iTX™ 2.8

Integrated Playout

Release Notes

iTX 2.8 Service Pack 2 (build 3.28.2.553)

18 July 2016

Table of Contents

Introducing iTX 2.8 SP2

iTX 2.8 SP2 is a cumulative, full-version release of the iTX software, in that it contains all the features and fixes from the initial v2.8 release and supplemental releases since. As such, it can be used for new installations, for upgrading from one major and minor release to another, or for updating the same release stream.

Attention:

Please read the following notices regarding fundamental changes to the iTX system in this release:

- As of iTX 2.8, the iTX Encode Service requires the 'FPP Transcode' license to operate. Before upgrading you can confirm whether you have this license by following these steps:

  1. On your Framework Server, switch to the System Service.
  2. Go to the **Licensing** tab then select the **License Feature Details** tab.
  3. Click **Refresh**. All of the licensed features registered with that Framework Service will appear. If 'FPP Transcode' is not in the list and you require the Encode Service, please contact your Service or Support representative about this additional license.

- As part of the new 4K support, iTX 2.8 introduces 64-bit versions of the Output Server 2 and I/O Device Manager services, which automatically replace the previous 32-bit versions on upgrade. As such, you should be aware of the following:

  - Before upgrading to iTX 2.8 you must ensure your appliance servers have a 64-bit compatible processor and operating system.

  - The filename of the 64-bit executables for Output Server 2 and I/O Device Controller end with "_x64.exe". If you have any existing custom logging profiles for either Output Server 2 or I/O Device Controller they will no longer work, as the 32-bit executables to which they refer are no longer active. To continue using your custom logging profiles for Output Server 2 or I/O Device Controller, you will need to transfer their configuration to their new 64-bit versions. i.e.

    Transfer the contents of "OutputServer2.exe.logging" to "OutputServer2_x64.exe.logging".

    Transfer the contents of "DeviceController.exe.logging" to "DeviceController_x64.exe.logging"

Version 2.8 SP2 (build 3.28.2.553)

Fixes

ITX-6264: OSC User Data not imported through Legacy Schedule Processor

When constructing the schedule, the text_data was used for the User Data. This was changed to use the user_data value as specified in the OSC documentation.

ITX-6218: Logo disappears when the channel goes into Hold

When a live event has a duration logo and the channel goes into hold, the logo is removed while the live is extended.

Now the logo is extended together with the live event.

ITX-5998: Particular schedule scenario involving Join In Progress items caused video jitter and stutter

Video jitter and stuttered resulted when TXPlay unnecessarily cued 10 clips if the start time of the Join In Progress item (and the items followed by Join In Progress) was earlier than the next item after the over-running Live event.

ITX-5872: The Caching Service sometimes failed to re-cache media items after the on-air sequence was modified

When a large sequence is on air and it receives a modification, all of the items in the sequence are now properly reloaded. The Caching Service accomplishes this by freeing the cached media clips and then re-caching the items in quick succession without failures.

ITX-5871: Take Next sometimes results in the backup channel becoming out of sync

A subtle timing issue was causing the backup channel to restore the schedule to the point just before a Take Next was performed and the old event was being put back on air.

ITX-5868: Output Server failover after the backup channel restarts

Sometimes a Follower channel was being promoted to Leader after a restart due because the timeout for the connection between Leader and Follower was too short. To resolve this issue, the timeout value for the connection between the Leader and the Follower channels has been increased.

ITX-5400: As Run files appended instead of overwritten

The As Run service uses the LastWriteTime to evaluate if the As Run file is from the last month. This can be incorrect if another user or process has opened and saved the file. To avoid this error, the CreationTime is now used to check if the file is from last month.

ITX-5370: Rendering region of interest corrected for blank frames for SPGs

Rendering region of interest is no longer calculated as full image height/width when blank frames are encountered within SPG sequences.

ITX-5282: Live logos can be erroneously taken to air using the space bar

It is no longer possible to accidentally take a logo to air using the Live Logo control by accidentally pressing the space bar (or any other key).

This applies whether or not keyboard mapping is applied to the Live Logo control or if the space bar is assigned to another component on the same layout.

ITX-5151: The import of a schedule caused secondary recordings to be marked as "Complete" regardless of the specified default

Secondary record mode now respects the default status upon schedule import.

ITX-5088: Playback performance issues when duplicating audio tracks to more than one pin

Audio stutter, lip-sync problems and inaccurate subtitle playout is no longer experienced during video clip playout when duplicating audio tracks to more than one pin.

ITX-5047: External Logo failing occasionally

Occasionally an external logo fails to go to air. When the parent event goes to air and tries to cue the next events, the external logo is uncued and fails to recue in time.

ITX-5020: HCO Router causes unnecessarily large iTX logs

Improvements were made to the HCO logging to stop too much data going to the system logs when an error occurs.

ITX-4647: Secondary records on a 720p channel create a 30 fps clip

In case of 720p, the Pandora audio pipeline generates an audio packet at 29.97 (video is at 60 DF), which was not supported by the ITX Encoder.

In the iTX Encoder, we are now dividing the audio packet into two and adjusting the time stamps accordingly.

ITX-981: The HCO Router Service produces an excessive quantity of logging data

The iTX HCO Router Service was logging large volumes of data if the HCO card it is connected to lost communication with iControl. For example, if the iControl server was re-booted or the Ethernet cable was pulled from the frame controller card, the HCO Router Service would get stuck in a loop logging messages about data not being recognized as headers.

The HCO Router Service has been updated so that it no longer produces excessive logging if bad data is encountered on a socket stream.

ITX-400: LGK CUE Fails if LGK response is too quick

If the LGK response is too quick there was no time to set the event state to "cueing" and the response was discarded.

After the fix the event state is set to "cueing" before the message is sent to the LGK and therefore the response from the LGK will always be considered even if it is received quickly.

Version 2.8 SP1 (build 3.28.1.513)

Fixes

ITX-5870: Scheduled logos are added multiple times on slave channel

In Master/Slave channel setup, schedule logos were added again on Slave channel when Master schedule is change and Slave channel syncs with Master.

ITX-5492: WAS fails to import some schedules due to SQL collation error

Enabled Unicode support for schedule importing through WAS.

ITX-5422: The CG application's dynamic clock text in the iTX Desktop refers to the system time instead of the channel offset time

The CG application's dynamic clock text now correctly receives UTC offset values from the associated channel. Channel UTC offset now respected when CG clock is on air.

ITX-5403: VANC data not stored in files

The Encode Server was not correctly setting Encode Profile values, which resulted in VANC data not stored in files. Upon playback of the encoded clip, VANCs (i.e. SCTE104) were not triggering held items.

ITX-5355: Manually entered sub-channel events on a live channel fails to play on air

When an event is moved between sub-channels, the original cache information of the event was retained and prevented the event from playing on air. To correct this issue, the cache information is now erased when the event is moved between sub-channels.

ITX-5305: Pilat to DTSS import would not set the Start mode for Stills to Fixed

Stills were being treated as Secondary items rather than Primary items. As such, the Pilat Start modes were not mapped to iTX as Fixed.

ITX-5265: Source Format and Active Region warning

The Active Region warning is only raised when the Active Region of the scheduled item is different from the clip's Active Region and none of them is pass through. If one of them is pass through, then the Source Format is used to do the comparison instead of the Active Region.

ITX-5058: Licensing Life-cycle management added

When a licence is removed from the system (e.g. local/central dongle unplugged) services will attempt to recover the licence after a timeout. If the original licence is not available, the original licence will be freed and an attempt to request a new licence will be made. This process continues until a licence becomes available.

ITX-5049: Duplicate schedules appear when modifying chained schedules

Duplicate schedules would appear in the LIVE channel when chaining schedules together and modifying one of the schedules in the chain.

ITX-4773: Emergency slide appears on air due to the extended 'Cueing' state of MXF clip

MXF clip was held in Cueing state for more than 15 seconds, which caused the Emergency slide to display on air. The cue delay was related to the MXF Partition Size setting, which was set to 1 MB when 70 MB was needed. To prevent this situation from occuring in the future, the Auto setting was added to the MXF Partition Size options. The Auto option enables the MXF loader to try both sizes; first 1 MB and if that fails then 70 MB.

ITX-4745: Short clip was not played if scheduled between two master control events

The wrong master control crosspoint was set if a short clip was scheduled between two master control events leading to the clip not being played. The crosspoints are now set correctly and the schedule plays fine.

ITX-4627: SmartClient users without Edit permissions cannot scroll multi-line metadata textboxes

When a textbox is rendered for a user without Edit rights, the textbox is now enabled so that they can scroll but it remains read-only.

ITX-3768: Edit channel configuration can be modified from Engineering layout (Output Server 2)

On Output Server 1 channels, an edit channel can have its own channel configuration, separate from its playout counterpart. On Output Server 2 channels, Edit channels inherit their channel configuration from their playout counterparts. This could cause confusion between the two systems, resulting in users expecting channel configuration changes for an OS2 Edit channel to be honored.

To resolve this issue and avoid further confusion, in iTX 2.8 SP2 when accessing the Engineering>Channel Configuration dialogue for an Output Server 2 edit channel, the user interface is replaced with the message "The EDIT Channel configuration must be done on the MAIN channel".

ITX-3554: Delivery Manager immediately deletes existing iTX location during ingest

When ingesting new media for an asset that already has an iTX location, Delivery manager would previously delete the existing location. This could leave the asset without any media if the subsequent import failed. To resolve this issue, Delivery Manager leaves the existing iTX location in place until the new media has been successfully analyzed after which it is replaced.

ITX-2469: As Run items are not written to the log when another process has locked the log file

The SDS Standard Writer Plugin now keeps a dictionary of any files that should be written to the As Run log while the log file is subject to an exclusive lock. This includes both outgoing and incoming As Run logs over the As Run Start time.

Version 2.8 (build 3.28.0.396)

New Features

ITX-4365: Introducing Softel Inside subtitles for Output Server 2

iTX 2.8 introduces Softel Inside subtitles for iTX channels operating on Output Server 2. This includes the following new features and functionality:

- Support for the following input formats as either open or closed (but not mixed):
    - Cavena (file extension .890)
    - EBU N19 (file extension .STL)
    - EBU-TT (file extension .XML)
- Support for the following output formats:
    - Teletext (pg 888,pg100), World Standard Teletext (VBI analogue - Line21)
    - Teletext, OP47, SMPTE-2031 (VANC)
    - Teletext, SMPTE-2031 - IP XAP Cyclone
    - Open Subtitles with up to 2 languages displayed simultaneously

Softel Inside is a licensed feature. For more information about purchasing software licenses and the Grass Valley license dongle, please contact: itxlicensing@grassvalley.com.

Subtitling with Softel Inside is documented in 'iTX Softel Inside Configuration and User Guide v2.8'.

ITX-4142: Introducing 4K playout over SDI with Output Server 2

For channels operating on Output Server 2, iTX 2.8 introduces support for the playout of 4K media encoded as Quad Full HD (QFHD), which has a pixel resolution of 3840 x 2160 (four times the resolution of 1080p). In order to support 4K input and output, the following enhancements have been made to iTX:

- 64-bit versions of the Output Server 2 service, File Processing Pipeline (FPP) and the I/O Device Controller are now included in the iTX installer and are automatically installed with the Output Server 2 group.
- PinPoint's search criteria for Definition now includes a 4K option.

4K is only supported on AJA Corvid 44 or AJA Corvid 88 SDI video/audio I/O cards and has the following cabling requirements:

- For 4K output via SDI, all four output spigots on the SDI video/audio I/O card must be connected to four inputs on a matrix router.
- For 4K input via SDI, your playout server must be equipped with a AJA Corvid 88. All four input spigots on the Corvid 88 must be connected to four destinations on a matrix router.

4K playout is a licensed feature. For more information about purchasing software licenses and the Grass Valley license dongle, please contact: itxlicensing@grassvalley.com.

4K playout is documented in the iTX Output Server 2 Channel Configuration Guide.

Note: Secondary record is not available to channels set to a 4K output resolution.

Note: If you are upgrading to iTX 2.8 from a previous version, you may need to reset your PinPoint search filters in Opus for the new PinPoint search filters to appear.

ITX-4031: Adding Items to playlist with less than 7 secs to on-air fail with "Item Not Ready"

If items were added to a playlist with less than 7 seconds to their on-air, they would fail with an "Item Not Ready" error.

iTX has now been updated so that items can be added up to 2 seconds before the on-air time and will playout correctly. If a user attempts to add an item to the schedule to go on air within its commit window, the following warning is displayed:

"Item cannot be inserted so close to its on air time"

ITX-3980: Flag MediaCache Service as unavailable if Cache Share is unavailable

The MediaCache Service will now be marked as unavailable if the Cache Share is unavailable.

ITX-3897: Introducing the Preview As Channel layout

iTX 2.8 introduces a new iTX Desktop global layout, called Preview as Channel. This layout has similar functionality to the existing Asset layout, but features a media player than displays Softel Inside subtitles that are linked to a video asset. This includes:

- Up to two streams of closed caption/Teletext subtitles
- Open top and open bottom captions

Note: As Softel Inside is only supported by Output Server 2, the Preview as Channel layout can only display subtitles for Output Server 2 channels.

ITX-3479: ShotList rendering using FPP Render

iTX 2.8 allows you to use the FPP Render job service to render shotlists created in SmartClient to a single flat file.

Once the FPP Render ShotList Job Service manager plugin has been installed and the workflow configured, a shotlist render can be performed by clicking the Render ShotList button on the Actions tab in the Asset layout of iTX Desktop or the ShotList workspace of SmartClient.

ITX-3462: SmartClient - Ability to reload shotlists for user jobs

The SmartClient ShotList user job dialog has been updated, so that when a shotlist is saved, the key is stashed in JobData, so that it can be reloaded if the job is paused and returned to at a later date.

ITX-3285: MediaUtils can now process logs from multiple Delivery Manager endpoints or MediaWatchers

MediaUtils has been updated so that it will process the logs from multiple Delivery Manager endpoints or instances of MediaWatcher, and consolidate them into a single log file.

In addition, ingesting a MOV file will record logs in the MOVParser.log. If a faulty reference MOV file is ingested, any logs in C:\ITXLogs are zipped ready for analysis.

ITX-3267: Link to Interra Baton user interface on Assets

The Interra Baton QC integration has been improved with the addition of a link to the Baton user interface, which can be accessed on the Asset Metadata tab, following Baton QC analysis.

ITX-3266: Interra Baton test plan configuration

The Interra Baton QC integration has been updated with the ability to configure the default test plans for Baton QC jobs from within the Baton Service. This means that you no longer need to set the workflow properties for Delivery Manager and Workflow, although you can use the workflow properties to override the defaults.

ITX-3035: Desktop clip preview using FPP now supports buffer level detection and auto pause on frame drop

In iTX Desktop, the clip preview has been enhanced with the following features:

- Play button buffer color codes:

  When using FPP for media output, the play button on the clip preview changes color to indicate how the speed of your storage media and network is impacting the buffering of the media:

  - If buffering is low (< 10%) due to network congestion or disk access, the play button turns red.
  - If buffering is not optimal (between 10% > and < 75%) then the play button turns amber.
  - If buffer is healthy (> 75%) then the play button turns green.

  Note: It is normal for the button color to change from red to amber to green when a clip is loading or after seeking the clip as it buffers up on input.

- Playback stops on frame drop:

  If dropped frames are detected at the screen rendering time (DirectX) or SDI output (if enabled), the playback will automatically stop. The user must then click on the Play button to start playback again.

  If the playback automatically stops, the Play button may be red and blinking. This indicates the source is not reading fast enough for realtime playback. During this stage, the user is locked out of the transport commands (e.g. to play or to seek the clip) until the Play button turns to amber or green.

ITX-2545: Playout of live IP sources using Output Server 2

For channels operating on Output Server 2, this release of iTX introduces the ability to playout a live IP (Internet Protocol) source.

Features of IP playout include:

- A new IP Router Service, which provides the ability to configure IP routing sources and destinations. It is also possible to configure IP sources and destination using a CSV file.
- The ability to use dual live and simulcast over IP.
- The ability to use a combination of SDI and IP live events on the same channel.
- The ability to have sub-channels with live IP events.

IP playout depending on the functionality you require, there are multiple licenses needed for IP playout to function. For more information about purchasing software licenses and the Grass Valley license dongle, please contact: itxlicensing@grassvalley.com.

IP playout is documented in the following sections of the Output Server 2 Channel Configuration Guide:

- Chapter 1 - 'About Output Server 2'; section 'About Output Targets (SDI and IP)'
- Chapter 2 - 'Preparing for Output Server 2'; section 'Process Overview - Output Server 2 Installation and Channel Configuration'
- Chapter 5 - 'About Channel Communication and Routing'
- Chapter 6 - 'Configuring Channel Playout'

The IP Router Service is documented in the 'iTX System Administration Guide v2.8' under the chapter titled 'Using iTX with a matrix router', section 'Installing and configuring the IP Router Service'.

ITX-2029: Failed imports are now identified in the iTX Desktop Job Monitoring layout

Asset import failures are now automatically added to the Job Monitoring layout so that Media Management Operators can easily identify and manage asset import failures.

ITX-2011: Render and export of daughter clips as self contained assets with metadata

This release of iTX introduces a new simple workflow called Export Daughter Clip. When previewing a clip in iTX Desktop's Asset layout, you can mark an in-point and out-point, then click the Export Daughter Clip on the Actions tab. The selected portion of the parent is then exported and rendered as a new media file, with its own metadata.

ITX-2006: Output Server 2 - Audio mapping and output using logical audio program groups

This release of iTX introduces a new system for configuring and handling audio mapping for Output Server 2 systems, called logical audio programs.

Key features include:

- By using FPP for media analysis, when video or voice over assets are imported, logical audio program labels are extracted and stored in the Opus database. These program labels can then be used to define audio programs and output groups and also be assigned to live assets in the same iTX domain.
- In Output Server 2's Configuration user interface, a new Audio tab has been added. From here you can define your audio program rules and assign them to audio output program groups.
- The Dolby, Watermark and Upmix tabs have been migrated to the new Audio tab, allowing all audio related configuration to be managed from a central location. This also means you can more easily see the Dolby, watermarking and upmixing configuration assigned to each audio program.
- The ability to apply scheduled voice overs to audio programs.
- Support for six channel voice overs.
- The ability to map stereo voice overs to Dolby surround 5.1 outputs.
- Migration of audio configuration for existing Output Server 2 channels.
- Following an upgrade to this release, you can play out audio using either your existing settings or the new logical audio program model. Logical audio program groups are derived from your previous configuration and can be modified using the new interface.
- In the Asset layout of iTX Desktop, both the logical and physical audio configuration for video and voice over assets can be viewed from the Locations tab in the property editor. These are shown on separate tabs, called Logical and Physical. When the Physical tab is selected the original control is displayed. For live assets, the Logical and Physical tabs are located under the Asset tab in the property editor, where both the logical and the physical configuration can be edited at a per-asset level.
- PinPoint has been updated with a new Media filter to show video and voice over assets that have logical audio programs.
- The ability to define logical audio programs and groups for live events, on a per live asset basis.
- Backwards compatibility with media containing legacy audio configuration.

- Previously, iTX was limited to 8 audio output groups. Now it is possible create more than 8 groups, such as 16 mono groups.

Note: Output Server 1 and Output Server 2 (up until iTX 2.8) supported PCM (Auto) mode for Audio Mapping. In this mode, the number of channels was determined by the source audio stream. Use of the PCM (Auto) output format could impact the track positioning of subsequent output streams and is not supported for media with logical audio programs.

Note: If you are upgrading to this release of iTX from a previous version, you may need to reset your PinPoint search filters in Opus for the new PinPoint search filters to appear.

Note: Voice overs, audio watermarking and Dolby metadata configuration are licensed features. For more information about purchasing software licenses and the Grass Valley license dongle, please contact: itxlicensing@grassvalley.com.

The configuration and operation of an Output Server 2 channel using assets with logical audio program groups are documented in the 'Output Server 2 Channel Configuration Guide v2.8' in the following sections:

- Chapter 1 'About Output Server 2'
  - Section 'About Logical Audio Programs'
- Chapter 2 'Preparing for Output Server 2'
  - Section 'Preparing for Logical Audio Programs'
- Chapter 7 'Configuring Audio Output'
- Appendix B 'Operating an Output Server 2 System'
  - Section 'Managing Audio from iTX Desktop'
- Appendix C 'Maintaining an Output Server 2 System'
  - Section 'Managing Audio Registration, Output and Substitution'

ITX-310: Introducing the Asset Fixer Service

This release of iTX introduces the Asset Fixer Service. This is a Job Service Manager plugin that runs on your Opus server. It currently supports customers on Output Server 2 who are migrating to the new logical audio program model. Once executed, the Asset Fixer Service performs three jobs to update video, voice over and live assets to use logical audio programs. For customers who are in the process of upgrading, the physical audio configuration of updated assets is not lost, so they can still be played out on earlier versions of Output Server 2, as well as Output Server 1.

As part of this update, the Job Monitoring layout has been updated to provide filters for each of the three logical audio jobs and PinPoint has also been updated with a new Category filter to show assets that have had their audio fixed.

Note: If you are upgrading to this release of iTX from a previous version, you may need to reset your PinPoint search filters in Opus for the new PinPoint search filters to appear.

ITX-72: Missing Materials Manager - User-friendly reports

The Missing Materials Manager now offers the option to produce a more user-friendly report of missing items. Items listed in the report now specify the associated schedule name(s) for these items, along with the channel names on which they are scheduled.

The user can configure the Transform Filename field in the Missing Materials Manager to use a pre-defined stylesheet transform file (XSLT) that converts the XML output into a comma separated values file (CSV). These reports can be opened with Excel to in order to export, print or perform searches on the content. The generated CSV files contain one entry for each missing item found on each channel and each schedule. The XSLT file used to create CSV reports can be applied to any previously configured Missing Materials Manager. It can be found in the installation package under ITX Install/Files/M3_CsvTransform.xslt.

Note: A report that has been transformed by the XSLT still retains the configured file extension, so if a user wants to generate a CSV file, they must also change the extension to .csv in the Missing Materials Manager configuration.

ITX-49: Support for DNxHD media

iTX has been updated to support media that has been encoded using the DNxHD format (including DNX 440X 1080p, DNX 100 720p, DNX 100 1080p and DNX 100 1080i).

Support for DnxHD media includes the following features:

- The ability to import DNxHD media through Delivery Manager.
- The ability to create an iTX proxy of DNxHD media, which can be previewed within iTX Desktop and iTX Smart Client.
- The ability to search for DNxHD media via PinPoint.
- The ability to search by Bitrate via PinPoint.
- Playback of high resolution DNxHD assets via iTX Desktop preview.
- Playout of high resolution DNxHD asset via iTX Output Server 2 (either cached or streamed from a NAS).

Note: If you are upgrading to this release of iTX from a previous version, you must reset your PinPoint search filters in Opus for the new Bitrate search filter to appear.

Improvements

ITX-4234: I/O Device Controller user interface enhancements

The user interface for the I/O Device Controller service has been updated with the following improvements:

- The Configuration and Engineering tabs have been redesigned to bring their appearance and behaviour into line with the Service Details, Trace Logs and Installation Info tabs, as well as other iTX services.
- The Routing Configuation tab is now integrated into the Configuration tab and divided into two sub-tabs, one for SDI and one for IP routing configuration.

ITX-4115: Output Server 2 user interface enhancements

The user interface for the Output Server 2 service has been updated with the following improvements:

- The Channel and Subtitles tabs have been redesigned to bring their appearance and behaviour into line with the Service Details, Trace Logs and Installation Info tabs, as well as other iTX services.
- The SCTE tab has been renamed Splice Insert and redesigned to bring its appearance and behaviour into line with the Service Details, Trace Logs and Installation Info tabs, as well as other iTX services.

ITX-2903: Presistent settings for the Live Preview Control component

When using the Live Preview Control as a masked component on the iTX Desktop, its settings would not be persisted between instances of iTX Desktop.

You can now persist the settings for the Preview Control component by editting and saving the Desktop layout

Fixes

ITX-5407: iTX Desktop client stopped responding while using the Channel Control layout

A fix allows the iTX Desktop to consistently operate when the Channel Control layout is being used.

ITX-4759: Duplicate chained schedule created when schedules are appended using Auto Schedule Update

When a schedule was updated in TX-Edit or via the Pilat To DTSS Schedule Service whilst live on air, a duplicate chained schedule would be created. This issue has been resolved.

ITX-4751: Master Control Crosspoint wrongly set after a schedule restore or service restart

The Master Control Crosspoint is now maintained correctly after a schedule restore or a service restart.

ITX-4505: Workflow Application Service - Schedule processing can now cope with larger file address sizes

A limitation in the Microsoft .Net Large Object Heap could sometimes cause the Workflow Application Service to have out of memory errors when processing large files.

In order to prevent the Workflow Application Service from running out of memory when processing large files, its memory address space has been increased above 2GB.

ITX-4430: Animated Logo crops one pixel from right

Animated logos could be cropped one pixel from right, when trying to find region of interest. This issue has been resolved.

ITX-4389: Output Server 1 - When a video clip follows a slide show in the schedule, it stays at a Status of 'Not Ready'

A customer site reported that on Output Server 1 channels, if a video clip followed a slide show in the schedule, it stayed at a status of 'Not Ready'.

The Slideshow Event's LoadAsset method now successfully returns the first slide instead of null. This is traditionally used for a preview image in the Event Editor, but there is no preview in this plugin, so this change does not affect the interface.

ITX-4315: Output Server 2 - Assets set to loop freeze and do not play out

For channels operating on Output Server 2, assets that were scheduled to loop would freeze at the point they should have restarted.

This issue has now been resolved.

ITX-4252: TXPlay 2 fails over when a Follower is restarted

In a leader/follower setup, the TXPlay 2 service could failover when a follower restarted. This should not happen, except when the leader service is not available.

This issue has been resolved, so that TXPlay 2 only fails over when the leader is not available.

ITX-4223: Pressing 'Take' to end a live event can cause channel to go off air

A customer site reported that if they pressed 'Take' into a live event, then around 5 seconds later pressed 'Take' again to end the live event, the channel would sometimes go off air.

This issue has been resolved.

ITX-4215: Unpaired mono tracks warn the user when configured in Output Server 2

iTX allows Dolby E or Dolby D to be inserted in different pairs. For example if channel 1 has a mono channel, the subsequent Dolby E channel will be inserted in channel 2 and 3. This has the potential to cause conflicts with downstream de-embedders, which may not be able to detect the Dolby signal.

Now, if you have unpaired mono tracks, the Output Server 2 configuration warns the user of the potential problems.

ITX-4160: Delivery Manager - SGL Flashnet archive is assigning all of its cache to each job

When Delivery Manager was issuing archive jobs to SGL Flashnet end points, the SGL archive would assign all available cache to the job. As a result, only one SGL Flashnet archive job could be processed at a time.

To resolve this issue, the Delivery Manager SGL Flashnet endpoint driver now passes file size information to the SGL archive, so that it can assign only the required cache space to perform the job. This allows multiple SGL Flashnet archive jobs to be performed at the same time.

ITX-4151: Text boxes on Event Editor for CGs reloads whenever the text is modified

In the Event Editor for CGs, when a label was modified and the user navigated away, in order to update the thumbnail iTX Desktop would reload all buttons and text boxes. This was slow and would reset the tab position.

This issue has been resolved, so that now iTX Desktop only redraws the thumbnail preview.

ITX-4132: Purge dialog reports 0 bytes recovered

Following a Media Cache purge, the results dialog would report 0 bytes recovered.

This issue has been resolved.

ITX-4094: TXPlay 2 fails to cue XG events if they are in the past

A customer site reported that XG events could fail to cue if their start times were in the past. The logs for these Vertigo XG also indicated that the items took too long to take.

This issue has been resolved.

ITX-4093: CG preview text cannot be seen

The preview window for the CG application now displays the text when set to crawl.

ITX-4055: Main channel went to black, while backup channel continued to play

A customer site reported that an operator performed a Take Next into an on-hold item, following a live event that had gone over its dummy duration. However, the on-hold item did not take and instead, the main channel went to black, while the backup channel continued to playout.

This happened because the time to air for in-hold items was being miscalculated, pushing them forward by a few seconds.

This issue has now been resolved, so that the time to air for in-hold items is calculated correctly.

ITX-4034: Output Server 2 restarts following channel destination changing sources

A customer site reported that Output Server 2 would restart if the source routed to the channel destination changed when a user initiated a failover between Output Servers.

This issue has been resolved.

ITX-4030: Output Server 1 - Takes into recorded live events taking too long

When a Take Next was initiated into a live event with secondary record enabled, it would sometimes take too long to look up the default file store.

To resolve this issue, Output Server 1 now gets the default file store upon startup and caches it.

ITX-4019: Missing As Run secondary events

For clips with multiple secondaries, the second and subsequent secondaries could sometimes be omitted from the As Run logs. This would only happen if the last item completed around the same time as a batch update to the As Run service.

This issue has been resolved.

ITX-4016: MPG files restored from CIFS Endpoint lose their in-point

Some media formats do not store their own in-point data, such as MPGs. As a result, when they were restored from a CIFS endpoint, the in-point and any offset would be reset to 00:00:00:00.

To resolve this issue, archive restore jobs in Delivery Manager no longer have their in-point data overwritten when registered.

ITX-4008: Secondary event triggered earlier than primary event when there is a Manual Take Delay (iTX Master Control)

When using iTX Master Control, secondary events were triggered before the primary event when a Manual Take Delay was configured for the channel.

To resolve this issue, iTX Master Control secondary events are now taken to air at the same time as the primary event.

ITX-3978: Installation path name limit

Windows supports a maximum of 260 characters in a folder path name. Now, if the path name where the iTX installer resides exceeds this limitation, the application files are extracted to a shorter folder path, preventing errors on installation.

ITX-3944: AsRun Plugins can now be enabled/disabled from within the AsRun configuration

An additional list of the currently installed As Run plugins, along with a checkbox indicating the current active status is now available within the Configuration tab of the As Run Service.

In line with the existing configuration options, user preferences will be saved/persisted when plugins are enabled/disabled directly from this menu. A plugin must first be selected, then the active plugin checkbox can be toggled.

ITX-3942: Picture in Picture squeezes with background cause Output Server to crash

Picture in Picture squeezes with background no longer causes the Output Server to crash.

ITX-3926: Vertigo events that aired without issue are missing from As Run logs

Vertigo events that went to air without issue would be missing from the As Run logs. This included:

- Primary items would not be written to the As Run log if there was a secondary PiP or Pandora DVE.
- Secondary items that finished within a few frames of the end of the primary.
- Sections of the As Run logs could be missing after upgrading to v2.4.10 Output Server 1.

All of these issues have been resolved.

ITX-3925: Output Server 2 sends the same reference of file for both main and edit channels to MediaCache

A customer site reported that Output Server 2 could send the same reference of files for both main and edit channels to MediaCache, resulting in files being purged by mistake.

This issue has been resolved.

ITX-3905: iTX installer overwrites the EnhancedSCTE.xml file when an upgrade is installed

iTX installer would overwrite the EnhancedSCTE.xml file when an upgrade was installed. This issue has been resolved, so the EnhancedSCTE.xml is no longer overwritten.

ITX-3890: Output Server 2 - Extended data for Vertigo events missing from As Run log

A customer site reported that on Output Server 2 channels, the extended data for Vertigo events was missing from the As Run log.

This issue has been resolved.

ITX-3889: Assets with missing media cause internal errors in the media cache

Assets with media missing from the media store would cause an internal error in the media cache preventing other assets from caching.

This internal error is now handled correctly so that the caching of other items is not affected.

ITX-3882: Certain PinPoint filters have no affect when selected

A number of search filters had not been correctly implemented. These filters were available in the PinPoint filter list, but either did not display when selected or caused an error on search.

To resolve this issue, the following filters have been fixed and now function as expected:

- Ingest Date
- Media\Analysed By
- Media\Created Before
- Media\Created Within
- Media\Date Created
- Media\Date Time Created
- Purge Date

Of the non-functioning filters, the following have been removed:

- Is Programme
- Set Identifier
- TX Details

ITX-3881: Selected items total duration is cropped on Schedule Grid

With the addition of the jump-to-home/jump-to-end buttons to the Schedule Grid, the item duration text (which appears below the Schedule Grid) was being pushed down and cropped by the Schedule Manager.

The item duration now displays correctly.

ITX-3874: Output Server 2 - Live events do not replicate the same audio tracks on HD channels as for SD simulcast partner

On Output Server 2 channels, iTX live events (not Master Control) did not replicate the same audio tracks on HD channels as for SD simulcast partner.

Simulcast live audio now shows correct outputs for live events.

ITX-3866: Manual purge of co-reference media fails to purge everything

When doing a manual purge of co-reference clips, some co-reference media items were not removed from the media cache, even though they were no longer referenced in the schedule.

This issue has now been resolved so that all co-reference items are removed.

ITX-3840: Delivery Manager is updating iTX locations with wrong data

A customer site reported that when archiving and restoring media from a DIVA endpoint, Delivery Manager did not update the paths to the media saved in the database.

This issue has been resolved, so that clips can now be correctly restored from a DIVA endpoint.

ITX-3825: Change Media Limits pop-up makes quick Duration edits difficult to perform

In iTX 2.7, the Duration pop-up on the Schedule Grid was renamed Change Media Limits and enhanced with additional controls for changing In-Points, Out-Points and whether or not the item should hold points or hold duration. This interface was not user friendly if you only wanted to perform a quick Duration change.

Now, this interface defaults to focusing on the Duration field and can be collapsed to hide the additional controls introduced in iTX 2.7.

ITX-3785: Missing Materials Manager issues duplicate jobs for the same parent clip

A customer site reported that Missing Materials Manager was issuing duplicate jobs for the same parent clip to Delivery Manager, which in turn was causing duplicate jobs to be issued to DIVA. This resulted in DIVA either restoring the clip twice or the job being cancelled.

This issue has been resolved.

ITX-3782: Daughter assets failing to restore when parent asset location is missing

A customer site reported that some daughter assets that had been manually archived would fail to restore to iTX and the following exception would be displayed: "Cannot get parent for Co-Referenced clip name". This was caused by the asset locations being removed from the parent assets.

This issue has been resolved, so that when a daughter clip (with no parent asset location) is restored using the asset key, it restores without causing an exception error.

ITX-3776: After second restore of an asset, audio/video tracks are lost

If an asset was created through an interchange, then the media was restored from an archive, if the asset was restored while it had an iTX location, its audio/video tracks would be lost.

This is issue has been resolved.

ITX-3775: Support for DVE scheduling in BXF schedules

This release of iTX now includes support for DVEs to be scheduled via BXF schedules using the Schedule Processing Service.

ITX-3748: Output Server 1 - Backup Channel went to black following an unexpected schedule restore

A customer site reported an instance of an Output Server 1 backup channel going to black following an unexpected schedule restore. The problem occurred because the clip was committed, cancelled and later sent again with the same ID. As a result, Output Server 1 would not play that clip again.

To resolve this issue, if the last clip ID is same as clip that was cancelled, the ID is cleared, allowing the clip to playout.

ITX-3734: As Run logs missing short duration (<30 second) events

Under certain timing conditions, items with a short duration (less than 30 seconds) would not be recorded in the As Run logs.

This issue has been resolved.

ITX-3725: Legacy proxies (without VideoTrack Information) will not play in the MediaUtils preview window

Legacy proxy media assets (from iTX v2.2 and earlier) would not playout in the MediaUtils preview control.

This issue has been resolved.

ITX-3719: Large BXF schedules would cause Opus to error

Importing large BXF schedules (e.g. ones with several thousand items) would result in Opus timing out with error code 1002 "Call to IOpusDataService.ScheduleUpdateItems failed".

To resolve this issue, Opus's schedule items update timeout has been increased from 10 seconds to 20.

ITX-3683: Smartclient - Job control still shows when a job is paused

In Smart Client, when a job is loaded into an job activity stage (i.e. the Browse activity or Shot List activity), if the user returns to the dashboard or Jobs workspace, the active job is paused. However, if the user then went to either the Browse or Shotlist workspace, the job controls remained visible. If used, these controls had an unpredictable affect on the job.

This issue has been resolved, so that now job control no longer shows in the Browse and Shotlist workspaces when a job is paused.

ITX-3540: Delivery Manager - Importing subtitles adds erroneous Location metadata

When importing a subtitle file, Delivery Manager could sometimes add an erroneous Location to the metadata.

This issue has been resolved.

ITX-3534: Back-to-back live events using the Hard Wired Router service fail

Back-to-back live events using the Hard Wired Router service could sometimes fail.

This issue has been resolved, so that live events using the Hard Wired Router are processed in the same way as any other router.

ITX-3478: Media Watcher does not clear some errors when connection is regained

A customer site reported that following a disconnection, Media Watcher would not clear certain error messages once the connection was regained, such as the "Cannot Access the INBOX" error message. This made it appear as though new errors were being detected or existing errors were persisting, when in fact there were no current errors.

This issue has been resolved, so that MediaWatcher now clears historic errors when the connection is regained.

ITX-3477: Delivery Manager stops processing when media store capacity reaches 10% remaining

Delivery Manager was limited to stop processing files when the available storage space on the media store reached 10% remaining. For facilities with 100s of TBs of storage, this could cause Delivery Manager to stop processing when the media store still had considerable space available.

The Delivery Manager endpoint configuration dialog has been updated with a Free Space Limit field, which allows users to control the minimum available media store capacity at which Delivery Manager stops processing new media. This value can be set as a percentage or an absolute value (in MBytes, GBytes or TBytes).

ITX-3476: Output Server 1 restarts following an item freezing

A customer site reported a random issue with playout freezing for several seconds, followed by the output server restarting.

On investigation, it was found the logs reported "Warning: Graph Paused. TimelineEnd." This was caused by two threads switching streams at the same time, resulting the stream being switched to -1 (which does not exist).

Now, when multiple threads attempt to switch streams, they first check the switch is required, resolving this issue.

ITX-3468: Media Cache Service loses status of items in Media Keep List on restart

A customer site reported an issue with TXPlay 2 not knowing when the Media Cache Service had been restarted.

This issue has been resolved. In addition, the keep media references are resent following a restart.

ITX-3467: Animated sequence logo duration defaults to 30 seconds

When importing a new sequence logo using .TZIP, the default duration of the logo asset was always being set to 30 seconds, regardless of total number of image frames within the archive file.

To resolve this issue, iTX now calculates the duration of sequence logos in a .TZIP file based on the total number of frames. Users can see this in the Asset layout and the Channel Content selector.

ITX-3463: Smart Client - Search hits are not displayed

A customer site reported that the Search hits panel on Smart Client was not being displayed for searches performed from either the Shot List and Browse workspaces.

This issue has been resolved.

ITX-3447: PinPoint fails to return assets containing pound sign/hash (#) character

Previously, PinPoint treated the pound sign/hash character (#) as a special character. As such, searches for assets containing this character would return no results.

This issue has been resolved.

ITX-3433: SPG files should not be resized

Previously, the Logo editor in iTX Desktop incorrectly allowed you to resize SPG files, when it should only allow you to move the SPG.

Now, SPGs use the default output resolution and do not get scaled. You can move the SPG and the new coordinates will be respected on playout. As soon as you resize it, it will playout using the default position.

ITX-3411: Output Server 2 - 'Slave' 'Slave' mode displayed in iTX Desktop

On an Output Server 2 system, if the TX Edit service (which controls the Edit channel) was restarted, in ITX Desktop a main and backup pair would both be displayed as 'Slave' channels.

This issue has been resolved, so that iTX Desktop control is no longer affected when the Edit channel is restarted

ITX-3410: TXPlay2/Output Server 2 reports incorrect health status

A customer site reported an issue where OutputServer2 would not be connected to the UMP server, but TXPlay 2 did not report an error.

To resolve this issue, if the selected plug-in is in error status, Output Server 2 is now flagged as unavailable.This in turn flags TXPlay2 as offline and cause a fail over.

ITX-3408: Resolution not updated when Output Server 1 restarts

Output Server 1 channels can be configured to restart if the resolution of the live input changes. However, when a resolution transition sequence invoked a restart, the Resolution field in Channel Config was not being set to the new resolution.

This issue has been resolved, so that iTX automatically changes the Resolution to match the new source and restarts the Output Server 1 service correctly.

ITX-3406: iTX defaults to using Locator mode after upgrading to v2.7

For the initial release of iTX v2.7, a configuration file was included in the installer that forced iTX to operate in Locator mode. For customer sites that operate using Discovery mode, this configuration prevented the Opus service from starting.

This issue has been resolved, so that customers upgrading to this release will be able to use their existing configuration.

ITX-3388: Color configuration for Time Modes only uses colors for Start Minus mode

The colors of schedule items can be changed through the Desktop Engineering Layout, using the Color Configuration dialog. The colors for Time Mode Value Start Plus, End Plus, Start Minus and End Minus could be configured individually, although only one value would be applied (the one chosen for Time Mode Value Start Minus). In addition, user defined event color configuration options could be created, but not deleted.

To resolve these issues, the color configuration options for the Time Mode values have been combined to one entry in the Color Config dialog called 'Time Mode Value Start/End Minus/Plus' and user defined event color configuration options can now be deleted.

Note:

- If you are upgrading your iTX system, the previous Time Mode color configuration entries will still appear in Color Config. These can be deleted individually or all together (along with any other custom entries) by clicking the 'Default' button.
- This fix also resolves ticket ITX-3210.

ITX-3387: DVE/PIP wipe number not honoured in ITXML schedules

Previously if WipeNumber was specified in an ITXML schedule it was not being honored.

This issue has been resolved.

ITX-3354: Join in Progress color configuration results in corrupted text and colors

A customer site reported that after upgrading from iTX 2.2, the color configuration for Join in Progress events resulted in corrupted text and incorrect colors would be displayed.

This issue has been resolved.

ITX-3353: Time codes in Sintec Service output (Program.txt) are recoded in drop frame

Time codes in the Program.txt file from the Sintec Service were being outputted in drop frame format, not non-drop frame.

The Sintec Service has been updated so that the Program.txt contains frame numbers as per non-drop frame rather than drop frame.

ITX-3325: Content Editor duration value for Vertigo trigger type events is incorrect

On the Channel Control layout, the Content Editor Duration value for Vertigo trigger type events was incorrect. Previously the Content Editor would automatically set the Duration value to 5 seconds when an event was selected, regardless of what the actual duration for that event is in TXPlay.

This issue has been resolved.

ITX-3324: External subtitle events do not track the Start Of Media of their parent event

Prior to a clip being restored from an archive, TXPlay would show the clip in-point in the schedule grid as zero. Once the restore job had completed, this would be updated to reflect the actual in-point and the clip would be shown as ready. However, TXPlay was not updating the schedule information it sends the Softel Swift TX application (via the external subtitle driver) after the restore had completed and the in-point for the clip had been updated. This resulted in subtitles not playing from the proper in-point.

Now, external subtitle events track the Start Of Media value of their parent event, resolving this issue.

ITX-3297: Newly-imported BXF schedules lose extended data

A BXF schedule imported for the first time would lose its extended data. A workaround was to import the schedule again.

This issue has been resolved.

ITX-3280: Audio glitch on grouped audio after coming out of an overrunning live event

If a live event with grouped audio overran for more than 5 minutes, an audio glitch could be heard on subsequent video clips. The longer the live event overran, the more pronounced the glitch became.

The audio glitch was happening due to a timeout error in audio grouping, which has now been resolved.

ITX-3253: Changes made using Gang Control View Editor overwrites changes made by other users

Changes made using the Gang Control View Editor could overwrite changes made by other users or remove control from other users, even if they were not editing the same view.

This issue has been resolved.

ITX-3247: PIP failing when using a still as the secondary background

Using a still as a secondary background Picture in Picture (PIP) event would only work once. After which, subsequent calls using stills as the background would fail.

This issue has been resolved, so that the same secondary background PIP can be used as many times as required.

ITX-3240: Still events go to black 7 seconds before ending

A customer site reported that stills on both main and backup servers would go to black 7 seconds before the next video event.

This was caused by the timing of the fade-cut transition between the still and Video clip events. The event duration for audio samples was not being calculated, which was triggering the transition 7 seconds early in the Vision Mixer.

This issue has been resolved, so that stills end at the scheduled time.

ITX-3211: Create MMM Report button on the Missing Material layout produces an error

In the Missing Materials layout, click the 'Create MMM Report' button could generate an error and no report would be produced. This was because it was trying to create additional connections to the Live Channel Client, which is not permitted.

This issue has been resolved. In addition, one of two new pop-up messages can appear when the button is clicked, depending on what channel is selected:

- If no channel or the wrong channel is selected, the message reads "Error requesting Missing Materials report. Please provide a Missing Materials channel".
- If the Missing Material channel is selected, the message reads "Successfully requested Missing Materials report", after which the report is generated.

ITX-3201: Media Watcher - deleting a Location for a clip causes the original in points of the parent to be used

Previously, when using the Media Watcher Diva plugin, deleting the Location for a clip caused the original in points of the parent to be used.

This issue has been resolved, so that now after a clip has been restored, its in points are preserved and used.

ITX-3155: Default Picture-In-Picture window size

The default window size for Picture-In-Picture (PIP) effects has changed from 100x80 to 480x270, which provides greater scaling at different resolutions.

ITX-3148: Output Server 1 - PIPs are created if the user accidentally drops a primary item onto a secondary item

On Output Server 1 channels, it was possible to create Picture In Picture (PIP) events by dragging and dropping a primary video event on to a secondary item in the schedule grid. Once these PIPs went to air they could not be removed. Following feedback from customers, iTX has been updated to disable this method of creating PIPs. If PIPs are required they can still be created using the Event Editor.

ITX-3083: Final item fails in fixed start schedule starting in the past

A customer site reported an issue with the last item in the schedule failing to play out in a schedule with a fixed start time in the past.

This issue has been resolved

ITX-3079: Output Server 1 - Items on sub channel #8 do not play out

On Output Server 1 channels, on channels with 8 sub-channels, the 8th sub-channel would not play items out and would error instead.

This issue has been resolved, so that sub-channel #8 now plays out as expected.

ITX-3076: Output Server 1 - Items on regional channels do not appear on the correct timeline track

On Output Server 1 channels with regional sub-channels, each sub channel has a dedicated track on the timeline, but items on a sub channel would not show up on the corresponding sub-channel track. For example, if an item was scheduled to play out on sub channel #1 it would not appear on timeline track "Output:1"

Regional sub-channels now appear on the correct timeline track, resolving this issue.

ITX-3059: Delivery Manager - FTP endpoints fail to re-connect if the FTP server has been restarted

A customer site reported that cancelled Delivery Manager restore jobs could remain in a "Cancelling" state after performing the following steps:

1. Stop FTP endpoint while a restore job was in progress
2. Stop the target FTP server
3. Cancel the restore job in iTX
4. Restart Delivery Manager. The endpoint is unable to connect to the FTP server (expected as the FTP server is down).
5. Restart the FTP server.
6. Delivery Manager should re-connect to the FTP server, but it fails and the job remains in the "Cancelling" state.

To resolve this issue, when an endpoint is resumed following a restart, Delivery Manager now checks if there are any restore jobs that were cancelled prior to Delivery Manager being stopped. As a result, a job which was in progress will now advance from the "Cancelling" state to the "Cancelled" state.

ITX-3047: Search and Replace - As Run User Data

A new option has been added to System Wide Config in iTX Desktop called 'Retain User Data'. This option controls whether or not the As Run log retains the previous item's user data after performing a search and replace (single or multi item). This option is enabled by default.

If the option is disabled, after a search and replace the user data is cleared for the previous item and all of its child items, so that it will not appear in the As Run log.

ITX-3023: Disabled services re-activate following an upgrade

Services that had been disabled in the Server Controller were being re-enabled following an upgrade.

The Server Controller has been updated so that disabled services no longer become active following an upgrade.

ITX-2986: Timeout when uploading BXF schedules via the web service

Uploads of large BXF schedules via the web service could timeout before completion.

To resolve this issue, an infinite time out has been added to the BXF message service, which stops the application timing out.

ITX-2979: Output Server 1 - CGs with empty text layers and an animated background cause exception errors

On Output Server 1 channels, schedules containing CG with one empty text layer and an animated background would cause exception errors.

This issue has been resolved

ITX-2969: Media Watcher ignores default profile for Asset Source Format on import

A customer site reported that Media Watcher would ignore the default profile for the Asset Source Format and therefore apply the wrong format on import. For example, if the default profile for both HD and SD content was set to '16:9 Pass through', on import HD content would be set to 16:9 and 16:9 SD content would always be set to '4:3 Pass through'.

This was because Media Watcher was checking the width of clips in pixels to determine if it was 16:9 or 4:3. Anything less than 720 pixels wide would always be set to 4:3.

To resolve this issue, Media Watcher now uses analysis results to set asset Source Format when importing clips.

ITX-2963: Router events that are not ready remain in a "New" state

Router items in BXF or ITXML schedules that were not ready would stay in a "New" state indefinitely.

This was caused by a problem importing schedules that used names rather than IDs for the matrix router, source and destination for router events.

This issue has been resolved, so that BXF and ITXML schedules containing router events can use either names or IDs for the matrix router, source and destination.

ITX-2932: Secondary live recordings are short, blank or missing

When doing main and backup secondary live recordings, some recordings would be short, blank or missing altogether.

The cause of this issue was that the Encoder service was not receiving an up to date value of frames. As such, some frames from the event to be recorded were being processed by the Encoder before the ID change detection took place, which caused the recording to fail.

This has been resolved by ensuring that the ID change detection (used to start recording) correctly reads the ID of the event to be recorded.

ITX-2901: After Primary MOS failure, the Buddy server did not pick up new clips from ITX

Messages for new clips are sent to both the Primary and Buddy server (the Buddy server rejects them as long as Primary is available). However, following a failure of the primary server, the buddy service did not pick up any messages for new clips from iTX.

To resolve this issue, messages are no longer sent to the disconnected server, so there is not a 1-30 second delay for each message sent. When the disconnected server comes back online the MOS Service reconnects within 60 seconds and continues to send messages as normal.

ITX-2899: Invalid error messages related to secondary recording

Previously, if a manual Take out of a live event was performed, ITX would attempt to stop secondary recording, even if no recording was set on the event. This caused spurious error messages to appear in the log.

This issue has been resolved.

ITX-2827: Secondary items are not skipped during a Join-in-Progress

If there is an active Join-in-Progress (JIP) item and either a manual take is performed or a fixed item goes to air, the JIP functionality (and fixed item functionality) causes items in the schedule to be skipped. However, it was found that secondary items were not being skipped.

This issue has been resolved.

ITX-2736: Flickering when in hold on first or last frames

A customer site reported the picture could flicker when either the first or the last frame was in hold. This issue was being caused by duplicates of Field 1 on the cue frame and Field 2 on last frame pause.

These duplicates have been removed, resolving this issue.

ITX-2694: Output Server 1 - Restarting inactive channel causes both channel select indicators to turn red on Live Channel Bypass layout

For Output Server 1 channels, on the Live Channel Bypass layout, if the inactive channel was restarted, both channel select indicators would turn red.

To resolve this issue, inactive channels roll under when they are restarted and the Take buttons on the Live Channel Bypass layout now accurately reflect the status of the channels.

ITX-2577: Output Server 2 - Advance schedule buttons on Schedule Grid crash TXPlay2

On Output Server 2 channels, the +1 and +24 advance schedule buttons on the Schedule Grid caused TXPlay2 to terminate.

This issue has been resolved.

ITX-2509: Vertigo events given wrong UUID in BXF As-Run log

Vertigo events in a BXF schedule carry a UUID. This UUID should appear in the As Run log, but a different UUID was being logged.

The correct UUID is now written into the XG event, resolving this issue.

ITX-2175: SCTE 104 triggering outside of the Fixed Availability window

SCTE 104 would trigger when the previous window had been used and a new trigger was still within the window.

To resolve this issue, all SCTE windows are now removed before sending the next one, so that triggers from the previous window are not acted on.

ITX-1996: CG template animations imported via OSC not honouring In and Out offset

CGs imported via OSC can use settings in the Schedule Import Configuration panel (on the Colossus plug-in) to override the animation of the underlying template. However the Colossus plugin did not allow the user to set In and Out offsets for the animation.

To provide this functionality, the Colossus plugin mapping can now be overridden by specifying the name of the actual CG template (rather than a mapping name). In which case, the original template animation settings will not get overridden by the plugin.

ITX-1647: Output Server 1 - On-air clips with a secondary event cause News Flash to produce an exception when a Take is performed

On an Output Server 1 channel, when using either of the two News Flash methods (Manual Return or Auto Return), when the operator clicked Take on the current on-air clip, an exception error was produced under the following circumstances:

- If the operator had inserted into the on-air schedule by clicking the Prepare button

  and

- the current on-air clip had a secondary event.

This issue has been resolved.

ITX-1615: Daylight Savings Time messages repeatedly appear in the iTX Desktop

Various actions and events were causing the Daylight Savings Time dialog to appear in the iTX Desktop, which required the operator to close each instance of the dialog before being able to continue using the iTX Desktop. Now the Daylight Savings Time dialog only appears when a new item is scheduled.

ITX-1561: SmartClient - Search term highlighting and improved mouse and keyboard controls

Original Resolution

The SmartClient interface has been updated with the following improvements:

- On the Source Search dialog, the Search History panel now includes a Search Hits tab, which displays the source clip metadata for each result and highlights any that match the search term. This appears when a result is selected in the Asset Search Viewer in grid view or thumbnail view.
- The Source Search popup dialog available in the Browse and Shot List workspaces now allows the user to load a result by double-clicking on it.
- In grid view the user can now change selection using the 'Up' and 'Down' cursor keys and can load the result by pressing 'Enter'.

Updated Resolution

This release of iTX includes the following additional changes:

- On the Browse Workspace, the search level has been replaced with the Source Search dialog, which appears when the Browse dialog is first opened.

ITX-1510: BXF As Run logs missing extended data

A customer site discovered an issue with events reporting that they had extended As Run data, when in fact they did not. This caused the BXF As Run plugin to drop the associated records, resulting in missing values in the As Run logs.

This issue has been resolved by ensuring when extended data is retrieved it is checked to make sure it is not null, before dropping the record. This ensures BXF As Run logs always include the correct information about extended data.

ITX-1256: Reference MOV and MXF assets rejected if not all tracks are registered

Reference MOV or MXF assets which fail to register path details for all track files in OPUS asset information will now be rejected. This prevents assets with no tracks present from attempting to play out.

If failures are due to networking issues while processing the file, then resubmitting the file will allow the registration to succeed.

ITX-1073: Reducing 'Cache Throttle in Mb/s' value to lower than 16mbs causes caching to fail

On the Configure Output Server pop-up layout (found on Channel Config 4), lowering the value of the Cache Throttle in Mb/s field to lower than 16Mb/s caused caching to fail (despite messages saying that caching is still taking place). As a result, iTX attempted to stream media for playout directly from the NAS, without alerting the user.

ITX-783: GSM Gateway Service does not send backup channel alerts to iControl

The iTX GSM Gateway passes data on the Current Item, Duration, Next Item, Time to Transition to iControl. If a channel was failed over to its backup, the data stopped getting to the iControl GSM.

Now, when a channel is monitored, main, backup and on-air channel alerts are sent to iControl.

ITX-428: Schedules that start with comment events do not evoke a warning when appended to the current schedule

When a schedule is loaded into the Schedule component and appended to the current schedule, TX Play checks to see if the schedule starts with a fixed item in the past. If it does, the user is informed that if the block of items is appended to the current schedule, the first item will be changed to be auto. They are asked if they wish to proceed and if they say yes, the first item is changed to be auto and the item block is appended.

If the item block started with a comment event, then a fixed event in the past, the above check was bypassed.

This issue has been resolved, so that comment events also trigger the warning box and the first unskipped, fixed item is changed to be auto.

ITX-427: Items missing from As Run logs after master/slave failover

Following a master/slave failover, TXPlay would lose track of what items needed to be added to the As Run log.

This issue has been resolved.

ITX-426: As Run logs do not include details of master/slave failovers

When a failover from a master and a slave was performed, there was no indication of the failure in the As Run log.

Now, following a failover, the As Run log updated with a line stating the time, date and which channel is now the master, for example:

> "<ServerName> is ** TXPlay: <ChannelName>-BACKUP has now become the MASTER channel."

ITX-388: Main to live channel tally switching fails

When using the Tally Service to provide tallies for an on-air source and switching from the main to live channel via the Live Channel bypass layout, the tallies would fail to follow the video source. This then caused the tally for both sources to be active at the same time. One tally would be due to the main channel and the other was based on the live channel, without regard to the state of main/live.

To resolve this issue, routers derived from the Base Router Service now update the tallies themselves, rather than in the Router Server.

ITX-387: Imported schedules containing voice overs did not set background audio level

Imported schedules containing voice overs did not set the background audio level and instead left it at the default setting. This issue affected all schedule types.

This issue has been resolved, so that the background audio level is set when schedules containing voice overs are imported.

ITX-281: iTX timecode drivers have been updated to version 6.4

To support Adrienne VITC cards installed in iTX framework servers, the Local Time Service version 6.4 is now part of the iTX installer.

Accessing the iTX Installer

The iTX 2.8 SP2 software is distributed as an iTX Suite zip file, which must be downloaded onto the machine where you want to install the iTX software modules.

To access the iTX Installer:

1. Copy the official release version of the **iTX Suite** zip file (e.g. ITX Suite 2.8 SP2 - Build 3.28.2.553.zip) to a local drive on the machine you want to install the software on. Never attempt to run the iTX Installer from a network share.
2. Unzip the file.
   If the computer security settings prevent you unzipping the file:
   a. Right-click the zip file and select **Properties** from the displayed menu commands. The Properties window appears.
   b. Select the **General** tab in the Properties window and click **Unblock**.
   c. Click **OK** to close the Properties window.
3. Once the file is unzipped, open the **iTX Suite v2.8 SP2** folder.
   The folder contains the Setup.exe file which you use to launch the iTX Installer.
   The following two subfolders are also included to support the installation, but require no immediate attention:
   - **Drivers**: contains the required device drivers for the SDI video cards that are used with the iTX Output and Encode servers. You must ensure you are using the correct AJA drivers for the version of the Output Server service you have installed. For more information on installing the Output Server service see the iTX System Administrator Guide.
   - **iTX Install**: contains the iTX installation and iTX system files that are required to manage and run the iTX software.
     WARNING: Never use or modify the files in the iTX Install folder, except when instructed by our personnel. Always use the Setup.exe file and iTX software module user interfaces to configure and operate iTX. This minimizes the risk of unintentionally damaging the iTX system.

Supported Devices and Software

iTX 2.8 SP2 can work with a range of devices, including those listed below.

For more details of which firmware versions are supported, contact our Technical Support Services team.

External Playout Devices

With the appropriate plug-in licenses, iTX 2.8 SP2 supports the following devices for on-air control.

External Logo plug-in
- Grass Valley Imagestore 300, HD and 750 models
- Grass Valley LGK-3901 card in a Densité frame

External Subtitle plug-in
- Screen Polistream v2.4.1.2
- Softel Swift TX M-Series 2.01
- Cavena STU v3.1.7

Clarity plug-in

- Pixel Power Clarity graphics system v7.2.7.8

VizRT plug-in
- VizRT graphics system v2.8

iTX Master Control
- Grass Valley Imagestore 750 , v4.5-012
- Grass Valley Imagestore Modular 3901, v4.8
- Grass Valley iMC-Panel-100, v7.2.10.0_ECO_18578 - 2012_10_16
- Grass Valley iMC-Panel-200, v7.2.10.0_ECO_18578 - 2012_10_16
- Grass Valley iMC-Panel-300, v7.2.10.0_ECO_18578 - 2012_10_16

Vertigo XG plug-in
- Vertigo XG Xmedia Suite v4.8 SP7
- XG Inside Xmedia Suite v4.8 SP7 for Output Server 1
- XG Inside Xmedia Suite v5.1 for Output Server 2

Routers
iTX 2.8 SP2 can work with a range of broadcast routers via the following router controllers.
- Grass Valley NVision NV9000 and NVision 920
It can also control the following routers directly.
- Grass Valley Densité HCO

GPI devices
iTX 2.8 SP2 supports the following GPI devices.
- Videoframe: VNODE 8x8; VNODE 16x16; VNODE 32x32
- DNF Universal Switch Panels: USP-8; USP-8A; USP-EM-8; USP-SNMP-8; USP-16; USP-EM-16; USP-SNMP-16

External content stores
iTX v2.8 SP2 can work with media files on the following types of external storage system.

Devices	Supported functionality
EMC Isilon OneFS (v7.2.1.1)	Searching, restoring, retrieving and storing.
SGL FlashNet Archive (v6.4.13.003)	Searching, restoring, manual archiving and manual restoring.
Front Porch Digital DIVArchive (v6.5.3.5.0)	Restoring, partial restoring; archiving and deleting of media files.
Viz Ardome	Retrieval of media files.
Suitcase TV archive system	Restoring of media files.
Omneon Server	Retrieval of media files, using FTP.
GVG Profile	Retrieval of media files, using FTP.
Masstech MassStore (v 7.5.3)	Restoring, archiving and deleting of media files.

Third-Party Applications

- Interra Baton automated file-based QC v5.3
- TeleStream Vantage Workflow v4.2.286 (for import, transcode and render jobs)
- iTX support for ENPS versions 5 and 6 has now been deprecated.
- iTX support for MOS Protocol 2.83 has now been deprecated.

QA Environment and Platform

This release of iTX has been qualified by our Quality Assurance team using the following third-party software, hardware and operating systems.

Operating Systems and Other Software

iTX Framework Services
- Microsoft Windows Server 2008 R2

iTX Database
- Microsoft Windows Server 2008 R2 running Microsoft SQL Server 2008 Service Pack 3 (version 10.0.5500)

iTX Output Server
- Microsoft Windows 7 Ultimate SP1 64 bit edition (version 6.1 build 7601) for Grass Valley Playout Appliance 1 Servers (OS1)
- Microsoft Windows Server 2008 R2 for Grass Valley Playout Appliance 2 Servers (OS2)

iTX Desktop Client
- Microsoft Windows 7 Ultimate SP1 64-bit edition (version 6.1 build 7601)
- Microsoft Windows 7 Professional SP1 64-bit Edition

Other Hardware and Software

Video Playout and Ingest Cards
For encode servers running the Encode Services:
- AJA Corvid 1 with Drivers 7.4.0.49 FW 20-01-10
- AJA Kona 3G with Drivers 7.4.0.49 FW 04-07-11
For output servers running Output Server 1:
- AJA Corvid 1 with Drivers 7.4.0.49 FW 20-01-10
- AJA Kona 3G with Drivers 7.4.0.49 FW 04-07-11
For output servers running Output Server 2:
- AJA Corvid 1 with Drivers 12.1.0.107
- AJA Corvid 44 with Drivers 12.1.0.107
- AJA Corvid 88 with Drivers 12.1.0.107
- AJA Kona 3G with Drivers 12.1.0.107

System Time Code Generation
- Adrienne Time Code Card with drivers 1.0.0.7

Video Router and Router Controller
- Nvision NV8576+ router (software version 14.0.0.11)

- Nvision NV9000 router controller (software 6.2.0.1674)

iTX Software Anti-Virus Qualification

This version of the iTX software install package was scanned with Sophos Endpoint Security anti-virus software version 10.6.3.537, virus data detection version 5.29 (28 June 2016) and found to contain no currently known viruses.

Grass Valley User Documentation

Release Notes, product manuals and other user documentation is available online via the Grass Valley Documentation Library at http://www.grassvalley.com/docs/page

Access to Release Notes, product manuals and white papers is prohibited without authentication. There are multiple authentication paths available to verify your identity.

Broadcast customers:

- If you already have a Grass Valley Service Portal account, you can login via http://www.grassvalley.com/support/portal
- If you do not have a Grass Valley Service Portal account, you can request one via http://www.grassvalley.com/support/service_portal_access_request

Alternately:

- If you already have a Grass Valley website account, you can login via http://www.grassvalley.com/auth
- If you do not have a Grass Valley website account, you can sign up via http://www.grassvalley.com/account

Contact Us

For technical assistance, contact our international support center at 1-800-547-8949 (US and Canada) or +1 530 478 4148.

To obtain a local phone number for the support center nearest you, please consult the Contact Us section of Grass Valley's web site (http://www.grassvalley.com/contact). An online form for e-mail contact is also available from the web site.

Copyright and Trademark Notice

Belden, Belden Sending All The Right Signals and the Belden logo are trademarks or registered trademarks of Belden Inc. or its affiliated companies in the United States and other jurisdictions. Grass Valley and iTX are trademarks or registered trademarks of Grass Valley Canada. Belden Inc., Grass Valley Canada, and other parties may also have trademark rights in other terms used herein.