
Chapter 7 – Connectivity

7.1 General

The gamma camera is designed to be connected to a Local Area Network (LAN) and a Remote Area Network (WAN) in order to transfer studies to Processing & Reviewing (P&R) stations, viewing stations and hardcopy devices. For the LAN Ethernet is used, while WAN connectivity is provided via Modem or broadband connection. Both LAN and WAN use the Transmission Control Protocol / Internet Protocol (TCP/IP) or File Transfer Protocol (FTP).

Towards this goal the following must be prepared:

- Network connection
- IP Addresses for all stations
- Insite pre-requisites
- Telephone line for modem connectivity, if relevant
- Broadband connection, if relevant

In addition, network information, hardcopy devices data and DICOM data must be prepared prior to system installation, to ensure that the system can be configured properly without delay. Refer to Chapter 2 in the Installation Manual for the required information.

7.2 LAN Connection

The connection to the LAN is done via an Ethernet Adapter installed in the Acquisition Station. Therefore, the LAN connection must be on the wall next to the Acquisition station, so that the cable is not in the path of the Collimator Carts, or patient and operator access to the Table.

The actual connection to the network depends on the physical network media of the hospital, which is normally a Twisted Pair Cable, implementing the 10Base-T standard.

The LAN connection must meet the requirements of the standard used in your hospital or clinic. Consult the hospital network specialist or your local service for specific instructions.

7.3 IP Address

An IP address identifies both the network and the host attached to it.

Network IDs for networks that connect to the worldwide Internet are allocated by a central authority, the Internet Network Information Center (InterNIC), while the Host IDs are allocated by the Local Network Administrator.

For Internet connected networks, ask your local LAN Administrator to allocate an IP address for the camera or contact the InterNIC for allocating an IP address space for your hospital/clinic, whichever applies to your site.

For a camera to be connected over an internal network (that does not connect to the Internet), ask your local LAN Administrator, if any, for allocation of an IP address or consult your local service.

For description of the IP Address structure, refer to Chapter 2 in the Installation Manual.

7.4 Telephone Line or Broadband Connection for Insite

For Modem connection a telephone line must be installed.

For broadband connection, a suitably located connection socket should be supplied.

7.5 Broadband For Remote Connectivity.

Serviceability strategy for the Infinia is based on remote accessibility via Insite over broadband connection.

Important

Broadband connectivity should be ready prior to system installation in order to allow remote service and customer support from Day One of the installation.

The following forms need to be completed to configure the broadband connection:

- [InSite Broadband - Add System\(s\) to a Connected Site on page 7-4](#)
- [Remote Service Broadband - Customer Site Assessment on page 7-5](#)

7.5.1 InSite Broadband - Add System(s) to a Connected Site

Site Name: _____	FE Name: _____
City, State: _____	FE Phone: _____
Date: _____	FE Email: _____

1. Is this site already connected to GE InSite Broadband? If Yes, Enter the System ID of a device that is already connected via Broadband (this helps validate the site) System ID: _____ If No, you are using the wrong form!		Yes <input type="checkbox"/> No <input type="checkbox"/>																		
2. Update/Confirm the Customer IT Contact information. This is the person who will be contacted to add the new System IP Address to their Encryption Domain. Customer IT Contact Name: _____ Telephone: _____ Email: _____ Notes: _____ _____ _____																				
3. Field Engineer needs to provide the new system information. All three fields required: <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">System ID:</td> <td style="width: 33%;">IP Address:</td> <td style="width: 33%;">Gateway Address:</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>			System ID:	IP Address:	Gateway Address:	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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If you have questions or need assessment support: Contact your Zone Champ or: Joe Gracz - HQ Support 1-262-524-5261 Joseph.Gracz@med.ge.com																				
If you have questions or need assessment support in Europe: Contact Remi Lelong +33-01-30-70-45-92 Remi.Lelong@med.ge.com																				
Once you have completed both pages of this form: Please send it to: Judy Heyer Fax# 414-918-4707 judy.heyer@med.ge.com																				

7.5.2 Remote Service Broadband - Customer Site Assessment

Site Name: _____	FE Name: _____
City, State: _____	FE Phone: _____
Date: _____	FE Email: _____

1. Does your site currently have a persistent (24x7) Internet connection?	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Is the GEMS Diagnostic Imaging equipment on the Local Area Network and will it be accessible to the Internet?	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Does your site have a VPN device today?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Is the VPN device one of the models below? Please select the model from the options below." <ul style="list-style-type: none"> <input type="checkbox"/> a) Cisco Pix Firewalls <input type="checkbox"/> b) Cisco Routers <input type="checkbox"/> c) Cisco 3000 Series (Altiga acquisition) <input type="checkbox"/> d) Checkpoint Firewalls Software Version 4.1 and higher <input type="checkbox"/> e) Nortel Contivity Software Version 3.2 or higher <input type="checkbox"/> f) Redcreek <input type="checkbox"/> g) Symantec (Raptor) firewalls <input type="checkbox"/> h) Firebox <input type="checkbox"/> i) Linux S/WAN <input type="checkbox"/> j) Sidewinder <input type="checkbox"/> k) Netscreen <input type="checkbox"/> l) None <input type="checkbox"/> m) Other _____ <p>*If None, the GEMS Connectivity Support Team can help determine device compatibility.</p>	

5. Does your VPN device support "triple DES" Encryption?	Yes <input type="checkbox"/> No <input type="checkbox"/>																					
6. Has approval been given to install this VPN connection? Site Approver's Name _____	Yes <input type="checkbox"/> No <input type="checkbox"/>																					
7. Provide your VPN Installer information. This is the person who will be contacted to schedule the VPN installation. Customer Installer Name: _____ Telephone: _____ Email : _____ Notes: _____ _____ _____																						
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