iTX™ 2.6 Service Pack 8

Integrated Playout

Release Notes

16 January 2017

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Introducing iTX 2.6 SP8

iTX 2.6 SP8 is a cumulative, full-version release of the iTX software, in that it contains all the features and fixes from the initial v2.6 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.

Important: The File Processing Pipeline plug-in for video playback within Output Server 2 is now a licensed feature. To use the File Processing Pipeline plug-in for video playback within Output Server 2, its license credentials must be included on the iTX software key (dongle).

Version 2.6 SP8 (build 3.26.8.615)

Fixes

ITX-7873: Closing the slave TXPlay1 routes the slave to air

When closing the Slave TXPlay1, it is no longer promoted to on air if it cannot communicate with the Master.

ITX-7393: LGK fails after clip on hold

When two live events are back-to-back with different external logos and the second live event is on hold, pressing Take Next no longer causes the second external logo to fail.

ITX-6782: An item in the schedule failed to cache

The item's caching state is now correctly set at the point that a copy job is requested within the Media Cache Service.

A new caching state "CacheRequested" has been introduced. This state is distinct from "Caching", where a progress update has actually been received from the in progress caching job.

ITX-6730: Schedule imported by Legacy Import Service has VertigoXG events set to keyer 0

A Schedule imported by Legacy Import Service had all VertigoXG events loaded with keyer 0. Now they are all loaded with the correct keyer value.

ITX-6673: Default Cache Throttle value has been changed from 100 MB/s to 40 MB/s

The default value for Cache Throttle is currently set to 100 MB/s (Megabytes). Having such a high value could potentially disrupt streaming while media caching. As such, the default value for Cache Throttle has been changed to 40MB/s.
Even if the caching throttle value is reduced for smooth streaming, other ITX channels (using the same Isilon) may still be still caching with 100 MB/s, which can effect the Streaming Channel.
Note: This change is for Output Server 1 new channels & Greenfield install only.
Customers who will be upgrading from previous ITX build will still be getting the default value as 100 MB/s.

ITX-6534: UpdateItem causes schedule restore on backup with stale data

The Freeze information of the event was not being reset during UpdateItem.

ITX-6278: TXPlay became unresponsive during media caching

An internal fix to the media caching code has resulted in TXPlay no longer becoming unresponsive during media caching.

ITX-6277: Clips failed to cue due to missing media

When a clip fails to cue due to missing media (e.g. the physical file being missing from the cache), TXPlay will show two error messages with the second 'ERROR in the Audio Channel' message showing the file path where the missing file should be.

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-6189: The names of secondary recordings are overwritten on historical items

In the Schedule Grid, the names of older secondary recording items are no longer being updated with the name of the next, last or current recording.

ITX-6087: Skipped items appear in the wrong order in the As Run files

Skipped items were being sorted by 'End Time'. Since skipped items have a duration of 0, they should not be sorted by duration. Skipped items now appear in the As Run file in the order in which they appeared in the schedule.

ITX-6060: Global ID not being extracted from DUB list

When a dub list is imported, the Global ID was not being translated from the DUB list into the itxml.

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

Video jitter and stutter 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-5961: Back-to-back live events with secondary record are taking too long

The routing of back-to-back live events is delayed while waiting for a secondary record asset to be created. The asset is now created asynchronously so that the route does not wait on this.

ITX-5877: Channel did not cache until a failover was initiated

Within the Media Cache service, Live assets sharing the same cache reference were placed in an invalid state and a schedule restore was required to recover. This problem has been resolved and the channel caches without requiring a schedule restore.

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-5432: Wrong live event goes to air after TXPlay restart

When TXPlay is recovering a live event to air, ensure the destination for the routing is set before issuing the route instruction.

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-5369: The iTX Desktop's event editor did not play the preview video from the correct position as specified by the in/out points

Switching between daughter clips and then previewing the clip in the event editor now resets the daughter clip's in/out points correctly.

ITX-5332: Multi-layer CGs are not removed following a schedule restore

Multi-layer CGs are now consistently removed at the correct time following a schedule restore.

ITX-5125: Imagestore 750 layer 4 does not work even if the number of configured layers is 4 or more

Imagestore 750 layer 4 now works when correctly configured. The 'Num Layers' field in the Channel Config > Plugins > External Logo configuration now only allows you to select from a value of 0-4 (zero being 'not configured') and defaults to a value of 2 when first installed.
The External Logo plugin on the Channel Control layout 'Ex Logo' plugin also only allows you to select layers 1-4.

ITX-5006: PinPoint Search Result items are deleted, despite not being selected for deletion

After performing a Select All in the PinPoint Search Results and then deselecting a few items, pressing Delete now deletes only the selected items rather than all items listed.

ITX-4127: Playout of long clips while caching to Output Server resulted in stutter on air

Delays in reading data for Pandora/iTXPlayer caused stuttering. To make caching more efficient, a new property was added to Configure Output Server Config form that allows you to configure the Media Cache block size.
For optimal performance while streaming media, we recommend the following media cache settings:

- Cache Throttle in MB/s = 16 MB
- Cache Block Size in MB = 1 MB

Version 2.6 SP7 (build 3.26.7.568)

New Features

ITX-5416: Pinpoint now supports the search for invalid clips

PinPoint now features a new search category within the Media filter called Invalid. This new search category allows you to search for invalid clips by setting the 'Invalid' option to yes and the 'Location Type' to iTX or Proxy.

Fixes

ITX-6086: Clip taking long time to cue MXF Partition size

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-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-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-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-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-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-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.

Version 2.6 SP6 (build 3.26.6.545)

Fixes

ITX-5874: Take Next would fail, despite the item's status being Ready to Commit

In TXPlay, if the previous and next item to play had identical names, then the Take Next would fail. This issue has been resolved.

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-5421: Clips scheduled after a Live event remained in a Cued or Cueing state

A grouping of three short clips scheduled after a Live event remained in a Cued or Cueing state because FPP slots were not being released.

This fix ensures that the slots are freed up once playout of the item(s) has completed. Items now correctly go from Cued > ReadytoCommit > OnAir and playout with sound and video as expected.

ITX-5395: The 64 bit version of the iTX Desktop stopped working

The 64 bit version of the iTX Desktop stopped working due to an unhandled exception. This issue has been resolved.

ITX-5279: Wrong date and start time for midnight in the BXF As Run

Items scheduled to start exactly at midnight (UTC) were reported in the BXF As Run as being the previous day, not the next day. This issue has now been fixed, so that at midnight (00:00:00:00), the correct date is given.

ITX-5223: Follower channel does not play out a Live event when 'Take Next Sequence' GPI is triggered from Leader channel

In a Leader / Follower configuration, a video clip was followed by a sequence that contained a Live event that was On-Hold. When the 'Take Next Sequence' GPI was triggered, both the Leader and Follower Timelines and Schedule Grids displayed the Live event as being On-Air. In reality though, the Live event was actually only playing out on the Leader channel and the Follower channel was still cued on the last frame of the previous video clip. This issues has been fixed so that the Live event also plays out on the Follower channel.

ITX-5215: Placing a channel on hold caused an increase in memory usage

When a channel was on hold, a new TXMediaEvent was created every 6 seconds causing high memory usage. This issue has been resolved.

ITX-5137: During JIP removal procedure, time mode was changed to fixed end and caused an outage

A JIP item has a fixed start-time and is now allowed to be converted to a Fixed item. Before, an error would be displayed if the JIP had rolled under a frozen item (such as a JIP message pinning a Live) to the point the start-time was before the start-time of the frozen item.

ITX-5115: The GPI End Sequence failed to take next cueing item

If the next item after the on air sequence was in the cueing state for a small duration, then the GPI End Sequence failed to take next cueing item. This issue has been resolved.

ITX-5084: Global Edit does not respect manual holds, which caused an outage as the live source was taken prematurely

Manual Hold is now preserved for a live item which is replaced by a video or another Live item. Manual Hold is also preserved for video items which are replaced by a live item.

ITX-5050: Inpoint was not being overwritten during audio encode

The Inpoint was not being overwritten after a scheduled audio encode. This has been resolved.

ITX-5011: Media Cache did not update cached item after location change

A Cancel Copy message generated a null reference error during a location update event if no copying was occurring. Perform a null check before trying to use this message.

ITX-4944: Unable to maintain the letter case (upper and lower case) of Schedule GUIDs

The Preserve GUID Letter Case checkbox has been added to the Workflow Application Service Configuration. When unchecked (default), the Schedule GUID is displayed in all lower case letters and any upper case are converted to lower case. If checked, the GUID is processed without any changes to the letters (e.g. upper and lower case letters remain as is).

ITX-4913: All radio channels on the Output Server go to silence

During the removal of a live source from a radio channel, there was potential for an unhandled exception to occur. This prevented the live source from being unloaded, which could lead to a memory leak. The exception has now been prevented and live sources will not be removed.

ITX-4890: CG Secondary Event returns to a Cueing state following a Schedule Restore

When a Primary item was on air with a CG Secondary Event, performing a Schedule Restore changed the CG's status back to 'Cueing' on the Schedule Grid. This issue has been resolved.

ITX-4221: Using the Take selected Item control while the channel was on hold caused the channel to go off air

When using the 'Take selected item' control to take into an item further down the schedule when the channel is in hold would sometimes cause the channel to go off air. This issue was especially present if the item being taken had a V-fade, Fade/Cut or Cut/Cut transition. This issue has been resolved.

Version 2.6 SP5 (build 3.26.5.514)

Improvements

ITX-4350: SmartClient - ShotList Export can now create Final Cut Pro XML v5.0 files

The Export ShotList workflow in SmartClient can now export a Final Cut Pro XML v5.0 format file, which can be loaded into Grass Valley Edius v8.10 or Adobe Premiere Pro CC v9.0.2 (6) editing packages.

Fixes

ITX-4908: BXF Schedule Sync Service missing a DLL file on install

The iTX Installer reported that the Omnibus.G3.Automation.TXPlugins.TXVizRTCaptionEvent.dll file was missing. This DLL related to the BXF Schedule Sync Service is now included in the iTX Installer.

ITX-4819: An error message appears when selecting channels in the iTX Channel Config window

When selecting a channel on the Channel Config window in the Engineering panel, a message box would sometimes appear saying, "Error Getting Encode Profile List: Value cannot be null. Parameter name: item". This would happen each time a channel was selected and if you clicked OK to cancel the message, the message box would reappear several times. This issue has been resolved.

ITX-4775: Edit channel does not update restore status

Following an upgrade to iTX build 3.26.4.437, when the status of a video clip changed from Restoring to Restored, the Schedule Grid of the Edit channel did not update to reflect this. This issue has been resolved.

ITX-4768: Evergreen functionality should replace media that's not on ITX as well as missing media (Output Server 2)

For Output Server 2 channels, Evergreen functionality is now available to auto-replace scheduled media that has an asset placeholder, but no ITX location. This is configured using the 'Advanced Replace' option in the Engineering Configuration panel, found in iTX Desktop's Engineering layout. When enabled, users can enter a tolerance in Minutes to control how long iTX should wait when non-iTX media cannot be found, before auto-populating the playlist with the selected evergreen content.

ITX-4617: Analysis of Corrupted Media Status

A customer site reported that following an upgrade to iTX 2.6 SP4, video clips that were registered with Delivery Manager would sometimes have missing audio tracks. The physical files were restored and were present in the media folder, but Delivery Manger did not always analyze the tracks.

This issue has been resolved and as part of this fix, corrupted video and audio files will now be marked as 'Invalid' after being registered. Furthermore, corrupted video and audio files will also be flagged with a Status of 'Not Ready' when on the Schedule Grid.

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-4320: If file is not accessible for analysis stage, the asset appear as Invalid

A customer site reported intermittent failures of the Delivery Manager Register in Place end point with clips that played out fine on the iTX 1.4 system they were migration from. During these failures, the Register in Place endpoint would attempt to analyze the media on the 1.4 media store, but would then indicate it could not find the file. The registration would complete but when the clip was viewed in the Locations tab of the iTX Desktop Asset layout, there would be no video or audio tracks listed. The end result was the clip would look fine on the Channel Control timeline, but when it went to play the audio would be missing. When this happened it would usually coincide with some sort of access issue on the 1.4 media store.

Now, when ingesting a file, if it becomes inaccessible due to a network error during the analyze stage then the asset will appear as invalid.

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-4276: Items restored from Archive for current schedules are being purged just before they go to air (Missing Materials Manager)

Items that had been restored from an archive for current schedules were being purged by Missing Materials Manager just before they were due to go to air. This was because previously iTX was using a cloned copy of the "Keep List", which was not guaranteed to have up-to-date information, due to the delay in purging threads (as specified by the purge criteria). For example there could be large delay (over a day), where the purge criteria would allow too many clips to be purged, only a few of which were actual iTX clips that could be considered as purge candidates.

To resolve this issue, iTX no longer uses a cloned copy of "Keep List" and instead uses the original "Keep List", which has up-to-date information.

ITX-4257: Output Server does not send Recue command on both iTXPlayer and Output Server restarts

If ITXPlayer or Output Server 1 were restarted while a schedule was playing out, TXPlay was not sending "Recue" command for already cued items.

To resolve this issue, both Output Server 1 and ITXPlayer have been updated:

- For Output Server restarts: Once TXPlay is notified that Output Server 1 has restarted, it will change the state of all the cued items to "Ready". As such, TXPlay will automatically send the "Cue" command again at the due time.
- For ITXPlayer restarts: Once Output Server is notified that iTXPlayer has restarted, it will inform TXPlay and TXPlay will change the status of all the cued items to "Ready". TXPlay will then automatically send the "Cue" command again at the due time.

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-4229: CGs on dual channel servers share the same temp folder, causing conflicts on playout (Output Server 1)

On Dual Appliance Servers (Output Server 1) operating in dual channel mode, both channels would use %appdata%\TempCaptions as a temporary folder for CGs, which would cause conflicts on playout.

Now, for dual channel servers, each channel stores its temporary CGs in its own folder (%appdata%\TempCaptions\"Channel Name").

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-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-4125: CG crawls/tickers do not respect their scheduled duration (Output Server 2)

An issue was discovered with CG crawls/tickers not respecting their scheduled duration. This would result in crawls ending before their scheduled duration. 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-4092: New cut and paste functionality in the Schedule Grid

In the Schedule Grid, it is now possible to paste primary items above other primary items, before they go to air.

In addition, the view controls in the Schedule Grid context menu have been consolidated into a sub-menu called View.

For more information, see the "Change the order of schedule events" in the iTX Desktop Operator guide.

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-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-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-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-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-3786: As Run plugin assigns an incorrect date to schedule items that are not in chronological order

If a schedule contained items that were not in chronological order, these items would be written to the As Run log for the wrong day. For example, if a secondary item was added with a Start+ duration which exceeded the start time of the next primary event and the next primary event occurred before the As Run rollover point, these items would be written to the As Run log for the wrong day. This issue has been resolved and the As Run plugin now correctly handles schedule items that are not in chronological order.

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-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-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-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-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-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-2909: Logo over a Live event was lost after restarting TXPlay 2 (Output Server 2)

Following a TXPlay 2 restart, the Logo which was present over the Live event was lost and its Status on the timeline was 'PostScheduleRestore'. This issue has been resolved and logos now recover on a Live Event following a TXPlay 2 restart.

ITX-2765: The Schedule Sync service was not updating the house number in the BXF file

The Schedule Sync service was not updating the house number in the BXF file when an asset was changed for the item in the current schedule. This issue has been resolved.

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-2222: Take Next does not work when a schedule is dropped onto grid

After a schedule was pasted into an empty Schedule Grid, the 'Take Next' sometimes did not work. This issue has been resolved.

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-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-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.

Version 2.6 SP4 (build 3.26.4.2033)

New Features

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-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.

Fixes

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-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-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-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-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-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-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-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-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-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-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-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-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-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-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-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-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-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-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-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-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.

Version 2.6 SP2 (build 3.26.0.342)

New Features

ITX-2710: Regional channel route back END+ time modes

Live RETURN events from the Split Break plugin were scheduled with an END- time mode with a 0 offset and a 1 second duration. This caused the regional channels to route back to the main region 1 second early and lose the last 1 second of the advert break.

Now, live RETURN event from the Split Break plugin are now scheduled with an END+ time mode.

ITX-2701: The Enhanced VANC plugin now populates the iControl GSM Gateway

The iControl GSM Gateway now passes data from the SCTE104 (enhanced VANC) plugin through to iControl, along with the data from the standard VANC plugin. The presence of SCTE104 data can be seen in the Alarms browser of iControl Navigator for the selected channel.

ITX-1864: Multi-language subtitle support in BXF traffic schedules

For external subtitles it is now possible to specify which languages should be played in the BXF traffic schedule using macro parameter strings. The first string should be "Language" and the second should be a list of language identifiers, separated by a pipe sign (e.g. "ENG|FRA" for English and French).

Note:

- The 'Use Dedicated Softel driver' option must be checked in TXPlay Config.
- The language option string depends on the external subtitle device and the language definitions it accepts. The languages entered into the string must match the definition on the external subtitle device.

ITX-713: Delivery Manager Register In Place Endpoint

This release introduces a new system for migrating from a legacy iTXv1.4 system to an iTX 2.x system.

Because the iTX 1.x and iTX 2.x databases differ in structure, it is not possible for customers to simply upgrade to iTX 2.x. A new Delivery Manager endpoint driver called "iTXV1Driver" has been introduced that can perform "register in place" actions between v1.4 and the latest v2.x databases. This means as video and subtitle assets are added to, updated on or deleted from the iTX v1.4 system, the corresponding metadata is added, updated or deleted on an iTX v2.4 system, running in parallel. The media itself remains on a shared media store and so does not need to be transferred, as each database has its own metadata record. The new iTXV1 endpoint can be selected from the Delivery Manager Config.

By using Delivery Manager, the iTXV1 endpoint is able to take advantage of bespoke workflows to manage the metadata transfer and deletion. Users are also able to manually trigger the database synchronization, which ensures all of your existing metadata is migrated to the iTX v2.4 system. This synchronization is done in batches, as not to impact system performance and the process repeats until all of the asset metadata has been migrated. After that, asset metadata additions, updates and deletions are migrated to the iTX v2.4 system as they are performed on the v1.4 system.

Note: At this time the endpoint supports only video and subtitle metadata synchronization.

Improvements

ITX-2365: Output Server 2 - Picture in Picture (PIP) event creation

On Output Server 2 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-1948: Schedule Grid navigation using Home and End buttons

In iTX Desktop, Home and End buttons have been added to the scroll bars of the Schedule Grid in all of its various locations (e.g. Channel Control, iTX MC, Live Channel Bypass). These buttons provide the ability to jump to the top or bottom of the respective window, for improved navigation.

In addition, the Home and End keys can also be used to jump to the top or bottom of whichever window currently has focus (i.e. the one the mouse pointer is hovering over).

Fixes

ITX-3227: iTX Desktop memory issue - automation grid control grayed out

Memory usage issues in the desktop cause a variety of symptoms. One of the most common is that the automation grid control becomes flat and grey. In this case a memory leak in the Live CG component caused the memory issue, leaking around 1MB per component when switching between channels. This has been addressed.

ITX-3173: Output Server 2 - Follower channels do not promote themselves to leader

On Output Server 2 channels, if both the leader and follower channels went offline, restarting the follower would not cause it to promote to be the leader.

This issue has been resolved, so that on restarts, follower channels with no leader promote themselves to be the leader and restore the schedule.

ITX-3150: Output Server 2 - TXPlay2 stops processing items if AsRun is ON and the schedule contains sequences

On Output Server 2 channels, TXPlay 2 would stop processing a schedule that contained sequences if AsRun logging was switched ON. Eventually iTX Desktop would show the schedule with items in the past as still being on air, sequence items in an error state and other random errors. If left to run, TXPlay 2 would eventually reset.

This issue has been resolved, so that As Run logging does not affect TXPlay 2.

ITX-3134: Logos, animations or CGs are not removed if more than 4095 of these asset types have played out

iTX was unable to remove logos, animations or CGs once more than 4095 of these items had played out. The only work around was to restart the Output Server service.

This issue has been resolved so that all of these types of asset clear correctly, regardless of how many have played out.

ITX-3122: Output Server 1 - Sub-channel not returning to main if logo present

On Output Server 1 channels, if a sub-channel item had a secondary item attached (such as a logo), this prevented the sub-channel from returning back to the main channel output when the clip finished.

This issue is now resolved, so that sub-channels with secondary items attached now return to the main channel, as expected.

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-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-2944: Output Server 2 - Starting iTX Desktop before Output Server 2 would not enable all of the controls

On Output Server 2 channels, if iTX Desktop was started before Output Server 2 in a Leader/Follower mode, the Schedule Management Load button was greyed out. Also it was not possible to drag and drop video items from the Content Control palette.

These issues have been resolved, so that on an active iTX Desktop, all controls are enabled once Output Server 2 is started.

ITX-2941: Multiple BXF schedule processing issues

There were a number of issues in the Workflow Application Service-based BXF processor when using custom workflows. These included:

- SCTE 104 triggers not having a material ID
- External subtitle events getting converted to internal subtitle events
- Channel logos (where device name is "CHANNELLOGO") did not work properly.

These issues have been resolved, plus the reason for import failures is now more accurately reported to the client.

ITX-2936: Output Server 2 - Items scheduled after a skipped sequence fails

On Output Server 2 channels, items scheduled after a skipped sequence would fail.

This issue has been resolved so that the next item plays out as expected.

ITX-2896: Output Server 2 - Live items with fixed start times in past fails when appended

On Output Server 2 channels, live items with a fixed start time in the past would fail when appended.

This issue has been resolved, so that these live items now play out as expected.

ITX-2875: iTX Master Control secondaries do not obey items in hold.

A customer site reported that secondary events for iTX Master Control could trigger when their primary events were still in manual hold.

To resolve this issue, the Master Control driver now checks that a secondary item is not in hold prior to advancing from 'Cued' to 'Commit'.

ITX-2863: Output Server 2 - Fixed live events freeze if an overrun coincides with a junction

On Output Server 2 channels, if a fixed clip overran into the "commit" window of a fixed live event, the next clip would be skipped and the live would playout. However, if the overrun coincided with the junction between the clips, the live would then freeze.

This issue has been resolved, so that live events now play out as expected.

ITX-2845: Audio assignment errors after restoring from archive

A customer site reported an audio assignment issue when restoring a clip from an archive to a Xor media store. The audio would be mapped correctly on the archive, but the mapping data corrupted on the media store after restoring.

This issue has been resolved.

ITX-2841: Selected Delivery Manager endpoints cannot be manually paused and resumed

Selecting "Pause Selected" or "Resume Selected" from the Delivery Manager Active Endpoints dialog tab did not pause or resume the selected endpoints.

This issue has been resolved, so that endpoints can now be paused and resumed from Delivery Manager's Active Endpoints dialog.

ITX-2807: Output Server 1 - Schedule dates are corrupted when importing OSCs via a bespoke Process Schedule workflow

A customer site reported that when importing multiple OSC schedules into an Output Server 1 channel using a bespoke version of the process schedule workflow, the date for events could be changed to a year in the distant future.

A threading conflict was causing times to get corrupted when importing OSC schedules via the ScheduleProcessingService. This issue has been resolved.

ITX-2770: Items with no ITX location do not display a title in Schedule Grid

If a user dragged a video clip that only had a Diva location from the Video Clip palette into the Schedule Grid, the Title column remained empty until the clip had been restored to the local Isilon or cached to iTX playout server.

To resolve this issue, the titles for non-ITX video clips is now displayed in the Schedule Grid when they are added.

ITX-2769: Zero duration Vertigo events should execute via Trigger mode

Trigger-based Vertigo XG items do not contain any duration information, whilst duration-based scheduling of Vertigo XG events do contain the duration of the event sent to the Vertigo box. As such, Vertigo events scheduled with zero duration were failed, when they should really be set to Trigger mode.

To resolve this issue, iTX has been updated to check for zero timecodes in drop frame and non-drop frame formats so that zero durations are set to Trigger mode.

ITX-2764: Output Server 2 - Fixed option on the Content Selector not respected

On Output Server 2 channels, when an item was added to the schedule from the Content Selector panel with Fixed enabled, the Fixed option would be ignored on playout channels. On edit channels the Fixed option was respected, but the item would be given a start time of 00:00:00:00.

To resolve this issue, Output Server 2 now respects the Fixed option on playout channels and does not erroneously alter the start time for items on edit channels.

ITX-2759: Missing Materials Manager allows duplicate restore jobs for the same asset

Missing Materials Manager could create two jobs for restoring media for the same asset. This could happen if there were two endpoints capable of fulfilling the job. One job was created for the first endpoint, but if that endpoint paused for a period of time, Missing Materials Manager would create a second job for the second endpoint. Both jobs would be processed.

At best this resulted in duplicated effort, but if the second job failed, this could lead to the iTX location being removed from the clip, so that it had to be restored for a third time (during which time, the clip would fail to play).

To resolve this issue, there have been the following updates:

1. Missing Materials Manager: When checking an active job, it first checks that any assigned Delivery Manager endpoint is still available. If it has become unavailable and the material is also present on a different Delivery Manager endpoint, a second job is started. After the second job is started the first job is cancelled.
2. Delivery Manager now only removes the location if the location's URI matches the target location for the Delivery Manager job. If a second job, on a different Delivery Manage endpoint, has been created for restoring the media, Delivery Manager does not delete the location.
3. Delivery Manager Diva driver: On startup, any job in the "Cancelling" state has the copied media file(s) deleted. Earlier attempts to delete these files (e.g. via Media Watcher when the iTX store location was deleted / updated) fail as the delete request would have been for files as shown in the asset's location, however their name on disk is the same name as in the Diva archive, which is different.

ITX-2753: Warning icons do not always open in the Channel Control Schedule Grid

When clicking on warning icons in the Channel Control Schedule Grid, the Warnings dialog did not always appear.

This issue was being caused by the way the "hot spot" for the warning icon was being detected when the column had been resized and has now been resolved.

ITX-2752: Channel icons inconsistently show when changing views

Channel icons in the channel selector randomly failed to appear when changing views.

This issue has now been resolved. In addition, the channel icons also update at run-time if the channel's configuration is changed from another instance of iTX Desktop. When a channel goes offline its icon is hidden.

ITX-2721: Delivery Manager not de-archiving reference files

Delivery Manager would fail to de-archive reference files if the path was the same as an existing folder structure.

Existing media is now restored to the specified file path, resolving this issue.

ITX-2711: Output Server 1 - AFD data for PAL SD channels is corrupted on line 11

A customer site reported that AFD data for their PAL SD channels running on Output Server 1 was getting corrupted on line 11. They were using SMPTE RP186: VLI Data insertion for AFD data in SDI to send the AFD data out.

This AFD data corruption issue has been resolved.

ITX-2709: ITX does not get language tags from non-reference MXF files

ITX would not get language tags from non-reference MXF files under the following circumstances:

- When the clip was imported via Media Watcher

- When the clip was imported via Delivery Manager using MediaUtil Analysis

- When the clip was imported via Delivery Manager using FPP Analysis

To resolve the first two scenarios, iTX now uses Media Info to get the language tags for the audio tracks.

The third scenario, "When the clip was imported via Deliver Manger (using FPP analysis)", requires extended development to resolve and will be addressed in a future release.

ITX-2604: Edits to an on-air schedule during the edit lock out window are saved to the schedule file

A customer site reported that changes made to an on-air schedule were saved to the schedule file in the database, even if they were rejected by the schedule loaded in the on-air Schedule Grid.

To resolve this issue, if a schedule is changed (e.g. in an edit channel) and a new item is added to the lockout zone, the on-air channel will accept the updated schedule, but display a warning in the Schedule Grid to say an attempt was made to edit the schedule within the lockout window and that this edit has been rejected.

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-2461: Output Server 2 does not allow "clip mode" to be used

When migrating from Output Server 1 to Output Server 2, the "clip mode" SD audio configuration cannot be used and instead a more specific audio configuration is required. This is because Output Server 2 does not allow clip mode to be used, however many sites in North America use clip mode by default. In addition, the standard IMX template provided in ITX for growing files only allows users to assign a group to one track, not the sub-channels, which does not suit sites with non-standard grouping for Stereo, 5.1, DVS and SAP.

To support sites that require this kind of configuration, we have added a new non-standard MXF D-10 Encode Profile to iTX. Encode profiles are imported after installing or upgrading iTX.

ITX-2435: Output Server 1 - Live CG trigger button does not work unless logos and captions are cleared first

On Output Server 1 channels, if you used the Channel Control + Gang Control Dual layout, it was not possible to switch on a Live CG if logos or captions were playing out.

This issue has been resolved.

ITX-2428: Output Server 1 - Using selected item control to skip a break causes the channel to go off air.

On an Output Server 1 channel, if an operator performed a Take on the selected item while the item was in hold, it would not be skipped, causing iTX to attempt to re-cue it. This sometimes resulted in a "Media event failed to cue" error, which could cause the off air slide to be broadcast. The reason channel's might go off air was actually that iTX did not have enough time to uncue the manually held event before it had to cue the next item.

To resolve this issue, hitting Take on a held item now skips the held item and takes the next available item instead.

ITX-2427: Workflow will not issue a new proxy job if one already exists

Workflow would not issue a new proxy job if one already existed, even if that job had a status of Completed.

To resolve this issue, a checkbox called 'Ignore Completed' has been added to the CheckForGenerateProxyJob activity in Workflow Designer. When this checkbox is checked, workflow will issue new jobs even when a completed job exists.

ITX-2317: Output Server 1 - Secondary record on sequences fails on Take Next

If a Take Next was done on a sequence with a secondary recording set on it, the recording frequently failed on the backup/slave channel.

Recordings on backup/slave channels now do not fail when a Take Next is performed on a sequence with a secondary recording, resolving this issue.

ITX-2316: BXF import fails when importing multiple files concurrently

The Schedule Processing Service could fail to import BXF schedule files if multiple files were imported at once. The symptoms were that the response file for one or more BXF schedule would contain the error "An item with the same key has already been added".

To resolve this issue, the Schedule Processing Service has been updated to handle multiple simultaneous BXF file imports.

ITX-2312: Simulcast channel fails to reload schedule following Output Server 2 restart

On playout servers running Output Server 2, if the Server Controller for a simulcast channel was shut down and a change was made to the schedule on the leader channel (e.g. a clip was added to or deleted from the schedule), when the Server Controller was restarted, the change would not be retrospectively applied to the simulcast schedule.

To resolve this issue, if a Server Controller for a simulcast channel is shut down and a change is made to the schedule on the leader channel, the change is now automatically applied to the Simulcast schedule when the Server Controller is restarted.

ITX-2266: Output Server 2 - Taking an uncued item causes playlist to freeze

A customer site reported that on an Output Server 2 channel, playlists could freeze if an item was cued, then an uncued item was taken.

This was caused by the way Output Server 2 was assigning cue slots to items, which could be seen in the Filter Graph of Vy GUI App.

Output Server 2's cue slot usage has been improved to prevent this issue from occurring.

ITX-2247: GXF media imported with a non-zero in point always has its start offset changed to zero

When importing GXF media with a non-zero in point (using either Media Watcher or Delivery Manager), the start offset was always changed to zero.

To resolve this issue, start offsets on GXF media is now preserved on import.

ITX-2145: In and out points lost following an archive restore

A customer site reported that after an archive restore from a XenData archive, in and out points were lost and the default values were restored.

To resolve this issue, in and out points that were set when the archive was created are now preserved during archive restores.

ITX-2142: Transition duration in Live Event Editor panel does not respect the 'Show DF as Non-DF' option

The transition duration in the Live Event Editor panel was being displayed in seconds and milliseconds (drop frame format) when the Global Confiig option 'Show DF as Non-DF' was enabled.

This issue has now been resolved, so the Live Event Editor panel displays the duration in seconds and frames (non-drop frame format) if the 'Show DF as Non-DF' option is enabled.

ITX-2089: Output Server 1 - In 1080i Live event, Line 9 ANC data is being lost except EIA-608/708.

Previously, if VCHIP was applied to a 1080i Live event, Output Server 1 would clear all VANC data on line 9 except CC 608/708.

This functionality has been enhanced, so that all the ANC data found on line 9 that existed before CC 608/708 data will be preserved.

ITX-1992: 'Delete all' can be mistaken for the singular 'Delete' option and results in an immediate save

In iTX Desktop, the 'Delete All' option on the Schedule Grid context menu can be mistaken for the singular 'Delete' option and when clicked it results in an immediate save to the (now empty) schedule.

A new 'Undo Delete All' option has been added to the Schedule Grid context menu. This option is only available after a 'Delete All' has been performed and will disappear if any additional changes are made to the schedule. The warning text for the Delete All option has also been updated to be more explicit about the action being performed and consequences of continuing.

ITX-1952: DIVA restores to media store file paths too long in both Diva Job Provider and when using Delivery Manager workflow

This ticket covers the following related issues:

- The Diva Job Provider uses the file name of the media as the name of the sub-folder in which the file is stored (e.g. a file called "grassvalley_nab2015_promo_reel.mxf" would be in a sub-folder called "grassvalley_nab2015_promo_reel". However, when importing files, this sub-folder creation would be duplicated, which could result in the path being longer than expected (e.g. grassvalley_nab2015_promo_reel/grassvalley_nab2015_promo_reel/grassvalley_nab2015_promo_reel.mxf". This could cause errors that relate to the file path character limits discussed later in this issue.

  This issue did not affect Media Watcher, as it does not use sub-folders with the same name as the file they contain.

  To resolve this issue, the Diva Job Provider no longer duplicates the sub-folder containing the media.
- Diva has a File Root Path Limit which supports a maximum of 128 characters, but ITX uses the Windows file path limit of 255 characters. Because of this, when a file with a long path (more than 128 characters) was restored, the path would be erroneously truncated, leading to Delivery Manager thinking it was a different file and causing an error. This issue affected both DivaJobProvider and DeliveryManager.

  To resolve this issue, Delivery Manager now checks for file paths that may be affected by the Diva File Root Path Limit and recreates the long path name as required.

- The maximum name length used by the Diva Job Provider and MediaWatcher meant that when restoring a file, MediaWatcher was checking the file name length, but wrongly setting the maximum value to 60 characters instead of 64 (the value set by the Asset).

  MediaWatcher now sets the maximum value to 64 characters.

ITX-1837: VizRT events do not appear in the playlist

Viz RT events that were present in BXF imported schedules did not appear when the playlist was appended to the channel.

This issue has been resolved so that Viz RT events in imported BXF schedules now appear when appended to the current schedule.

ITX-1800: Output Server 1 - XG graphics remain on-air following a schedule restore

A customer site reported that on an Output Server 1 channel, following a schedule restore, XG graphics that are scheduled to end remained on-air.

This issue has been resolved, so that following a schedule restore XG graphics end as scheduled.

ITX-1789: Output Server 2 - CG text not present on the slave channel when using CG secondary events scheduled via ITXML

A customer site reported an issue on Output Server 2 where CG Text was not present on the backup channel when using CG secondary events that had been imported using an ITXML schedule.

To resolve this issue, when the fields/text for CG events have been specified in the imported .itxml file, those values now are used instead of the values in the asset.

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-1531: Output Server 1 - Secondary records on slave channels often fail when taken manually

On an Output Server 1 channel, secondary live records were often failing on slave channels. This was because the schedule was not being saved immediately after a record was set.

To resolve this issue, the schedule is now automatically saved when a record is set, so that the slave channel will respond when taken manually and perform the secondary record.

ITX-1056: Track "XG Keyer 0" shows up on timeline as track "V-Chip"

If you clicked on 'Select Tracks' on the timeline and added track 'XG Keyer 0' to the 'Selected Tracks' list, then clicked 'OK', the timeline would display the 'V-Chip' track, not 'XG Keyer 0'.

This issue has been resolved, so the timeline now correctly displays the 'XG Keyer 0' track when it is added to the timeline.

ITX-858: Output Server 2 - Enhanced SCTE104 packet does not get inserted if Preroll time >255 ms

On an Output Server 2 channel, when sending SCTE104 packets, if the pre-roll time was more than 255 ms the packet would not be inserted into the output. This was caused by the DTMF Descriptor's limit of 255 10ths of a second, as both splice requests and DTMF Descriptors shared the same input value on the iTX Desktop interface.

The value is now correctly divided by 100, which resolves the issue between the two increments. The value for the DTMF Descriptor has also been limited to 255, so a value of 25600 or greater will no longer cause an exception.

No changes have been made to the original splice request preroll value, and this now works without interference from the DTMF Descriptor's value.

Version 2.6 SP1 (build 3.26.0.267)

New Features

ITX-2273: FPP applies a -6bB output for stereo to mono audio track playout

The File Processing Pipeline (FPP) plugin for Output Server 2 has been updated to perform stereo to mono sum with -6dB. At the point of playout on an SD channel, the internal audio processing within the iTX Output Server 2 process first performs a mono-sum -6dB to the audio of all HD media files to match the audio construct of the SD media files. iTX thens performs an internal audio shuffle to align with the final expected audio outputs and constructs.

Version 2.6 (build 3.26.0.266)

New Features

ITX-2047: Dual Vertigo XG channels on iTX Playout Appliance 2 servers

It is now possible to configure and two Vertigo XG enabled channels on iTX Playout Appliance 2 servers (or playout servers with an AJA Corvid 44 or 88 SDI I/O card), which allows for simulcast with independent branding or dual channel playout both with XG graphics.

ITX-1822: Output Server 2 - Live assets now have Aspect Ratio Properties

For channels running on Output Server 2, Live assets and events now include Aspect Ratio Properties. These properties can be accessed in the following locations:

- The Asset layout, on the Asset tab of a selected Live asset.
- On the Live Content Selector when a Live event has been loaded, by clicking the Properties button.
- By selecting a Live event in the Schedule Grid, then clicking Properties in the Event Editor.

This enables ARC rules to be applied to live events formatting them correctly for on air playback.

Note: There is no auto-detection of the input aspect ratio. Therefore it is recommended that you specify the required aspect ratio from the properties of the Live Event Asset first. If you set the aspect ratio to 16:9 and the source is 4:3, the image will be stretched on playout. In these situations, it is possible to correct the aspect on-air using the Live Event Editor.

ITX-1626: Ouput Server 1 to Output Server 2 Master/Slave compatibility

To aid with upgrades from Output Server 1 to Output Server 2, it is now possible to operate an OS1 main channel and an OS2 backup in a Master/Slave configuration during the transition.

ITX-1545: AJA Kona 3G support for Output Server 2

Output Server 2 now supports the AJA Kona 3G SDI I/O card in Single Channel mode.

As part of this enhancement, the I/O Device Controller's Engineering panel includes input and output schematics for playout servers equipped with a Kona 3G.

ITX-1413: Leader/follower channel communication model

iTX v2.6 introduces Grass Valley's new leader/follower channel communication model for Output Server 2. Leader/follower is the successor to our existing master/slave model and is designed to enable simulcast channel setups and improve standard main/backup operation.

Output server 2 utilizes the concept of a leading channel and its followers. This enables a leader to have multiple followers instead of being restricted to one master and its slave. All changes made on the leading channel, including manual operator actions, are instantaneously synchronised with all following channels. This is an essential part of the new simulcast capabilities in Output server 2 launched with this version of iTX.

New 'Leader' and 'Follower' channel status indicators are displayed above the Schedule Grid for channels in an Output Server 2 leader/follower system.

ITX-1380: I/O Device Controller for Output Server 2

This is a new service for Output Server 2, called the I/O Device Controller. This service is responsible for initialising the AJA board with its I/O configuration. The I/O Device Controller is hosted in Server Controller and is setup via TXPlay 2's iTX Channel Config during the post installation process.

The I/O Device Controller includes the following new functionality:

- Support for AJA Corvid 44 and Corvid 88 SDI I/O video cards for dual channel and simulcast transmissions from a single playout server.
- Control over the reference input signal, frame rate family and channel delay. This information is then passed on to each instance of Output Server 2, to ensure all channels in a dual channel or simulcast system are using the same frame rate and delay.
- The controller Includes visual schematics of the inputs and outputs on your SDI I/O card, in relation to your chosen playout type (single channel, simulcast or dual channel). This can then be used as an aid to cabling your playout server.

Note: Customers who are upgrading to Output Server 2 for the first time, as well as those who are already running Output Server 2 for iTX v2.5 , are required to confirm their I/O configuration when upgrading from iTX v2.6.

ITX-1257: Simulcast playout for Output Server 2

iTX v2.6 introduces simulcast playout for Output Server 2. Simulcast allows dual transmission of the same schedule in HD and SD formats, using a single playout server. Operators are able to control both transmissions from a single channel view in the iTX Desktop. Changes to the schedule, the assets and any manual operations performed, are reflected instantaneously on both the main channel (leader) and its simulcast sibling (follower).

Simulcast for Output Server 2 introduces the following new functionality and feature enhancements:

- Simulcast takes advantage of Grass Valley's new networked TXPlay 2 system, known as the leader/follower model. This ensures schedules, assets and operator controls are shared between a main channel, its backup, its simulcast channel and its simulcast backup channel instantaneously, without the need for schedule restores.
- Independent channel configuration means you can ensure the HD and SD channels are transmitted with the required resolution, aspect ratio control, audio output, ANC data and subtitles.
- Automated event substitution of logos, CGs and stills. By defining a single substitution rule, iTX is able to replace logo, CG and stills assets on the HD channel for SD counterparts on the simulcast channel, as they are added to the main schedule.
- Audio upmixing controls have been added to the user interface of the Output Server 2 service.
- On the iTX Desktop, the simulcast channel is identified by a 'Simulcast' indicator light, which appears above the Schedule Grid.
- Manual operator controls are disabled for simulcast channels, as they are for backup channels.

ITX-1015: SGL FlashNet end point driver for Delivery Manger

Delivery Manager has added support for a new endpoint, SGL FlashNet Archives. The new FlashNet driver can be selected from the Delivery Manager Config and supports the following modes of operation:

- Search and Restore (via Missing Material Manager)
- Manual Archive
- Manual Restore

Not yet supported:

- Partial Restore

Note: The FlashNet Archive must be running version 6.4.13.003.

ITX-862: Subtitle File Translator - SCC Support

The Subtitle File Translator now supports SCC to MCC translation including 708 upconversion.

ITX-853: iTX SwiftTX driver - shared device support

The new external subtitler driver now supports single Softel SwiftTX device for master/slave setup. This allows iTX master channels to control the Softel SwiftTX device, while the slave channels only check for material availability.

ITX-713: Delivery Manager Register In Place Endpoint

This release introduces a new system for migrating from a legacy iTXv1.4 system to an iTX 2.x system.

Because the iTX 1.x and iTX 2.x databases differ in structure, it is not possible for customers to simply upgrade to iTX 2.x. A new Delivery Manager endpoint driver called "iTXV1Driver" has been introduced that can perform "register in place" actions between v1.4 and the latest v2.x databases. This means as video and subtitle assets are added to, updated on or deleted from the iTX v1.4 system, the corresponding metadata is added, updated or deleted on an iTX v2.4 system, running in parallel. The media itself remains on a shared media store and so does not need to be transferred, as each database has its own metadata record. The new iTXV1 endpoint can be selected from the Delivery Manager Config.

By using Delivery Manager, the iTXV1 endpoint is able to take advantage of bespoke workflows to manage the metadata transfer and deletion. Users are also able to manually trigger the database synchronization, which ensures all of your existing metadata is migrated to the iTX v2.4 system. This synchronization is done in batches, as not to impact system performance and the process repeats until all of the asset metadata has been migrated. After that, asset metadata additions, updates and deletions are migrated to the iTX v2.4 system as they are performed on the v1.4 system.

Note: At this time the endpoint supports only video and subtitle metadata synchronization.

Fixes

ITX-2435: Output Server 1 - Live CG trigger button does not work unless logos and captions are cleared first

On Output Server 1 channels, if you used the Channel Control + Gang Control Dual layout, it was not possible to switch on a Live CG if logos or captions were playing out.

This issue has been resolved.

ITX-2428: Output Server 1 - Using selected item control to skip a break causes the channel to go off air.

On an Output Server 1 channel, if an operator performed a Take on the selected item while the item was in hold, it would not be skipped, causing iTX to attempt to re-cue it. This sometimes resulted in a "Media event failed to cue" error, which could cause the off air slide to be broadcast. The reason channel's might go off air was actually that iTX did not have enough time to uncue the manually held event before it had to cue the next item.

To resolve this issue, hitting Take on a held item now skips the held item and takes the next available item instead.

ITX-2427: Workflow will not issue a new proxy job if one already exists

Workflow would not issue a new proxy job if one already existed, even if that job had a status of Completed.

To resolve this issue, a checkbox called 'Ignore Completed' has been added to the CheckForGenerateProxyJob activity in Workflow Designer. When this checkbox is checked, workflow will issue new jobs even when a completed job exists.

ITX-2380: Output Server 1 - Master and slave go out of sync when a Take Next is performed on the Live Channel Bypass layout

On an Output Server 1 channel, in the Live Channel Bypass layout, if you had Auto Take enabled and switched to a live channel that was in hold, the master and slave channels could go out of sync with each other by 0.5 - 1 second.

This synchronization issue did not occur on manual Takes from the Live Chanel Bypass, and has now been resolved when Auto Take is enabled.

ITX-2147: Output Server 1 - Schedule Restore causes on-air logo to be removed

Sometimes on Output Server 1 channels, when a Schedule Restore/Store Schedule was performed, the on-air logo would be removed.

This issue has been resolved, so the logo will continue to stay on-air for its designated duration.

ITX-2142: Transition duration in Live Event Editor panel does not respect the 'Show DF as Non-DF' option

The transition duration in the Live Event Editor panel was being displayed in seconds and milliseconds (drop frame format) when the Global Confiig option 'Show DF as Non-DF' was enabled.

This issue has now been resolved, so the Live Event Editor panel displays the duration in seconds and frames (non-drop frame format) if the 'Show DF as Non-DF' option is enabled.

ITX-2094: Reconfiguring the external subtitler causes service error

Reconfiguring the Ex Subtitler plugin through Channel Config caused the TXPlay service status to remain in an error state after the driver had re-established connection to the subtitler. The only workaround was to restart the TXPlay service.

This issue has now been resolved, so that reconfiguring an external subtitler no longer requires the TXPlay service to be restarted.

ITX-2093: External subtitle driver adjusts start of media to 12:00:00:00

When a primary event had a start of media value of 00:00:00:00, the new external subtitle driver adjusted the start of media value that it sent down to the subtitler to 12:00:00:00. This caused subtitles not to play out as they were out of range.

This issue has now been resolved, so that start of media values of 00:00:00:00 for primary events are no longer changed.

ITX-2089: Output Server 1 - In 1080i Live event, Line 9 ANC data is being lost except EIA-608/708.

Previously, if VCHIP was applied to a 1080i Live event, Output Server 1 would clear all VANC data on line 9 except CC 608/708.

This functionality has been enhanced, so that all the ANC data found on line 9 that existed before CC 608/708 data will be preserved.

ITX-2062: Output Server 1 fails to create secondary recording

On Output Server 1, when performing a secondary recording of an existing asset, the underlying media would be intermittently deleted.

This issue has now been resolved, so that the underlying media is preserved.

ITX-2050: Seeking issues with some LXF files

Seeking in both iTX Desktop preview and FPP-inside playout in iTXPlayer could fail when seeking to specific frames on some LXF files.

This issue has been resolved.

ITX-2035: When encoding with presets that require specific incoming feed formats, the first encode will always fail

The initial status of the live feed at startup was not being stored. This would prevent the encode service from matching up the incoming format with the requirements of the preset and would cause the job to fail. Jobs would succeed once the incoming video signal was changed or the preset was changed.

This issue has now been resolved.

ITX-2015: Fixed End items play from the start of the media, instead of the in-point

Fixed End items would start playing at the start of the media instead of at the correct in-point.

This issue has now been resolved, so that Fixed End items finish correctly on the last frame of the media by starting at the right in-point when going to air.

ITX-2002: Scheduled secondary records do not take the default channel record mode

Scheduled secondary records via Sintec did not take the default channel record mode.

The Thomson interface service has been updated so that it now correctly sets the default secondary record template and record mode from the Channel Config for schedule imports via Sintec.

ITX-1987: Output Server 1 - Join-In-Progress (JIP) items were starting at incorrect points

On an Output Server 1 channel, TXPlay wrongly calculated how far to cut into the item you are joining after a JIP operation.

The calculation has been corrected and JIP items now start at the correct in-point.

ITX-1968: Media Cache 2 - Caching stops on placeholders

Media Cache 2 would stall the caching of media when it encountered a placeholder in the playlist.

This issue has been resolved, so that media caching is uninterrupted when a placeholder is encountered.

ITX-1959: Live Channel Bypass layout behavior

Prior to iTX v2.2, the Live Channel Bypass required a manual take, however after iTX v2.2 would Live Channel Bypass perform an auto take.

The Live Channel Bypass control has been modified to allow the operator to choose the behavior (auto take or not auto take) by switching a toggle button on the control.

ITX-1950: Channel displays color bars following an Output Server 1 crash

At the end of a file cache operation, Output Server could crash, causing the channel to display color bars. This was being caused by a conflict during thread deallocation. This issue has now been resolved.

ITX-1947: Output Server 2 allows on-air items to be deleted without warning

On an Output Server 2 channel, iTX Desktop users could delete the on-air item without iTX producing an error.

This issue has now been resolved. The way to delete the on-air item is using the 'Delete all' function.

Note: This will delete the entire contents of the current schedule, therefore it is recommended alternative actions are taken, such as replacing the on-air item or taking next.

Changing the on-air item aspect ratio/source format will also now prompt the user that the item is on-air and ask for confirmation before completing the action.

ITX-1915: Output Server 1 - Incorrect cache status shown for placeholders

Placeholders would incorrectly display a blue cache status (Archived) when the ITX location for a different item (but which also had an archive location) was deleted.

This issue has now been resolved.

ITX-1913: As-Run information is written to As-Run schedule using channel name only

iTX used to write As-Run information to As-Run schedules using the channel name only. e.g. If you were running a schedule named "Sched1" on a channel called "MyChannel" the As-Run information was written to the database in an As-Run schedule named "MyChannel_AsRun"

Now if you run a schedule named "Sched1" on a channel called "MyChannel" the As-Run information is written to the database in an As-Run schedule named "MyChannel_Sched1_AsRun"

Also, As-Run information and empty As-Run schedules that are older than 45 days will be deleted.

ITX-1912: Modifying a schedule from an edit channel can cause duplicate items to appear in on-air schedule

If new items were added to a schedule in the edit channel within the set of locked-out items for the on-air schedule, the on-air schedule would be incorrectly updated, causing items to become duplicated.

This issue has been resolved.

ITX-1867: Search and replace for single items using Item Editor and Global Edit continues to play old clip

When replacing an individual instance of a clip in a TX Play schedule, caching information from the original clip was being retained. This would lead to the old/stale clip playing out instead of the new/replaced clip. This issue has been resolved.

ITX-1863: Output Server 2 - Option to Ignore Field Reverse Order

An option has been added to Channel Config>System Wide Config to allow Output Server 2 to ignore Reverse Field Order on Assets that had previously had their field order reversed for Output Server 1.

ITX-1862: Late switching on scheduled video recordings results in a zero length file

Late switching on scheduled video recordings could intermittantly result in a zero length file.

This issue has been resolved.

ITX-1838: Scheduled logos are not always restored after Output Server 1 is restarted

If both Live and Scheduled logos are on air and the Output Server 1 service was restarted, only the live logos were restored on air.

This issue has been resolved, so that if the Output Server 1 service is restarted, both Live and the Schedule logos are restored on air.

ITX-1798: Proxy Generation Service fails during MP4 transcode with XML Parse error

When the 'Generate Low Res Proxy' option was enabled in Media Watcher, the Proxy Generation Service would fail to generate a proxy and produce an input locator error or FPP process error.

This issue did not affect Delivery Manager and has been resolved for Media Watcher.

ITX-1794: User not notified to store changes when updating the Duration field for non-media events using the Event Editor

If an operator changed the duration of a non-media event (i.e. any event except Video, Audio and Music) using the Event Editor component, the "Store Changes" button was not flashing and the new duration was not updated in the Event Editor.

This issue has been resolved, so that now when non-media events are changed the button flashes and the change is correctly notified to the operator.

ITX-1644: Delete all on video secondary recordings does not complete

Previously if a delete all action was performed during a secondary record of a video, then the underlying media would not complete correctly and would be shown as 'Invalid Media' in the Asset Preview window.

Now, when a delete all is performed on a secondary record of video, the underlying media will complete as expected.

ITX-1635: Music clips do not honour clip duration

Previously music clips might continue playing if there was no event following them and the underlying media file was longer than the music event duration. This behaviour that was different from video channels.

This issue has been resolved, so that music clips will now stop when the music clip event finishes as expected.

ITX-1625: iTXPlayer resetting due to access violation

ITX Player (Pandora) could crash during playout or Media Utils could crash during registration if a MOV file with specific invalid MOV atoms was played or registered. This issue has been resolved.

ITX-1623: Memory usage due to high volumes of logging

Logging within iTXPlayer is managed in dedicated threads to avoid blocking output. The queues for logging in these threads can become quite long if iTXPlayer is generating a lot of logs in a short period of time. The queues would not shrink automatically once the log entries were processing. This would result in excessive memory usage over time on complex channels and would lead to iTXPlayer resets.

This issue has been resolved.

ITX-1581: "Unknown" Items dragged into grid still show drop-frame limitations with 'Show DF as Non-DF' flag enabled

Placeholder items that had been dragged into the schedule from the selector panel (an "Unknown" item) did not display their duration correctly when the global configuration "Show DF as Non-DF" was enabled.

This issue has been resolved.

ITX-1551: Second As Run file created on Master restart

When the As Run start time was different from 00:00 and the Master Channel was restarted before the As Run period was finished, a second As Run file was created for that day.

This issue has been resolved, so that now there is only one file per day, even when the Master Channel is stopped or restarted.

ITX-1505: VANC events from Thompson converted schedules do not function

VANC splicer events in a schedule imported through the Thomson Interface Service stopped at the 'New' state and did not progress to the 'Ready' state.

Now, VANC splicer events initialize correctly when loaded into TX Play and will progress to the 'Ready' state.

ITX-1504: Placeholders are running long and short compared with how they are scheduled in Sintec

Placeholders created via the Thomson interface service (via the XML webservice) were having the times and durations parsed as drop frame timecodes. However, the peripheral business systems at customer sites work in non-drop frame timecodes.

This issue has been resolved, so that the XML webservice will now parse all times as non-drop frame timecodes.

ITX-1503: Live events scheduled for whole minutes gain frames when schedule is dropped onto the iTX channel grid

A problem was identified in the Thompson interface service whereby times and durations were being parsed as drop frame timecodes, whereas the customer business systems create schedules in 'real-time' non-drop frame timecodes.

This issue has been resolved, so that nNow timecodes are parsed as non-drop frame timecodes in imported INR and PEI schedules.

ITX-1502: Placeholder properties overwritten on Media Import

The Content Type, Start Date, End Date and Title properties of placeholder assets were overwritten when the clip was imported. Now, these properties, if set on the placeholder, will be preserved.

ITX-1496: Shotlists do not inherit metadata when the source clip is copied from another domain

Shotlists did not inherit metadata when the source clip was copied from another domain. This was happening because media level metadata was being copied to the asset level in the workflow activity.

This issue has been resolved, so that the metadata is maintained at a media level when copying shotlists between domains.

ITX-1489: Scheduled logos are not always restored after iTXPlayer is restarted

If both Live and Schedule logos were on air and iTXPlayer is restarted, only the Live logos were coming back on air.

This issue has been resolved, so that now if iTXPlayer is restarted, both Live and Schedule Logos will come back on air.

ITX-1488: RAW format for Dolby E 2.2, 5.1 and 5.1+2 audio

RAW format support has been implemented for media containing Dolby E 2.2, 5.1 and 5.1+2 audio tracks.

ITX-1384: Media Watcher - OSC schedules with Fixed items in the past are converted to Auto on import

When Media Watcher imported an OSC schedule, if the schedule started with a Fixed item with a time or date in the past, that item would be converted to an Auto item in iTX.

Maintaining the Fixed status is particularly important when re-importing the current day's schedule, so Media Watcher OSC imports have been updated to preserve the status of Fixed items.

ITX-1383: Schedule import reports an error when importing OSC through the Workflow Application Service

When the Schedule Import Service (WAS) imported an OSC, the Workflow reported "Schedule Imported" as an error.

This issue has been resolved, so the Schedule Import Service now reports completed OSC imports as information message not errors.

ITX-1359: TXPlay 1 - Live schedule is not updated when changes are made to an event's asset duration

If the asset duration was updated for an event in the live schedule, the schedule was not always updated and the changes were not stored to the database.

This issue has been resolved, so that TXPlay 1 now automatically updates the live schedule and stores it to the database when asset durations affect the schedule.

ITX-1313: SDI Output H/V offsets (output timings) are incorrect

In iTX v2.5, the SDI output timings (horizontal and vertical offsets) were being incorrectly set, resulting in incorrect output timings on the SDI output.

This issue has been resolved, so the SDI output timings are now correct.

ITX-1306: VANC list corruption causes Output Server 1 to reset

Corrupted VANC lists could cause Output Server 1 to reset.

The VANC List (_VancList) used by iTXPlayer has been updated to be thread safe, preventing resets in the event of corrupted lists.

ITX-1304: Deleting all then re-adding a schedule causes distortion

Deleting a schedule and then re-adding it caused the live event audio to be mixed twice. This resulted in increased audio volume and distortion.

This issue has been resolved.

ITX-1280: Thompson Interface Service - 1 second logo events are no longer converted to Auto duration

In iTX v2.4, when converting from .INR to .iTXML using the Thompson Interface Service, all logos with 1 second durations used to be converted to Auto duration, but in iTX v2.5 this stopped happening.

Now, all logos with 1 second durations are again converted to Auto duration.

ITX-1254: Media Watcher imports cannot generate Proxy Media files

When the 'Generate Low Res Proxy' option was enabled in Media Watcher, the Proxy Generation Service would fail to generate a proxy and produce an input locator error or FPP process error.

This issue did not affect Delivery Manager and has now been resolved for Media Watcher.

ITX-1186: GPI events to trigger a take out of manual hold at the end of a live event failed

Some customer sites reported that GPI events to trigger a take out of manual hold at the end of a live event would fail.

This issue has been resolved for the following scenarios:

- Failover in master/slave architecture
- Schedule restore during live event playout
- Restart during live event on air.

ITX-1181: Enhanced SCTE104 op codes are not enabled and disabled

When an enhanced SCTE104 pass-through operation transitions through Pandora, the only message field that should be updated is the pre-roll to account for AJA buffer latency. The processing of SCTE104 op codes was being disabled in TXPlay rather than iTX Player, which led to passed-through SCTE 104 data being incorrectly updated on messages that were not being processed by iTXPlayer. These messages are now left unchanged.

In addition, if a customer later upgrades to Output Server 2, the SCTE104 configuration information is now correctly carried through from Output Server 1.

ITX-1178: Back-to-back graphics on different layers fail to load on LGK-3901 including Master/Slave and Ganging conditions

When controlling an LGK-3901 using back-to-back graphics and switching the layers between graphics, the LGK-3901 did not load the subsequent graphics into the keyer correctly, causing pauses in the graphics while it was waiting for the graphic to load. This issue was being caused by command sequences being sent to the LGK-3901 in the wrong order, although it did not apply to back-to-back graphic that are always on the same keyer.

The command sequence being sent to the LGK-3901 has been corrected to prevent this issue from occurring.

Full support for Master/Slave scenarios and Ganging configuration has been considered.

ITX-1164: Memory leak when repeatedly switching channels on iTX Desktop

Under some circumstances, when the live logo control was displayed on the iTX Desktop, switching repeatedly between channels could result in a memory leak that caused the iTX Desktop Client to lock up.

This issue has now been resolved.

ITX-1126: OSC schedule items with only duration times cause playout failures

Items imported from an OSC schedule with only a duration time could cause playout to fail. To resolve this issue, TXPlay, iTX Desktop, Media Watcher and the automation libraries have been updated to support the Fixed/Hold Duration flag on items in the OSC schedule. This flag is used to determine whether the duration should be updated when media is changed. As part of this update, two new buttons have been added to the Event Editor in iTX Desktop called Hold Duration and Hold Limits.

The Quick Media Duration dialog has also been updated to allow users to set the in-point and out-point for schedule items, as well as the Hold Duration flag.

ITX-1119: "Schedule updated externally" alerts cannot be canceled

Previously, there was no way to cancel "Schedule updated externally" alerts.

The channel status indicator and Service Provider Status messages can now be reset for externally updated schedules alerts. Also, when a "Schedule updated externally" alert is canceled on the master channel, it is automatically canceled on the slave channel.

ITX-1066: Enhanced SCTE104 configuration is now dynamic

Configuration changes to enhanced SCTE104 functionality are now applied as the config is saved. Output Server no longer needs to be restarted for changes to apply.

ITX-1058: Output Server 2 - The Clarity plugin does not allow pages to be recalled from the device

When running an Output Server 2 channel, the Clarity plugin could not create a new page from a template page, as they could not be recalled from the Clarity device.

This issue has been resolved.

ITX-1021: Animated logos with varying image sizes lead to iTXPlayer resets

While rendering SPG images which decrease and increase in size over time, it was possible for image processing to use a smaller data buffer than was expected. This would lead to an access violation that would go unreported, but cause iTX Player to stall when removing the logo. This would result in a graph pause two seconds later.

This issue has been resolved.

ITX-1019: SCTEInbound and SCTEOutbound logs are not included in Pandora reset logs

SCTEInbound and SCTEOutbound logs were not included in Pandora reset logs.

These logs are now both present in Pandora reset logs, which are generated by the Output Server during a reset.

ITX-819: Output Server service occasionally fails to start up

Output Server: On rare occasions, the Output Server service would fail to start up, and instead would display an error box stating "Omnibus.Config.ObjectDataException: Invalid security context ..." Given that the Output Server auto-restarts following an actions such as resolution changes (i.e. from 1080i to D1) this issue could leave the Output Server in an unusable condition, requiring manual intervention to restart it. This issue has now been resolved so that the Output Server service correctly restarts.

ITX-454: Opus - Search by category is searching by phrase instead of unique ID

Category searches were returning more results than was expected. For example, assume the assets below have been tagged with the following categories:

```
Asset name    Category
=========    ========
Asset-1      Cat
Asset-2      Cat 2
Asset-3      Cat 3
```

Category searches failed in that:

- A search for "Category is 'Cat'" would return Asset-1, Asset-2 and Asset-3
- A search for "Category is not 'Cat'" would return nothing.

This has now been fixed so that:

- A search for "Category is 'Cat'" returns Asset-1 only.
- A search for "Category is not 'Cat'" returns Asset-2 and Asset-3.

ITX-453: Multi-domain workflow jobs failing

Multi-domain workflow jobs would fail if the clip used to be a shotlist of another clip and the source clip had been deleted. Single doman workflow jobs were not affected.

This issue has now been resolved.

ITX-430: GPI mirroring acts as master/slave

iTX v1.4 supported true GPI mirroring for VNode devices, while in iTX v2.x GPI mirroring behaved as master and slave only.

The configuration for VNode GPI devices has been updated so that GPI inputs and outputs can be still be configured to operate as master and slave, but if you have two GPI outputs they can also be configured to function as a mirrored pair.

ITX-395: Video format is not detected before the encode service prepares the encode

When the encode service was preparing the encode, the video format was not detected, causing wrong framerate to be encoded.

This issue has been resolved.

ITX-393: Workflow Application Service (WAS) - OSC schedules with Fixed items in the past are converted to Auto

When the WAS processed an OSC schedule, if the schedule started with a Fixed item with a time or date in the past, that item would be converted to an Auto item in iTX.

Maintaining the Fixed status is particularly important when re-importing the current day's schedule, so now WAS OSC imports have been updated to preserve the status of Fixed items.

ITX-374: Encode service not registering audio ingests

When registering media, the Encode service attempts to re-initialize the BASS library, so it can analyze the recorded WAV. However, if the BASS library had already been initialized, this sometimes resulted in an error.

This issue has been resolved, so that if the BASS library has already initialized iTX will not treat this as an error.

ITX-373: Live radio events are set to auto time mode when scheduled via Sintec

In a radio channel, when converting INR or PEI format schedules using the Thompson Interface service, live events that were set to Auto Time Mode remained as Auto in the resulting iTXML, when they should be converted to Fixed.

The Thompson Interface has been updated so that live events with Auto Time Mode are converted to 'Fixed' in the iTXML.

ITX-205: Output Server 2 - Media caching improvements

Media file caching has been improved for Output Server 2 in the following ways:

- The caching prioritization has been improved and is now performed at a low I/O priority. This means media file caching will have less impact on other disk read/write activities.
- A new Configuration panel has been added to the Media Cache 2 user interface which contains the following options:
  - 'Max Transfer Rate (MB/s)', which allows users to set the maximum caching speed, up to 1024MB/s (or 8.192 Gbit/sec). This option defaults to 0 MB/s, which means the speed is uncapped.
  - 'Block Size (MB)' allows users to control the size of the data blocks that are written to disk. The default is 8MB. Increasing this value can reduce the amount of throttling that is required during caching and improve the overall performance.
  - The Media Watcher and domain selection controls, which were previously located on the Channel Config layout in the iTX Desktop.
- The status and speed of the cache can now be monitored from the Cache channel view on the iTX Desktop.

ITX-160: Delivery Manager - LXF clips with 4 mono audio streams are imported as one 4 channel audio track

LXF clips with 4 mono audio streams that were imported through Delivery Manager were imported as one 4 channel audio track. This prevented individual audio from being reviewed in the Asset or Segmentation iTX Desktop layouts.

This issue has been resolved, by updating the audio mapping for LXF file imports, so that if the audio file contains multiple interleave tracks, they are converted to individual mono tracks within iTX.

Accessing the iTX Installer

The iTX 2.6 SP8 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 2.6 SP8 - Build 3.26.8.615.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 v2.6 SP8** 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 2.6 SP8 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 2.6 SP8 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 Viz Trio 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
- XG Inside Xmedia Suite v4.8 SP7 for Output Server 1
- XG Inside Xmedia Suite v5.0 SP1 for Output Server 2

Routers
iTX 2.6 SP8 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 2.6 SP8 supports the following GPI devices.
- Videoframe: VNODE 8x8; VNODE 16x16; VNODE 32x32

External content stores
iTX v2.6 SP8 can work with media files on the following types of external storage system.

Devices	Supported functionality
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

- iTX SmartClient can export ShotLists as Final Cut Pro v5.0 XML files, which can opened using Grass Valley Edius v8.10 onwards.

Note:
iTX support for the following third-party applications has now ended:
- ENPS versions 5 and 6
- MOS Protocol 2.83

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 LP with Drivers 7.4.0.49, Firmware 0x34 dated 11-05-11
- AJA Kona 3G with Drivers 7.4.0.49, Firmware 0xA, dated 11-07-04
For output servers running Output Server 1:
- AJA Corvid LP with Drivers 7.4.0.49, Firmware 0x34 dated 11-05-11
- AJA Kona 3G with Drivers 7.4.0.49, Firmware 0xA, dated 11-07-04
For output servers running Output Server 2:
- AJA Corvid LP with Drivers 12.1.0.107, Firmware 0x34, dated 11-05-11
- AJA Corvid 44 with Drivers 12.1.0.107, Firmware 0x0E, dated 15-10-05
- AJA Corvid 88 with Drivers 12.1.0.107, Firmware 0x1A, dated 15-10-05
- AJA Kona 3G with Drivers 12.1.0.107, Firmware 0xA, dated 11-07-04
For desktop SDI Preview:
- AJA Corvid LP with Drivers 12.1.0.107, Firmware 0x34, dated 11-05-11

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 Symantec Endpoint Protection version 12.1.6 with Virus and Spyware Protection definitions r21 dated 11th January 2017 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.

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