



# CHAPTER 7

## Adding Distribution Settings to a Job Profile (CLUI)

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**Revised: October 10, 2008, OL-16995-01**

Distribution tabs tell the Cisco MXE 3000 what to do with output files once encoding is complete.

This section includes the following topics:

- [When to Add a Distribution Tab to a Job Profile, page 7-1](#)
- [Delivery, page 7-1](#)
- [Notification, page 7-9](#)
- [Output, page 7-13](#)
- [Variables Used for File and Directory Naming, page 7-16](#)



**Note**

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From the main menu, select Distribution to display distribution options.

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## When to Add a Distribution Tab to a Job Profile

Distribution tabs allow users and administrators to save encoded output according to their specific business needs in addition to or instead of the default location.

Distribution tabs are not a required component of Job Profiles. By default, output files will be saved to the system default locations. When any type of distribution tab is added to a job or Job Profile, the system default will be overridden. When any type of distribution tab is added to a job or Job Profile, the output file is sent to the location specified on the distribution tab in addition to the default distribution location.

Likewise, distribution tabs are used to automate portions of the encoding workflow. For example, if encoded clips must be reviewed before they are moved to a streaming server, you can add a Delivery tab to automatically send the media to the reviewer's server using FTP, eliminating the need to manually FTP files. Or, if encoding files for an external customer, you can use the Notification tab to automatically post job statuses (via HTTP Post or e-mail) to a site for client reference.

## Delivery

This section includes the following topics:

- [Introduction to the Delivery Tab, page 7-2](#)

- [Understanding Delivery Settings, page 7-4](#)
- [Adding a Delivery Tab to a Job Profile, page 7-9](#)

## Introduction to the Delivery Tab

Delivery tabs are added to a job or a Job Profile from the main menu, by selecting **Distribution > Add Delivery**. Adding a Delivery tab is optional.

The Delivery tab controls the distribution of encoded media files. Encoded media can be copied to a network drive or can be delivered to another site via File Transfer Protocol (FTP). You can add one or multiple Delivery tabs to a job or a Job Profile. Each Delivery tab specifies how a subset of all the encoded outputs will be delivered. Multiple deliveries and multiple delivery methods may be specified with multiple Delivery tabs. For instance, within one job, you can have Real and QuickTime outputs delivered to a network drive. Then you can add another tab that sets delivery of Windows Media output to another site via FTP.

If a Delivery tab is not added to a job or a Job Profile, files will be saved to the system default location or to the client default location defined on the [General Preferences](#) tab.

See also: [Understanding Delivery Settings](#) for a description of each of the settings in [Figure 7-1](#).

Figure 7-1 Delivery Tab

The screenshot shows the 'Delivery (untitled...)' tab in the Media Experience Engine application. The window has a menu bar with 'File', 'Edit', 'Encoder', 'Imaging', 'Distribution', 'View', 'Tools', and 'Help'. Below the menu bar are three tabs: 'File Job', 'Preprocessor (...)', and 'Delivery (untitled...)'.

The main content area is divided into three sections:

- Formats to Deliver:** A section with a blue header containing several unchecked checkboxes: H.264, MPEG, QuickTime, Thumbnails, Select Profiles, Flash 8, MP3, Real, WAV, and Windows Media. There is an empty rectangular box to the right of the 'Select Profiles' checkbox.
- Delivery Method:** A section with a blue header containing:
  - Copy: Location [text input field]
  - FTP: Hostname [text input field], Directory [text input field], Username [text input field], Password [text input field], Port [text input field with value '21']
  - Retry attempts [text input field with value '0'], Minutes between retry attempts [text input field with value '2']
  - Secure FTP,  Passive,  Use Temp File
- Rename on Delivery:** A section with a blue header containing:
  - Rename Output: Output Filename [text input field with value '\$(basename).\$(profile).\$(subprofile).\$(ext)']

On the right side of the window, there is a vertical label '271954'.

## Understanding Delivery Settings

Each Delivery tab is made up of the following sections:

- [Formats to Deliver](#)
- [Select Profiles](#)
- [Delivery Method](#)
- [Rename on Delivery](#)



### Note

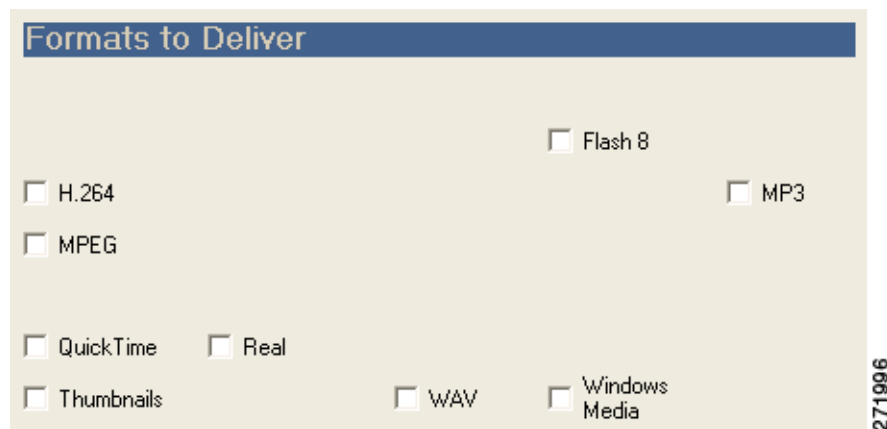
You may choose to deliver one or more formats or one or more particular profiles.

## Formats to Deliver

Select file types to be delivered to the location defined in the [Delivery Method](#) section.

Checking a particular format type will specify that all the encodes for that encoder will be delivered. Unchecked formats are not delivered.

**Figure 7-2** *Delivery Tab: Formats to Deliver*

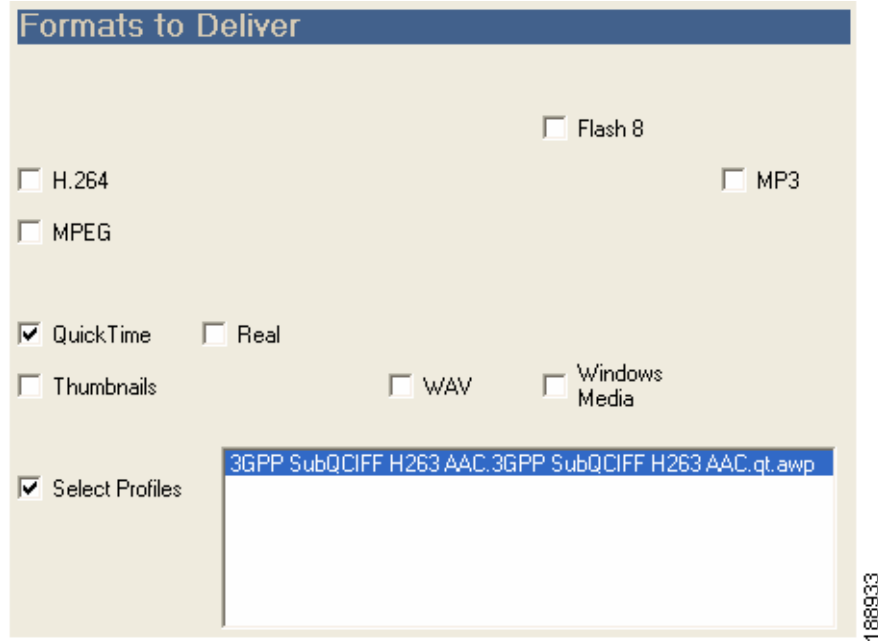


## Select Profiles

In addition to checking one or more format boxes, check the Select Profiles box, shown in [Figure 7-3](#), to specify a distribution method limited to certain profiles within the encoder types.

Checking this box allows profiles to be picked from the adjacent list.

**Figure 7-3 Delivery Tab: Select Profiles Checkbox**



The Select Profiles box lists the profiles used in the current job. Select only the profiles for which you want to set delivery.

Click on a profile name to select it (or select multiple profiles using the Shift or Ctrl keys). The encoded files generated from the selected profiles are then subject to the delivery method specified on this tab.

If the Select Profiles box is not checked, individual profiles cannot be selected and are grayed out.



**Note**

To deliver to individual profiles, you must check at least one Format to Deliver, you must check the Select Profiles box, and you must highlight the chosen profile(s).

## Delivery Method

Use this section, shown in [Figure 7-4](#), to specify delivery method, choosing to copy the output to a file location and/or to FTP the output to a host.

**Figure 7-4 Delivery Tab: Delivery Methods**

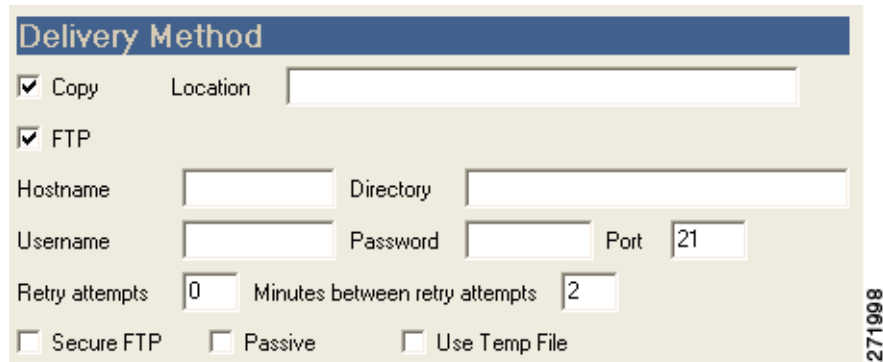


Table 7-1 describes the settings.

**Table 7-1 Delivery Method Settings and Descriptions**

Setting	Description
Copy	Check this box to allow encoded files to be copied to a network folder.
Location	Specify the network folder to which the encoded files will be copied, by entering the UNC path of a network folder (Example: \\Machine\EncodedMedia).  Note: The path must be to a network folder to which you have access from the node that executes the Distribution worker. If your MXE-3000 is configured to work with a SAN, you can use the drive letter mapping of the SAN that is common to all hosts. Also, variables can be used in this field to define custom directories and filenames for copying files. See also: <a href="#">Notification</a> .
FTP	Check this box to send encoded files to another server via FTP, and specify the following settings, if applicable:
Hostname	The hostname (or address) of the FTP server that will receive the output files
Directory	The name of the directory path where the file will be stored. Variables can be used in this field to define custom directories.
Username	The username used to establish the FTP session, if required
Password	The password used to validate the user establishing the FTP session, if required
Port	The port the destination server uses for FTP traffic. The port number is supplied by the administrator of the destination server.
Retry attempts	The maximum number of times (0-16) an attempt will be made after the first FTP transfer fails.
Minutes between retry attempts	The number of minutes the Cisco MXE 3000 will wait after a failed FTP connection attempt before trying again.
Secure FTP	Check the box to use the secure FTP protocol.
Passive	Check this box to request Passive mode from the host. In Passive mode, the FTP host server opens a random port and tells the Cisco MXE 3000 the address and port on which it is listening.
Use Temp File	Check this box to use a temporary remote filename and rename after the transfer completes. This option helps prevent an external system from ingesting the remote file that failed to completely transfer. For example, if the FTP connection was dropped during the transfer, a partial file could be left at the destination. Only after a completed transfer will the delivered file be renamed to its desired name. See also: <a href="#">Understanding FTP .tmp File Extension</a> for more information on the .tmp file extension.

## Rename on Delivery

Figure 7-5 shows the Rename on Delivery section.

**Figure 7-5** *Rename on Delivery*



Table 7-2 describes the settings.

**Table 7-2** *Rename on Delivery Settings and Descriptions*

Setting	Description
Rename Output	Check this box to enable file renaming, as determined by the Output Filename box. If this box is not checked, the files retain the same names they have in the normal output folders.
Output Filename	The text and/or pattern of variables used to build the names of output files. Variables can be used to replace the default file name structure with one that reflects the unique Job Profile requirements. See also: <a href="#">Notification</a> .

## Understanding FTP .tmp File Extension

This section includes the following topics:

- [Overview of File Transfer, page 7-7](#)
- [Addition of .tmp Extension, page 7-7](#)
- [Enabling the .tmp File Extension, page 7-8](#)

### Overview of File Transfer

After the encoding process, the newly generated file is transferred through file transfer protocol (FTP) from the Cisco MXE 3000 file system to the target server. The transfer takes place one chunk at a time, until the file is completely copied.

A problem can occur if there is an interruption in the transfer (i.e., lost connection or remote FTP server down) and the file is not completely copied over. FTP does not provide guaranteed delivery of the complete files, and valid but incomplete files could result. A validation mechanism is needed to ensure that content is fully uploaded before the watch folder agent begins to ingest the file.

### Addition of .tmp Extension

The Cisco MXE 3000 File Manager (FM) adds a .tmp extension to the target file name during transfer. After the upload is complete, FM removes the .tmp extension from the target file name. If the transfer is incomplete, the .tmp extension remains. Therefore, the watch folder agent can be configured to ignore files with a .tmp file extension to ensure complete transfers.

Example: Target file thefile.bmp is uploaded as thefile.bmp.tmp then renamed to thefile.bmp.

**Note**

The recommended Minutes between retry attempts value is 3 or greater. This gives the remote FTP server enough time to recycle the previously failed session.

## Enabling the .tmp File Extension

- From the main menu: On the **Distribution > Add Delivery** tab, under Delivery Method, check the **FTP** box and the **Use Temp File** box, as shown in [Figure 7-6](#).

**Figure 7-6** FTP and Use Temp File Checkboxes

- From **File Manager**: The Boolean field use-temp-file resides in the File Manager's Task XML parameter section. (See example XML in [Figure 7-7](#).) This field is optional and defaults to false. The preferred field values are: yes or no. An empty field <use-temp-file/> is treated as a true value.

**Figure 7-7** Example XML

```

<task>
  <type>fileman</type>
  <license>fileman</license>
  <io>
    <input-directory>C:/media</input-directory>
    <input-file>downfall.mpg</input-file>
    <output-directory>/Users/shared</output-directory>
    <output-file></output-file>
  </io>
  <parameters>
    <command>put-file</command>
    <ftp-server>10.3.2.101</ftp-server>
    <user-name>adamgrace</user-name>
    <user-password>qatest</user-password>
    <port-number>21</port-number>
    <retry>3</retry>
    <retry-period>1</retry-period>
    <use-temp-file>yes</use-temp-file>
  </parameters>
</task>

```

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## Adding a Delivery Tab to a Job Profile

### Procedure

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- Step 1** From the main menu, click **File** and **New Job Profile** or **Open Job Profile**.
- Step 2** From the main menu, click **Distribution > Add Delivery**. A Delivery tab is added to the job.
- Step 3** Set Formats to Deliver, Delivery Methods, and Rename on Delivery settings. See also: [Understanding Delivery Settings](#).
- Step 4** Click **File > Save Job Profile** to save changes.
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## Notification

This section includes the following topics:

- [Introduction to the Notification Tab, page 7-9](#)
- [When to Use the Notification Feature, page 7-9](#)
- [Understanding Notification Settings, page 7-10](#)
- [Adding a Notification Tab to a Job Profile, page 7-13](#)

## Introduction to the Notification Tab

Notification tabs are added to a job or a Job Profile from the main menu, by selecting **Distribution > Add Notification**. Adding a Notification tab is optional.

Notification settings enable the Cisco MXE 3000 to send messages regarding job success or failure. The four forms of notification available are:

- E-mail
- HTTP Post
- TCP Post
- UDP Post

Any of the above notification types can be used separately or together. It is also possible to use multiple Notification tabs to implement complex notification scenarios.

## When to Use the Notification Feature

Add a Notification tab if you want to be notified of a job's completion, or if you need metadata from the job to be sent to another location. For example, you may elect to receive an e-mail alert whenever a job fails, or a list of output file names for every successful encode. In another example, watermarking associates metadata items with an embedded watermark payload, and these metadata are included in the notification, which can be forwarded to a central database via HTTP post.

See also: [Understanding Notification Settings](#) for a description of each of the settings in [Figure 7-8](#).

Figure 7-8 Notification Tab

Media Experience Engine : Cable\_Broadband.job.awp\*

File Edit Encoder Imaging Distribution View Tools Help

File Job Preprocessor (...) WM (Cable\_Broa...) Notification (...)

On Failure

Email

Address

Address

HTTP Post

80

TCP Post

80

UDP Post

80

271962

## Understanding Notification Settings

Each Notification tab is made up of five sections used to define when and how notification will take place.

- [Send Notification](#)
- [Email](#)
- [HTTP Post](#)
- [TCP Post](#)
- [UDP Post](#)

## Send Notification

Select the status at which a notification is sent.

- Always
- On Success
- On Failure



**Note**

Failed jobs are jobs that fail at any point in the process and include jobs stopped by a user..

## Email

Check this box, shown in [Figure 7-9](#), to enable e-mail notification. Notifications are forwarded to the server name previously configured at the time of your system deployment. The server must be running the Simple Mail Transport Protocol (SMTP) service to process the e-mail transmission.

**Figure 7-9 Notification Tab: Email**

### From and To Options

- **Address:** uses an e-mail address supplied in the From Address field
- **System Administrator:** uses the System Administrator e-mail address stored in the Cisco MXE 3000 database.



**Note**

The To Address can be any type of account capable of receiving text messages from an SMTP server, regular e-mail addresses, pagers, and text-enabled cellular phones.

## HTTP Post

Check this box, shown in [Figure 7-10](#), to define parameters used to post notification messages to web servers using HTTP Post.

**Figure 7-10** Notification Tab: HTTP Post

HTTP Post  
 Server Name   
 Port   
 CGI Path

272032

**HTTP Post Fields**

- **Server Name:** Enter the host name of the web server to which HTTP notification messages will be posted. This is a required field.
- **Port:** Enter the TCP port used for HTTP communication with the web server specified. If no value is specified the default port, port 80, will be used.
- **CGI Path:** Enter the path of the Common Gateway Interface (CGI) script used for HTTP notification. The path does not include the server name, which is supplied in the HTTP Server name field above, but does include the file name of the script being called.

**TCP Post**

Check this box, shown in [Figure 7-11](#), to enable Transmission Control Protocol (TCP) post notifications.

**Figure 7-11** Notification Tab: TCP Post

TCP Post  
 Server Name   
 Port

272033

**TCP Post Fields**

- **Server Name:** Enter the name of a destination server for the notification. This is a required field.
- **Port:** Enter the destination server's TCP port number. If no value is specified the default port, port 80, will be used.

**UDP Post**

Check this box, shown in [Figure 7-12](#), to enable User Datagram Protocol (UDP) post notifications.

**Figure 7-12** Notification Tab: UDP Post

UDP Post  
 Server Name   
 Port

272034

**UDP Post Fields**

- **Server Name:** Enter the name of a destination server for the notification. This is a required field.
- **Port:** Enter the destination server's TCP port number. If no value is specified the default port, port 80, will be used.

## Adding a Notification Tab to a Job Profile

**Procedure**

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- Step 1** From the main menu, click **File** and **New Job Profile** or **Open Job Profile**.
  - Step 2** From the main menu, click **Distribution > Add Notification**. A Notification tab is added to the job.
  - Step 3** Check boxes and complete fields as needed. See also: [Understanding Notification Settings](#).
  - Step 4** Click **File > Save Job Profile** to save changes.
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## Output

This section includes the following topics:

- [Introduction to the Output Tab, page 7-13](#)
- [Understanding Output Settings, page 7-14](#)
- [Adding an Output Tab to a Job Profile, page 7-16](#)

## Introduction to the Output Tab

Output tabs are added to a job or a Job Profile from the main menu, by selecting **Distribution > Add Output**. Adding an Output tab is optional.

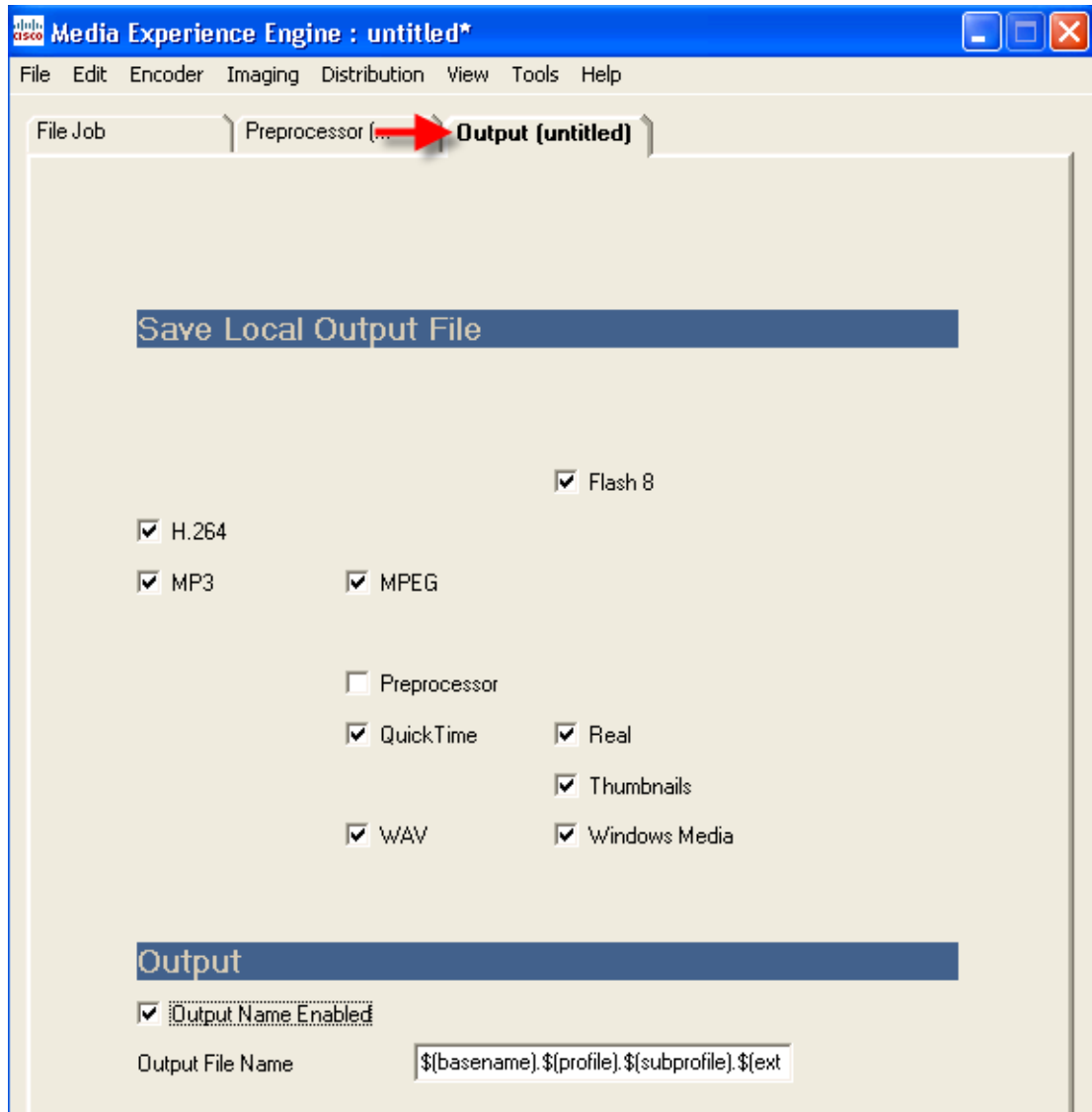
Use this tab to identify encoder types for which the output files should be saved locally.

The output file locations are defined during system setup. The name assigned to each output file is determined either by the client default defined in the [General Preferences](#) tab or by the Output File Name defined on the Output tab.

Output files that are not saved are automatically removed from the local machine as the last step of a job. When a delivery method is used (see [Delivery](#) Tab) there may be no reason to keep the local files. The automatic file removal keeps the local machine clean for high-volume users.

See also: [Understanding Output Settings](#) for a description of each of the settings in [Figure 7-13](#).

Figure 7-13 Output Tab



## Understanding Output Settings

Each Output tab is made up of two sections:

- [Save Local Output File](#)
- [Output](#)

### Save Local Output File

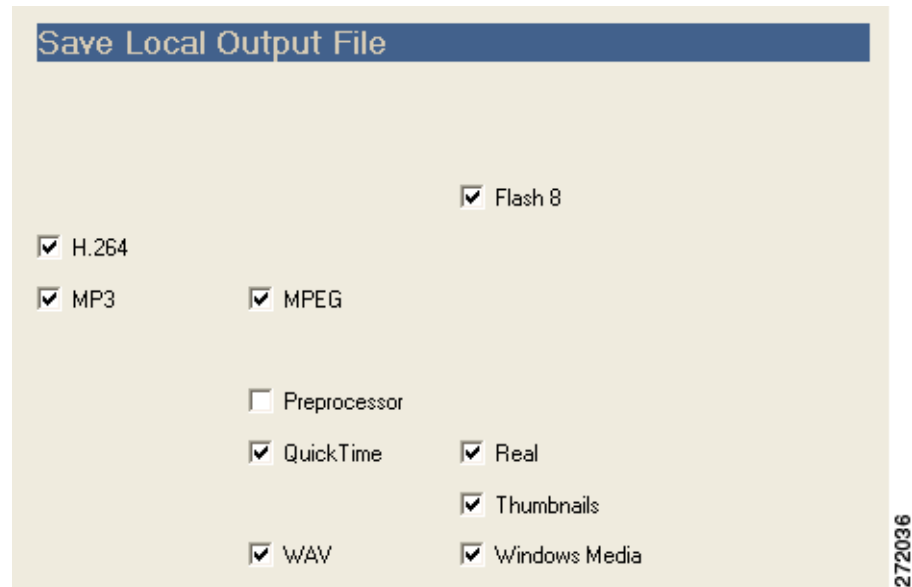
Check the boxes, shown in [Figure 7-14](#), to specify output for certain encoded formats.

Checking a particular format type will specify that all the encodes for that encoder will be saved in the output folder. Unchecked formats are not saved.

**Note**

The Preprocessor checkbox allows the Cisco MXE 3000 intermediate preprocessed files to be retained in the temporary directory.

**Figure 7-14 Save Local Output File**



## Output

Figure 7-15 shows the Output section.

**Figure 7-15 Output**



- **Output Name Enabled:** Check this box to allow output files to be renamed according to the Output File Name box below. If unchecked, the files are named according to the default format defined in [General Preferences](#).
- **Output File Name:** This field defines the new name for encoded output files.

You may use Cisco MXE 3000 substitution macros, which allow this single entry to specify the names of multiple encoded outputs. By default, the box holds:

`${basename}.${profile}.${subprofile}.${extension}`, which ensures that each encoded file will receive a distinct name.

## Adding an Output Tab to a Job Profile

### Procedure

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- Step 1** Click **File** and **New Job Profile** or **Open Job Profile**.
  - Step 2** From the main menu, click **Distribution > Add Output**. An Output tab is added to the job.
  - Step 3** Check the appropriate **Save Local Output File** boxes, and complete the Output section, if needed. See also: [Understanding Output Settings](#).
  - Step 4** Click **File > Save Job Profile** to save changes.
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## Variables Used for File and Directory Naming

Table 7-3 describes the variables for file and directory naming.

**Table 7-3** File and Directory Naming Variables and Descriptions

Variable	Description
\$(date)	Inserts the current date in a <i>yyyymmdd</i> format.
\$(time)	Inserts the current time in 24-hour format, <i>hhmmss</i> .
\$(day)	Inserts the current day of the month as a two digit number.
\$(month)	Inserts the current month as a two digit number.
\$(year)	Inserts the current year as a four digit number.
\$(author)	Inserts the author metadata provided on the File Job tab.
\$(title)	Inserts the title metadata provided on the File Job tab.
\$(profile)	Inserts the name of the Job Profile used to encode the output file.
\$(basename)	Inserts the Output Name provided in the File Job tab.
\$(format)	Inserts a description of the file type created during encoding.
\$(extension)	Inserts the appropriate file extension for the type of file created.
\$(filename)	Inserts the name of the source file.
\$(uid)	Creates a unique filename based on text or other values included, which are appended by a number. For example, <i>File1</i> , <i>File2</i> , <i>File3</i> , and so on.
\$(user-data)	Inserts text entered on the encoder tab using the Change Encoded Data command from the Edit menu. This variable can only be used in Output Profiles.