

Fast Video Server Administration Guide



January 31, 2005



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Introduction to the SVGateway

The SVGateway acts as the gateway for video, audio, and sensor inputs and for client requests. The client communicates with the gateway via the PC host's Internet connection.

This document describes the following steps that are required to successfully set up and configure the gateway:

- [“Setting up the Hardware” on page 3](#)
Connecting the SVGateway, audio and video hardware, and other accessories.
- SVGateway and configuring its access.

Before You Begin

Before configuring the SVGateway, perform the following:

- Read the entire [“Read This First”](#) section.
- Download and install the most recent version of the SerVision MultiClient application . For more information, see the *SerVision MultiClient User Guide*.
- Connect the SVGateway gateway as described in [“Setting up the Hardware” on page 3](#).

Read This First



WARNING

HAZARDOUS VOLTAGE ON SYSTEM. Read all the cautions in this section before proceeding.

The system supplied to you has been tested under extreme conditions to enable you to enjoy a high quality and stable product.

The SVGateway and all of its derivatives have a warranty of one year after shipment.

- There are hazardous voltages within this system. These voltages will not cause any damage or injury if the system is correctly operated.

- It is prohibited for the customer or any user to open the product. Only personnel authorized by SerVision is able to open the product.
- If a system is opened by unauthorized personnel the one-year warranty of the product automatically becomes null and void.
- SerVision assumes no responsibility for damage or injury caused by incorrect use of the product.
- The equipment you receive has been tested in our laboratories prior to shipment. SerVision assumes no responsibility for faults due to improper conditions during shipment.
- If a coax cable between an external camera and the SVGateway is more than 40 meters long, a surge protection module must be installed between the video input connector on the SVGateway and the cable that comes from the external camera.
- Surge protection modules must be purchased separately from the SVGateway unit; however they can be ordered as part of a special kit. Consult with your distributor if the modules are needed.
- Equipment can ONLY be installed in a socket with an “Electrical Safety Ground.” SerVision assumes no responsibility for any damage and/or injury caused by deficient electrical installation. Call an authorized electrician for assistance in these matters.

WARNING



Do not connect any cable to the system while there is no connection to a protective ground.

- To avoid electrocution, use the provided power cord to connect the SVGateway to a grounded AC electrical outlet before making any other connections to your SVGateway unit.
- If the system needs to be disconnected, remove the power cord last. First turn off the system using the power switch on the unit.
- Caution: There is a risk of explosion if any battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

In the event of any anomaly regarding the product, please call your distributor or the SerVision Technical Support Department.

We strongly recommend reading this entire manual before using this product.

Setting up the Hardware

This section describes how to perform the hardware connections necessary for a successful gateway installation.

Your System Includes the Following

Your system includes the following components:

- the SVGateway unit
- a 2 meter standard ethernet cable
- (optional) video camera and accompanying cables and connectors
- (optional) input/output sensor connectors
- (optional) input microphones

Connectors Used With the SVGateway

The SVGateway uses the following connection devices:

- Electricity
Voltage supported ranges from 90Vac to 250Vac. This means that you can power the SVGateway with 110Vac and 220Vac grids. You must use a cable that is doubled, isolated, and grounded.
- Video
You can connect up to xxx 4 analog cameras to an SVGateway. Video connections are made via the BNC connectors. The BNC cables must be capable of supplying video signals with no more than 1Vpp amplitude. There should be no more than 6dB attenuation between the video source and the SVGateway. You can compensate for attenuation by using video amplifiers.
- PTZ
Some cameras have various combinations of Pan, Tilt, and Zoom (PTZ) functions. PTZ commands are transmitted from the SVGateway unit to the camera via the COM1 (RS-232) or COM2 (RS-485) ports, depending on the camera's protocol. Up to 64 cameras can be connected to the same COM2 RS-485 port.

PTZ control is obtained using varying pin combinations, as described in the following table. The table also describes how these pin connections are made using the supplied flat control cable.

| Protocol/Port | Control Pins | Flat Cable Position |
|---------------|---|--|
| RS232 (COM1) | <ul style="list-style-type: none"> ■ Pin 2 (RXD) ■ Pin 3 (TXD) ■ Pin 5 (GND) | <ul style="list-style-type: none"> ■ Wire 3 ■ Wire 5 ■ Wire 9 |
| RS485 (COM2) | <ul style="list-style-type: none"> ■ Pin 1 (Data +) ■ Pin 3 (Data -) | <ul style="list-style-type: none"> ■ Wire 1 ■ Wire 5 |

WARNING



Incorrect use of COM ports can cause damage to the camera and/or the SVGateway.

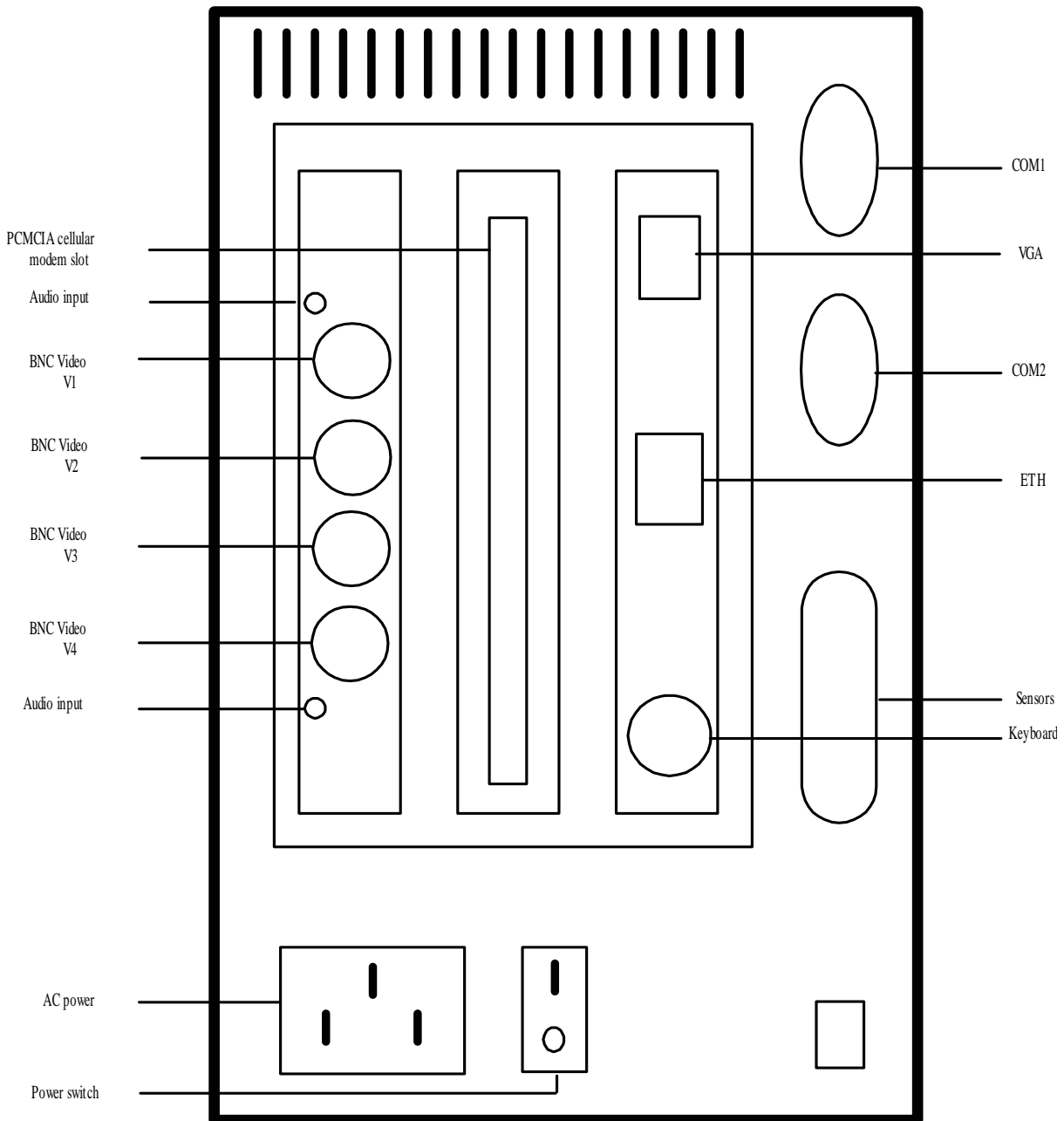
- Ethernet
You can connect the SVGateway to a network via a hub, switch, or router, or you can connect directly to a PC. For more information on network connections, see the following section.
- Input sensors and activators
You can connect up to six input sensors and two output activators using the sensor adaptor (optional). The sensor adaptor connects to the sensor parrallel port. For more information, see [“Installing Sensors” on page 7](#).

Connecting the SVGateway Hardware

This section describes how to make the proper connections for the SVGateway and its accessories. For information on how to install input and activator sensors, see [“Installing Sensors” on page 7](#).

The following illustration shows the back of the SVGateway where the hardware connections are made.

Figure 1 The SVGateway Connection Area



To set up the SVGateway hardware



WARNING

If your video camera uses DC power, you must ensure that the correct polarity leads are connected to the camera. On power cables provided by SerVision, the positive (+) lead is marked.

Do not connect a cellular modem at this time. The cellular modem must be configured before it is connected.

- 1** Connect the power cord to the AC power plug on the SVGateway unit.
- 2** Connect the power to all video cameras. For more information, refer to the camera documentation.
- 3** Connect a BNC cable between each video camera and a BNC video connector (V1, V2...VN) using a BNC video cable and connector (included).
- 4** Connect an Ethernet cable from the SVGateway ETH port as follows:
 - A** If your SVGateway is connected to a hub, switch, or router, connect it using a standard cable (included). You can use any CAT5-compatible cable, up to 100 meters long.
 - B** If your SVGateway is connected directly to a PC, connect it using a cross-over cable.
- 5** If you are using PTZ cameras, connect the control cables as follows:
 - A** For RS-232 cameras, connect the cable from the COM1 port on the SVGateway to the camera.
 - B** For RS-485 cameras, connect the cable from the COM2 port on the SVGateway to the camera.
- 6** If you are using input microphones, connect them into the audio inputs.
- 7** If you are using input sensors or output activators, perform the following:
 - A** Connect the sensor adaptor (Figure 2 on page 7) to the sensor parallel port.
 - B** Connect each pair of sensor leads to an adjacent pair of In (In1, In2...) or Out (Out1 or Out2) inputs on the sensor adaptor.
- 8** Switch the power to the SVGateway to on. The green power LED on the front of the unit should light.

After a few seconds, a beep indicates that the basic system is functioning. Activity on the red HDD LED on the front of the unit indicates that the hard disk is being accessed.

Your hardware is now set up. Continue with the basic installation and configuration described in [Chapter 2, “Basic SVGateway Configuration.”](#)

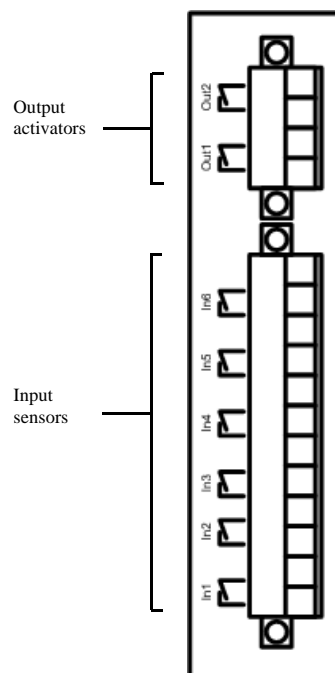
Installing Sensors

You can install the following sensors on your SVGateway:

- Input sensors (dry contact)
 - trigger an event when the contact is opened, closed, or both
- Output Activators
 - cause an action to occur, either on command from the client or when an event calls for it

Sensors are installed using the sensor adaptor, illustrated in the following figure.

Figure 2 Sensor Adaptor



To install sensors

Insert the leads into an adjacent pair of inputs. For example, for an input sensor put the leads in In1; for an output activator put the leads in Out1.

For more information on configuring sensors, see [“Sensors” on page 27](#).

Viewing Video Without a Computer

You can use the SVGateway to view video either through a SerVision client (such as the SerVision MultiClient application or a PDA client) or directly from the SVGateway. The second option is perfect for situations and locations where your main interest is to view live video.

The following section discusses how to view video directly from the SVGateway, an option referred to as “Video Out.” To enable viewing video through a SerVision client, proceed with [“Accessing the SVGateway” on page 9](#).

Before You Begin

Before you start using the Video out feature, ensure that you have performed the following steps:

1. Connect the SVGateway hardware as described in [step 1](#) through [step 3](#) in [“Setting up the Hardware” on page 3](#).
2. Connect a VGA monitor into the VGA port on the back of the SVGateway.
3. Connect a keyboard into the keyboard port on the back of the SVGateway.

Using the “Video Out” Viewing Option

Video Out (VO) enables you to view up to four live video streams simultaneously. You can choose to view each video stream in quarter screen (SIF) and full screen (VGA) sizes.

To view video using “Video Out”

- 1 Turn the power on to the SVGateway.

When a VGA monitor is attached, the VO screen is displayed. The video streams from each camera are displayed in a separate area of the screen.

- 2 To switch between cameras, press the <Up>, <Down>, <Left>, and <Right> keys to select a camera.

- 3 To switch from SIF mode to VGA mode, press <F1>. To switch from VGA mode to SIF mode, press <F2>.

Accessing the SVGateway

The SVGateway sends (uploads) video streams to the SerVision client. The SVGateway can communicate with the client in the following ways:

- Local LAN
This is the simplest (and most secure) form of access
- WAN (such as Internet)
When the SVGateway connects to the Internet via an ADSL or cable modem you must use an ADSL or cable router. This method requires opening the TCP ports on the router and setting up port forwarding in the router.
- Modems (cellular, ISDN, and PSTN)
Modem access can be accomplished via the Internet or directly from the modem to the SVGateway. Cellular modem access is most appropriate when the SVGateway has no direct means of connecting to the Internet (for instance, in mobile applications).

The following PCMCIA cellular modems are supported:

- GPRS
 - Sierra Wireless Aircard 750
 - Sierra Wireless Aircard 710
 - Enfora Enabler G Modem
- CDMA
 - AirCard Sierra Wireless 555
 - AirCard Sierra Wireless 550

How to Choose a Cellular Access Method

When choosing the access method, keep in mind the speed, cost, and availability of each method.

To enable access via a cellular modem, evaluate local cellular suppliers based on the following factors:

- The quality and speed of uploading data.
Most providers provide fast download speed, but only 96 kbps of upload speed. As the SVGateway uploads data to the client, SerVision recommends a minimum 128 kbps upload speed.

TIP



In general, CDMA modems provide much greater upload speed (up to 250kbps as opposed to 96kbps for GPRS modems).

- The ability to secure a permanent IP address.
A permanent IP address enables the most efficient communication. If you cannot secure a permanent IP, you can use the SerVision proxy server, as described in “[Accessing the SVGateway via the SerVision Proxy Server](#)” on [page 11](#).

For GPRS modems, you must choose a cellular modem (that is supported by the cellular provider) with a GSM SIM card that is enabled for GPRS data transfer and enabled with HTTP (not WAP) access. (CDMA modems do not require SIM cards and are automatically HTTP-enabled.)

Alternately, you can use an ISDN or PSTN modem to dial into an Internet provider or to dial directly into the SVGateway, thus bypassing the Internet provider.

- SVGateway dial-up on event triggering
To reduce bandwidth consumption and dial-up time, you can configure the SVGateway to dial out only when an event is triggered.

Accessing the SVGateway via the SerVision Proxy Server

To access the SVGateway, you must know the IP address of the gateway or the IP address of the router that the gateway is behind. For this reason, it is recommended that you secure a permanent IP address from your Internet provider.



NOTE

If you have a permanent IP, it is strongly recommended that you verify it.

If you cannot secure a permanent IP address, you can access the SVGateway via the SerVision proxy server, but this method may not provide optimal access speed.

To use the SerVision proxy server, you must perform the following steps:

- In the SVConfigHTML utility, activate and configure the use of the SerVision proxy server, as described in “[Proxy Servers](#)” on page 26.
- In the client application (such as the SerVision MultiClient), connect to the SVGateway using its System name (from the Server Configuration tab in the SVConfigHTML) and select **Use default proxy** (from the Gateway => Connect => Advanced => Proxy tab). For more information, see the *SerVision MultiClient User Guide*.

Basic SVGateway Configuration

| To Perform This Task | See Here |
|---|----------|
| Initiate Communication with the SVGateway | page 13 |
| Configuring Gateway Network Communication | page 18 |
| Synchronizing the Gateway Time | page 20 |

Initiate Communication with the SVGateway

You initiate communication with the SVGateway unit using the SerVision MultiClient (SVMC) application. You communicate with and configure the SVGateway using the SVConfigHTML Webmin utility.

Before You Begin

Before you begin with basic configuration, ensure that the following tasks have been completed:

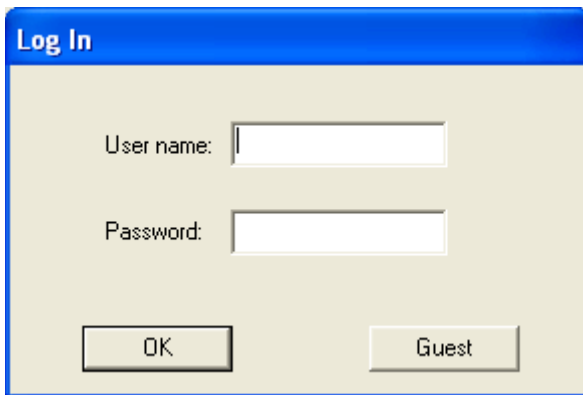
- The SVMC client is installed and running. For more information, see the *SerVision MultiClient User Guide*.
- The SVGateway is powered on and connected (as described in “Setting up the Hardware” on page 3).

To log in to the SVConfigHTML Webmin utility

- 1 Open the SVMC application by double-clicking the desktop icon or by running **SVMultiClient.exe** from the installation folder.

The Log In dialog box is displayed.

Figure 3 Log In Dialog Box



- 2 Enter a user name and password and click **OK**.

If no user name and password has been created yet, you are prompted to create a new user ID and password.

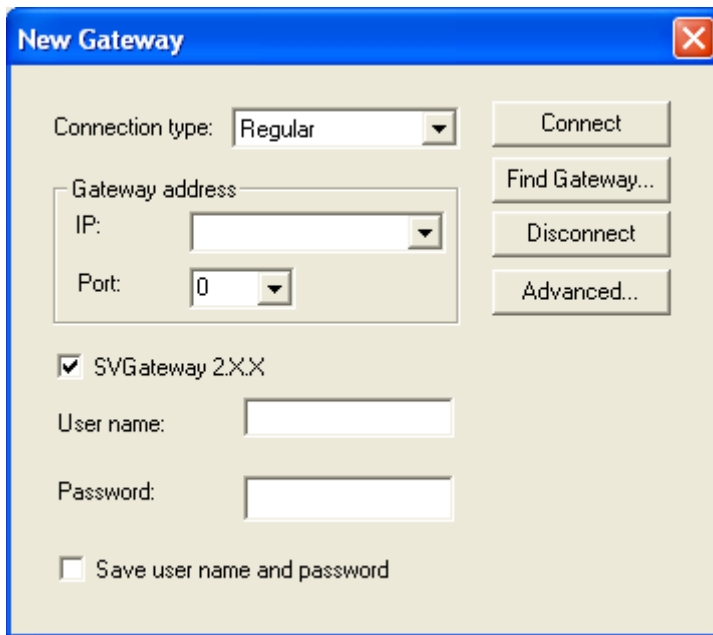
- 3 To create a new user name and password, perform the following:
 - A Confirm the request to create a new user ID. The Add User dialog box is displayed.
 - B Enter a user name, password, and password confirmation.
 - C Click **OK**.

The name of the user is displayed in the title bar of the SVMC main window.

- 4 From the main menu, choose **Gateway => Connect**.

The New Gateway dialog box is displayed.

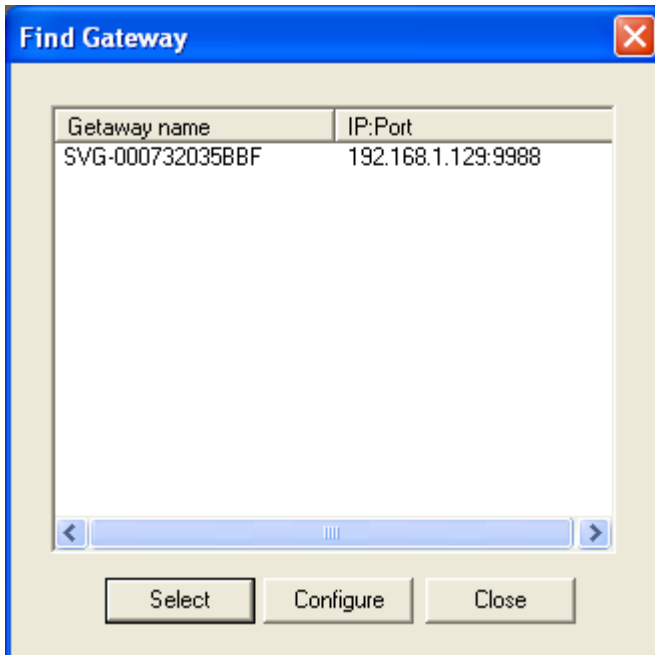
Figure 4 New Gateway Dialog Box



5 Click **Find**.

The Find Gateway dialog box is displayed, showing a list of all SVGateways in the network.

Figure 5 Find Gateway Dialog Box



NOTE



The Gateway name and IP address listed in this box are temporary. Do not use this IP address anywhere except for initial communication and configuration.

- 6 Select the listed gateway and click **Configure**.

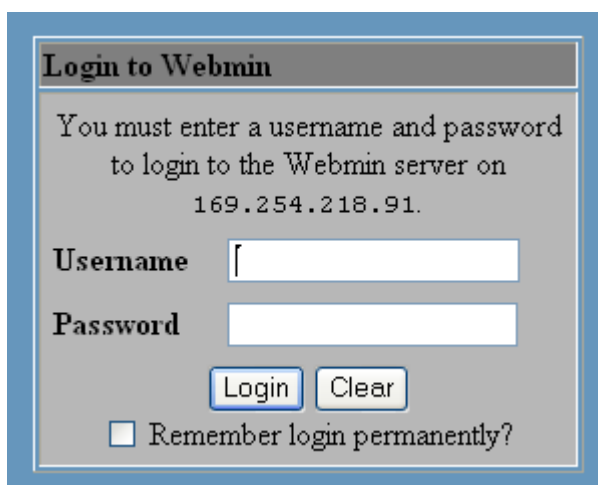
The SVConfigHTML Webmin utility login screen is displayed.

NOTE



If the Windows Security Alert is displayed, click **Unblock** to enable access to this utility.

Figure 6 SVConfigHTML Webmin Utility Login Screen



7 Enter the default user name (**svuser**) and password (**servconf**) and click **Login**.

TIP



If you are prompted to save the login information, do not accept this. You should change the password later.

The Servers menu is displayed together with the SVConfigHTML Module index.

Figure 7 SVConfigHTML Utility Main Screen



You are now logged in to the SVConfigHTML Webmin utility. Continue with the basic gateway configuration as described in the next section, “[Configuring Gateway Network Communication](#).”

Configuring Gateway Network Communication

To enable communication to the SVGateway over the network/Internet, the gateway communication must be configured.

NOTE

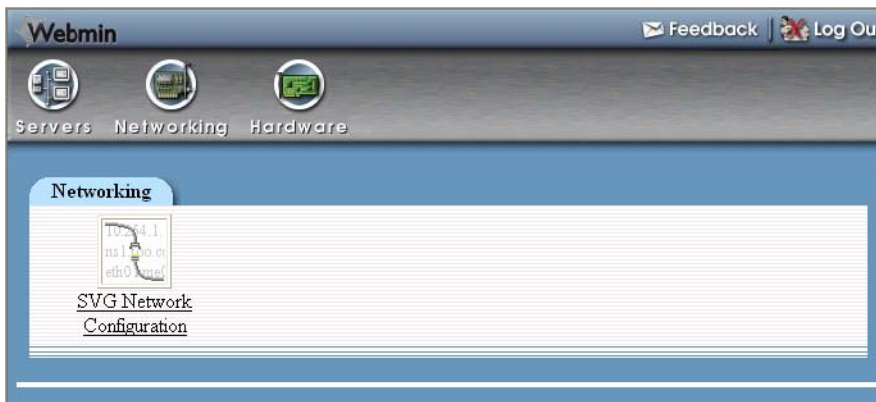


It is recommended to configure the network settings even if you are communicating with the gateway via a modem.

- 1 From the module index, click **Networking**.

The Networking menu is displayed.

Figure 8 Networking Menu



- 2 Click **SVG Network Configuration**.

The Edit Bootup Interface screen is displayed.

Figure 9 Edit Bootup Interface Screen

The screenshot shows a web-based configuration interface for the bootup interface. The title bar reads "Edit Bootup Interface". Below the title bar, the main content area is titled "Boot Time Interface Parameters". Under this heading, there is a "Service Type" dropdown menu currently set to "ZEROCONF". Below that, there are several input fields: "Name" (containing "eth0"), "IP Address" (empty), "Netmask" (containing "255.255.255.0"), and "Broadcast" (empty). There is also a "Default router" field (empty) and a "DNS servers" field (containing "192.168.1.13"). At the bottom of the form, there are two buttons: "Save" and "Save and Apply".

You can select one of the following network service types:

- **Static**
Select this option when the internal IP address of the SVGateway will remain consistent.
- **DHCP**
Select this option to request the DHCP server to assign an IP address for the SVGateway. To use this option, the SVGateway must be connected (via a standard network cable) to a network with a DHCP server.

NOTE



If you are requesting an IP address from a DHCP server, be sure to reserve the IP address with the DHCP server so the assigned address remains constant.

- **ZEROCONF**
Do not choose this option. It is provided for initial communication purposes only.
- 3** To configure the **Static** service type, perform the following:
- A** In the **Service Type** box, select **Static**.
 - B** Enter the values according to the following table. All values should be obtained from the system administrator, though some can be obtained using the DOS **ipconfig/all** command.

| Property | Description |
|-----------------|--|
| eth0 IP Address | Enter an IP address to assign to the SVGateway. |
| Netmask | Enter the netmask. |
| Broadcast | Enter the broadcast address. This address is one number higher than the highest IP address in your network. For example, if your IP addresses range from 192.168.0.1 to 192.168.0.254, the broadcast address is 192.168.0.255. |
| Default Router | Enter the IP address of the default router/gateway. |
| DNS Servers | Enter the address of the DNS servers (minimum: 1, maximum: 3). |

- C** Click **Save and Apply**, and confirm the request to restart the SVGateway operating system.

After the SVGateway operating system restarts, you will be prompted to log in to the SVConfigHTML utility again with the IP address you supplied in step 3B.

- 4** To configure the DHCP service type, perform the following:

- A** Select DHCP.

- B** Click **Save and Apply**, and confirm the request to restart the SVGateway operating system.

- C** To continue, you must log in again to the SVConfigHTML, as described in “To log in to the SVConfigHTML Webmin utility” on page 14.

Continue with the basic configuration as described in the next section, “Synchronizing the Gateway Time.”

Synchronizing the Gateway Time

You can synchronize the SVGateway system time to your network time. This ensures that the time displayed in the SerVision MultiClient will match your system time. You can use either of the following methods:

- Enter the system time, date, and time zone.
- Synchronize with a time server.

To synchronize the gateway time

- 1 From the module index, click **Hardware**.

The Hardware menu is displayed.

Figure 10 Hardware Menu



- 2 From the hardware menu, click **SVG System Time**.

The SVG System Time screen is displayed.

Figure 11 SVG System Time Screen

The screenshot shows the 'SVG System Time' configuration screen. At the top, there is a title bar 'SVG System Time' and a version indicator '[SVG System Time 0.1.7]'. Below this is a 'System Time' section with a table for setting the date and time. The table has columns for Day, Date, Month, Year, and Hour. The current values are Sunday, 5, December, 2004, and 11:02:00. Below the table is a 'Timezone' dropdown menu set to 'Asia/Jerusalem' and a 'Save and Apply' button. There is also a 'Time Server' section with a 'Timeserver hostname or address' input field and a 'Sync and Apply' button.

- 3 Enter the system time in either of the following ways:
 - To manually set the gateway time, enter the current date and time, select a time zone, and click **Save and Apply**.
 - To synchronize with a time server, enter the host name or IP address of the time server in the **Time Server** area, and click **Sync and Apply**.

4 Confirm the restart of system services. This is necessary to initialize the changes.

You can continue with custom configuration settings, as described in [Chapter 3, “Custom SVGateway Configuration.”](#)

Custom SVGateway Configuration

After you complete the basic configuration settings, you can continue with the custom configuration settings. For each SVGateway, you can configure the following areas:

- **Gateways**
properties relating to the way in which to address the SVGateway
- **Recorders**
properties relating to the recording of events
- **Proxy Servers**
properties relating to the setup and activation of proxy servers
- **Sensors**
properties relating to the setup and activation of sensors and event triggering
- **Audio**
properties relating to audio capture and its association with a specific camera
- **Cameras**
properties relating to camera configuration
- **Notification Settings**
properties relating to event notification settings
- **Modem Communication**
properties relating to modem communication

This section also describes the following areas:

- **Technical Specifications**
technical specifications for the SVGateway
- **Regulations**
important regulations regarding use of the SVGateway

You perform all custom configuration tasks using the Server Configuration screen from the SVConfigHTML utility.

To open the Server Configuration screen

- 1 Log in to the SVConfigHTML utility (as described in “To log in to the SVConfigHTML Webmin utility” on page 14).
- 2 From the Module index, click **Servers**.
- 3 From the Servers menu, click **SVGServer Configuration**.
- 4 From the SVGServer Configuration menu, click **Gateway**.

The Server Configuration screen is displayed.

Figure 12 Server Configuration Screen

Server configuration

WORKSPACE: Test

Server Configuration

System Name: System Port:

Login: Password:

Enable TV-Out

Recorder Configuration

Max Events to store:

Proxy Server Configuration

Activate IP Address: Port: Max TCP Connections available: Network Interface:

Camera Configuration

Camera.#1

Camera.#2

Camera.#3

Camera.#4

Before You Begin

The SVGateway comes with a default read-only configuration workspace called *default*. To customize your configuration settings, you must first copy these settings to another configuration workspace. The default workspace is always available to revert back to in the future.

To create an editable configuration workspace

- 1 From the Server Configuration screen, just under the proxy server options, enter a new configuration workspace name and click **Save Configuration as**.
- 2 After the confirmation of the workspace creation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

You can define multiple configuration workspaces, and you can save them for later use. For more information, see [“Using Multiple Configuration Workspaces” on page 41](#).

Proceed with the custom configuration options as described in the following sections.

Gateways

You can configure the following gateway properties:

- **System Name**
a descriptive name for the SVGateway
- **System Port**
the port on the SVGateway that enables communication with the clients (default: 9988)
- **Login**
the user name that the client uses to log in to the SVGateway (default: user)
- **Password**
the password that the client uses to log in to the SVGateway (default: password)

To configure Gateway properties

- 1 In the **Server Configuration** area, enter the desired values.
- 2 Click **Save Configuration**.

-
- 3 You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
 - A Click **Apply Changes**. This reinitializes the system services with the new values.
 - B After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Recorders

You can configure the following recorder property:

- Max Events to store
the maximum number of event listings displayed in the SerVision MultiClient for this gateway (default: 5000)

To configure Recorder properties

- 1 In the **Recorder Configuration** area, enter the desired value.
- 2 Click **Save Configuration**.
- 3 You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
 - A Click **Apply Changes**. This reinitializes the system services with the new values.
 - B After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Proxy Servers

If you do not have a public IP address, and you cannot contact the IP address of the SVGateway in a direct manner, you should direct communications to a proxy server. You can use a private proxy server, or you can connect to the SerVision proxy server. To use the SerVision proxy server, activate it and accept the default settings.

You can configure the following proxy server properties:

- IP Address
the IP address of the proxy server (default: the address of the SerVision proxy server)

-
- Port
the TCP port on the proxy server (default: the port of the SerVision proxy server)
 - MAX TCP Connections available
the maximum amount of simultaneous connections (default: 10)
 - Network Interface
how the proxy connection is established, via LAN or modem

To configure Proxy Server properties

- 1 In the **Proxy Server Configuration** area, perform the following:
 - A To enable use of the SerVision proxy server, select **Activate**.
 - B Enter the settings for the proxy server. If you are using the SerVision proxy server, you do not need to change these values.
- 2 Click **Save Configuration**.
- 3 You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
 - A Click **Apply Changes**. This reinitializes the system services with the new values.
 - B After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Sensors

Sensors are used to generate events when specific activities are done, for example, when a door is opened or a switch is turned on or off. When an event is generated, you can record the video from the event, or trigger other notification activities. For more information on notification settings, see [“Notification Settings” on page 34](#).

You can configure the following sensor properties:

- Event Gap in msec
the amount of milliseconds between the end of one event and the beginning of another (default: 1000)
- Description
description of the sensor (like “Entry door”) that will be used for notification messages

- **Event Notification**
the kind of events for which notification should be activated
- **Attached to**
the camera to which the sensor is associated

This setting may affect client options, such as video pop-up on sensor events. For more information, see the *SerVision MultiClient User Guide*.

You configure sensors using the Sensor Configuration screen.

To configure sensor properties

- 1 From the Server Configuration screen, click **Sensor Configuration**.

The Sensor Configuration screen is displayed.

Figure 13 Sensor Configuration Screen

WORKSPACE: test

Event Gap in msec

SerVision Sensors Table

| Activation | Pin ID | Sensor ID | Description | Event Notification | Attached to |
|-------------------------------------|--------|-----------|--|--|--|
| <input checked="" type="checkbox"/> | 1 | 1001 | <input type="text" value="hwsensor Sensor 1"/> | <input type="radio"/> RAISE <input type="radio"/> FALL <input checked="" type="radio"/> BOTH | <input type="radio"/> Camera One <input type="radio"/> Camera Two <input type="radio"/> Camera Three <input checked="" type="radio"/> Camera Four |
| <input checked="" type="checkbox"/> | 2 | 1002 | <input type="text" value="hwsensor Sensor 2"/> | <input type="radio"/> RAISE <input type="radio"/> FALL <input checked="" type="radio"/> BOTH | <input type="radio"/> Camera One <input type="radio"/> Camera Two <input type="radio"/> Camera Three <input checked="" type="radio"/> Camera Four |
| <input checked="" type="checkbox"/> | 3 | 1003 | <input type="text" value="hwsensor Sensor 3"/> | <input type="radio"/> RAISE <input type="radio"/> FALL <input checked="" type="radio"/> BOTH | <input type="radio"/> Camera One <input type="radio"/> Camera Two <input type="radio"/> Camera Three <input checked="" type="radio"/> Camera Four |
| <input checked="" type="checkbox"/> | 4 | 1004 | <input type="text" value="hwsensor Sensor 4"/> | <input type="radio"/> RAISE <input type="radio"/> FALL <input checked="" type="radio"/> BOTH | <input type="radio"/> Camera One <input type="radio"/> Camera Two <input type="radio"/> Camera Three <input checked="" type="radio"/> Camera Four |
| <input checked="" type="checkbox"/> | 5 | 1005 | <input type="text" value="hwsensor Sensor 5"/> | <input type="radio"/> RAISE <input type="radio"/> FALL <input checked="" type="radio"/> BOTH | <input type="radio"/> Camera One <input type="radio"/> Camera Two <input type="radio"/> Camera Three <input checked="" type="radio"/> Camera Four |
| <input checked="" type="checkbox"/> | 6 | 1006 | <input type="text" value="hwsensor Sensor 6"/> | <input type="radio"/> RAISE <input type="radio"/> FALL <input checked="" type="radio"/> BOTH | <input type="radio"/> Camera One <input type="radio"/> Camera Two <input type="radio"/> Camera Three <input checked="" type="radio"/> Camera Four |

- 2 In the SerVision Sensors Table area, perform the following:

-
- A** To enable a sensor, select **Activation**.
 - B** (optional) Enter a sensor description.
 - C** Select the kind of sensor event that triggers notification.
 - D** (optional) To link the sensor to a camera, select the camera. This enables the recording of video for the event. The event will be listed in the SerVision MultiClient under the linked camera.
 - 3** At the bottom of the screen, click **Save Sensors**.
 - 4** On the confirmation screen, click **Return to svg configuration**. The Server Configuration screen is redisplayed.
 - 5** You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
 - A** Click **Apply Changes**. This reinitializes the system services with the new values.
 - B** After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Audio

You can connect up to four microphones to the SVGateway.

You can configure the following audio property:

- Description
 - a description of the microphone (such as “Reception area”)

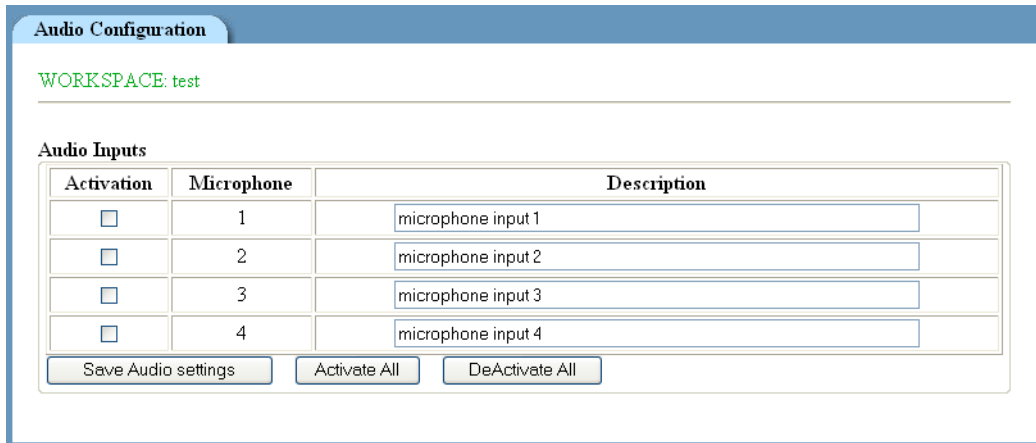
You configure audio properties using the Audio Configuration screen.

To configure audio properties

- 1 From the Server Configuration screen, click **Audio Configuration**.

The Audio Configuration screen is displayed.

Figure 14 Audio Configuration Screen



The screenshot shows the 'Audio Configuration' screen. At the top, there is a blue header with the text 'Audio Configuration'. Below the header, the workspace name 'WORKSPACE: test' is displayed. The main area is titled 'Audio Inputs' and contains a table with four rows. Each row has three columns: 'Activation' (with a checkbox), 'Microphone' (with a number 1-4), and 'Description' (with a text input field). Below the table are three buttons: 'Save Audio settings', 'Activate All', and 'DeActivate All'.

| Activation | Microphone | Description |
|--------------------------|------------|--------------------|
| <input type="checkbox"/> | 1 | microphone input 1 |
| <input type="checkbox"/> | 2 | microphone input 2 |
| <input type="checkbox"/> | 3 | microphone input 3 |
| <input type="checkbox"/> | 4 | microphone input 4 |

Save Audio settings Activate All DeActivate All

- 2 In the **Audio Inputs** area, perform the following:
 - A To enable a microphone, select **Activation**.
 - B (optional) Enter a description for the audio input.
- 3 Click **Save Audio settings**.
- 4 On the confirmation screen, click **Return to svg configuration**. The Server Configuration screen is redisplayed.
- 5 You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
 - A Click **Apply Changes**. This reinitializes the system services with the new values.
 - B After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Cameras

You can configure the following properties for each connected camera:

- **Camera Configuration**
a descriptive name for the camera, the camera protocol (NTSC, PAL, etc.), picture properties, and whether the camera video quality level options have been limited
- **Audio**
whether audio is captured together with the camera
- **Camera Control**
whether camera movement is enabled and the protocol through which this is done
- **Camera Recording**
camera recording settings such as when recording is performed and at what quality level
- **Camera Motion Detection**
whether motion detection capabilities are enabled and the sensitivity to motion

You configure each camera using its Camera Configuration screen.

To configure Camera properties

- 1 From the Server Configuration screen, click the camera configuration button for the desired camera. For example, to configure camera #1, click **Camera #1**.

The Camera Configuration screen for the selected camera is displayed.

Figure 15 Camera Configuration Screen

The screenshot shows the 'Camera #1 configuration' screen. At the top, it says 'WORKSPACE: test' and '(type:b)'. The main configuration area is divided into several sections:

- Camera Configuration:** Includes a 'Description' field with 'Camera One', a 'Video Mode' dropdown set to 'PAL', 'Video Contrast' and 'Video Brightness' input fields both set to '50', and a 'Fixed' dropdown set to 'False'.
- Audio:** Includes an 'Activate' checkbox and a 'Microphone' dropdown set to 'Mic 1'.
- Camera Control:** Includes an 'Activate' checkbox, a 'Device' dropdown set to 'COM1', a 'Protocol' dropdown set to 'Smile Cam', and a 'Camera Bus ID (only for 485):' input field set to '1'.
- Camera Recording:** Includes an 'Activate' checkbox, radio buttons for 'always' (selected) and 'by events', and a 'Recording Quality' dropdown set to 'middle quality(10 fps,96 kbps,sif)'.
- Camera Motion Detection:** Includes an 'Activate' checkbox, a 'Motion Detection Sensitivity' dropdown set to 'high sensitivity', and a 'Motion Gap (in sec)' dropdown set to '3'.

At the bottom, there are 'Save Camera' and 'Delete Camera' buttons.

- 2 To configure camera properties, enter the values as described in the following table:

| Field | Description |
|------------------|--|
| Description | (optional) Enter a descriptive camera name. |
| Video Mode | Select the format of the camera: PAL, NTSC, or SECAM. |
| Video Contrast | To define a default contrast level, select the check box and enter a contrast level (from 0-100) |
| Video Brightness | To define a default brightness level, select the check box and enter a contrast level (from 0-100) |
| Fixed | To limit the video quality levels available to the user, select True . To enable all quality level choices, select False . |

3 To configure audio properties, perform the following:

A To activate audio recording, select **Activate**.

B To select from which input microphone the audio is recorded with this camera, select a microphone.



NOTE

To use audio, you must install audio microphones, as described in “[Setting up the Hardware](#)” on page 3.

4 To configure camera control properties, perform the following:

A To activate camera control, select **Activate**.

B Select the COM port through which the camera control properties are set. RS-232 cameras are controlled via COM1. RS-485 cameras are controlled via COM2.

For more information on your camera, see the documentation that accompanied the camera.

C Select the protocol of the attached camera. For more information, see the camera documentation.

D If you are using RS-485 to control this camera, enter its Bus ID. The Bus ID is the identification number of the camera to control, set on each camera.

5 To configure camera recording properties, perform the following:

A To activate camera recording, select **Activate**.

B Select whether to record video at all times or only upon the triggering of an event.

C Select a recording image quality.

6 To configure camera motion detection properties, perform the following:

A To enable the motion detection, select **Activate**. (By default, motion detection is activated.)

B Select the camera’s level of sensitivity to motion. Increased sensitivity will create more motion detection events.

C Select the motion gap, that is, the amount of time free of detected motion which will signal the end of the event.

-
- 7 You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
- A Click **Apply Changes**. This reinitializes the system services with the new values.
 - B After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Notification Settings

You can cause a notification task to be performed when specific events are created. For example, when a contact sensor on a door is tripped, a specific camera can move to that location, or when motion is detected in a restricted area an SMS or email notification can be sent.

In some cases, you may want to operate your SVGateway without live modem communication (for example, to reduce connection time). You can set the system to dial out to a SerVision client only when events occur.

To complete the notification setting configuration process, you must complete the following tasks:

- **Activating the sensors**
Camera motion detection is activated by default, but dry sensors must be activated. For more information on activating dry sensors, see [“Sensors” on page 27](#). For more information on activating motion detection sensors, see [“Cameras” on page 31](#).
- **Linking Sensors with Notification Events**
Link each desired sensor (or camera) with a notification event.
- **Configuring SMS and Email Message Options**
For SMS and Email notification, you must define the message settings.

Linking Sensors with Notification Events

To link sensors with notification events, you configure the following settings:

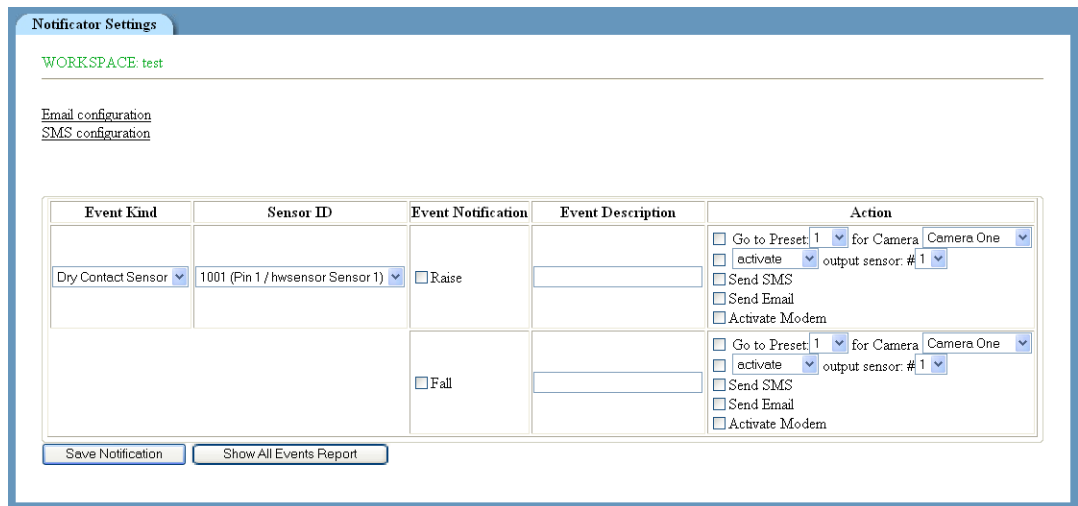
- **Event Kind**
the type of event that triggers the notification
- **Sensor ID**
the location through which the sensor is connected to the SVGateway
- **Event Notification**
the kind of event that requires notification

- **Event Description**
an optional text event description (such as “Entry - Back Door”)
- **Action**
the action to take when the event is triggeredlink sensors with notification events

1 From the Server Configuration screen, click **Events Notification**.

The Events Notification screen is displayed.

Figure 16 Events Notification Screen



2 In the **Notification Settings** table, perform the following:

- A** In the **Event Kind** box, select the kind of event to configure: Adam Sensor, Dry Contact Sensor, or Motion Detection. The **Sensor ID** selection changes according to your selection.
- B** In the **Sensor ID** box, select the specific sensor to monitor for this event kind.
- C** In the **Event Notification** box, select the kind of notification to link with the action. For sensor events, select **Raise** or **Fall**. For motion events, select **Start** or **Stop**.
- D** In the **Action** box, select the action to take when an event that meets the selected criteria is triggered. Select any of the following actions:
 - **Go to Preset**
Select a preset location for a specific camera. Preset locations are defined in the SerVision MultiClient application. For more information, see the *SerVision MultiClient User Guide for the PC*.

-
- **Activate output sensor**
Activate or deactivate an attached output sensor (such as activating or silencing an alarm). For more information on installing output sensors, see [“Installing Sensors” on page 7](#).



NOTE

Output sensors are not included in the standard SerVision package. To purchase output sensors, contact your SerVision representative.

- **Send SMS**
Send an SMS message to a predefined number. You must configure the SMS message settings as described in [“Configuring SMS and Email Message Options” on page 37](#).
- **Send Email**
Send an email message to a predefined address. You must configure the email message settings as described in [“Configuring SMS and Email Message Options” on page 37](#).
- **Activate Modem**
Enable the default modem to initiate communication to allow a client to view the event. For more information on modem communication, see [“Modem Communication” on page 42](#).

- 3** When you have completed entering the desired values, click **Save Notification**.
- 4** On the confirmation screen, click **Return to svg configuration**. The Server Configuration screen is redisplayed.
- 5** You can make additional configuration changes as described in the other sections, or to apply all changes made in this screen, perform the following:
 - A** Click **Apply Changes**. This reinitializes the system services with the new values.
 - B** After the confirmation of the restart operation completion, click **Return to svg configuration**. The Server Configuration screen is redisplayed.

Configuring SMS and Email Message Options

To enable the sending of SMS and email notifications, you must define the phone number or address of the recipient. You can also customize the text that is sent in the notification by defining notification templates. In addition to the text that you define, each notification can include the following information:

- the time the message was generated
- the source of the generated event (dry sensor, motion detector, etc.)
- the event description, as entered in the Events Notification screen

To configure Email message options

- 1 On the Events Notification screen, click **Email configuration**.

The Email Templates screen is displayed.

Figure 17 Email Templates Screen

email Templates

WORKSPACE: test

Use specific mail server

From:

Mail server address:

Username:

Password:

Template instructions:

1. each @@time@@ will be replaced by the time of message generation
2. each @@source@@ will be replaced by the source description (From Motion/ or From Dry Contact Sensor etc..)
3. each @@event@@ will be replaced by the event description (ex: 'The door has been opened')

/ / [Load current template](#)

Template Name: (Used for Notification)

To:

Cc:

Bcc:

Subject:

Email body:

Event @@event@@ has occurred at time @@time@@ from @@source@@ .

Use it for notification

as

The SVConfigHTML Webmin utility contains an internal mail server. You can use this mail server, or you can define an alternate mail server.

-
- 2 To use an alternate email server, select **Use specific mail server** and enter the following details:
 - **From**
an address that identifies from where the notification is being sent
 - **Mail server address**
the address of the outgoing SMTP mail server
 - **User name**
the user name for this email account
 - **Password**
the password for this email account
 - 3 Enter the email address to where the notification message should be sent.
 - 4 (optional) Edit the **Subject** and **Email body** text.
 - 5 To save this template, enter a name in the text box, and click **Save**.
 - 6 To use this template for notification, select **Use it for notification**.

For more information on using multiple templates, see [“Managing Multiple Notification Templates”](#) on page 41.

To configure SMS message options

- 1 On the Events Notification screen, click **SMS configuration**.

The SMS Templates screen is displayed.

Figure 18 SMS Templates Screen

sms Templates

WORKSPACE: test

Template instructions:

1. each @@time@@ will be replaced by the time of message generation
2. each @@source@@ will be replaced by the source description (From Motion/ or From Dry Contact Sensor etc..)
3. each @@event@@ will be replaced by the event description (ex: 'The door has been opened')

Load Template / Remove Template / Load current template

Template Name: (Used for Notification)

To:

Sms body:

Event @@event@@ has occurred at time @@time@@ from @@source@@ .

Use it for notification

Save as

- 2 In the **To** field, enter the phone number of the SMS message recipient in the following format:

+CountrycodeAreacodeNumber

For example, +441822123456

- 3 (optional) Edit the **SMS body** text.
- 4 To save this template, enter a name in the text box, and click **Save**.
- 5 To use this template for notification, select **Use it for notification**.

For more information on using multiple templates, see “[Managing Multiple Notification Templates](#)” on page 41.

Managing Multiple Notification Templates

You can configure and save multiple email and SMS notification templates. You can subsequently edit the saved templates and select which template to use for notification.

The following procedures apply to both the SMS and the Email Template screens.

| To do This | Perform These Steps |
|---------------------------|---|
| save multiple templates | From the Templates screen, enter a unique name and click Save . When multiple templates exist, a drop-down box is displayed next to the Load Template button. |
| load a saved template | From the Templates screen, select the desired template from the drop-down box, and click Load Template . |
| remove a saved template | From the Templates screen, select the desired template from the drop-down box, and click Remove Template . |
| load the current template | From the Templates screen, select the desired template from the drop-down box, and click Load Current Template . |

The template that was last selected to be used for notification is referred to as the *current template*.

Using Multiple Configuration Workspaces

You can save (and remove) configuration workspaces and load them to the gateway as necessary.

NOTE



SVConfigHTML includes a workspace called *default*. Changes to this workspace cannot be saved and this workspace cannot be removed. To make changes, you must first save and load a new workspace.

To manage configuration workspaces

From the Server Configuration screen, just under the proxy server options section, perform the following:

| To do This | Perform These Steps |
|--|---|
| save changes made to the current workspace | Click Save Configuration . |
| save the current workspace with a different name | Enter a new name in the text box and click Save Configuration as . |
| remove the current workspace | Click Remove Configuration . |
| use a different workspace | From the SVGServer Configuration menu, select the desired workspace name from the drop-down menu, and click Load . |

Modem Communication

If the SVGateway is using a modem to connect to the Internet, you must configure the modem communication. These settings are accomplished using the Modem Connections Configuration screen.

To open the Modem Connections Configurations screen

- 1 Log in to the SVConfigHTML utility (as described in “To log in to the SVConfigHTML Webmin utility” on page 14).
- 2 From the module index, click **Servers**.
- 3 From the Servers menu, click **SVGServer Configuration**.
- 4 From the SVGServer Configuration menu, click **Modems**.

The Modem Connections Configuration screen is displayed.

Figure 19 Modem Connections Configuration Screen

Continue configuring the modem as described in the following sections:

| To Configure Communication With This Type of Modem | See This Section |
|--|---|
| GSM | Configuring GSM Modems on page 43 |
| CDMA | Configuring CDMA Modems on page 45 |
| PSTN/ISDN | Configuring PSTN/ISDN Modems on page 47 |

Configuring GSM Modems

You configure SVGateway communication through a GSM modem by performing the following tasks:

- 1 From the Modem Connections Configuration screen, select **GPRS** and click **GSM**.

The Modem Configuration screen is displayed.

Figure 20 Modem Configuration Screen—GSM/GPRS

Modem Configuration

Modem type: GSM
Connection type: GPRS

APN:

PIN:

Phone number:

User name:

Password:

Make this connection type default

Connect automatically

Disconnect when there is no activity

Enable debugging mode

- 2 Enter the modem configuration properties as described in the following table. (These are the same properties that you would use to connect your computer to the Internet via a cellular modem.)

| Modem Type | Field and Description |
|------------|---|
| GSM | <ul style="list-style-type: none"> ■ APN Enter the access point name. Your cellular provider should supply this value. ■ PIN Enter the personal ID number for the SIM. Your cellular provider should supply this value. ■ Phone number Enter the cellular provider's GSM number. By default, the *99# number is used by most cellular providers. ■ User name If your provider requires a user name, enter it here. Your cellular provider should supply this value. ■ Password If your provider requires a password, enter it here. Your cellular provider should supply this value. ■ Make this connection type default Select this to use these connection properties (regardless of which type of modem is actually being used). ■ Connect automatically Select this to use this modem to connect to the Internet immediately upon inserting it. This modem will remain in "always-on" state. If you do not select this option, the modem can be configured to connect only when an event is triggered. For more information about this setting, see "Notification Settings" on page 34. ■ Disconnect when there is no activity If the modem is configured to connect only when there is an event, selecting this option will disconnect the modem after the event activity has ended. For more information about this setting, see "Notification Settings" on page 34. ■ Enable debugging mode Select this to activate debugging mode. Debugging mode is very useful in troubleshooting modem communication issues. It is recommended that you enable this option at least until the modem is successfully connected. When debugging mode is activated, you must refresh the screen periodically to view the activity. |

- 3 Click **Save**.

- 4 Gently insert the PCMCIA modem card into the modem slot on the back of the SVGateway. For more information, see ["Connecting the SVGateway Hardware" on page 5](#).

A single beep confirms that the inserted modem is supported and has been recognized by the SVGateway. Three ascending beeps indicate that a successful connection has been established.

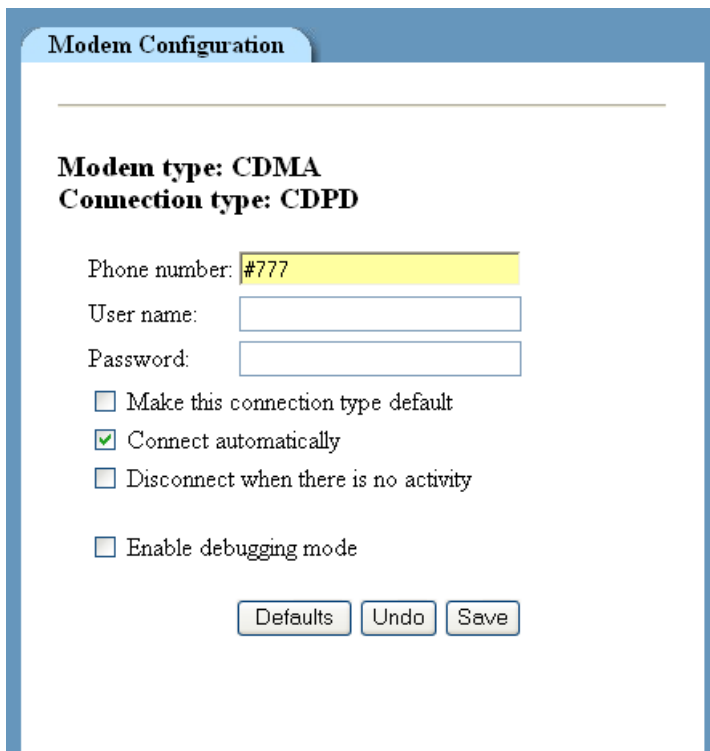
Configuring CDMA Modems

You configure SVGateway communication through a CDMA modem by performing the following tasks:

- 1 From the Modem Connections Configuration screen, select **CDPD** and click **CDMA**.

The Modem Configuration screen is displayed.

Figure 21 Modem Configuration Screen—CDMA/CDPD



Modem Configuration

Modem type: CDMA
Connection type: CDPD

Phone number: #777

User name:

Password:

Make this connection type default

Connect automatically

Disconnect when there is no activity

Enable debugging mode

- 2 Enter the modem configuration properties as described in the following table. (These are the same properties that you would use to connect your computer to the Internet via a cellular modem.)

| Modem Type | Field and Description |
|------------|--|
| CDMA | <ul style="list-style-type: none"> ■ Phone number Enter the cellular provider’s number. By default, the #777 number is used by most cellular providers. ■ User name If your provider requires a user name, enter it here. Your cellular provider should supply this value. ■ Password If your provider requires a password, enter it here. Your cellular provider should supply this value. ■ Make this connection type default Select this to use these connection properties (regardless of which type of modem is actually being used). ■ Connect automatically Select this to use this modem to connect to the Internet immediately upon inserting it. This modem will remain in “always-on” state. If you do not select this option, the modem can be configured to connect only when an event is triggered. For more information about this setting, see “Notification Settings” on page 34. ■ Disconnect when there is no activity If the modem is configured to connect only when there is an event, selecting this option will disconnect the modem after the event activity has ended. For more information about this setting, see “Notification Settings” on page 34. ■ Enable debugging mode Select this to activate debugging mode. Debugging mode is very useful in troubleshooting modem communication issues. It is recommended that you enable this option at least until the modem is successfully connected. When debugging mode is activated, you must refresh the screen periodically to view the activity. |

- 3 Click **Save**.

- 4 Gently insert the PCMCIA modem card into the modem slot on the back of the SVGateway. For more information, see [“Connecting the SVGateway Hardware” on page 5](#).

A single beep confirms that the inserted modem is supported and has been recognized by the SVGateway. Three ascending beeps indicate that a successful connection has been established.

Configuring PSTN/ISDN Modems

You can configure PSTN/ISDN modems to dial out (“dial-up”) or to enable other modems to dial in (“dial-in”).

To configure a PSTN/ISDN modem to dial-up

- 1 From the Modem Connections Configuration screen, select **CDPD** and click **CDMA**.

The Modem Configuration screen is displayed.

| Modem Type | Field and Description |
|------------|---|
| PSTN | <p>Dial-in (default) is used to configure the SVGateway to answer incoming connection client requests over PSTN and ISDN lines.</p> <ul style="list-style-type: none">■ Authentication Settings:<ul style="list-style-type: none">■ Use current SVGServer’s Settings Select this option to use the user name and password that are defined in the SVGServer Configuration screen. For more information, see “To configure Gateway properties” on page 25.■ Use custom credentials Select this option to enter a different user name and password for communication. Enter a user name and password for authenticating the incoming request.■ IP Addresses:<ul style="list-style-type: none">■ Use default addresses Select this option to give the incoming request an IP Address supplied by the server.■ Use custom addresses Select this option to give the incoming request predefined server and client IP addresses. Enter the desired addresses.■ Enable debugging mode Select this to activate debugging mode. This option may be requested to be used for support troubleshooting. |

- 2 Click **Save**.

Disconnecting the SVGateway



WARNING

To ensure your safety and prevent the danger of electrocution, the following disconnection sequence must be followed. Do not remove the power cord until instructed.

To disconnect the SVGateway

- 1 Turn the power switch off on the SVGateway unit.
- 2 Remove the cellular modem from the PCMCIA slot.
- 3 Disconnect the PTZ cables from the SVGateway COM1 and/or COM2 ports.
- 4 Disconnect the ethernet cable from the SVGateway unit.
- 5 Disconnect the video camera BNC cables from the SVGateway unit.
- 6 After all previous steps have been completed, disconnect the power cord from the SVGateway unit.

Technical Specifications

SVG Series

The SerVisionSVG series is a family of compact video gateways that combine fully controllable security functionality with the highest level of video streaming performance in one compact stand-alone unit. SVG gateways give you fast access to all the information in the field through state-of-the-art motion detection, recording and monitoring features.

Integrated sensor inputs and Video Motion Detection on all cameras give the system multiple ways to catch intruders quickly. With support of an impressive array of data networks, including LAN, Wi-Fi, analog phone lines and all cellular protocols, and a long line of communication clients, including PCs, PDAs and cellular phones, you can access information wherever you are: at home, on the road, or in the control center.

Control multiple cameras simultaneously, monitor the situation in real-time, or when events occur, choose between recording modes, and enjoy full DVR capabilities on all video channels – with the SerVisionSVG Gateway.

Choose a model to match your needs:

- **SVG400**: the perfect security system for medium businesses
- **SVG1000**: the high-end security system for large enterprises
- **IVG**: the perfect mobile DVR system for vehicles and remote sites

SVGateway

Supporting up to 4 video channels simultaneously and 6 input sensors in a small footprint device, the SVGateway is the perfect security solution for small to medium size businesses.

The SVG400 supports:

- Simultaneous integration of up to 4 cameras
- Integration of up to 6 input sensors
- Integration of up to 2 output sensors
- Simultaneous video recording and playback on all channels
- All cellular transport protocols: GPRS, CDMA and HSCSD, including a generic PCMCIA slot for custom modem integration
- Pre and post-alarm video recording
- Triple DES encryption of the video stream
- Adjustable bit rates to support the full range of network bandwidths (9 KBits/sec to 1 MBits/sec, 5-30 fps live)
- High-quality DVR capabilities on all channels, with real-time transcoding algorithms for lower bit rates
- Software generated motion detection with adjustable threshold and Region-of-Interest
- Event-driven user notification

The SVGateway is available in the following models:

- SVG-400-P: For connection to a telephone line
- SVG-400-M: For mobile applications

SVG 400 Gateway Series Specification

| Models | | <ul style="list-style-type: none"> ■ SVG400-P ■ SVG400-M |
|----------------|-----------------------|--|
| Video Input | Standard | <ul style="list-style-type: none"> ■ PAL ■ NTSC ■ SECAM ■ Composite video ■ BNC |
| | Number of channels | <ul style="list-style-type: none"> ■ 1-4 |
| | Resolution | <ul style="list-style-type: none"> ■ 640x480 (VGA) ■ 320x240 (SIF) ■ 160x120 (QSIF) |
| | Compression | <ul style="list-style-type: none"> ■ MPEG4 ■ DSP-based |
| | Compressed data rates | <ul style="list-style-type: none"> ■ 9 Kbps – 1Mbps |
| | Encryption | <ul style="list-style-type: none"> ■ Triple DES |
| | PTZ control | <ul style="list-style-type: none"> ■ 1 RS-232 port ■ 1 RS-232/RS-485 port |
| | PTZ protocol | <ul style="list-style-type: none"> ■ Pelco-D ■ Mintron ■ Others (on demand) |
| Communication | Network | <ul style="list-style-type: none"> ■ RJ-45, 10/100 Base-T Ethernet ■ Optional: PSTN (phone) modem (SVG400-P) ■ Optional: PCMCIA slot for external modems (SVG400-M) |
| | Concurrent users | <ul style="list-style-type: none"> ■ 15 |
| | Maintenance | <ul style="list-style-type: none"> ■ Built-in web server for administration |
| Recording | Mode | <ul style="list-style-type: none"> ■ Continuous, event-driven ■ Cyclic recording: disk is never full |
| | HD type | <ul style="list-style-type: none"> ■ Internal |
| | HD size | <ul style="list-style-type: none"> ■ 2.5 inch: 20GB - 80GB, 3.5inch: 20GB - 250GB |
| Event Handling | Event type | <ul style="list-style-type: none"> ■ External alarm, video motion detection, video-cut, system failure, power failure |
| I/O | Input channels | <ul style="list-style-type: none"> ■ 6 Opto-isolated Inputs |
| | Output channels | <ul style="list-style-type: none"> ■ 2 Opto Isolated Transistor Drivers |

| Power | Voltage | <ul style="list-style-type: none"> ■ 110/220V AC (SVG-400-P) ■ 12V DC (SVG-400-M) ■ |
|-----------------------|---------------------|--|
| | Max. Rating | ■ 60W |
| Operating Environment | Ambient temperature | ■ 5°C - 50°C |
| | Relative humidity | ■ < 85% (no condensation) |
| Mechanical Design | Dimension (mm) | ■ 90.5 x 206 x 240 |


Regulations


This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.


If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:




- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or distributor for help.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Changes or modifications not expressly approved by Servision Ltd. could void the user's authority to operate the equipment.

 The equipment shall be powered from the AC Inlet mains supply. The socket-outlet shall be installed near the equipment and shall be easily accessible.

 The outer conductors of coaxial cables entering and/or leaving a building shall be bonded directly to a common equipotential bar.

 The unit shall be powered from the wall outlet socket located closer (at least 50-100 cm) than the power supply cord length.

-  The wall socket/outlet shall be easily accessible.
-  Disconnect power supply cord (after the Video cable was disconnected) from the wall socket/outlet before removing the unit from the wall.
-  The socket/outlet powering the unit shall have branch circuit protection of 15A.

Changing the SVConfigHTML Login Password

You can change the password used to access the SVConfigHTML utility. The user name, **svuser** cannot be changed.

To change the SVConfigHTML login password

- 1 Log in to the SVConfigHTML utility (as described in “To log in to the SVConfigHTML Webmin utility” on page 14).
- 2 From the module index, click **Servers**.
- 3 From the Servers menu, click **SVG Change Password**.

The Change Password screen is displayed.

Figure 22 Change Password Screen



- 4 Enter the new password and confirm it.
- 5 Click **Save**.

A confirmation message is displayed.

Accessing an SVGateway Through a Firewall

To access the SVGateway server through the Internet when the server is located within the LAN and with a firewall, you must ensure that the following ports are opened:

| Port | Purpose | Protocol |
|-------|-----------------|----------|
| 8810 | Support | TCP |
| 9988 | Control & video | TCP |
| 10000 | Configuration | TCP |

