



# Media Server

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## About Media Server

Many of the optional features in Packaged CCE require a Cisco Unified Customer Voice Portal (CVP) media server to store and serve supporting `.wav` files. This chapter describes how to set up a CVP media server. It also describes expanded call variable settings that are related to the media server and requirements for accessing a media server in call routing scripts.

The features that require a CVP media server include Agent Greeting, Courtesy Callback, Post-Call Survey, and Whisper Announcement.

## Prepare a Media Server

A media server is installed by default on each of the CVP servers in a Packaged CCE deployment.

### Procedure

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**Step 1** Ensure that IIS is properly configured and running on the server. It must be listening on port 80. To validate proper configuration of the media server, launch a browser from a remote machine that is able to ping the CVP server and attempt to access and play one of the default media files installed during the CVP installation such as `http://<cvp_ip>/en-us/app/en_1.wav`. If the file is accessible, the media server is installed correctly.

**Note** Use Microsoft IIS with Unified CVP. This component is automatically installed as part of the CVP server package installation.

**Step 2** Ensure the server is accessible to CVP, Unified CCE, and your agent desktops.

**Step 3** Perform the following steps:

- On the taskbar, click **Start**, point to **Administrative Tools**, and then click **Server Manager**.
- In the **Server Manager** hierarchy pane, expand **Roles**, and then click **Web Server (IIS)**.
- In the **Web Server (IIS)** pane, scroll to the **Role Services** section, and then click **Add Role Services**.

- d) On the **Select Role Services** page of the **Add Role Services** wizard, expand **FTP Server**.
- e) Select **FTP Service**

**Note** To support ASP.NET membership or IIS Manager authentication for the FTP service, you need to select **FTP Extensibility**.

- f) Click **Next**.
- g) On the **Confirm Installation Selections** page, click **Install**.
- h) On the **Results** page, click **Close**.
- i) In the sites section, click **Add FTP Site**. Provide a site name and path to the same location as the http directory `c:\inetpub\wwwroot`.
- j) Select your desired binding method, and specify to start immediately.
- k) On the FTP SSL Settings, select **Allow SSL Connections**.
- l) On the **Authentication and Authorization** section select the type of authentication required. If using basic, note the name and password of the account.
- m) Select the authorization; for anonymous select **Anonymous users**.
- n) Set the read and write permissions.

**Note** Make note of your FTP connection information -- connection type, user name, password, and port number.

**Step 4** Make sure that the FTP and the IIS share the same root directory, because the recording application writes the file to the media server directory structure, and the greeting playback call uses IIS to fetch the file. The `en-us/app` directory should be under the same root directory for FTP and IIS.

**Step 5** Create a dedicated directory on the server to store your greeting files. This lets you specify a lower cache timeout of 5 minutes for your agent greeting files that does not affect other more static files you may be serving from other directories. By default, the Record Greeting application posts the `.wav` file to the `en-us/app` directory under your `web/ftp` root directory. You may create a dedicated directory such as `ag_gr` under the `en-us/app` directory, and then indicate this in the Unified CCE script that invokes the recording application. Use the array for the expanded call variable `call.user.microapp.ToExtVXML` to send the `ftpPath` parameter to the recording application. Make sure the expanded call variable length is long enough, or it may get truncated and fail.

**Step 6** To allow re-recorded greetings to replace their predecessor in a reasonable amount of time while minimizing requests for data to the media server from the VXML Gateway, configure a cache expiration value in IIS Manager. The ideal value varies depending on the number of agents you support and how often they re-record their greetings. Two minutes may be a reasonable starting point.

To configure a cache expiration value in IIS Manager:

- a) Find the site you are using, go to the agent greeting folder you created (`ag_gr`), and then select **HTTP Response Headers**.
- b) Click **Set Common Headers** on Actions panel.
- c) Select **Expire Web Content** and set the desired value.

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### What to do next

- After specifying the cache timeout, it is a good idea to clear the cache on the VXML Gateway. This ensures the gateway requests the latest files from the media server. You need only clear the gateway cache once. Reset the gateway to clear the cache.

The HTTP client response timeout setting on the gateway must be greater than the time it takes to complete the largest anticipated FTP file transfer. If an FTP file transfer takes longer than the configured duration in seconds for HTTP client response timeout, the FTP transfer completes correctly, but the call drops as soon as the configured timeout duration is met. To change the HTTP client response timeout setting, open a command prompt on the CVP VXML Gateway, log into IOS, and enter the following commands:

```
my_server# conf t
my_server(config)# http client response timeout <new value in seconds>
my_server(config)# exit
my_server(config)# wr
```

By default, the HTTP client response timeout value for CVP VXML Gateway is 30 seconds.

- Add Media Servers in the **Unified CCE Administration > Infrastructure > Inventory** page. For more information, see the *Cisco Packaged Contact Center Enterprise Administration and Configuration Guide* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/products-maintenance-guides-list.html>.

## Reference a Media Server in CCE Scripts

### Specify Media Server in Routing Scripts

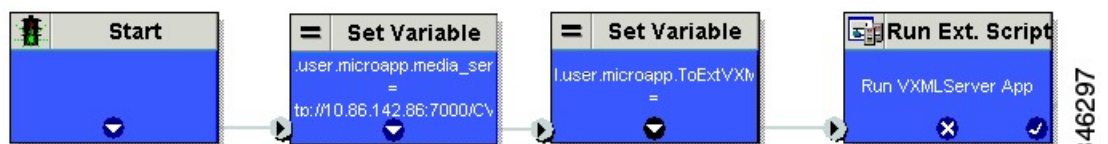
When you configure media servers in CVP, you can specify a default media server. The benefit to specifying a default media server is that your scripts do not need a Set Variable node to access the default media server. For this to work, you must make sure that the files a script requests are stored on the default server.

If you do not define a default media server, or if you define a default but the files that your script requires are not stored on the default, then the script must include a Set Variable node to identify a media server.

To specify a media server that stores the files required by your script, use the following settings in the Set Variable node:

- Object Type: Call.
- Variable: Must use the user.microapp.media\_server expanded call variable.
- Value: Specify the HTTP path to the server. For example: “http://myserver.mydomain.net.” You must enclose the path in quotes.
- Alternately you can specify an IP address in place of a hostname.

See the following example.



## Specify Greeting File Locale and Application Directories in Routing Scripts

CVP uses a default storage directory for media files: `<web_server_root>/en-us/app`. The physical location of the default storage directory is `c:\inetpub\wwwroot\en-us\app`. To take advantage of this, Packaged CCE call routing scripts automatically add `en-us/app` to the server name when constructing HTTP requests for media files. For example:

- If the script node that defines the media server has a value of “`http://myserver.mydomain.com`,” and
- The script node that defines which audio file to play has a value of “`5050_1.wav`” (for an agent with a Person ID of 5050), then
- The HTTP request for the file is automatically constructed as  
`http://myserver.mydomain.com/en-us/app/5050_1.wav`

If your greeting audio files are stored in a different locale directory, you must add a Set Variable node to your script that identifies the locale directory. As you must store your greeting files in a dedicated subdirectory under the locale, you must always add a Set Variable node that identifies that directory.

Use these settings in the Set Variable node to specify your locale directory:

- Object Type: Call.
- Variable: Must use the `user.microapp.locale` expanded call variable.
- Value: Specify the directory name. For example: “`pt-br`” (Portuguese-Brazil). You must enclose the path in quotes.

Use these settings in the Set Variable node to specify your application directory:

- Object Type: Call.
- Variable: Must use the `user.microapp.app_media_lib` expanded call variable.
- Value: Specify the directory name. For example: to use a directory “`greet`” in place of the default directory “`app`”, enter “`greet`”. To use a sub-directory “`greet`” under “`app`” enter “`app/greet`”. You must enclose the path in quotes.

## Verify Length for Media Server Locale and Application Directory Variables

If you include Set Variable nodes for the media server, locale, and/or application directories, make sure that the values you set for them do not exceed the Maximum Length settings for their corresponding expanded call variables.

For example, if you include a Set Variable node for the media server with a value of “`http://mysubdomain.mydomain.co.uk`”, the string is 33 characters long. Therefore, the Maximum Length setting for the `user.microapp.media_server` expanded call variable must be 33 or greater. Otherwise, the server name is truncated in the HTTP request for the file and the file is not found.

To configure ECC variables, use Unified CCE Administration, navigate to **Overview > Call Settings > Route Settings > Expanded Call Variables**.