Create custom Wowza ClearCaster destination and encoding templates

With Wowza ClearCaster™ Pro, you can create custom destination and encoding presets for ClearCaster broadcasts. Use Wowza ClearCaster Manager in universal mode to provide custom broadcast options by editing and saving existing JSON templates.

About custom templates

Custom Wowza ClearCaster templates provide a way to add new destination and encoding preset options that differ from the built-in configurations that are available in Wowza ClearCaster Manager by default. To create custom templates, copy an existing template, associate it with a new destination, and edit the template to reflect the configuration you need. The custom destination and encoding template then show up in the Create Broadcast dialog when you create a broadcast from the Broadcast page.

For this article, we'll add an example custom template with an updated profile value and a widget to enter a video bitrate.

Copy an existing encoding template and associate it with a new destination

1. Sign in to Wowza ClearCaster Manager at clearcaster.wowza.com with your Wowza account.
2. Click Manage in the menu bar, and then click the Templates tab.
3. Select a Destination and an Encoding Template that are most similar to the custom destination and encoding presets you want to define. For this example, select Wowza Stream Name and Wowza 1080p30.
4. Click Edit a Copy.
5. In the Select Destination For New Template dialog, enter a name for the custom destination in the Create a New Destination field and click Add Now.
6. Select the new destination from the **Custom** list, and click **Select Destination**. The copied template is now available to edit.

## Edit the Template JSON source

Make edits to the JSON in the **Template JSON** editor. As you edit, use the built-in validator tool to identify and resolve template errors.

In this example, we’ll update the template name, change the profile value from main to high, and add a widget to allow the user to enter a custom audio bitrate.

1. Update the **name** value to rename the encoding template file.

   ```json
   "name": "Wowza 1080p30 high profile variable bitrate",
   ```

2. Update the **profile** value in the **encodingConfigurationVideo** object to **high**.

   ```json
   "profile": "high",
   ```

3. Copy the following bitrate widget and paste it at the beginning of the **widgets** array in the **presentation** object. The positioning of the widget reflects the position of the UI element that it generates.

   ```json
   { 
     "widget": "Bitrate",
     "parameters": {
       "bitrate": {
         "variable": "$videoBitrate",
         "defaultValue": "5000k",
         "minValue": "1000k",
         "minWarning": "Video bitrate is less than minimum of 1000 Kbps",
         "maxValue": "8000k",
         "maxWarning": "Video bitrate is greater than maximum of 8000 Kbps",
         "units": "BITRATE_KBPS",
         "label": "Video Bitrate",
         "required": true
       }
     }
   }
   ```

4. Update the **bitrate** value in the **encodingConfigurationVideo** object to **$videoBitrate**. This associates the variable in the bitrate widget to the encoding configuration.

   ```json
   "bitrate": "$videoBitrate",
   ```

5. When the edits to the JSON are complete, click **Save Template**.
To preview the custom template, click **Broadcast** in the menu bar, click **Create Broadcast**, and select the new destination and encoding template.
More resources

- Manage custom Wowza ClearCaster destination and encoding templates