GeoVision inc
The Vision of Security

PN300 & SQP133

User's Manual

PN300SQP133V106-A

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Preface

Welcome to the*PN300 & SQP133 User's Manual*.

The PN300 & SQP133 are devices that play back slideshows edited or managed by GeoVision's software such as Content Designer, Content Schedule, CMS Lite and CMS Server. This Manual is designed for the following models, firmware, and software version:

Hardware

Model	Firmware Version
PN300	1.06
SQP133	1.06

Software

Model	Software Version
Content Designer	1.0.6.0
Content Schedule	1.0.3.0
CMS Lite	1.0.4.0
CMS Server	1.0.4.0

Compatible Firmware and Software Versions

The PN300 / SQP133 / SQP110 Series are compatible with CMS Server / CMS Lite / Content Designer. See the following compatible versions.

	PN300 / SQP133	SQP110 Series
CMS Server / CMS Lite V1.0.4.0	V1.06	N/A
CMS Server / CMS Lite V1.0.3.0	V1.05	N/A
CMS Server / CMS Lite V1.0.2.0 or earlier	V1.04 or earlier	V1.03 or earlier
Content Designer V1.0.5.0 or later	V1.05 or later	N/A
Content Designer V1.0.4.0 or earlier	V1.04 or earlier	N/A

Chapter 1 Introduction

The PN300 and SQP133 are digital media players designed to deliver uninterrupted playback of Digital Signage presentations.

1.1 Features

- Multimedia support
- Video resolution up to 1080p and Video outputs of HDMI and VGA (PN300 only)
- Panel resolution of 1280 x 800 (SQP133 only)
- Built-in speaker (SQP133 only)
- SD card and USB storage
- Content Schedule and Content Designer
- Content Management System (CMS Server and CMS Lite)
- IR remote control
- Wireless connectivity (GV-WiFi USB Adapter required)

1.2 Packing List

1.2.1 PN300

1. PN300 device × 1
2. IR remote control × 1
3. AC/DC adapter × 1 (12 V, 3 A, 36 W)
4. Power cord x 1

1.2.2 SQP133

1. SQP133 device × 1
2. IR remote control × 1
3. Magnetic hinge x 1
4. Screw x 4
5. AC/DC adapter × 1 (12 V, 3 A, 36 W)
6. Power cord x 1

1.3 Options

Optional devices can expand the capabilities and versatility of your PN300/SQP133. Contact your dealer for more information.

Options	Detail
Wall Mount Kit 	The Wall Mount Kit is used to mount the **PN300** to the wall.
	● L-type brackets x 2 ● Small screws x 4
VESA Monitor-Mount Kit 	The VESA Monitor Mount Kit is used to mount the **PN300** to the back of a VESA monitor.
	● VESA monitor mount bracket x 1 ● L-type brackets x 2 ● Large screws x 4 ● Small screws x 8
GV-WiFi USB Adapter 	The GV-WiFi USB adapter is a plug-and-play device that provides wireless connectivity to GeoVision IP devices. The GV-WiFi USB Adapter complies with IEEE802.11 b/g/n (Draft 3.0) standards for wireless networking.
Internal GV-USB Dongle for CMS Lite and CMS Server 	The USB dongle can provide the Hardware Watchdog function to the system by restarting the computer when Windows crashes. You need to connect the dongle internally on the motherboard.
SD Card (4 GB, Class 4)	The SD Card is used for local storage and firmware upgrade.

1.4 Overview

This section identifies the components of the PN300 and SQP133.

PN300

Front View

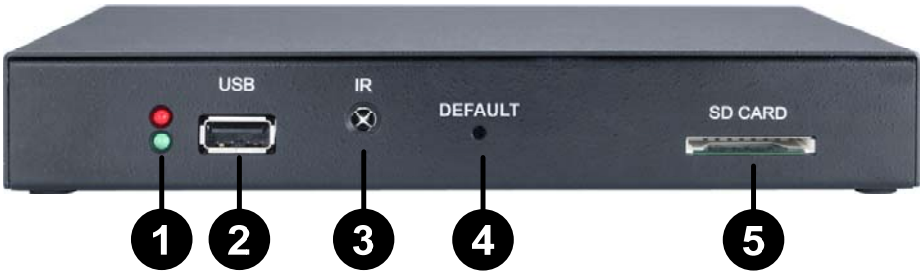


Figure 1-1

No.	Name	Function
1	LED Indicators	The **green** LED indicates the system is ready. The **red** LED indicates the power is supplied. When the **green** LED is off and the **red** LED is on, the device is in sleep mode.
2	USB	Connect to a USB device for local storage of content, firmware upgrade and GV-WiFi USB Adapter. Note the removal of the USB storage device will cause the PN300 to automatically reboot.
3	IR	Built-in IR receiver to receive the IR signals from the IR remote control.
4	Default	Reset the PN300 to the default factory settings. See *3.10 Restoring to Factory Default Settings*.
5	SD Card Slot	Connect to an SD card for local storage and firmware upgrade. Note the removal of the SD card will cause the PN300 to automatically reboot.

Rear View

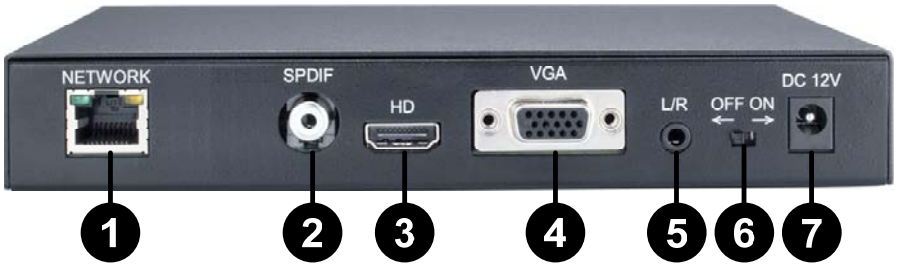


Figure 1-2

No.	Name	Function
1	Ethernet	Connect to an Ethernet.
2	SPDIF	Reserved (not enabled).
3	HDMI	Connect to an HDMI supported display device.
4	VGA	Connect to a VGA monitor.
5	L/R	Connect to a speaker.
6	Power OFF/ON	Switch the power on or off.
7	DC 12V	Connect to power by using the supplied power adapter.

1.4.2 SQP133

Right Panel View

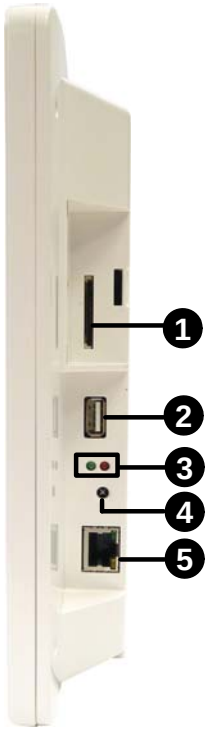


Figure 1-3

No.	Name	Function
1	SD Card Slot	Connect to an SD card for local storage of content and firmware upgrade.
2	USB	Connect to a USB device for local storage of content, firmware upgrade, and GV-WiFi USB Adapter. Note the removal of the USB storage device will cause the SQP133 to automatically reboot.
3	LED Indicators	The **green** LED indicates the system is ready. The **red** LED indicates the power is supplied. When the **green** LED is off and the **red** LED is on, the device is in sleep mode.
4	IR	Built-in IR receiver to receive the IR signals from the IR remote control.
5	Ethernet	Connect to an Ethernet.

Left Panel

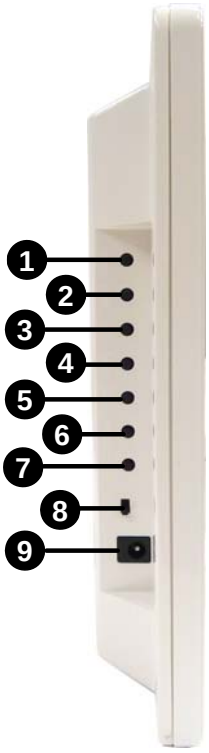


Figure 1-4

No.	Name	Function
1.	MENU	Switch to the setup menu.
2	ENTER	Enter the setup options or save the settings in the Setup Menu.
3	UP	Move the cursor up.
4	DOWN	Move the cursor down.
5	LEFT	Move the cursor left.
6	RIGHT	Move the cursor right.
7	STAND BY	Press to enter the Standby/Sleep mode. In the standby mode, the screen turns off to minimize power consumption. Press the key again to enter the ON mode.
8	Power OFF/ON	Switch the power on or off.
9	DC 12V	Connect to power using the supplied power adapter.

1.5 The IR Remote Control

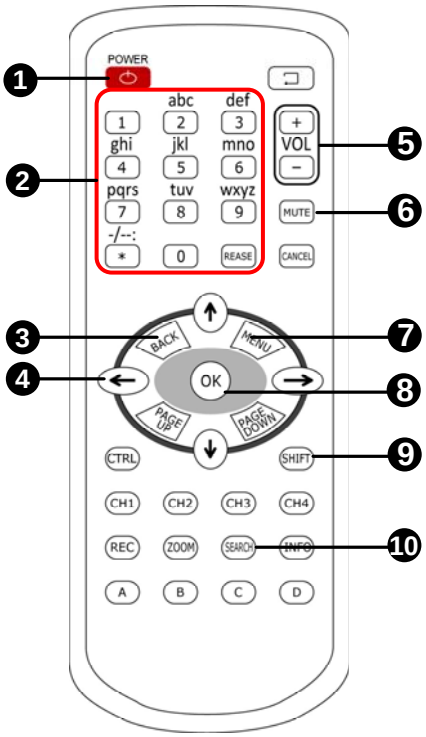


Figure 1-5

No.	Name	Function
1	Power	Press to enter the Standby/Sleep mode. In the standby mode, the screen turns off to minimize power consumption. Press the key again to enter the ON mode.
2	Numeric / Alphabetical / Punctuation Marks Buttons	Enter the numbers, alphabets or punctuation marks.
3	Back	● Back to the previous page in the Setup Menu. ● Play the media files.
4	Menu Control	Move up, down, right and left in the Setup Menu.
5	Volume Control	Increase or decrease the volume.
6	Mute	Mute the volume.
7	Menu	Switch to the setup menu.

No.	Name	Function
8	OK	Enter the setup options or save the settings in the Setup Menu.
9	Shift	Switch among the 8 resolutions for PN300. Once the button is pressed, the Green LED on the front panel of PN300 will flash. Press No. 0 ~ 7 for the desired resolution within 30 seconds. Shift + 0 : VGA_640 x 480 Shift + 4 : HDMI_480p Shift + 1 : VGA_1024 x 768 Shift + 5 : HDMI_720p Shift + 2 : VGA_1280 x 768 Shift + 6 : HDMI_1080i Shift + 3 : VGA_1366 x 768 Shift + 7 : HDMI_1080p Note the resolution switch will cause the PN300 to automatically reboot.
10	Search	Scan for available Access Points or wireless stations when wireless network is selected.

Chapter 2 Getting Started

2.1 Connecting the Device

2.1.1 Connecting the PN300

Figure 2-1

1. Connect a display device to VGA video connector, or HDMI connector for video and audio combined outputs.
2. Connect to a standard network cable.
3. If you use a VGA monitor, connect a speaker to L/R port for audio output.
4. Connect to power using the supplied power adapter.
5. Switch the Power button to ON.

Note:

1. You can only connect the PN300 / SQP133 to one display device through the HDMI or VGA connector. The video signal will be unstable if multiple display devices are connected.

---

2. The default video output is set to VGA with 1024 x 768 resolutions. To change the default setting, see *3.2 Setting Video Output and Resolution*.

2.1.2 Connecting the SQP133

Follow the steps below to connect the SQP133:

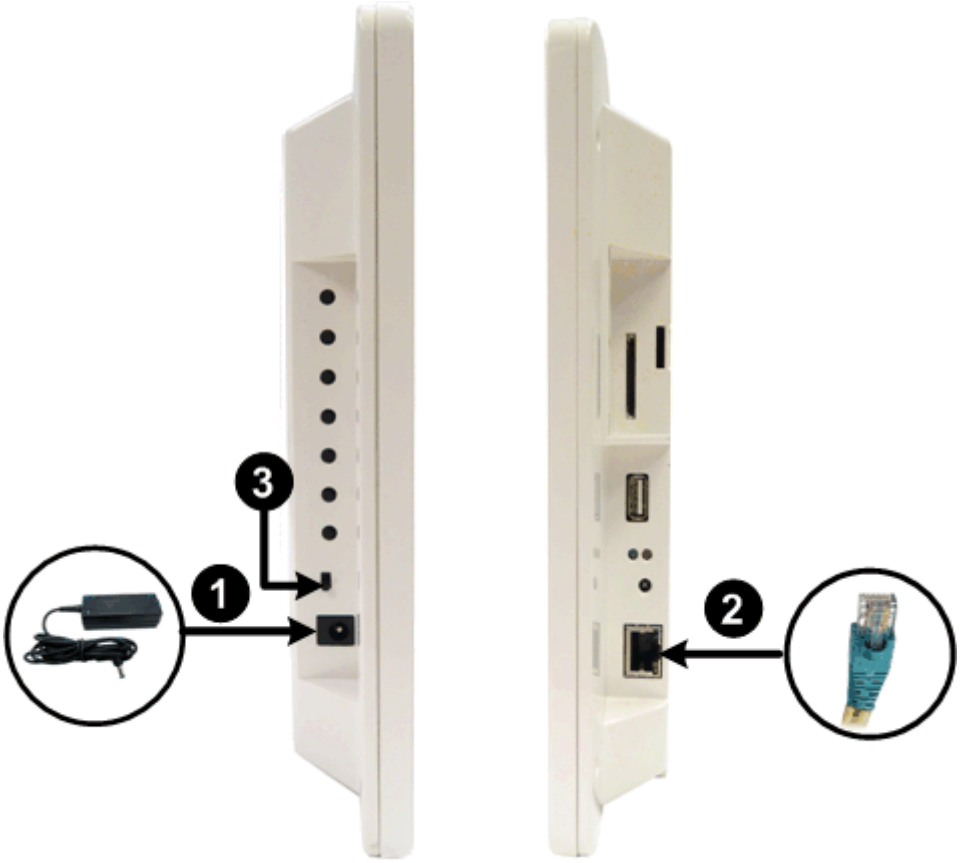


Figure 2-2

1. Connect to power using the supplied power adapter.
2. Connect to a standard network cable.
3. Turn the Power switch to ON.

2.2 Installing Wall Mount

Optionally, you can purchase the mounting plates to mount PN300 on a wall.

1. Unscrew the 4 screws on the back panel of the PN300.

Figure 2-3

2. Use the 4 screws in the package to tighten the L-type brackets on the PN300.

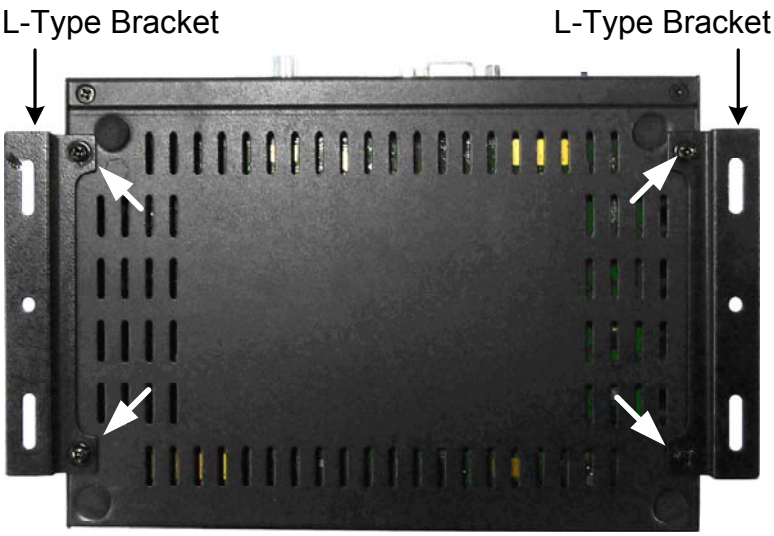


Figure 2-4

2.3 Installing VESA Monitor Mount

Optionally, you can purchase VESA Monitor mount for installing PN300.

1. Follow steps 1 and 2 in *2.2 Installing Wall Mount* to tighten the L-type brackets on the back panel of PN300.
2. Using the 4 large screws, tighten the VESA monitor mount bracket on the back of the computer monitor.

Figure 2-5

3. Use the 4 small screws to tighten the PN300 and the VESA monitor mount bracket together.

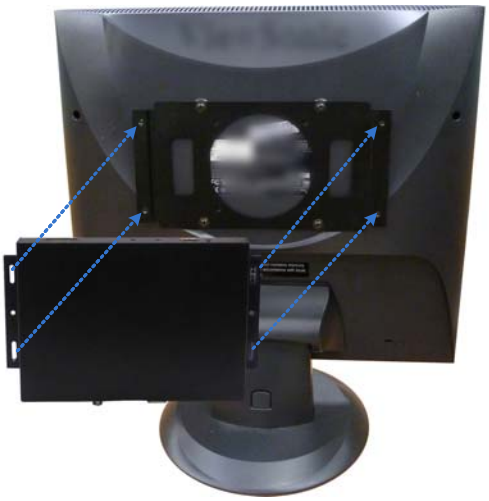


Figure 2-6

2.4 Playing the Slideshow

Without any further settings, you can now play the slideshow made of video or image files.

1. Create a folder named **Loop_Video** in a USB storage device or an SD card.
2. Copy image or video files to the **Loop_Video** folder.
3. Connect the USB storage device or the SD card to the device.
4. Turn on the digital signage device.
5. By default, the local storage is **SD card**. If you are using an SD card, the device will repeatedly play the files at this step.
6. If you are using a **USB storage**, select **Play Source**

and select **USB** to be the storage, press **Back** to return the menu, and press **Back** again to start playing.

Note:

1. For the folder names workable on the device, see *Definitions of Folder Names*, *Appendix*.
2. By default, the image and video files are sorted by name, first in numerical and then alphabetical order. To change the sorting rule to by size or random, see Loop Mode option, *3.3 Setting Slideshow Display Effect*.

Chapter 3 System Setup

You can customize the system settings of the PN300 / SQP133.

3.1 The Setup Menu

Turn on the PN300 / SQP133 and the connected display device. The setup menu with six setup options appears.

Figure 3-1

Name	Description
Service	Set up the video output and resolution. See *3.2 Setting Video Output and Resolution*.
Play Source	Select the local storage and set up the slideshow display effect. See *3.3 Setting Slideshow Display Effect.*
Information	Display the network information, storage information and the device firmware version. See *3.4 Looking Up Device Information.*
Time Adjustment	Set up the system time. See *3.5 Setting the System Time.*
Network	Set up the network. See *3.6 Setting the Network*.
Factory	Upgrade firmware or to copy files from the USB storage device to the SD card. Select Language and Time Zone settings. See *3.5.2 Setting the Time Zone*, *3.8 Copying Files from the USB Storage Device* and *3.9 Upgrading the Firmware*.

3.2 Setting Video Output and Resolution

To set up the video output and resolution for PN300, select **Service**

. The following window appears.

Figure 3-2

- **Output:** Select a video output from **VGA** or **HDMI** which is supported by the display monitor.
- **Resolution:** Select a screen resolution from the following options:

HDMI at 60 Hz	480p	720p	1080i	1080p
VGA at 60 Hz	640 x 480	1024 x 768	1280 x 768	1366 x 768

By default, the video output is set to VGA with 1024 x 768 resolutions.

Note: The video output and resolution for SQP133 cannot be changed.

3.3 Setting Slideshow Display Effect

To set up slideshow display effect, select **Play Source**

. The following window appears.

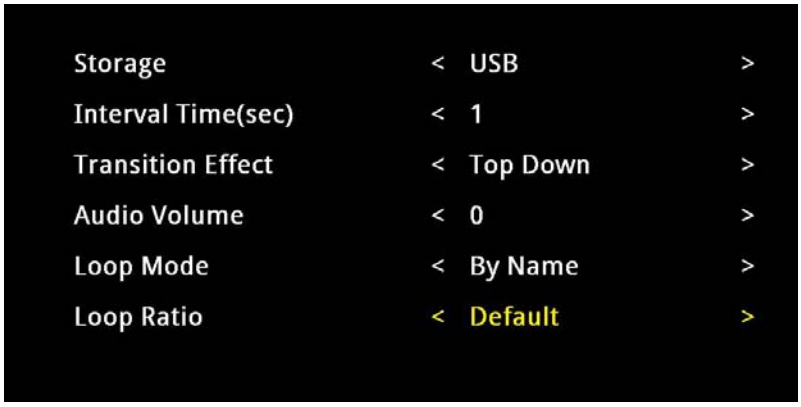


Figure 3-3

- **Storage:** Select a local storage from **USB** or **SD**. By default, SD card is set as local storage.
- **Interval Time:** Select the interval time to play the slideshow. The options include **1**, **3**, **5**, **10**, and **30** seconds.
- **Transition Effect:** Select the transition effect for the slideshow from the nine options: **Bevel**, **Shutters**, **Blind Top Down**, **Circle**, **None**, **Top Down**, **Bottom Up**, **Left to Right** or **Right to Left**.
- **Audio Volume:** Select an audio volume value. The larger the value, the louder the volume.
- **Loop Mode:** Select a playback mode for the slideshow from the three options: **By Size**, **Random** or **By Name**.
- **Loop Ratio:** Select **Full** to set the slideshow to full screen or select **Default** to use the setting of the slideshow.

Note: The display effect will not apply to the project created using the Content Designer.

3.4 Looking Up Device Information

To see the network information, storage information, current time and firmware version, select **Information** . The following window appears.

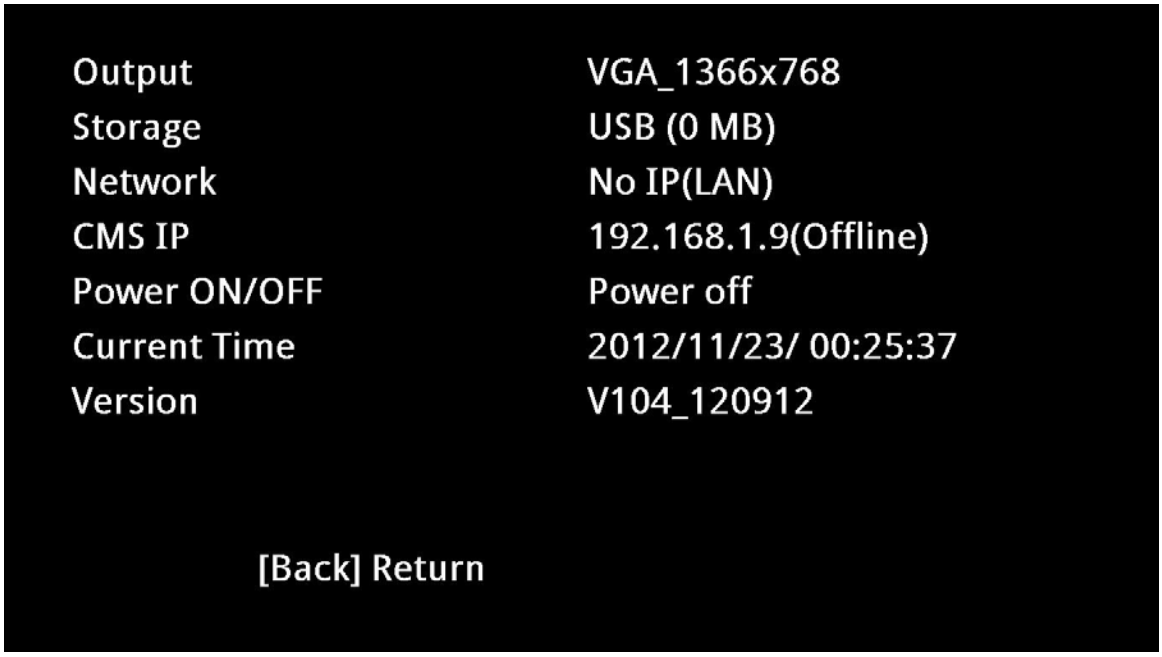


Figure 3-4

- **Output:** Shows the video output and resolution.
- **Storage:** Shows whether the local storage is set to SD or USB. The remaining storage space is shown in parenthesis.
- **Network:** Shows the IP address of the device.
- **CMS IP:** Shows the IP address set for connection to CMS Lite or CMS Server.
- **Power ON/OFF:** Shows whether the Power ON/OFF function is enabled or not.
- **Current Time:** Shows the current date and time.
- **Version:** Shows the firmware version of the device.

3.5 Setting the Time

3.5.1 Setting the System Time

To set up the system time, select **Time Adjustment** . The following window appears.

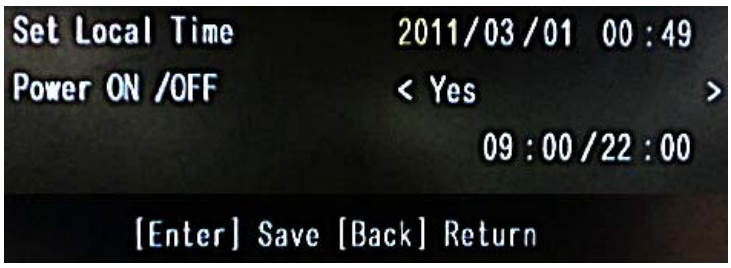


Figure 3-5

- **Set Local Time:** Set up the date and time.
- **Power ON/OFF:** Select **Yes** and set up the power on and off time. For example, if you set the power on/off to 09:00/22:00, the device will automatically turn on at 9 am and turn off at 10 pm daily.

3.5.2 Setting the Time Zone

To set up the time zone, select **Factory** and use the arrow button from the remote control to define the time.

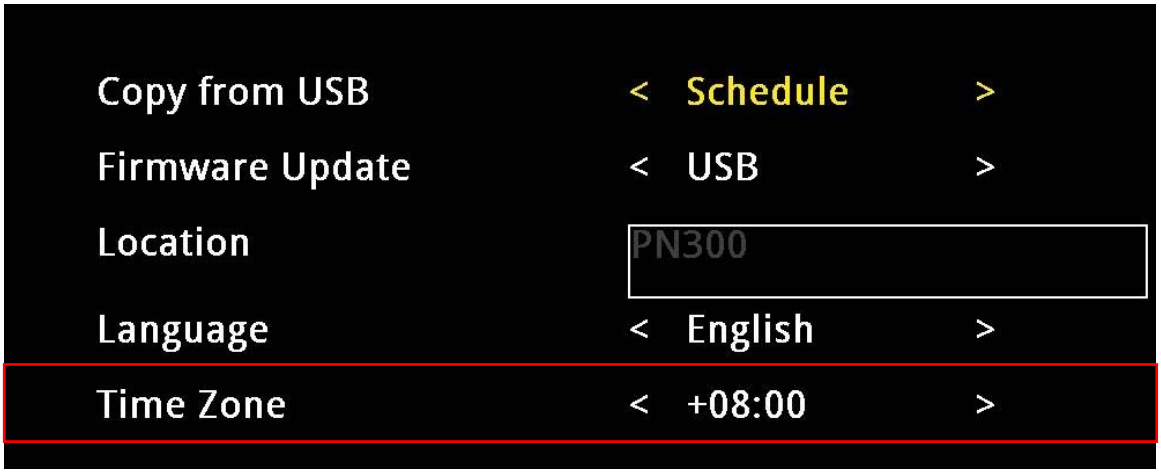


Figure 3-6

3.6 Setting the Network

You can configure the network settings of the device to establish a wired or a wireless network connection. The network connection allows you to manage the media files from a remote Content Management System (CMS). For more details on CMS Lite or CMS Server, see *Chapter 6 CMS Lite* or *Chapter 7 CMS Server.*

By default, the device will be assigned an unused IP address automatically by the DHCP server when connected to the network.

3.6.1 Wired Network Connection

By default, the device will be assigned an unused IP address automatically by the DHCP server when connected to the network. If the device is installed in a LAN without the DHCP server, assign a fixed IP address for network access.

Figure 3-7

1. Select **Network** and select **LAN Setting**.
2. To specify a static IP address for the device, select **NO** in the DHCP section and enter a fixed IP address, subnet mask and DNS and gateway.
3. Press **OK** to save the settings and connect to the network.

3.6.2 Wireless Network Connection

A GV-WiFi USB Dongle is required to connect the device to the wireless network.

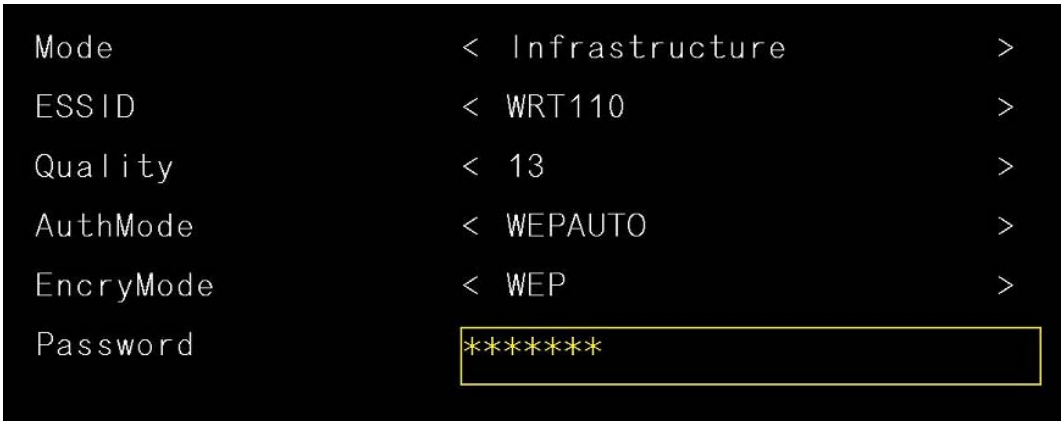


Figure 3-8

1. To establish a wireless network connection, select **Network** and select **WLAN Setting**.
2. Press the **Search** button to scan for available Access Points / wireless stations.
3. Select an Access Point / wireless station in the **ESSID** field and complete the settings below.
   - **ESSID:** Shows the name of the Access Point. Press the left and right button to select an Access Point.
   - **Quality:** Shows the connection quality on a scale of 1 to 100 with 100 being the highest quality.
   - **AuthMode:** Select **WEP Auto** or **WPAPSK** according to the encryption setting of the Access Point.
   - **EncryMode:** Select the Encryption Mode according to the encryption setting of the Access Point.
   - **Password:** Type a password to match the Access Point. You can type up to 26 characters.
4. Press **OK** to save the settings and connect to wireless LAN.

3.7 Setting the Device Name

You can name the device by selecting **Factory** , and entering a name in the **Location** field.

Figure 3-9

3.8 Copying Files from the USB Storage Device

You can always insert the SD card on the PN300 / SQP133 and use a USB storage device to transfer media files to the SD card.

1. Copy the **Schedule**, **Loop_Video** or **Scenario** folders to the USB storage device.
2. Connect the USB storage device to the device.
3. On the setup menu, select **Factory** .
4. In the **Copy from USB** field, select the folder you want to replace: **Schedule**, **Loop_Video** or **Scenario**.

Figure 3-10

5. Press **OK**. The files will be replaced after the file transfer is complete.

Note: For details on the **Schedule**, **Loop_Video** and **Scenario** folders, see *Definitions of Folder Names, Appendix.*

3.9 Upgrading the Firmware

The latest firmware can be downloaded from the GeoVision Website. Follow the steps below to upgrade the device firmware.

1. Download the latest firmware from the GeoVision Website http://www.geovision.com.tw/english/5_3_Signage.asp
2. Copy the firmware file to the root folder of a USB storage device or an SD card.
3. Connect the local storage.
4. On the setup menu, select **Factory**

.
5. In the **Firmware Update** field, select **USB** or **SD** storage that stores the firmware file.

Figure 3-11

6. Press **OK**. The firmware upgrade runs automatically, and the device will restart after the firmware upgrade is complete.

Note:

1. To upgrade the firmware through CMS Server or CMS Lite, see *6.8 Uploading the Firmware* or *7.10 Upgrading the Firmware*.
2. You need to allocate at least 100 MB in the device storage before upgrading the firmware.

3.10 Restoring to Factory Default Settings

To restore to default settings, follow the steps below.

Note: The power should always be on during the process of loading default value.

For PN300, use the default button on the device to restore default settings.

1. Press and hold the **Default** button (No.1, Figure 1-1) on the front panel of the PN300. The green LED will turn off after 8 seconds. Then you can release the **Default** button.
2. Wait until the green LED turns on. This may take about 10 seconds.
3. The process of loading default values is complete.

For SQP133, use the setup menu to restore default settings.

1. On the setup menu, select **Factory**

.
2. In the Load Default field, select **Yes** and select **OK** to confirm.

Figure 3-12

Chapter 4 Content Designer

Using the Content Designer, you can design your own digital media content. You can create a project contained with images, videos, scrolling tickers, RSS feeds or QR code for digital signage presentations.

4.1 Minimum System Requirements

The minimum system requirements to install and run the Content Designer:

OS Supported	**32-bit**	Windows XP / 7
	64-bit	Windows XP / 7
CPU		Pentium 4, 3.0 GHz
RAM		1 GB
HDD		80 GB
Graphic Card		AGP or PCI-Express, 1024 x 768 (1280 x 1024 recommended), 32-bit color
DirectX		9.0c
.NET Framework		3.5

4.2 Installing the Content Designer

Downloading from Software DVD

1. Insert the Software DVD to your computer. It runs automatically and a window pops up.

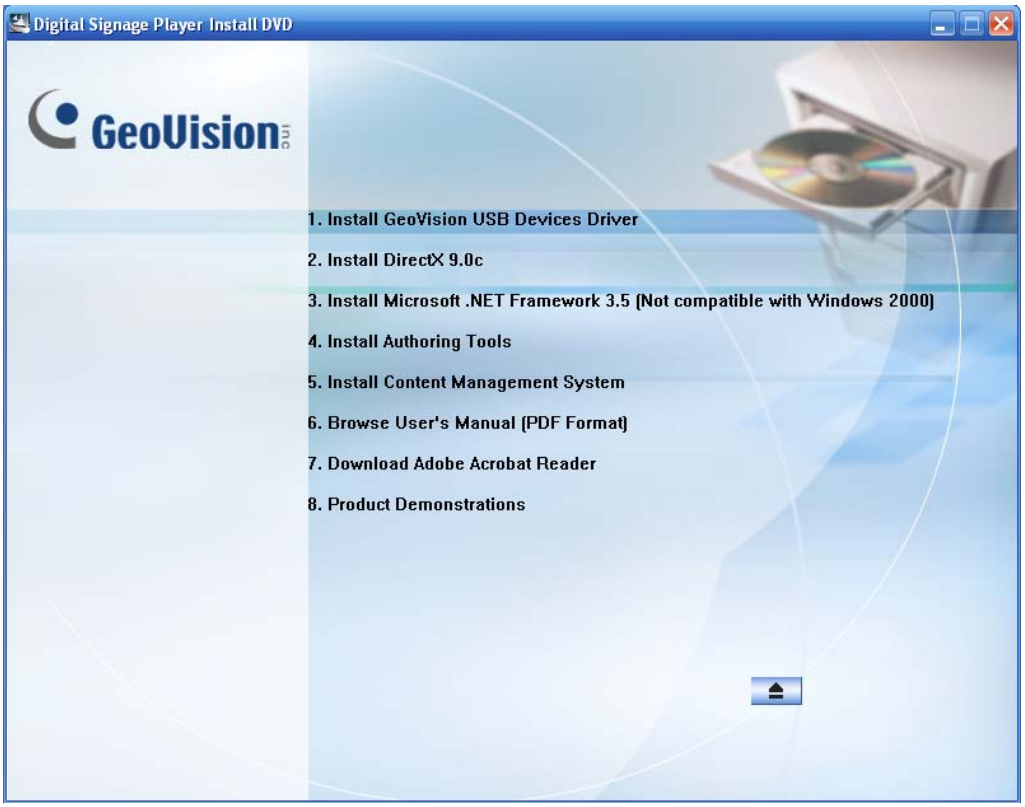


Figure 4-1

2. Select **Install DirectX 9.0c** and follow the on-screen instructions.
3. Select **Install Microsoft .NET Framework 3.5 (Not compatible with Windows 2000)** and follow the on-screen instructions.
4. Select **Install Authoring Tools** and then select **Install Authoring Tool-Content Designer (Only for PN300 & SQP133)**, and follow the on-screen instructions.

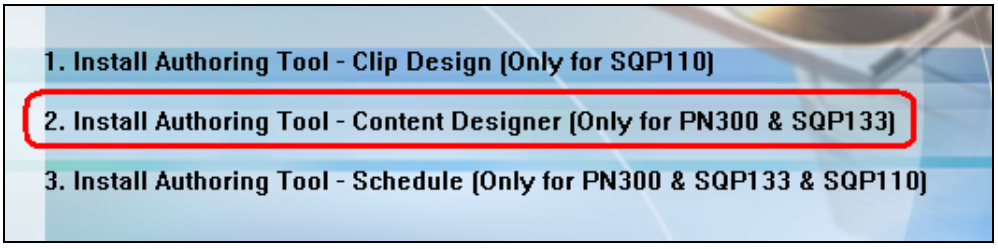


Figure 4-2

Downloading from GeoVision Website

1. Download and install the DirectX 9.0c and .Net Framework 3.5:
   - DirectX 9.0c

   http://www.microsoft.com/en-us/download/details.aspx?id=34429
   - Microsoft .Net Framework 3.5 (not compatible with Windows 2000)

   http://www.microsoft.com/en-us/download/details.aspx?id=21
2. Go to the Software Download and Upgrading page of GeoVision Website:

http://www.geovision.com.tw/english/5_8.asp

3. Click the **Digital Signage** tab and click the **Download** icon

of **Content Designer**.

Figure 4-3

4.3 The Menu Bar

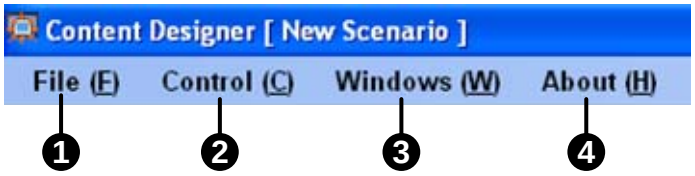


Figure 4-4

No.	Name	Function
1	File	Create, open or export a scenario or a project.
2	Control	Select a transition mode for the displayed.
3	Windows	Add grid lines and select the color of the grid line on the canvas to help edit the project, or change the language setting.
4	About	Display the version properties of the Content Designer.

4.4 Creating a Project

Follow the instructions below to create a project.

4.4.1 Create a Screen Layout

1. To create a project, click **File** on the menu bar and select **New Scenario**.
2. Select **PN300** or **SQP133** and a screen resolution.

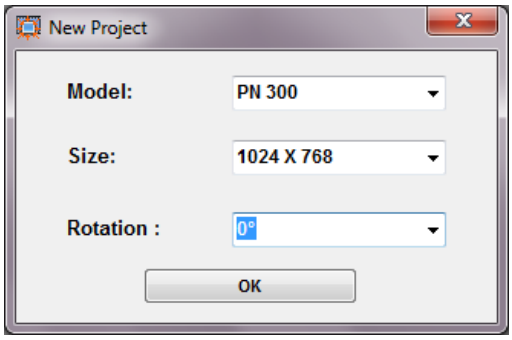


Figure 4-5

Note: The Content Designer supports the following resolutions for HDMI and VGA video outputs:

HDMI at 60 Hz	480p	720p	1080i	1080p
VGA at 60 Hz	640 x 480	1024 x 768	1280 x 768	1366 x 768

For HDMI 480p, select 720 x 480; for HDMI 720p, select 1280 x 720; for HDMI 1080p and 1080i, select 1920 x 1080.

---

3. Click the **Rotation** drop-down list to select **0°** for the landscape display or **90°** for the portrait display. Here we choose the landscape display to show you the following instructions.

4. Select a desired template or select **Null** to create your own layout.

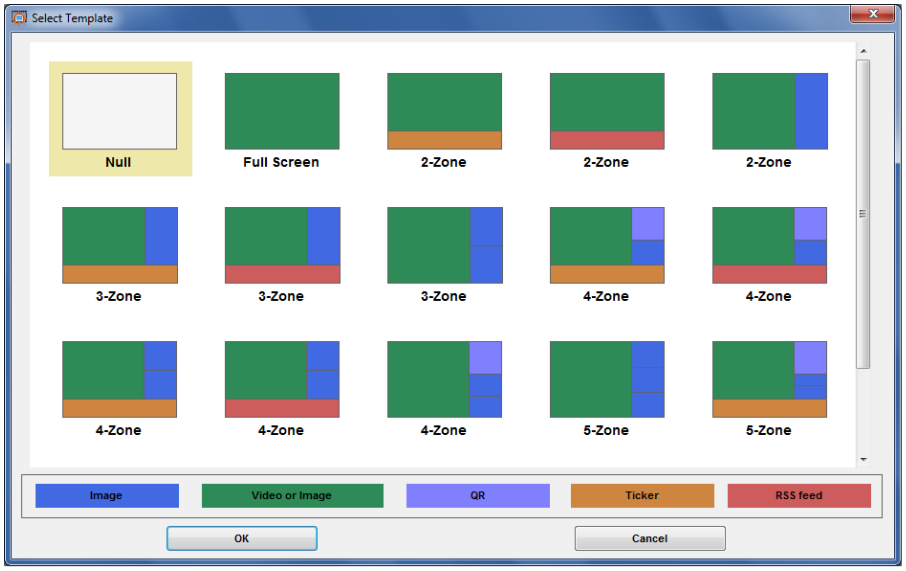


Figure 4-6

4.4.2 The Main Screen

After the screen layout is selected, the main screen appears.

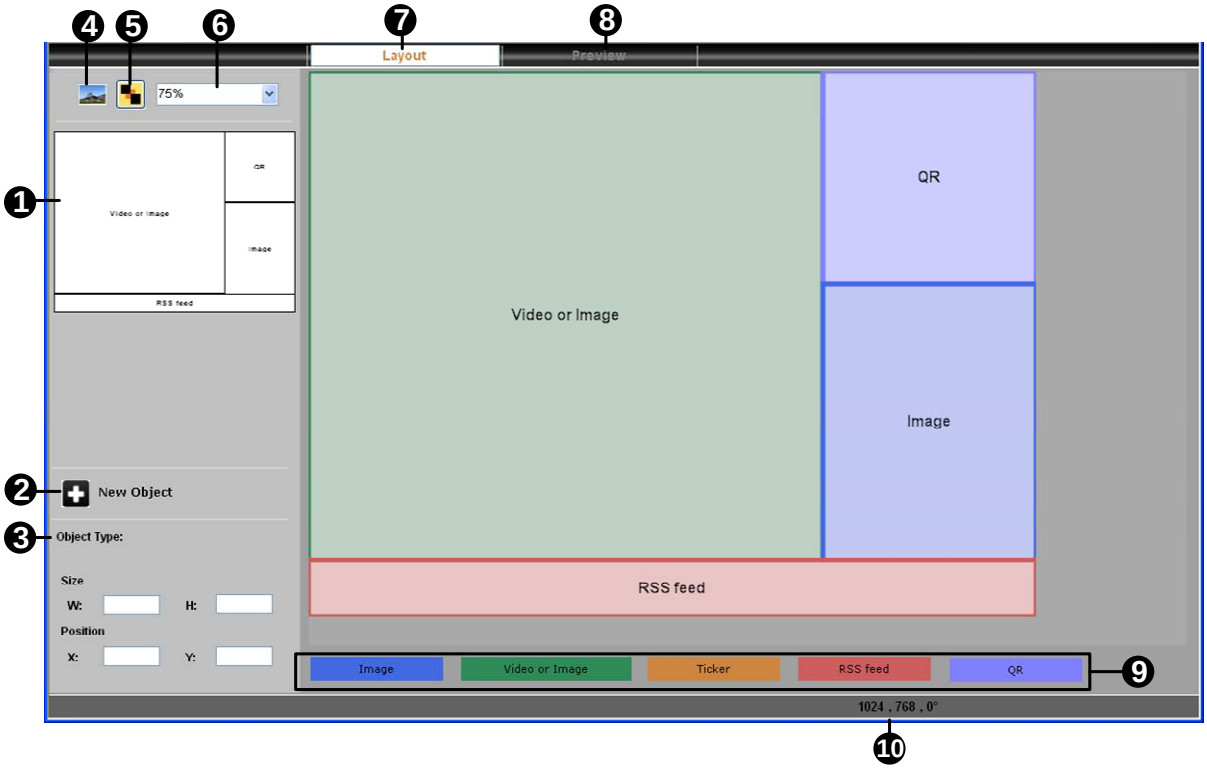


Figure 4-7

No.	Name	Function
1	Overview	Display the location of an object (or a zone) on the layout.
2	New Object	■ **QR:** Add an object (or a zone) to include QR code. ■ **Ticker:** Add an object (or a zone) to include a scrolling ticker. You can only add up to 32 scrolling tickers to a project. ■ **Image:** Add an object (or a zone) to include an image. ■ **Video:** Add an object (or a zone) to include a video file. You can only add one video file to a project. ■ **RSS feed:** Add an object (or a zone) to include a RSS. You can only add one RSS to a project. Note that it is an either-or option between the Ticker and the RSS feeds.

No.	Name	Function
3	Object Type	Type figures in the Size and Position boxes to modify the size and the location of an object (or a zone).
4	Background Image	Add a background image in PNG, BMP or JPEG format by clicking **Browse**.
5	Hide/Show Object Layer	Hide or show the layer of the selected object/zone.
6	Size	Enlarge (100%) or minimize (50%) the layout.
7	Layout	Select **Layout** to edit a project.
8	Preview	Select **Preview** to view the created project.
9	Object Colors	**Blue:** Image files **Green:** Video or image files **Purple:** QR code **Orange:** Scrolling Ticker **Red:** RSS feeds
10	Resolutions	Display the screen resolution and rotation degree of the project.

4.4.3 Assign Content to Zones

You can add new objects (zones) to the layout by clicking the **New Object** button

and then selecting **Image**, **Video**, **Ticker, RSS feed** or **QR**. Up to 7 objects (zones) can be included in a layout, with only one video object and one scrolling ticker/RSS feeds allowed.

Dragging the sides of the object (or zone) can change the position or size of objects (zones).

1. To add video or image files:
   A. Double-click the Video or Image object (zone)

.
   B. Click the **Browse** button to browse the folder containing video or image files.

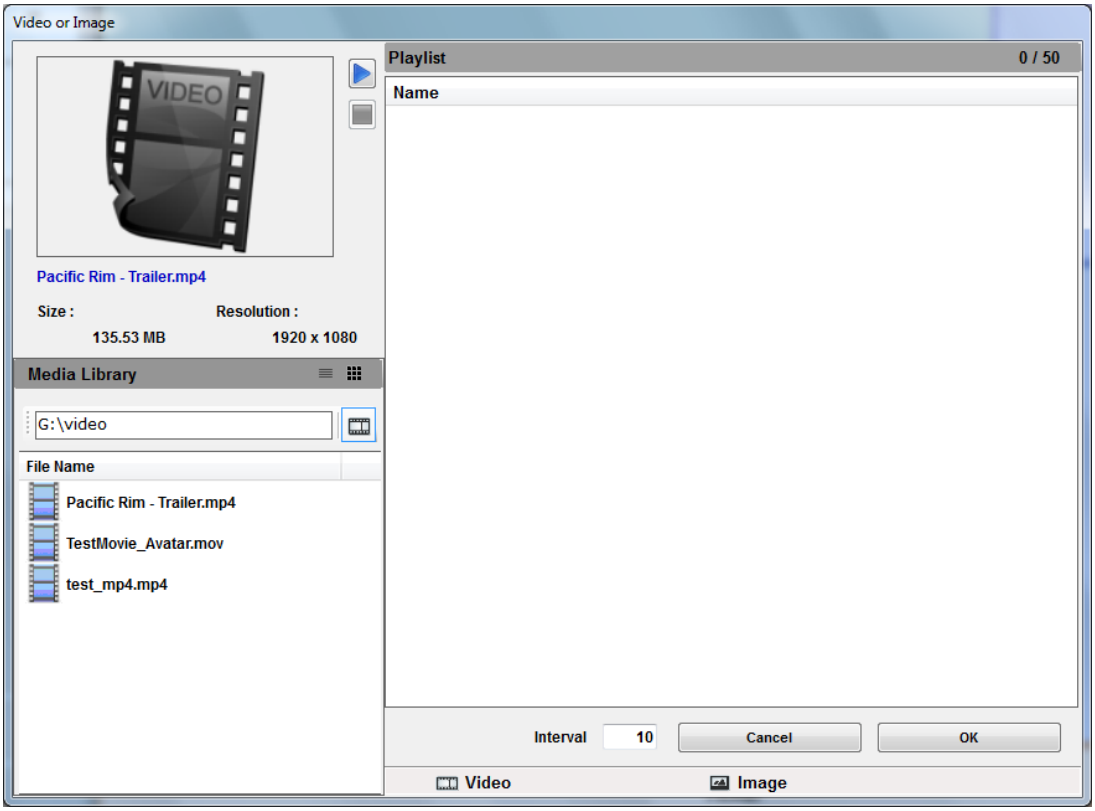


Figure 4-8

   C. Drag the desired video or image files to the playlist. Up to 50 video or image files can be added. You can change the order of the files on the playlist by using the arrow buttons.
   D. Define the interval time to play the video or image files. Click **OK**.

2. To add images:

Note: The image format supported are .PNG, .BMP and .JPEG

A. Double-click the **Image** object (zone)

.

B. Click the **Browse** button to browse the folder containing image files.

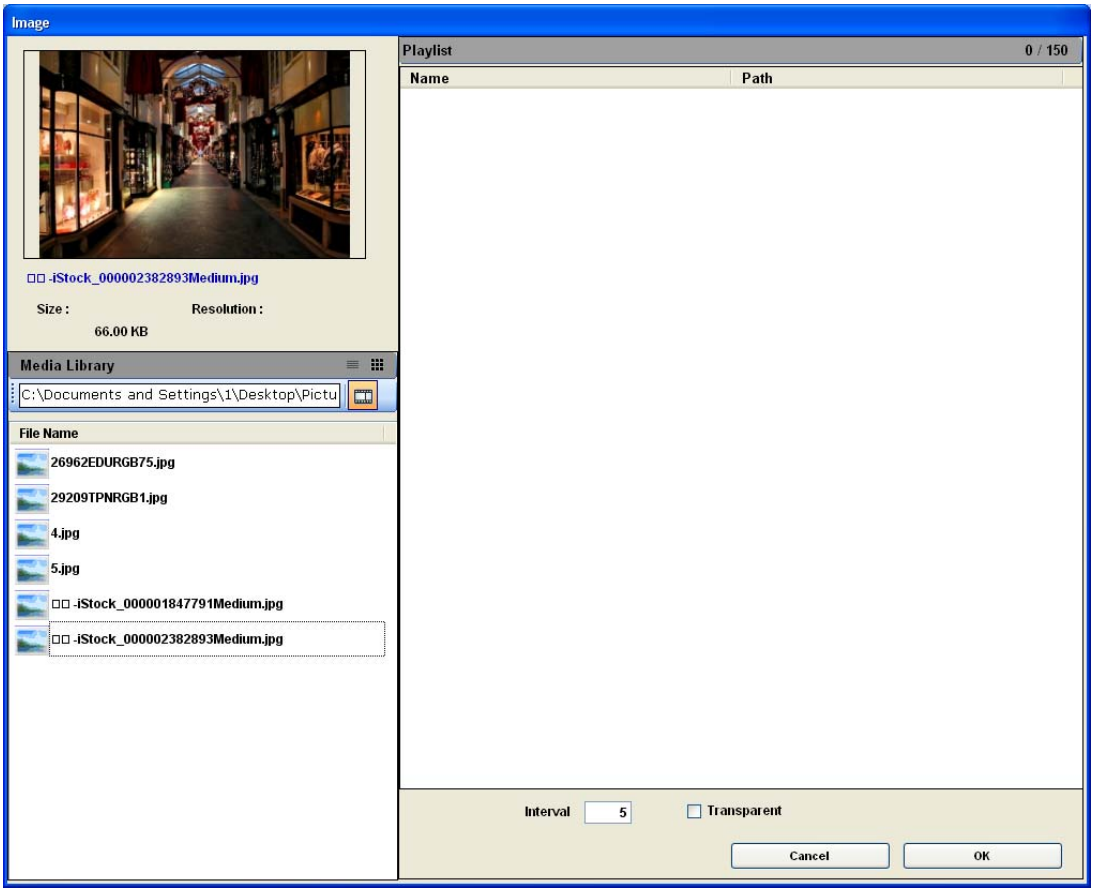


Figure 4-9

C. Drag the desired image files to the playlist. Up to 50 image files can be added. You can change the order of the files on the playlist by using the arrow buttons.

D. Define the interval time in seconds to play the images.

E. To overlap the image on a video in semi-transparent form, select **Transparent**.

F. Click **OK**.

3. To add a scrolling ticker

:

A. Double-click the **Ticker** object (zone). This dialog box appears.

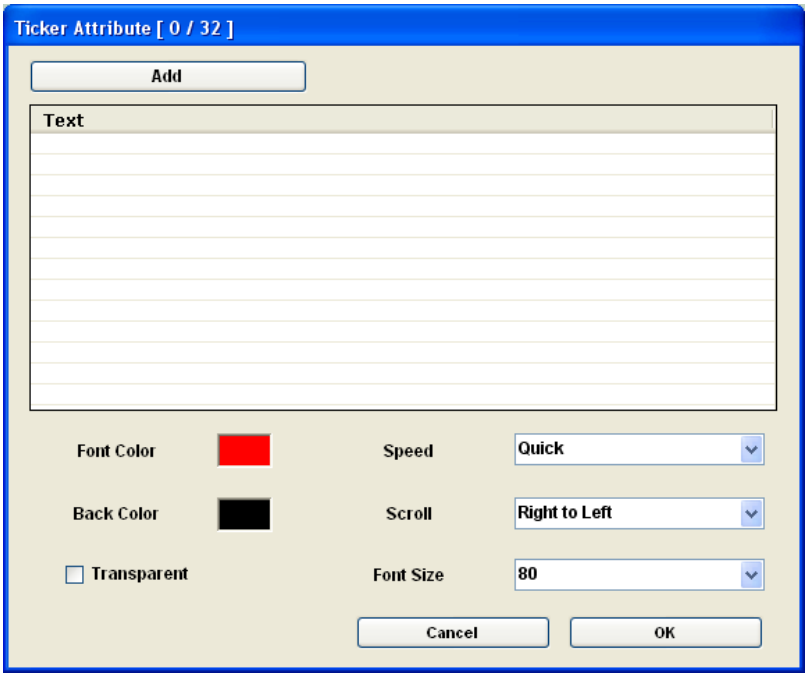


Figure 4-10

B. Click **Add** to add the text to the text list. This dialog box appears.

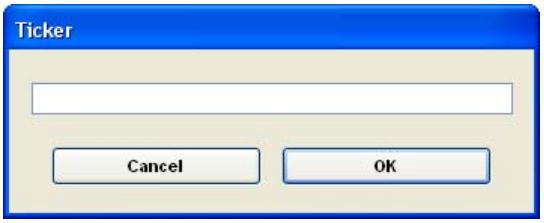


Figure 4-11

C. Type the text you want to display for the ticker. Up to 32 tickers can be added. To edit, delete or change the display order, right-click a ticker to access these options.

D. Optionally, you can change the font, background color and font size of the text. You can also select the speed and scrolling direction to display the text.

E. To overlap the tickers on a video in semi-transparent form, select **Transparent**.

F. Click **OK**.

Note: In the portrait mode, the ticker can solely be displayed on the bottom.

---

4. To add a QR code QR:

   A. Double-click the **QR** object (zone).

   B. In the Text section, type the desired content you want to display in the QR code.

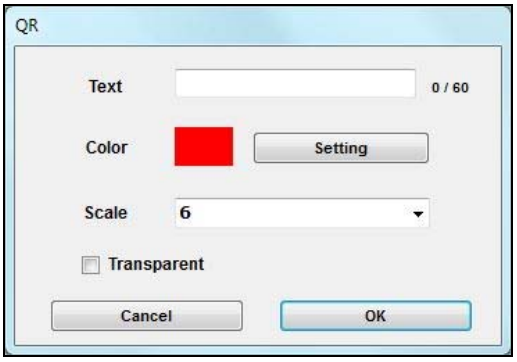


Figure 4-12

   C. Optionally, you can change the QR code color by clicking the **Setting** button or the QR object size by clicking the **Scale** drop-down list.

   D. To overlap the QR codes on a video in semi-transparent form, select **Transparent**.

   E. Click **OK**.

5. To add the RSS feeds RSS feed:

   A. Double-click the **RSS feed** object (zone).

   B. In the Feed URL section, click the ... button and select a source of news headlines from the list.

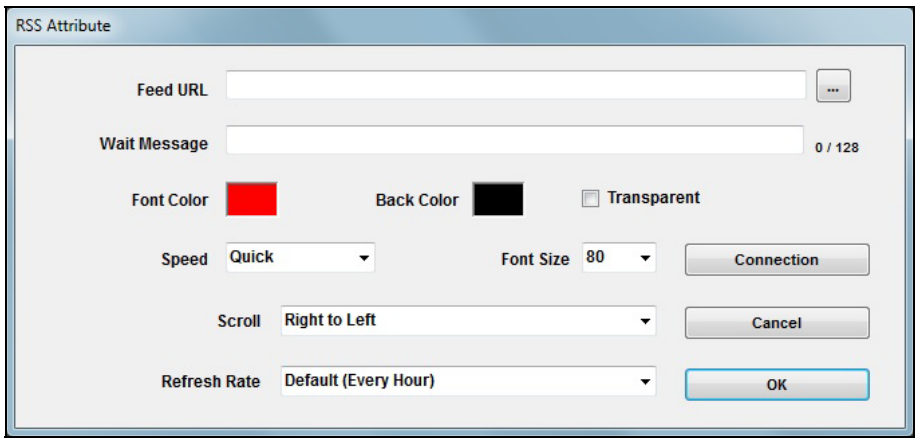


Figure 4-13

   C. Click the **Connection** button to test the selected Feed URL to find out if the news link is available.

D. In the **Wait Message** field, type the text message to display on the device before it receives the RSS feeds. This Wait Message solely appears at the first time this function being applied.

E. Optionally, you can change the font, background color and font size of the text. You can also select the speed and scrolling direction to display the text.

F. To overlap the RSS feeds on a video in semi-transparent form, select **Transparent**.

G. In the **Refresh Rate** drop-down list, define how often you want to refresh the news headlines.

H. Click **OK**.

Note: It is an either-or option for the Ticker and the RSS feeds.

4.4.4 Preview and Save Screen Layout

1. To preview the created project, click **Preview**

on the main screen.
2. To save the project, click **File** and select **Output Scenario**.
3. Name the project in the **Scenario Name** field. Click

to browse the location to save the project.

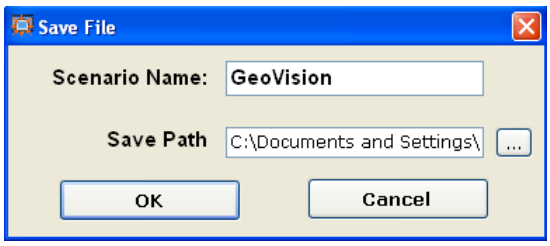


Figure 4-14

Note:

1. Do not use space in the Scenario Name if you want to include the scenario in a content schedule.
2. Windows Media Player is required to preview the project you created.

4.5 Playing the Project on PN300 or SQP133

To play the project, created using the Content Designer, on the PN300 / SQP133, follow the steps below:

1. Create a folder named **Scenario** in a USB storage device or an SD card.
2. Copy the project files to the **Scenario** folder.
3. Connect the USB storage device or the SD card to the PN300 / SQP133.
4. Turn on the display monitor and the PN300 / SQP133.
5. By default, the local storage is **SD card**. If you are using an SD card, the PN300 / SQP133 will play the project automatically at this step.
6. If you are using a **USB storage**, select **Play Source**

and select **USB** to be the storage, press **Back** to return the menu, and press **Back** again to start playing.

Note:

1. You can only store one project in the **Scenario** folder. If you store multiple projects in the **Scenario** folder, the PN300 / SQP133 can only play the last project. To play multiple projects, you can set up a schedule by using the Content Schedule software. See *Chapter 5 Content Schedule.*
2. The PN300 / SQP133 can only play the files stored in the **Scenario** folder if you store both the **Scenario** and **Loop_Video** folders in the storage device. To play both **Scenario** and **Loop_Video** files, you can set up a schedule by using the Content Schedule software. See *Chapter 5 Content Schedule.*
3. You can also upload scenario to PN300 or SQP133 using CMS Lite or CMS Server. Refer to *Chapter 6 CMS Lite* or *Chapter 7 CMS Server* for more details.

Chapter 5 Content Schedule

The Content Schedule software allows you to create a weekly schedule to automatically start up the device and present media content at a specific date and time.

5.1 Installing the Content Schedule

Installing from Software DVD

1. Insert the Software DVD to your computer. It runs automatically and a window pops up.
2. Select **Install Authoring Tools**, and then select **Install Authoring Tool-Content Schedule (Only for PN300 & SQP133 & SQP110)**, and follow the on-screen instructions.

Figure 5-1

Downloading from GeoVision Website

1. Go to the Software Download and Upgrading page of GeoVision Website: http://www.geovision.com.tw/english/5_8.asp

2. Select the **Digital Signage** tab and click the **Download** icon

of **Content Schedule**.

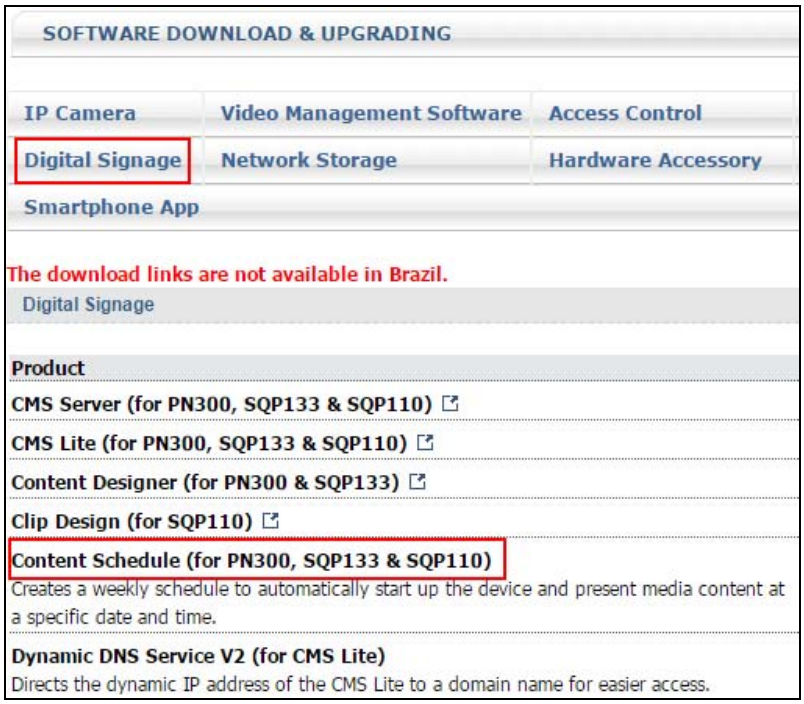


Figure 5-2

5.2 Setting the Content Schedule

1. Start the Content Schedule software, and this dialog box appears. You can create up to three content schedules by using three sets of **Power On** and **Power Off** settings.

Figure 5-3

2. To create the first content schedule, specify the time for the PN300 / SQP133 to automatically turn on and turn off in the **Power On** and **Power Off** drop-down lists.

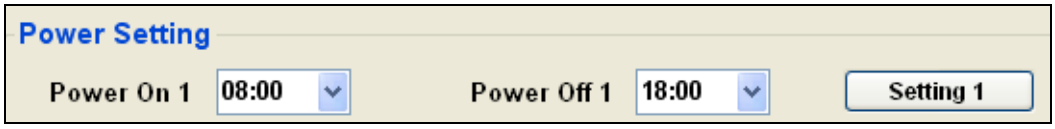


Figure 5-4

3. Click the **Setting 1** button to set up the first schedule. This dialog box appears.

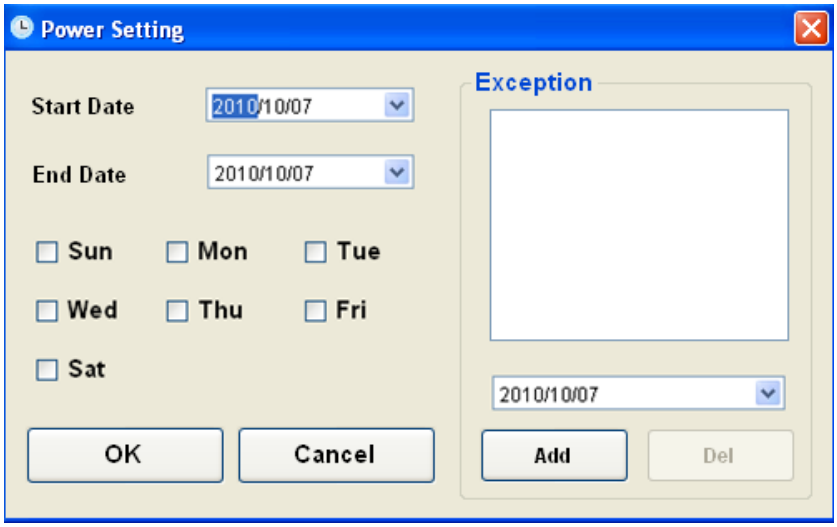


Figure 5-5

4. Specify the date to play the media files in the **Start Date** and **End Date** drop-down lists.

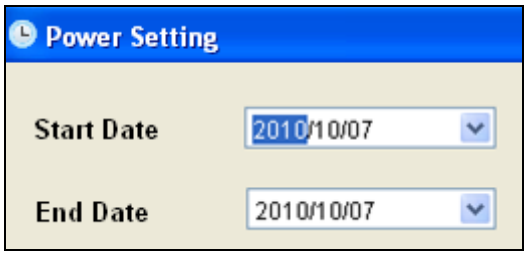


Figure 5-6

5. Specify the day(s) to play the media files.

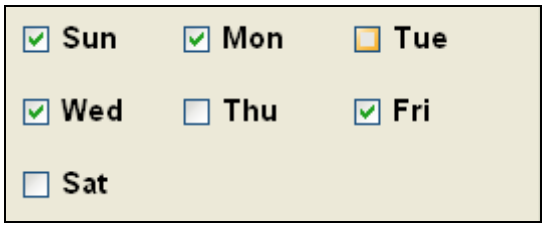


Figure 5-7

6. To exclude certain dates from the schedule, select the dates from the drop-down list, and click **Add**.

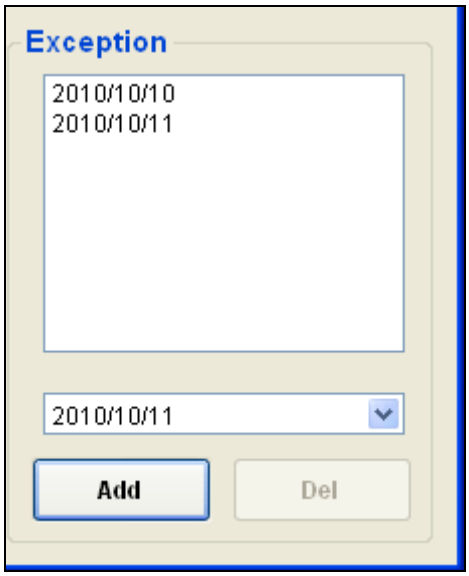


Figure 5-8

7. Click **OK**. This calendar appears. The scheduled dates are displayed in black color.

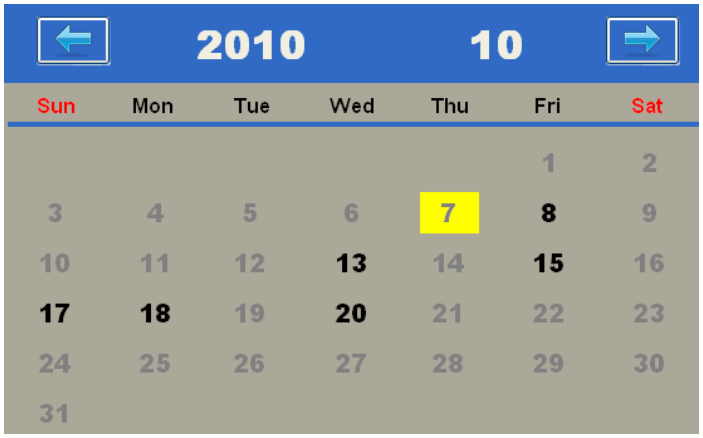


Figure 5-9

8. Double-click any of the scheduled dates in black. This setup box appears. You can further specify a period of time in a day to play the media files.

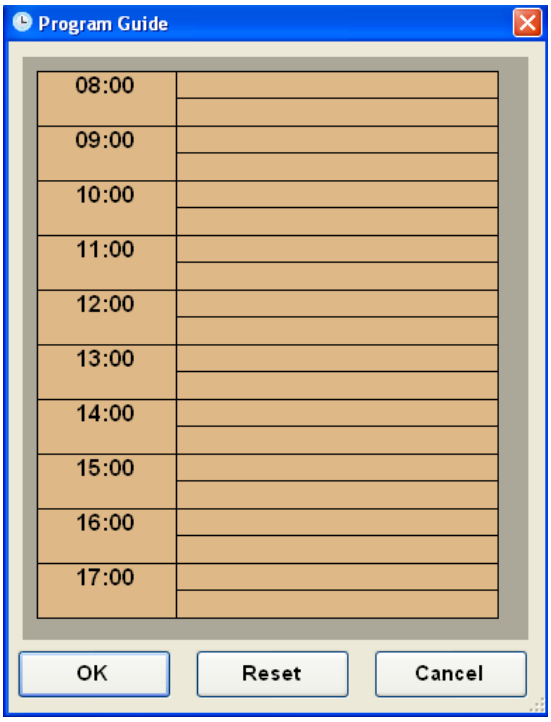


Figure 5-10

9. Click any time column. This dialog box appears. You can specify the type of media files and time to play.

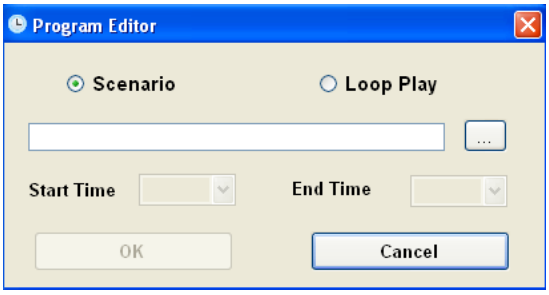


Figure 5-11

10. Select **Scenario** to play the project created using the Content Designer, or **Loop Play** to play some video and/or image files.

    If you select **Scenario:**

    A. Click the … button to locate the Scenario folder, select **PN300.NOE** or **SQP133.NOE**, and click **Open**.

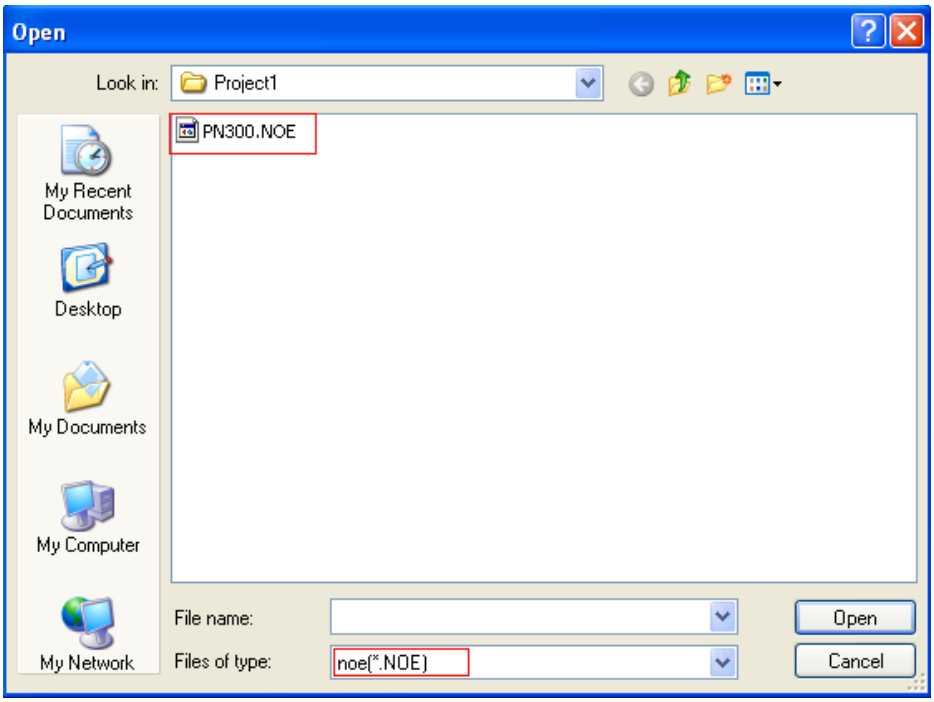


Figure 5-12

    B. Specify a period of time to play the Scenario files in the **Start Time** and **End Time** drop-down lists. Click **OK**.

Note: When including scenario in a content schedule, do not use space in the Scenario file name or folder name.

    If you select **Loop Play**:

    A. Specify a period of time to play the Loop_Video files in the **Start Time** and **End Time** drop-down lists. Click **OK**.

11. You can create different periods of time to play different types of media files in a day by repeating steps 8 to 10.
12. Click **OK** in the following dialog box to apply the time settings to the selected date.

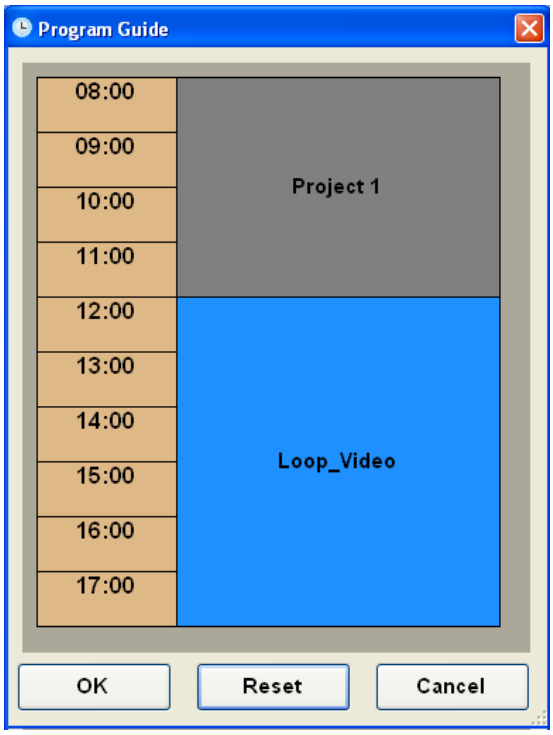


Figure 5-13

13. Repeat steps 2 to 12 to set up the second and the third content schedules, if necessary. If the three content schedules are created, they can be distinguished by color: the first scheduled dates are black, the second ones are light blue and the third ones are dark blue, as shown below.

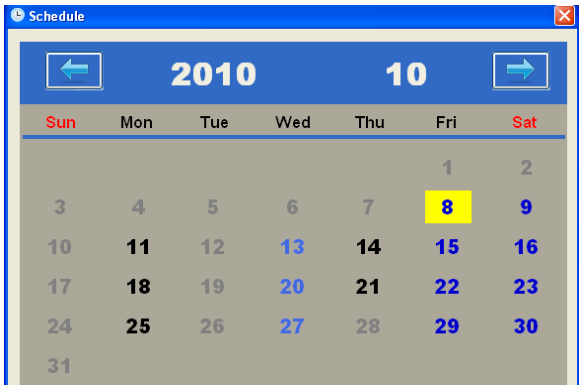


Figure 5-14

14. To save the schedule, click **Export** on the main screen, and click **File Transfer Completes** when this message box appears.

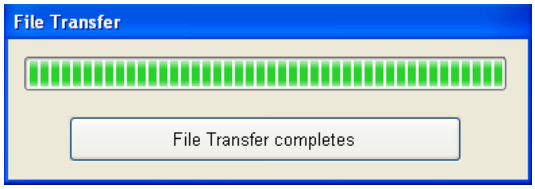


Figure 5-15

15. The schedule settings are exported to the **Output_Schedule** folder. After opening the folder, you will find two subfolders, **Scenario** and **Schedule**.

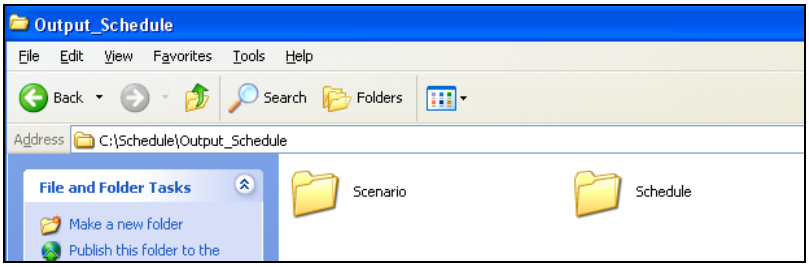


Figure 5-16

16. Store the **Scenario** and **Schedule** folders in the storage device. If you select **Loop Play** to play some video and/or image files, you need to store these video and/or image files to the **Loop_Video** folder first and then include the **Loop_Video** folder in the storage device too.
17. Connect the storage device to the device. It will automatically play the media files according to the schedule.

Note:

1. Don't copy the **Output_Schedule** folder directly to the local storage of the device. You need to copy the **Schedule**, **Scenario** and/or **Loop Video** folders to it.
2. By default the local storage of the device is set to **SD card**. If you are using a USB storage, you need to change the local storage setting. See the Storage option, in *3.3 Setting Slideshow Display Effect*.

Chapter 6 CMS Lite

The CMS Lite is Content Management System, allowing you to remotely upload media files, scrolling tickers or firmware to multiple digital signage devices.

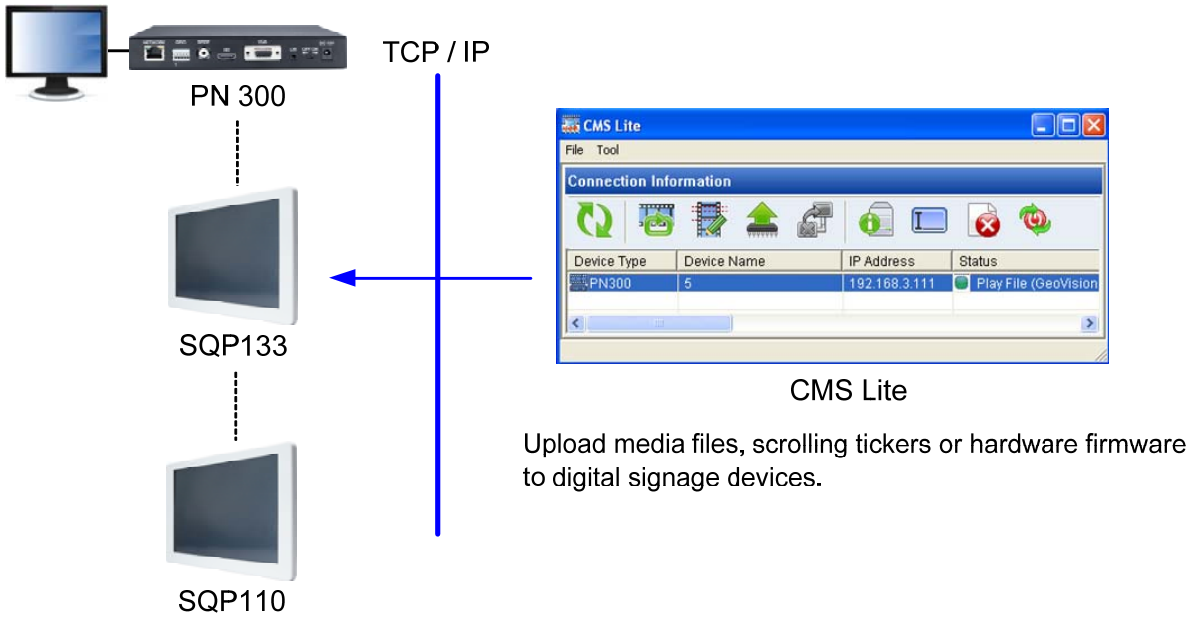


Figure 6-1

Note: For information on SQP110, refer to *SQP110 Series User's Manual*.

6.1 Software License

The CMS Lite supports 50 units of digital signage devices for free. If you want to connect more devices to the CMS Lite, an additional dongle is required. Different number of connections is available for purchase, with 10 connections for every increment and up to 500 connections in maximum.

Free License	50 clients
Maximum License	500 clients
Increment for Each License	10 clients
Optional Combinations	N/A
Dongle Type	Internal or external

6.2 Installing the CMS Lite

To install the CMS Lite, follow the steps below.

Note: Before starting the CMS Lite, make sure you have inserted the dongle to the computer and installed the USB drivers for dongle; otherwise the additional number of connections will not be applied.

Installing from Software DVD

1. Insert the Software DVD to your computer. It runs automatically and a window pops up.
2. If you use a USB dongle, select **Install GeoVision USB Devices Driver** and follow the on-screen instructions.
3. Select **Install Content Management System** and then select **Install CMS Lite (Only for PN300 & SQP133 & SQP110)**, and follow the on-screen instructions.

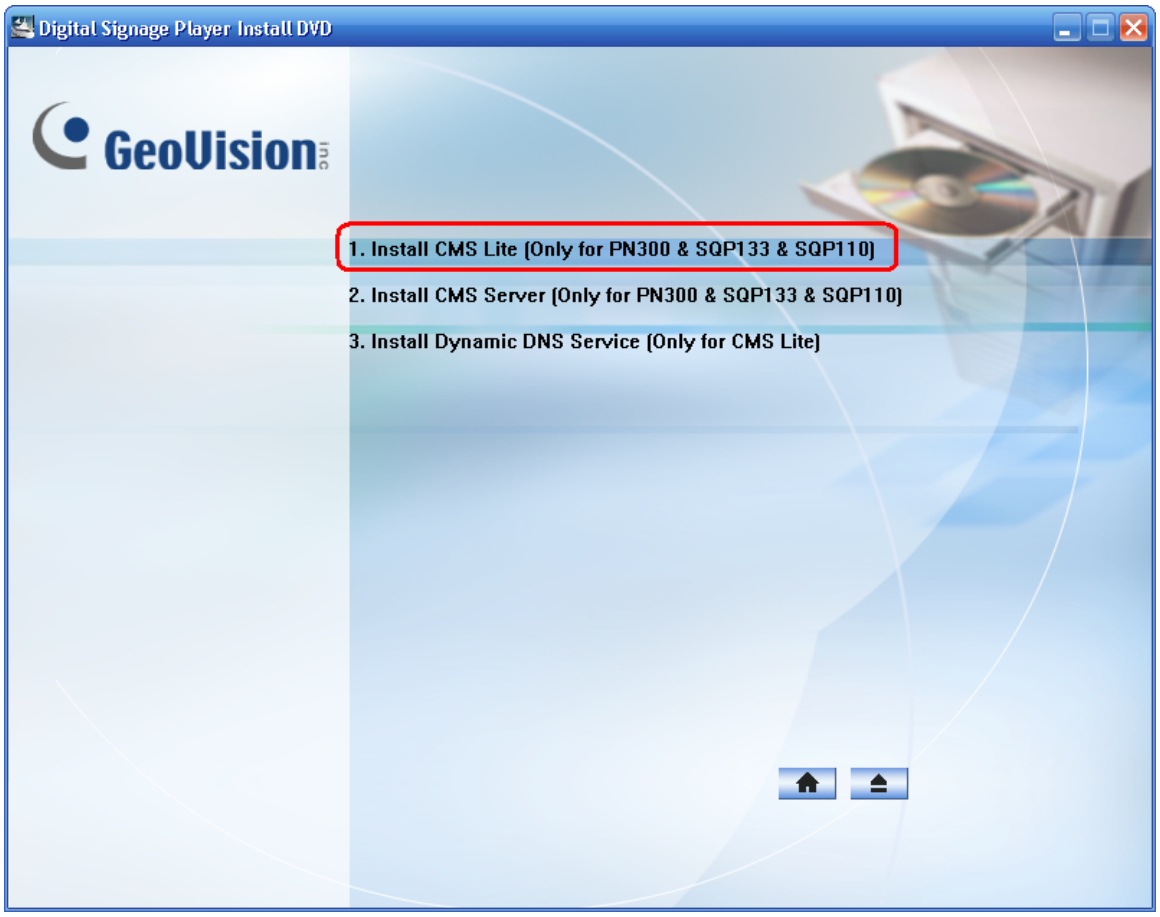


Figure 6-2

Downloading from GeoVision Website

1. Go to the Software Download and Upgrading page of GeoVision Website: http://www.geovision.com.tw/english/5_8.asp
2. Select the **Digital Signage** tab and click the **Download** icon DOWNLOAD of **CMS Lite**.

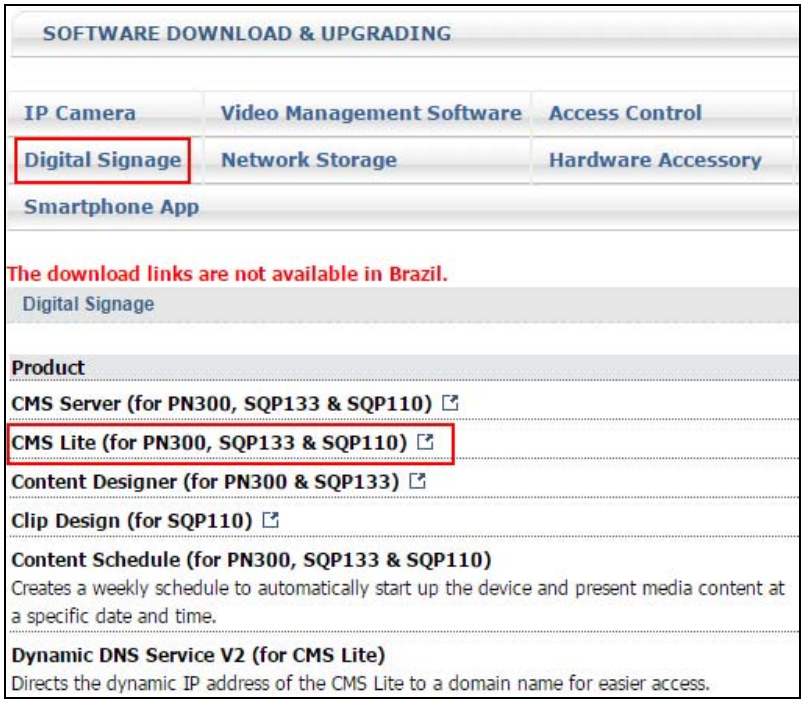


Figure 6-3

6.3 Connecting the Devices to CMS Lite

To connect the device to CMS Lite, you have to set up the CMS settings. Make sure the device is already connected to the network. See *3.6 Setting the Network* for more details.

1. On the setup menu, select **Network** and select **CMS Setting**. The following window appears.

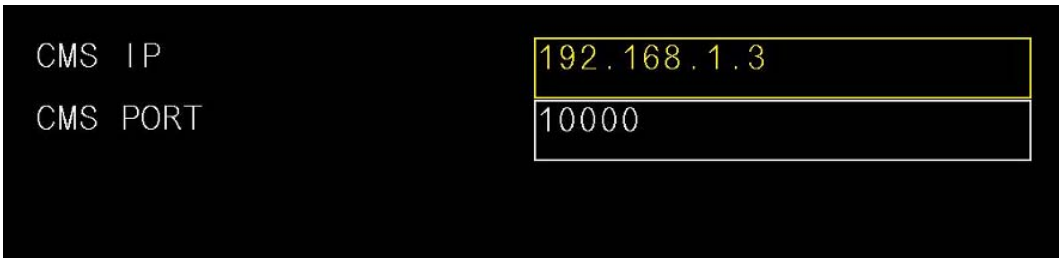


Figure 6-4

2. In the **CMS IP** field, specify the IP address of CMS Lite.
3. Keep the **CMS Port** value as 10000 or modify it to match the port on the CMS Lite.
4. Press **OK** to save the settings.

When the CMS Lite is started, the devices will be connected to the CMS Lite automatically, the connection information will be listed.

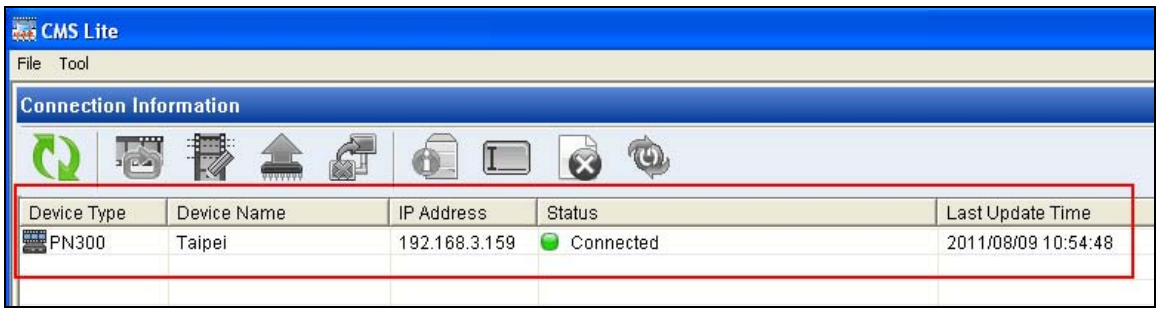


Figure 6-5

6.4 The Main Screen

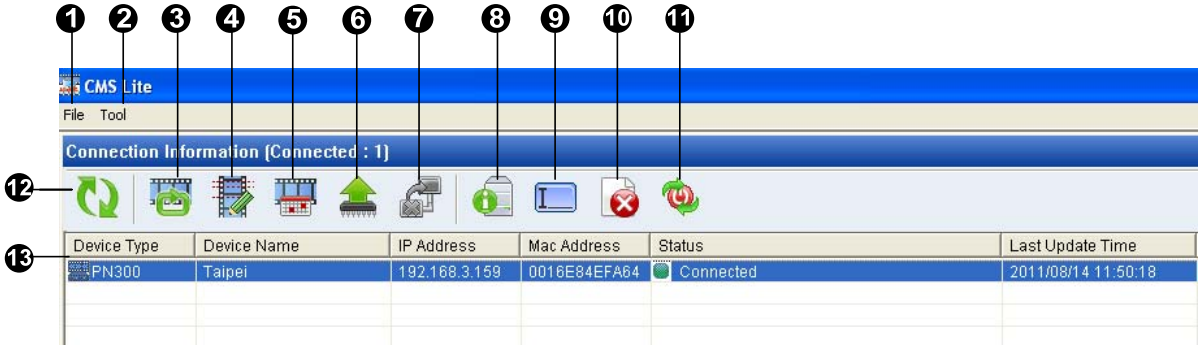


Figure 6-6

No.	Name	Function
1	File	Exit the CMS Lite.
2	Tool	**Configure:** Configure the communication port between the CMS Lite and the devices. The available port number is between 1 and 65534. The default value is 10000. **Version:** Display the version of the CMS Lite.
3	Upload Loop Video	Upload the video or image files (**Loop_Video**) to the device. See *6.5 Uploading Video and Image Files.*
4	Upload Scenario	Upload the project created using the Content Designer (**Scenario**) to the device. See *6.6 Uploading the Scenario.*
5	Upload Schedule	Upload the content schedule to the device. See *6.7 Uploading the Schedule*.
6	Upload Firmware	Upload firmware to the device. See *6.8 Uploading the Firmware.*
7	Cancel Uploading	Cancel the process of uploading.
8	Edit Device Information	Change the device name. See *6.10 Changing the Device Name*.
9	Ticker	Upload the scrolling ticker to the device. See *6.9 Uploading Scrolling Ticker.*

No.	Name	Function
10	Remove Content	Remove the **Loop_Video** and **Scenario** files saved on the local storage of the device.
11	Reboot	Reboot the device.
12	Reload	Refresh the information.
13	Information	Display the information of connected devices, including device type, device name, IP address, MAC address, status, last update time, transfer status, file name, transfer speed, free space, resolution and firmware version.

6.5 Uploading Video and Image Files

You can upload some video and/or image files to the device. To upload the desired video and/or images files, you must save these files to the **Loop_Video** folder first.

Important: The upload action will remove all the **Loop_Video**, **Scenario** and **Schedule** folders from the local storage.

---

1. On the CMS Lite, select the desired device(s) and click the **Upload Loop Video** button .

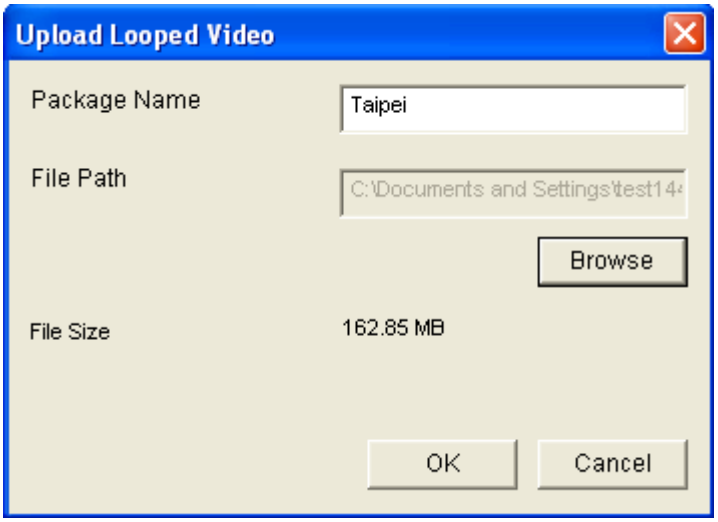


Figure 6-7

2. Type a name in the **Package Name** field for the uploading folder.
3. Click **Browse** to locate the **Loop_Video** folder.
4. Click **OK**. The percentage of uploading process will be displayed in the Transfer Status column.

After the uploading process is complete, the CMS Lite will disconnect with the device and all the previous folders (Loop_Video, Scenario and Schedule) will be removed from the local storage of the device. After that, the CMS Lite will reconnect to the device again, and the device will automatically play the uploaded media files.

6.6 Uploading the Scenario

To upload the project created using the Content Designer to the device, follow the steps below.

Important: The upload action will remove all the **Loop_Video**, **Scenario** and **Schedule** folders from the local storage.

---

1. On the CMS Lite, select the desired device(s) and click the **Upload Scenario** button .

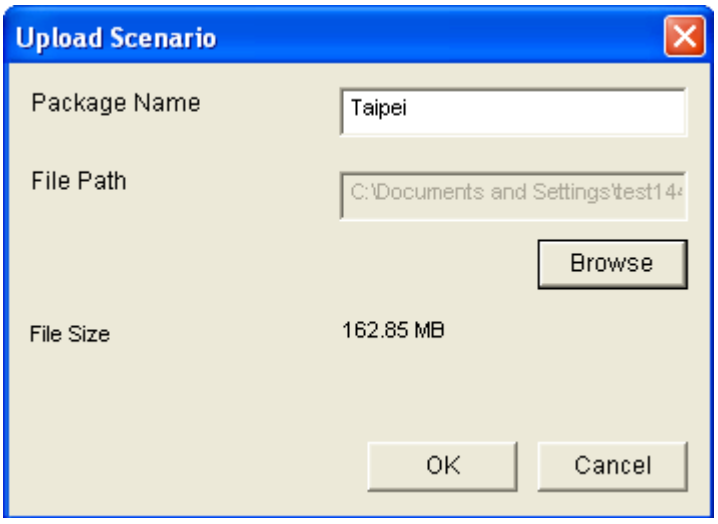


Figure 6-8

2. Type a name in the **Package Name** field for the uploading folder.
3. Click **Browse** to locate the **Scenario** folder.
4. Click **OK**. The percentage of uploading process will be displayed in the Transfer Status column.

After the uploading process is complete, the CMS Lite will disconnect with the device, and all the previous folders (Loop_Video, Scenario and Schedule) will be removed from the local storage of the device. After that, the CMS Lite will reconnect to the device again, and the device will automatically play the uploaded media files.

6.7 Uploading the Schedule

To upload the content schedule, created using the Content Schedule software, to the device, follow the steps below.

Important: The upload action will remove all the **Loop Video**, **Scenario** and **Schedule** folders from the local storage.

---

1. On the CMS Lite, select the desired device(s) and click the **Upload Schedule** button .

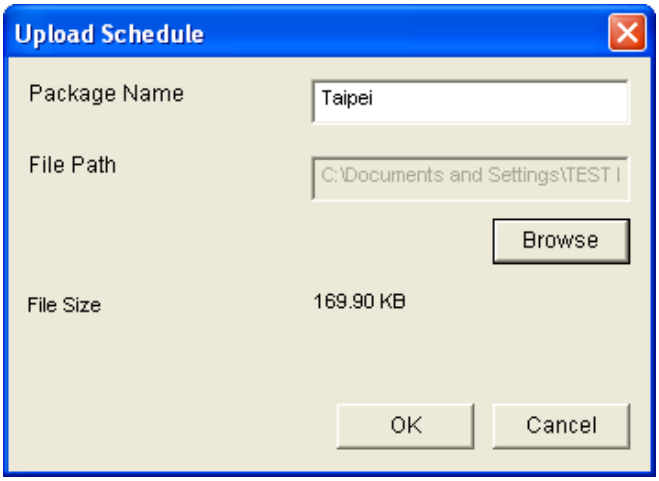


Figure 6-9

2. Type a name in the **Package Name** field for the uploading folder.
3. Click **Browse** to locate the **Output_Schedule** folder.
4. Click **OK**. The percentage of uploading process will be displayed in the Transfer Status column.

After the uploading process is complete, the **Schedule**, **Scenario** and/or **Loop_Video** folders in the device will be updated.

6.8 Uploading the Firmware

To upload the firmware to the device, follow the steps below.

1. On the CMS Lite, select the desired device(s) and click the **Upload Firmware** button to locate the firmware file.
2. Click **Open**. The percentage of uploading process will be displayed in the Transfer Status column.

After the uploading process is complete, the device will automatically restart.

6.9 Uploading the Scrolling Ticker

To upload a scrolling ticker to the device, follow the steps below.

1. On the CMS Lite, select the desired device(s) and click the **Ticker Setup** button .

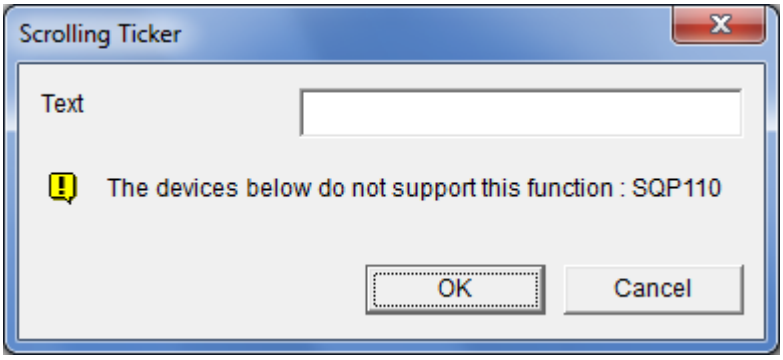


Figure 6-10

2. Type the text in the Text field. You can type up to 200 characters in the Text filed.
3. Click **OK**. The scrolling ticker will be uploaded to the device and displayed on the bottom of the screen.

Note:

1. If the project, created using the Content Designer, already includes a scrolling ticker, the position of the uploaded scrolling ticker will be the same as your original design in the project. If there is no scrolling ticker in the project, the uploaded scrolling ticker will be displayed at the bottom of the screen.
2. When you upload the scrolling ticker, this ticker becomes the only ticker in the device; it replaces all the tickers existed in the device. The screen displays the newly uploaded ticker only.

6.10 Changing the Device Name

To change the device name, follow the steps below.

1. On the CMS Lite, select the desired device(s) and click the **Edit Device Information** button .

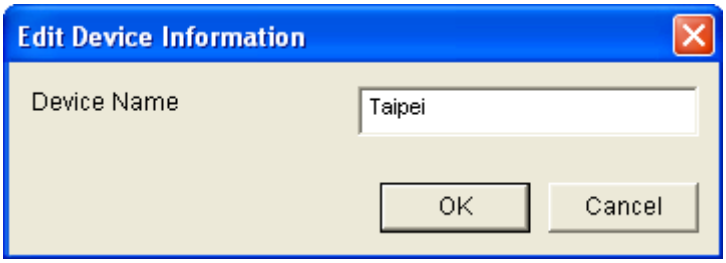


Figure 6-11

2. Type a name for the device.
3. Click **OK**. The CMS Lite will disconnect and then reconnect to the device automatically.

Note: You can find the device name in the Factory menu of the device. See *3.7 Setting the Device Name.*

Chapter 7 CMS Server

CMS Server is a Content Management System server that allows you to upload media files, scrolling tickers or firmware to up to 1000 digital signage devices using a Web interface. You can also look up records and analysis of user and device activities.

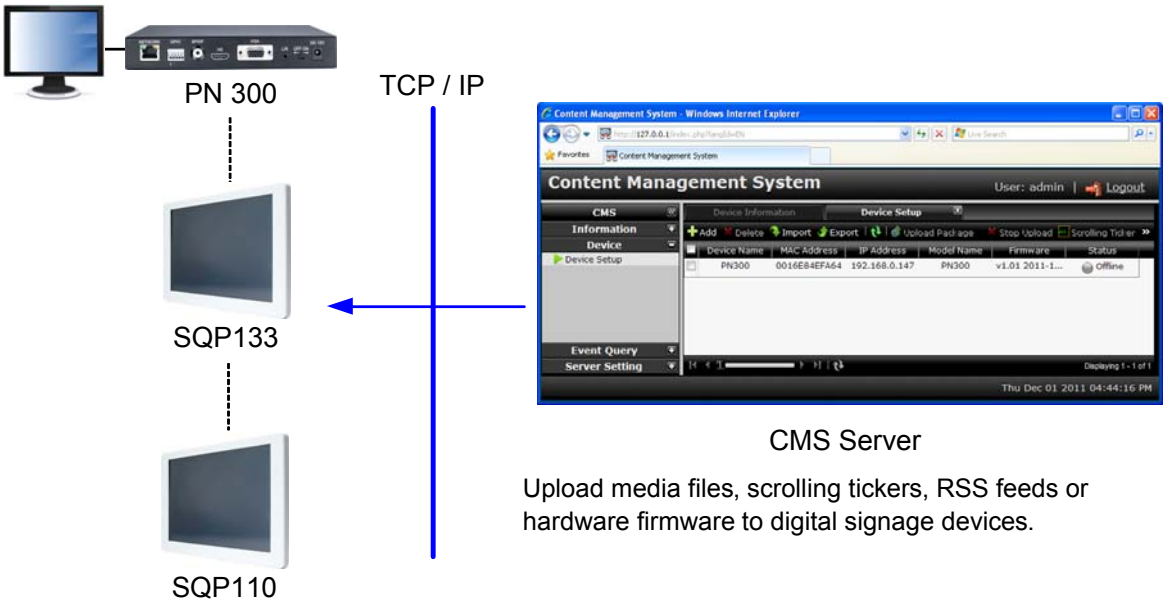


Figure 7-1

Note: For information on SQP110, refer to *SQP110 Series User's Manual*.

7.1 System Requirements

The system requirements for CMS Server are listed below.

Note: For the compatible firmware versions of PN300, SQP133 and SQP110 with the CMS Server, see *Compatible Firmware and Software Versions*.

7.1.1 Minimum System Requirements

	500 Devices or less	500 Devices or more
OS	32-bit and 64-bit Windows 7 / XP / Vista / Server 2008	
CPU	Core Duo, 2.6 GHz	Core Duo, 3.0 GHz
Memory	1 GB	2 GB
Browser	• Internet Explorer 8.0 • Firefox 6.0.2 • Google Chrome 15.0.874.121 • Safari 5.1	
Hardware	Internal or external GV-USB Dongle	
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.		

7.1.2 Software License

An USB dongle is required to connect CMS Server to devices. Starting from a minimum of 5 connections to a maximum of 1000 connections, different number of connections is available for purchase in increments of 5 connections.

Free License	N/A
Maximum License	1000 clients
Increment for Each License	5 to 1000 clients at an increment of 5
Optional Combinations	N/A
Dongle Type	Internal or external

7.2 Installing CMS Server

Installing from Software DVD

1. Insert the Software DVD to your computer. It runs automatically and a window pops up.
2. To install USB dongle driver, select **Install GeoVision USB Devices Driver** and follow the on-screen instructions.
3. To install the CMS Server, select **Install Content Management System**, select **Install CMS Server (Only for PN300 & SQP133)**, and follow the on-screen instructions.

Figure 7-2

Downloading from GeoVision Website

1. Go to the Software Download and Upgrading page of GeoVision Website: http://www.geovision.com.tw/english/5_8.asp
2. Select the **Digital Signage** tab and click the **Download** icon DOWNLOAD of **CMS Server**.

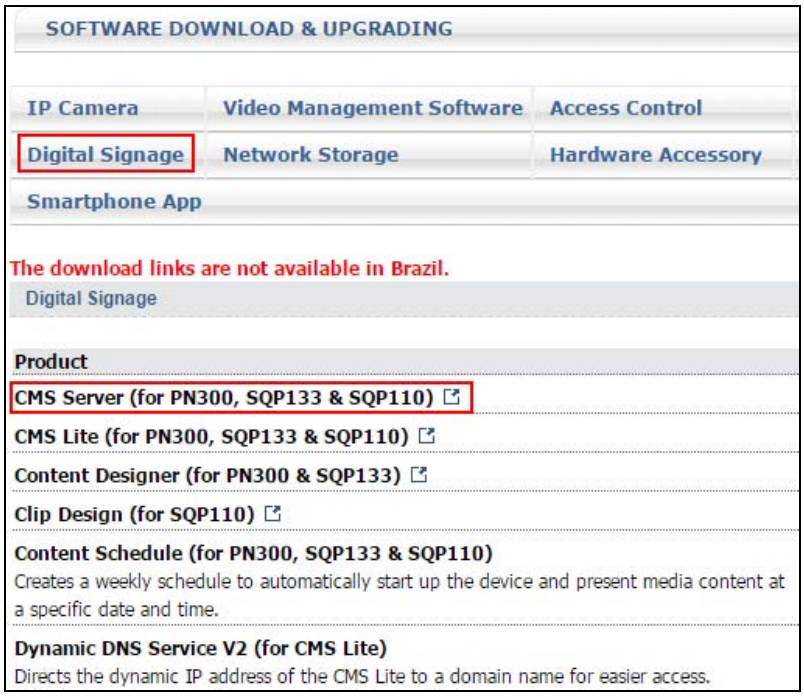


Figure 7-3

7.3 Connecting the Devices to CMS Server

To connect the device to CMS Server, you have to set up the CMS settings. Make sure the device is already connected to the network. See *3.6 Setting the Network* to set up the network connection.

1. On the setup menu, select **Network** and select **CMS Setting**. The following window appears.

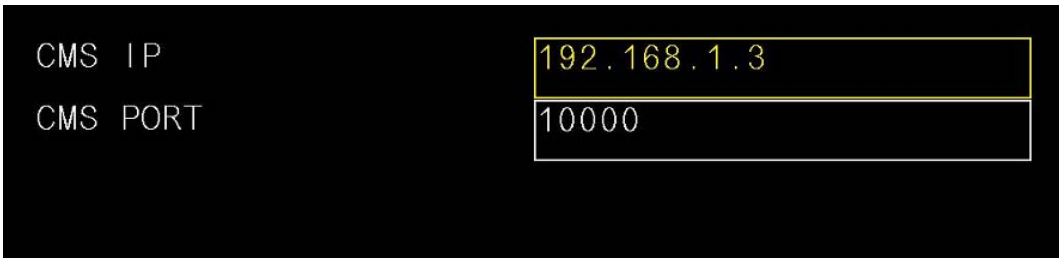


Figure 7-4

2. In the **CMS IP** field, specify the IP address of CMS Server.
3. Keep the **CMS Port** value as 10000 or modify it to match the port on CMS Server.
4. Press **OK** to save the settings.

When CMS Server is started, the device will be listed in the Device Setup page as Invalid. Double-click the device to add the device to CMS Server.

Figure 7-5

7.4 Starting CMS Server

After installing CMS Server, the CMS Server icon

will appear in the system tray. Follow the steps below to configure general settings and access the Web interface of CMS Server.

1. To configure the general settings, right-click the CMS Server icon , click **Stop Service**, and click **Configure** to access the following options.

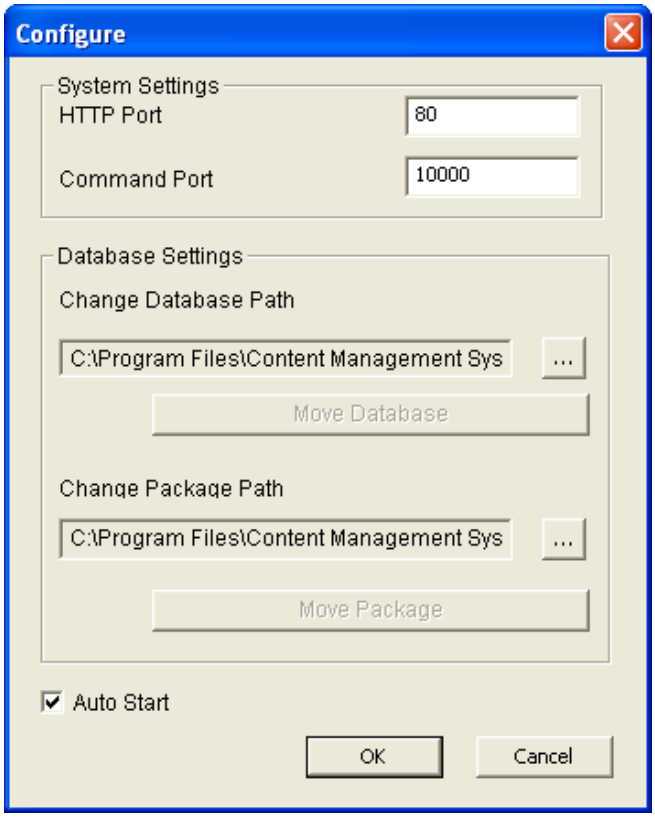


Figure 7-6

- **HTTP Port:** The default HTTP port is 80.
- **Command Port:** The Command port is used for communicating with digital signage devices. If other program is using the default port 10000, you may need to change the Command port value. The port range is 1 to 65534.
- **Change Database Path:** Changes the storage path for event log and device information.
- **Change Package Path:** Changes the storage path for content packages.
- **Auto Start:** Automatically start CMS Server at system startup.

2. Click **OK** to apply the settings.

3. To access the Web interface of CMS Server, right-click the CMS Server icon , click **Start Service** and click **Access Web Interface**. The Web Interface login page appears.

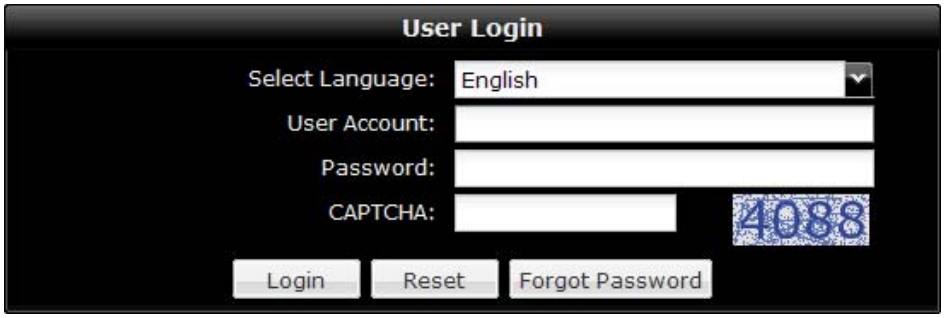


Figure 7-7

4. Type the **User Account** and **Password**. The default login name and password for the Administrator are **admin**.
5. Type the verification number shown in the image.
6. Click **Login**. The CMS Server Web interface is now displayed.
7. If you have forgotten your password, click the **Forgot Password** button and a new password will be sent to the email address of the user account.

To access the Web interface from a remote computer, start the Internet browser and type the IP address or the domain name of CMS Server in the Location/Address field. If the default HTTP port has been changed, type a colon and the port number after the IP address, for example, **http://192.168.3.199:81**. After the login page appears, follow steps 4 to 6 to log in the Web interface.

Note:

1. To enable the updating of images in Microsoft Internet Explorer, you must set your browser to allow ActiveX Controls and perform a one-time installation of GeoVision's ActiveX component onto your computer.
2. If CMS Server is installed behind a firewall or router, you may need to open these default ports: HTTP port 80 and command port 10000.
3. When updating the CMS Server from V1.0.3.0 to V1.0.4.0, right-click the CMS Server icon , click **Upgrade Database** and click **Start Service**.

7.4.1 List of Menu Options

After logging in the Web interface, the following menu options are available in the left panel. Refer to the section number below to see more details on each menu option.

7.10 Information	7.10.1 Device Information 7.10.2 System Information 7.10.3 User Information 7.10.4 Package Information
7.11 Device Setup	
7.12 Event Query	7.12.1 Behavior Log Query 7.12.2 Behavior Log Analysis 7.12.3 Device Event Query 7.12.4 Device Event Analysis (Counts) 7.12.5 Device Event Analysis (Elapsed Time) 7.12.6 Play Count Analysis
7.13 Upload Management	
7.14 Server Setting	7.14.1 User Account 7.14.2 Network Setting 7.14.3 Email Service

7.5 Getting Started

After logging into the Web interface, you will need to first add the devices to establish connection (see *7.3 Connecting the Devices to CMS Server*). Next, you will need to prepare a content package, transfer the package to the designated storage path, and then upload the package to the device. You can also optionally plan your devices into groups for further management (see *7.8 Planning the Group*) and arrange the playing orders for the Loop Videos (see *7.9 Arranging the Loop Video*).

7.5.1 Preparing the Package

There are five types of content packages you can upload to the device: **Loop Video**, **Scenario**, **Firmware**, **Schedule** and **Customized Loop Video**. For explanation on the concept of Schedule, Loop Video and Scenario packages, see *Appendix. Definitions of Folder Names*.

To prepare a scenario or a schedule, the Content Designer, Clip Design or Content Schedule tool is required. You can install them from the Software DVD or from the Upload Management section of the CMS Server. For details, see *4.2 Installing the Content Designer* and *5.1 Installing the Content Schedule*.

In the Upload Management section, select **Package Management**, click the **Download Tools** button and select the required tool.

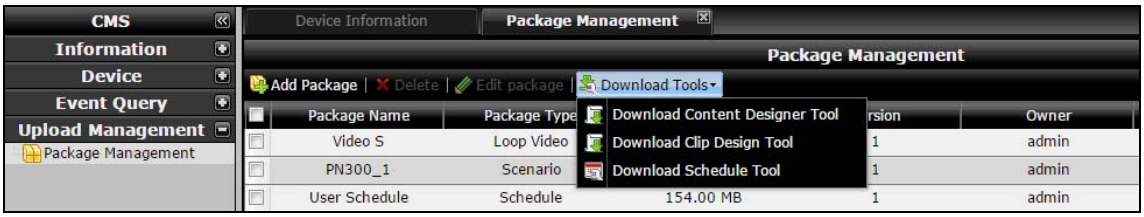


Figure 7-8

- **Loop Video:** Select one or multiple images or video files to be used in the loop video.
- **Scenario:** To create a scenario, see *Content Designer* in *PN300 & SQP133 User's Manual* or see *Clip Design* in *SQP110 Series User's Manual*.
- **Firmware:** To update the firmware, see *7.15 Upgrading the Firmware.*
- **Schedule:** To create a schedule, see *Content Schedule* in *PN300 & SQP133 User's Manual* or *SQP110 Series User's Manual*.
- **Customized Loop Video:** Select multiple images or video files from an added package and arrange the playing order. For details, see *7.9 Arranging Loop Video*.

7.5.2 Transferring the Package

Before uploading the content package to the device, you need to first transfer the content package to the designated storage path on the computer.

1. In the Upload Management section, click **Package Management**. This page appears.

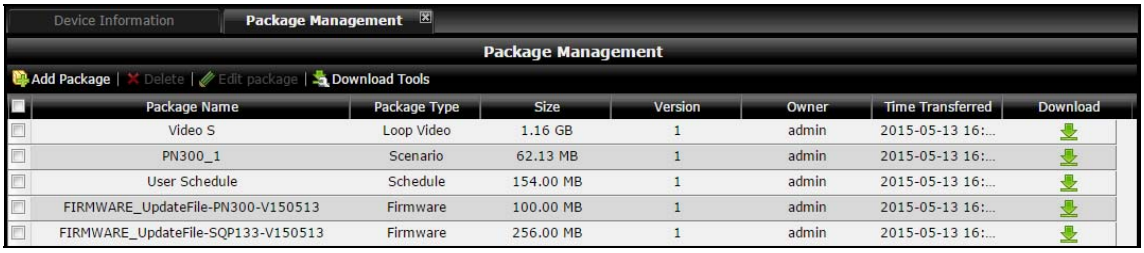


Figure 7-9

2. Click the **Add Package** button, type a **Package Name** and a **Version** number for your own reference. Use the **Package Type** drop-down list to select whether the package is a **Loop Video**, **Scenario**, **Schedule** or a **Customized Loop Video**.

Figure 7-10

Note: For how to customize a Loop Video, see *7.9 Arranging the Loop Video*.

3. Click **Next**. This dialog box appears.

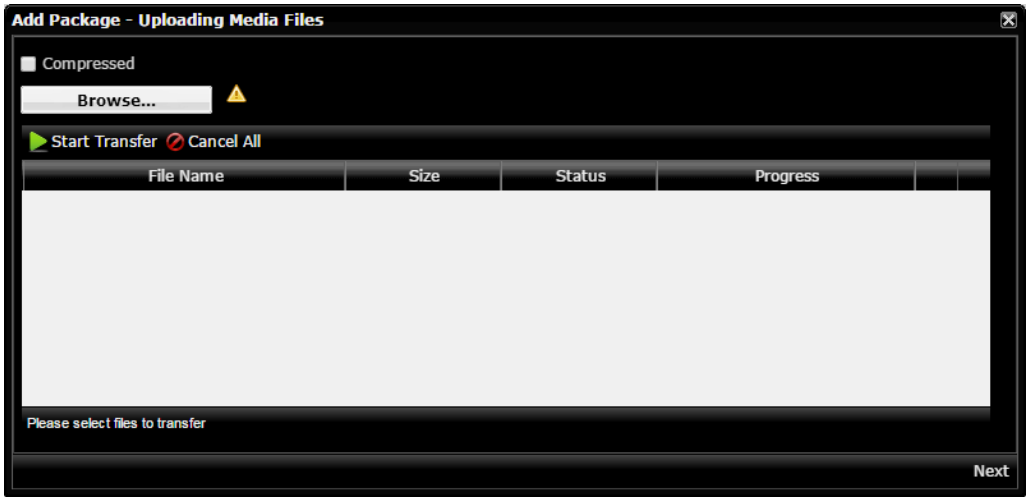
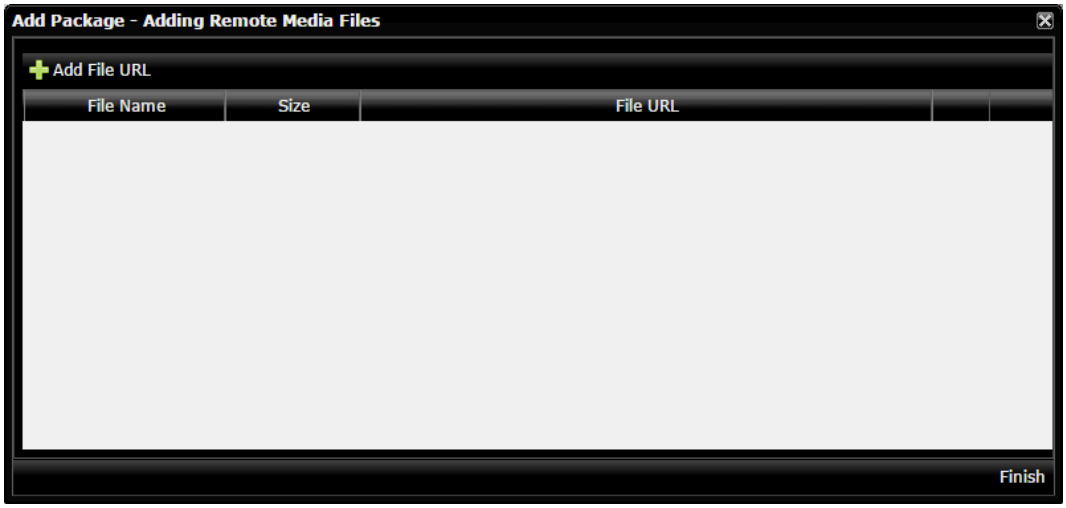


Figure 7-11

4. Select **Compressed** to transfer zipped files or click **Browse** to locate the file(s) for the package. You can press the Ctrl and Shift key to select multiple files.
5. Click the **Start Transfer** button. Click **Next** when the transfer is completed.
6. If you are uploading **Loop Video**, this dialog box will appear. To upload a media file larger than 2 GB, you need to upload the file from a remote storage link, e.g. https://www.dropbox.com/s/qug7gljcjc0c17i/StreetSociety.avi?dl=1. You can add multiple URLs by using semicolons to separate addresses.



7. After the files are transferred, click **Finish**. This dialog box appears.

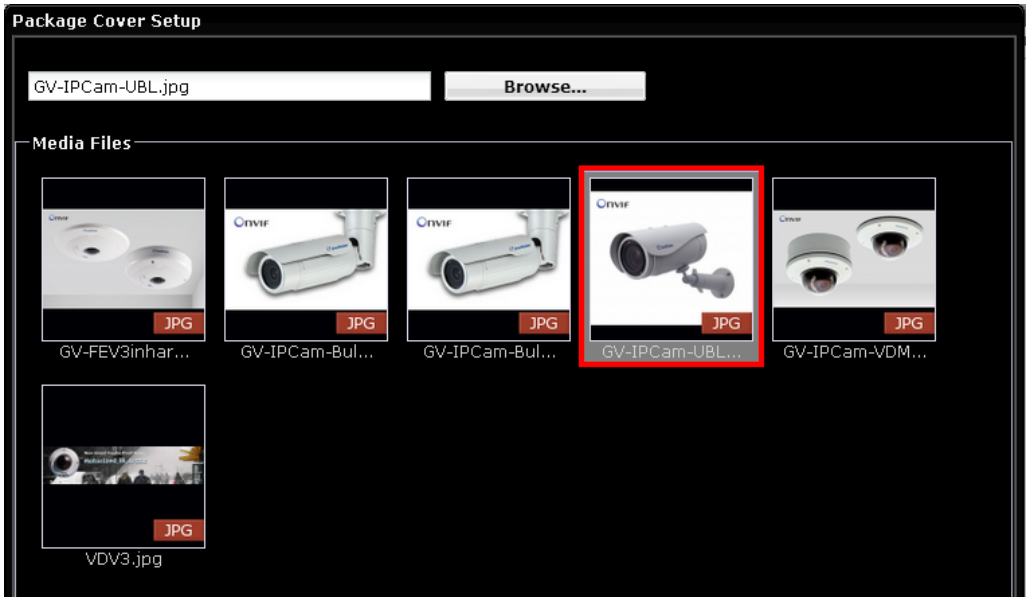


Figure 7-13

8. Click a media file to set it as the package cover and click **OK**. The cover will be shown on the Device Information page when this package is assigned. For example:

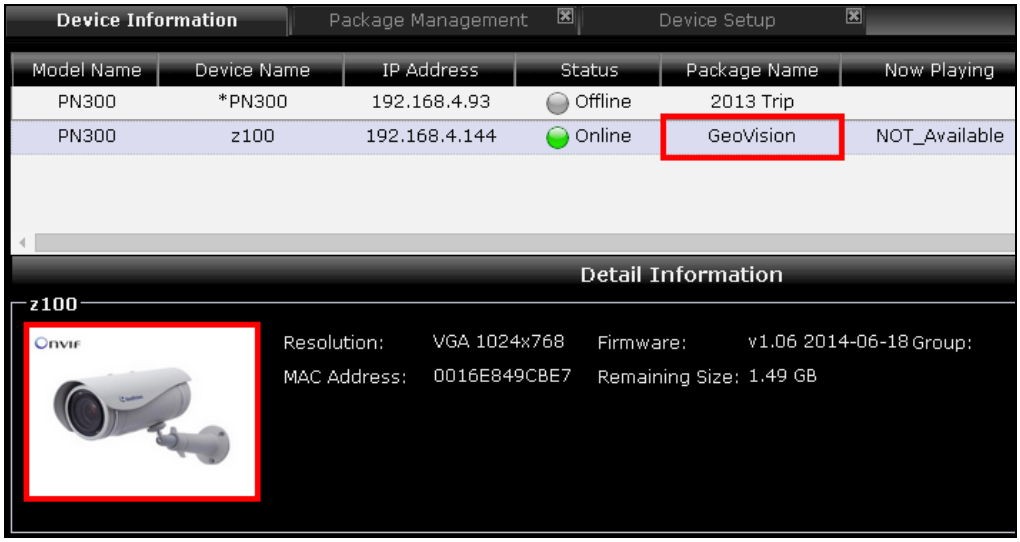


Figure 7-12

Note:

1. The Scenario and Schedule files must be zipped before you can transfer and upload the file to the device, while compressing files for Loop Video is optional. The compressed file must be in .zip format.

2. You can select up to 240 uncompressed files or select **Compressed** in step 2 to include more than 240 files.
3. For the package cover, if the selected item is a video file, its first frame will be used as the package cover.

7.5.3 Uploading the Package

After transferring the content package to the designated storage path, the content package can now be uploaded to the device. If the network settings on the device have not been set up, refer to *7.3 Connecting the Devices to CMS Server*.

Instant Uploading

1. In the Device section, click **Device Setup**.
2. If the device is displayed as Invalid in the Status column, double-click the device name to add the device.

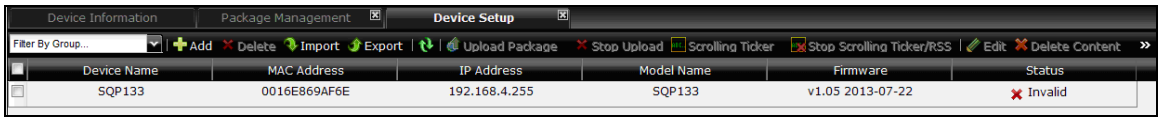


Figure 7-13

3. Select the device, click the **Upload Package** button and select **Scenario**, **Loop Video** or **Schedule** depending on the content of your package. This dialog box appears and the packages you transferred are listed.

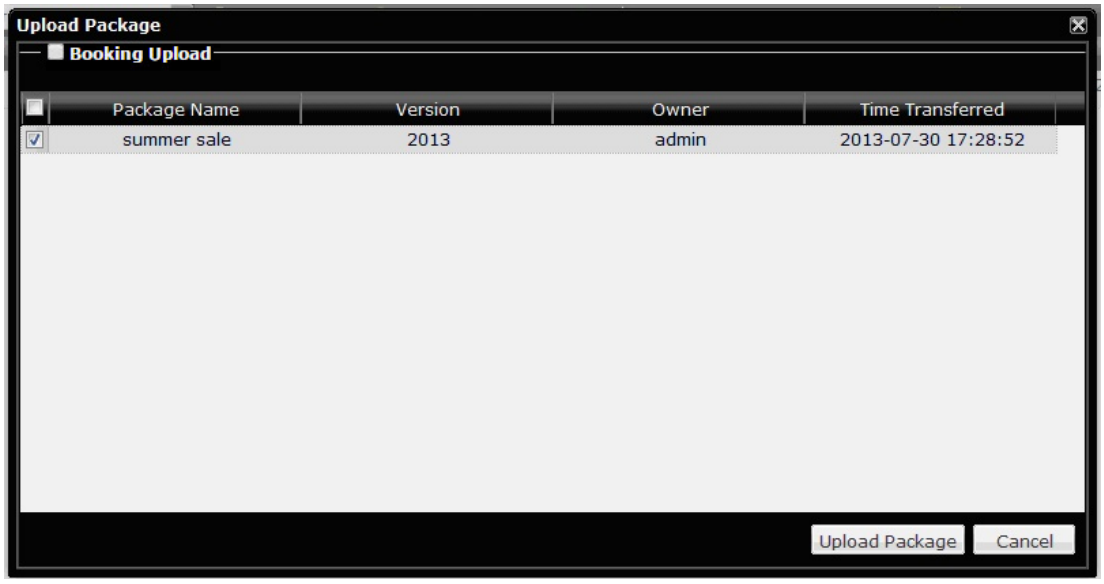


Figure 7-14

4. Select a package and click **Upload Package**. The package is now uploaded and will replace any existing packages.

Note: SQP110 series will reboot after the package is uploaded.

Scheduled Uploading

You can upload the packages based on your schedule. Using this function allows your device to play videos or images at the appointed time.

1. Select the **Booking Upload** option on the top left corner and the window expands as below.

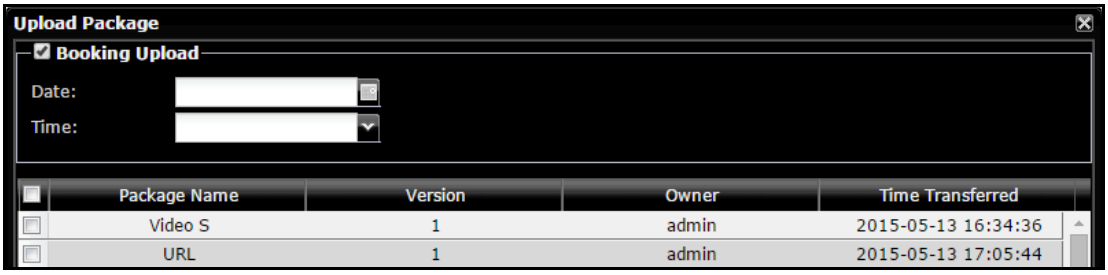


Figure 7-15

2. To upload the packages at the appointed time, select the **Date** by clicking the calendar button and select the **Time** by clicking the arrow button .
3. Select the listed package that you want to upload.
4. Click **Upload Package**.

Delayed Uploading

If you upload a package or firmware to a device that is not connected, the command will be stored in the Command List until the device is connected. The Command List can be accessed by double-clicking the IP address of the device.

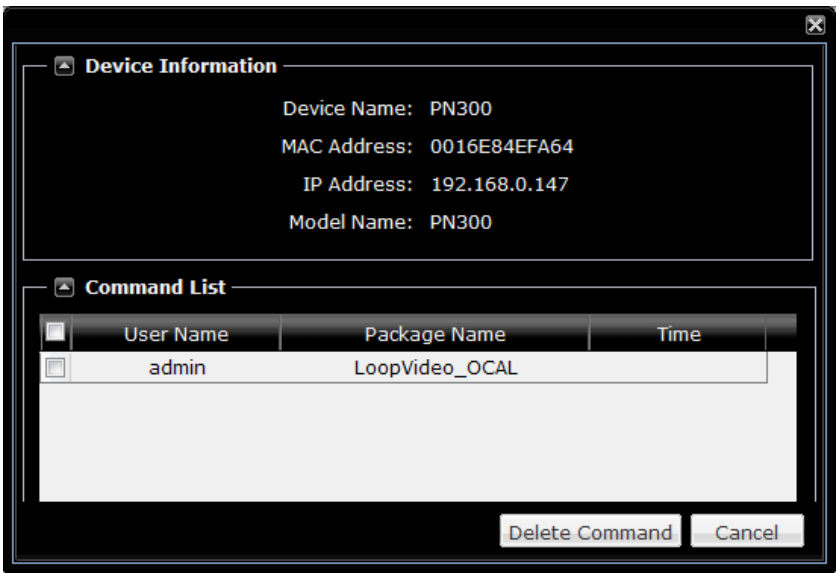


Figure 7-16

7.5.4 Revising the Package

To add or delete files from an existing package, double-click the device's Package Type to access this page. To download the files, use the **Download** button.

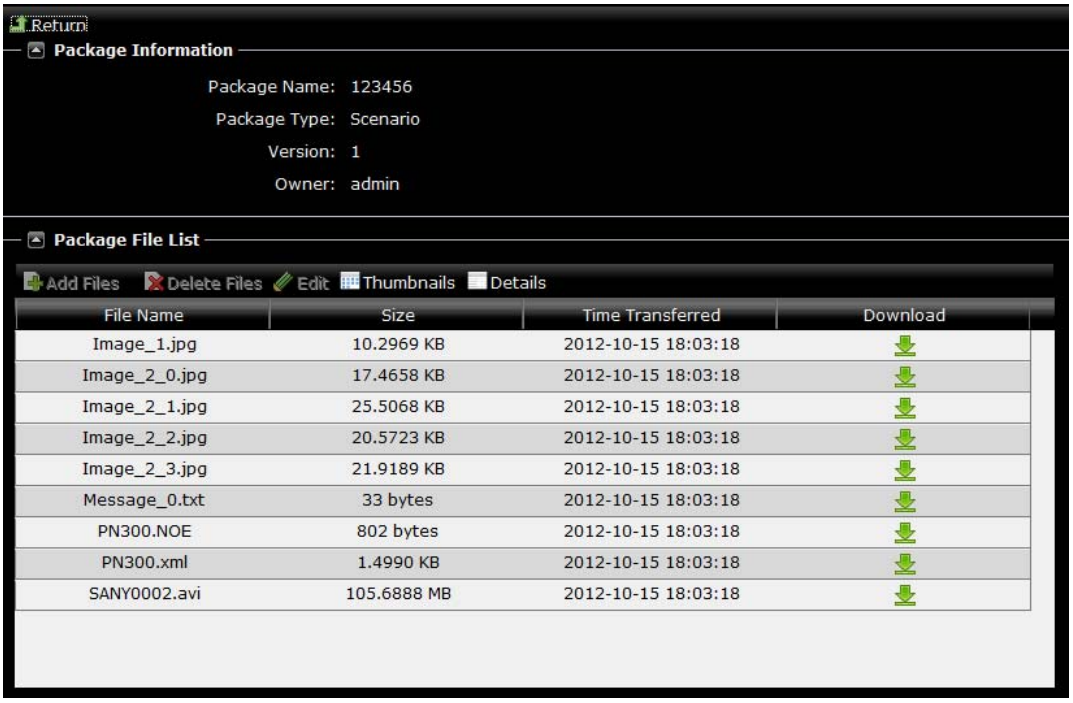


Figure 7-17

7.6 Applying the Scrolling Ticker

You can apply the scrolling ticker to the uploaded package. The scrolling ticker will be applied to the package and any existing scrolling ticker will be replaced.

1. In the Device Setup, select the desired device.

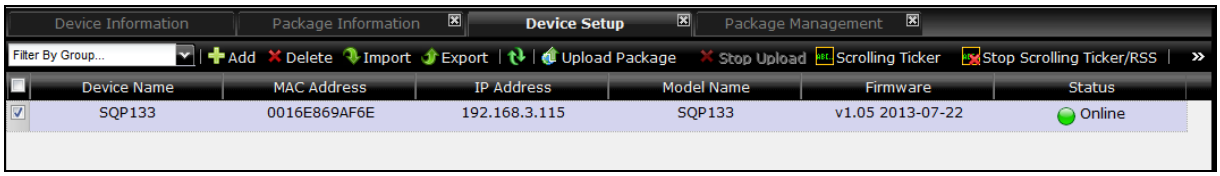
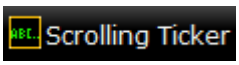


Figure 7-18

2. Click the **Scrolling Ticker** button  and select **Scrolling Ticker**.

3. When the dialog box below appears, type up to 200 characters and click **OK**.

Figure 7-19

To disable scrolling ticker, click the **Stop Strolling Ticker/RSS** button in the Device Setup page.

Note:

1. Scrolling Ticker is not supported on SQP110 series.
2. It is an either-or option between the scrolling ticker and the RSS feeds.

7.7 Applying the RSS Feed

You can apply RSS feeds to the uploaded package. When you apply new RSS feeds, any existing scrolling ticker or RSS feeds will be replaced.

1. In the Device section, click **Rss**. This page appears.

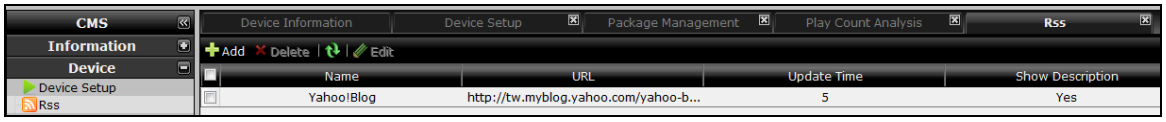


Figure 7-20

2. Click the **Add** button. Type a description in the **Name** field and a designated RSS site in the **URL** field.

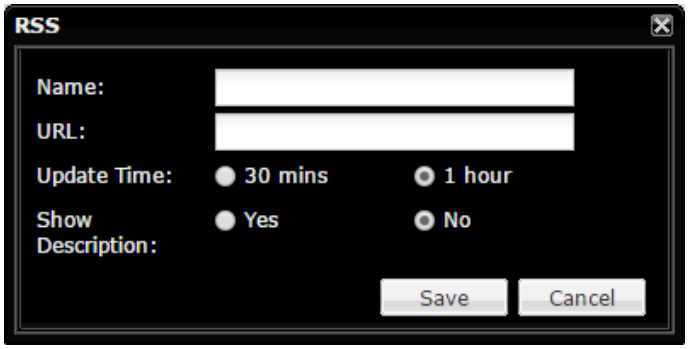


Figure 7-21

3. Select **30 mins** or **1 hour** for the device to update the RSS feeds every 30 minutes or 1 hour.
4. Select **Yes** or **No** to display the subtitle of the news.
5. Click **Save**.

Note: It is an either-or option between the scrolling ticker and the RSS feeds.

7.8 Planning Device Group

You can manage the devices by planning them into groups to avoid repetitive procedures when you upload the packages and upgrade the firmware.

1. In the Server Setting section, click **Group**. This page appears.

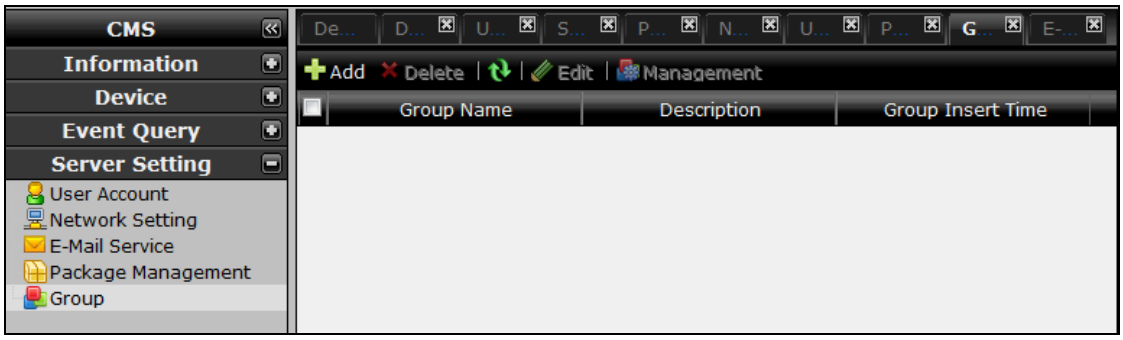


Figure 7-22

2. Click the **Add** button and type a group name and a description for your reference.

Figure 7-23

3. Select the newly added group and click the **Management** button. This page appears.

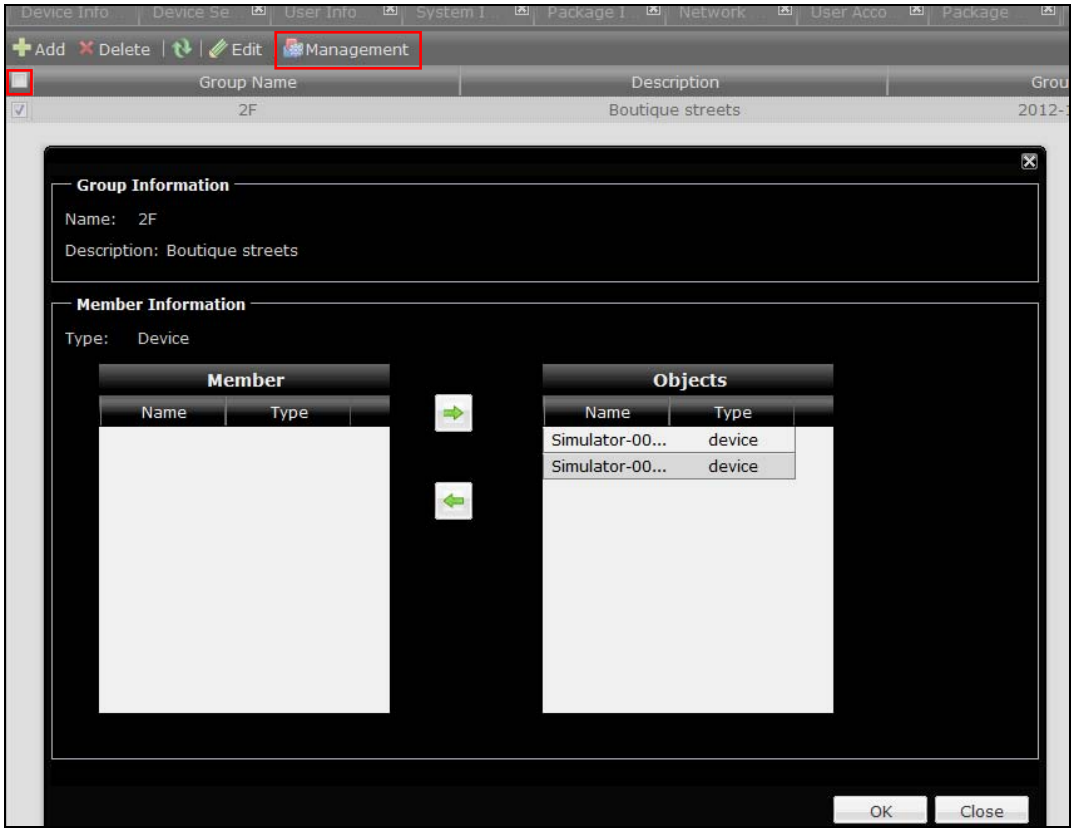


Figure 7-24

4. Click the device you want to add to the designated group from the Objects box. Move the selected devices by using arrow buttons.
5. Click **OK**.

7.9 Arranging the Loop Video

You can arrange the Loop Video to play on the device in any type of order.

1. In the Upload Management section, click **Package Management**. This page appears.

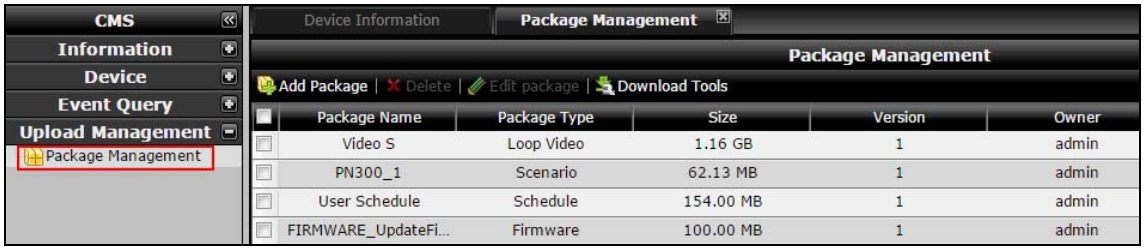


Figure 7-25

2. Click **Add Package**. Type the **Package Name** and **Version** for your references and select **Customized Loop Video** in the Package Type drop-down list.

Figure 7-26

3. Click **Next**.
4. Select a package from the **Loop Video** drop-down list.

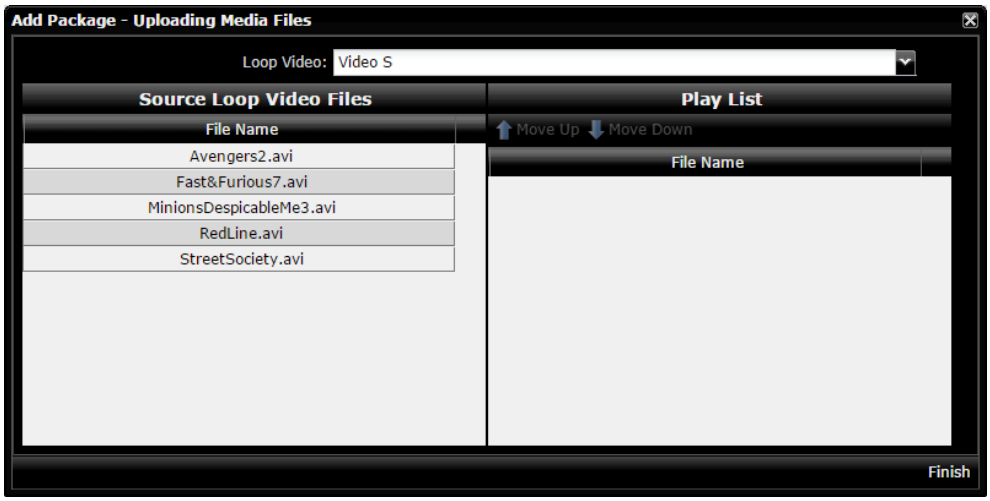


Figure 7-27

5. Click and drag the files from the left box to the right box.

6. You can use the **Move Up** and **Move Down** buttons

to help you arrange the playing order. The top file should be the first to play on the device.
7. When you finish arranging the order, click **Finish**.

7.10 Information

This section introduces how to look up device information, system information, user information and package information.

7.10.1 Device Information

The Device Information page shows device details such as device name, IP address, connection status, and the name of the package being played. After logging in CMS Server, the Device Information page is displayed by default and can later on be accessed by clicking the Device Information tab labeled in red.

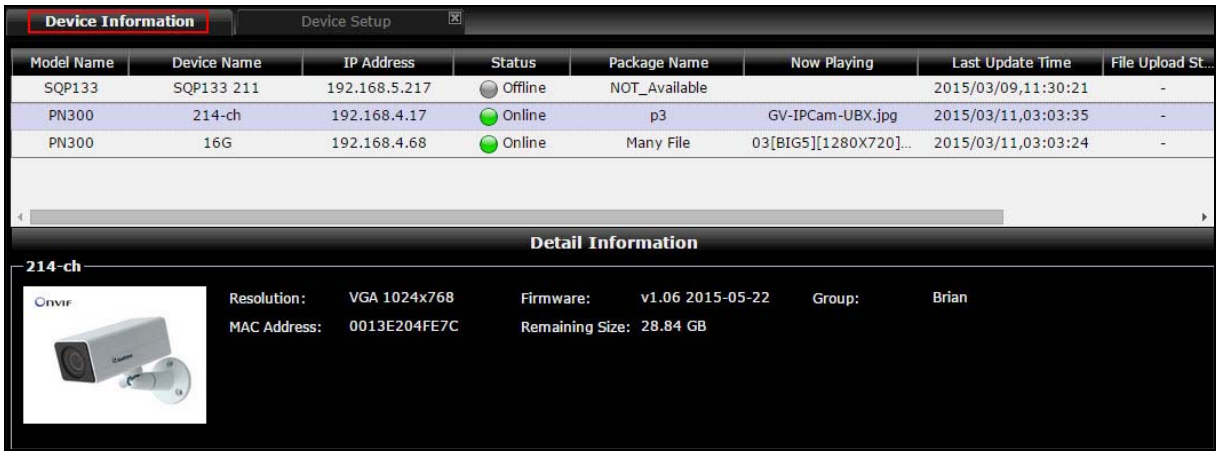


Figure 7-28

Device Status

- **Online:** A PN300/SQP133 device is connected to the CMS Server.
- **Offline:** A PN300/SQP133 device is disconnected from the CMS Server.
- **Connecting:** A PN300/SQP133 device is connecting to the CMS Server.
- **Busy:** A media package is uploading from CMS Server to a PN300/SQP133 device.
- **Formatting:** An SD card or a USB storage device connected to PN300/SQP133 is being formatted on the CMS Server.
- **Sleep:** During the off-schedule period, a PN300/SQP133 device is indicated as Sleep Mode.

Note:

1. The Package Name column only shows the packages uploaded from the CMS Server.

2. Formatting the SD card or USB storage device is only available on CMS Server V1.0.4.0 with PN300/SQP133 V1.06.

7.10.2 System Information

The System Information page shows the version information, system time, maximum number of devices allowed and number of devices currently connected.

Note: The CMS Server synchronizes the devices' time with the Network Time Server automatically each time it connects to the devices.

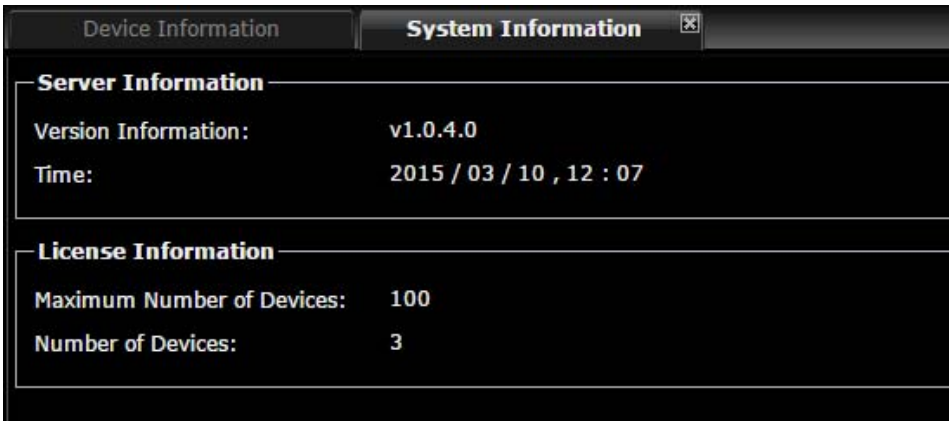


Figure 7-29

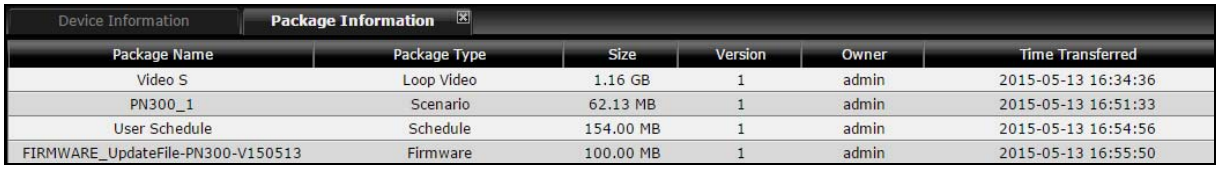
7.10.3 User Information

The User Information page shows the user accounts created, the password hint and the email address associated with the account.

Figure 7-30

7.10.4 Package Information

The Package Information page shows the name, type, size, version, owner and upload time of the content packages stored.



Package Name	Package Type	Size	Version	Owner	Time Transferred
Video S	Loop Video	1.16 GB	1	admin	2015-05-13 16:34:36
PN300_1	Scenario	62.13 MB	1	admin	2015-05-13 16:51:33
User Schedule	Schedule	154.00 MB	1	admin	2015-05-13 16:54:56
FIRMWARE_UpdateFile-PN300-V150513	Firmware	100.00 MB	1	admin	2015-05-13 16:55:50

Figure 7-31

7.11 Device Setup

The device setup page allows you to see the devices available, connect to devices, upload content to devices and apply scrolling ticker. After you connect the device to CMS server, the device will be listed as **Invalid** in the device list as shown below.

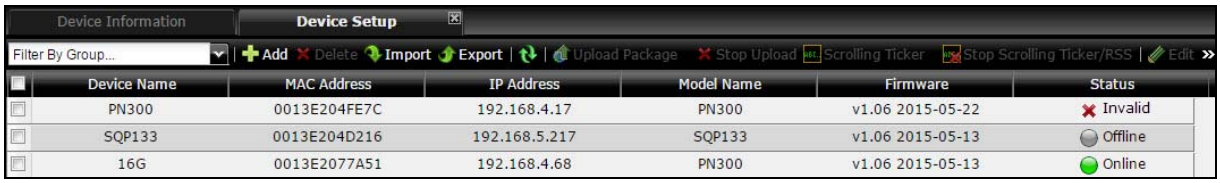


Figure 7-32

To add the invalid device, double-click the device name. The device will appear as **Online** after it is connected.

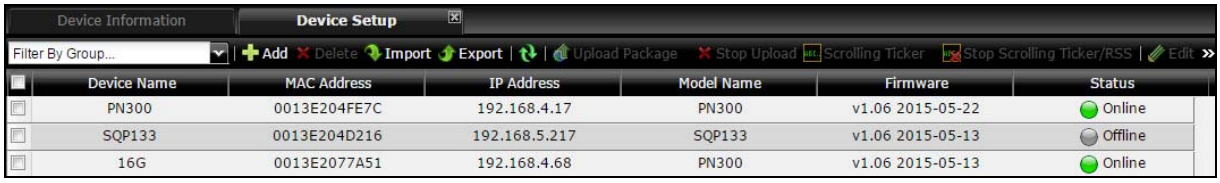


Figure 7-33

Note: You can change the device name for your reference by clicking the name.

The following buttons are available:

- **Add:** Adds a device using the MAC address.
- **Delete:** Deletes the selected devices.
- **Import:** Imports a previously exported device list.
- **Export:** Exports the current device list.
- **Refresh:** Refreshes the device setup page.
- **Upload Package:** Uploads scenario, loop video, schedule or firmware to the device.
  - **Stop Upload:** Stops the upload while content is being uploaded to the device.
  - **Scrolling Ticker:** Applies scrolling ticker to the device.
  - **Stop Scrolling Ticker/RSS:** Disables the scrolling ticker/RSS applied.
  - **Edit:** Edits the device name.

- ⊙ **Delete Content:** Deletes the content of the device.
- ⊙ **Reboot:** Reboots the device.

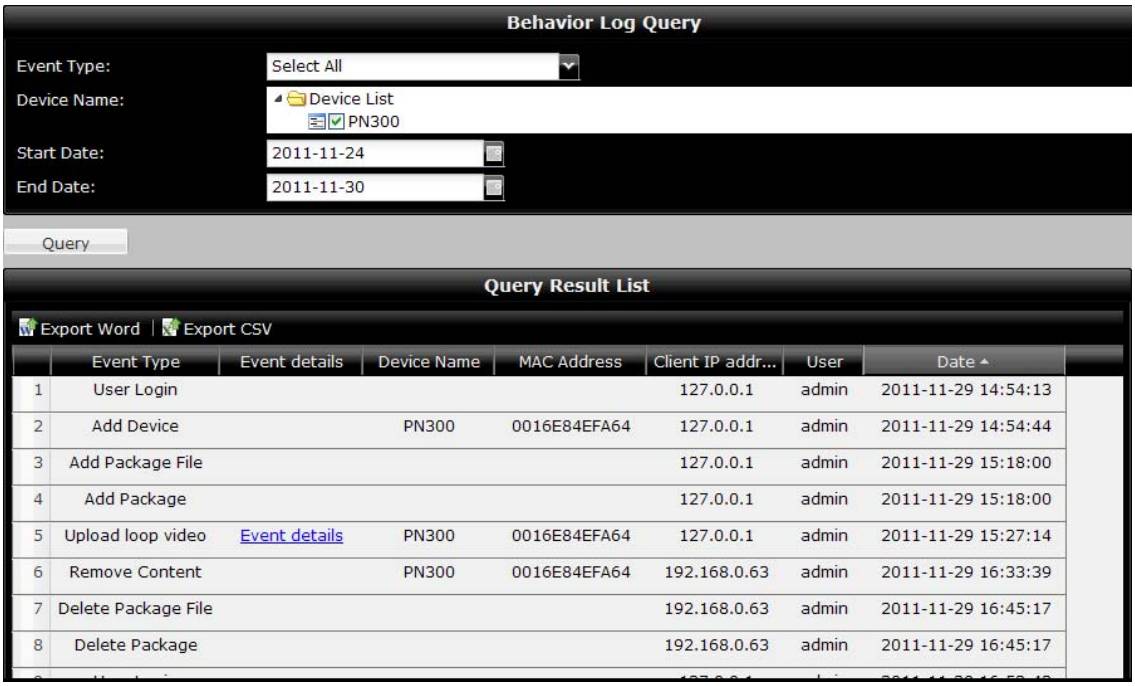
- **Format:** Formats your USB storage device or SD card inserted to PN300/SQP133.
- **Email Alarm:** Sets up an e-mail notification when the device is disconnected from the CMS Server. To establish an e-mail alarm, select a device, click , point to **Email Alarm** and select **Email Alarm**. Make sure you have enabled the e-mail service for the CMS Server. For details, see *7.14.3 Email Service*.

7.12 Event Query

In the Event Query section, you can look up record of user activities and device activities.

7.12.1 Behavior Log Query

Using the Behavior Log Query, you can search user activities such as login, adding packages, adding devices and applying scrolling ticker.



	Event Type	Event details	Device Name	MAC Address	Client IP addr...	User	Date
1	User Login				127.0.0.1	admin	2011-11-29 14:54:13
2	Add Device		PN300	0016E84EFA64	127.0.0.1	admin	2011-11-29 14:54:44
3	Add Package File				127.0.0.1	admin	2011-11-29 15:18:00
4	Add Package				127.0.0.1	admin	2011-11-29 15:18:00
5	Upload loop video	Event details	PN300	0016E84EFA64	127.0.0.1	admin	2011-11-29 15:27:14
6	Remove Content		PN300	0016E84EFA64	192.168.0.63	admin	2011-11-29 16:33:39
7	Delete Package File				192.168.0.63	admin	2011-11-29 16:45:17
8	Delete Package				192.168.0.63	admin	2011-11-29 16:45:17

Figure 7-34

1. Use the **Event Type** drop-down list to select the type of event to search.
2. Select the devices to include in the search results.
3. Specify the time period by selecting a **Start Date** and an **End Date**.
4. Click the **Query** button to see the search results.

You can export the search results in Word format and Excel format by clicking **Export Word** or **Export CSV**.

7.12.2 Behavior Log Analysis

Using the Behavior Log Query, you can see user activities displayed in bar graph, pie graph or line graph.

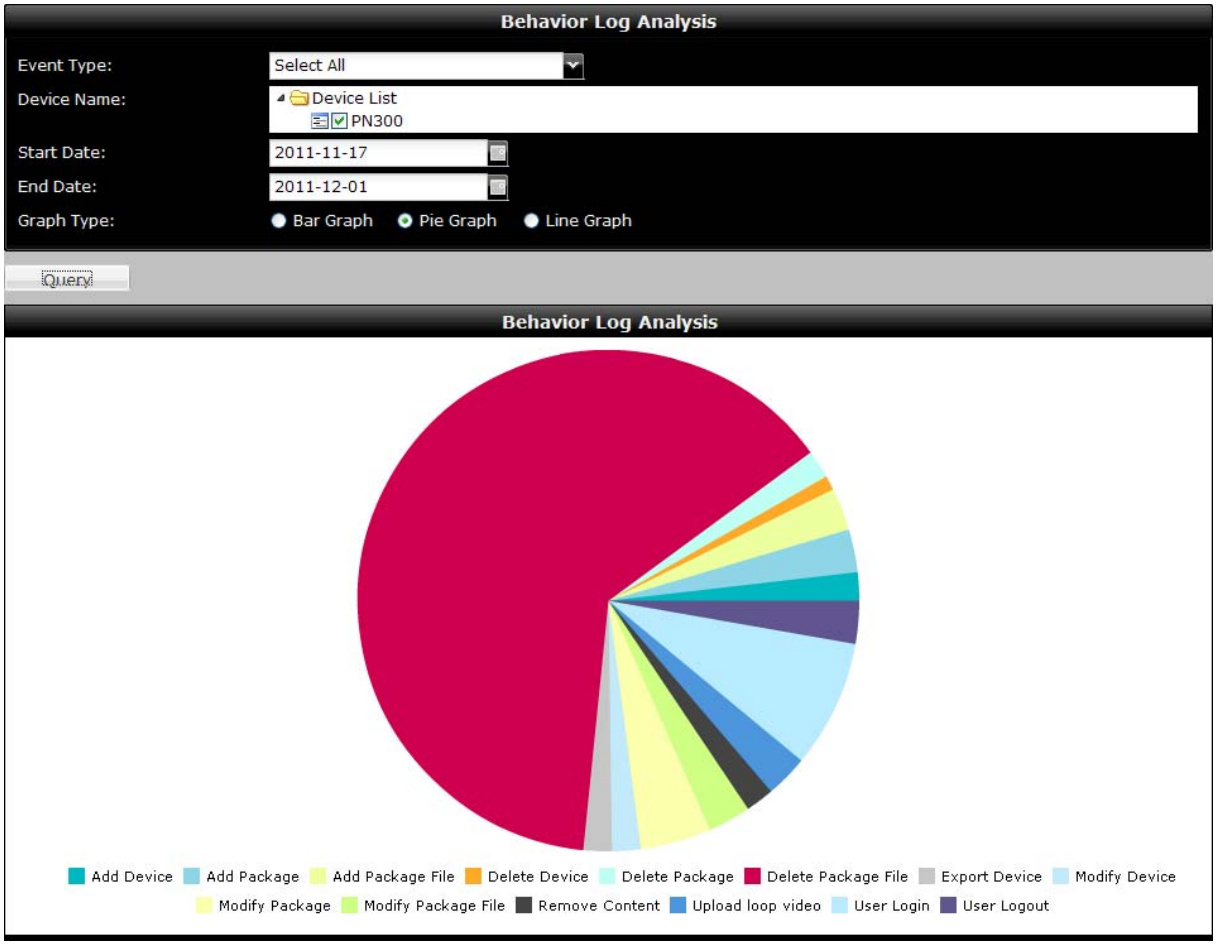
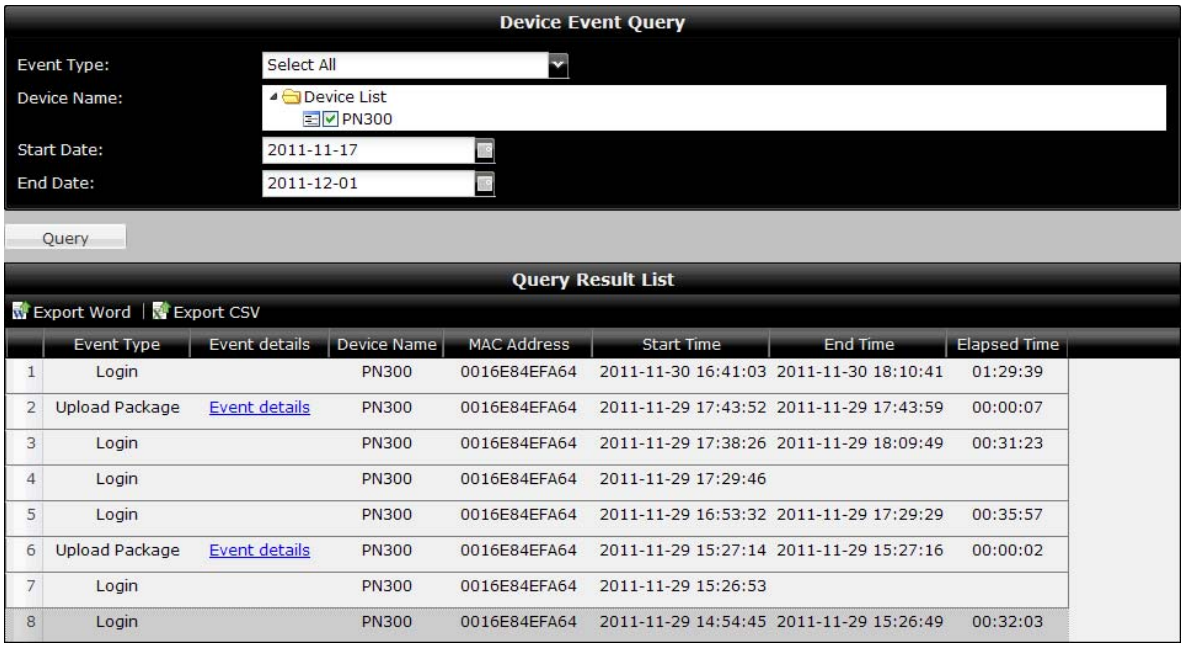


Figure 7-35

1. Use the **Event Type** drop-down list to select the type of event to search or click **Select All**.
2. Select the devices to include in the search results.
3. Specify the time period by selecting a **Start Date** and an **End Date**.
4. Select a type of graph to display the results.
5. Click the **Query** button to see the search results.

7.12.3 Device Event Query

Using the Device Event Query, you can search device events such as connection to devices and uploading packages to devices.



	Event Type	Event details	Device Name	MAC Address	Start Time	End Time	Elapsed Time
1	Login		PN300	0016E84EFA64	2011-11-30 16:41:03	2011-11-30 18:10:41	01:29:39
2	Upload Package	Event details	PN300	0016E84EFA64	2011-11-29 17:43:52	2011-11-29 17:43:59	00:00:07
3	Login		PN300	0016E84EFA64	2011-11-29 17:38:26	2011-11-29 18:09:49	00:31:23
4	Login		PN300	0016E84EFA64	2011-11-29 17:29:46		
5	Login		PN300	0016E84EFA64	2011-11-29 16:53:32	2011-11-29 17:29:29	00:35:57
6	Upload Package	Event details	PN300	0016E84EFA64	2011-11-29 15:27:14	2011-11-29 15:27:16	00:00:02
7	Login		PN300	0016E84EFA64	2011-11-29 15:26:53		
8	Login		PN300	0016E84EFA64	2011-11-29 14:54:45	2011-11-29 15:26:49	00:32:03

Figure 7-36

1. Use the **Event Type** drop-down list to select the type of event to search.
2. Select the devices to include in the search results.
3. Specify the time period by selecting a **Start Date** and an **End Date**.
4. Click the **Query** button to see the search results.

You can export the search results in Word format and Excel format by clicking **Export Word** or **Export CSV**.

7.12.4 Device Event Analysis (Counts)

Using the Device Event Analysis (Counts), you can see the number of connections made to devices and the number of packages uploaded in bar graph, pie graph or line graph.

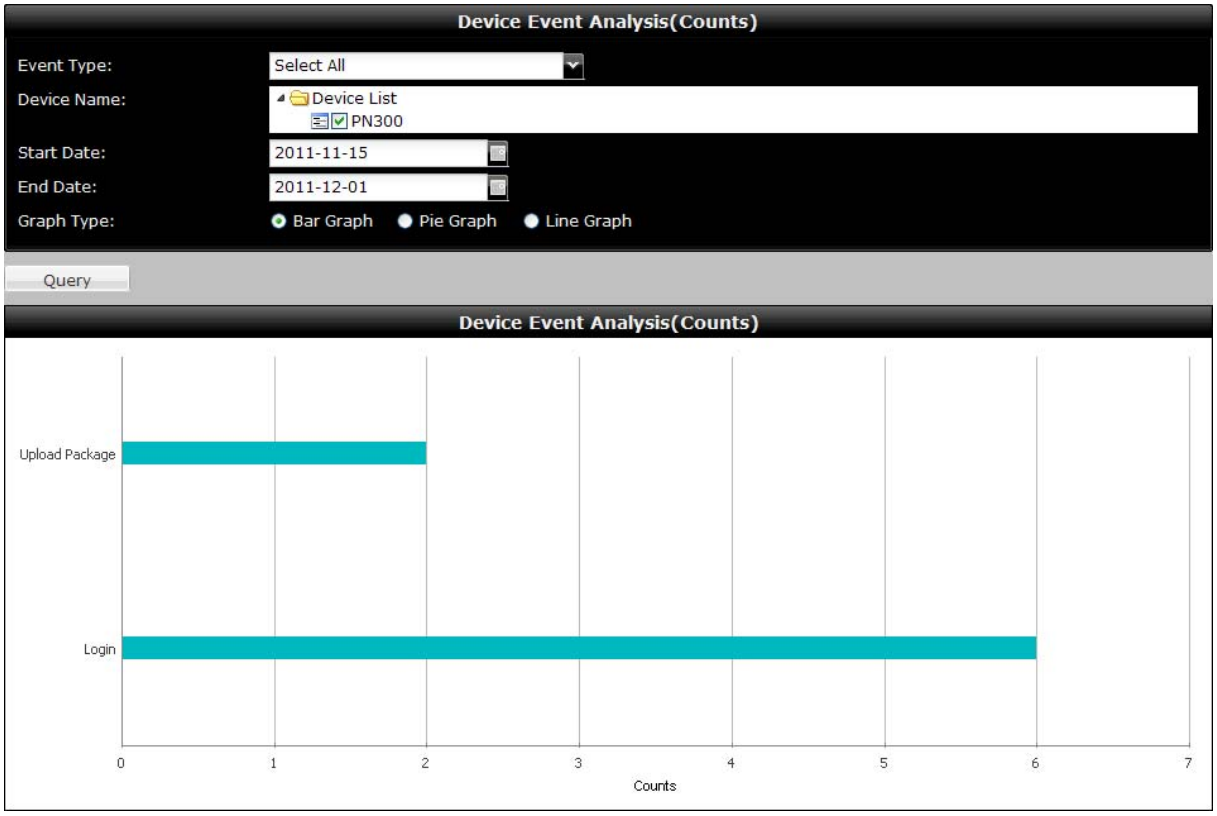


Figure 7-37

1. Use the **Event Type** drop-down list to select the type of event to search or click **Select All**.
2. Select the devices to include in the search results.
3. Specify the time period by selecting a **Start Date** and an **End Date**.
4. Select a type of graph to display the results.
5. Click the **Query** button to see the search results.

7.12.5 Device Event Analysis (Elapsed Time)

Using the Device Event Analysis (Elapsed Time), you can see the total connection time and package upload time for each device in bar graph, pie graph or line graph.

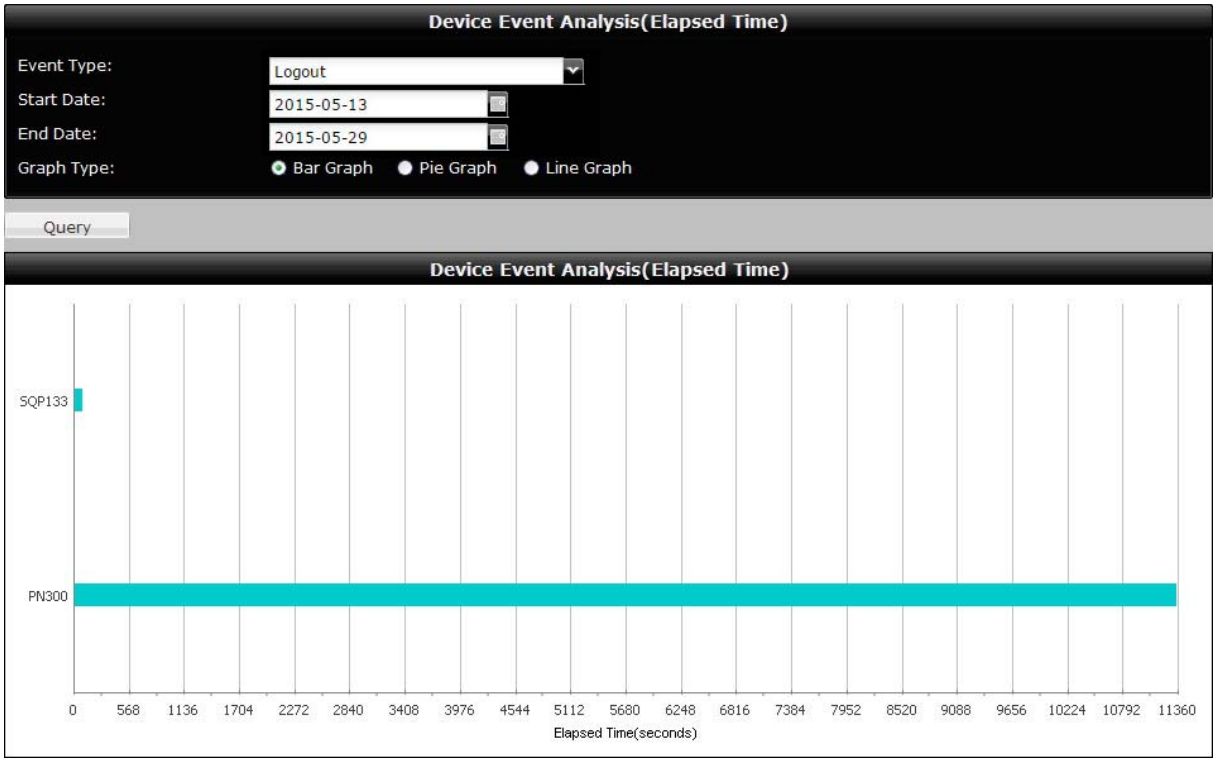


Figure 7-38

1. Use the **Event Type** drop-down list to select the type of event. Select **Logout** to see the total connection time of each device or select **Upload Package** to see the total package upload time of each device.
2. Specify the time period by selecting a **Start Date** and an **End Date**.
3. Select a type of graph to display the results.
4. Click the **Query** button to see the search results.

7.12.6 Play Count Analysis

Using the Play Count Analysis, you can see the frequency or the length of the time of the designated file which have been played on the device and export the play count files.

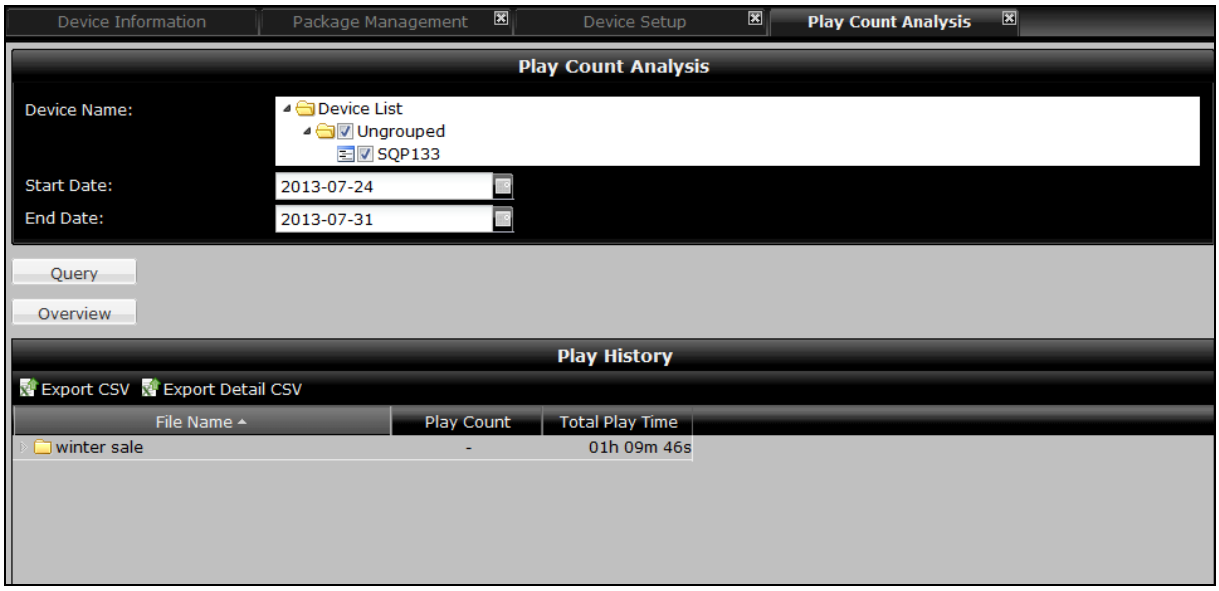


Figure 7-39

To Show the Play History

1. When you open this window, all the devices connected to the server will be automatically selected from the Device Name field. You can unselect the devices that you do not wish to proceed with.
2. Click the calendar button to specify the **Start Date** and the **End Date**.
3. Click the **Query** button to display the list of the packages in the Play History section.
4. Double-click the desired File Name and click the **Overview** button.
5. To show the frequency of the designated file being played on the device, select **Play Count** from the top left corner. To see the length of time of the designated file being played on the device, select **Play Time** from the top right corner.

The following two figures show the count result of a Scenario package which includes images files (.jpg), video files (.mp4) and stickers or RSS (.txt).

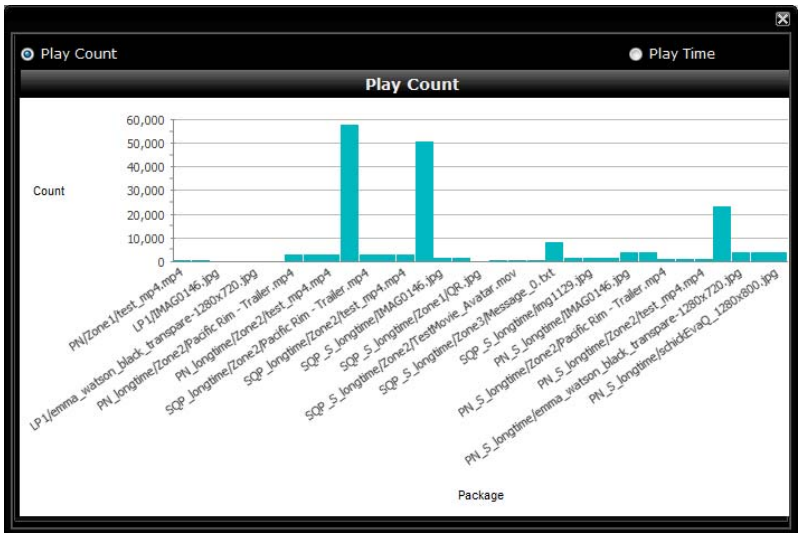


Figure 7-40 Play Count

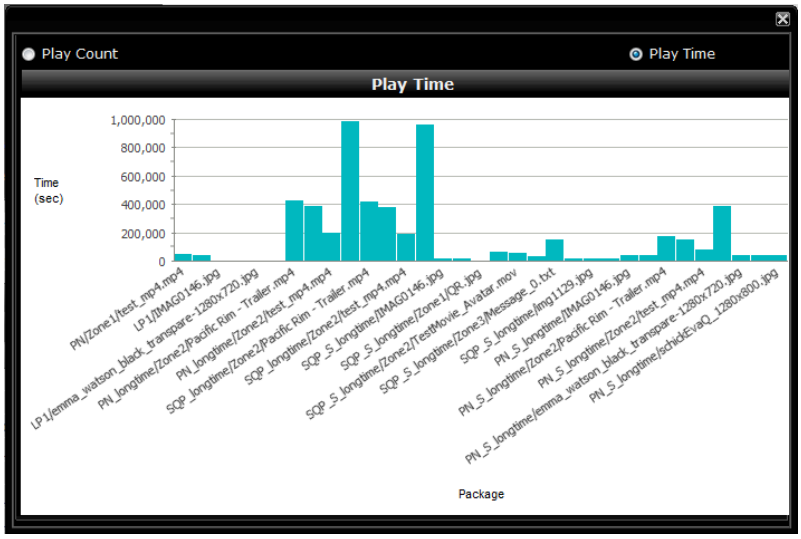
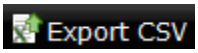


Figure 7-41 Play Time

To Export the Play History Files

1. Click the **Query** button to display the list of the files in the Play History section.

2. Click the **Export CSV** button 

to save or open a Windows Excel file to see the listed play time and play count of each played file. Or click the **Export Detail CSV** button

to save or open a Windows Excel file to see the start time and stop time of each played file.

7.13 Upload Management

Before uploading video or image to the device, you need to transfer the content to the specified storage location in **Package Management** of the Upload Management section.

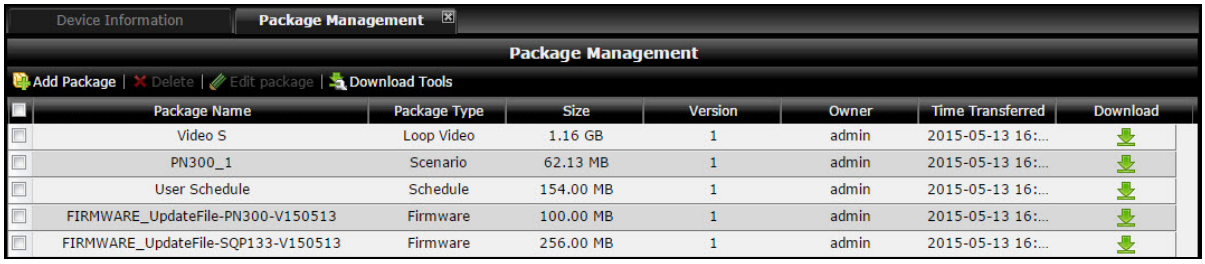


Figure 7-46

- **Add Package:** Adds packages to the specified storage location. Refer to *7.5.2 Transferring the Package* for more details.
- **Delete:** Deletes the package.
- **Edit Package:** Edits the name and version number of the package. You can also click the package name or version to edit.
- **Download Tools:** Click to download **Content Design Tool**, **Clip Design Tool** or **Schedule Tool**.
- **Download** : You can use this button to download the uploaded package.

7.14 Server Setting

In the Server Setting section, you can create user accounts, configure network settings, set up mail server for password retrieval and manage packages. The Server Setting section is only available for the administrator.

7.14.1 User Account

You can create user accounts to access CMS Server.

Figure 7-42

1. Click the **Add** button. This dialog box appears.

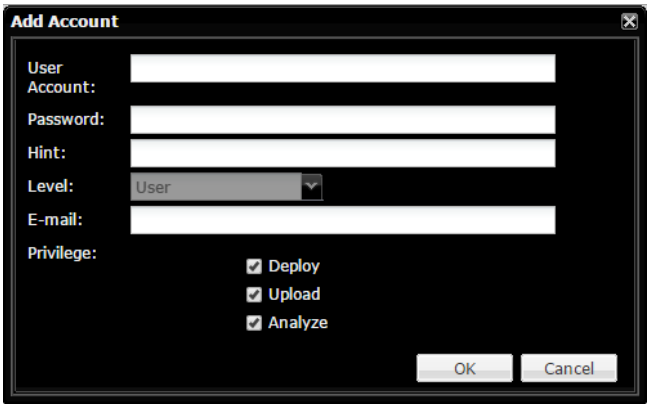


Figure 7-43

2. Type a **User Account** name, **Password** and **Hint** for the account.
3. Type an **E-mail** address for the account. When you forget the password, a new password can be sent to your e-mail account using the Forget Password link in the login page. Make sure you have enabled the e-mail service for the CMS Server. For details, see *7.14.3 Email Service*.
4. Select the privilege(s) allowed for the user.
   - **Deploy** allows access to the Device section.
   - **Upload** allows access to the Upload Management section.
   - **Analyze** allows accessi to the Event Query section.

5. Click **OK** to return to the User Account List.
6. You can edit the account setting using the **Change Password** and **E-Mail** buttons.
7. To delete an account, select an account and click the **Delete** button.

7.14.2 Network Setting

In the Network Setting page, you can configure basic network settings as well as set up SSL protocol and Dynamic DNS.

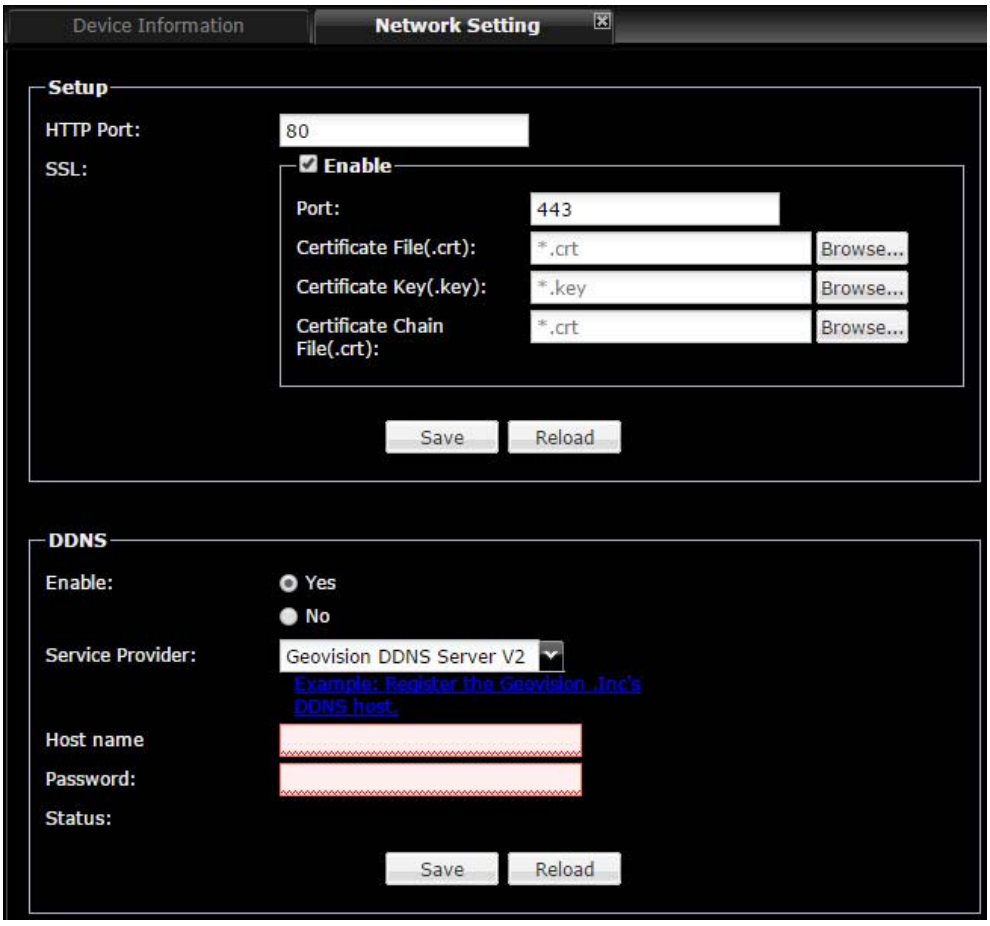


Figure 7-44

[Setup]

- **HTTP Port:** The default HTTP port is 80.
- **SSL:** Enable the Secure Sockets Layer (SSL) protocol for a more secure Internet connection. To use your own Certificate File, Certificate Key File and Certificate Chain File, click the **Browse** buttons and select the files stored at your computer. The encryption strength depends on your SSL certificate.

[DDNS] Dynamic DNS allows you to register a domain name to easily access your CMS Server when using a dynamic IP address.

- **Enable:** Select to enable DDNS.
- **Service Provider:** Click the link below to register a GeoVision DDNS Server. The provider is GeoVision DDNS Server V2 by default.
- **User Name:** Type the username used to enable the service from the GeoVision DDNS Server. For GeoVision DDNS Server V2, type the complete host name.
- **Password:** Type the password used to enable the service from the DDNS.
- **Status:** Shows whether the DDNS server is connected.

7.14.3 Email Service

You can configure the SMTP server settings to send password to the user's email address when the user forgot the password. An e-mail notification can also be sent when a device is disconnected from the CMS Server.

For details about the e-mail alarm setting, see *7.11 Device Setup*.

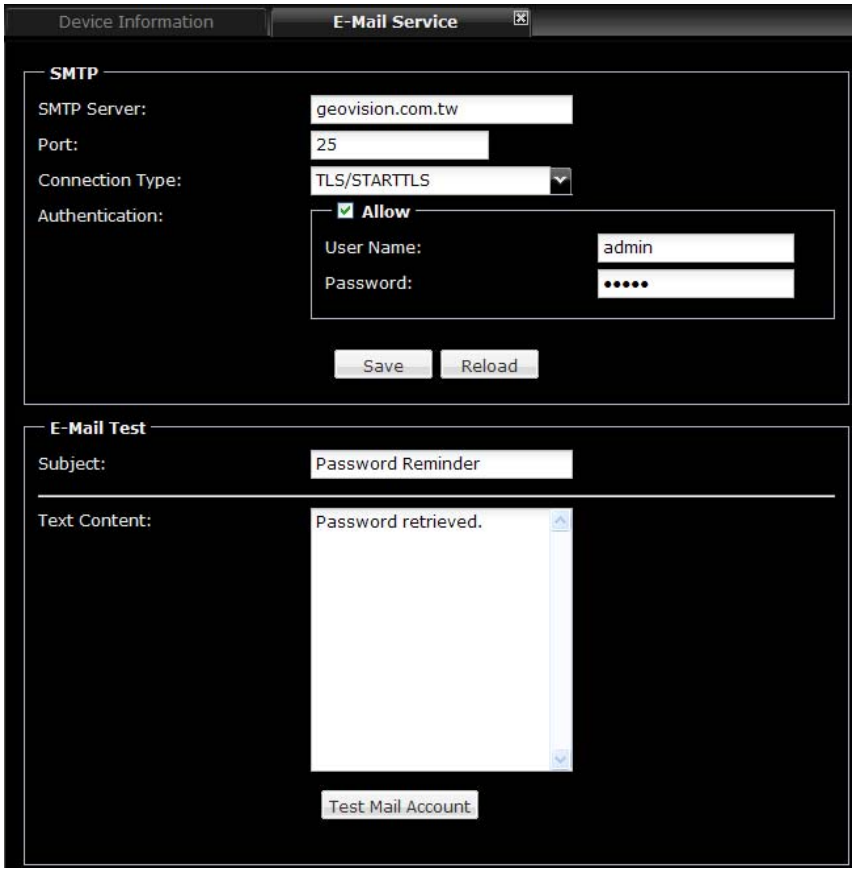


Figure 7-45

[SMTP]

- **SMTP Server:** Type your SMTP Server's URL address or IP address.
- **Port:** The default port for most SMTP servers is 25. However webmail Yahoo and Hotmail generally use different SMTP port. In this case, check your e-mail provider for the SMTP port number.
- **Connection Type:** For a more secure connection, use the drop-down list to select **SSL** or **TLS/STARTTLS**.
- **Authentication:** If your mail server needs login authentication, select **Allow** and type your login account name and password.

[Email Test]

- **Subject:** Type a subject for the password retrieval email.
- **Text Content:** Type the content of the email.
- **Test Mail Account:** Click this button to send a test e-mail to the assigned account.

7.15 Upgrading the Firmware

To upload firmware to the device, follow the steps below.

1. In the left menu, click **Upload Management**, select **Package Management** and click the **Add Package** button.
2. Select Firmware from the **Package Type** drop-down list. Click **Next**.

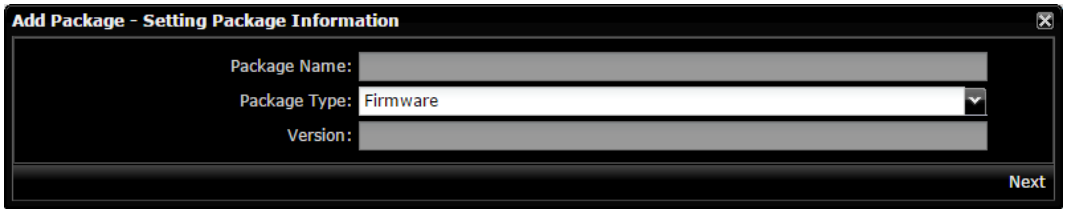


Figure 7-10

3. Select **Compressed** if the firmware is zipped or click **Browse** to locate the firmware file. This dialog box appears.

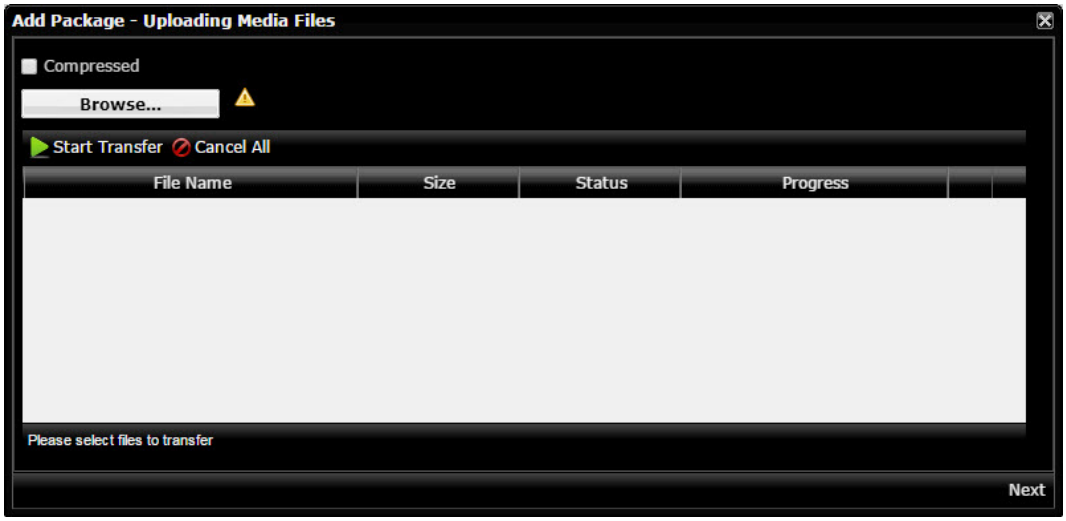


Figure 7-47

4. Click **Start Transfer**.
5. Click **Finish** after the file is transferred successfully.
6. In the left menu, click **Device**, select **Device Setup** and select the device you want to upgrade.
7. Click the **Upload Package** button and select **Firmware**.
8. Select the firmware you want to upload and click **Upload Package**.

After the uploading process is completed, the device will automatically restart.

Note: You need to allocate at least 100 MB in the device storage before upgrading the firmware.

Chapter 8 Dynamic DNS

Dynamic DNS (Domain Name System) provides a convenient way of accessing the CMS Lite when using a dynamic IP address. Dynamic DNS can direct the changing IP address of the CMS Lite to a same domain name, so that you don't need to go through the trouble of checking if the IP address assigned by the DHCP server or ISP has changed.

8.1 Installing the Dynamic DNS

Install the Dynamic DNS to the computer installed with the CMS Lite:

Downloading from the Software DVD

1. Insert the Software DVD to your computer. It runs automatically and a window pops up.
2. Select **Install Content Management System** and then select **Install Dynamic DNS Service (Only for CMS Lite)**, and follow the on-screen instructions.

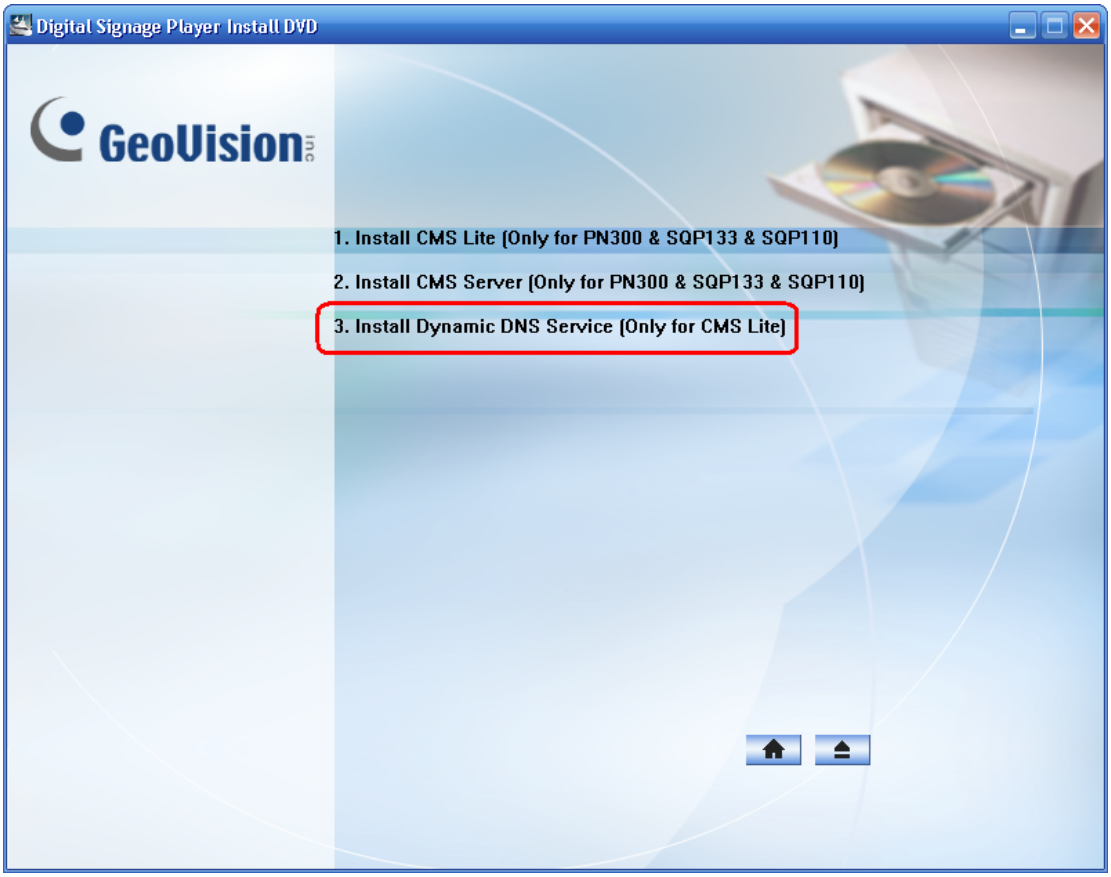


Figure 8-1

Downloading from GeoVision Website

1. Go to the Software Download and Upgrading page of GeoVision Website: http://www.geovision.com.tw/english/5_8.asp
2. Select the **Digital Signage** tab and click the **Download** icon

of **Dynamic DNS Service V2**.

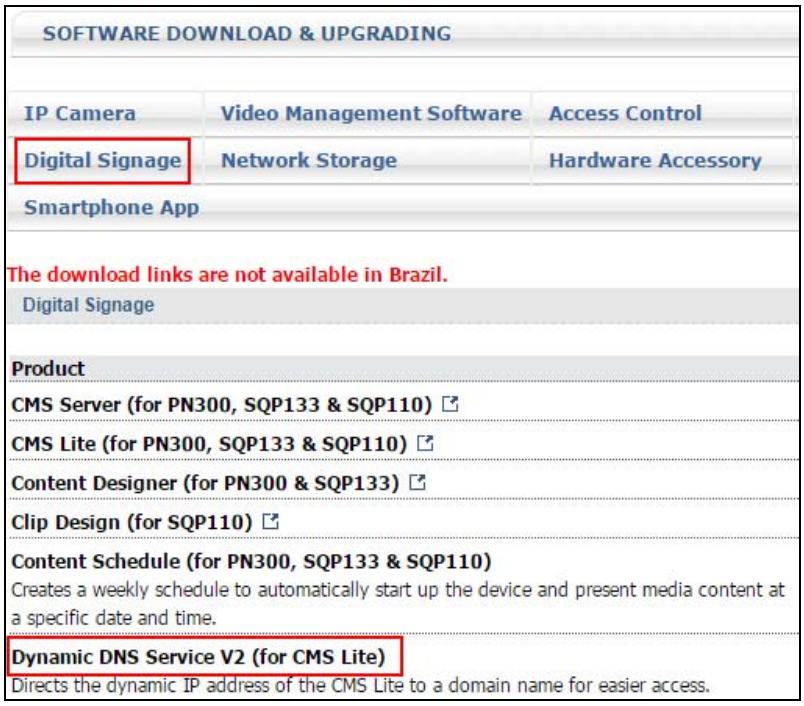


Figure 8-2

8.2 Registering Domain Name

1. Start the **DNS Client**, and click **Register**.

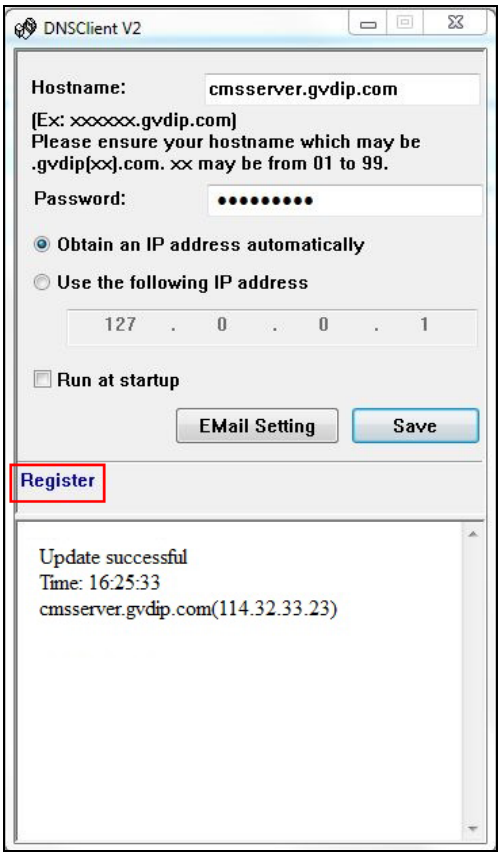


Figure 8-2

2. The Register page of Dynamic DNS Server appears.

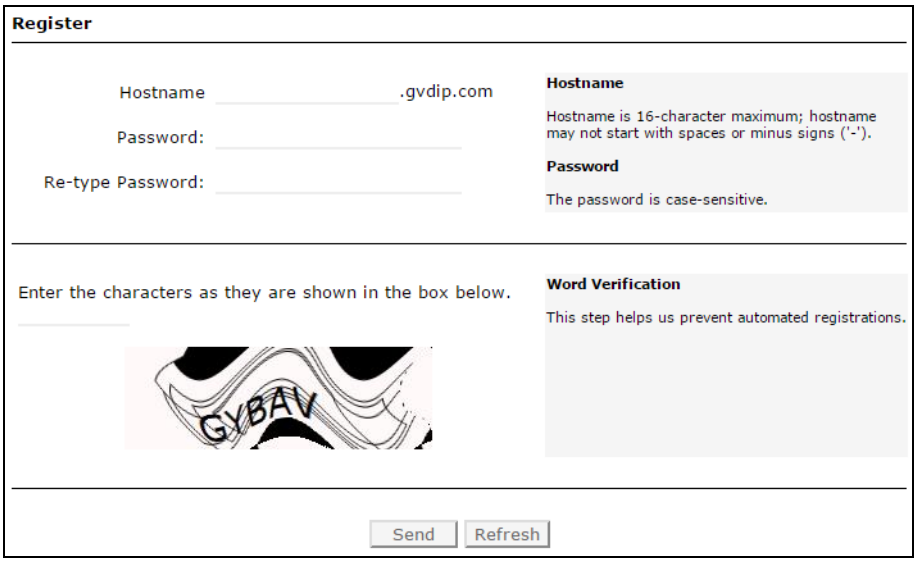


Figure 8-3

3. Type a username. The username can be up to 16 characters. The username accepts “a ~ z”, “0~9”, and “-“, but does not accept space or “-“ as the first character.
4. Type a password. The password is case-sensitive and must be at least 6 characters. Re-type the password for confirmation.
5. In the Word Verification section, type the code within the box. In this example, the code you should enter is *SiBiX6*. Word verification is not case-sensitive.
6. Click the **Send** button. The following message appears.

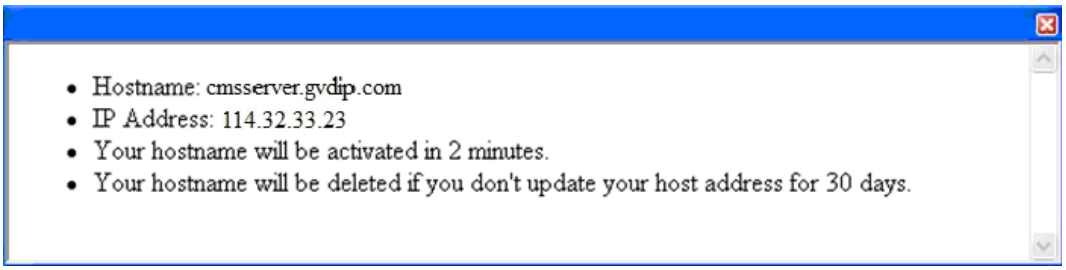


Figure 8-4

- **Hostname:** The hostname you created. Hostname is made by registered username and “gvdip.com”. In this example the host name is “http://cmsserver.gvdip.com”. This will be the domain name you use to log into the device.
- **IP Address:** Your current IP address. This IP address is updated every 10 minutes.

8.3 Starting Dynamic DNS

After registering a domain name with DDNS service, you can now enable the DDNS function.

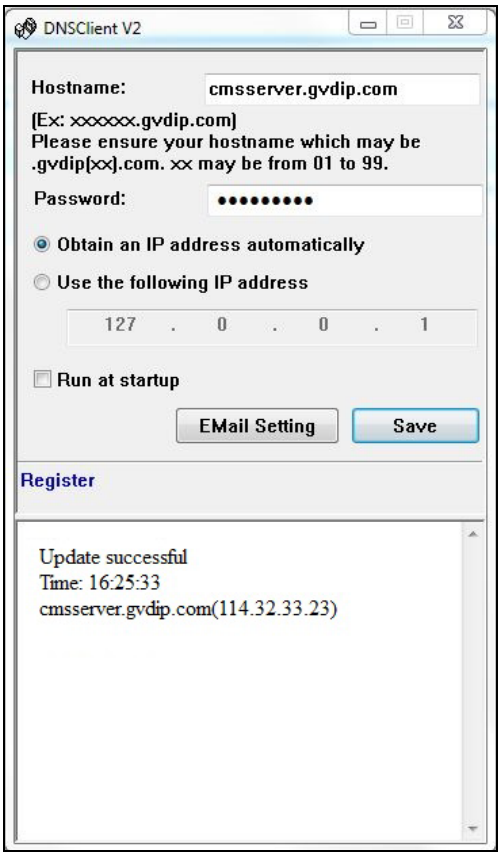


Figure 8-5

1. Run the **DNS Client**.
2. Type the **Username** and **Password** used to enable the service from the Dynamic DNS server.
3. If you router has more than one IP address:
   - **Obtain an IP address automatically:** The Dynamic DNS server will use any available IP address from the router.
   - **Use the following IP address:** If your router has more than one IP address, you can assign an IP address for the communication between the Dynamic DNS server and the CMS Lite. It is highly suggested to assign a fixed IP address. If the assigned IP address is dynamic, the Dynamic DNS server will not be able to access the CMS Lite when the IP address is changed.
4. Select **Run at startup** to automatically run the DDNS service at Windows startup.
5. After above settings, click **Save**. The connection information will be displayed.

Specifications

PN300

Model	PN300	
Video Format	Multimedia support	
Audio Format	AAC	
Photo Format	PNG / JPEG / BMP	
Audio Output	High Definition, 3.5 mm jack	
Video Output at 60 Hz	HDMI	VGA
	480p	640 x 480
	720p	1024 x 768
	1080i	1280 x 768
	1080p	1366 x 768
TV Standard	NTSC / PAL	
SD Card	Class 4 or above (FAT32 and NTFS formats)	
USB	USB 2.0 backward compatible (FAT32 and NTFS formats)	
IR Remote Control	Yes	
Operating Temperature	0°C ~ 40°C / 32 °F ~ 104 °F	
Operating Humidity	20 % ~ 80 % (with no condensation)	
Dimensions (W x H x D)	182.5 × 29 × 141.5 mm / 7.19 × 1.14 × 5.58 in	
Net Weight	615 g / 1.36 lb	
Language	English / French / German / Italian / Japanese / Portuguese / Russian / Spanish / Traditional Chinese	
Note: NTFS format is only supported by PN300/SQP133 V1.06 or later on CMS Server V1.0.4.0.		

All specifications are subject to change without prior notice.

SQP133

Model	SQP133
Video Format	Multimedia support
Audio Format	AAC
Photo Format	PNG / JPEG / BMP
Audio Output	Built-in speakers (4 Ω / 1.5 W)
Video Output	1280 x 800
TV Standard	NTSC / PAL
SD Card	Class 4 or above (FAT32 and NTFS formats)
USB	USB 2.0 backward compatible (FAT32 and NTFS formats)
IR Remote Control	Yes
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Operating Humidity	20% ~ 80% (with no condensation)
Dimensions (W x H x D)	342.8 × 220.3 × 38.3 mm / 13.5 x 8.7 x 1.5 in
Net Weight	1160 g / 2.6 lb
Housing	Black / White
Language	English / French / German / Italian / Japanese / Portuguese / Russian / Spanish / Traditional Chinese
Note: NTFS format is only supported by PN300/SQP133 V1.06 or later on CMS Server V1.0.4.0.	

All specifications are subject to change without prior notice.

Appendix

Definitions of Folder Names

The followings are the names and the descriptions of the folders workable with digital signage devices.

Folder Name	Description
Loop_Video	The folder stores the image and/or video files, and is used for the slideshow to be played repeatedly on the device. See *2.4 Playing the Slideshow*.
Scenario	The folder stores the media project created using the Content Designer software. See *4.5 Playing the Project on PN300 or SQP133.*
Schedule	The folder stores the schedule setting files created using the Content Schedule software. See *5.2 Setting the Content Schedule*.