

envivio.

4Forum User Reference Guide

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The leading provider of MPEG-4 broadcast and streaming solutions

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4Forum 3.1 User Reference Guide

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CHAPTER I

Introducing 4Forum

Envivio 4Forum is a plug and play solution for creating, distributing, playing back and managing live and on-demand MPEG-4 presentations made of video, audio, a VGA screen capture and interactivity.

This document explains how to use 4Forum.

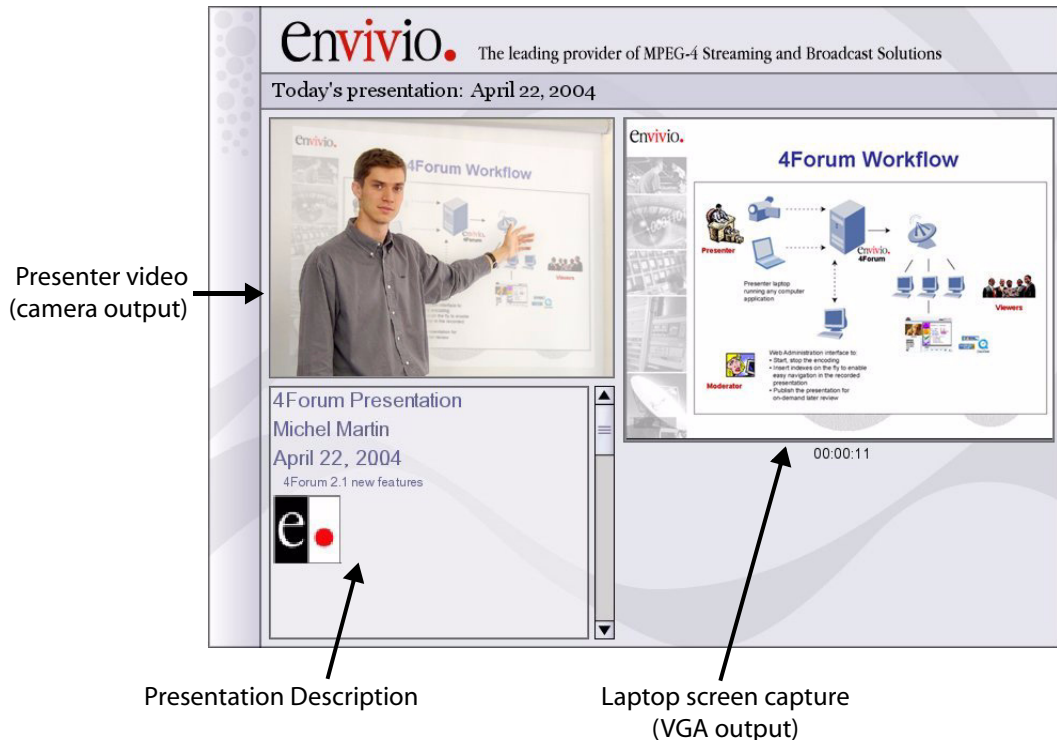
Envivio 4Forum solution

The 4Forum solution enables presenters to communicate information to geographically dispersed viewers.

The presenter simply connects a PC, a Mac, an electronic white board, a visualizer, or the output of a VGA switch (with the supplied VGA cable) and a video camera (with a video cable) to the 4Forum appliance. The appliance broadcasts and records the screen capture with the audio and video from the camera as one interactive stream.

The presenter shares, with the audience, any software application displayed on the screen, while recording the entire presentation as one interactive MPEG-4 file.

Figure 1. Example of 4Forum interactive MPEG-4 presentation



4Forum editions

4Forum is delivered in three editions, *System*, *Producer and Lite*. 4Forum System and Producer editions are available as either a rack-mount or tower form factor. 4Forum Lite is only available in a set-top box form.

4Forum System

4Forum *System* is a turn-key system ready for medium to larger webcasting deployments (up to 100 simultaneous users, depending on the bit rate).

It consists of hardware components with a web-based administration application, encoders, players for playback, and streaming server to stream live and on-demand content.

4Forum *System* includes 4Sight, a powerful MPEG-4 server for streaming live broadcasts and distributing interactive media.

4Forum *System* supports screen capture resolutions up to 1600x1200.

4Forum Producer

4Forum *Producer* has the same features as the 4Forum *System* but does not include the 4Sight streaming server component. 4Forum *Producer* is for applications where streaming is not required (non real-time production of presentation files), or for large deployments (from 100 to several thousand simultaneous viewers) where one or more separate 4Sight streaming servers are used instead, to serve more simultaneous streams.

4Forum *Producer* supports screen capture resolutions up to 1600x1200.

4Forum Lite

4Forum *Lite* is specifically designed for applications where portability overrules encoding power. However, it is still scalable for larger webcasting deployments, using additional streaming servers. Its very compact and small appliance size makes it very portable and easy to set up. 4Forum *Lite* main settings are configurable via a LCD front panel.

4Forum *Lite* supports screen capture resolutions up to 1024x768.

4Forum *Lite* built-in server supports up to five simultaneous viewers.

Table 1. Components included in 4Forum Editions

4Forum components	4Forum Lite	4Forum Producer	4Forum System
4Forum web admin interface	×	×	×
Two live real-time encoders	×	×	×
4Sight streaming server STD <i>Software Edition</i>	×	—	×
4Sight streaming server <i>Hardware Edition</i>	<i>optional</i>	<i>optional</i>	<i>optional</i>
4Mation authoring tool ^(b)	<i>optional</i>	<i>optional</i>	<i>optional</i>
EnvivioTV simultaneous client license	100	100	100

- a. Max. of 5 concurrent streams in unicast, unlimited streams in multicast.
- b. Professional authoring environment for creating interactive MPEG-4 content and applications, and customizing the background design templates for 4Forum.

4Forum configuration examples

4Forum is a scalable solution. The following graphic shows how the solution can be scaled: you can simply produce presentation files or stream to several thousands simultaneous viewers, dispersed over a worldwide and heterogeneous IP network.

Figure 2. Configuration examples (1)

Interactive file production (e.g., training/usability testing)



Initial deployments – 2 to 100 viewers (e.g., classroom/small conference)



Scalable deployments, homogeneous networks – 100 to thousands viewers

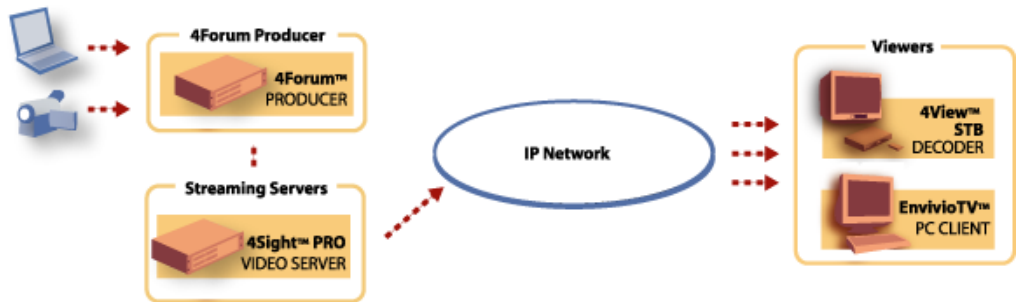
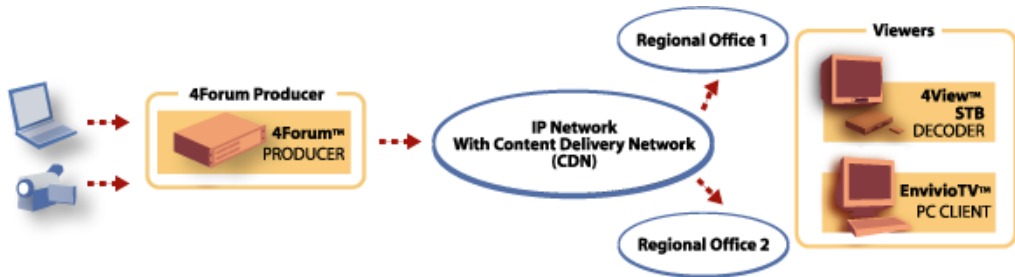


Figure 3. Configuration examples (2)

Scalable deployments, mixed unicast/multicast network



Multi-conference room environment



4Forum components

4Forum is delivered as a plug and play solution. Software and hardware are therefore already installed and preconfigured.

For more information on 4Forum components configuration, please refer to Appendix A, "Frequently Asked Questions".

The 4Forum webcasting system is a turn-key solution composed of the following:

Encoding components

4Forum live encoders: video, audio and XGA (UXGA with 4Forum *Producer and 4Forum System*).

Streaming component

4Sight streaming server⁽¹⁾. 4Sight streaming server is preconfigured and installed as a service. If you want to check your 4Sight configuration connect to Envivio 4Sight WebAdmin.

NOTE

For more information, see Appendix A, "Frequently Asked Questions" or refer to 4Sight Administrator's Guide.

For small deployments, 4Sight streaming server is installed on the same physical server as the encoding and administration server.

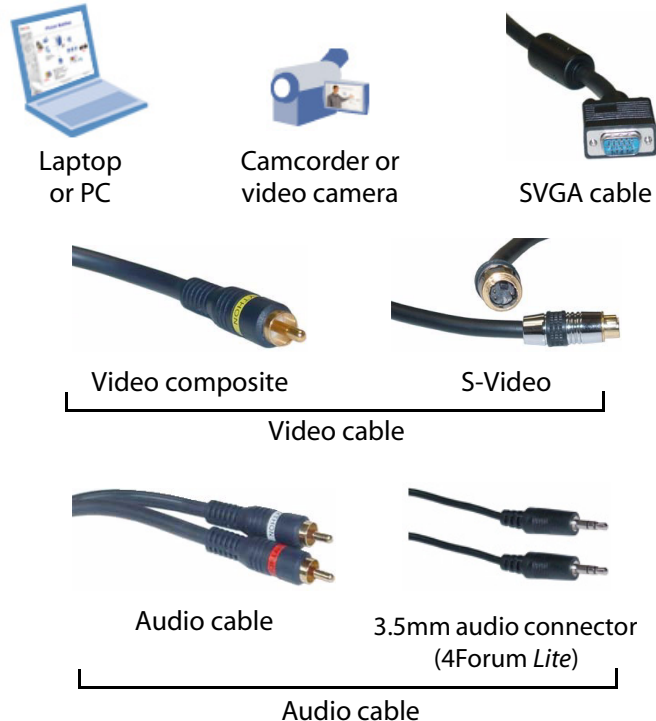
1. Except for 4Forum *Producer* edition that does not include a streaming server.

Additional components

In addition to the encoding and streaming components, you will also need the following items to set up your webcasting studio:

- Camcorder or video camera to capture audio and video of the presenter
- Laptop to provide presentation slides or images to accompany your webcasts
- Video, audio and VGA cables (see Appendix 2, "Connecting audio and video equipment").

Figure 4. Additional components



NOTE

Please note that not all cables are included (see "Unpacking the system" on page 24 for detailed list of delivered components for each edition).

4Forum system licences

The 4Forum system was installed either with a full-license or with a demo-license.

Full-license

The full-license allows you to use 4Forum with all features.

Demo-license

The demo-license allows you to use 4Forum until an expiration date.

There are minor limitations for 4Forum with a demo-license:

- 4Sight streaming server: full functionality, maximum number of 10 users or 5 Mb at any time
- Live encoder: Envivio logo is burnt into the captured video
- 4Mation: **Envivio demo** is burnt into the MPEG-4 movies

NOTE

You can always use the 4Forum Licenser to update your demo-license to a full-license and use 4Forum without any limitations (see Appendix A, "Frequently Asked Questions").

CHAPTER 2

Installation

Version 3.1

Unpacking the system

This section describes the components delivered with the product. Ensure that you have received the following:

Figure 1. Common components delivered with 4Forum *Lite, Producer* and *System*



EnvivioTV license certificate



4Sight Administrator Guide,
EnvivioTV, and 4Forum
User Guides



4Forum CD

Figure 2. Components delivered with 4Forum Lite



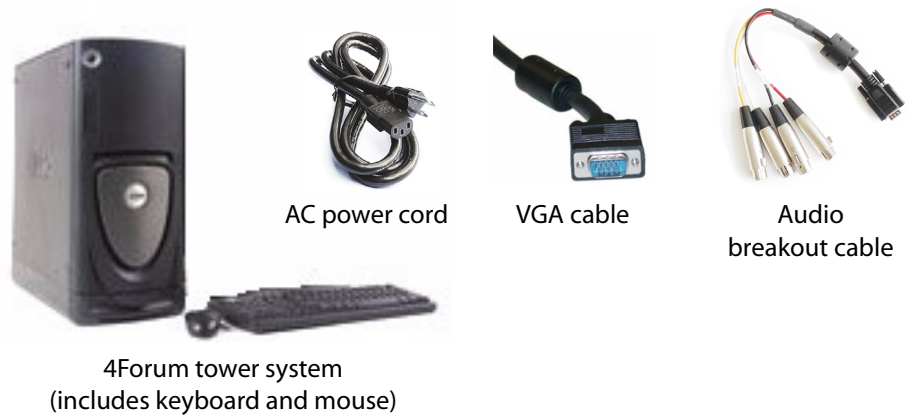
Figure 3. Components delivered with 4Forum *Producer* and 4Forum *System* (rack)



NOTE

If you ordered the 4Forum rack system, you may also have received a kit to install 4Forum in a rack (see "Rack-mount bracket installation" on page 28 for installation instructions).

Figure 4. Components delivered with 4Forum *Producer* and 4Forum *System* (tower)



Choosing the Operating Environment

The 4Forum is designed to operate in a typical office environment. Install the product in a location that is:

- Clean and free of airborne particles (other than normal dust).
- Well ventilated and away from sources of heat, including direct sunlight.
- Away from sources of vibration or physical shock.
- Isolated from strong electromagnetic fields produced by electrical devices.
- Provided with a properly grounded wall outlet.
- Provided with sufficient space to access the power supply cord, because they serve as the main power disconnect for the product.

CAUTION

The operating temperature of the 4Forum must not go below 5 °C (41 °F) or rise above 35 °C (95 °F).

4Forum *Producer* and 4Forum *System* placement

4Forum can be installed on a table top or in a rack. Use the following guidelines to determine the appropriate installation for your needs:

- If the 4Forum must be moved frequently, install it on a table top or other flat surface.
- If the 4Forum is going to be installed permanently, install it in a rack using rack mount brackets.

Whichever installation is used, always position the equipment to allow easy access to the rear panel and provide adequate ventilation.

CAUTION

Never cover the 4Forum *Lite* chassis.

Table top placement

When 4Forum is installed on a table top or other flat surface, place the unit on a rubber mat or other material that will prevent the unit from sliding and protect the table top surface.

Ensure that the location and position provide the minimum required air flow clearance.

Rack-mount bracket installation

To install the 4Forum *Producer* or the 4Forum *System* into most two-post and four-post rack and cabinet systems, use the brackets and attachment screws provided in the shipping kit. For more details, bracket kit installation guide can be downloaded at:

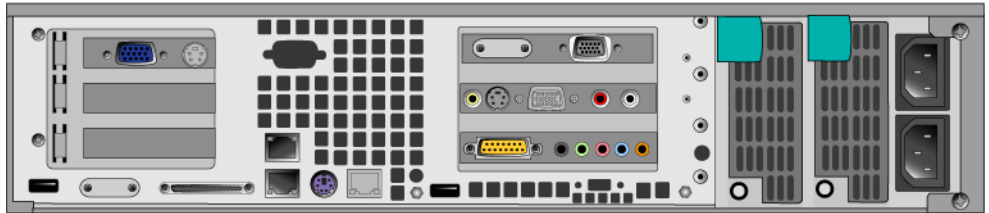
http://support.intel.com/support/motherboards/server/chassis/bracket_kit_guide.htm.

Connecting audio and video equipment

This section describes how to connect audio and video equipment to the 4Forum. For example, you will need to connect video and audio output from a video camera or camcorder. You will also need to connect a VGA signal from the presenter's laptop or PC.

4Forum rackmount chassis

Figure 5. 4Forum rackmount chassis

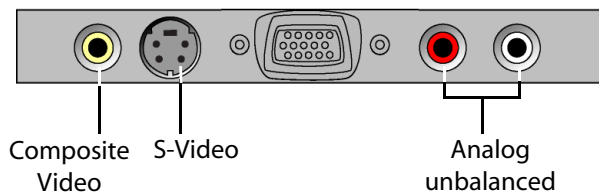


Connecting analog video and audio

Connect the presenter's video camera or camcorder to the 4Forum analog video and audio acquisition card, using the connectors shown below.

1. Connect either a composite video input or an S-Video input to the appropriate connector.

Figure 6. Audio and video connectors



2. Connect the analog audio input to the RCA connectors on the acquisition card for unbalanced audio.

NOTE 4Forum only accepts unbalanced audio.

Connecting a laptop display output

Use a VGA male to VGA male cable to connect the presenter's laptop or PC to the 4Forum VGA acquisition card.

1. Connect one end of the cable to the VGA output connector on the presenter's laptop or PC.
2. Connect the other end of the VGA cable to the VGA connector on the 4Forum VGA acquisition card.

Figure 7. VGA connector



4Forum tower chassis

Figure 8. 4Forum tower chassis .

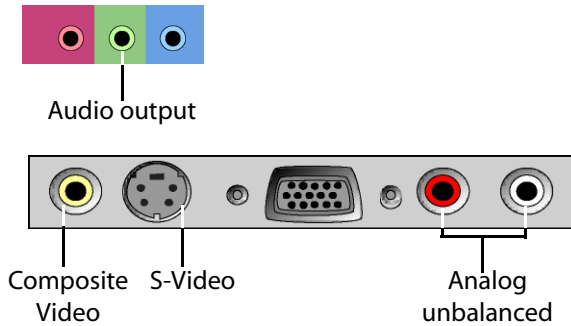


Connecting analog video and audio

Connect the presenter's video camera or camcorder to the 4Forum analog video and audio acquisition card, using the connectors shown below.

1. Connect either a composite video input or an S-Video input to the appropriate connector.

Figure 9. Audio and video connectors



2. Connect the analog audio input to the RCA connectors on the acquisition card for unbalanced audio.

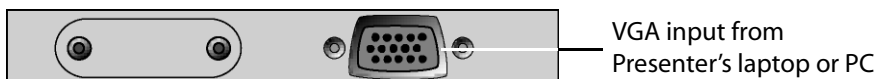
NOTE 4Forum only accepts unbalanced audio.

Connecting a laptop display output

Use a VGA male to VGA male cable to connect the presenter's laptop or PC to the 4Forum VGA acquisition card.

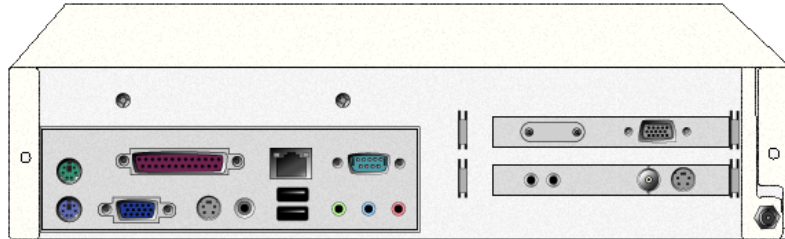
1. Connect one end of the cable to the VGA output connector on the presenter's laptop or PC.
2. Connect the other end of the VGA cable to the VGA connector on the 4Forum VGA acquisition card.

Figure 10. VGA connector



4Forum Lite

Figure 11. 4Forum Lite chassis .



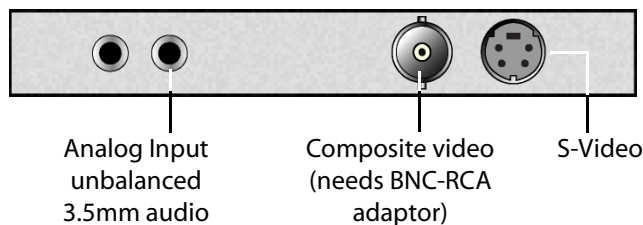
Connecting analog video and audio

Connect the presenter's video camera or camcorder to the 4Forum analog video and audio acquisition card, using the connectors shown below.

1. Connect either a composite video input or an S-Video input to the appropriate connector.

NOTE A BNC to RCA adaptor is provided for composite video (see "Components delivered with 4Forum Lite" on page 25).

Figure 12. Audio and video connectors



2. Connect the analog audio input to the Analog Input unbalanced 3.5mm audio connector. If necessary you can use the supplied adapter (see "Components delivered with 4Forum Lite" on page 25.)

NOTE The 4Forum audio input accepts line-in level signals. Plugging a non-amplified audio signal directly from a microphone would not provide a line-in level signal. If necessary, use an audio amplifier.

Connecting a laptop display output

Use a VGA male to VGA male cable to connect the presenter's laptop or PC to the 4Forum VGA acquisition card.

1. Connect one end of the cable to the VGA output connector on the presenter's laptop or PC.
2. Connect the other end of the VGA cable to the VGA connector on the 4Forum VGA acquisition card.

Figure 13. VGA connector



Connecting to the network

You should tell your network administrator that you plan to connect the 4Forum to the network.

Depending upon the model, there may be two RJ-45 network interface connectors on the rear panel of the 4Forum:

1. Connect the 1 Gb network interface cable into the 1 Gb LAN connector on the rear panel. Push the plug into the connector until it clicks into place.
2. Plug the other end of the LAN cables into the corresponding 10 network switch or hub.

Getting the IP address

If you have a DHCP server, you need to connect a mouse, keyboard, and display to the back of 4Forum to get the IP address. This address will be necessary to connect to 4Forum's Web interface (see "Launching the 4Forum Administrator interface" on page 54).

To get the IP address:

- Plug the network cable (see graphics below),
- Open a Dos window,
- Type **ipconfig** command⁽¹⁾. This command lists the IP address, subnet mask, and default gateway of each network adapter.

NOTE

With 4Forum *Lite* you can get the IP address from the LCD panel (see "Configuring the network interface card (NIC)" on page 65.)

1. Ipconfig is a DOS utility which can be used to display the network settings currently assigned and given by a network.

Figure 14. 4Forum rackmount chassis network, mouse, keyboard, and display connectors

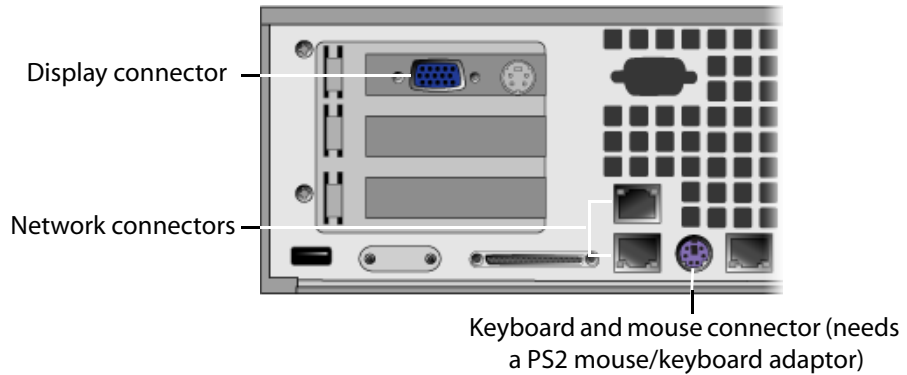
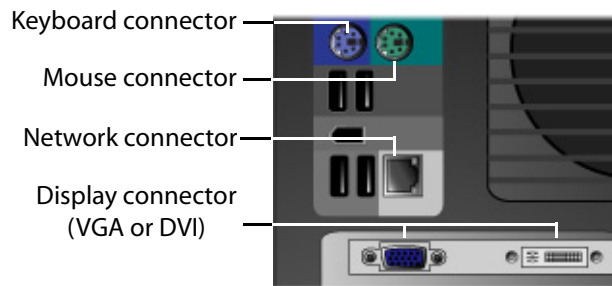


Figure 15. 4Forum tower chassis network, mouse, keyboard, and display connectors

Figure 16. 4Forum *Lite* network connector**NOTE**

4Forum *Lite* does not require a mouse/keyboard since it can be administrated via the LCD panel (see Chapter 5.)

Powering

Connecting power cords

Follow this procedure to connect the power cord.

CAUTION

Before connecting any power cords, verify that the input voltage selector switch (if present) is set to the correct voltage for your region.

1. Connect the power cord to the system.
2. Plug the power cord into grounded outlets.

CAUTION

Use a grounded power cord that complies with national electrical safety regulations. Do not use or attempt to modify the supplied power cord if it is not the correct type for your electric power outlet.

In regions where electrical storms are frequent, plug the system into a surge suppressor for additional protection.

Power-up sequence


Once the cabling and interconnections for 4Forum are completed, you may power-up the unit.

4Forum rackmount and tower chassis

The 4Forum power button is located on the front panel. The power-on cycle takes approximately one minute to complete, as 4Forum performs extensive self-diagnostics in this time period.

When 4Forum is powered up, the green power LED, located on the front panel, illuminates.

4Forum *Lite*

To power-up 4Forum *Lite*, press the  button located on the front panel during 0.5 seconds. The power-on cycle takes approximately one minute to complete, as 4Forum performs extensive self-diagnostics in this time period. When 4Forum is powered up, the LCD panel displays "**4Forum 3.1.xx, Idle**".

Power-down sequence

4Forum rackmount and tower chassis

To power-down 4Forum, press the power button located on the front panel during about one second.

4Forum *Lite*

To power-down 4Forum *Lite*, select the **Shut down** menu from the LCD panel.

NOTE

If 4Forum does not shut down, press the  button for a few seconds.

Support Information

This section provides basic troubleshooting advice and explains how to contact the Envivio support organization.

Troubleshooting Advice

Make sure that the system is plugged into an electric power outlet and switched on.

For systems with video and audio inputs or outputs:

- If the product has video input or video output connectors, ensure that the video cables are correctly connected.
- If the product has audio input or audio output connectors, ensure that the audio cables are correctly connected.

Obtaining Support

You may contact us for specific projects requiring customized options or specific development, available through our service organization. For contact information, see the Envivio website at <http://www.envivio.com>.

If you have support questions, contact Envivio Customer Services or send an email to your Sales contact or to your reseller.

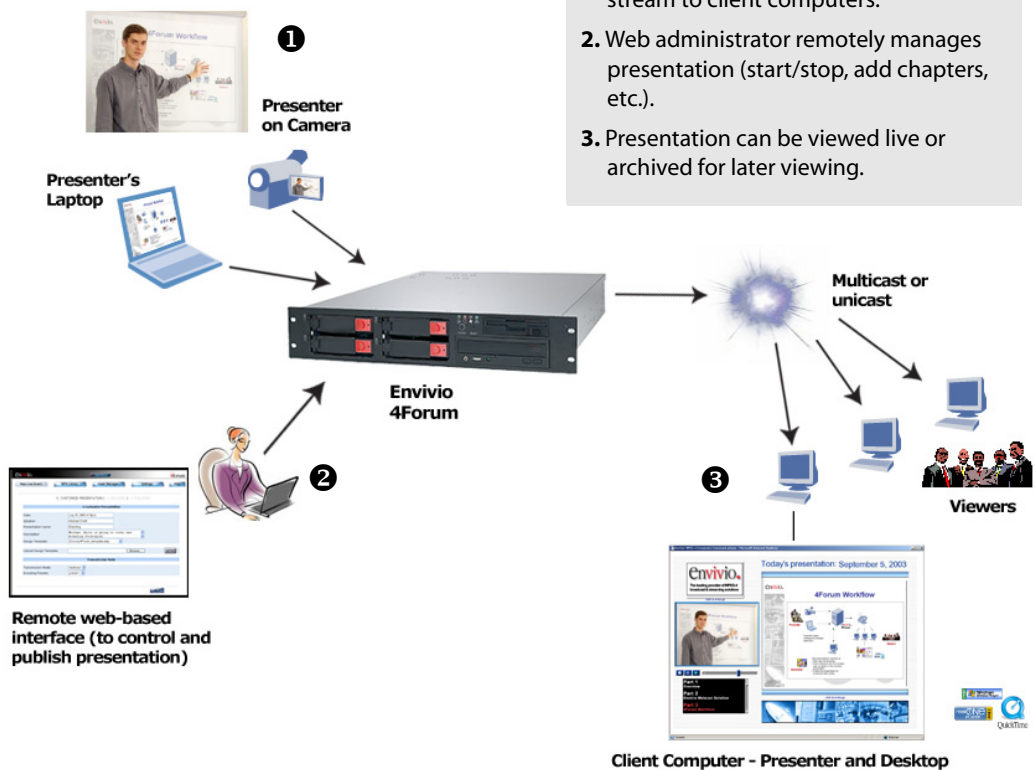
CHAPTER 3

Setting Up 4Forum

Basic Workflow

4Forum involves three types of actors:

- 1 A presenter giving a presentation in front of a camera, using a laptop.
- 2 An administrator who controls 4Forum. He/she can start, dynamically insert chapter marks, stop, publish, and manage live and on-demand broadcasts remotely.
- 3 Viewers (or end users) who can view the live and on-demand MPEG-4 presentations.



Configuring the presenter's computer

4Forum has input connectors for two media sources: one VGA source from a computer, and one video source from a camera.

Configuring the presenter's computer (VGA source)

1. Ensure that the VGA cable from the presenter laptop (computer) is properly connected to 4Forum VGA input connector.

Under Windows:

2. Set the presenter's laptop screen resolution:
 - Right-click on your desktop and select **Properties**, then go to **Settings** tab and set the screen resolution.
 - Check that your VGA output signal matches your settings.

NOTE

4Forum Producer and System supports resolutions up to UXGA, 1600 x 1200. 4Forum Lite supports only a resolution up to 1024x768 XGA. The resolution can be selected from the encoding settings (see "Encoding preset editor" on page 111) or defined by the template (see step 4, on page 73).

3. Set the presenter's laptop output.

On the presenter's laptop, set the VGA output to an external monitor:

- right-click on your desktop and activate the external monitor output (dual monitor),
- or toggle the LCD/VGA key on your laptop.

Configuring the video camera

Ensure that the S-video (or composite) cable and the audio cable from the camera are properly connected to the audio/video input connectors of 4Forum.

Configuring the viewers' computer

Minimum requirements

Windows:

- Pentium III 800MHz (Pentium IV 1.7GHz recommended); graphics: 16 MB (128 MB recommended)
- ActiveX control player for Internet Explorer, or plug-in to Real, Windows Media, and QuickTime players.
- Internet Explorer version 6.0
- RealOne Player
- Windows Media Player version 9 and later
- QuickTime player version 6.2 and later

Mac:

- Apple G4 computer, 32 MB RAM
- QuickTime™ Player 6.5 and later.

Installing EnvivioTV

In order to play MPEG-4 content you have to install EnvivioTV. EnvivioTV is available for Windows and Mac operating systems.

You can install EnvivioTV as an ActiveX control that will embed EnvivioTV into a web page. You can also use EnvivioTV as a plug-in for QuickTime™ Player, RealPlayer™ or Windows Media™ player.

The EnvivioTV plug-ins can be installed:

- manually on every end users' computer
- or for larger audiences, automatically with 4Forum's automatic installer. This means that when users connect to a live stream, the automatic installer checks if EnvivioTV is already installed or if it needs to be upgraded, installing it when necessary.

To activate the automatic installer, you must check the **Use Automatic Installer** option from the **Settings>General** tab (see "Player settings" on page 107.)

Installing EnvivioTV plug-in for QuickTime Player, RealPlayer or Windows Media Player manually

You can download EnvivioTV from the **Help** tab.

1. Launch EnvivioTV installer.

CAUTION At least, one player (QuickTime Player, RealPlayer or Windows Media Player) must be installed before installing the EnvivioTV plug-in.

2. During the installation, the program automatically detects if you have QuickTime Player, RealPlayer or Windows Media installed. If several of them are installed on your system, you are asked to choose which EnvivioTV plug-in you want to install. You can install one plug-in or all of them.

By default, EnvivioTV is correctly configured

Installing EnvivioTV with the ETV automatic installer

When configuring 4Forum, if you select **Use Automatic installer** (see "Player settings" on page 107), the EnvivioTV plug-in or the EnvivioTV ActiveX control will be automatically installed on the end user's computer.

This automatic installer is triggered when the user views the live or on-demand presentations using links created by 4Forum. The web page checks whether the EnvivioTV plug-in is installed or needs to be upgraded to a newer version.

If the EnvivioTV plug-in is not installed the automatic installer is downloaded and a message prompts you that EnvivioTV will be installed.

The automatic installer also checks your existing player version. If the installed version is too old, it will suggest a link to update your players (QuickTime™ Player, RealPlayer or Windows Media™).

Installing the EnvivioTV ActiveX control

The EnvivioTV ActiveX control allows EnvivioTV to be embedded into an HTML page rather than into a player.

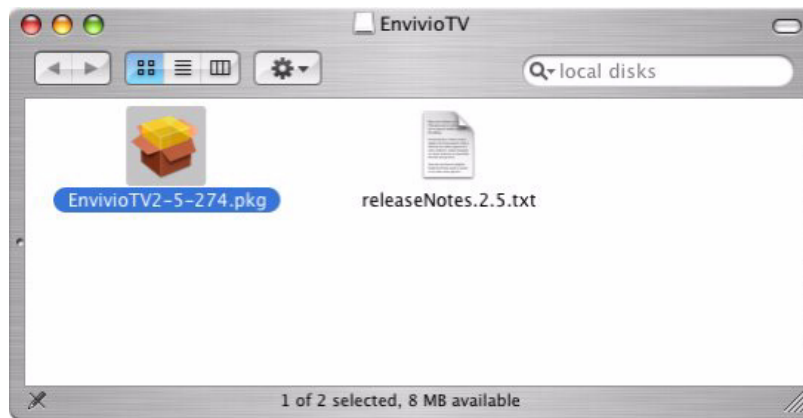
The EnvivioTV ActiveX control can be installed manually or automatically.

- The EnvivioTV ActiveX control is installed with EnvivioTV, whatever plug-in is selected. The installation is transparent to the user.
- The EnvivioTV ActiveX control can be installed automatically, if you select **Automatic installer** (see "Installing EnvivioTV with the ETV automatic installer" on page 45).

Installing EnvivioTV for Mac player

To install 4Forum on a Macintosh, follow these steps:

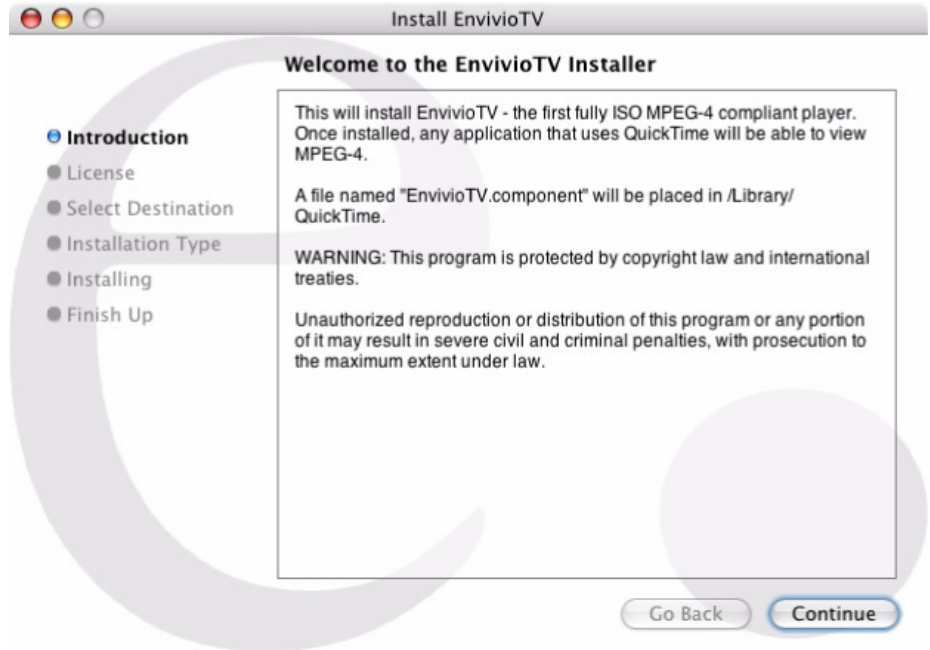
1. Double-click the **EnvivioTV-XXX.dmg**⁽¹⁾ file. Then, open the uncompressed package folder that contains the installer, **EnvivioTV-XXX.pkg** and the release notes, **ReleaseNotes-XXX.txt**.



2. Double-click the **EnvivioTV-XXX.pkg** package file to start the installation.

1. Where *XXX* is the version number.

3. Read and follow the online instructions given during the installation process.
Click the Continue button to go to the next step.



4. At the end of the installation process a message informs you that 4Forum has been correctly installed on your system.

NOTE

By default, 4Forum uses the connection parameters specified in QuickTime™.

Configuring Internet Explorer

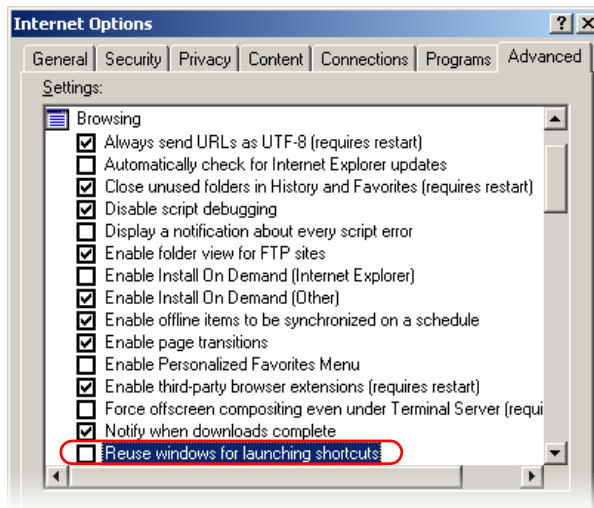
CAUTION

Internet Explorer 6.0 is required for accessing the 4Forum Administrator interface.

Mac users should use Firefox 1.0 (or higher) to access 4Forum web interface.

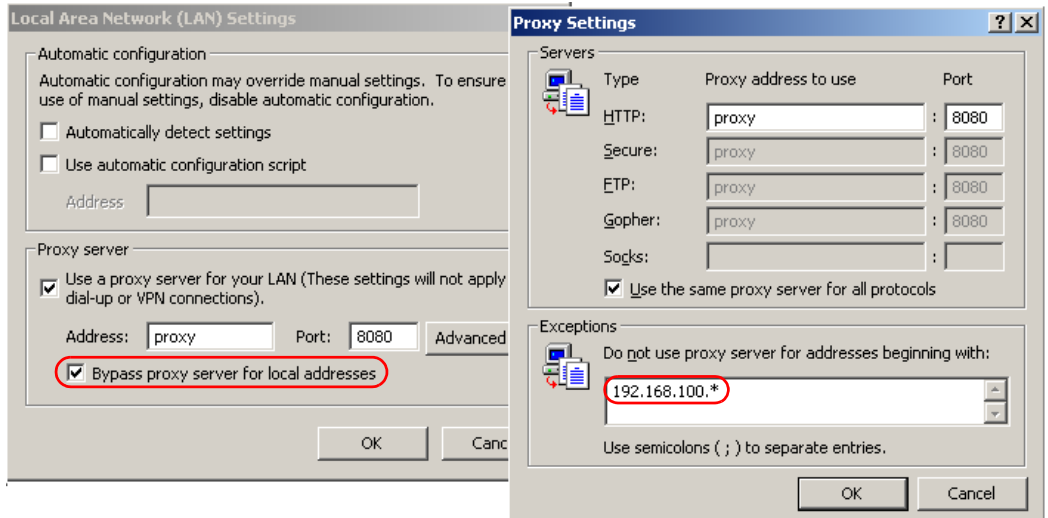
1. In **Tools>Internet options>Advanced>Browsing**, uncheck **Reuse windows for launching shortcuts**. This option makes a web interface window always available and opens all links in another Internet Explorer window

Figure 1. Setting Internet options.



2. If you are using a proxy, go to **Tools>Internet options>Connections>Lan setting>Proxy server**, check **Bypass proxy server for local addresses**. Then click **Advanced**, and enter the 4Forum and the server IP address in **Exceptions field** (for example, 192.168.100.*).

Figure 2. Setting proxy settings



CHAPTER 4

Quick Start

Workflow overview

This paragraph gives a general idea about the workflow of 4Forum and could be used as a check list. All steps are thoroughly explained in the next sections.

NOTE

This chapter explains the basic steps for encoding a live event using the web-based interface. With 4Forum Lite, this can also be done using the LCD panel (see Appendix 5 on page 57 for more information).

1. Check the connections:

- Set the resolution of the laptop and activate the external monitor output.
- Check the connections to the laptop VGA connector and to the camera (see "Connecting audio and video equipment" on page 29).

2. Launch Internet Explorer and connect to 4Forum Administrator interface (see "Launching the 4Forum Administrator interface" on page 54).

3. Double check the system settings.

4. Choose a template that matches your VGA input resolution to avoid resizing.

5. Choose an encoding preset that matches your template.

6. Create a live event.

7. Encode the live event.

8. Preview the live event.

9. Insert chapters (*optional*).

You can add chapter marks during live encoding to help viewers jump to a particular point in the recorded presentation (VOD). Note that chapters are only available in the VOD presentation.

10. Stop the encoding of the live event.

11. Publish the presentation (*optional*).

You can save the presentation as an MPEG-4 file, upload it to a remote streaming server for on-demand viewing, and save the presentation assets for later edition.

You can also save the presentation as an editable archive for later publishing or editing.

NOTE

Sometimes, between two presentations, there is not enough time to publish. The user may save the presentation into the MPEG-4 editor (fast process) for later publishing and proceed to the second presentation.

12. View the published event in the MPEG-4 Library.**13. Edit a presentation** (*optional*).

You can change the background design template, modify or add chapters, etc.

Launching the 4Forum Administrator interface

4Forum can be remotely controlled from a web browser with the 4Forum Administrator interface.

Follow these instructions to launch the 4Forum Administrator interface from Internet Explorer.


1. Launch Internet Explorer and open this URL:

http://<IP_address>

where *<IP_address>* is the IP address of the 4Forum system.

NOTE

With 4Forum *Lite*, you can know the IP address from the LCD panel. With 4Forum *System* and 4Forum *Producer*, type **ipconfig** from the command prompt.

2. Click the Enter button, .

CAUTION

Before shutting down 4Forum, always click the Quit button, .

4Forum Lite

4Forum Lite can be controlled from the front panel (see Chapter 5, for more information.)

Running 4Forum for the first time

If you are running 4Forum for the first time and before creating a presentation, we recommend checking the 4Forum settings. For more advanced details on Settings, see "System settings" on page 106.

WARNING

Settings should only be modified by advanced users and administrators. Once the settings are set, the user can operate 4Forum without having to change the settings again.

4Forum web interface structure

- New live event**
 - Record a new presentation.
 - Customize the new presentation.
 - Manage chapters on the fly.
 - Save and publish presentation (as a file or as an editable archive)

- MPEG-4 Library**
 - View and manage published files and viewer's portal

- MPEG-4 Editor**
 - Edit saved archives (change design template, add and edit chapters, publish as MPEG-4 file)

- Settings**
 - Set your preferences
 - General**
 - Language, default player used, video input format, view logs
 - Network**
 - Access control, streaming server FTP configuration, broadcasting mode
 - Encoding**
 - Manage encoding presets (create, modify, delete, reset to default)
 - Templates**
 - Manage design templates (import, delete, modify banner)
 - CDN**
 - Set up CDN parameters

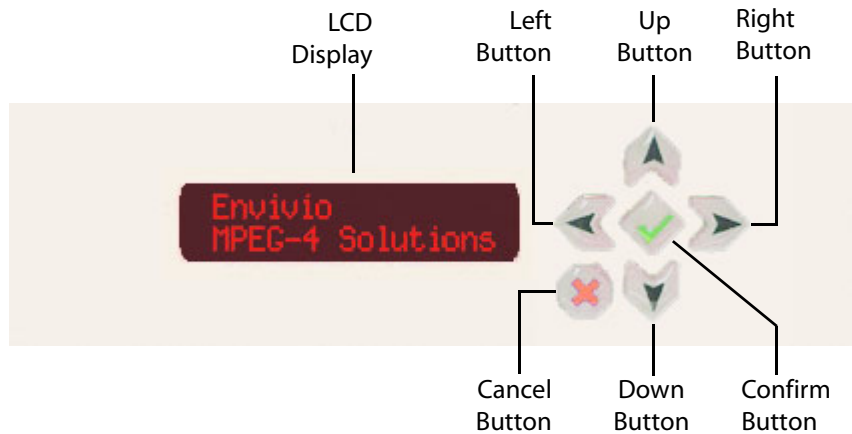
- Help**
 - Download 4Forum user's manual
 - Download EnvivioTV plugin for Mac and Windows.
 - Download Powerpoint Add-in for Microsoft Windows

CHAPTER 5

Using the Front Panel (4Forum *Lite* only)

Using the front panel controls



Example 1. 4Forum front panel controls and display



Front panel control buttons

- | | | | |
|---|----------------------------------|---|----------------------|
|  | Scroll up through menu options |  | Select a menu option |
|  | Scroll down through menu options |  | Confirm a selection |
|  | Exit a menu option |  | Cancel a selection |

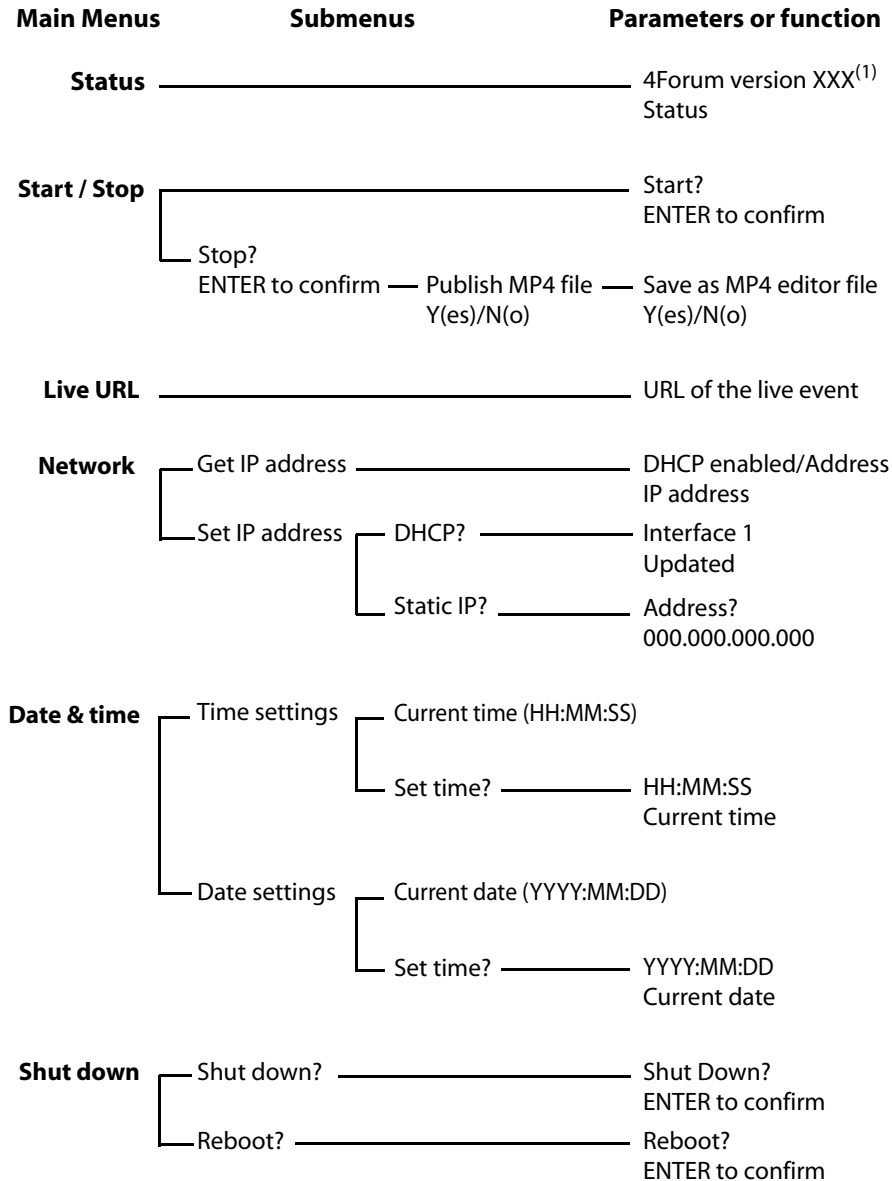
Navigating through the menus

-  Up and down arrows
At a menu level, the arrow indicates that there are additional menu items available.
At a parameter level, the arrow indicates that there are additional parameters available.
-  Cursor
The cursor indicates the selected menu or parameter.

NOTE

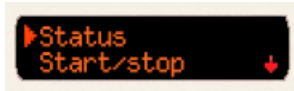


Menu structure



1. Where XXX is the product version

Displaying status






▶ Status
Start/stop ↓




4Forum 3.1.35
Idle



4Forum 3.1.35
000:00:23 252k

1. Use  or  to select **Status** then press .

4Forum version is displayed on the first line, then the status is displayed on the second line. The status may be:

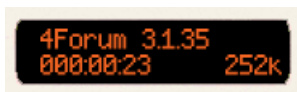
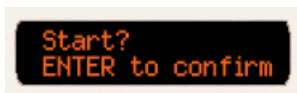
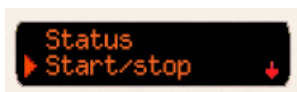
- *Not loaded* when 4Forum is not started,
 - *Idle* when 4Forum is not encoding,
 - or the time elapsed since the beginning of the encoding followed by the total bit rate (video + audio)
2. Press  to quit this menu option.






Start/Stop encoding

This menu lets you start or stop a live event from the LCD panel. This can be done using the web interface (see “Settings should only be modified by advanced users and administrators. Once the settings are set, the user can operate 4Forum without having to change the settings again.” on page 54).

Start encoding

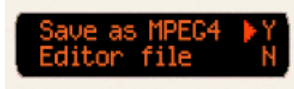
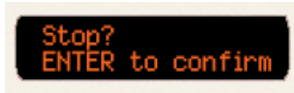
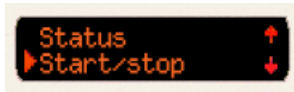
When you start encoding a live event from the LCD panel, 4Forum uses the latest encoding parameters and templates selected from the web-based interface.















1. Use  or  to select **Start/stop**, then press .
2. If 4Forum is not started, you are asked to confirm the start. Press  to confirm the action or press  to cancel the action. 4Forum is launched and then starts encoding.
 - The first line displays the 4Forum version.
 - The second line displays 4Forum status (*loading, initializing, starting, started*), then it displays the time elapsed since the beginning of the encoding followed by the total bit rate (video + audio)

Note: When the CPU usage goes over 90%, a warning message is displayed on the first line, with the current CPU usage, for example, "CPU used at 95%".

Stop encoding







1. Use  or  to select **Start/Stop**, then press .
2. If 4Forum is started, press  to stop encoding.
3. Press  to confirm the action or press  to cancel the action.
4. A first message asks you if you want to save the MPEG-4 file as an editor file (see “Step 3: Publishing your live event” on page 75, for more information).
5. Use  or  to select **Y(es) or N(o)**, then press .
6. A second message asks you if you want to publish the MPEG-4 file (see “Step 3: Publishing your live event” on page 75, for more information).
7. Use  or  to select **Y(es) or N(o)**, then press .
8. If you select **Y(es)**, an archive file will be created with the following name:
archive-month-day-year-hour
For example, *archive-Jan10-2005-14h53min40s*

Getting the URL of the live event

When 4Forum is encoding, you can get the URL of the live session.



1. Use  or  to select **Live URL**, then press .
 - If a live session is started, the URL of the live session is displayed as a scrolling text (for example, *http://192.165.100.100/presentation/live.html*).
 - If no live session is started, the link opens an html page with the following message: *"No live session"*.
2. Press  to quit this menu option.

Configuring the network interface card (NIC)




The network configuration depends on the presence of a DHCP server:

- If you have a DHCP server, 4Forum will obtain an IP address automatically from the DHCP server. You do not need to re-configure the network address.
- If you do not have a DHCP server, you have to configure the network interface(s) with a static address.

NOTE





By default, NIC 1 uses a DHCP configuration.

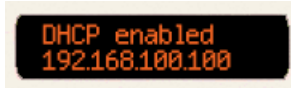


1. Use  or  to select **Network**, then press  to configure the IP address of the network interface used to broadcast the MPEG-4 streams.

Viewing the NIC address






1. Use  or  to select **Get IP Address**, then press .
2. The NIC information is displayed.
3. Press  to quit this menu option.



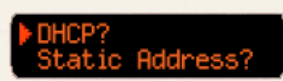
Configuring the NIC



```
Get IP Address
▶ Set IP Address
```

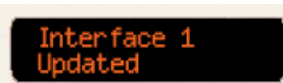
1. Use  or  to select **Set IP Address**, then press .

Configuring the NIC with DHCP



```
DHCP?
▶ Static Address?
```

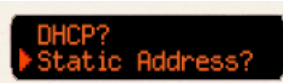
2. Press  to select **DHCP** then press .





```
Interface 1
Updated
```

A message informs you that your modification has been taken into account.

Configuring the NIC with a static address




```
DHCP?
▶ Static Address?
```

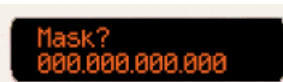
3. Press  to select **Static Address** then press .



```
Address?
000.000.000.000
```


4. Use the direction buttons to enter the IP address.

5. Press  to confirm your selection.



```
Mask?
000.000.000.000
```


6. Use the direction buttons to enter the network mask.

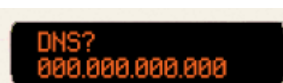
7. Press  to confirm your selection.



```
Gateway?
000.000.000.000
```


8. Use the direction buttons to enter the gateway.

9. Press  to confirm your selection.

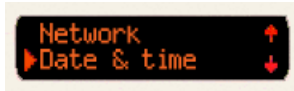


```
DNS?
000.000.000.000
```

10. Use the direction buttons to enter the DNS address.

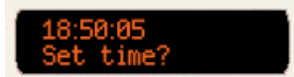
11. Press  to confirm your selection.

Configuring the date and time.



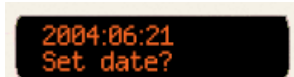
1. Use or to select **Date & time** then press to configure the date.

Setting the time



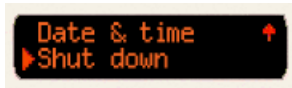
1. Use or to select **Time settings** then press . The current time is displayed.
2. Press to keep the current value or press to change the time.
3. Use the direction buttons to enter the new time.
4. Press to confirm your modification.
5. Press to quit this menu option.


Setting the date



1. Use or to select **Date settings** then press . The current time is displayed.
2. Press to keep the current value or press to change the date.
3. Use the direction buttons to enter the new date.
4. Press to confirm your modification.
5. Press to quit this menu option.

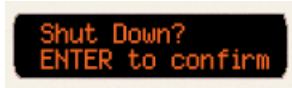
Shutting down or rebooting the encoder






1. Use  or  to select **Shut Down**, then press .



2. Use  or  to shut down or reboot 4Forum then press .



3. Press  to confirm the action or press  to cancel the action.

4. Press  to quit this menu option.

CHAPTER 6

Creating a new live event

Workflow for creating a new live event

Creating a new live event involves three tasks:

- **Customize your live event**, by entering information about the event such as the date, the speaker, the description (*optional*), by selecting a background design template, and by selecting an encoding preset.
- **Encode the live event**.
You can also add chapter marks during encoding to help viewers jump to a particular point in the VOD presentation.
- **Publish the live event**. You can save the presentation as an MPEG-4 file, upload it to a streaming server for on-demand viewing, and/or save the presentation assets for later editing.

Step 1: Customizing your live event

Follow these steps to customize your live event.

1. Click the **New Live Event** tab.
2. You can enter information (*optional*) that will be displayed in your live presentation:

>> 1. CUSTOMIZE LIVE EVENT | 2. ENCODING | 3. EVENT PUBLISHER

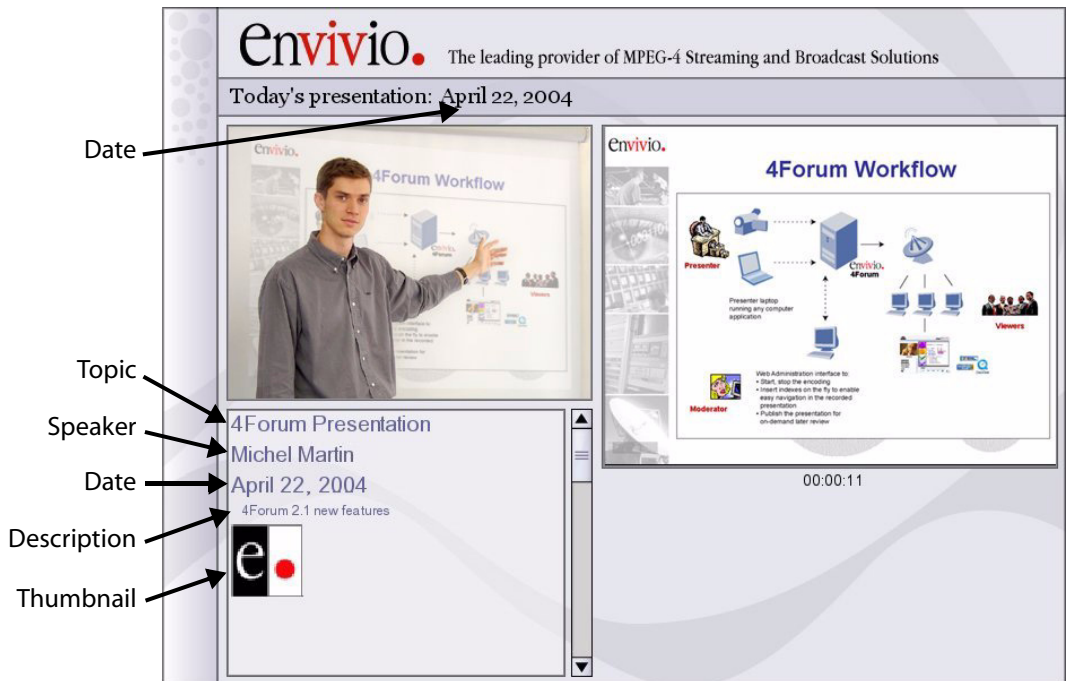
1. Customize Live Event

Date of Live Event:	<input type="text" value="January 17, 2004"/>
Speaker:	<input type="text" value="Julien Signès"/>
Topic:	<input type="text" value="4Forum"/>
Description:	<input type="text" value="Presentation of the 4Forum solution"/>
Attach image thumbnail:	<input type="text" value="I:\Graphics\envivio_ico.gif"/> <input type="button" value="Parcourir..."/>
Design Template:	<input type="text" value="blue800x600/blue800x600.ebp"/>

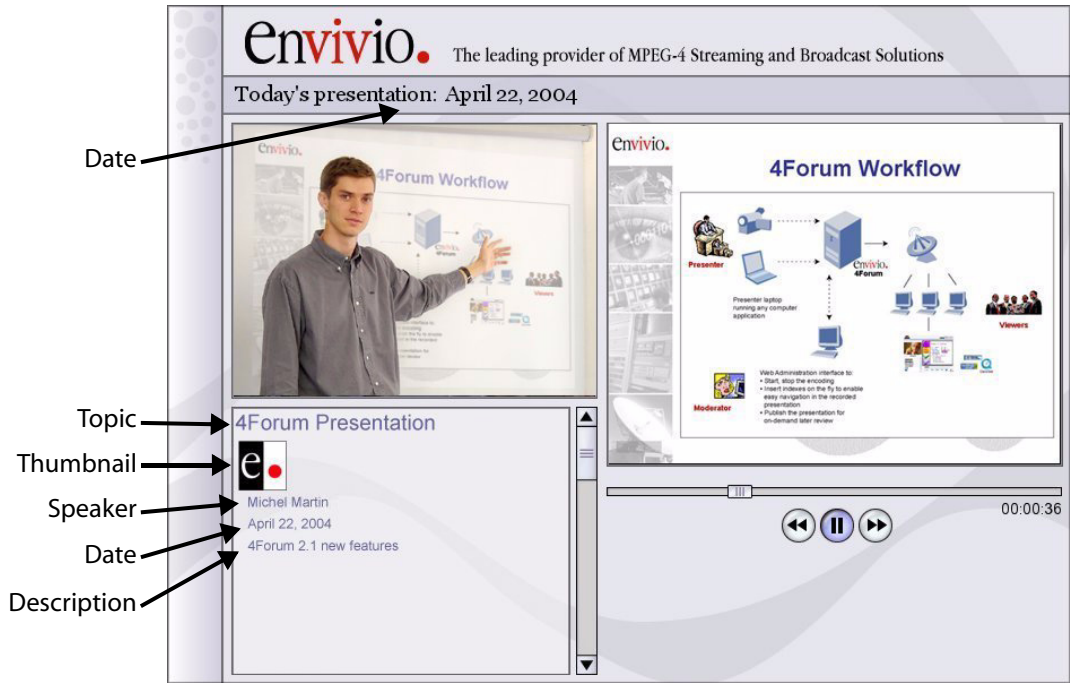
Date	The time and date of the presentation.
Speaker	The name of the person making the presentation
Topic	A title for the presentation
Description	Provide a brief description of the presentation
Attach image thumbnail	You can select an image for your live event. This image is going to be displayed as a thumbnail in the description box.

Note: 4Forum supports a large number of input file formats, including JPEG, PNG, GIF, PSD, and BMP. The thumbnail image is always rendered using 64x64 pixels, so to ensure the best quality, use 64x64 pixels input images.

Figure 1. Live presentation



Example 1. Video-on-demand presentation



3. In the drop-down list, select a background design template for your presentation.

NOTE

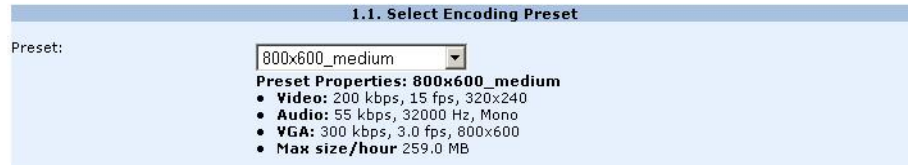
The design template defines the look and feel, as well as the layout of the presentation. These templates are designed using the 4Mation MPEG-4 authoring tool, sold separately.

CAUTION

You have to select a template that corresponds to your laptop resolution. For example, if the laptop resolutions is 800x600 you have to select the **blue800x600.ebp** design template.

For more information on importing a new background design template, or changing the banner, see Chapter 10 on page 121.

4. Select an encoding preset from the drop-down list.



Each preset optimizes the encoding of the live event for a specific network bandwidth and/or resolution. For example, you can select a preset designed for broadcasting your live event to viewers with DSL network connections. Another preset could encode your presentation for corporate LAN users.

To have the best quality, we recommend selecting a template resolution that corresponds to your laptop, then you have to select an encoding preset that corresponds to your laptop resolution. For example, if the laptop resolutions is 800x600, you have to select Encoding Preset medium_800x600.

NOTE

If the encoding preset is different from the laptop resolution, the VGA signal will be automatically resized.

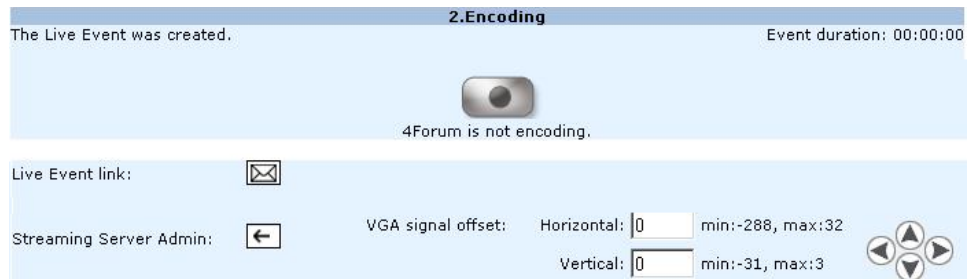
5. Double check that your background design template and your encoding presets corresponds to your laptop resolution.
6. When you have provided the required information you can go to the next step. Click the **NEXT** button to move to "Step 2: Encoding your live event".


NOTE

If your preset uses ACNS, after pressing the **NEXT** button, 4Forum will communicate with ACNS (using the information provided in Settings>ACNS) to create programs and assign them to channels.

Step 2: Encoding your live event

After you have customized your presentation, follow these steps to start encoding your live event.




1. Before starting encoding, You can email your audience the link to the live event by clicking the email icon, . Clicking this icon launches your default email client (for example, Outlook or Outlook Express).


NOTE

You can use the VGA signal offset arrows (up, down, left and right) to align the VGA output, or you can enter the VGA offset directly by entering the offset values in the offset text fields..


2. Click the VCR encode button,  to start your live presentation. When you start encoding, the page is refreshed.




3. You can click the View icon,  to check that the presentation is being broadcasted and encoded correctly. You can preview either the .m4e or the .html page.

- If you select the **live.html** link, you will see an HTML page with either the ActiceX player or a link to the default EnvivioTV player.
 - If you select the **live.m4e** link, the presentation will always open with the default EnvivioTV plug-in.
4. You can click the Open Streaming Server Admin icon,  to see how many users are connected to your live event.
 5. You can use the Chapter Manager to dynamically add chapter markers during the live presentation or after the encoding has stopped. Then viewers can use chapter markers to jump forward or backward through the VOD presentation.

NOTE For more information on Chapter Manager, see "Step 3: Adding chapter marks with the EZEditor" on page 92.

6. You can stop encoding the presentation at anytime by clicking the flashing Stop button, .

CAUTION You can start encoding again by clicking the Encode button, . However, restarting the encoder will overwrite the previously recorded content.

7. Click the **NEXT** button to move to "Step 3: Publishing your live event".

Step 3: Publishing your live event

When you have completed your live event, follow these steps to publish it as an MPEG-4 file and upload it to a streaming server.

NOTE If you do not want to create a final MPEG-4 file now, you can still save your presentation as an MPEG-4 package and re-edit it later (for example, change or add chapters, change the background design).

The image shows two sections of a web interface. The first section, titled '3. MP4 Event Publisher', contains the following fields and options: 'File name:' with a text input field containing 'e.g. Presentation1'; 'Event Description:' with a text area; 'Publish as MP4 file:' with a checked checkbox and the text '(default)'; and 'Upload MP4 Event to Streaming Server:' with an unchecked checkbox and the text '(for immediate streaming)'. The second section, titled '3.1 Post-production Publisher', contains the field 'Save event as MPEG-4 Editor file:' with an unchecked checkbox and the text '(For post-editing with the MPEG-4 Editor)'. A 'publish' button is located at the bottom right of the form.

1. Enter a file name for your presentation. The MPEG-4 file will be published and archived with this name in the MPEG-4 Library (see "MPEG-4 Library" on page 96). We recommend using a unique and meaningful file name.

NOTE

The file name must use english characters, however the event description supports other characters such as Japanese.

2. Select the publishing options for your live event.

Publish as MP4 file

This option is always selected by default. This creates an MPEG-4 file that is saved in the MPEG-4 Library.

**Upload MP4 Event
to Streaming Server**

Select this option if you want to upload the MPEG-4 file to the streaming server.

Note: This is only necessary if your streaming server is not on 4Forum.

The option to upload the MPEG-4 file to the streaming server will only appear if a separate streaming server is used and identified in the **Settings** page (see "Server settings" on page 109).

**Save event as MPEG-4
Editor file**

Select this option if you want to edit the presentation later with the MPEG-4 Editor. The MPEG-4 Editor allows you to edit chapters, background designs and text of your presentation (see "MPEG-4 Editor" on page 90).

3. Once you have selected your publishing options, click the **publish** button. Your file will be automatically saved into the MPEG-4 Library (see "MPEG-4 Library" on page 96 for additional information).

CHAPTER 7

Viewing an Event

Viewing a live event

The entire presentation is delivered as an interactive ISO MPEG-4 file that can be customized and branded. It can contain MPEG-4 graphics, vector-based animations, and interactivity. For example, you can expand the presenter video and the slides video to full-screen view.

You can view the live event by launching either a web browser or Windows Media Player, QuickTime Player or RealPlayer.

To view the presentation, the viewer can either:

- Click a link from the viewer's portal.

The moderator can email a link to the Viewer's Portal from the **MPEG-4 Library** tab (see "Emailing the Viewers' Portal URL" on page 97).

- Click a link to the live presentation received by email.

The moderator can email a link of the presentation in the **Settings>General** tab before creating the live event, during the encoding of the new live event (see "Live event link" on page 107) or in the library manager for video on-demand presentations (see "Emailing the link to the presentation" on page 98). The moderator can send this file to viewers or use it as an example to add it to the intranet.

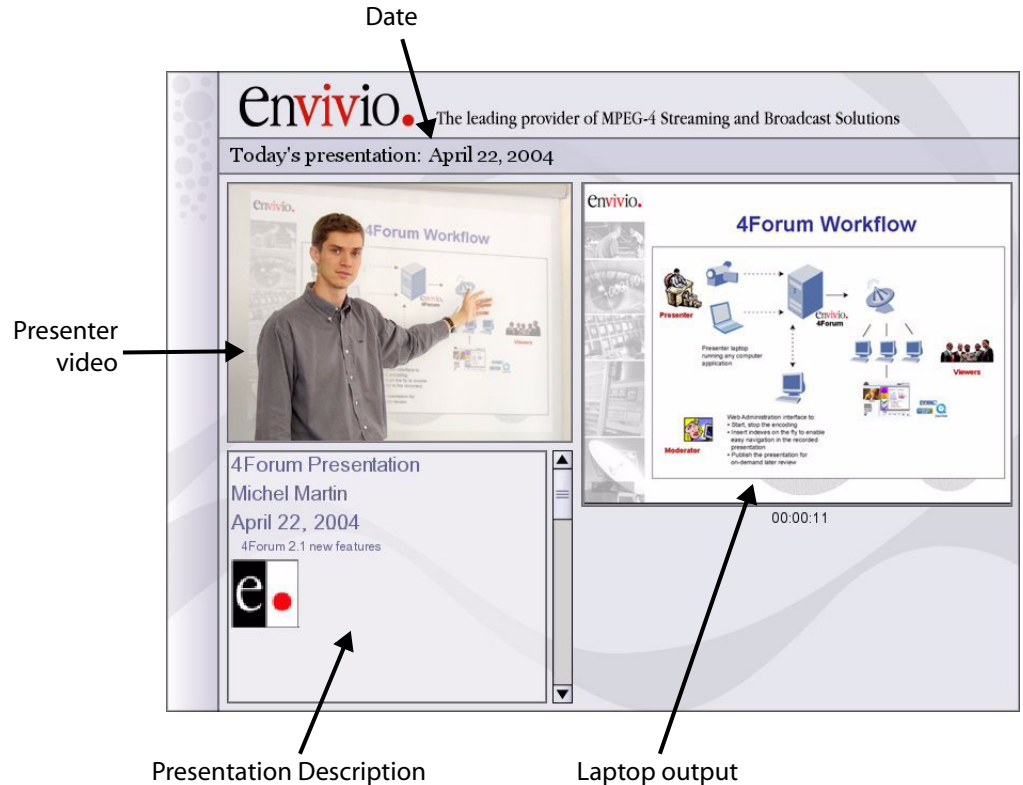
You can also open a web browser and enter the following address:

http://IP_address/presentations/live.m4e

where *IP_address* is the IP address of the 4Forum HTTP server.

This will open the default MPEG-4 player installed on your machine.

Figure 1. Live presentation using "blue800x600" template



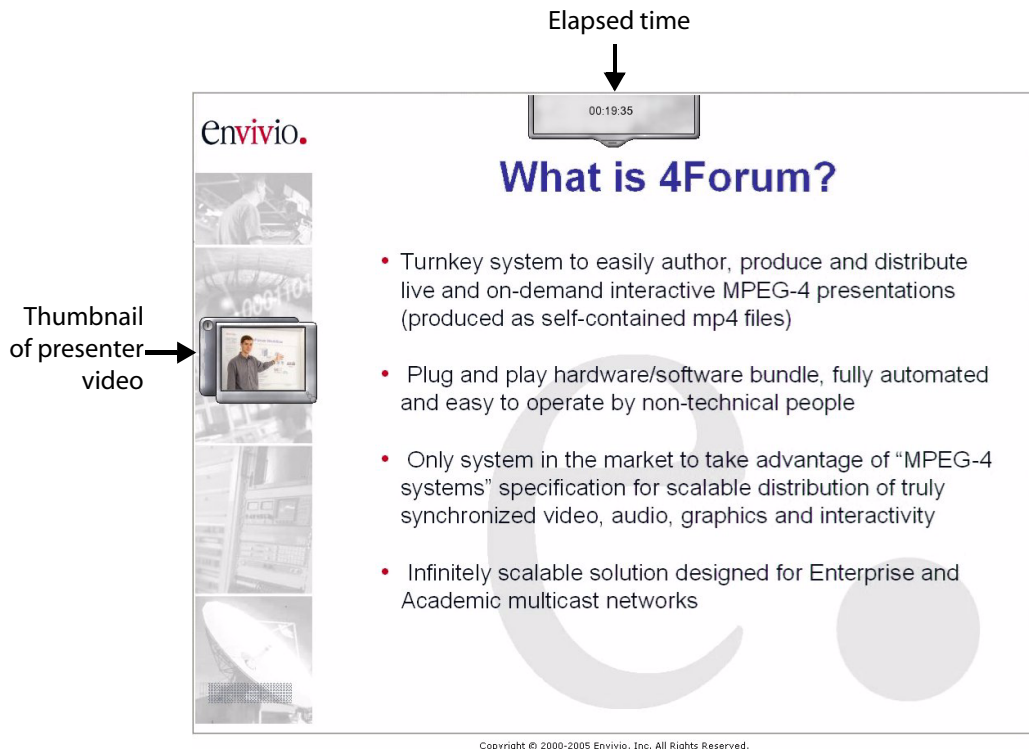
You can enlarge the presenter video by clicking on it.
You can expand the laptop video to full-screen view by clicking on it.

NOTE

The layout, graphics and interactive behaviors are defined in the MPEG-4 template. This template can be modified and customized using the optional 4Mation (see Chapter 10 on page 121 for additional information).

When one of the video is displayed in full screen, two toolboxes appear:

Figure 2. Live presentation in full screen mode



- The upper toolbox displays the elapsed time since the beginning of the presentation. You can click the handle to show/hide the toolbox.
- The left toolbox shows the other presentation as a thumbnail.
 - You can move the toolbox anywhere in the window using the left handle.
 - You can stretch the toolbox using the bottom right handle.
 - You can click the +/- button to show/hide the video thumbnail.

Viewing a published event

Viewers can access a published event "on-demand" by clicking the link to the presentation in the viewer's portal (see "Viewer's Portal" on page 86).

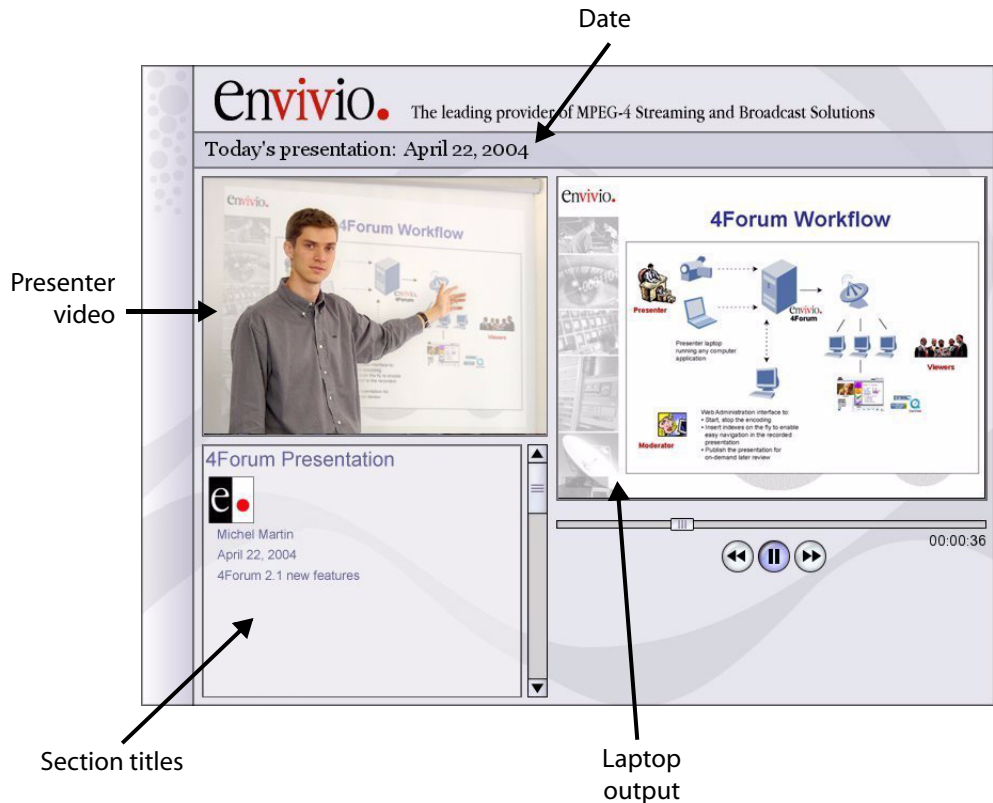
The published event contains MPEG-4 graphics, vector-based animations, and interactivity. As in a live presentation, you have full interactivity, for example, you can expand the presenter video and the slides video to full-screen view.

You have play, pause controls and special fast forward and rewind controls. These allow you to fast forward at different speeds. For example, if you press the fast forward buttons twice your video will play eight times faster than the original presentation.

Further users can navigate easily anywhere in the published event using chapters marks or the slide bar.

The moderator can send the MPEG-4 file to viewers or use it as an example to add it to the intranet.

Figure 3. Video-on-demand presentation using "blue800x600" template



You can enlarge the presenter video by clicking on it.

You can expand the laptop video to full-screen view by clicking on it.

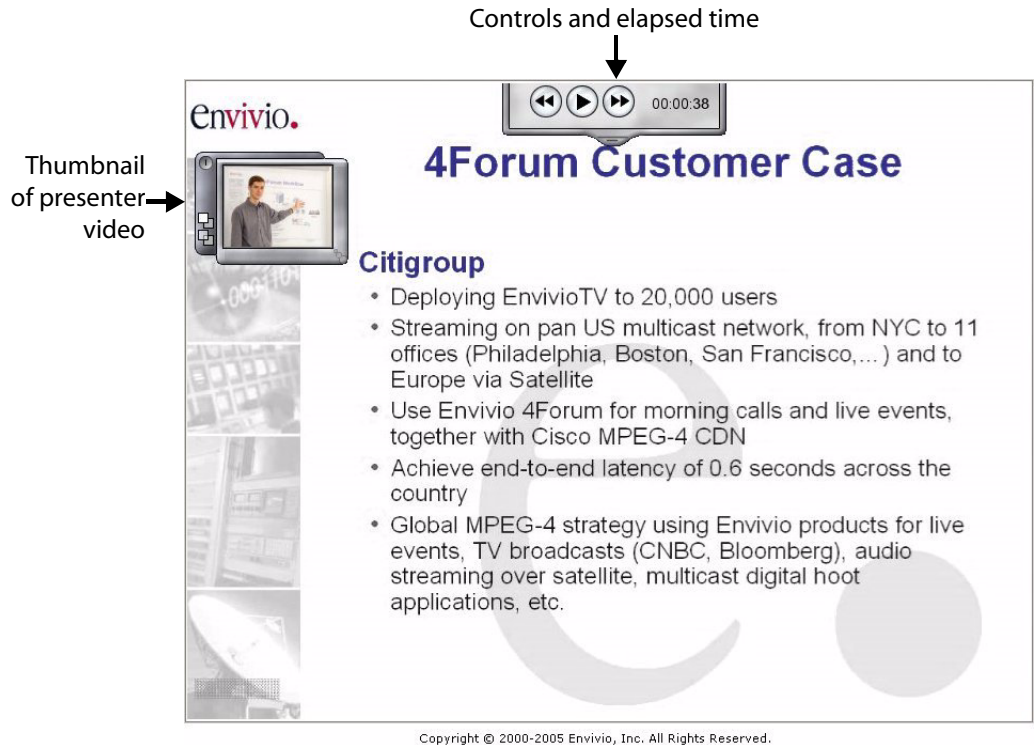
You can play, pause, stop, fast forward and rewind by clicking on the controls.



NOTE

Speed for fast forward and rewind are 4x if you click once, 8x if you click twice and 32x if you click three times.

When one of the video is displayed in full screen, two toolboxes are displayed:

Figure 4. Video-on-demand presentation in full screen mode



- The upper toolbox lets you play, pause, stop, fast forward and rewind by clicking on the controls. It also displays the elapsed time since the beginning of the presentation.
You can click the handle to show/hide the toolbox.
- The left toolbox shows the other presentation as a thumbnail.
 - You can move the toolbox anywhere in the window.
 - You can stretch the toolbox using the bottom right handle.
 - You can click the +/- button to show/hide the small video.
 - You can click the  or  buttons to adjust the transparency of the small video.

Viewer's Portal

Administrators can select presentations in the MPEG-4 library and create a Viewer's portal for the viewers. The Viewer's Portal is a web page that lists links to the live presentation and/or on-demand presentation.

The Viewer's Portal link can be emailed to the audience by the administrator.

Figure 5. Viewer's portal



The screenshot shows a web page titled "Viewers' Portal". It contains the following text and table:

Viewers' Portal
The Viewers' Portal allows you to view MPEG-4 events.

Live Event Link
Live Event: <http://192.168.105.221/presentations/live.html>

VOD Events:						
No.	Name:	Date:	Size:	Duration:	Description:	Link:
1	tutorial.mp4	5:08PM 1 Mar 2005	1.4 MB	00:29:18	tutorial	http://192.168.105.185/presentations/tutorial.html
2	conference.mp4	3:11PM 1 Mar 2005	1.8 MB	01:43:42	4Forum conference 2005/01/17	http://192.168.105.185/presentations/conference.html

See "Viewers' portal" on page 96 for more information.

CHAPTER 8

Advanced use

Chapter Manager

You can use the Chapter Manager to dynamically add chapter markers during the live presentation or after the encoding has stopped.

Viewers can use chapter markers to jump forward or backward through the video-on-demand presentation.

Chapter Manager			
You can add, modify or delete chapters, attach image thumbnails and make them invisible with the Chapter manager.			
Add new chapter			
Chapter Name:	<input type="text"/>	Invisible:	<input type="checkbox"/> (This will allow you to hide this chapter. Starting from this chapter mark until the next one.)
Description :	<input type="text"/>	Time:	<input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> Total duration: 00:12:21
Image Thumbnail:	<input type="text"/> <input type="button" value="Browse..."/>		<input type="button" value="add"/>
Chapters			
1. Chapter Name:	<input type="text" value="4Forum Presentation"/>	Time:	<input type="text" value="00:00:00"/> Invisible: <input type="checkbox"/> Delete <input type="checkbox"/>
			<input type="button" value="apply"/>

Adding a new chapter during encoding

To add a new chapter follow these steps:

1. Provide the following information:

- | | |
|---------------------|--|
| Chapter name | Enter a name for the new chapter. |
| Description | Enter a description for the new chapter. |
| Image | Each chapter can have an image associated to it. |

Note: 4Forum supports a large number of input file formats, including JPEG, PNG, GIF, PSD, and BMP. The thumbnail image is always rendered using 64x64 pixels, so to ensure the best quality, use 64x64 pixels input images.

Invisible	Invisible chapters allow you to hide chapters of your presentation. This means that the user will not see a certain section of your presentation. For example, if you have five chapters 1-2-3-4-5 and you make chapter 3 invisible then the user will not be able to see the presentation from the end of chapter 2 to the beginning of chapter 4. Therefore, your chapters will appear in the order 1-2-4-5.
Time	Enter the time for the new chapter. If you leave it blank, time will be set to now.

NOTE

If you select the **Loop Presentation** check box, the presentation will automatically restart at the beginning when it reaches the end.

2. Click the **Add** button to save your changes.

Adding a new chapter after encoding

After the encoding has stopped, additional chapters can be added by entering a specific time manually.

NOTE

Added chapter times must be within the duration of the presentation.

Editing the order of chapters after encoding

1. You can change the order of chapter marks by changing their time or by adding new chapter markers.
2. Click the **apply** button to save your changes.

MPEG-4 Editor

The MPEG-4 Editor allows the user to edit a presentation and to re-publish it. For example, you can change the background design template, modify the presentation text, add or modify the chapter marks, or cut out specific sections of your presentation by using invisible chapters markers.

It is also a local repository for MPEG-4 editor files.

The MPEG-4 Editor includes two tools:

- the EZeditor,
for adding chapters marks during the presentation playback.
- the Chapter Manager,
for modifying chapter marks manually.

CAUTION

The MPEG-4 Editor can only be used when you published a live event as an MPEG-4 editor file in the Event Publisher.

Basic workflow






Editing an MPEG-4 editor file involves five steps:

1. **Select an MPEG-4 editor file.**
2. **Edit the MPEG-4 background design** (*optional*).
3. **Add chapter marks with the EZEditor** (*optional*).
4. **Modify chapters with the Chapter Manager** (*optional*).
5. **Publish the MPEG-4 editor file.**


You can save the presentation as an MPEG-4 file, upload it to the 4Forum streaming server or create a new presentation editor file.

Step 1: Selecting a presentation to be edited

1. Click the **MPEG-4 Editor** tab. The list of available MPEG-4 editor files is displayed.

1. MPEG-4 EDITOR						
NO.	NAME	DATE ▼	SIZE	EDIT	DOWNLOAD PACKAGE	DELETE PACKAGE
	Latest Presentation	3:51PM 3 Mar 2005	8.8 MB			<input type="checkbox"/>
1	tutorial	5:10PM 1 Mar 2005	1.4 MB			<input type="checkbox"/>
2	conference	5:07PM 1 Mar 2005	1.8 MB			<input type="checkbox"/>

Import Archive (.zip files):

2. Select an MPEG-4 editor file, by clicking the Edit icon,  to edit the presentation. Once the presentation components are loaded, you can edit the MPEG-4 background, use the EZEditor and/or the Chapter Manager and publish the MPEG-4 editor file.

NOTE

You can download your MPEG-4 archive for backup purpose (see "Making a backup of 4Forum data" on page 99).

You can import an MPEG-4 archive stored onto another PC (see "Importing an archive" on page 100).

Step 2: Changing the MPEG-4 background design

1. Select a different background design template from the drop-down list.


2. Edit Event			
Topic:	presentation 4Forum	Date of Event:	Tue Apr 13 16:53:53 2004
Design Template:	<input type="text" value="blue800x600/blue800x600.ebp"/>		

2. Click the **apply** button to apply your changes.



Step 3: Adding chapter marks with the EZEditor

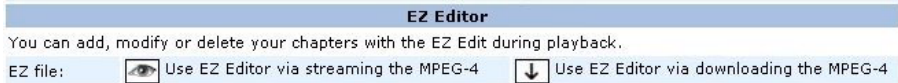
The EZEditor (*pronounced easy editor*) is a visual post-editing tool that allows you to add chapters marks during playback.

Follow these steps to edit your event with EZEditor.

1. Click the Create EZfile icon,  to create the EZ file.



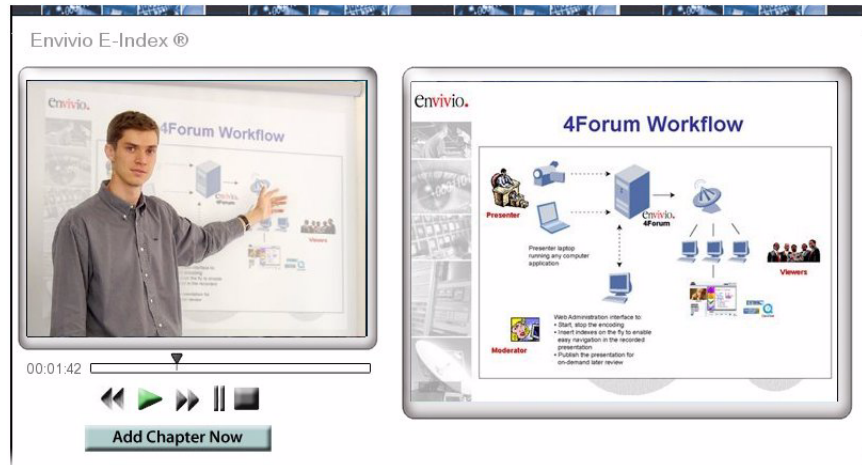
2. Click the Streaming icon,  or the Download icon,  to launch the presentation in the EZEditor.



There are two options to edit your presentation.

- The Streaming option will be faster since you are not downloading the complete presentation to your hard drive. However, any interaction will take longer since you have to wait for the streaming server buffer delay.
 - The download option will take longer initially since the presentation is downloaded, however editing will be smoother since the presentation is played back in real-time rather than streamed.
3. You can play, pause, forward, or rewind the presentation and add chapters.

Figure 1. Adding chapters using EZEditor



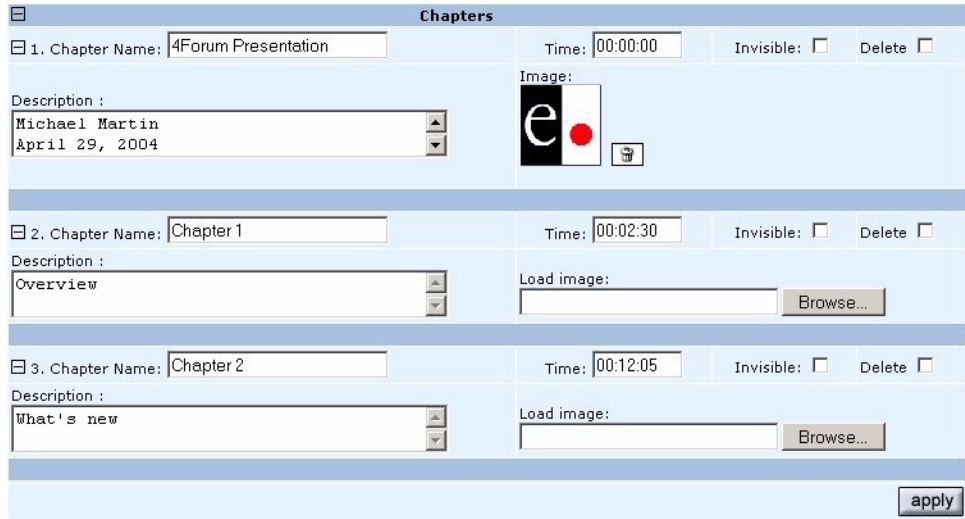
4. When you click the **Add Chapter Now** button, the presentation pauses and a form is displayed. You can enter a name for the new chapter, attach an image thumbnail, and add a description.
5. Once you have finished filling the fields, click the **apply** button to create a new chapter. The new chapter is added to the list of the Chapter Manager.
6. Click on play, forward or rewind to add more chapters.
7. When you have added all the chapters, close the EZEditor.
You can now review your new chapters in the Chapter Manager.

Step 4: Modifying chapters with the Chapter Manager

1. In the Chapter Manager, click the plus sign, **+** to view all your chapters.

NOTE

For more information on chapter parameters, see "Chapter Manager" on page 88.



2. When you have completed your edits, click the **apply** button.
3. Then click the **NEXT** button to go to the publishing page.

Step 5: Publishing an MPEG-4 file


When you have completed your edits, follow these steps to publish it as an MPEG-4 file.

1. Enter a new file name for your presentation. We recommend choosing a unique and meaningful name.
2. Select the publishing options for your presentation:

- Publish as MP4 Event** (Default selection) Select this option to create an MPEG-4 file that will be saved in the MPEG-4 Library.
- Upload MP4 Event to Streaming Server** Select this option if you want to upload the MPEG-4 file to the streaming server.
Note: This is only possible if your streaming server is not on the same machine as 4Forum.
- Save event as MPEG-4 Editor file** Select this option if you want to re-edit the presentation later with the MPEG-4 Editor.

3. Click the **publish** button to apply your selection(s).

MPEG-4 Library

The MPEG-4 Library is a local repository of files produced by 4Forum. These files are not necessarily served by the streaming server but can be delivered by using the Upload icon, , for each file. The upload icon will only appear if the streaming server IP address is set in the **Settings>Network** page to an address different from the address of the 4Forum system.

Click the **MPEG-4 Library** tab to access the Viewer's Portal and the Library Manager.

Viewers' portal

The viewers' portal is a web page with links to the live presentation and/or published events. It allows to display a selection of files that are available for everyone as the authentication is not requested.

Publishing a presentation to the Viewers' portal

To add a presentation to the Viewers' portal:

1. Select a presentation Live or VOD by clicking the **Publish to Viewers' Portal** checkbox, then click **apply**.
2. The selected presentation is added to the list of available presentations in the Viewers' portal.

To remove a presentation from the Viewers' portal:

1. Select a presentation and uncheck **Publish to Viewers' Portal**, then click **apply**.
2. The selected presentation is removed from the list of available presentations in the Viewers' portal.

Previewing the Viewers' Portal



You can preview the Viewers' portal by clicking the Preview icon, .





Figure 2. Viewer's portal

Viewers' Portal						
The Viewers' Portal allows you to view MPEG-4 events.						
Live Event Link						
Live Event: http://192.168.105.221/presentations/live.html						
VOD Events:						
No.	Name:	Date:	Size:	Duration:	Description:	Link:
1	tutorial.mp4	5:08PM 1 Mar 2005	1.4 MB	00:29:18	tutorial	http://192.168.105.185/presentations/tutorial.html
2	conference.mp4	3:11PM 1 Mar 2005	1.8 MB	01:43:42	4Forum conference 2005/01/17	http://192.168.105.185/presentations/conference.html

Emailing the Viewers' Portal URL

The Viewers' portal URL can be emailed to your audience by clicking the email icon, . Clicking this icon launches your default email client for example, Outlook or Outlook Express.

Managing published events with the Library Manager

Library Manager								
Free Space:		20.8 GB free						
Viewers' Portal		Publish MPEG-4 presentation into the Viewers' Portal. The Viewers' Portal gives your viewers access to MPEG-4 presentations you selected.						
 								
NO.	NAME	DATE ▼	SIZE	DURATION	DESCRIPTION	UPLOAD TO STREAMING SERVER	PUBLISH TO VIEWERS PORTAL	DELETE FILE
	The live presentation				live link		<input type="checkbox"/>	
	 						<input type="checkbox"/>	<input type="checkbox"/>
1	tutorial.mp4	5:08PM 1 Mar 2005	1.4 MB	00:29:18	tutorial		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	conference.mp4	3:11PM 1 Mar 2005	1.8 MB	01:43:42	4Forum co...		<input checked="" type="checkbox"/>	<input type="checkbox"/>
								<input type="button" value="apply"/>

The **Free space** parameter gives you information on the available free space on your 4Forum.

The following information is given for each event: the file name, the date and the description.


NOTE

The live event is always displayed on top of the list of events.


Downloading a presentation

You can download the selected presentation by clicking the file name in the **Name** column.


Streaming an MPEG-4 presentation

If it was uploaded to the streaming server, you can stream the selected presentation by clicking the View streamed presentation icon, , in the **Name** column.

Emailing the link to the presentation

You can email the link of the selected presentation by clicking the email icon, .

Uploading a presentation to the streaming server

You can upload the selected presentation to the streaming server by clicking the Upload icon, .

NOTE

The Upload icon is displayed when the streaming server is on a separate machine.


Publishing a presentation to the Viewers' Portal

You can publish the selected presentation for your viewers. The Viewers' Portal is for viewers only. (See "Publishing a presentation to the Viewers' portal" on page 96.)

Deleting a presentation

To delete a selected presentation, click the **Delete File** checkbox then click the **apply** button.


Making a backup of 4Forum data

To backup an MPEG-4 presentation, go to the **MPEG-4 Editor** tab, then select the presentation to be exported and click the Download icon, . Then select the path where you want to save your archive (ZIP file).

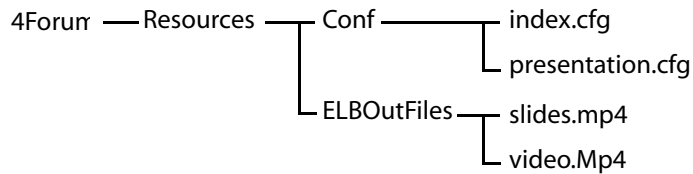
The MPEG-4 presentations, they are located in the **C:\4Forum\ESCContents\Movies** directory.

The archives (source files needed for post-editing), are located in the **C:\4Forum\Archive** directory. Each directory corresponds to one 4Forum session.

Importing an archive

To import an archive, click the **Browse** button and select the archive to be imported, then click the Import icon, . The archive will be added to the list of MPEG-4 editor files.

Note that the ZIP file must have the correct directory structure:



CAUTION

You cannot download a file greater than 2 Gb.

Advanced Editing

The two sources (presenter video & audio, and collaborative video) are located in two separated MPEG-4 files:

C:\4Forum\Archive\<<archiveName>\4Forum\resources\ELBoutputFiles\slides.mp4

C:\4Forum\Archive\<<archiveName>\4Forum\resources\ELBoutputFiles\video.mp4

To change the duration of a source, edit the

C:\4Forum\Archive\<<archiveName>\4Forum\resources\conf\presentation.cfg,
and change the value of the **Duration** property.

CAUTION

You must keep the same duration for these two sources to avoid problems when they are included in the final presentation template.

4Forum presenter add-in for Microsoft Powerpoint

The 4Forum Powerpoint add-in allows automatic creation of chapters in the 4Forum system with the user of Microsoft Powerpoint (for PC only). Chapter titles are taken automatically from the slide headers.

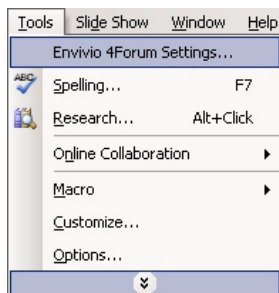
NOTE

In order to make use of the 4Forum powerpoint add-in, the presenter laptop must be connected to the network and the powerpoint add-in must be configured using the procedure described below.

Installation

1. Before installing the 4Forum add-in for Microsoft Powerpoint, check that a previous add-in is not installed: from Powerpoint application, go to **Tools>Add-ins...** and check that there is not an add-in named **Envivio4ForumAddIn**. If so, select it in the list and click the **Remove** button.
2. Go to **Tools>Macros...>Security>Security Level** and select the *Medium* security level (or *Low*, but it is not recommended). You will be prompted when you want to install an add-in
3. From the 4Forum web interface, go to the **Help** tab, and download the add-in onto your hard drive.
4. Double click the **Envivio4ForumAddin.ppa** file: it opens Powerpoint and ask you if you trust the source and want to enable macros: click **Enable macros**.

A new item is added to the **Tools** menu, called **Envivio 4Forum settings...**:

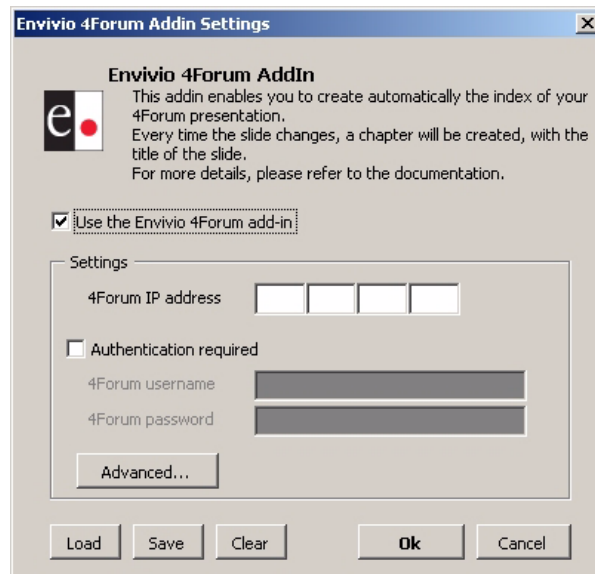


Configuration and use

Once your Powerpoint presentation is launched, click the **Settings** tab from the 4Forum web interface to configure the add-in.

Configuring the Powerpoint add-in

1. Check the **Use the Envivio 4Forum add-in** box and fill in the form with the IP address of the 4Forum.

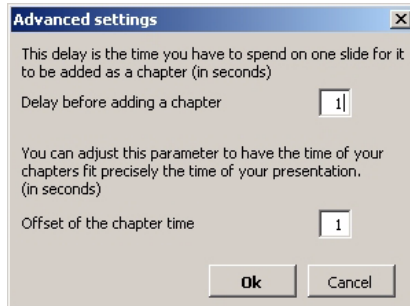


The screenshot shows a dialog box titled "Envivio 4Forum Addin Settings". It contains the following elements:

- Envivio 4Forum Addin** header with a logo (a black square with a white 'e' and a red dot) and descriptive text: "This addin enables you to create automatically the index of your 4Forum presentation. Every time the slide changes, a chapter will be created, with the title of the slide. For more details, please refer to the documentation."
- A checked checkbox labeled "Use the Envivio 4Forum add-in".
- A "Settings" section containing:
 - A "4Forum IP address" field with four empty input boxes.
 - An unchecked checkbox labeled "Authentication required".
 - "4Forum username" and "4Forum password" fields, each with a dark grey input box.
 - An "Advanced..." button.
- Buttons at the bottom: "Load", "Save", "Clear", "Ok", and "Cancel".

2. If you have defined an access control with a login and password (see "4Forum Producer IP address and password protection" on page 109), you have to type this login and password to connect to the 4Forum administration web interface.

3. You can set the delay and/or the offset by clicking the **Advanced...** button:



- **Delay:** When you change the active slide, the add-in will wait for that time (in seconds) before creating a new chapter. It allows you to skip some slides without creating chapter for them.
 - **Offset:** When you initiate a command for adding a chapter it takes time (due to the network and the processing time). This parameters allows reducing this delay. It must be an integer.
4. To save your parameters click the **Save** button. It will save all the parameters except the password.
When you re-launch the Powerpoint application, you can load these parameters (except the password that will need to be re-entered) by clicking the **Load** button.
 5. Close the window by clicking the **Ok** button. The next time you will run the presentation, chapters will be created.

Uninstallation

1. From Powerpoint application, go to **Tools>Add-ins...**, select the 4Forum add-in then click the **Remove** or **Unload** button.

NOTE

The file containing your preferences will have to be removed manually. It's located in C:\Windows\ and is called EnvivioPPTAddin.ini.

CHAPTER 9

4Forum Settings

System settings

General settings

Settings>General

Settings (4Forum version 3.1.xx)	
Player:	Windows Media Player <input type="checkbox"/> Use Automatic Installer: <input checked="" type="checkbox"/>
Live Event link:	<input checked="" type="checkbox"/> http://192.168.105.185/presentations/live.html
Language:	English
Date Format:	DD Mon YYYY
Video Input	
Video Source:	S-Video
Video Format:	PAL

2.

Player settings


Player

Select the player.

- If you select one of the players (Windows Media Player, ActiveX control), the presentation will be embedded in a web page using the selected player.
- If you select the **EnvivioTV default player**, the presentation will be played in your default player i.e. Windows Media Player, RealPlayer or QuickTime Player. This can be set on the viewer's machine in EnvivioTV preferences.
- The **Automatic installer** detects if the ETV-plug-in or ActiveX control is already installed. If not or if the installed version is too old, the automatic installer starts the installation process after the user's agreement. check this option to activate the automatic installer (see page 45.)

Note: The same content can still be played in any player with the EnvivioTV plug-in. This setting only defines which player will be launched when the viewer clicks on the links automatically generated by 4Forum (see "Viewers' portal" on page 96).

Live event link

Click the email icon,  to email the link of the live presentation. This link can be sent to users for viewing the live presentation.

4Forum language

Language

Select your preferred language for the 4Forum web administrator.

Possible values: English, Japanese, or Chinese.

Date Format

Select the date format used in the library and the MPEG-4 Editor web pages.

Video source

Select the type of video source.

Possible values: **S-Video** (default) or **Composite**.

Video input

Video format


Select the type of video format.

Possible values: **NTSC** or **PAL**.

Note: When changing video format, the 4Forum system may require a reboot. When necessary, a dialog box will pop-up, warning that a reboot is required.

Log files

Logs	
Main Log	 
4Mation Live Log	 
4Mation VOD Log	 


To display a log, select a log file then click the View icon, .

To delete a log file, select a log file then click the Trash icon, .

Network settings

Follow these steps to view and modify network settings

1. Click the **Settings>Network** tab

Settings (4Forum version 2.1.4)	
4Forum Producer IP (HTTP):	<input type="text" value="192.168.100.10"/> <input checked="" type="checkbox"/> Force to local IP (Check this when you are using DHCP.)
4Forum Administrator Login:	<input type="text"/>
Password:	<input type="password"/>
Confirm Password:	<input type="password"/>
Streaming Server Admin:	
Streaming Server IP:	<input type="text" value="192.168.100.140"/> <input type="checkbox"/> Force to local IP (Check this when you are using DHCP.)
FTP Login:	<input type="text" value="envivio"/>
Password:	<input type="password" value="*****"/>
Transmission Mode	
Transmission Mode:	<input type="text" value="Multicast"/>
<input type="button" value="apply"/>	

2. Provide the following information:


4Forum Producer IP address and password protection

4Forum Producer IP (HTTP)	Enter the IP address or domain name of the 4Forum HTTP server.
Force to Local IP	Check this option if you are using DHCP. This will set the IP address automatically.
4Forum administrator login	Enter a login name. When no name is entered, there is no access control to the 4Forum administration web interface. When a name and password are entered, access control is initiated and access to the 4Forum administration web interface requires use of these values. Using access control is strongly recommended. Note: Even with access control, the user and password are sent over the network as clear-text.
Password	Enter a password for this login name.
Confirm password	Enter the same password again.

NOTE

If you are using 4Forum Powerpoint add-in (see "Configuration and use" on page 103), you will have to give this login and password.

Server settings

Streaming Server Admin	Click the Open icon,  , to open the streaming server WebAdmin.
Streaming Server IP	Enter the IP address of the streaming server. Note: If you are using 4Forum <i>System</i> edition this is going to be the same address as the 4Forum Producer IP (HTTP).

Force to Local IP	Check this option if you are using DHCP. This will set the IP address automatically.
FTP Login	Enter the login name for the FTP server – only needed if the streaming server is on a separate machine, otherwise leave it blank.
Password	Enter the password for the FTP server – only needed if the streaming server is on a separate machine, otherwise leave it blank.

3. Click the **apply** button to enable these settings.

Transmission mode

Transmission mode

The transmission mode determines where clients tune in to receive the live video and VGA streams: directly from the 4Forum server or from an Envivio Streaming Server.

The transmission mode setting should be used in conjunction with the broadcast address setting in the **Settings>Encoding** tab.

If you set the transmission mode to Multicast, then clients viewing the live MPEG-4 presentation will tune to live streams coming directly from the 4Forum server. In that case, the Envivio Streaming server must be on the same multicast-enabled network as the 4Forum server.

If you set the transmission mode to Unicast, the clients viewing the live MPEG-4 presentation will tune to live streams reflected from the Envivio Streaming Server.

Here are three sample network configuration profiles:

- streaming over the internet: you must use an external streaming server. Set the transmission mode to **Unicast**. Set the broadcast address to the streaming server IP Address. See Appendix B for more details.
- streaming within a local area network: set the transmission mode to **Multicast**. Set the broadcast address to a multicast address.
- streaming to one client only, within a local area network: set the transmission mode to **Multicast**. Set the broadcast address to the client IP Address.

Encoding preset editor

The Encoding Editor allows you to modify existing presets or to create new presets. A preset defines how your video is encoded, for instance what bit rate, frame rate etc. For one presentation there are two presets: the first one corresponds to the video of the presenter, the second one to the VGA output of the laptop.

Below are the default presets of projects after a new installation of 4Forum.

NOTES

All these presets are set with a low latency.

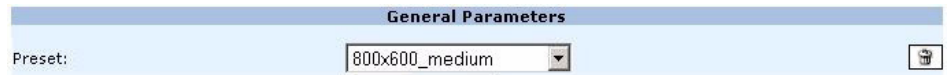
Only the sum of both presets is the total bit rate of your presentation. Please make sure that your audience has sufficient bandwidth to stream your presentation.

Quality Mode	Audio		Frames per second		Video bit rate in kbits/s			
	Presenter only		Presenter	VGA	Presenter		VGA	
			Bit rate	Resolution	Bit rate	Resolution	Bit rate	Resolution
Low bitrate	32kbits/s, Mono, 22.05kHz	14	1	100	160x120	120	640x480 to 896x600	
				200	320x240	200	1024x768	
Medium	55kbits/s, Mono, 32kHz	14	3	250	320x240	300	640x480 to 1024x768	
						600	1024x852 to 1152x768	
						900	1152x864 to 1360x768	
						1200	1400x900 to 1600x1200	
High quality	96kbits/s, Stereo, 44.1kHz	25 (PAL) 30 (NTSC)	5	500	320x240	600	640x480 to 896x600	
						1200	1024x768 to 1152x864	
						1500	1280x720 to 1360x768	
						2000	1440x900 to 1600x1200	

Modifying an existing preset

Follow these steps:

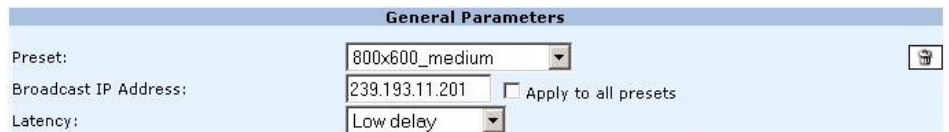
1. Select a preset from the drop-down list.



The screenshot shows a dialog box titled "General Parameters". The "Preset:" field is a dropdown menu currently displaying "800x600_medium". There is a trash icon to the right of the dropdown.

2. You can use the default parameters, or adjust them:

General parameters



The screenshot shows the "General Parameters" dialog box. The "Preset:" dropdown is set to "800x600_medium". The "Broadcast IP Address:" field contains "239.193.11.201" and has an unchecked checkbox labeled "Apply to all presets". The "Latency:" dropdown is set to "Low delay".

Broadcast IP Address

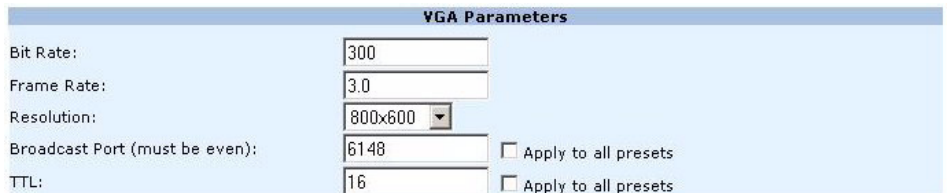
Enter the broadcast IP address.

You can apply the IP address to all presets by selecting the corresponding checkbox.

Latency

Select the latency for your Encoding Presets.

VGA parameters



The screenshot shows a dialog box titled "VGA Parameters". The "Bit Rate:" field is a text input with "300". The "Frame Rate:" field is a text input with "3.0". The "Resolution:" field is a dropdown menu set to "800x600". The "Broadcast Port (must be even):" field is a text input with "6148" and has an unchecked checkbox labeled "Apply to all presets". The "TTL:" field is a text input with "16" and has an unchecked checkbox labeled "Apply to all presets".

Bit Rate

Enter the bit rate (in kbits/s) for the VGA stream.

Frame Rate

Enter the frame rate (in fps/s) for the VGA input.

Resolution

Select the resolution for the VGA input.

Broadcast Port

Enter the broadcast port for the encoded VGA stream.

Note: The port number must be even.

You can apply the broadcast port to all presets by selecting the corresponding checkbox.

TTL

TTL stands for Time To Live.

A value in the range 0 through 255 defines the scope within which multicast packets should be sent over a network using Internet Protocol (IP). Each router decrements the TTL by one. When the value reaches a predefined lower limit, the router throws the packet away. By default the TTL is set to 16.

Note: You can apply the TTL to all presets by selecting the corresponding checkbox.

Video parameters (camera)

Video Parameters	
Bit Rate:	<input type="text" value="200"/>
Frame Rate:	<input type="text" value="15"/>
Video Size:	<input type="text" value="320x240"/>
Broadcast Port (must be even):	<input type="text" value="7570"/> <input type="checkbox"/> Apply to all presets
TTL:	<input type="text" value="16"/> <input type="checkbox"/> Apply to all presets

Bit Rate (kbits/s) Enter the encoding bit rate for the presenter video stream.

Frame Rate (fps/s) Enter the frame rate used for the presenter video stream.

Video size Select the resolution of the captured presenter video.

Broadcast Port Enter the port number for the presenter video stream.

Note: You can calculate the audio port number by adding 2 to the video port number.

Note: You can apply the broadcast port to all presets by selecting the corresponding checkbox.

TTL

TTL stands for Time To Live.

A value in the range 0 through 255 defines the scope within which multicast packets should be sent over a network using Internet Protocol (IP). Each router decrements the TTL by one. When the value reaches a predefined lower limit, the router throws the packet away. By default the TTL is set to 16.

Note: You can apply the TTL to all presets by selecting the corresponding checkbox.

Audio parameters (camera)



Bit Rate

Enter the bit rate for the presenter audio stream.

Sampling frequency

Enter the frame rate for the presenter audio stream

Channels

Select the number of channels captured in the presenter audio stream.

Possible values: mono or stereo.

3. Modify parameters, then click the **save** button.


Creating a new preset

Follow these steps:

1. Select a preset then modify the preset parameters (see "Modifying an existing preset" on page 113).
2. Click the **Save as** button to apply your modifications, then enter a new preset name and click the **save** button.



Deleting a preset

1. Select a preset from the drop-down list
2. Click the Trash icon, , then confirm your action.

Envivio 4Forum and Cisco ACNS

The objective of the Cisco Application and Content Networking System (ACNS) software solution is to deliver content to the user in the most efficient manner possible. To that end, ACNS supports multiple content routing methods, and allows Content Engine caches to be populated with content in multiple ways. The Cisco ACNS network consists of at least one Content Distribution Manager, one or more Content Engines, and one or more optional Content Routers.

Cisco ACNS software allows content services to be configured, reconfigured, and monitored centrally from the Content Distribution Manager graphical user interface (GUI), Cisco's web-based application management tool.

Configuring the ACNS for use with 4Forum

The Cisco ACNS can be used to distribute both live and on-demand content. In the case of a live 4Forum event, both methods must be used on the ACNS in conjunction. This is because the main MPEG-4 content is distributed as an on-demand asset, while the live streams are distributed live. The ACNS can be used to distribute on-demand 4Forum content (that is, exported MPEG-4 assets), but this must be done "by hand." The 4Forum ACNS interface is used only to facilitate the distribution of live 4Forum events.

The remainder of this section outlines the set-up required on the ACNS side in order to use the ACNS to distribute live 4Forum content.

Please consult the ACNS documentation for details on the creation of ACNS channels, websites, etc.

Because live 4Forum content makes use of both the on-demand and live ACNS distribution capabilities, two ACNS channels must be created on the CDM:

- create a live ACNS channel, setting the 4Forum server as the origin server.
- create an ACND on-demand channel, setting the 4Forum server as the origin server. For ACNS version 5.3 or higher, make sure that this channel allows use of an external manifest file. This is done under **Channel content>Change Method** in the channel panel.

NOTE

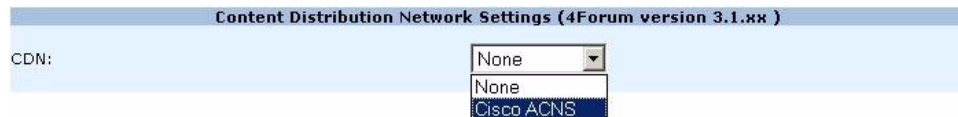
The live and VOD channel names must be entered into the 4Forum interface.

Follow these steps to use Cisco ACNS with Envivio 4Forum.

CAUTION

ACNS settings should only be set once by the administrator. 4Forum users do not have to change any ACNS settings again. They only have to select a preset in **Settings>Encoding** and check the option **Use ACNS settings**.

1. Click the **Settings>CDN** tab.
2. In the CDN drop-down list, select **Cisco ACNS** option to enable ACNS. This will make the **use ACNS** option available in the **Settings>Encoding** tab



3. Provide the following information:

Content Distribution Manager Authentication

The screenshot shows a configuration window titled "Cisco ACNS 5.1 Settings". It contains three input fields:

- CDM IP Address:port:** 60.61.62.63 : 8443
- CDM User:** admin
- CDM Password:** [masked with 7 dots]

4Forum needs authentication credentials for you Content Distribution Manager GUI.

CDM IP Address:Port	Enter the IP address and port of your CDM.
CDM Login	Enter the CDM login
CDM Password	Enter the CDM password

Broadcast Addresses

Video Multicast Address:Port	<input type="text" value="239.193.11.201"/>	:	<input type="text" value="7570"/>
VGA Multicast Address:Port	<input type="text" value="239.193.11.202"/>	:	<input type="text" value="6164"/>

NOTE

Please ensure that the video multicast address is different from the VGA multicast address.

Video Multicast Address:Port	Enter the multicast address for the video. This is the multicast address used by the ACNS to broadcast the video stream.
VGA Multicast Address:Port	Enter the multicast address for your VGA. This is the multicast address used by the ACNS to broadcast the VGA stream.

Program file

Program Start (MM/DD/YYYY HH:MM:SS):	<input type="text" value="03/03/2005 17:08:01"/>	Set to:	<input type="text" value="now+1 hours"/> ▾
Program Duration (Minutes):	<input type="text" value="60"/>		

Program start	Enter the start of the program (MM/DD/YYYY HH:MM:SS).
Set to	Select the start time in the drop down list, for example Now+2hours .
Program duration	Enter the duration (in minutes) of the program.

Manifest URL

For prepositioned content

Manifest File URL:	http://192.168.105.185/ACNS/liveManifest.xml
--------------------	---

Manifest URL

Informative field. Path of the manifest file for the on-demand channel. Clicking on the link opens the XML file in a browser.

Note: **LiveManifest.xml** is the manifest file for the on-demand channel. Do not be confused by its name.

Root Content Engine and channels

Enter the Root Content Engine IP address and the ACNS channel names below, or use 'update' to fetch these data from the ACNS.

Root CE IP Address:

Live ACNS Channel Name:

On-demand ACNS Channel Name:

**Root CE
IP Address**

Enter the Ip address of your Root Content Engine.

**Live ACNS
Channel Name**

Enter the name of your Live Channel. Please check channel settings in your Cisco CDM graphical user interface (GUI).

**On-Demand
ACNS Channel
Name**

Enter the name of your Live Channel. Please check channel settings in your Cisco CDM graphical user interface (GUI).

NOTE

You can click the **update** button to retrieve the information from the ACNS server.

4. Click the **save** button to apply these settings.

CHAPTER 10

4Forum Templates

The design template defines the look and feel, as well as the layout of the presentation. These templates are designed using the 4Mation MPEG-4 authoring tool, sold separately

Creating templates

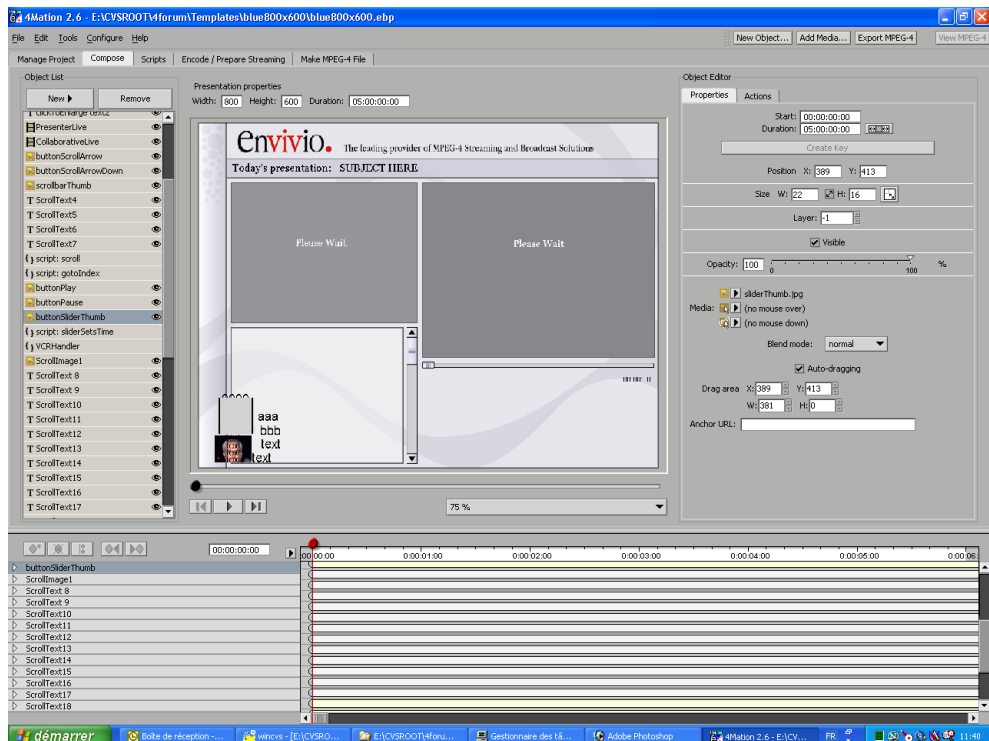
This section describes how to use 4Mation to create and update your own customized 4Forum background design templates.

Editing the background design template with 4Mation

Using 4Mation, the administrator can define a new look and feel and interactive behavior for the presentations.

4Forum background design templates (EBP files) are located in the **4Forum>Resources>Templates_XX** directory (where XX is the language code). (See the 4Mation User's Guide for additional information).

Figure 1. 4Forum template opened in 4Mation



Saving the 4Mation project as a ZIP file

The archived project file (ZIP file) created by 4Mation contains all the information about position of objects, scene size, graphics, local interactivity, text information, etc. (see Figure 1, on page 122).

The same file will be used by 4Forum as a background design template for both the live and published presentations.

Use the **Export project as ZIP...** command of 4Mation to export the new background design template. This ZIP file can be uploaded to the system through the **Settings>Templates** page to become selectable as a background design template (see “Step 1: Customizing your live event” on page 70).


See 4Mation User’s Guide for further details.

Modifying templates


Using 4Forum web interface, you can import a new banner to be displayed on the MPEG-4 presentation, instead of the Envivio logo.

1. Click the **Settings>Templates** tab to access Templates panel:



2. Select the template to be modified and click the Import icon,  to view the template properties.
3. You can click the current banner thumbnail to display the banner in full size.
4. To import a new banner, in the **Import new Design Banner** parameter, you can either directly enter the path to the new banner or click the **Browse** button and select the new banner to be imported.

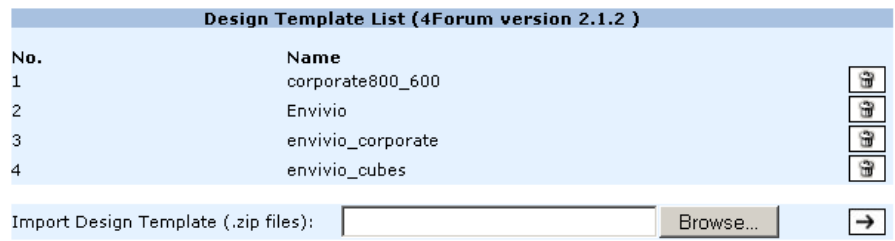
NOTE The banner file must be a JPEG file. Its size is indicated between parentheses (for example, 961 x 78 pixels). If the new image has a different size than indicated, it will be stretched to fit in the indicated size, and this may result in aliasing. To avoid these artifacts, always use a new banner image with the indicated size.

5. Click the Import icon, , to import the new banner.

Importing templates

To import a template, follow these steps:



1. Click the **Settings>Templates** tab to access Templates panel:



2. In the **Import Design Template** parameter, you can either directly enter the path to the template ZIP archive or click the **Browse** button and select the template ZIP archive to be imported.

NOTE

The imported file has to be an archived project (with ZIP extension) exported from 4Mation (see “Saving the 4Mation project as a ZIP file” on page 123).

3. Click the Import icon, , to import the new design template.
4. To delete a template, select a template then click the Trash icon, .

APPENDIX A

Frequently Asked Questions

How do I update my demo licences with a full license?

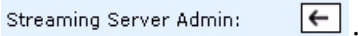
If you have installed 4Forum with a demo license, you can upgrade it with a full-license using the licenser.

To update 4Forum:

1. Stop 4Forum.
2. Go to **C:\4Forum\Resources\Licenser**, and double click **4forum-Licenser.exe**.
3. Indicate the path to the full-license file, then follow the on-line instructions.

How do I check the streaming server configuration?

4Sight is Envivio's streaming server. It is preconfigured and installed as a service.

1. If you want to check your 4Sight configurations, go to the **Settings>Network** tab and click the link to 4Sight Web Admin,
 .
2. To edit the default movie folder, select the **Server Configuration>Movie Folder** menu, then enter **C:\4Forum\ESCContents\Movies**.

NOTE

For more information, refer to 4Sight Administrator's Guide.

How do I see how many users are connected?

4Sight is Envivio's streaming server and it allows you to see how many users are connected to your event. Launch 4Sights WebAdmin and go to connected users section.

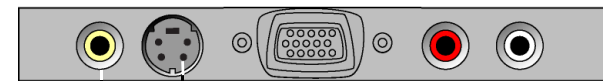
NOTE

For more information, refer to 4Sight Administrator's Guide.

How do I check my video input?

Check the video connections

1. The presenter's video camera or camcorder must be connected to the 4Forum analog video acquisition card, using the connectors shown below.
2. Connect either a composite video input or an s-video input to the appropriate connector.



Composite Video
S-Video



S-Video cable

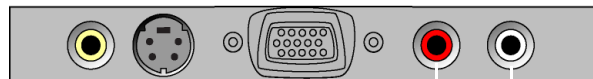


Composite cable

3. Select the appropriate input source from the **Settings>general** tab (see "Video input" on page 108).

How do I check my audio input?

1. Check your audio cables.
2. The analog audio input must be connected to the appropriate connectors. Use the RCA connectors on the acquisition card for unbalanced audio.



Analog unbalanced



Analog unbalanced cable

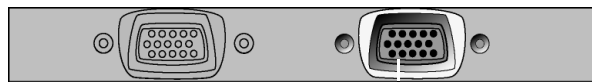
NOTE

4Forum only accepts unbalanced audio.

How do I check my VGA input?

Check the connections: use a VGA male to VGA male cable to connect the presenter's laptop or PC to the 4Forum VGA acquisition card.

1. Connect one end of the cable to the VGA output connector on the presenter's laptop or PC.
2. Connect the other end of the VGA cable to the VGA connector on the 4Forum VGA acquisition card.



VGA input from
Presenter's laptop or PC



VGA cable

How do I configure the position of my VGA signal?

When you create a new live event, you can adjust the VGA signal offset (see "Step 2: Encoding your live event" on page 74).

How do I setup streaming over the Internet? What do I have to configure if I am using a firewall?

4Forum configuration

1. In the 4Forum Web interface, go to the **Settings>Network** tab and select **Unicast** as transmission mode.
Since the Internet is not a multicast enabled network, you have to use unicast over the Internet.
2. Then start a **New Live Event** and select a low-bit rate encoding preset; or check with the viewer how much bandwidth is available and select the encoding preset depending on that.

Viewer configurations

1. The viewer has to check with his IT administrator that ports 554 and 7070 of the firewall are open.

I cannot view any live or video-on-demand MPEG-4 files

1. To check that the streaming server, 4Sight is running:
 - Go to **Start>Settings>Control Panel>Administrative Tools>Services**, 4Sight status must be **Started**
 - Or connect to your streaming server IP address on port 1220:
http://StreamingServer_IP_address:1220
2. Check if your MPEG-4 file has been created (click the **MPEG-4 Library** tab).
3. Check if your MPEG-4 file has been uploaded to 4Sight server.

Design template can be viewed but integrated video or slides are not displayed

1. Check that the IP settings of the 4Forum machine are correctly set in the **Settings>General** Tab.
2. Check if the streaming server, 4Sight is running:
 - Go to **Start>Settings>Control Panel>Administrative Tools>Services**, 4Sight status must be **Started**
 - Or connect to your Streaming Server IP address on port 1220:
http://StreamingServer_IP_address:1220
3. Check the location of the folder where the streaming server is serving.
4. On 4Forum side, check the broadcast IP address (go to the **Settings>Encoding** tab).
5. Check the multicast/unicast Transmission Mode (go to the **Settings>Network** tab).

Why is my screen capture encoded in a poor quality?

1. Start a New Live Event and double check that you have selected the same resolution for your background design template, encoding preset and laptop resolution.
2. Increase the bit rate of your VGA stream (see "VGA parameters" on page 113).

What does the "Signal format not supported" message mean?

The resolution and/or the signal frequency of your laptop are too high. Change the resolution and/or the signal frequency of your laptop.

NOTE

4Forum supports resolutions up to 1600 x 1200 with a frequency up to 85 Hz.

The FTP connection is not working (when the streaming server and 4Forum are not installed on the same machine)

1. Check that your FTP connection is working:
 - Open a DOS window and type **cmd**. Then, in the command line window, type **ftp IP_address_of_ftp_sever** (for example, *ftp 192.168.100.100*).
2. Check your Internet connection: double check that your FTP server is running when you use 4Forum:
 - Go to the **Settings>General** tab and check the IP address of your streaming server machine and your FTP server preferences.

NOTE

The login and password must be the same as those specified for your FTP server. Configure the FTP server to give users download, upload, read, and write permissions for your allocated FTP folder. Restart the FTP server after making any changes.

“Sorry, could not ftp live.mp4” is displayed when the streaming server and 4Forum are not installed on the same machine

This error message appears when you are creating a **New Live Event** and you are using a separate streaming server with either the wrong FTP login/password or the wrong IP address.

Click the **Settings>Network** tab to check if the streaming server IP address and the FTP login/password are valid.

What does the error message "High CPU usage" mean?

When the CPU used is higher than 90%, 4Forum generates an error message. The message disappears when the CPU usage decreases below 85 %.

How do I decrease the CPU usage on the viewer's machine?

You can decrease the CPU usage of the viewer's machine:

- by decreasing the size of the template, for example you can use the **blue800x600** template.
- by decreasing the quality of the encoding preset and choosing a low bit rate.

NOTE

The resolution of your laptop, background design template and encoding preset must be consistent, for example blue **800x600**, **blue800x600.ebp** and **video800x600_low_bitrate.prj**.

What does the error message "4Forum is not creating a live event" mean?

This message may appear after filling the **Customize Live Event** step in the **New Live Event** tab. This means that the MPEG-4 file for your live event was not generated.

To resolve this issue, try to start a **New Live Event** again. If it still does not work, restart the 4Forum application

Which languages are supported? How do I switch to another language?

4Forum Administrator Interface supports English, Chinese, and Japanese.

To change the language of your 4Forum Administrator interface, go to the **Settings>General** tab and select your preferred language in the drop-down menu.

APPENDIX B

Specific Configurations

Setting up 4Forum with a separate 4Sight server

FTP server configuration

The separate 4Sight server must be located on a machine containing an FTP server. 4Forum application will upload content files to this FTP server, for live sessions and VOD sessions.

NOTE

When using 4Sight for Linux version as an external streaming server, an FTP server is already installed on the 4Sight device. You can configure it remotely, via the web-based administration tool call Webmin.

You can access Webmin with your favorite Web browser, at this address:

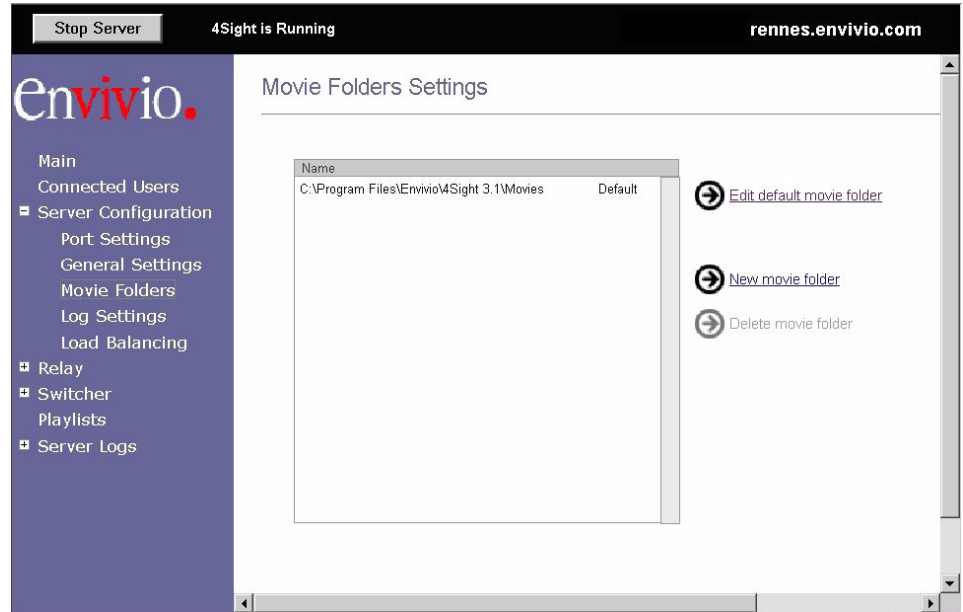
http://<serverIPAddress>:10000/

In the **Servers** tab, click on **WU-FTP Server** link. You will be able to configure your FTP Server from the interface.

The FTP server repository must point to the same location as the 4Sight Movie folder. To get the path to the 4Sight Movie folder, use the 4Sight webAdmin application. Launch a web browser with the following URL:

http://<4SightIPAddress>:1220

Go to the **Server configuration>Movie Folders** sub-menu. The path is displayed in the right frame. You can also update the path from this page.

**NOTE**

The user rights for accessing the FTP server must include read file, write file and file deletion access.

Configuring 4Forum with the external 4Sight.

1. From 4Forum web interface, go to the **Settings** tab, then select the **Network** sub-menu. The streaming server configuration is the second part of the page.
2. Uncheck the **Force to local IP** option, and replace the 4Forum IP Address by the IP Address of the server machine.
You must also specify the login and password of the FTP server, so that 4Forum can automatically upload content files to the server when needed.

If the 4Forum and 4Sight are not on the same multicast network (for example when 4Sight is hosted somewhere on the internet and your 4Forum is local in your office), 4Forum needs to unicast to 4Sight.

From 4Forum web interface, go to the **Settings** tab, then select the **Encoding** sub-menu. Set the **Broadcast IP Address** to the IP address of your external 4Sight.

Setting up 4Forum and 4Sight behind a firewall

Firewalls Overview

In very simple terms, a firewall is a device or program for monitoring and controlling all that comes into and goes out of your network. Almost all major companies use a firewall to protect their internal network from the outside.

Traditionally, firewalls were - and in many cases still are - very expensive dedicated pieces of hardware that use a "rule set" to either allow or disallow connections through it. An efficient firewall will do it at the packet level that is look at every piece of data or packet individually before deciding to either accept it or drop it.

TCP transport mode

4Forum uses the RTSP/TCP protocol on the 4Sight RTSP port specified in the **Settings>Network** tab. So this port must be opened on the firewall.

UDP transport mode

4Forum uses RTP/UDP and RTCP/UDP on 6 ports to stream the video and audio tracks. The base ports are specified in the Broadcast port parameters from the **Settings>Encoding** tab.

- For the VGA part, two ports must be opened on the firewall:
(VGA Broadcast port) and (VGA Broadcast port + 1)
- For the presenter, four ports must be opened:
from (Presenter Broadcast port) to (Presenter Broadcast port + 3)

For example, if the VGA Broadcast port is **6148** and the Presenter Broadcast port is **7570**, then the firewall must open the ports **6148, 6149, 7570, 7571, 7572, 7573**.

Setting up 4Forum to stream over HTTP port 80

HTTP Tunneling

Many firewalls are configured to allow HTTP protocol traffic on port 80 only - this way, users inside the firewall can browse web pages but nothing else. It also prevents external attempts from accessing the network inside the firewall.

This is the reason why we developed HTTP tunneling into EnvivioTV and 4Sight. HTTP tunneling allows you to use the port 80 to stream your content. RTP, RTSP and RTCP packet are encapsulated into HTTP packets.

To use HTTP tunneling (i.e. streaming over HTTP on port 80), follow these steps:

1. In the **Settings>Network** tab, set the **Transmission Mode** parameter to Unicast, and delete the **RTSP Port** value.
2. In the 4Sight Web Admin, go to the **Server Configuration>Port Settings** sub menu and select the **Streaming on Port 80** option.

NOTE

4Sight and 4Forum must not be located on the same machine (i.e. use an external 4Sight).

If you want to close all ports on the firewall except port 80 in HTTP, then 4Sight and 4Forum must be located on the same multicast network, otherwise you will have to open the six ports to stream video and audio from the 4Forum to the 4Sight (see "UDP transport mode" on page 138).

APPENDIX C

Physical Characteristics

Rack-mount chassis

Dimensions	Width: 483 mm (19"), Height: 90mm (3.5"), Depth: 635 mm (25")
Weight	23 kg (51 lb)
Operating temperature	5° C to 35°C (41° F to 95°F)
Operating humidity	15% to 80% (relative)
Storage temperature	-40° C to 70°C (-40° F to 158°F)
Storage humidity	8% to 80% (relative)
Power supply	Input voltage: 100 to 240 VAC auto-ranging Input frequency: 50/60 Hz
Maximum power output	460 W

Tower chassis

Dimensions	Width: 227 mm (8.9"), Height: 506 mm (19.9"), Depth: 503 mm (19.8")
Weight	27 kg (59 lb)
Operating temperature	5° C to 35°C (41° F to 95°F)
Operating humidity	15% to 80% (relative)
Storage temperature	-40° C to 70°C (-40° F to 158°F)
Storage humidity	8% to 80% (relative)
Power supply	Input voltage: 100 to 240 VAC auto-ranging Input frequency: 50/60 Hz
Maximum power output	400 W

4Forum *Lite*

Dimensions	Width: 322 mm (12.7"), Height: 68.58 mm (2.7"), Depth: 254 mm (10")
Weight	5 kg (11 lb)
Operating temperature	5° C to 35°C (41° F to 95°F)
Operating humidity	15% to 80% (relative)
Storage temperature	-40° C to 70°C (-40° F to 158°F)
Storage humidity	8% to 80% (relative)
Power supply	Input voltage: 100 to 240 VAC Input frequency: 50/60 Hz
Maximum power output	120 W

APPENDIX D

Regulatory information

(under certification)

Product safety regulations

The product has been designed to comply with the following regulations:

UL 1950 - CSA 950 (US/Canada)

EN 60 950 (European Union)

IEC 60 950 (International)

CE – Low Voltage Directive (73/23/EEC) (European Union)

EMKO-TSE (74-SEC) 207/94 (Nordics)

GOST R 50377-92 (Russia)

IRAM Type Certification (Argentina)

Product EMC regulations

The product has been designed to comply with the following regulations:

FCC /ICES-003, Class A Emissions (USA/Canada) Verification

CISPR 22, 3rd Edition, Class A Emissions (International)

EN55022, Class A Emissions (CENELEC Europe)

EN55024: 1998, Immunity (CENELEC Europe)

EN61000-3-2, Harmonics (CENELEC Europe)

EN61000-3-3, Voltage Flicker (CENELEC Europe)

CE – EMC Directive 89/336/EEC (CENELEC Europe)

VCCI, Class A Emissions (Japan)

AS/NZS 3548 Class A Emissions (Australia / New Zealand)

BSMI CNS13438 Class A Emissions (Taiwan)

GOST R 29216-91, Class A Emissions (Russia)

GOST R 50628-95, Immunity (Russia)

RRL, MIC Notice No. 1997-41 (EMC) & 1997-42 (EMI) (Korea)

Electromagnetic compatibility notices

FCC statement (USA)

This device has been designed to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

ICES-003 (Canada)

Cet appareil numérique respecte les limites bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par le Ministre Canadian des Communications.

English translation: This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Canadian Department of Communications.

Europe (CE declaration of conformity)

This product has been designed to comply with the Low Voltage Directive (73/23/EEC) and EMC Directive (89/336/EEC). The product has been marked with the CE Mark to illustrate its compliance.

VCCI (Japan)

この装置は、クラスA 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI- A

English translation: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take corrective actions.

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