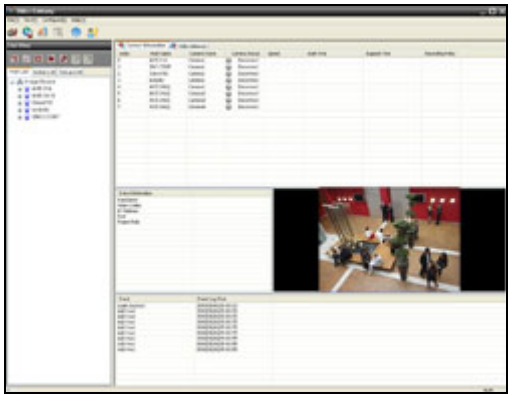
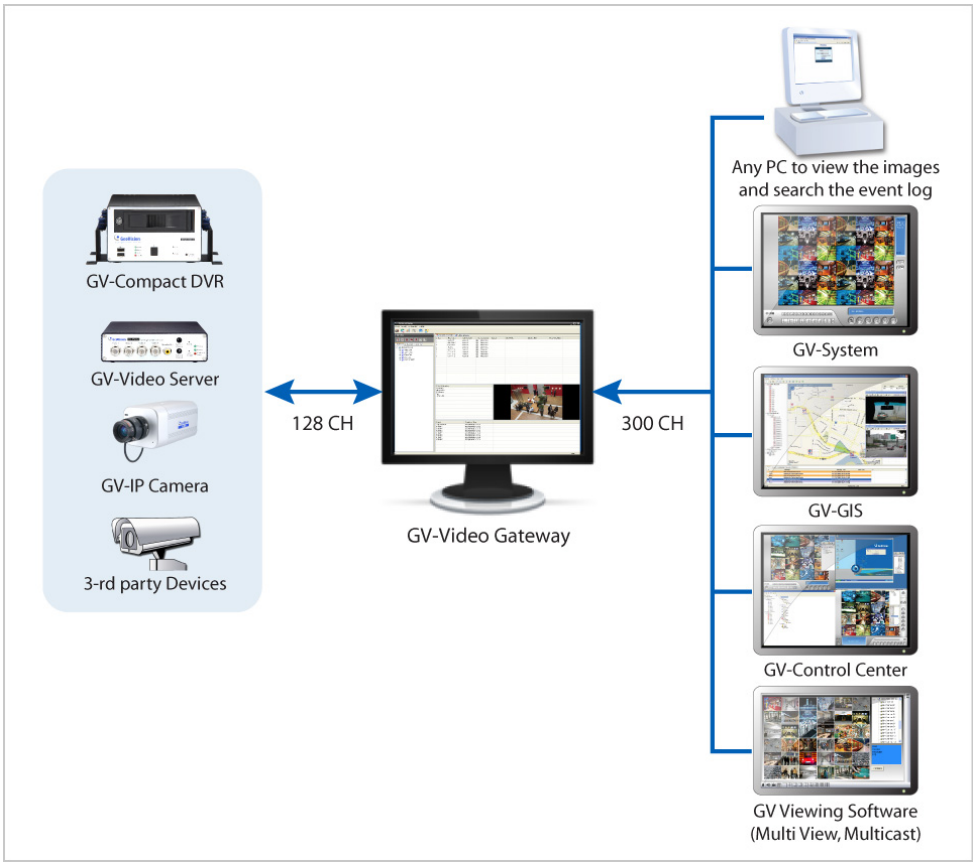
GV-Video Gateway



INTRODUCTION

The GV-Video Gateway is a video streaming server designed for large-scale video surveillance deployments. It can receive up to 128 IP cameras from various IP video devices. Then it can simultaneously distribute up to 300 channels to its clients which include GV-System (DVR/NVR system), GV-GIS (geographic information system), GV-Control Center (central monitoring system) and Multi View (viewing software). Through the GV-Video Gateway, the CPU loading of IP video devices is significantly minimized and the desired frame rates are reached as well as the bandwidth usage is greatly reduced.



In some areas or countries, you may like to install 3G wireless Internet module (e.g. GPRS/UMTS) on the GV-Video Server or GV-Compact DVR but have the problem to obtain a public IP address from ISP. The Passive connection method of GV-Video Gateway can solve the public IP issue by accepting the connection request from the GV-Video Server or GV-Compact DVR, and then distribute the video streaming to clients.

It is also possible to view single-channel live images on the GV-Video Gateway server or multiple-channel live images on any PC through the GV-Video Gateway's Web interface.

Features

- Video gateway between IP cameras and receiving clients (GV-System, GV-GIS, GV-Control Center, GV-IP Matrix and Multi View)
- Maximum video distribution for large IP camera counts (up to 128 IP cameras) and receiving clients (up to 300 IP cameras)
- Passive and Active connection methods
- Compatibility with a variety of third-party IP video devices
- Single-channel or multi-channel live view through IE browser
- Bandwidth monitoring
- Two-way audio communication (only for General Hosts)
- Solution for Mobile DVR (GV-Video Server, GV-Compact DVR) to obtain a public IP address
- Web interface for live image monitoring, multicast streaming and event log query

Minimum System Requirements

The server conforming to the minimum system requirements has the capacity to perform one of these:

- Receive up to 128 channels and transmit up to 300 channels with the image settings of 1280 x 1024 resolution, 15 fps and MPEG4/H.264 codec for each channel. OR
- Receive up to 128 channels and transmit up to 300 channels with the image settings of 640 x 480 resolution, 30 fps and MPEG4/H.264 codec for each channel.

OS	32bit	Windows XP, Windows Vista, Windows 7, Windows Server 2008
	64bit	Windows 7, Windows Server 2008
CPU		Core 2 Quad 9300, 2.5 GHz
Memory		2 X 1 GB Dual Channels
Hard Disk		1 GB.
Software		.Net Framework 3.5
Browser		Internet Explorer 7.X
LAN		Gigabit Ethernet X 1
Hardware		Internal or External GV-USB Dongle
Note: .Net Framework can be found in the accompanying software CD.		

Optimal System Requirements

The server conforming to the minimum system requirements has the capacity to perform one of these:

- Receive up to 128 channels and transmit up to 104 channels with the image settings of 1280 x 1024 resolution, 15 fps and JPEG codec for each channel. OR
- Receive up to 128 channels and transmit up to 184 channels with the image settings of 640 x 480 resolution, 30 fps and JEPG codec for each channel.

OS	32bit	Windows XP, Windows Vista, Windows 7, Windows Server 2008
	64bit	Windows 7, Windows Server 2008
CPU		Core i7 920, 2.67 GHz
Memory		2 X 1 GB Dual Channels
Hard Disk		1 GB.
Software		.Net Framework 3.5
Browser		Internet Explorer 7.X
LAN		Gigabit Ethernet X 4
Hardware		Internal or External GV-USB Dongle
Note: .Net Framework can be found in the accompanying software CD.		

Network Requirements

The server's transmitting capacity varies depending on the number of Gigabit connections:

- One (1) Gigabit connection: Transmits up to 104 channels with the image settings of 1280 x 1024, 15 fps and JPEG codec for each channel.
- Two (2) Gigabit connections: Transmit up to 256 channels with the image settings of 1280 x 1024, 15 fps and JPEG codec for each channel.
- Three (3) Gigabit connections: Transmit up to 300 channels with the image settings of 1280 x 1024, 15 fps and JPEG codec for each channel.

The deployment of Gigabit connections for transmitting and receiving is suggested as illustrated below. Ensure to run every Gigabit connection on a different network to reduce the lag on any network connection.

Specifications

Feature	Device
Number of IP Video Device Connections	128 channels
Number of Remote Client Connections	300 channels
Active Connections	Yes
Passive Connections	Yes (only for GV IP devices)
3rd Party IP Cameras Support	Yes
Live Viewing	Single Live View
Recording	No
E-Mail Notification	Yes (for Camera Connection Lost, GV-USB Dongle Removed, Connection Lost of Passive Hosts)
SMS Notification	No
2-Way Audio	Yes (only for Active Hosts)
GPS support	Yes (for the first 32 connected IP cameras)
Number of Accounts	1 for Supervisor, 1,000 for Users
Mobile Phone Support	No
Bandwidth Control	No
IE Live View	Yes (up to 16 channels)
IE Event Query	Yes
IE I/O Control	Yes