be broadcast. |
| 9     | Centricity PACS  
Non user specific domain registered in PIX with related domains and IDs | Local ID registered in PIX (used in PIX query) along with global ID (if present) and related IDs will be broadcast. |

**Figure 1.6 PIX scenarios table**
Deployments supported:

Whether deployed on a CPACS or PACS-IW foundation, Centricity Universal Viewer is required at the Primary Read location (Requestor). Enterprise Archive is required as a DICOM source (Provider) from which Cross Enterprise Display will retrieve image data.

Deployment Options: Cross Enterprise display can be deployed in a centralized data center or a distributed (federated) model.

For distributed model, see Figure 1.2.

Figure 1.7 Example of Centralized archive deployment
Viewing images from a non-GE PACS/VNA

Cross Enterprise Display supports viewing of images from a non-GE PACS/VNA (third-party DICOM source). Studies are streamed from the third party DICOM sources without the need to transfer the images to the local PACS. The remote streaming of third party images eliminates the administration effort to import and normalize external images or DVDs. In order to display third party images in Centricity Universal Viewer, the local PACS will not be contaminated with foreign exams.

Images from a third party DICOM source are moved to a GE Healthcare cache [Cross Enterprise Display (XED) Provider App with an Centricity Enterprise Archive foundation] that is installed in front of the non-GE PACS/VNA. The cache is the access point from which Centricity Universal Viewer streams the images.

When a radiologist launches the local primary exam in Centricity Universal Viewer, a query is sent to the remote third party site. The workflow manager sends a query out through the XBUS into the XED Provider App tied to the remote third party site. The GE cache fronting the third party DICOM source performs a DICOM c-find to the third party source to find out what images are available for the patient.

That information is brought back to the viewer and the radiologist can see in the timeline tiles that offline images are available on a third party archive.

To display the third party image, the radiologist can click on the timeline tile. This initiates the DICOM c-move and the image is brought online and put in the GE Cache. When the image is on the GE cache, the timeline updates in real time, displaying different icons indicating the status of the move request.

The radiologist can pull the images into a viewport and stream directly from the remote GE Cache as soon as the full study has been retrieved. When images from a third party archive are displayed in a viewport, the remote study indicator displays in the viewport title bar.

To verify at a later display that the study in the GE Cache is still up-to-date with the study in the third party source, a stale check compares the following DICOM tags for a given Study Instance UID:
- Study Date (0008,0020)
- Study Time (0008,0030)
- Accession Number (0008,0050)
- Patient Name (0010,0010)
- Patient ID (0010,0020)
- Issuer of Patient ID (0010,0021)
- Study ID (0020,0010)
- Modalities in Study (0008,0061)
- Referring Physician (0008,0090)
- Patient DOB (0010,0030)
- Patient Sex (0010,0040)
- Number of Series (0020,1206)
- Number of Instances (0020,1208)

Note:
- Streamed images are read only - any manipulations made to streamed images are not saved back to the third party PACS/VNA
- Remote sites with a PACS-IW foundation need a Centricity Enterprise Archive fronting PACS-IW, similar to a non-GE PACS/VNA
Figure 1.9 Provide 3rd Party Patient History – DICOM c-move
A) Bring Online
B) Internet
C) C-Move

Figure 1.10 Display 3rd Party Patient History – Streaming
A) Stream Images
B) C-Move Images

Figure 1.11 Download icon shows images are available
Figure 1.12 Hour glass indicates image is being brought online
Figure 1.13 Folder indicates image is available for viewing
Requestor Cache option

The Requestor Cache option provides the ability to pre-fetch remote comparisons to the local reading site without contaminating the local PACS with foreign exams. In cases where the performance of the wide area network (WAN) is not optimal for streaming, the Requestor Cache at the radiologist’s location enables to display external and local images with a similar performance.

Remote comparisons are pre-fetched to the requestor cache using the pre-fetch capability of the CPACS foundation. When a new study arrives (order, scheduled exam, performed procedure) it will be added to the Cross Enterprise Display (XED) pre-fetch queue in the database. The XED Requestor Service polls the XED pre-fetch queue for new entries and triggers the pre-fetch from the remote site to the Requestor Cache. For scheduled exams the pre-fetch will be triggered based on the scheduled exam date/time.

Remote studies that are located in the Requestor Cache are still flagged as remote studies in the timeline.

- When the user opens the study to see the images for a remote comparison, the images are streamed from the local Requestor Cache and not from a remote site.
- When the user opens a study where the images for a remote comparison have not been pre-fetched to the local Requestor Cache, or have been removed from the Requestor Cache, the remote comparison images are streamed from the remote site.

To verify at a later display that the study in the Requestor Cache is still up-to-date with the study in the remote archive a stale check compares the following DICOM tags for a given Study Instance UID:

- Study Date (0008,0020)
- Study Time (0008,0030)
- Accession Number (0008,0050)
- Patient Name (0010,0010)
- Patient ID (0010,0020)
- Issuer of Patient ID (0010,0021)
- Study ID (0020,0010)
- Modalities in Study (0008,0061)
- Referring Physician (0008,0090)
- Patient DOB (0010,0030)
- Patient Sex (0010,0040)
- Number of Series (0020,1206)
- Number of Instances (0020,1208)

Notes

- The Requestor Cache is only available for sites that have the Universal Viewer with the CPACS foundation.
- The Requestor Cache can be added to an existing Centricity Enterprise Archive as a Virtual Archive by adding additional 2GB RAM and 2 vCPU.
- A stand-alone Requestor Cache is also an option if a Virtual Archive will not be implemented on an existing Centricity Enterprise Archive.
- If an existing Centricity Enterprise Archive is deployed in load balanced environment the Requestor Cache must be deployed as stand-alone.

Figure 1.14 Requestor Cache – Pre-fetch & View

A) New study in CPACS triggers entry in xed_queue database table
B) WFM® polls xed_queue for new entries to process
C) WFM® does a patient history request to determine if exams need to be pre-fetched from remote site and sends a request to fetch study to local cache
D) The remote study is moved from remote site to local cache using DICOM C-MOVE
E) User launches viewer and wants to display the remote study
F) StudyFile for remote exam is generated from local cache and checked for staleness
G) Remote study is streamed from local cache
Smart Relevancy

Relevant remote studies are denoted the same as local relevant studies; the tile is blue (or darker gray on gray-scale monitor) with a ‘turned-down’ upper left corner.

Relevancy for remote studies is determined by ontology matching using the same ontology management as with smart reading protocols. Body part information from the remote study is extracted from items such as the study description and body part DICOM tag. Ontology is used to match the anatomy with the primary study – same or similar match.

The Relevancy Filter parse the study description and body part then map the body part identified to the Ontology Library (configurable) for relevant match to the primary study.

Cross Enterprise Display with Cross-Enterprise Document Sharing (XDS)

When a XDS environment is available in the enterprise, documents and reports from XDS can be accessed within Centricity Universal Viewer via the Patient Folder. Supported XDS document formats include PDF, plain text and HL7 Clinical Document Architecture (CDA).
Figure 1.17 Discover Patient History with XDS
A) Viewer is launched, Viewer sends request for Patient information to WFM
B) WFM® queries dB for Local Patient Data based on Patient ID
C) WFM® calls XServices API to retrieve Patient History
D) XServices queries PIX Manager for Global Patient ID and uses that information to query for location of Patient Reports in the XDS Registry

Figure 1.18 Display Patient History with XDS
E) The applicable XDS Document Repository is queried for and responds with a Report and or a KOSDataObject for each DICOM study associated with the Patient
F) If a Report exists it will be retrieved and presented to Viewer if a DICOM study is associated additional Patient History info is extracted from KOSDataObject by XServices and combined with the info from the XDS Registry and sent to XSD® where it is mapped and formatted for Viewer (also consolidates with local data)
G) Patient history sent to the viewer for use and display
**HL7 CDA with XDS**

Clinical Document Architecture (CDA) is an XML-based markup standard developed by the Health Level 7 International (HL7) organization to define the structure of clinical documents such as discharge summaries and progress notes. CDA documents can include text, images and other types of multimedia.

Supported CDA document types:
- **Level 1**
  - CDA documents with embedded items such as PDFs and text.
- **Level 2 and level 3**
  - CDA documents with clinical data encoded as XML.
  - XML rendered as HTML document via embedded stylesheet
  - Default stylesheet

When opened the XML data is converted using the default stylesheet and is rendered as an HTML document. The default stylesheet is part of Cross Enterprise Display.

Multiple templates can be defined and the template employed is based on the hospital or department’s name or ID and the domain ID.

Instructions regarding how to configure a custom stylesheet for CDA document display are available in the Centricity Universal Viewer 6.0 Installation and Upgrade Manual (DOC1671491).

**Role Based Access Control (RBAC) with XDS**

Role based access control (RBAC) is a security mechanism that allows organizations to restrict access to XDS studies and documents, based on the IHE cross enterprise user assertion (XUA++) integration profile.

Universal Viewer Cross Enterprise Display use RBAC to restrict user access to cross enterprise studies and documents when communicating with XDS. This is supported on both the Centricity PACS-IW and Centricity PACS foundations. Please note that when using the CPACS foundation, version 4.0.11 or later is required.

RBAC is enabled by default, RBAC privileges only work with XDS.

Each XDS document has a confidentiality code provided by the XDS Document Source.

Each user has a role provided by the XDS Document Consumer (XED).

Cross Enterprise Display passes the user role to the XDS Registry who takes the access control decision which role is privileged for which confidentiality code.
DICOM SR
DICOM basic structured reports (SR) for remote studies can be viewed from the Patient Folder, Timeline and Study Selector.
The date in a timeline tile is underlined if a DICOM SR report is available with the study. The DICOM SR can then be viewed by clicking on the underlined date.

Cross Enterprise Display
Health Status Indicator
The status of responses to a requestor’s query for remote patient information is indicated via the Health Status Indicator. The Health Status Indicator is included in the main toolbar.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Query is on progress</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Query was 100% successful</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Query competed with some successes and some failures</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Query failed 100%</td>
</tr>
</tbody>
</table>

Figure 1.21 Health Status Indicators

Patient Demographic Matching capability
Cross Enterprise Display with Patient Demographic Matching provides the ability to gather patient information across an enterprise where the affiliated facilities use local patient identifiers and where the enterprise does not have an IHE Patient Identifier Cross-referencing (PIX) manager.
In this case Cross Enterprise Display queries the affiliated sites for patient information using attributes other than patient ID.
The following patient attributes are used as matching criteria:
• Gender
• Date of birth
• Last name
• First name
All four patient attributes must match 100% to be a successful match.
Multiple patient matches in one facility – where the patient attributes from multiple patients pass the matching criteria – are a successful match. This helps to detect potential patient duplicates in one site.

Note:
• The patient demographic matching criteria of Cross Enterprise Display are search criteria – like a user would use to manually search a patient.
• The result of a patient demographic query of Cross Enterprise Display is read-only.

• The patient demographic matching of Cross Enterprise Display does not create, update, merge or cancel any patient information. This is a key difference to patient demographic matching in the database e.g. triggered by interface messages.
• If an organization requires other criteria to match patients, like a social security number, address, phonetics, etc., than a Patient Identifier Cross-referencing (PIX) manager is required.
• If configurable matching rules are needed for a successful match, e.g. thresholds, percentages or multiple criteria combinations, than a Patient Identifier Cross-referencing (PIX) manager is required.
Cross Enterprise Display version compatibility

Version compatibility enables a Requestor and Provider that are not on the same version to communicate with each other, provided the difference is not more than one release (example: Version 6.0 and version 6.0 SP1 will work together).

Note: New features from the most recent version that were not in the prior release are not available until Requestor and Provider are on the same version.

Number of supported providers

Cross Enterprise Display supports up to 25 providers. For projects with more than 25 providers, please involve the product team for evaluation & authorization.

Language support

Cross Enterprise Display supports all the languages currently available with Centricity Universal Viewer, however, Chinese, Japanese and Korean languages deployments are only supported when an IHE Patient Identifier Cross-Referencing (PIX) manager or an IHE Cross-Enterprise Document Sharing (XDS) is not included in the implementation. This is due to limitations of the PIX manager.

Figure 1.21 Patient Demographic Matching

A. Centricity Universal Viewer sends request for Patient information to Workflow Manager (WFM)
B. WFM queries DB for local Patient Data based on Patient ID
C. WFM calls XBUS for remote Patient information
D. XBUS sends multicast to all remote Sites based on Patient Demographic Matching.

Patient information is gathered from remote Sites
## Cross Enterprise Display supported configurations

<table>
<thead>
<tr>
<th>Cross Enterprise Display</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requestor (Initiation from viewer connected to)</td>
<td>Centricity PACS and PACS-IW</td>
</tr>
<tr>
<td>Provider (Image Source)</td>
<td>Centricity Enterprise Archive</td>
</tr>
</tbody>
</table>

**Provider: Centricity Enterprise Archive - DICOM mode**

<table>
<thead>
<tr>
<th>Multiple Virtual Archives on a single EA instance:</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Single MRN</td>
<td>Supported</td>
</tr>
<tr>
<td>- PIX with unique patient ID domain per archive</td>
<td></td>
</tr>
<tr>
<td>- PIX with multiple patient ID domain per archive</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple EA (centralized/distributed):</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Single MRN</td>
<td>Supported</td>
</tr>
<tr>
<td>- PIX with unique patient ID domain per archive</td>
<td></td>
</tr>
<tr>
<td>- PIX with multiple patient ID domain per archive</td>
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</tr>
</tbody>
</table>

**Provider: Centricity Enterprise Archive - XDS/XDS-I mode**

<table>
<thead>
<tr>
<th>XDS Reports</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>XDS-I (with Adaptive Streaming Engine)</td>
<td>Supported</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple virtual archives on a single EA instance:</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Single MRN</td>
<td>Supported</td>
</tr>
<tr>
<td>- PIX with unique patient ID domain per archive</td>
<td></td>
</tr>
<tr>
<td>- PIX with multiple patient ID domain per archive</td>
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</table>

<table>
<thead>
<tr>
<th>Multiple EA (central/distributed):</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Single MRN</td>
<td>Supported</td>
</tr>
<tr>
<td>- PIX with unique patient ID domain per archive</td>
<td></td>
</tr>
<tr>
<td>- PIX with multiple patient ID domain per archive</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- Only DICOM or XDS mode supported
- Combination of XDS and DICOM mode not supported

<table>
<thead>
<tr>
<th>Provider: Centricity Enterprise Archive - Non-GE DICOM source mode</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Studies in non-GE DICOM Source</td>
<td>Supported (EA 4.0.9.2 required)</td>
</tr>
</tbody>
</table>

**Requestor: Centricity Universal Viewer with CPACS**

<table>
<thead>
<tr>
<th>Single Domain on CPACS</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi Domain on CPACS</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Requestor: Centricity Universal Viewer with PACS-IW**

<table>
<thead>
<tr>
<th>Single Domains on PACS-IW</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Domains on PACS-IW</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Requestor: Centricity Universal Viewer with Requestor Cache**

<table>
<thead>
<tr>
<th>CPACS</th>
<th>Universal Viewer web</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supported (CPACS 4.0 SP11 and EA 4.0.9/4.0.9.2 required)</td>
</tr>
<tr>
<td>PACS-IW</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
Pre-requisites:
- For Multi-MRN patient matching an eMPI/IHE PIX manager is required
- Site to Site Connectivity is required
- Local primary exam is required to initiate discovery of remote comparisons

Limitations in the current release:
- Smart Reading Protocol does not learn and apply hanging protocols with remote study
- Auto hang of remote studies within hanging protocols is not supported
- Breast Imaging or embedded advanced applications will not launch for remote studies
- Remote comparison is read only

Hardware requirements

<table>
<thead>
<tr>
<th>Application</th>
<th>OS</th>
<th>Memory</th>
<th>Compute power</th>
<th>Storage</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UV-Web Cross Enterprise Display</strong>&lt;br&gt;Site is requestor only:</td>
<td>Windows 2008 R2 SP1</td>
<td>4 GB</td>
<td>4 cores, x64 compute CPU</td>
<td>60 GB - OS &amp; Application RAID 1</td>
<td>Two 1 GB NICs&lt;br&gt;DVD-RW&lt;br&gt;Remote Access (Lights-out) capability</td>
</tr>
<tr>
<td></td>
<td>Windows 2012 R2</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Standard, Enterprise, DataCenter</td>
<td></td>
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</tr>
<tr>
<td><strong>UV-Web Cross Enterprise Display</strong>&lt;br&gt;Site is requestor &amp; provider:</td>
<td>Windows 2008 R2 SP1</td>
<td>8 GB</td>
<td>8 cores, x64 compute CPU</td>
<td>60GB - OS &amp; Application RAID 1</td>
<td>Two 1 GB NICs&lt;br&gt;DVD-RW&lt;br&gt;Remote Access (Lights-out) capability</td>
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- XBUS Cross Enterprise Bus
- Xservices (optional) If PIX and/or XDS enabled
FAQs

How does Cross Enterprise Display on Universal Viewer Web differ from Cross Enterprise Display on Universal Viewer ZFP?

A customer may require both solutions based on Persona and Use Case.

**Centricity Universal Viewer web** – Cross Enterprise Display is a tool for radiologists that provides seamless access to a patient’s imaging history. This requires a close affiliation with other hospitals as they are expected to open up their network and give access to all patients. It is also only available with Centricity PACS and Centricity PACS-IW with Universal Viewer at the requestor site and Centricity Enterprise Archive at the provider site.

**Centricity Universal Viewer ZFP** – Cross Enterprise Display is ideal for clinicians to find a patient’s exam to review for diagnosis on an as needed basis. ZFP is typically launched from an EMR or launched as standalone viewer with ability to query for a study. This requires close affiliation with other hospitals which share information in a central site.

Can I view reports with Cross Enterprise Display?

Cross Enterprise Display will retrieve report information stored in Centricity Enterprise Archive. Reports must be in DICOM Basic Text SR format to be retrievable. If available the DICOM SR reports can be viewed from the patient folder.

Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CDA</td>
<td>Clinical Document Architecture</td>
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<td>CPACS</td>
<td>Centricity PACS</td>
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<tr>
<td>eMPI</td>
<td>Enterprise Master Patient Index</td>
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<tr>
<td>HL7</td>
<td>Health Level 7 International</td>
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<tr>
<td>PIX</td>
<td>Patient Identifier Cross-referencing</td>
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<td>STS</td>
<td>Short term storage</td>
</tr>
<tr>
<td>VNA</td>
<td>Vendor Neutral Archive</td>
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<tr>
<td>WFM</td>
<td>Workflow manager</td>
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<tr>
<td>XBUS</td>
<td>Cross Enterprise Bus</td>
</tr>
<tr>
<td>XED</td>
<td>Cross Enterprise Display</td>
</tr>
</tbody>
</table>
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Corporate Headquarters
GE Healthcare
540 W Northwest Highway
Barrington, IL 60010-3076 USA
Tel: +1 847-277-5000 or
1 800-437-1171 or
1 800-682-5327
Fax: +1 847 277-5240

Authorized European Representative
GE Medical Systems
283 rue de la Minière
78530 BUC
France

Asia Headquarters
GE Healthcare
1 BLD-3F
No. 1 Hua Tuo Road
Zhang Jiang Hi-Tech Park
Shanghai 201203 China
Tel: 8621 38777888
Fax: 8621 38777499

Asian Sales Office
1 Maritime Square
#13-01, (Lift Lobby B)
Harbour Front Centre
Singapore 099253
Tel: +65 6 2918528
Fax: +65 6 2917006

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