XPression Tessera One Setup

When launching XPression Tessera One for the first time, the setup consists of default presets and settings. If the defaults are changed, this document explains how to check the Tessera One settings and restore defaults.

This document covers the following topics:

Hardware Setup

Preferences

Tessera Settings

Demo Project Package

Creating a Project

DashBoard

Supported Scaler Configurations

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Hardware Setup

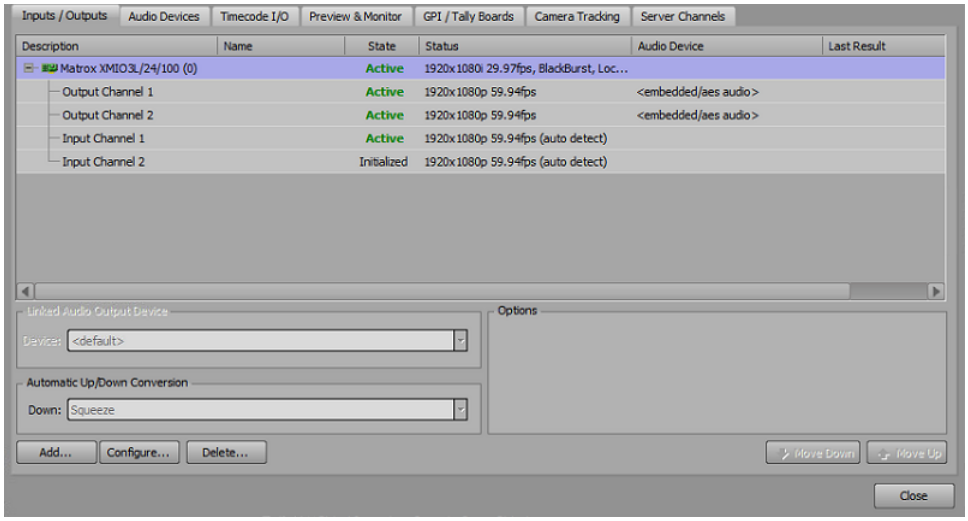
The following settings are required for Tessera One to operate properly using the low latency scaler. They are configured by default but should the settings be changed, use the following procedure to return to the default settings.

Tessera One comes with a default setting of **Fill/Fill** but can be set to **Fill/Key**. There is also an option to purchase two additional fills.

Inputs

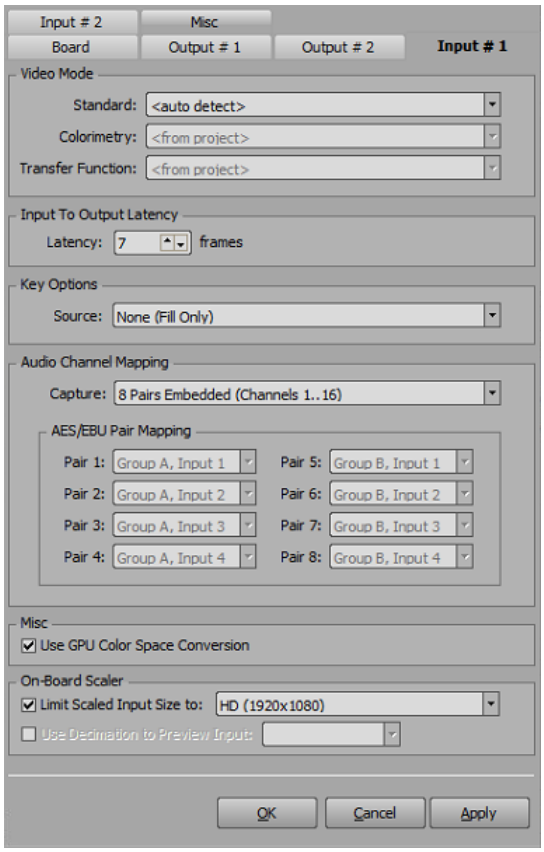
1. In XPression, select **Edit > Hardware Setup**.

   The **Hardware Setup** dialog opens.



2. In the **Inputs / Outputs** tab, double-click an input from the I/O list.

The **Matrox DSX - Framebuffer Setup** dialog opens on the **Input** tab for the selected input.



3. In the **Misc** section, select the **Use GPU Color Space Conversion** checkbox if it is not already selected.
4. In the **On-Board Scaler** section, select the **Limit Scaler Input Size to** checkbox if it is not already selected and use the drop-down to select a scaler size.

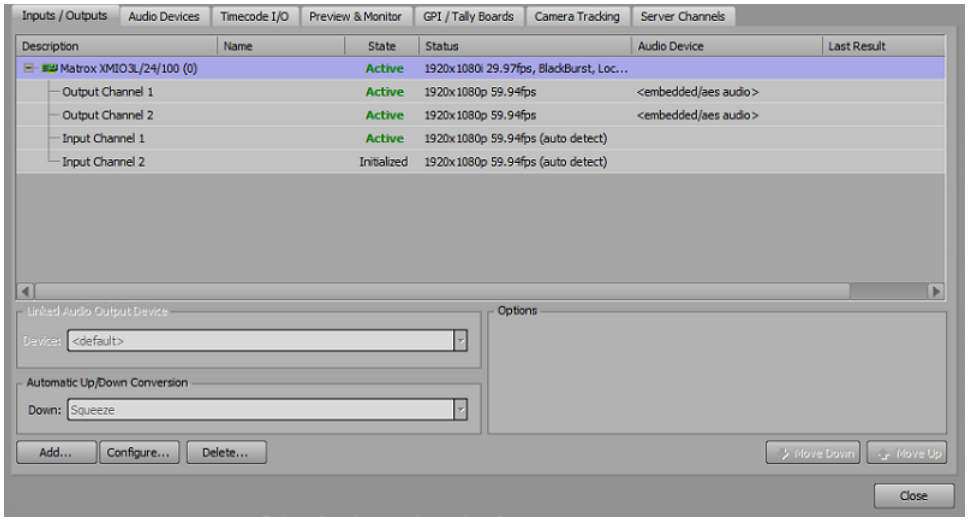
   The default is **HD (1920x1080)**.
5. Select **Apply** and then select **OK**.

   The **Matrox DSX - Framebuffer Setup** dialog closes.
6. Repeat steps 2 to 5 for any other inputs.

Outputs

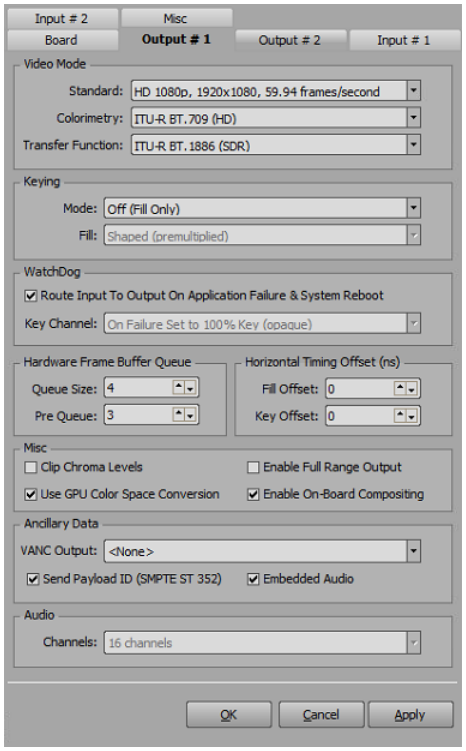
1. In XPression, select **Edit > Hardware Setup**.

   The **Hardware Setup** dialog opens.



2. In the **Inputs / Outputs** tab, double-click an output from the **I/O** list.

   The **Matrox DSX - Framebuffer Setup** dialog opens on the **Output** tab for the selected output.



3. In the **Misc** section, select the **Use GPU Color Space Conversion** checkbox if it is not already selected.
4. Select the **Enable On-Board Compositing** checkbox if it is not already selected.
5. Select **Apply** and then select **OK**.

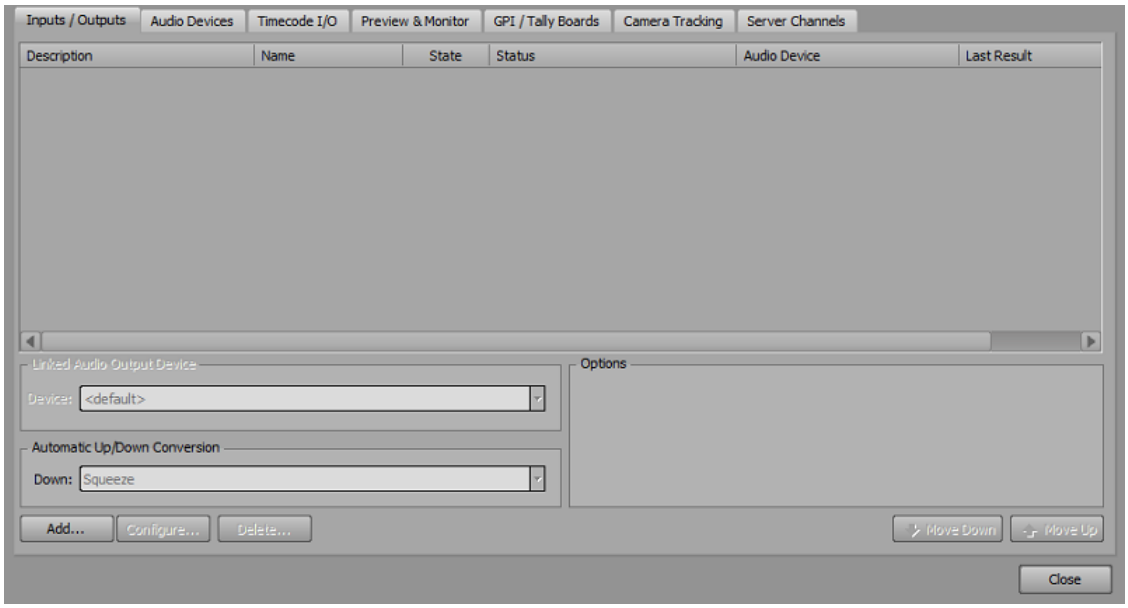
   The **Matrox DSX - Framebuffer Setup** dialog closes.
6. Repeat steps 2 to 5 for any other outputs.

RossTalk GPI

The RossTalk GPI settings are configured by default, but should the settings be changed, use the following procedure to reconfigure the RossTalk GPI settings.

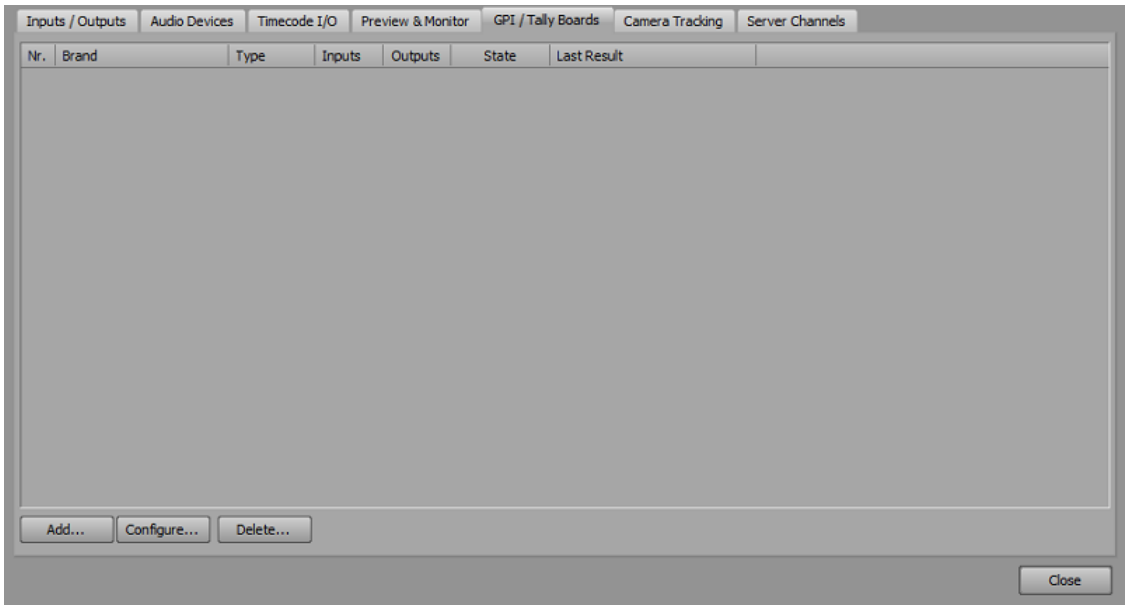
1. In XPression Tessera One, select **Edit > Hardware Setup**.

   The **Hardware Setup** dialog opens.



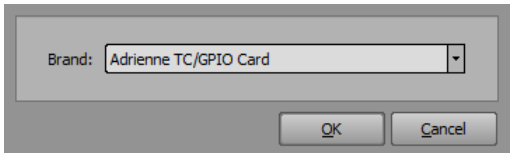
2. Select the **GPI / Tally Boards** tab.

   The **GPI / Tally Boards** section is displayed.



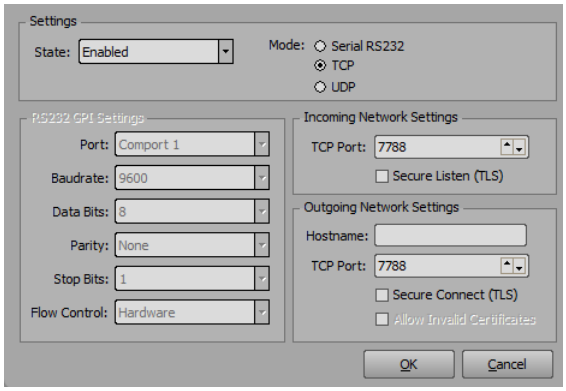
3. Select **Add**.

   The **Add New GPI Board** dialog opens.



4. From the **Brand** drop-down, select **Smart GPI / RossTalk** and then select **OK**.

   The **Smart GPI / RossTalk Setup** dialog opens.



5. In the **Settings** section, select the **TCP** network connection mode.
6. In the **Incoming Network Settings** section, in the TCP Port field, enter or select the communication port that receives GPI signals.

   Select **Secure Listen (TLS)** to secure communications between TCP and Smart GPI/RossTalk, making them unreadable by other machines.
7. In the **Outgoing Network Settings** section, in the **Hostname** field, enter the host name of a remote device that is to receive RossTalk messages.

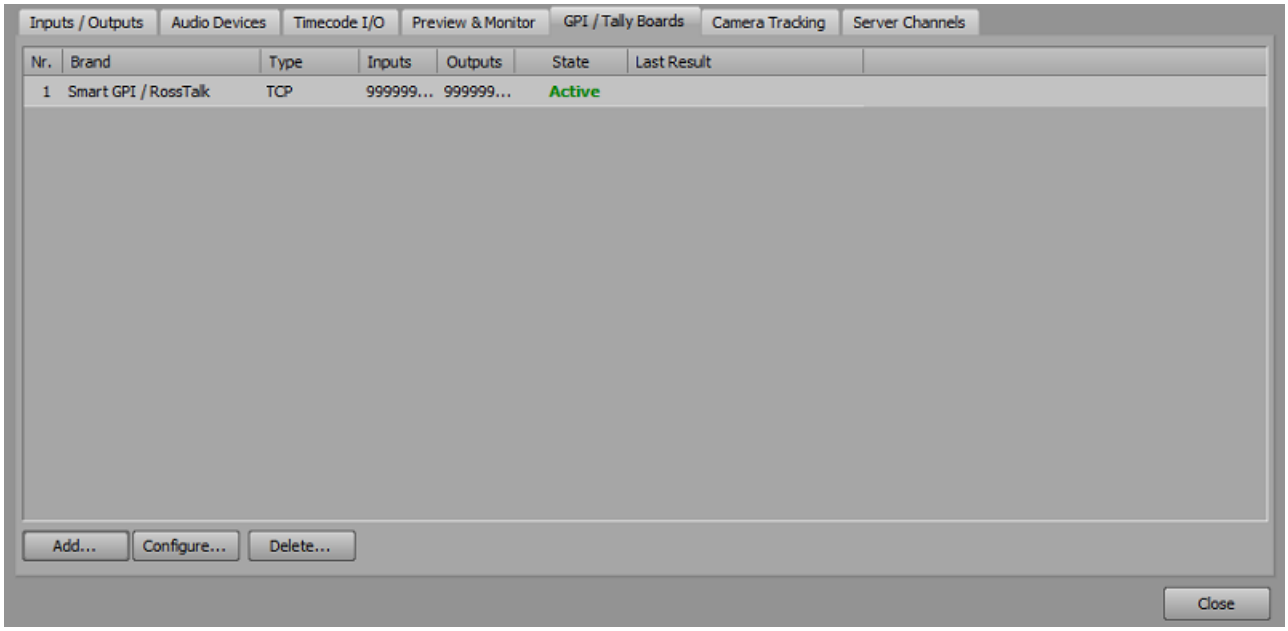
   In the **TCP Port** field, enter or select the communication port that receives the signals.

   If **Secure Listen (TLS)** was selected in the **Incoming Network Settings** section, then select the **Secure Connect (TLS)** checkbox to secure communications between TCP and Smart GPI/RossTalk, making them unreadable by other machines.

   Select **Allow Invalid Certificates** only when the DataLinq Server certificate name will not match the host (for example, when connecting by IP address to a server whose certificate was issued for a DNS name), or when the revocation server cannot be reached.

   ★Expired and untrusted certificates are always rejected. Existing projects that used secure connections before this version open with this option selected, preserving prior behavior.
8. Select **OK**.

The **Smart GPI / RossTalk Setup** dialog closes and the **Smart GPI / RossTalk** board is added to the **GPI / Tally Boards** list.



9. Select **Close**.

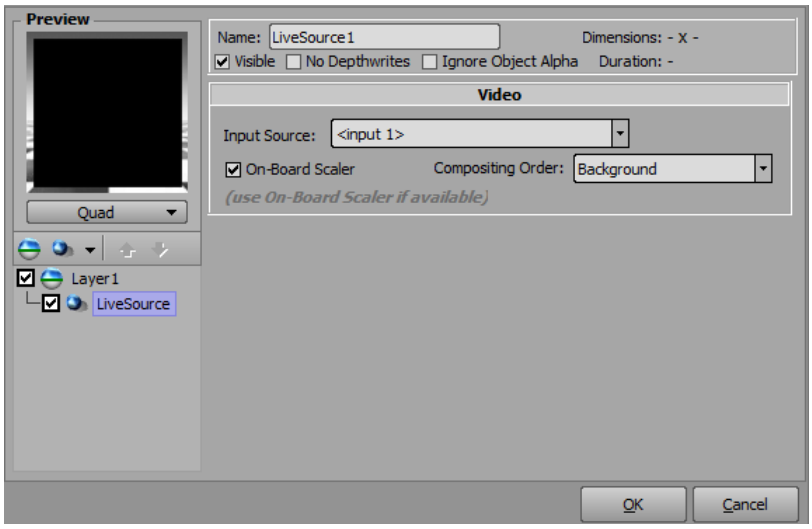
   The **Hardware Setup** dialog closes.

Low Latency Scaler Live Source Material

With the on-board scaler enabled in the material, all other live source options are disabled and the material can only be applied to quad and background objects.

1. In the **Material Manager**, right-click on a Live Source material and select **Edit**.

   The **Material Editor** opens for the selected Live Source material.



2. In the **Video** section for the Live Source material, select the **On-Board Scaler** checkbox if it is not already selected.
3. Select **OK**.

   The **Material Editor** closes.
4. Repeat steps 1 to 3 for any other Live Source material.

   For More Information on...

   - creating a Low Latency Live Source material, see Creating a Low Latency Scaler Material.

Preferences

The following preferences settings are required for Tessera One to operate properly. They are configured by default but should the preferences settings be changed, use the following procedures to return to the default settings.

Hardware Renderer

Sequencer

Video Engine

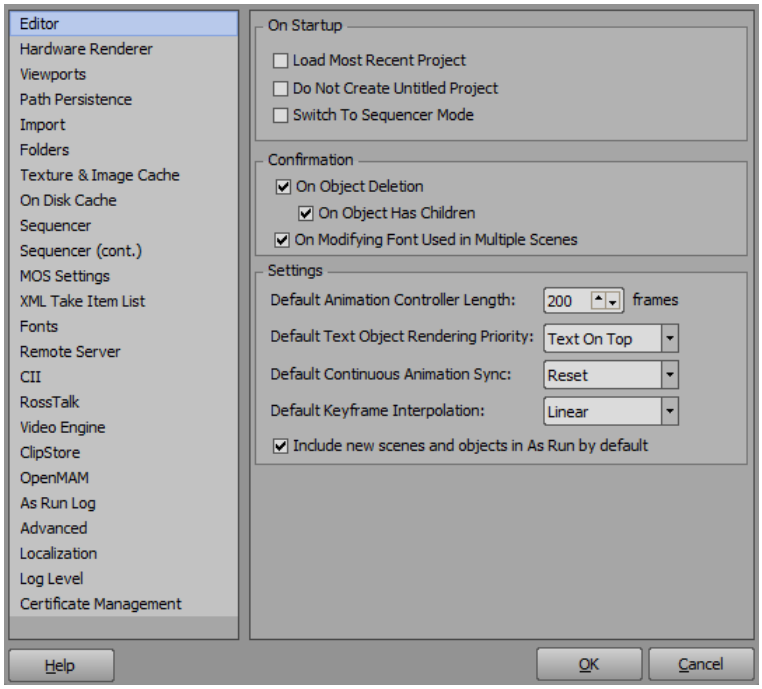
As Run Log

Certificate Management

Hardware Renderer

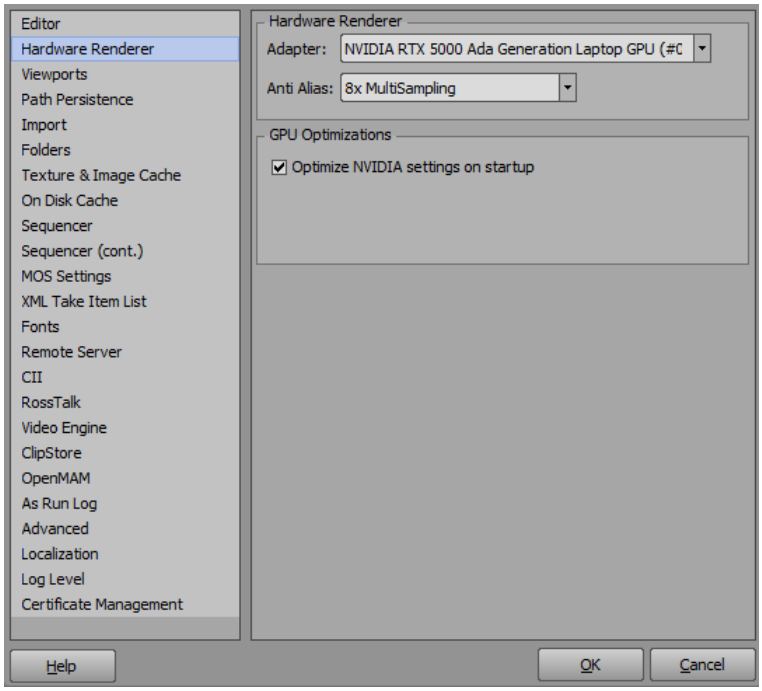
1. In XPression, select **Edit > Preferences**.

   The **Preferences** window opens.



2. From the left column, select **Hardware Renderer**.

The **Hardware Renderer** panel is displayed.



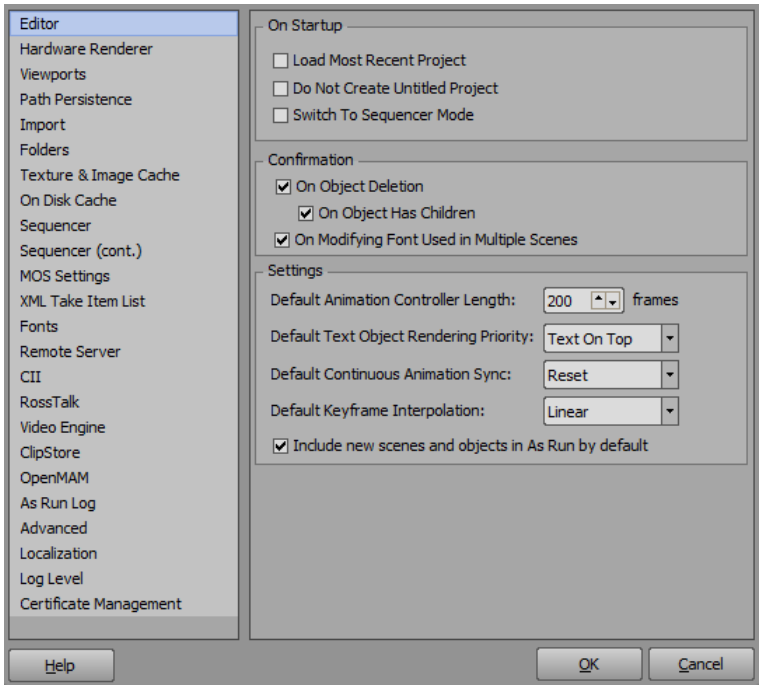
3. In the **Hardware Renderer** panel, from the **Adapter** drop-down, select **NVIDIA Quadro RTX 5000**.
4. From the **Anti Alias** drop-down, select **8x MultiSampling**.
5. Select **OK**.

   The **Preferences** window closes.

Sequencer

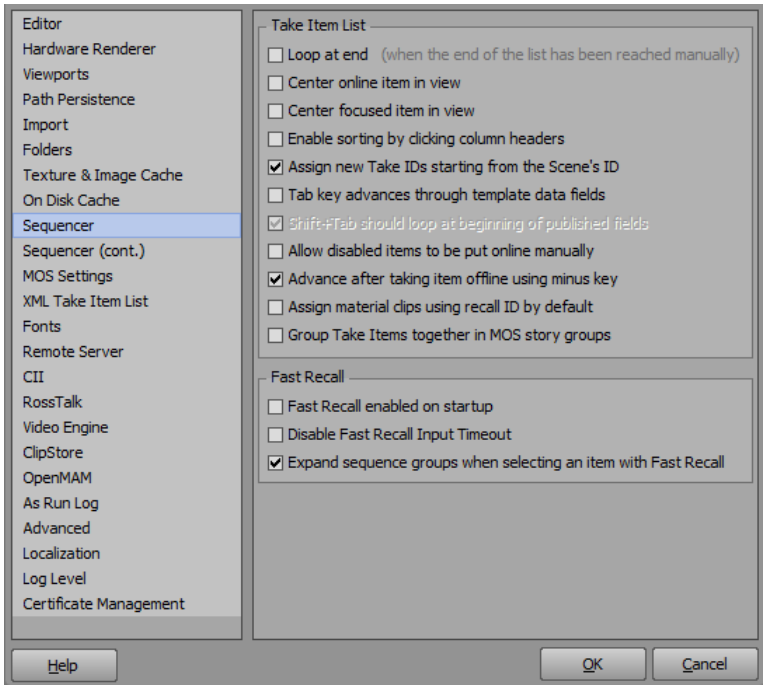
1. In XPression, select **Edit > Preferences**.

   The **Preferences** window opens.

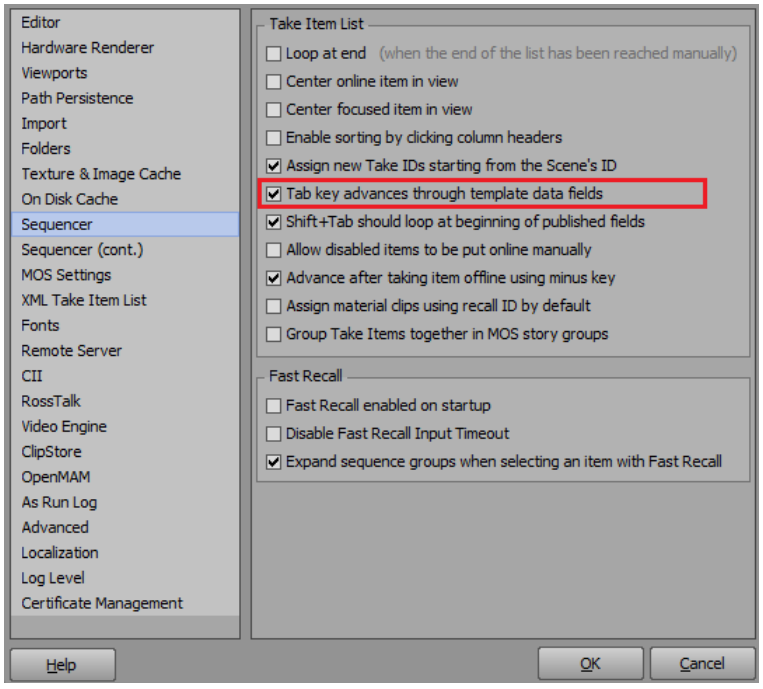


2. From the left column, select **Sequencer**.

The **Sequencer** panel is displayed.

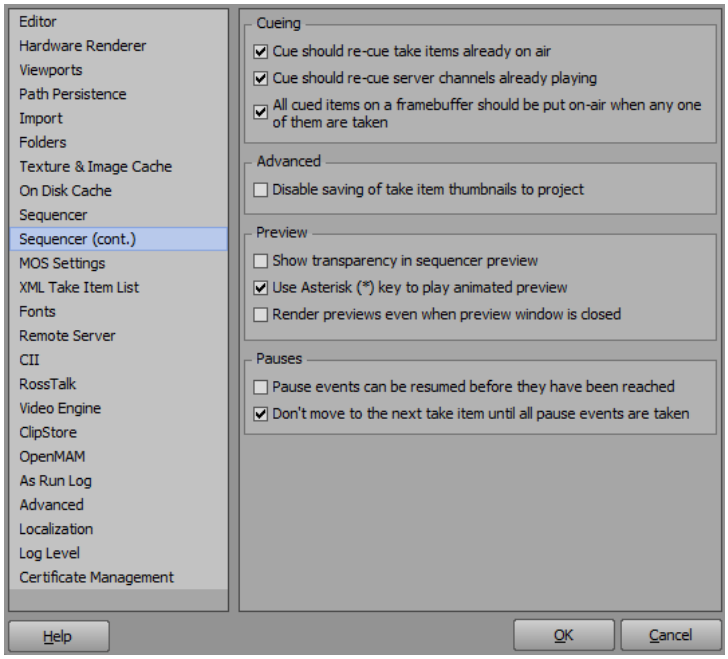


3. In the **Take Item List** section, select the **Tab key advances through template data fields** checkbox if it is not already selected.



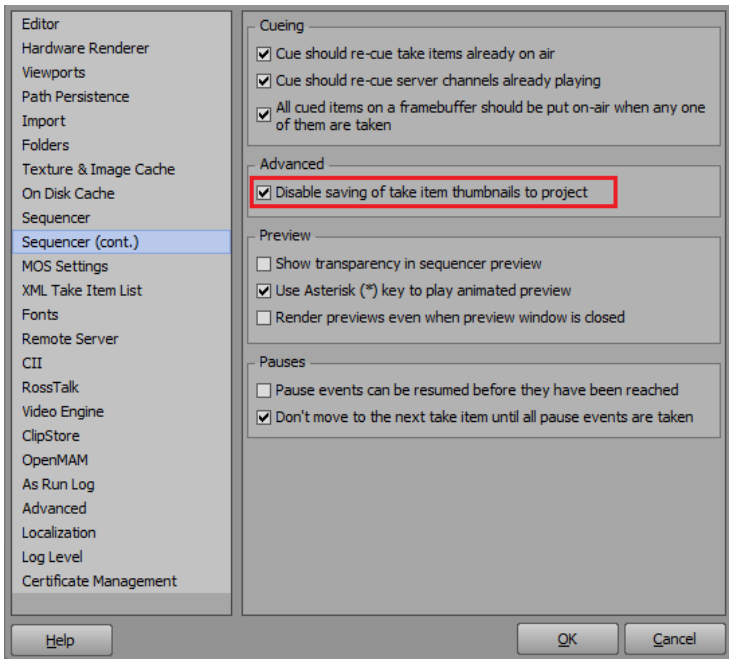
4. From the left column, select **Sequencer (cont.)**.

The **Sequencer (cont.)** panel is displayed.



5. In the **Advanced** section, select the **Disable saving of take item thumbnails to project** checkbox if it is not already selected.

   This increases the speed of project save and load times.



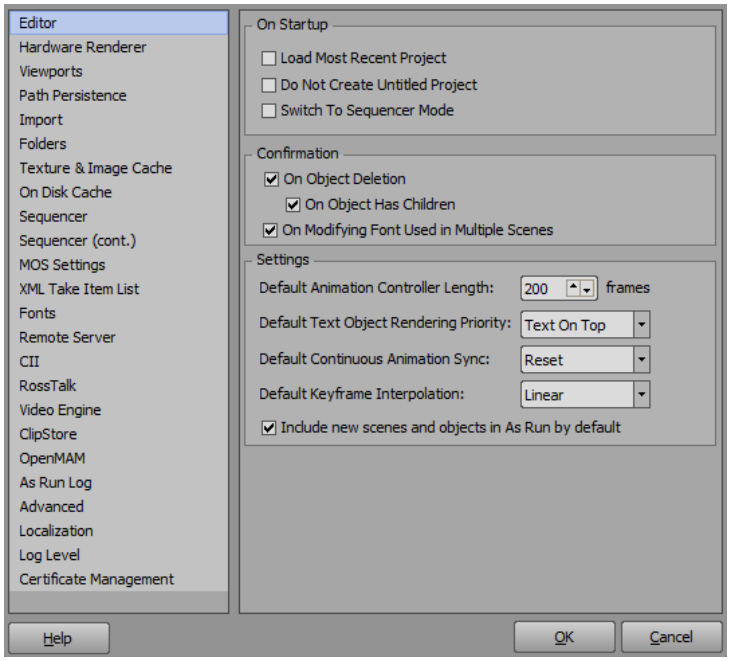
6. Select **OK**.

   The **Preferences** window closes.

Video Engine

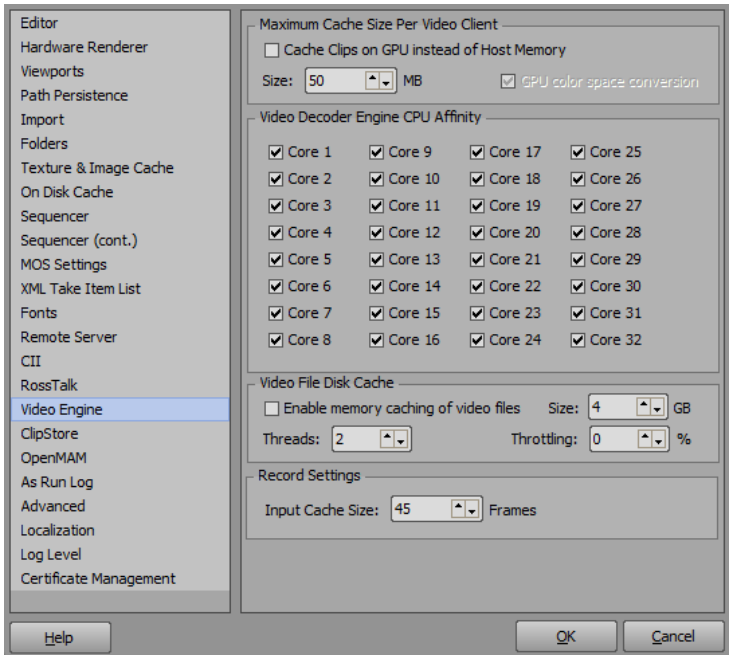
1. In XPression, select **Edit > Preferences**.

   The **Preferences** window opens.

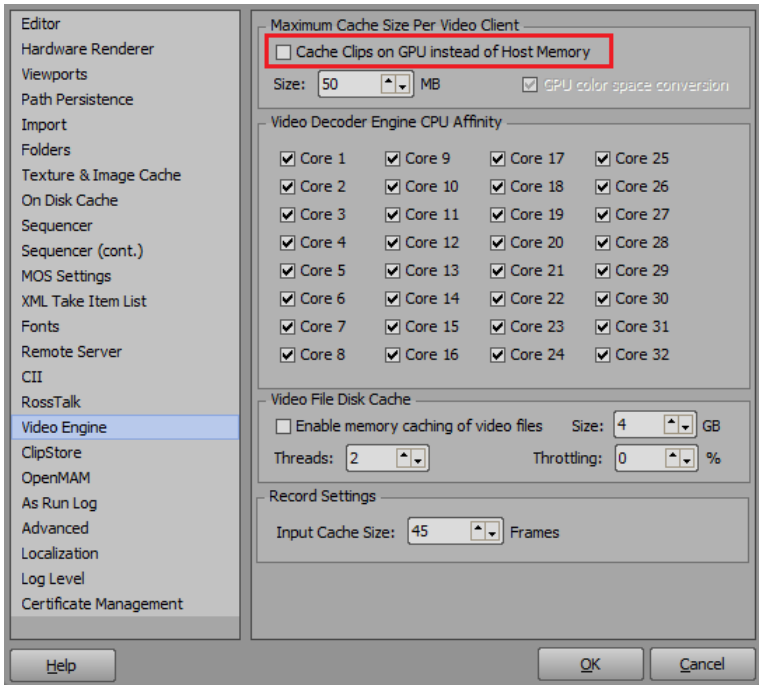


2. From the left column, select **Video Engine**.

   The **Video Engine** panel is displayed.



3. In the **Maximum Cache Size Per Video Client** section, ensure that the **Cache Clips on GPU instead of Host Memory** checkbox is NOT selected.



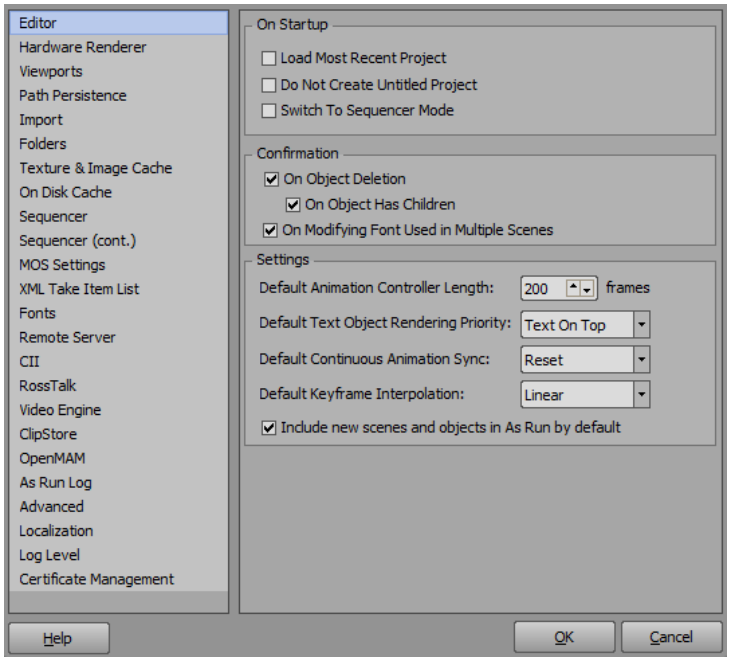
4. Select **OK**.

   The **Preferences** window closes.

As Run Log

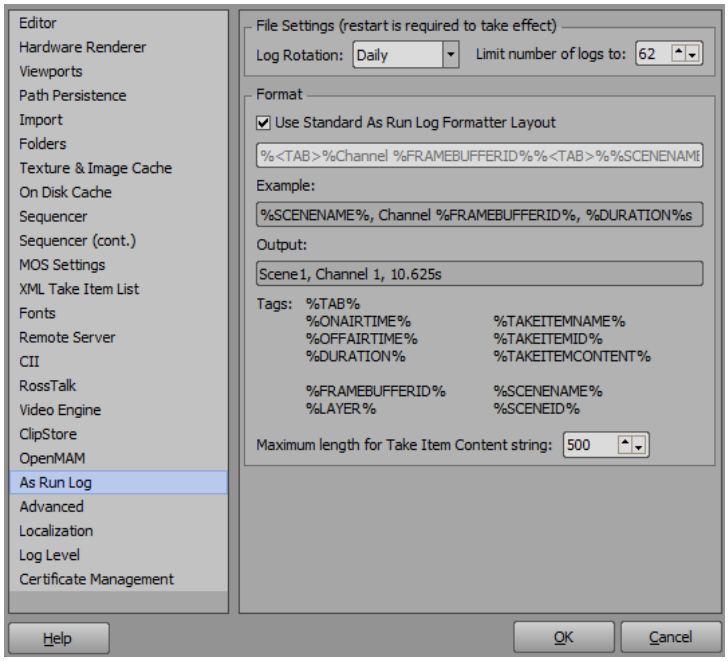
1. In XPression, select **Edit > Preferences**.

   The **Preferences** window opens.

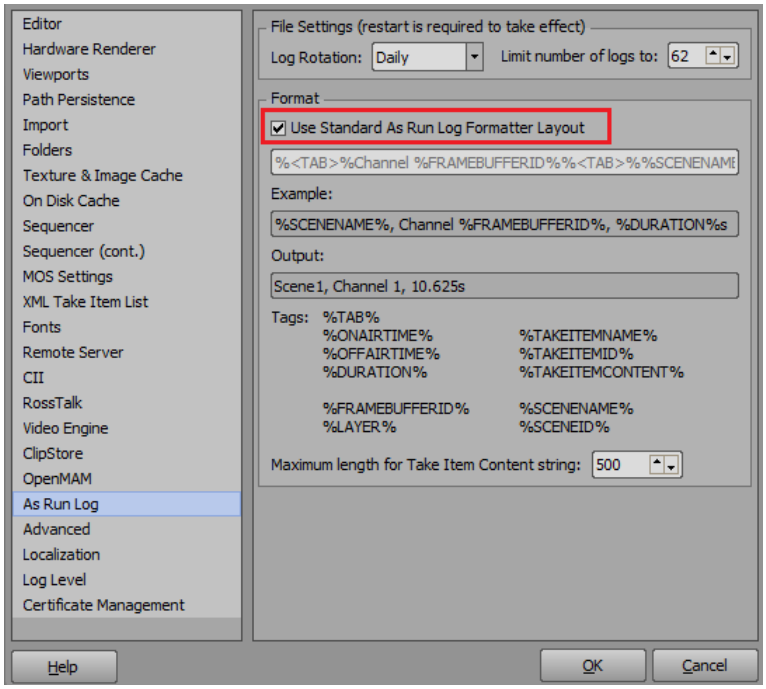


2. From the left column, select **As Run Log**.

   The **As Run Log** panel is displayed.



3. In the **Format** section, select the **Use Standard As Run Log Formatter Layout** checkbox if it is not already selected.



4. Select **OK**.

   The **Preferences** window closes.

Certificate Management

Use the **Certificate Management** panel to check if a certificate has been assigned to XPression Tessera One and to access the Ross Graphics Certificate Manager to assign a certificate, if necessary.

The following procedures are described in this topic:

Assigning a certificate

Replacing an expired certificate

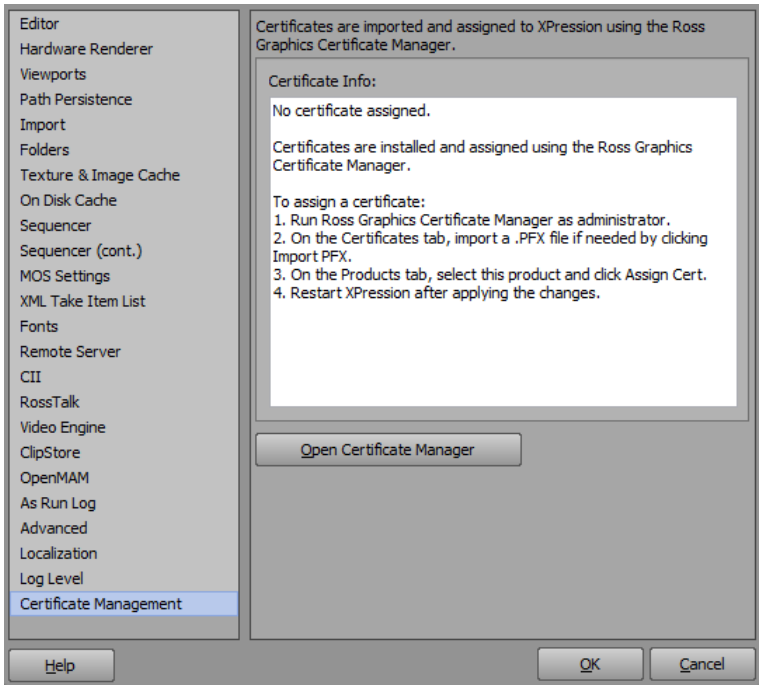
Adding a certificate to the Ross Graphics Certificate Manager

Viewing certificate details

To assign a certificate to XPression:

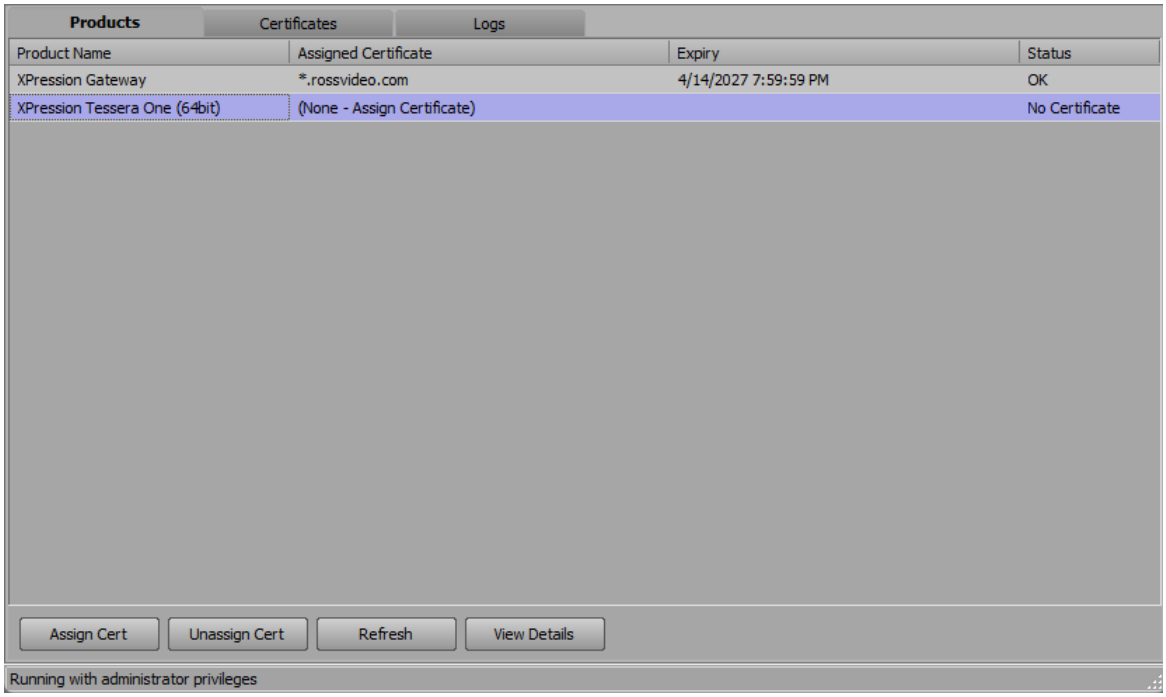
1. Select **Edit > Preferences**.
2. In the **Preferences** window, select the **Certificate Management** panel.

   If there is no certificate assigned to XPression Tessera One, you will see the **Certificate Info** shown in the image below:



3. Select the **Open Certificate Manager** button to launch the **Ross Graphics Certificate Manager**.

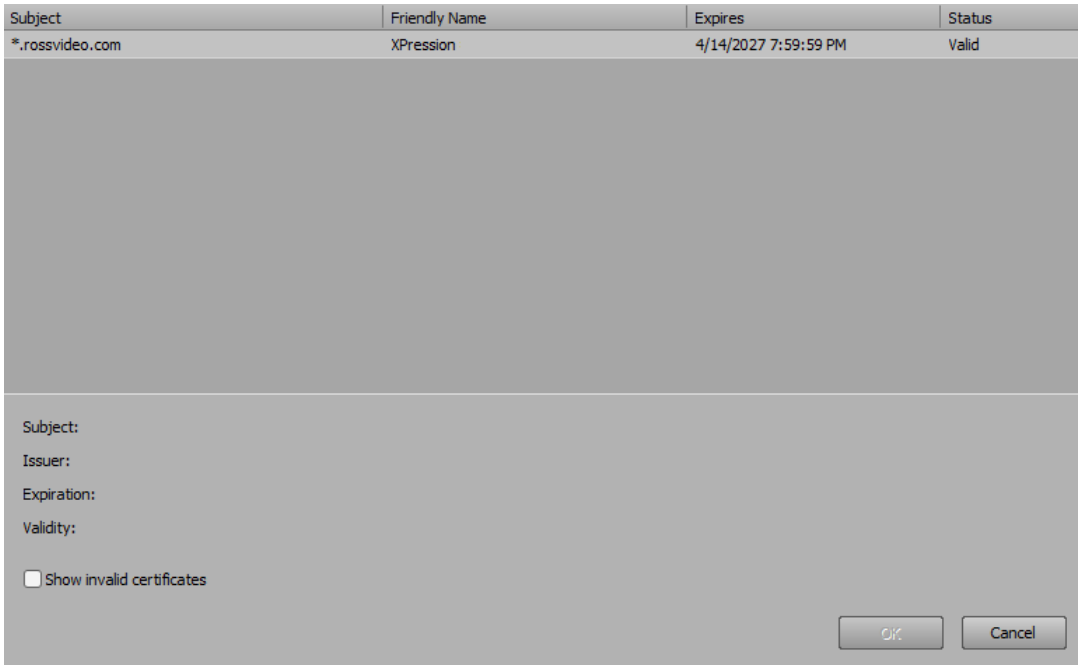
The **Ross Graphics Certificate Manager** application opens.



4. In the **Products** tab, select XPression Tessera One and then select **Assign Cert**.

   The same certificate can be assigned to multiple products.

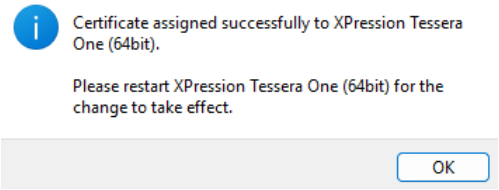
   The **Select Certificate** dialog opens.



5. Select the certificate you want to assign to XPression Tessera One, and then select **OK**.

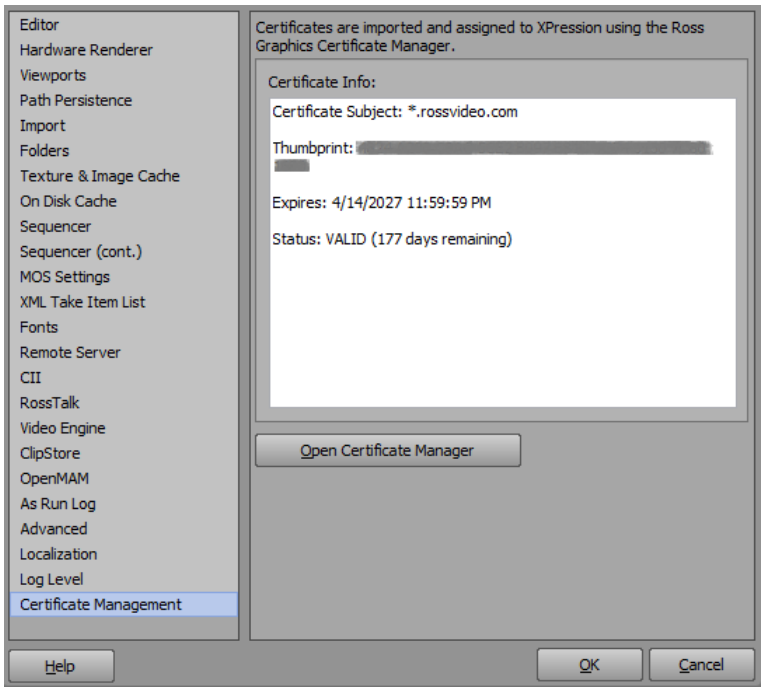
   If there are no certificates displayed, see To add a certificate to the Ross Graphics Certificate Manager.

6. An **Information** dialog opens to indicate that the certificate was successfully assigned.



7. Select **OK**, and then shut down and relaunch XPression Tessera One from the Windows **Start** menu.

   When a certificate has been assigned to XPression Tessera One, in the **Certificate Management** panel, you will see the **Certificate Info** as shown in the image below:

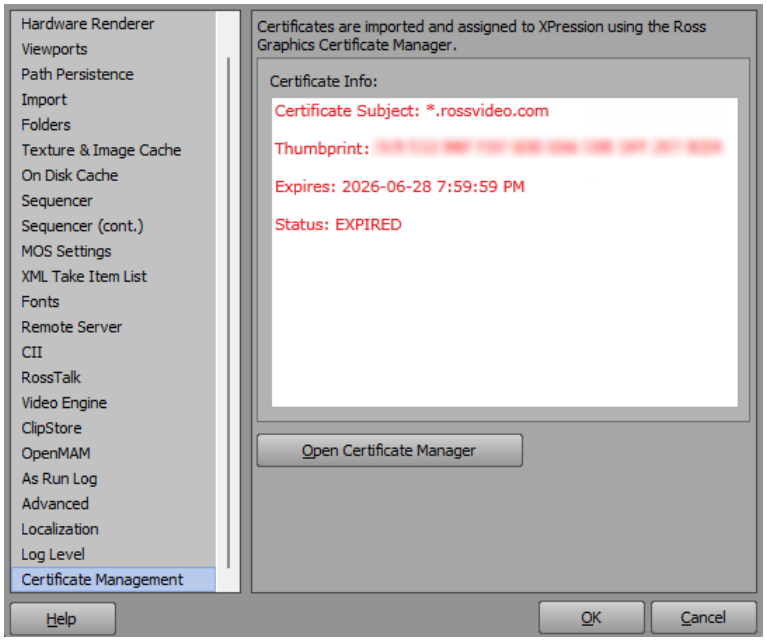


★Assigning a certificate alone does not mean that communication is secure. You will also need to enable secure communication in each connected application (e.g., RossTalk, RossLinq, DataLinq, etc.).

To replace an expired certificate:

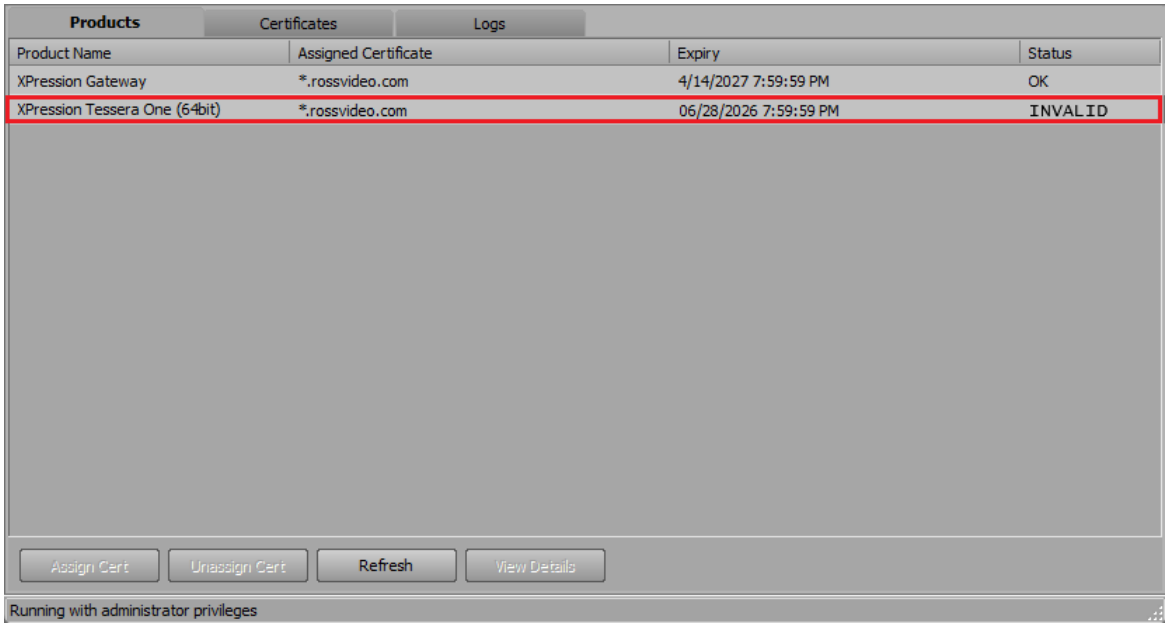
1. Select **Certificate Management**.

   The **Certificate Management** panel opens in the main window. If the current certificate has expired, you will see the following info:



2. Select **Open Certificate Manager**.

   The **Ross Graphics Certificate Manager** opens. You will see that the XPression Tessera One **Status** column indicates **INVALID**.



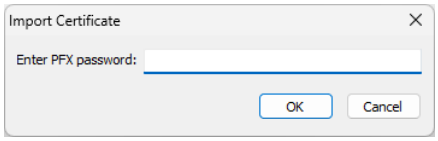
3. Select the XPression Tessera One product and then select **Unassign Cert**.
4. In the **Confirmation** dialog, select **Yes**.
5. In the **Information** dialog, select **OK**, but do not restart XPression Tessera One yet.
6. Select the XPression Tessera One product again, and then select **Assign Cert**.
7. In the **Select Certificate** window, select the certificate you want to assign to XPression Tessera One and then select **OK**.

   If there are no certificates showing, see To add a certificate to the Ross Graphics Certificate Manager.
8. In the **Information** dialog that indicates the certificate has been successfully assigned, select **OK**.
9. Shut down and relaunch XPression Tessera One from the Windows **Start** menu.

To add a certificate to the Ross Graphics Certificate Manager:

1. In the **Certificates** tab, select **Import PFX**, then navigate to and select the **.PFX** certificate file.

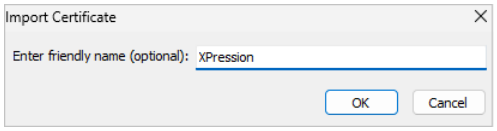
   Contact your IT department to get the location of the **.PFX** certificate file.
2. The **Import Certificate** dialog opens.



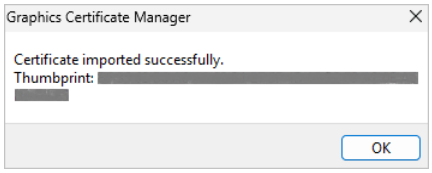
3. In the **Import Certificate** dialog, enter the **.PFX** password and select **OK**.

   Contact your IT department to get this password.
4. In the next dialog, enter a "friendly name" for the certificate.

   This is optional but will help you identify the certificate later, if necessary.



5. The **Graphics Certificate Manager** dialog opens indicating that the import was successful.



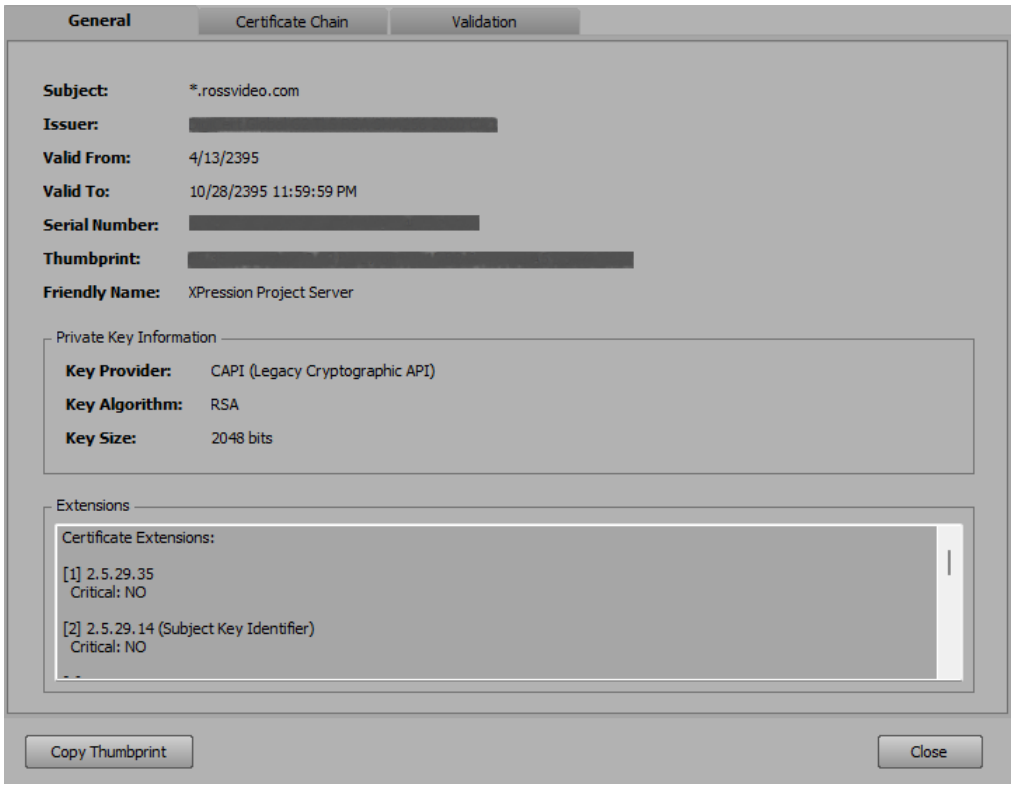
6. Select **OK** to close the dialog.

   You can now assign this certificate to XPression Tessera One.

To view certificate details:

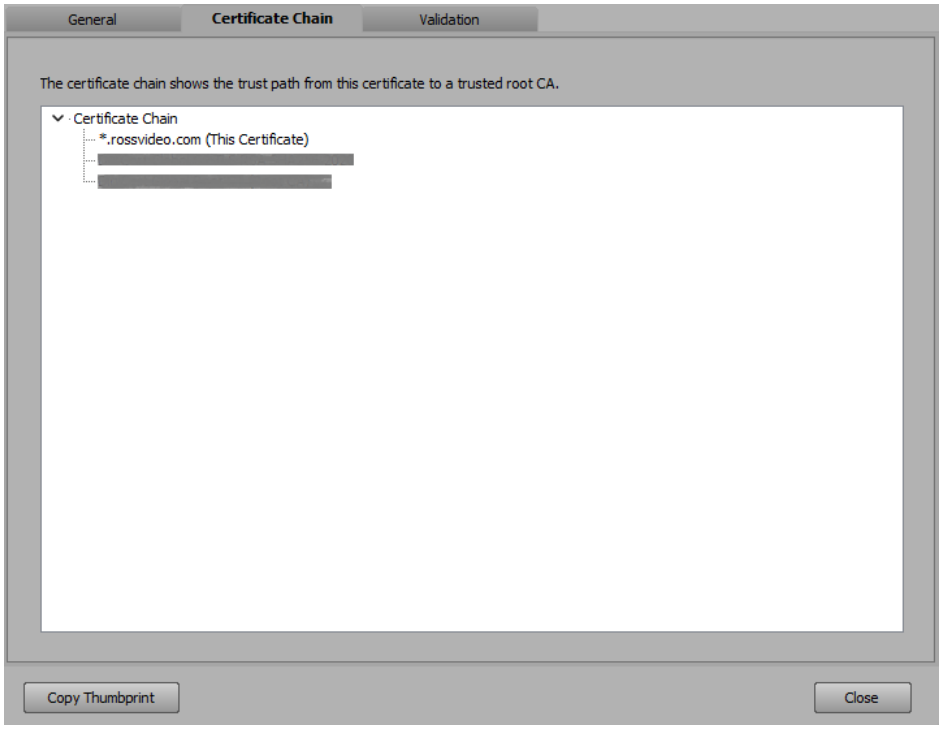
1. Select the **Certificates** tab.
2. Select a certificate and either double-click it or select the **View Details** button.

   The **Certificate Details** window opens on the **General** tab.

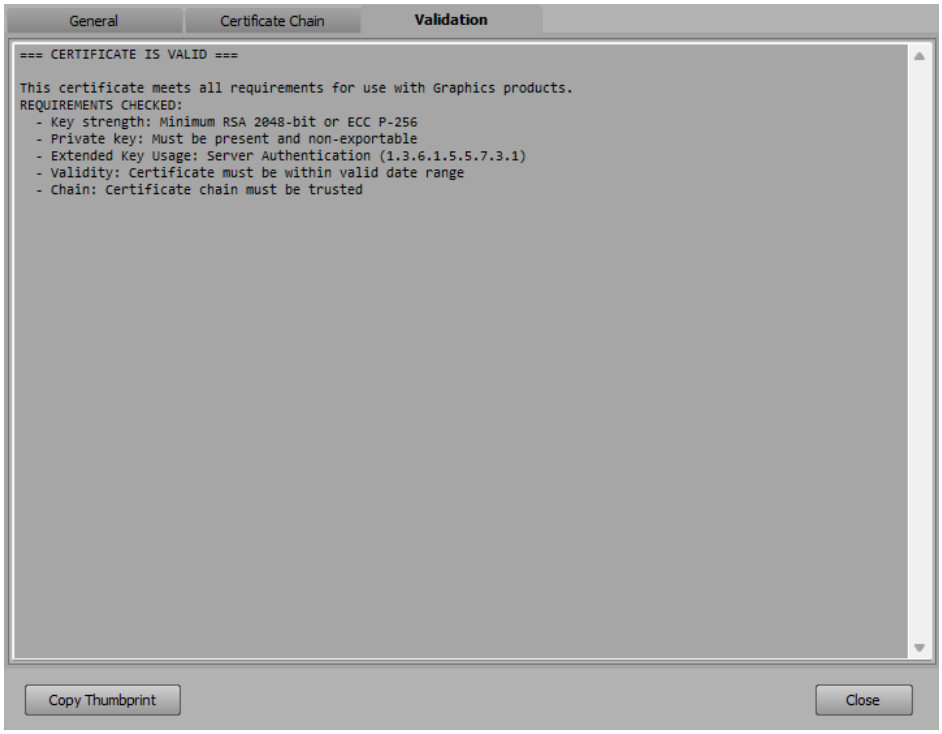


3. Select **Copy Thumbprint** to configure a non-XPression application to use the certificate or if you need to search for the thumbprint in a log file.

4. Select the **Certificate Chain** tab to view the trust path from the certificate to a trusted root CA.



5. Select the **Validation** tab to view the requirements that have been met by the certificate.



6. Select **Close** to exit the **Certificate Details**.

Tessera Settings

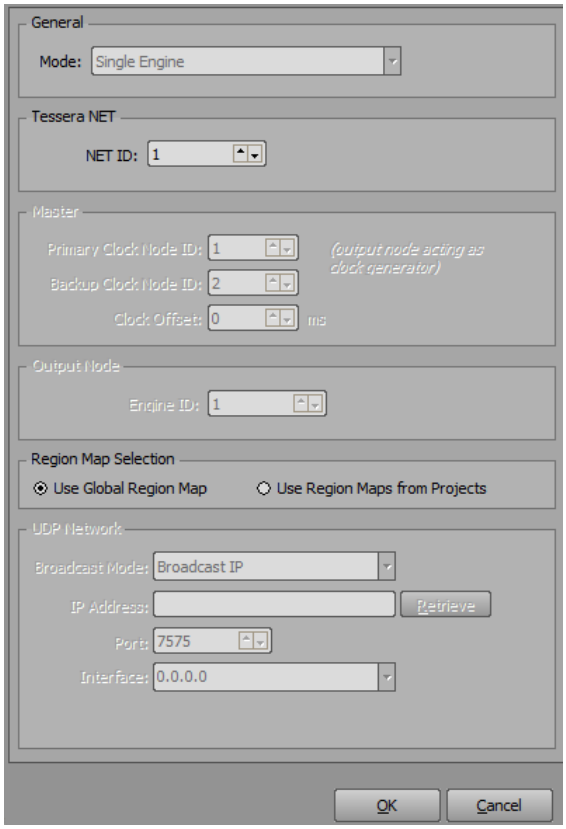
The following Tessera settings are required for Tessera One to operate properly. They are configured by default but should the Tessera settings be changed, use the following procedure to return to the default settings.

★Tessera One operates by default in single engine mode and cannot be changed.

To return to default Tessera settings:

1. In XPression, select **Edit > Tessera > Settings**.

   The **Tessera Settings** dialog opens.



2. If controlling multiple Tessera One systems using Remote Sequencer, in the **Tessera NET** section, in the **NET ID** field, enter a NET ID for the machine.
3. In the **Region Map Selection** section, select one of the following options:
   - **Use Global Region Map** — use one map that multiple projects share.
   - **Use Region Maps from Projects** (Tessera One default setting) — use maps specific to each project.
4. Select **OK**.

   The **Tessera Settings** dialog closes.

Demo Project Package

Tessera One comes with a pre-loaded demo project with pre-configured scenes, scripts, sequencer layout, Tessera region mapping, ClipStore content, and INcoder watch folders, as well as a custom DashBoard panel demo for playout (Tessera One - User Panel.grid). These demo projects are a good resource for learning how to create Tessera One scenes, how to use DataLinq, how to set up a custom DashBoard panel for Tessera One operation, and more.

To access the demo project for Tessera One:

1. In XPression, select **File > Open Project**.

   The **Open** browser opens.
2. Locate the Tessera One v1 demo project file in **D:\XPression Projects\Tessera One v1.xpf**.
3. Select **Open** to open the demo project.

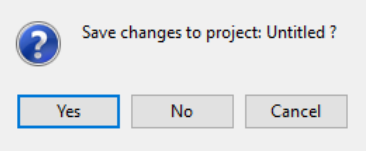
Creating a Project

This section covers creating a new project and configuring a low latency scaler material.

To create a new project:

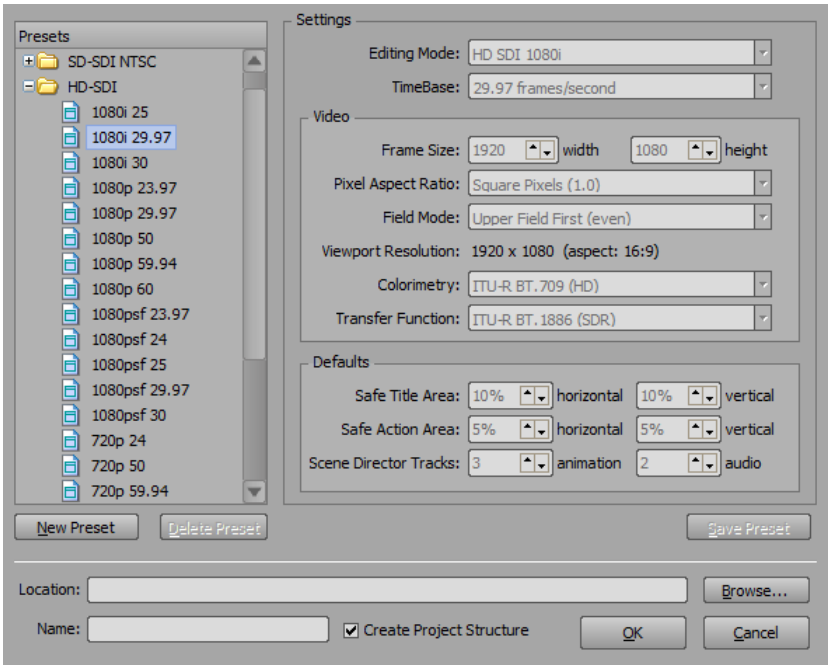
1. In XPression, select **File > New**.

   A confirmation dialog opens.



2. Select **Yes** to save the current project or **No** to continue without saving the current project.

   The **New Project** window opens.



3. In the **Presets** section, select a video format suitable for the project.
4. Select **Browse** to select the **Location** for the project.

   The **Select Project Folder** file browser opens.
5. Select or create a folder for the project.

   It is recommended to save each project in its own folder.
6. Select **Select Folder**.

   The **Select Project Folder** file browser closes.

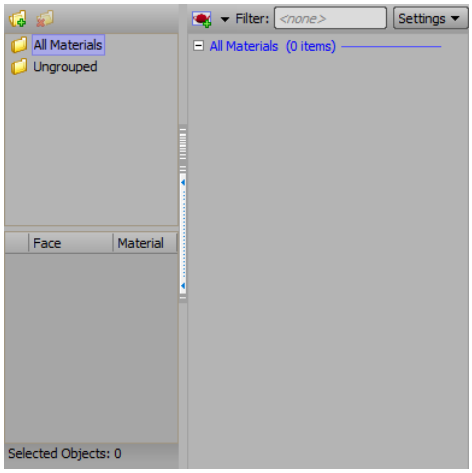
7. In the **New Project** dialog, in the **Name** field, enter a name for the new project.
8. Select **OK**.

   The **New Project** window closes and the new project is created.

To create a low latency material:

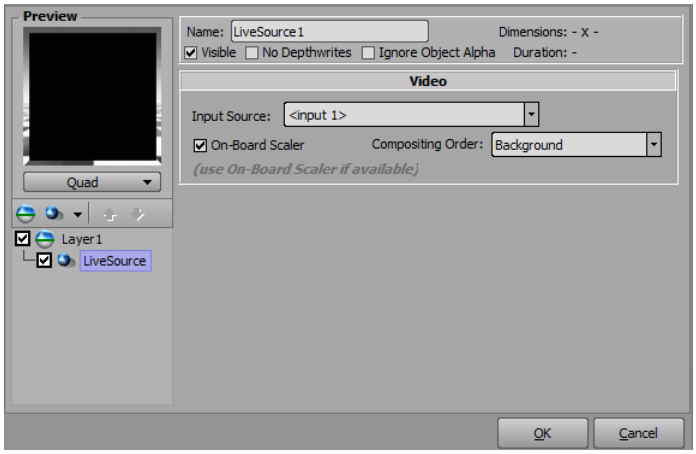
1. Press **Ctrl+M** to open the **Material Manager** (or select the **Material Manager** tab).

   The **Material Manager** opens.



2. In the **All Materials** list, right-click and select **Add New > Live Source**.

   The **Material Editor** opens with the **Live Source** material option selected.



3. In the **Video** section, from the **Input Source** drop-down, select a video input.
4. Select the **On-Board Scaler** checkbox if it is not already selected.

   This enables the low latency material scaler.

5. From the **Compositing Order** drop-down select one of the following options:
   - **Background** — layer the scaled input behind the graphics.
   - **Foreground** — layer the scaled input over the graphics.
6. Select **OK**.

   The **Material Editor** closes.
7. Apply the new material to an object.

   For More Information on...
   - configuring the low latency scaler, refer to Low Latency Scaler Live Source Material.

DashBoard

Optionally, users can use DashBoard custom panels as customizable graphical user interfaces to control Tessera One. DashBoard custom panels are opened using the DashBoard client software. If DashBoard is not installed on the system, navigate to the DashBoard downloads page on the Ross Video website to download the software: https://www.rossvideo.com/support/software-downloads/dashboard/. The system ships with examples of these custom panels that can be used as training resources or can be modified for user specific needs. The custom panel package can be found here: D:\Dashboard Applications\Tessera One - User Panel\Tessera One – Control.grid

The DataLinq default port number is 2021.

The XPression Tessera One device IP and port parameters are:

- TesseraOne_IPAddress = localhost
- TesseraOne_RossTalkExPort = 8020
- TesseraOne_RossTalkPort = 7788

Baseball





Basketball





XPression

Football





Hockey





Soccer





Supported Scaler Configurations

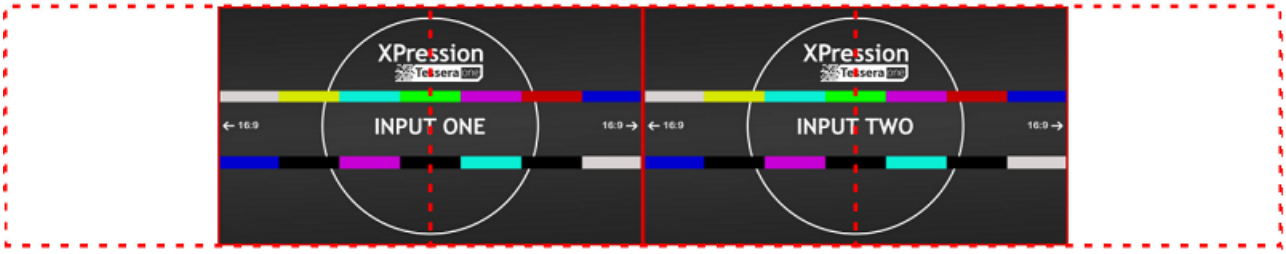
The following diagrams illustrate the supported scaler configurations for Tessera One.

ONE FULL RESOLUTION SCALER AVAILABLE ON UP TO THREE FILLS



[FILL 1] [FILL 2] [FILL 3]
*Requires (1) FILL+ LICENSE

TWO FULL RESOLUTION SCALERS SPANNED ACROSS THREE FILLS



[FILL 1] [FILL 2] [FILL 3]
*Requires (1) FILL+ LICENSE

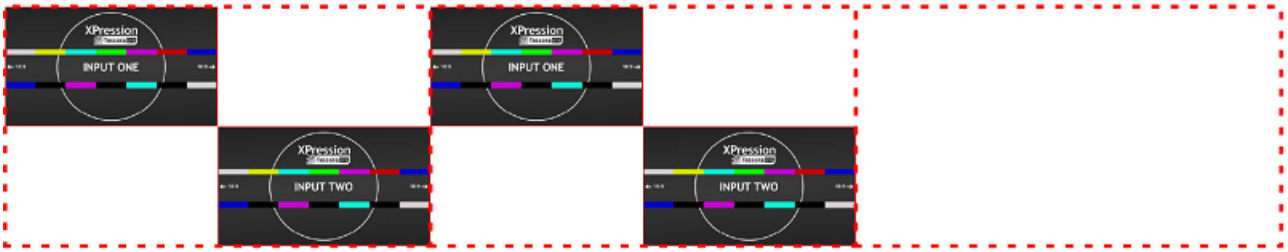
THREE HALF RESOLUTION SCALERS AVAILABLE ON ONE FILL



[FILL 1] [FILL 2] [FILL 3]
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XPression

TWO HALF RESOLUTION SCALERS AVAILABLE ON UP TO TWO FILLS



[FILL 1] [FILL 2] [FILL 3]
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TWO HALF RESOLUTION SCALERS AVAILABLE ON ONE FILL
ONE HALF RESOLUTION SCALER SPANNED ACROSS TWO FILLS



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