XPression 10.5 Release Notes

XPRESSION

BLUEBOX
- A preference to allow RossTalk TEMPLATEDATA commands to update published fields in sequencer items that are already on-air is now available in BlueBox editions.

DOCKING LAYOUTS
- XPression will only show docking layouts in the list that exist for the current mode (layout vs sequencer).
- The default docking layout in remote sequencer will no longer hide the main sequencer when using a 1920x1080 screen resolution.

FILE HANDLING
- A new option in the project import dialog to preserve subfolder structure of resources when importing scenes into a project. This is useful when the source project has a number of subfolders underneath Images\ or Videos\ etc.
- Importing materials into a project will now retain their folder structure in the material manager and create folders that do not already exist.
- The spacing and kerning options in the font inspector have been moved to a new sub-tab in the font inspector.

FONT MANAGEMENT
- The Font Editor dialog now has a field for entering notes about the font (notes will be displayed in the tooltip when hovering over the fonts).
- Font's can now be locked from modifying their properties.
- The dialog when changing fonts no longer has the option to "not show it again", instead a preference has been created to indicate if you want to be notified or not.
- The warning dialog when changing fonts now has an option to clone the font and assign it to one or more text objects in the scene.
- A new right click option in the font list to clone the font and assign it to text objects in the scene.
- The font inspector will now indicate the name of the selected font and if it is used in other scenes (and how many).
- The font list in the text object inspector now has options to change the sorting order.
- An option in the font list to show the font icons with their actual font size instead of scaling them all to the same size.
- New right click options in the font manager to search for matching fonts with different sizes, matching fonts with different colors, or similar fonts (fonts close to the same size, style).
- A new sorting option in the font list to sort by the fonts face name.
- A new option in the font manager to have it automatically select the text objects font when clicking text objects in the viewport.
• the font tab in the object inspector can now follow the font selected in the font manager

FRAMEBUFFERS
• transport parameters changed through NMOS on the Matrox IP boards are now applied as permanent settings
• the decklink framebuffer now supports the API function GetCurrentFrame
• paired inputs can be used on the DSXLE5 IP cards to switch a receiver cleanly when using NMOS IS-05
• NDI inputs now support an alpha channel
• inputs on the Matrox DSXLE5 now support an alpha channel (fill/key inputs)
• the NDI libraries have been upgraded to version 4.6
• an option on the Matrox DSX boards to clear the outputs topology on exit (can be used so that NMOS senders are no longer reported after XPression closes)
• the supported Matrox 10.1 driver (for Matrox DSXLE5 cards) is now the released SP1 (Matrox DSX-TopologyUtils 10.1.101.24979)

GPU SETTINGS
• XPression will attempt to optimize the NVIDIA global settings on startup to disable options like "Antialiasing Gamma Correction", and there is a new preference to disable these optimizations from occuring

HDR WORKFLOWS
• XPression can now load 48bit TIFF files to be used in HDR workflows

WIDE COLOR GAMUT
• an option to customize the reference SDR black and white luminance levels when converting from SDR to HDR (defaulting to 0 nits and 100 nits respectively)

KEYBOARD/GPI MAPPING
• two new assignable keyboard actions, one for focusing the template data field, and one for selecting an object by name in the template data field
• the Sequencer Take Offline shortcut in the keyboard mapping now has an option to take off all layers on a specified framebuffer

LOG COLLECTOR TOOL
• command line log collector tool xpLogCollectorCLI
• command line log collector tool xpLogCollectorCLI /fullinfo now take the station name before description to match the output filename

MATERIALS
• texture filtering settings will now be copied to volatile materials from their original base material
• large PNG files now load faster
• generating mipmaps for images not already cached is now much faster

OBJECT INSPECTOR
• the template links tab now allows multiple objects to be unpublished by multi-selecting them in the list and using the right click menu to unpublish them
• in the Template Links tab, published fields can now be assigned a color that they will be displayed with in the sequencer template data (and in the MOS plugin)
RECORD CLIENT
- The record client now supports grabbing stills in the JPG format (in addition to PNG and TGA)

SCENE DIRECTOR
- SceneDirector triggers set to execute in the same scene will now be triggered in the animated sequencer preview

SCENE MANAGER
- The ability to export one or more scenes / materials / fonts, etc to a file (.XPE) then can be sent to another system and imported (avoiding the need to send the whole project).
- Dragging an .XPE file into the viewport will open the import dialog
- Importing a scene or materials now has the option to overwrite an existing scene (when the scene name or material GUID is a match). Any existing sequencer items will be updated to use the newly overwritten scene. (You should ensure published fields are a match)
- The export / import dialogs now have a thumbnail size slider to adjust the scene thumbnail sizes
- Exporting to an XPP package now has an option to preserve subfolders underneath Images\ and Videos\ during deployment, rather than deploying all assets into the top level Images\Videos folder
- The "find" dialog in the scene manager will remain open after selecting "find next"

SEQUENCER
- A rightclick option in the scene manager and sequencer to assign a new scene to existing take items. Published fields will be updated in any matching fields in the new scene and all other fields will revert to defaults.
- The sequencer list thumbnails now update datalinq during rendering
- A preference to allow previews to render even when the preview window is closed (to allow for external previews to be updated, or for logic in OnPreviewRender scripts to be executed)
- When changing the ShowinTemplateData field for a published object, the focus in the Sequence Inspector will no longer change

SCRIPTING
- The size of the on-disk scripting cache has been increased to improve project loading speed with large amounts of scripting

SMPTE IP STANDARDS SUPPORT
- The redundancy (2022-7) of 2110 streams can now be individually enabled or disabled on Matrox DSX IP cards
- Support for ancillary streams (2110-40) on the Matrox DSX IP cards

TAKE ITEM INSPECTOR
- A "eye" icon on the template data tab to show fields that are currently hidden
- A global list being selected via a text object macro will now work with objects being set via Widgets or DataLinq™
• the dynamic material system can now use an @WidgetName@ macro in addition to the existing macros
• file paths in dynamic materials can now be absolute or relative to the project folder
• the Tab key will now advance through User Input controls that were set as Radio Buttons or Checkboxes (when the appropriate preference for tabbing is enabled)
• the up/down arrow keys can now be used to modify the selected radio button user input control

VIEWPORT
• a new button in the viewport toolbar to hide the bounding box of the selected objects as well as the safe title/safe action grid lines (custom hotkey can be assigned via keyboard shortcut menu)
• switching between scenes in the viewport that use transition logic is now much faster

VISUAL LOGIC
• a visual logic property ShowInTemplateData tab that can be used to dynamically hide published fields from the sequencer template data tab (not current available in MOS/Gateway workflows)
• setting a material color property in visual logic now accepts #RRGGBB instead of requiring #AARRGGBB
• the datalinq block in visual logic now supports the prepend/append data features
• (defaulting to 0 nits and 100 nits respectively)

API
• a new api function xpTakeItem.ReplaceScene to replace the scene that a take item is based up
• the xpEngine.OnState callback in the API will now send a notification when a project is unloaded
• added API properties for setting material blending modes, double sided, inverted normals, linear light, and depth writes
• the AddShader function in the API now accepts "Mask" as a valid shader type to create a texture fragment with the appropriate blending modes configured for a Mask
• an API property xpBaseObject.ShowInTemplateData to hide published objects from the template data tab
• an API function xpOutputFrameBuffer.GetTallyState will return the current tally status of an output framebuffer
• added Color and Alpha stage properties to the API
• an API function xpSequencer.GetFocusedPublishedObject to return the currently focused published object
• an API function xpPublishedObject.GetDatalinq and .GetDatalinqValue to retrieve the datalinq properties and current value for a published object
• xpScene.Create object now supports creating "background" objects
• an xpBackgroundObject class in the API
**CLIPS**

- The maximum length of the recall ID in the clipstore has been increased to 150 characters.
- When a clip is cued in a server channel while a previous clip is still playing back on that channel, the Media Control Gateway is now aware of the playing clip even if it wasn’t involved in starting the playback.
- When multiple clips from the Clip Store have the same unique ID (usually name) for the purpose of AMP and VDCP the Media Control Gateway now gives precedence to one with a matching Recall ID.
- A preference to allow Clipstore stills to be played back using a texture shader instead of a video shader.
- Playback of PNG files from the ClipStore is now faster.
- Clips played on server channels that do not have a sequencer item assigned will now send their countdown information to the countdown broadcast plug-in.

**DATALINQ™**

- Some OES soccer scoreboards support game times over 99 minutes. Added a configuration option to support that feature.
- Performance is improved when scenes have lots of datalinq fields and many text objects set to requery on datalinq change.
- Stats Perform API DataLinq™
  - StatsScoresLinq - Password in config screen is now masked and encrypted when saved.
  - StatsScoresLinq - Browse folder button added to set Local Data Folder.
  - StatsScoresLinq - Error message will be logged when http query fails, connection fails, connection starts and connection stops.
  - The RSS datalinq now includes an option to automatically detect XML vs JSON data based on the HTTP Content-Type header.
  - In datalinq, when searching for data in a tree based datalinq, the `<index>` field can now use the keyword "max" to return the element from the highest array index. E.g. `scoring_plays<max><description>` will return the description from the highest play element. `<max-1>` would return the second highest element, etc.
  - In tree datalinqs searching for children elements will now traverse all elements of a child array to look for a match.
  - The RSS datalinq has a new option to use the Table Presets tab with Static URLs; to allow multiple URLs to be queried by the same datalinq and each one is exposed as a separate table source to XPression. If the base URL contains the %table% then each Table Preset entry will be substituted into the base URL where the %table% macro exists. If the base URL does not contain %table% then each table entry must be its own fully fledged URL to be queried.
  - An XML/JSON TCP DataLinq that can receive an XML or JSON document over a TCP Socket.
- an SMTTennisUmpireClock DataLinq will read the data feed sent by Umpire Clocks during the match
- The Stats Perform API datalinq has a new option to use the Table Presets tab with Static URLs; to allow multiple URLs to be queried by the same datalinq and each one is exposed as a separate table source to Xpression. If the base URL contains the %table% then each Table Preset entry will be substituted into the base URL where the %table% macro exists. If the base URL does not contain %table% then each table entry must be its own fully fledged URL to be queried.
- The Stats Perform API datalinq now includes an option to automatically detect XML vs JSON data based on the HTTP Content-Type header.
- Statistics Perform API - Interval Option for Table Presets Queries
- published materials set via datalinq will now include the datalinq prepend/append values in the As-Run logs
- Better handling of OES datalinq basketball "M" Set Time of Day messages that are send when not in game mode
- the RSS datalinq in static mode with table presets can now use the Default URL macros to replace part of the URL
- DataLinq - Copy Data Option in DataLinq Browse Window
- DataLinq - Copy Data Option in DataLinq Browse Window has an option of Copy Path, using which selected Data Path can be directly pasted to Xpression Data Source > DataLinq Tab.

INCORDER
- the INcoder region splitting feature now has configurable destination size values to allow regions to be scaled
- added buttons in the INcoder to move sources, projects, and processors up/down in the list

MOS WORKFLOW
- HTML5 Plugin support for CG objects within iNEWS
- HTML5 Plugin Clips placeholder workflow
- UX has changed name to Lucid Studio.
- the ActiveX MOS plugin now supports user input controls with custom value entry when set to List Box, Radio Button, or Checkboxes
- an option in the gateway to prevent clipstore hostname from being resolved to an IP before being provided to the client plugins
- the output engine in a MOS workflow will now create take items in the sequencer with the preview frame set to the default preview frame
- Gateway configuration for SSL access to Clipstore from HTML5 Plug-in
- the MOS plugin can now use the ShowInTemplateData property to dynamically hide fields from the plugin (using scripting or visual logic)
- the MOS plugin can now use the TemplateDataColor property to dynamically color fields from the plugin (using scripting or visual logic)
• a new workflow to support multiple Tessera SE or Tessera Master systems in a MOS workflow. Each destination in the region map now requires a Net ID to be specified to indicate which tessera system the MOS item should be sent to

• HTML5 Plugin reflects the configured field colors from the scene design

• HTML5 Plugin - Added clip preview on thumbnail hover

• HTML5 Plugin clip player

• the ActiveX MOS plugin will now remember the clipstore sorting settings when closing/reopening the plug-in

• the clip browser tab in the ActiveX MOS plugin now supports Ctrl+C to copy and paste a clip into a material field in the Edit tab

• the up/down arrow keys in the ActiveX MOS plugin can now adjust user input control radio buttons

• HTML5 plugin support for Tessera Net IDs

• ActiveX Plugin will hide hours from the timing fields based on a Gateway setting

• HTML5 Plugin support for @MACRO@ substitution

NLE PLUG-IN

• the NLE Plugin now has a config option to use a locally configured render engine for previews and renders (overriding the engines specified in the gateway)

• the Premiere NLE plugin now supports direct connection to a local preview engine

• a preference to allow OnPreviewRender scripts to be run in NLE workflows and when Exporting to Images/Video

OPENMAM

• the OpenMAM driver for XPression Maps now supports secure HTTPS connections

PROJECT SERVER

• a new option in the project server show configuration to use a single incrementing revision list regardless of the project being published, so different projects do not get overlapping revision IDs

• publishing / deploying projects to the project server now handles cases better when there are assets stored in subfolders at the project level (not within the standard Images\ Videos\ folders)

REMOTE SEQUENCER

• when adding a scene to a non-mos rundown in Remote Sequencer, the layer value will default to the templates default layer

• remote sequencer will now notify you the project has been updated on the project server and provide a refresh button in the scene manager

• the remote sequencer now supports dynamic coloring and hiding of template fields

• renumbering multiple items in the remote sequencer is now faster
• some dialogs in remote sequencer did not accept numpad keys when fast recall is enabled
• the keyboard shortcut in Remote Sequencer can now perform a Take Offline for all items on a specified channel
• Remote Sequencer will now log when a layout is changed/reset

**ROSS TALK**

• a preference to allow RossTalk TEMPLATEDATA commands to update published fields in sequencer items that are already on-air
• the RossTalk TEMPLATEDATA command now supports adjusting published fields like Visibility, Position, Rotation, etc, by sending a command in the form of TEMPLATEDATA takeid:Object.Property:value (e.g. TEMPLATEDATA 1000:Quad1.Visibility:0)
• RossTalk outgoing messages are now logged in the log file
• a Rosstalk RESUME command can now contain a tessera source name to resume all layers on that source. e.g. "RESUME Ribbon Boards"

**TESSERA**

• the cue times in tessera have been improved when using scenes a large number of clip store clips
• the tessera master countdown column will now be updated when using dynamic materials from the clipstore

**STATUS CLIENT**

• XPression Status Client is a new application that enables a user on a single computer on the network to review the status of XPression applications on any or all computers running the XPression Monitor software
• The XPression Status Client allows a user on one computer to Start/Stop XPression Services remotely on other computers, launch TeamViewer sessions remotely, and install XPression software products remotely, which includes pushing the download of the software package to one or more computers involved in the remote install process
• the status client now has the ability to add groups to organize machines into different groups/categories
• the status client now has menu actions to load/save the list of client machines to a file

**VIDEO CODER**

• the Video Coder will now handle Prores 4444 files that are in Rec 601 color space
VIDEO CODEC

- a new XPVC2 video codec for improved performance including 10bit support (old XPVC clips can still be played back in the new codec)
- xpClipInfo tool (available as an explorer right click context menu item) to show the details of XPression Codec AVI files