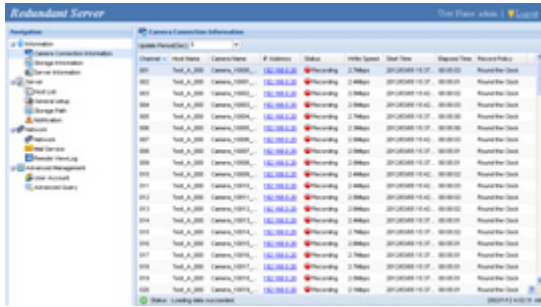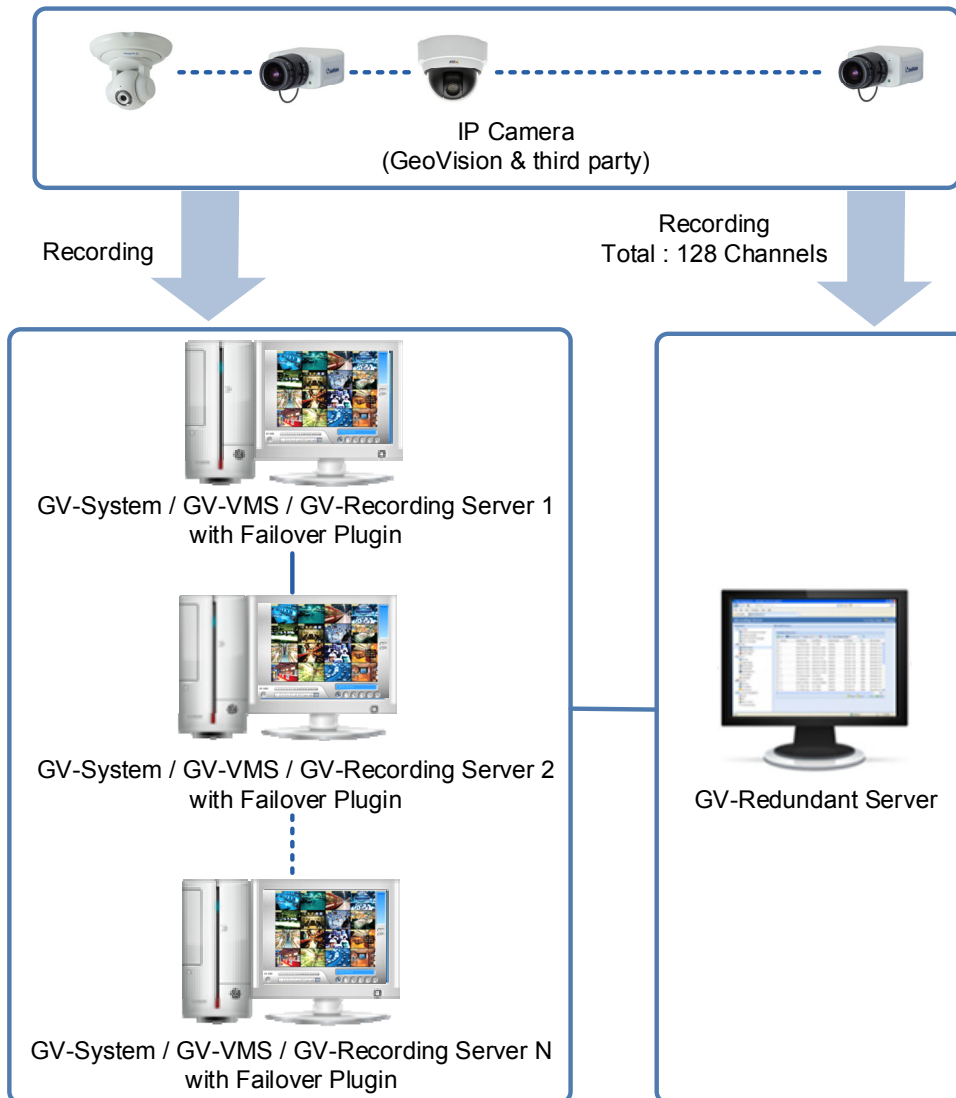# GV-Redundant Server

INTRODUCTION

GV-Redundant Server is a video backup server designed for large-scale video surveillance deployments. It can record up to 128 IP channels connected to GV-System / GV-VMS / GV-Recording Server. As its name suggests, the GV-Redundant Server keeps an extra copy of recordings for IP channels connected to GV-System / GV-VMS / GV-Recording Server.

IP Camera
(GeoVision & third party)

Recording

Recording
Total : 128 Channels

GV-System / GV-VMS / GV-Recording Server 1
with Failover Plugin

GV-System / GV-VMS / GV-Recording Server 2
with Failover Plugin

GV-System / GV-VMS / GV-Recording Server N
with Failover Plugin

GV-Redundant Server

Note:

1. GV-Redundant Server does not support GV-VMS hosts when they are running in service mode. It is highly suggested not to enable "Service Mode".

2. The GV-Redundant Server does not support backup of analog cameras.

Features

- Record up to 128 IP channels simultaneously
- Support round-the-clock recording
- Video playback using Remote ViewLog
- Support for remote configuration and monitoring of GV-Redundant Server using Internet Explorer, Firefox, Google Chrome and Safari
- Support 6 third-party IP device brands (Arecont Vision, Axis, HikVision, Panasonic, Sony, VIVOTEK)
- Support for ONVIF, PSIA and RTSP protocols
- Support for 31 languages

Minimum System Requirements

Servers meeting the following minimum system requirements have the capacity to receive up to 128 channels.

OS	64-bit Windows 7 / 8 / 8.1 / Server 2008 R2 / Server 2012 R2
CPU	Core i5 750, 2.67 GHz
Memory	6 GB Dual Channels
Hard Disk	1 GB. (for installation)
Browser	- Internet Explorer 8.0.7600.16385 - Internet Explorer 9.00.7930.16406 - Firefox 3.6.13 - Google Chrome 9.0.597.94 - Safari 5.33.19.4
LAN	Gigabit Ethernet X 1
Hardware	Internal or external GV-USB Dongle
Software	.Net Framework 3.5 SP1 for Windows 7 / Server 2008 R2 .Net Framework 3.5 for Windows 8 / 8.1 / Server 2012 R2

Note: It is recommended to use the internal GV-USB Dongle to have the Hardware Watchdog function which restarts the PC when Windows crashes or freezes.

Software License

Free License	N/A
Maximum License	128 channels
Increment for Each License	N/A
Optional Combinations	N/A
Dongle Type	Internal or external

Recommended Hardware Requirements

The recommended hard disk requirements for 24 hours of recording are detailed below.

Resolution	Frame rate	Codec	Max. Channel per HDD and Required HDD Capacity	HDD capacity required for recording 128 ch for 24 hr	Recommended HDD Requirements
1.3 M	30 fps	H.264 / MPEG4	32 ch / 2.5 TB	10 TB	3 TB 7200RPM HDD x 4 (SATA3)
		JPEG	8 ch / 2.7 TB	43.2 TB	3 TB 7200RPM HDD x 16 (SATA3)
2.0 M	30 fps	H.264	21 ch / 2.2 TB	13.5 TB	3 TB 7200RPM HDD x 7 (SATA3)
		JPEG	5 ch / 2.5 TB	64 TB	3 TB 7200RPM HDD x 26 (SATA3)
3.0 M	20 fps	H.264	32 ch / 3 TB	12 TB	3 TB 7200RPM HDD x 4 (SATA3)
		JPEG	4 ch / 2 TB	64 TB	3 TB 7200RPM HDD x 32 (SATA3)

Options

Optional Devices	Description
Internal USB Dongle	The USB dongle can provide the Hardware Watchdog function to the GV-Redundant Server by restarting the computer when Windows crashes. You need to connect the dongle internally on the motherboard.

Network Requirements

For optimal performance and processing efficiency, it is advisable to use two Gigabit connections, each assigned with 64 channels and run through separate network. The suggested deployment of Gigabit connections for recording is illustrated below.
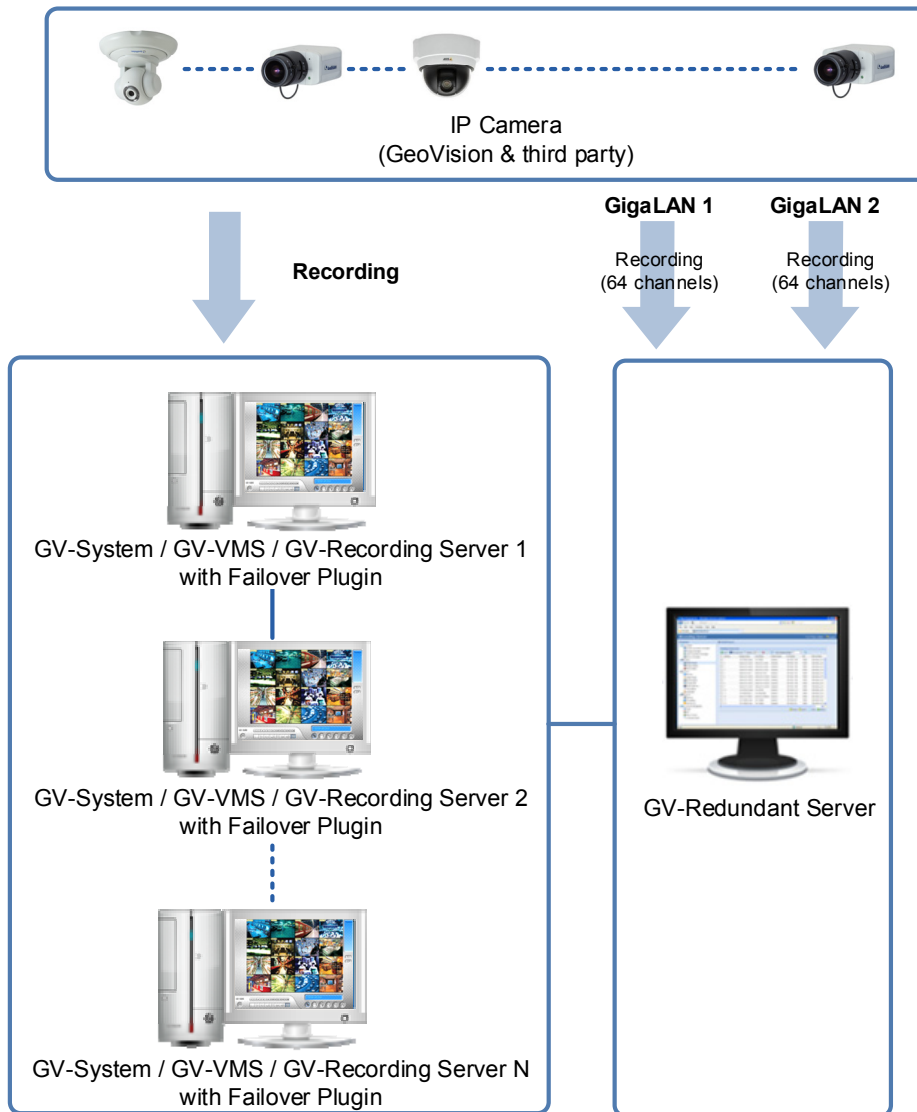
Packing List

- GV-USB dongle
- Software DVD

IP Camera Support List

The following camera brands and models have been tested for compatibility with GV-Redundant Server. Note that GV-Redundant Server V1.1.0.0 only supports IP devices with V8.5.9 or earlier versions listed under the GV S/W column in the support list.

GeoVision	Arecont Vision	AXIS	HikVision
Panasonic	Sony	VIVOTEK	

Compatible Standard and Protocol

GV-Redundant Server also allows for integration with all other IP video devices compatible with ONVIF (V2.0), PSIA (V1.1) standards, or RTSP protocol.

ONVIF	PSIA	RTSP	

Specifications

Feature		Device
Client		GV-System / GV-VMS / GV-Recording Server
Dongle		Up to 128 IP channels
3rd Party IP Cameras Support		Yes
Recording Mode		Records as soon as the hosts are connected
Protocol		DynDNS, HTTP, HTTPS, SMTP, ONVIF, PSIA, RTSP, TCP, UDP
Live Viewing		No
Playback	using Remote ViewLog	Yes (Remote ViewLog V8.5.3 or later)
	Via web page	Yes
Recycle Threshold for Video Files		Yes
Event Log		Yes
Recycling days & threshold for Event Logs		Yes
S/W & H/W Watchdog		Yes
E-mail Notification		Yes (camera connection loss, removal of USB protection key, recycling of recorded video, start keep days operation, disk full, disk error, removal of hard disk, recording failure)
Number of User Accounts		Up to 1000 accounts
Support for Internet / LAN		Yes
Mobile Phone Support		No
Bandwidth Control		No
IE Event Query		Yes
IE I/O Control		No
Language on Web Interface		Arabic / Bulgarian / Czech / Danish / Dutch / English / Finland / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian / Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Sweden / Thai / Traditional Chinese / Turkish

IMPORTANT:

1. The GV-Redundant Server and GV-Recording Server cannot be run in one PC at the same time.
2. GV-Redundant Server is only compatible with GV-Recording Server V1.2.5.0 or later.