



Configuring the Cisco TelePresence Content Server for Streaming Flash from a Wowza Media Server

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Introduction

This deployment guide is designed to provide guidelines for configuring the Cisco TelePresence Content Server and an external Wowza Media server for live and on demand Flash media streaming. These guidelines are for a Content Server running release 5.0.

The Content Server default installation supports only HTTP-based on demand hosting (also known as progressive download) of MPEG-4 for Flash content from its local IIS Web Server. An external Wowza Media server is required for live and on-demand streaming of MPEG-4 content for Flash.

Wowza Media Server Configuration

The information presented here regarding the setup and configuration of your Wowza Media Server is offered as a guideline only and assumes that you are configuring the Wowza Media Server from a fresh install.

Further information regarding the setup and configuration of Wowza Media Server as well as information regarding more advanced configuration alternatives can be found in the Wowza Media support forums through the Wowza Media web site.



Configure for Live Streaming

To set up your Wowza Media Server to accept live streaming of media from your Content Server, follow these steps:

Step 1 Create a new Wowza Pro application for live streaming by creating this directory:

[install-dir]/applications/live



Note

[install-dir] is the install directory of the Wowza software.

Step 2 Create the folder: [install-dir]/applications/_defapp_

Step 3 Create the folder: [install-dir]/conf/live

Step 4 Copy the file [install-dir]/conf/Application.xml into the new folder [install-dir]/conf/live.

Step 5 Open the newly copied [install-dir]/conf/live/Application.xml. Make the following edits (see the [“Example of XML Code: StreamType and Stream Properties”](#) for the location of these parameters in the code):

- a. Change Streams/StreamType to **live**.
- b. Add the following properties to the Streams/Properties container:

```
<Property>
<Name>sortPackets</Name>
<Value>true</Value>
<Type>Boolean</Type>
</Property>
<Property>
<Name>sortBufferSize</Name>
<Value>500</Value>
<Type>Integer</Type>
</Property>
```

Example of XML Code: StreamType and Stream Properties

```

-->
- <Streams>
  <StreamType>live</StreamType>
  <StorageDir>${com.wowza.wms.context.VHostConfigHome}/content</StorageDir>
  <KeyDir>${com.wowza.wms.context.VHostConfigHome}/keys</KeyDir>
  <!-- LiveStreamPacketizers (separate with commas): cupertinostreamingpacketizer, smoothstr
  -->
  <LiveStreamPacketizers />
  <!-- Properties defined here will override any properties defined in conf/Streams.xml for
- <Properties>
  - <Property>
    <Name>sortPackets</Name>
    <Value>true</Value>
    <Type>Boolean</Type>
  </Property>
  - <Property>
    <Name>sortBufferSize</Name>
    <Value>500</Value>
    <Type>Integer</Type>
  </Property>
  </Properties>
</Streams>
<!-- HTTPStreamers (separate with commas): cupertinostreaming, smoothstreaming -->
<HTTPStreamers>cupertinostreaming,smoothstreaming</HTTPStreamers>
- <SharedObjects>
  <StorageDir />
</SharedObjects>

```

- c. Set the authentication method on the Wowza Media Server to **digest** (see the “[Example of XML Code: Authentication](#)” for the location of the authentication parameter in the code):

Example of XML Code: Authentication

```

- <RTP>
  <!-- RTP/Authentication/[type]Methods defined in Authentication.xml. Default
- <Authentication>
  <PublishMethod>digest</PublishMethod>
  <PlayMethod>digest</PlayMethod>
</Authentication>
  <!-- RTP/AVSyncMethod. Valid values are: senderreport, systemclock, rtpptimec
  <AVSyncMethod>senderreport</AVSyncMethod>
  <MaxRTCPWaitTime>12000</MaxRTCPWaitTime>
  <IncomingDatagramPortRanges>*</IncomingDatagramPortRanges>
  <!-- Properties defined here will override any properties defined in conf/R/
  <Properties />
</RTP>

```

- Step 6** Edit the file [install-dir]/conf/rtp.password (or [install-dir]/conf/publish.password if Wowza Media Server 2) and add a username and password.

```

# RTP password file (format [username][space][password])
# username password
cisco changeme

```



Note

The username and password shown above are examples only. You should ensure you use a secure username and password combination for your server installation.

**Note**

The username and password are case sensitive. For the media server to function correctly, the same case must be used in the Content Server interface.

Step 7

If you are only setting up your Wowza Media Server for live streaming from your Content Server then startup the Wowza Media Server, otherwise move on to the next section.

**Note**

Any changes you make to the configurations in [Step 1](#) to [Step 6](#) in the future will require a restart of the Wowza Media Server.

Configure for On-Demand Streaming

To set up your Wowza Media Server to stream on-demand media follow these steps:

Step 1

Create the folder [install-dir]/applications/vod to serve as the application folder.

While there are no further changes required to the Wowza Media Server setup to have it stream media generated by the Content Server on-demand, there needs to be some way for the Content Server to get the media to the Wowza Streaming Server. The suggested method for this is FTP.

Ensure that you have an FTP service running on same server as your Wowza Media Server and that the FTP service has access to write into the [install-dir]/**content** folder on your Wowza Media Server. Please refer to the administration manual of your FTP service for details on how to accomplish this.

**Note**

While the Wowza Media Server supports the recording of live streams at the server, this functionality is not supported by the Content Server.

Step 2

Start up the Wowza Media Server.

TelePresence Content Server Configuration

Now that your Wowza Media Server is configured for live and on-demand streaming, you need to set up the Content Server using that configuration information.

The steps for setting up your Content Server are described below:

- [Create a Media Server, page 5](#)
- [Create a Template, page 6](#)
- [Create a Recording Alias, page 6](#)

Create a Media Server

The following steps will create a new media server on the Content Server with support for live and on demand streaming through Wowza Media Server. If you only require support for one type of streaming, follow the steps as applicable to create a live streaming only or on-demand only media server.

-
- Step 1** From the **Management** tab menu, go to **Recording setup > Media server configurations**.
- Step 2** Click the **Add Wowza Media Server for Flash configuration** link to create a new Wowza Media Server.
- Step 3** Enter a name for your new media server, and enter the server address, Check the type of streaming you want to support. You can check **Support live unicast streaming** or **Support on demand** or both. When you check either options, more configuration settings appear.
- Step 4** If you checked **Support live unicast streaming**, complete the **Live unicast streaming settings**:
- a. Enter a **Streaming port range start** value that is an even port number between 10000 and 65000. The Content Server will use a range of 30 ports beginning at this port number for streaming live calls.
 - b. Enter the user credentials you created in [Step 6](#) of the Configure for live streaming in Wowza Media Server Configuration above.
- Step 5** In most cases when setting up a new media server, it is recommended that you choose to **Use default live URLs**.
- The default Application directory is live and should not require changing.
- You should choose to use alternate live URLs only if you know the live streaming URLs for the Wowza Media Server require different path or filename information to that generated by the Content Server.
- Step 6** If you checked **Support on demand**, media needs to be moved from the Content Server to the Wowza Media Server. The standard method for this is File Transfer Protocol (FTP).
- From the **On demand settings** section, click **FTP movies to location** and enter the required FTP server information:
- Enter the FTP server IP address under **Server address**.
 - The standard FTP port is 21.
 - If you leave the **Directory** field blank then the media will be placed in the root folder of the FTP server.
 - Ensure that the account used for the FTP user has write privileges to the FTP server.
- Step 7** In the **On Demand URLs** section, it is recommended that you click **Use default on demand URLs**.
- The default Application directory is vod and should not require changing.
- You should enter alternate on-demand URLs only if you know the streaming server requires a different path or filename information to that generated by the Content Server.
- Step 8** Click **Save**.
-

Create a Template

Now that you have created a media server which supports streaming of Flash from a Wowza Media Server, you need to use this media server in a Content Server template. Multiple templates can use the same media server.

-
- Step 1** From the **Management** tab, go to **Recording setup > Templates**.
 - Step 2** Click the **Add Template** link to create a new template.
 - Step 3** Enter a Name for your template.
 - Step 4** Check **Viewable in the Content Server web interface**.
 - Step 5** In the **Outputs to view in the Content Server web interface** section, click one of the viewing layouts.
 - Step 6** In the **On demand** section, do the following:
 - a. Click **MPEG-4 for Flash** from the formats available.
 - b. Click one or two options under **Sizes (Audio only, Small, Medium, or Large)**.
 - Step 7** In the **On demand media server configuration settings** section, choose a media server that supports on-demand streaming from a Wowza Media Server.
 - Step 8** Check **Live Stream** if you want the call to be available for live streaming. Ensure that the format for live streaming chosen from the drop-down menu is MPEG-4 for Flash.
 - Step 9** In the **Live media server configuration settings** section, choose a media server that supports live streaming from a Wowza Media Server.
 - Step 10** Click **Save**.
-

Create a Recording Alias

Now that you have a template that is set up for streaming from a Wowza Media Server, you need to create a recording alias on the Content Server that uses this template. Multiple recording aliases can use the same template.

-
- Step 1** From the **Management** tab, go to **Recording setup > Recording aliases**.
 - Step 2** Click the **Add recording alias** link to create a new recording alias.
 - Step 3** Enter a name for your recording alias, and click the recording alias type. If required, choose a personal recording alias owner.
 - Step 4** Enter the relevant dialing properties that conform to your dialing plan.
 - Step 5** Choose a suitable template that supports streaming Flash from a Wowza Media Server.
 - Step 6** Click **Save**.
-

You have now configured the Content Server for streaming Flash from your Wowza Media Server. You should now make a test call on the recording alias you have created to verify your configuration.

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