



iTX™ 2.10 Service Pack 11

Integrated Playout

Release Notes

23 October 2020

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Introducing iTX 2.10

iTX 2.10 is a cumulative, full-version release of the iTX software, in that it contains all the features and fixes from the initial v2.10 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.

Version v2.10 SP11 (build 3.210.11.999)

Fixes

ITX-15182: Converting SCC caption files to MCC files resulted in incorrect in-times for most of the captions

There was an issue with back-to-back captions in SCC files where an erase displayed memory code was inserted erroneously. This issue has been resolved.

ITX-15120: iTX installer no longer removes required VertigoXG software

Previously when installing or upgrading iTX on a server with Vertigo XG installed the required 32 bit FPP would be uninstalled by default unless you intervened. Changes have been made to the installer to ignore the 32 bit FPP installation unless this is also required by iTX. Older versions of iTX such as 2.10 will correctly allow the FPP to update as required, whereas 2.12 for OS1 will correctly swap from the 32 bit FPP to the 32 bit GV Engine. Where the 64 bit GV Engine is required for 2.12 OS2 or 5.x then the installer will ignore FPP and only GV Engine will be changed if required.

ITX-14978: Additional secondary event was erroneously added when an item with a secondary event is dragged and dropped on an Edit channel

When an item with a secondary event is added by dragging and dropping it on an Edit channel, an additional secondary event is no longer added.

ITX-14778: Vertical Position Override (VPos) value was incorrect in Open.XIF when converted from Closed.STL

The converter version (4.1.0.2192) now correctly overrides the vertical position of a caption if specified in the config file. Currently the Bottom override is only supported which places all captions in the base line or bottom of the safe area.

ITX-14354: iTX Desktop Live Logo tracking gets out of sync

iTX Desktop Live Logo tracking gets out of sync because it was listening to Live Logo events from other channels. The messages are now filtered by channel, and the Live Logos don't get out of sync anymore.

ITX-14254: Subtitle processing times out too early

A timeout is now no longer used when processing with large caption files.

ITX-14145: The As Run service stopped working after a long period of use

A small memory leak that was impeding the AsRun logs has been fixed and it no longer stops working after a long period of use.

ITX-13294: When playing out the .mcc file, the timing is incorrect compared to the scc file

When converting from scc files to mcc files, the converter (v4.1.0.2192) now correctly sets an out time.

ITX-12149: The As Run service stopped working after a long period of use

A small memory leak was fixed in the As Run service and it no longer stops working after a long period of use.

Version v2.10 SP10 (build 3.210.10.986)

Fixes

ITX-14675: Secondary animated logo automatically extended with its parent event during an overrun

The Auto button in the Event Editor must now be selected for the secondary animated logo to extend with its parent event in an overrun scenario.

ITX-14355: Overrides of asset Source Format and Active Region data by scheduled Source Format and Active Region data were not obeyed

TXPlay playout of media assets would always follow the OPUS asset metadata for source format and active region regardless of any data supplied in the schedule that was intended to override that behavior.

The behavior is now re-calculated at the point of playout so that the overridden behavior from the schedule is obeyed.

ITX-14330: Exported Daughter Clips defaulted to a starting time of 00.00.00.00 and conflicted with the schedule's in and out points

In and out points on daughter clips now persist in the metadata so they can be used by the rest of the broadcast chain.

ITX-14329: Unable to import media with AS11 metadata

Clips with AS11 metadata can be imported even if some of the fields are greater than 100 characters in length.

ITX-14317: Changes to the iTX Desktop's Colour Configuration were overwritten when closing the iTX Desktop Client

Changes to the iTX Desktop's Colour Configuration are initially saved as expected, but no longer re-saved upon closing the iTX Desktop Client.

ITX-14088: Animated Logos do not play the out transition

TZIP and SPG logos did not play their out transition because iTX adds all logos for two days duration and removes them when required, as GV Engine doesn't support on-air updates to logo duration.

The resolution is to add SPG (and TZIP) logos for the actual schedule duration. This way they will play the out transition. These logos will not play the out transition if they are truncated, and they cannot be extended after Cueing.

ITX-13939: Delivery Manager was not assigning language metadata to disordered tracks correctly

Delivery Manager now uses track identifiers to identify where language metadata should be assigned. Where no identifiers are available or meaningful, it returns to previous behavior (i.e. assuming that all audio tracks are in order, contiguous, and start at Track ID 1).

ITX-13851: Chained schedules in a channel were duplicated when they were imported

Chained schedules were being expanded and populated twice due to two separate mechanisms for new and modified assets firing simultaneously. TXPlay will now only attempt to replace modified schedules if they are already expanded.

ITX-13745: .mpg files were cached to the UMP device as .MPG

A new option has been added in the Media Cache Service that allows you to specify a UNC path as the target cache folder. Also, the Media Cache Service no longer needs to access the UMP cache via a symlink.

To persist the -c command line option during upgrade, you must manually edit the file: %appdata%\TX\ITX Config\mediacache2config.xml and add a new key path with the full UNC path to the UMP cache share. For example:

```
<MediaCache>
  <UKCAS1DT0498>
    <name>UKCAS1DT0498-CACHE</name>
    <path>\\10.118.200.109\ump\Cache</path>
  </UKCAS1DT0498>
</MediaCache>
```

ITX-11671: The FPPRender end point of the Media Processing Service would not start correctly if the 32-bit version of GV Engine wasn't installed

The FPPRender end point of the Media Processing Service requires the 32-bit version of GV Engine. It would not start correctly if the 32-bit version of GV Engine had not been installed. Attempting to use the service resulted in an error message indicating that no jobs had been registered that could process the request. The installation package for the service only installed the 64-bit version of GV Engine.

The installation package for the Media Processing Service now installs both versions of GV Engine.

ITX-11454: The default transition duration was being added to the recording duration

The default transition duration was added to the recording duration resulting in 1 second of a clip after a recorded live was added to the recording. The transition duration is now only added for x-fade mixes as expected.

ITX-7987: Some iTX Services could were left with their Health status displaying as a Warning after logging health messages

Services that log a message in their Health status may have temporarily have their status set to "Warning". After a few minutes this status should be restored to "OK" and the messages cleared from the application's user interface.

Version v2.10 SP9 (build 3.210.9.967)

Fixes

ITX-13524: SCTE 104 splice requests were specified despite minimal BXF macro information

BXF scheduling of SCTE 104 splice request events processed by the VANC Event Driver in TXPlay provided valid SCTE 104 data on the output when only the splice_insert_type data was actually provided. The same events would not play out correctly using the TXPlay Enhanced VANC Event Driver.

The default data in the enhancedsccte.xml file has been altered to remedy this issue. Since the file is not overwritten by the default installation process, it must either be changed by uninstalling and ensuring the file is deleted on the target machine before re-installing TXPlay, or by manually copying the file from the installer into the same file in the TxPlay installation folder.

This issue does not affect TXPlay2, but the file has been updated for TXPlay2 for consistency.

Also note that a spliceStart_Immediate message is now generated if scheduled with no parameters.

ITX-13307: UMP plugin processing of SCTE 35 splice requests did not trigger sequences if the request contained a DTMF descriptor

If configured for neither Local nor National break triggers, the UMP Plugin for TXPlay2 incorrectly filtered out splice requests that included DTMF descriptors. This meant that commercial breaks were not taken to air when expected.

The filtering of the triggers now accounts for the DTMF descriptors correctly and the breaks are triggered as expected.

ITX-13297: Missing Materials Manager's purge options were not deleting some asset records or proxy media

If Missing Materials Manager had the purge option "Purge Clip (and media)" selected, some asset records would not be deleted. Asset records with media on external, archive or proxy Media Stores would remain in the system when the media is purged from the iTX media store.

This has been changed so that Missing Materials Manager deletes the asset regardless of any external, archived or proxy media that may be present.

This brings "Purge Clip (and media)" into line with the manual. Note that the media files on those stores will only actually be deleted if Delivery Manager has Endpoints that have been configured to do so.

If Missing Materials Manager had the purge option "Purge Media only" selected, proxy media would not be deleted. Missing Materials Manager would only remove the broadcast copy of the asset from the Media Store. It will now remove the broadcast copy and any proxy copy from the asset record and media store. The asset record will be left in the system. This is new behavior for "Purge Media only".

ITX-12629: Custom DTSS AsRun entries appeared in the wrong AsRun file

AsRun entries are now written to the correct AsRun file when an Item straddles midnight.

For example, when playing out a Primary event starting before 00:00:00:00 (23:59:00:00) which contains a secondary item beginning at 00:00:00:00 and ending at the same time as the primary (00:01:00:00), both AsRun entries are written to the one correct file.

ITX-12305: The exporting of daughter clips failed when using FPP Job Service via the Asset layout

The correct version of the FPP Job Service is now used when exporting daughter clips to an external store when using the Export button in the Actions tab of the Asset Layout.

ITX-12233: Delivery Manager does not process media dropped into the inbox and fails with a parsing error

Assets are successfully ingested even if the Asset Metadata for the "UKDPP_Video_Comments" field is longer than 100 characters.

ITX-11885: When using the 'Live Channel Bypass' layout, Logo events consumed all FPP slots

Repeatedly switching between 'Main' and 'Live' in the 'Live Channel Bypass' layout no longer causes Logo events to consume all FPP slots which resulted in the remaining events to remain in a Cueing state.

ITX-11688: If a GPI-1501 device timed out and failed to respond, the GPI service would not attempt to reconnect

In previous versions of the GPI service, there was no mechanism for re-establishing contact and re-sending the commands should a device go 'off-line' or time out while in use by a channel. This has now been addressed, making the GPI service more robust and device status aware. The version of the GPI-1501 firmware that this fix was implemented against is 1.0.0.RC-6.

ITX-11550: When a scheduled daughter clip was deleted from the system all other related clips would lose the link to the parent

With a schedule containing daughter clips, when one of the daughter clips is deleted from the system no other related daughter clips will now lose the link to the parent and thus be still shown as ready and available.

Version v2.10 SP8 (build 3.210.8.952)

Fixes

ITX-13307: UMP plugin processing of SCTE 35 splice requests did not trigger sequences if the request contained a DTMF descriptor

If configured for neither Local nor National break triggers, the UMP Plugin for TXPlay2 incorrectly filtered out splice requests that included DTMF descriptors. This meant that commercial breaks were not taken to air when expected.

The filtering of the triggers now accounts for the DTMF descriptors correctly and the breaks are triggered as expected.

ITX-12891: UMP restore to air functionality failed if the cueing operation failed or was cancelled

During a resume-on-air operation when performing schedule restore, restarting the Output Server or UMP device, Output Server 2 could get into a state where no further cueing was possible without a restart of the Output Server 2 application. This would happen if there was a failure to cue or if a cue request was cancelled.

The UMP plugin of Output Server 2 has been modified to handle these situations gracefully where possible and in a fashion that is recoverable by a subsequent schedule restore where not.

ITX-12629: Custom DTSS AsRun entries appeared in the wrong AsRun file

AsRun entries are now written to the correct AsRun file when an Item straddles midnight.

For example, when playing out a Primary event starting before 00:00:00:00 (23:59:00:00) which contains a secondary item beginning at 00:00:00:00 and ending at the same time as the primary (00:01:00:00), both AsRun entries are written to the one correct file.

ITX-12446: Partner services not reconnecting after a network interruption

Partner services now reconnect with a remote Locator when a network interruption is resolved.

ITX-12431: UMP was held in Cueing state following a resume on air

The UMP is no longer held in a Cueing state following a disconnect from the UMP server during the resume on air process.

ITX-12161: Media Cache would not retry the cache operation following a disconnect to NAS storage

If the Playout Server connection to the NAS storage is interrupted during the first attempt to cache an asset, when the connection to the NAS is re-established, the Media Cache service now attempts to recache the item.

ITX-12021: Greenfield install causes TXPlay exception when items are added to schedule grid

Fixed an issue where a greenfield install would throw a TXPlay exception when items are added to the schedule grid.

ITX-11987: UMP Output Server marked up SCTE messages even if they did not trigger

UMP Output Server marked up the event_id of passthrough SCTE35 SpliceRequest messages, despite the sequence matching the SCTE message having already been expired.

Now the subsequent message is not marked up when the sequence is taken to air, even if it matches the event_id of previous messages.

ITX-11628: Inventory Service ended a sync cycle on a deleted asset

If a locked asset is deleted from the archive store, it no longer stops the Inventory Service from processing subsequent assets.

ITX-11517: Schedule Processing Service cannot be used as a load balanced service

Schedule Processing Service can now be load balanced across two services to share the workload.

The 'Concurrent Processing' option on the Schedule Processing Service Configuration dialog must be checked on both Schedule Processing Service configurations for the workflow to be triggered. Note that when 'Concurrent Processing' is checked, the Update and Rename checkboxes are disabled.

ITX-11322: Incorrect warnings for Aspect Ratio / Source Format

The schedule's original Active Region/Source Format settings are now correctly used when checking against an asset's settings and the correct warnings are generated as a result.

ITX-11205: Channel GPI events failed to resolve when loading from disk

Whilst a specific channel was being controlled, if any configuration for any channel was modified, the Schedule Management control could lose the Schedule Import Configuration. From that point onwards, no further Channel GPI events would successfully load until the iTX Desktop was restarted. Changes have been made so that configuration changes are now handled correctly.

Version v2.10 SP7 (build 3.210.7.939)

Fixes

ITX-11966: Triggering a Vizrt event caused the start and duration of Vizrt graphic events to be inaccurate by more than a single frame

The commands controlling the Vizrt device are now sent in such a way as to ensure that the commands are carried out within a frame of the expected time.

ITX-11797: Items were stuck in cueing when using Cue to First Frame with Roll Under/Live Channels

Channels have now been changed to not automatically 'cue to first frame' when in a Roll Under state (e.g. Live channels when the Main is currently active). Cue to first frame is only actioned once the channel is made active.

ITX-11714: The Follower channel went off air when a video event with multiple Master Control Secondaries was scheduled

The Follower channel now plays out unaffected if a Master Control Secondary event is scheduled.

Version v2.10 SP6 (build 3.210.6.933)

New Features

ITX-11568: 'Time Mode Value Fixed Manual' option has been added to the iTX Desktop's Color Configuration pop-up

While Color Configuration options already existed for 'Time Mode Value Fixed' and 'Time Mode Value Manual', items that have time mode "Fixed" but have the "Manual Hold" flag set were not be easily identified since both conditions applied to those items.

The 'Time Mode Value Fixed Manual' option has been added to allow these items to be visually distinguished.

The 'Time Mode Value Fixed Manual' option defaults to the same color as 'Manual' so that existing color settings are retained.

All items with the "Manual Hold" flag set will transition to this color when they are taken to air, which correctly reflects their state within TXPlay 2.

Within channel Timeline controls on the iTX Desktop, the triangle representing the 'Fixed' nature of the item will remain green (existing functionality). The Color Configuration options do not currently affect the red and green triangles that reflect Fixed and Manual items in those controls.

ITX-11441: ServerController.exe.config file is no longer overwritten upon upgrading the iTX Server Controller

If it already exists during installation, the ServerController.exe.config file is not overwritten. As a result, the existing settings from that file are retained on upgrade. In particular, this includes the LowDiskSpacePercentage alert setting which is commonly set to a low value on Output Servers as their cache usage consistently means that the alert is triggered at the default 10%.

ITX-10380: Live Events support GPIO configuration regardless of schedule contents

The Remote Studio Control option has been added to the Edit GPI dialog, which is invoked from the Live Event Plugin Configuration. Enabling the Remote Studio Control button invokes GPIO functionality when the Live Event is followed in the playlist by a Sequence event that is scheduled with Time Mode set to Manual and the External Takes Allowed option is enabled. Disabling the Remote Studio Control button invokes GPIO functionality regardless of the type or scheduling of the next item in the playlist.

Fixes

ITX-11562: Re selecting video in Preview as channel layout

Now a user can select a subtitle asset and replay the video multiple times without having to restart the desktop

ITX-11534: Co-referenced media was cached separately if scheduled before it was delivered

When co-referenced (daughter clips) are scheduled before the parent asset is cached, each of the co-referenced clips now caches using the parent cache Source location, instead of its own Source location.

ITX-11532: Flash frames of live inputs crossed between channels on a dual channel iTX Output Server

In an SDI system with two channels running on the same server with an AJA 88 card providing live inputs for both channels, flash frames from one card could appear on the output of the other channel if it was playing a live event while a live event was cueing on the first channel. After addressing the issue, no flash frames are seen in this situation.

ITX-11531: UMP plugin interpreted inbound "out_of_network_indicator = False" messages as Start splice requests

Inbound SCTE 30 splice request messages with "out_of_network_indicator = False" were interpreted as "Start Normal" or "Start Immediate" splice insert type. This has now been fixed, so that they are interpreted as "End Normal" or "End Immediate" as expected.

ITX-11496: The first connected iTX HCO instance produced a bad data error upon enabling thumbnails within the Densité Frame

RAW data messages contain thumbnails which are not appropriate for HCO Services. In the past, these RAW messages were potentially sent to the service if thumbnails were enabled on the HCO Card. This caused issues in message processing and has potential impact to the status messages between the card and the service. To remedy this, The HCO Router service now requests that RAW data messages are not sent to the HCO Router Service.

ITX-11478: Master Control Secondary item held in Post Schedule Restore

Following a Schedule Restore, an iTX-MC Secondary item was held in Post Schedule restore for the Backup channel and Main channel. As a result, the Secondary Item was not removed from playout on the Program channel. This issue has been fixed.

ITX-11471: The UMP Output Server Plugin would not apply the correct break_duration information to second and subsequent items in SCTE 35 splice insert bursts

When SCTE 35 splice_insert bursts are received by the UMP output server plugin in pass-through mode, the correct break_duration information was only applied to the first message in the burst.

The correct duration is now applied to all messages in the burst (as defined by the messages having the same value present in the splice_event_id field).

ITX-11421: GPI mapping information was lost when loading a schedule in an Edit channel.

The Colossus Plugin in TxPlay2 provides generic mapping of GPI events to channel-specific GPI configuration.

If a schedule containing generically mapped GPI events was loaded in an EDIT channel, the mapping information would be lost if the item was saved. The information is now retained.

ITX-11393: Manual Insert was not added to the Backup channel's Schedule Grid or Timeline

Selecting in the IMC Panel a different Master Control Event to the one in hold or any Master Control Event with a Live Event/Video Clip on hold and then pressing Take now adds a Manual Insert for both the Main and Backup channels.

ITX-11388: Triggering a Vizrt event caused the duration of Vizrt graphic events to be inaccurate by more than a single frame

The commands controlling the Vizrt device are now sent in such a way as to make sure the commands are sent within a frame of the expected time.

ITX-11383: The status of items in the schedule were incorrectly changed to 'Done'

A comment in the past that was positioned at the start of a schedule no longer causes all subsequent events to be shifted up in the schedule and their status to become 'Done'.

ITX-11371: Items failed to go "Ready" in the Edit channels

An internal fix has improved the Output Server's ability to check the state of the media.

ITX-11370: Changes to schedule assets failed to update on-air playlists in TXPlay2

When an update to an on-air schedule was made, the expected changes would not be carried out if the schedule was on-air in a channel's playlist.

The on-air schedule is now updated as expected.

ITX-10953: Some Logo file formats are now correctly imported by Delivery Manager

When using Delivery Manager to import Logos, details of the graphics such as size and thumbnails were not correctly recorded in the Logo asset.

Delivery Manager now correctly imports the following Logo file types:

- .TZIP
- .BMP
- .JPG
- .JPEG
- .PNG
- .SPG

ITX-10939: When the GPI Service was stopped, GPI events stayed in the 'on-air' state until the schedule was cleared

Current and scheduled GPI events will now fail if the connection to the GPI Service is stopped during a GPI event and while the service is unavailable.

ITX-10670: The iTX Desktop's Color Configuration setting for 'Time Mode Value Start/End Minus/Plus' was not applied

Color Configuration settings for secondary events with Start Plus, Start Minus, End Plus or End Minus time modes are now applied correctly. Redundant information in the Color Configuration pop-up is automatically removed when the configuration changes are saved.

ITX-10048: Billing Reference was missing from the BXF As Run logs after a schedule restore

Billing Reference is now maintained in BXF As Run logs after a schedule restore has taken place in the Schedule Grid.

ITX-9796: The UTC time offset was not applied in the Ingest Control Service

The UTC offset is now applied on Ingest Control Service when the offset has been set in the iTX Desktop's Channel Config 2 tab.

ITX-9690: Color Configuration for events based on asset 'Content Type' information was not supported for all asset types

User-defined Color Configuration options matching 'Content Type' of assets would only affect video Clip assets scheduled in a channel.

This now affects all asset-based events for which 'Content Type' is appropriate. Fully supported types include video Clip, Audio, CG, Graphic, Live Event, Subtitle and Logo.

ITX-8073: Schedule that was incorrectly formatted was sent to processed folder instead of the Failed folder

When a BXF file contains correct details (i.e. the House number included), then the BXF file is correctly displayed in the Processed and Response folder. If however, the BXF file contains incorrect details (i.e. missing the House number), then the BXF file displays an error in the Failed and Response Folder.

Version v2.10 SP5 (build 3.210.5.896)

New Features

ITX-7843: Air Date from Masstech Store is now visible in Asset view

The Air Date as listed in the Default Group of asset details in the Masstech asset store is now imported to the ITX Asset view as the Production Date.

Fixes

ITX-11370: Changes to schedule assets failed to update on-air playlists in TXPlay2

When an update to an on-air schedule was made, the expected changes would not be carried out if the schedule was on-air in a channel's playlist.

The on-air schedule is now updated as expected.

ITX-11117: Media Cache service showed the size on disk of a reference mov file as being only the essence file size

The Media Cache Service now displays the full size of the ingested media for reference mov files.

ITX-11053: Layer 0 would always be used for a Logo item in a BXF schedule import

The specified layer is now used for a Logo item in a BXF schedule import.

ITX-10941: Setting Manual start mode on an item using BXF schedules forces Allow External Takes to be set for the item

The start mode setting "External" should set the Manual start mode and enable "Allow External Takes" for the item. Start mode "Manual" should set the Manual start mode and disable "Allow External Takes" for the item. Start mode "Manual" was incorrectly setting "Allow External Takes".

To prevent affecting existing schedule imports, a configuration option has been added to allow "Allow External Takes" in any form of BXF schedule import to iTX to be enabled or disabled for items with "Manual" start mode. This behaviour can now be configured to behave as was originally intended. The flag has been added in such a way that it can be set for any required application. This will normally be the Schedule Processing Service. The setting is:

```
<add key="BXFStartModeManualAllowExternalTake" value="True"/>
```

If set to True, then "Allow external takes" in iTX is enabled for Manual start mode items. This is the default setting and maps to existing behaviour.

If set to False, then "Allow external takes" in iTX is disabled for Manual start mode items.

The setting has been added to the "WorkflowApplicationService.exe.config" to affect the Schedule Processing Service. It can be added to the appropriate applications' ".exe.config" file or the machine-wide "Omnibus.config" file to affect other applications.

ITX-10933: Simulcast & Backup (follower) channels no longer in sync after a schedule update when the first item was a fixed item

All channels will now be in sync after a schedule update independently of the first item time mode.

ITX-10925: Media checks for Vertigo XG events would time out when using Dual Channel iTXG

TXPlay was excessively media checking missing Vertigo XG content. This was particularly noticeable if an XG item was in a schedule numerous times, which would not only generate a media check for the missing item, but also for each instance of the missing item.

In addition, missing media 'NotReady' messages and the associated warning displayed in the Schedule Grid for multiple instances of a single missing asset would often take some time for every item to be displayed in the grid as missing. This now happens almost instantaneously for every instance, as does the removal of the yellow NotReady status and warnings should the item become available again.

ITX-10901: Enabling or disabling any of the As Run Service Config options created an additional ITXML plugin instance

Enabling or disabling any of the options for the As Run Service Config no longer creates additional instances of the ITXML plugin. As a result, the ITXML Log Day folder no longer rolls over by multiple days after the configuration has been altered.

ITX-10688: Auto Cue After Live Event functionality fails for back-to-back lives events

Auto Cue After Live Event functionality in TXPlay2 now works correctly for the case of back-to-back Live events.

ITX-10638: Join In Progress (JIP) functionality could trigger items to skip incorrectly if extra material is added to the playlist before JIP is triggered

If extra material was added to the playlist (e.g. an extra live segment and break), then the channel would overrun without any specific live event entering overrun. When this happened, the Join In Progress (JIP) item would incorrectly roll at its scheduled time, skipping the end of the live event and the end credits for the live production and an end break.

To resolve this issue, a configuration option has been added for TXPlay2 that allows internal JIP logic to be applied at an earlier point in time so that the expected JIP rollunder behavior happens in this scenario.

The flag can be found in the usual TXPlay2 Channel Configuration "Channel Config 2". Enabling the "Mark JIP Flag Before HOLD" option triggers the new behavior.

ITX-10596: SNMP alerts forwarding from the System Service fails after six minutes

The forwarding of iTX alerts over SNMP would fail after a time period of six minutes. This has been addressed and the functionality will continue to work indefinitely.

ITX-10555: Start+ Secondary events on Live events were recued as the Live event went to air

Secondary events scheduled as Start+ events and starting within seconds after the Live event were recued and caused duplicate messages to be sent to UMP playout devices. Changes have been made to ensure the secondary events only cue once to avoid the duplicate messages.

ITX-10507: UMP Media Cache Service has duplicate Cache List entries due to the loss of the network to the symbolic link share

The Media Cache Service now tracks entries correctly when using a redirected shared folder via a symbolic link. If this link is lost (i.e. network error or reboot the UMP), duplicate entries are no longer generated in the Cache List.

ITX-10502: The Subtitle File Translator does not install all of the required runtime DLLs

When installing the Subtitle File Translator with Delivery Manager, all required DLLs are now installed such that the application will start correctly on a greenfield machine.

ITX-10457: As Runs files are missing items after updating and saving

After updating the As Run file, the save operation fails due to the file being locked. A retry has been added on write failure (10 attempts with 500ms wait between each one). If the retry fails completely, the failed records are cached and added to the front of the items to be written the next time (the cache is cleared after a successful write). A synchronization lock has been added as multiple calls into the writer (which can happen more frequently due to the retry delay) can result in data loss -- this is because the existing file is read, new items added in-memory then then file updated; This means that a second instance can read the file in-between the first read and the first write, effectively losing the new items (i.e. it is a typical ABA problem).

ITX-10448: Changing one of the Media Limits settings for Placeholder clip changed the other corresponding limit

When the media limits value of a placeholder clip is changed (e.g. in-point increased or out-point-decreased), the new value is no longer added to the opposite hold point. Placeholder clip points now obey the correct values.

ITX-10396: Caching on different channels on the same Media Cache caused each clip caching to be cancelled and restarted

When clips are cached simultaneously on two channels sharing a media cache, the clip caching is no longer cancelled and restarted.

ITX-10204: Time Source - Time from VITC was using the Local PC Date

When the Time Source was set from the VITC card and it was different from the local PC time, if the Local PC Time was offset to take the source time over midnight to the next day and the Time Service then restarted, then the time of day for the VITC would remain the same, but the date would jump to that of the Local PC Time. All scheduled items would then go into the past. This issue has now been fixed.

ITX-10197: Unable to delete the partial clips produced by the CacheShotlist Workflow after the Export Shotlist workflow has copied them from the iTX Mediastore to an external destination

A new option "RemovePartials" has been added to the Export Shotlist workflow. Partial clips generated by the workflow are now deleted at the end of the workflow when "RemovePartials" is set to True and not deleted if it is set to False.

ITX-10182: The Job service's FPP Render Plugin was not using Channel Audio Configuration

Rendered assets would always contain a single mono track of DolbyD followed by 4 tracks of PCM stereo (logical) regardless of the asset's audio type or audio config of the template channel. Now the rendered assets contain the 4 tracks of PCM audio specified by the 2 profiles (SD and HD) always used by the render process.

ITX-10160: Vertigo XG out transition exceeds iTX cleardown timeout

The iTX cleardown timeout for Vertigo XG events has been increased from five seconds to ten seconds to allow animations with longer out transition duration to complete before being marked as failed. Note that the duration logged to the As Run file is still the iTX event duration.

There is now a limit of ten seconds for the outgoing animation of a Vertigo XG template being controlled by iTX.

ITX-10129: TxPlay2 creates duplicate As Run entries when disconnected from the iTX Framework services

Disconnecting and reconnecting or stopping and restarting the OPUS service no longer produces the duplicate As Run items that were causing out of memory exceptions and crashes.

ITX-10117: The HCO service intermittently stops when receiving Send Partial - Send Partial Process commands

The HCO service no longer goes into a 'Timed out waiting for response' state when receiving Send Partial - Send Partial Process commands.

ITX-10115: Skipping a fixed item caused the next item to not respond to ripples of Auto time

When a fixed item is skipped in TXPlay2, the following item with Auto time mode now obeys its Auto time mode. TXPlay functionality has not been changed.

ITX-10114: Secondary video's audio is out-of-sync in PIP events when using Vertigo XG Inside with Output Server 1

When two clips are scheduled as a primary and secondary video event using an XG picture-in-picture template, the audio of the secondary item no longer lags behind its parent video by around 5 or 6 frames.

ITX-10107: Subtitle import in Delivery Manager fails to import SCC file

iTX Delivery Manager's subtitle import process now correctly imports SCC files with certain EIA-608 packet sequences without producing an error message.

ITX-10060: Deleting a sequence resulted in an error causing another sequence to fail

Deleting a sequence no longer negatively impacts subsequent sequences.

ITX-10059: Offset Channels go into hold at the offset time after a manually take is performed

If a manual take in the main channel, the offset (delay) channel goes to hold at the correspondent offset time instead of taking the manual take item to air.

Now the manual item is considered a fixed item in the offset channel and the manual flag is not set.

ITX-10025: Media Cache purges the wrong video file

When a 'Not Ready' clip appears in the Schedule Grid and the Output Server 2 channel's Cache is purged, if the same clip is immediately re-ingested into Delivery Manager, the newly ingested video file is no longer deleted. As expected, the clip's Cache Status will be Ready (green) and you will be able to Cue and Take the clip.

ITX-9925: BXF router events went into error status when scheduled

The BXF samples had Destination and Source the wrong way round - the samples have been updated to match the BXF documentation.

ITX-9882: First frame of a clip after a Master Control primary event is only cued when it is within 13 seconds of the next event

Now the first frame of clip after a Master Control primary event is cued immediately when the Master Control primary event goes to on-air.

ITX-9878: A schedule store/restore causes the backup channel to get the live source from the store/restore

Now when the primary output server goes from a Network live source to a news live source back-to-back, the backup makes the correct route.

ITX-9826: Locator service could stop sending its locally registered locations to other load-balance-partnered locator services

The Locator service no longer stops sending its local registered locations to its load-balance-partnered Locator services and the correct information is again used when applications try to connect or re-connect to other services.

ITX-9784: The iTX Desktop's Asset layout freezes if you fast forward the preview to the end of a live recording

The Asset layout no longer freezes when the Fast Forward option in the Asset Player (in Media Processing mode) is used until the end of an asset that is still being ingested.

ITX-9779: Secondary records ended before the actual show segment has finished

When a schedule restore is performed, a Live event in overrun no longer changes to a 'Done' state and the secondary recording is no longer terminated early.

ITX-9710: TXPlay delayed the handling of a cued message, which resulted in a delay in the Take Next to air

When the 'TAKE NEXT' button is pressed, schedule items no longer stay in a 'Cueing' state for 10 seconds. As such, the playout is also no longer delayed for the same period of time.

ITX-9471: Saving a copy of a Live asset does not inherit Audio Tracks settings

When creating a copy of a Live asset, copy the Logical Audio Tracks from the existing asset to the new asset.

When creating a co-reference of a Video asset, copy the Applied Audio Rules from the parent asset to the daughter asset.

ITX-9446: The 'Edit Page Text' button is not displayed in the Event Editor for VizRT items

For some resolutions of the iTX Desktop's Channel Control layout, the 'Edit Page Text' button was only partially displayed in the Event Editor for VizRT items. This has been addressed and the button is now fully displayed.

ITX-9422: Missing Materials Manager may purge items that are scheduled in the future if a channel that it is monitoring is in Hold

Extra logic has been built into Missing Materials Manager so that it can detect when a channel is on Hold and will not therefore delete any assets that relate to events that are in the future.

ITX-9391: Duration Logo events, On Logo events, Live Logo support and Flash events were not providing accurate start time and duration values to UMP devices

UMP_Insert_Graphic_data and UMP_Insert_Template_data commands did not accurately reflect scheduled start times and duration in all situations. Changes have been made to ensure timings are accurate including adjustments made when items are restored to air. These changes affect Duration Logo events, ON Logo events, Live Logo support and Flash events.

ITX-9225: Video clips whose duration goes beyond midnight are missing from ITXML As Run output

Video clips, with or without secondary items, that span midnight are now written to the ITXML As Run Log file.

ITX-9047: Asset Export workflow fails to export the proxy version of the clip

When using the Asset Export workflow to export an asset, there was an issue where selecting the option to add any existing proxy video to the export would fail to export the associated file. A change has been made to the workflow definition file to allow the proxy video file to be exported successfully.

ITX-9012: VizRT events without text fields were failing in VizRT Trio

Any type of VizRT event can now be scheduled without resulting in a failure.

ITX-8985: Inventory Service periodically issues removals and additions of assets

The Inventory Service was removing and adding assets for the monitored Masstech Archive. This resulted in missing externally available Masstech assets from the connected iTX system. The restarting of the Framework Server's System Service was creating additional active Inventory Service Working Threads which conflicted with each other, causing the problematic behavior. This problem has now been fixed.

ITX-8983: IS750 crosspoints were not switched correctly if a master control event had cued ready to play and a video clip was inserted before it

The TXPlay Master Control driver would not return the IS750 to the iTX crosspoint correctly under the following conditions:

A Master Control primary event was on air and a second Master Control primary event was cued and ready for air with its crosspoint displayed on the PST bus. If at this point an operator inserted an iTX video clip event, the video clip would air correctly but the IS750 PGM bus would not be returned to the iTX crosspoint at the on-air point. The TXPlay Master Control driver would instead take the previously-cued crosspoint for the second Master Control event to air.

The TXPlay Master Control driver now takes the iTX crosspoint to air correctly.

ITX-8917: Output Server 2 Secondary record using time of day timecode

A timecode override can now be configured for secondary records in Output Server 2. This is configured in the Secondary Record section of the Channel Config 4 tab of the Channel Config. The timecode override is done on a pre-channel basis with different channels in the same iTX system being able to use different timecode styles for their start-of-media. The default setting for secondary records is to use time of day but this can also be set to use either a fixed start time (e.g. 10:00:00:00) or zero start time (00:00:00:00).

ITX-8886: BXF Asrun file has all previously skipped items from channel history duplicated after each schedule restore

Duplicate entries could be created for skipped events (including all comment events).

If a channel was configured with history, or if expanded schedule markers lead to historic items being held in the channel, then any operation involving a schedule restore would result in the historic skipped items being duplicated. This would happen after each schedule restore.

This work prevents the duplicates from being generated.

ITX-8857: Creating a Manual insert by selecting another source on iMC Panel causes schedule items to be skipped

Upon selecting a Manual Insert from the iMC-Panel, all items for the Schedule, including the 'OnAir' secondary Master Control Event ('news'), no longer go to 'Skipped'.

ITX-8814: Media Delete Jobs for FTP endpoints set to not allow deletes are no longer created

A Media Delete job was being raised and set to complete even if the Delivery Manager endpoint was configured to not allow deletes. Now the Media Delete job is no longer created if the Delivery Manager Endpoint is configured to not allow deletes.

It is also no longer possible to disable a Media Delete job using the OPUS Service Job Type tab inside the Management window. To disable this type of job, you must now use the "Allow Deletes" configuration in the Delivery Manager Endpoint configuration. Attempting to enable or disable this type of job in the OPUS Service management window results in a message advising you to use Delivery Manager endpoint configuration.

ITX-8810: Restarting TXPlay fails to trigger Manual Insert events

If TXPlay or TXPlay2 is stopped and then restarted over a junction between video clip event and Master Control primary event, a manual insert event is correctly created if the IS750 is determined to be on a crosspoint that is not consistent with the transition between the video clip event and Master Control primary event. This also applies for restarting TXPlay or TXPlay2 over a junction between a Master Control primary event and a video clip event.

ITX-8296: VizRT command timeout caused all clips in all channels to cue later than expected

A VizRT command timeout no longer affects the rest of the clips in the channel.

ITX-8233: Missing Materials Manager is often in an incorrect warning state

Missing Materials Manager was often in a state of warning due to schedules being referenced in the past. So now Missing Materials Manager only considers current and future schedules when raising warnings.

ITX-7724: Changing the duration value in the Duration Quick Modifier dialog toggles the Hold Points flag

When changing the duration of an item in the schedule using the Duration Quick Modifier, the Hold Points flag are no longer enabled.

ITX-7442: GSM Gateway logs are flooding the iTX system logs

iTX GSM Gateway is no longer writing an inventory of verbose log entries to the system logs.

ITX-6798: As Run Start allows the entry of partial hours, but then saves as full hours

The As Run Start field has been changed to accept only integers so that you can only enter full hours.

ITX-6074: Inventory Service cannot retrieve asset inventory following a Masstech Restart

When the Masstech host PC was restarted, the Inventory Service could not retrieve the inventory, which required a restart of Delivery Manager. This action is no longer necessary to retrieve the assets.

ITX-5797: Unable to search by Purge Date in Smart Client

You are now able to perform a search in Smart Client by filtering on the Purge Date.

ITX-5401: Missing Materials combined reports are now valid against their XSD schemas

The cause of this issue was that an incorrect XML namespace was provided in the Combined missing materials report type. This meant that the report did not contain validatable XML. This fault was introduced in iTX 2.6 and has now been corrected in 2.10 SP5 and 2.12 SP1.

For the InterchangeFormat report format type, resolution of this issue required that the XML namespace 'xsi:schemaLocation="http://www.omnibus.tv/MissingMaterialAsset.xsd"' be corrected to 'xsi:noNamespaceSchemaLocation="MissingMaterialAssets.xsd"'. The XML is now valid against that schema, which is supplied with the iTX APIs. We have not changed the content of the report other than the namespace specified.

For the LegacyFormat report format type, resolution of this issue required that the parent node of the xml provided be restored from "t_clip_missing" to "t_clip_missing_list". The XML is now correct according to the schema "http://www.omnibus.tv/omnibus.g3.sig/omnibus.g3.sig.clip.xsd", which is supplied with the iTX APIs.

This could affect the parsing of combined Missing Materials reports. Sites where the combined missing materials reports are used should carry out a review to ensure any third parties consuming the data can successfully parse the corrected XML reports.

This could affect transforms used to generate the reports. If customers have a transform configured in Missing Materials Manager "Transform Filename..." then the transform may need to be reviewed to ensure it can successfully transform the corrected XML report.

It is acceptable to use the Missing Materials Manager service from 2.10 SP4 or the original 2.12 release while any changes to update third party parsing or site-specific transforms are actioned.

Version v2.10 SP4 (build 3.210.4.767)

Fixes

ITX-10396: Caching on different channels on the same Media Cache caused each clip caching to be cancelled and restarted

When clips are cached simultaneously on two channels sharing a media cache, the clip caching is no longer cancelled and restarted.

ITX-9826: Locator service could stop sending its locally registered locations to other load-balance-partnered locator services

The Locator service no longer stops sending its local registered locations to its load-balance-partnered Locator services and the correct information is again used when applications try to connect or re-connect to other services.

ITX-9590: GPI not triggering from Live channel in Output Server 2

TXPlay now reads the Live channel plugin data from the main channel and no longer causes GPIs configured in the plugin to fail.

ITX-9566: CG text boxes are not updated live when changes are made to associated text files

In Output Server 2, static fields in CG text boxes are now updated with the associated file.

ITX-9431: The live events from a bypass channel are still being cued onto slots

On a main and live TXPlay system, when an output server control is passed to the -Live channel, the live events on the main channel are cued and then released. As a result, they no longer unnecessarily use up FPP slots.

ITX-9391: Duration Logo events, On Logo events, Live Logo support and Flash events were not providing accurate start time and duration values to UMP devices

UMP_Insert_Graphic_data and UMP_Insert_Template_data commands did not accurately reflect scheduled start times and duration in all situations. Changes have been made to ensure timings are accurate including adjustments made when items are restored to air. These changes affect Duration Logo events, ON Logo events, Live Logo support and Flash events.

ITX-9388: Over-run and under-run values are incorrectly displayed in the Schedule Grid

Selecting the sequence header or the events within the sequence now displays the correct over-run and under-run values for sequences and schedules.

ITX-9356: Live Channel Events not being reported in the As Run file

When switching between live and main channels, the events were not being properly reported in the As Run file. Now whenever a channel goes into roll-under, an entry for that channels' on-air item is written to the As Run file (up to the point where the roll-under took effect and the channel went off air).

The above condition now holds no matter whether it is the Main or -LIVE channel that goes into roll-under, thus ensuring a complete record of on-air items is recorded in the As Run.

ITX-9329: VizRT Trio Out Of Memory Exception error

Changes were made in Output Server 1 to resolve an Out Of Memory Exception error associated with VizRT Trio.

ITX-9282: XML Adaptor throws exception error and stops while JIP event is on air

When a JIP event was on air, the XML Adaptor was stopping and would only recover after the end of the event. Now the XML Adaptor no longer stops and no exception appears.

ITX-9280: Items are prevented from being copied to the As Run log

When the 'Don't Wait for Secondaries' setting is enabled, logos that have been played out no longer maintain a status of On Air and these items are copied to the Standard or BXF As Run Logs.

ITX-9223: The RSS Streamer service removes the '£' character from any RSS feed

All types of character encoding are now supported; any character set is now displayed correctly.

ITX-9222: GPI logic not followed in roll under

When a channel was in roll under, it triggered and cancelled the GPI events that were configured in the Live channel plugin. This has been fixed so that channels in 'rollunder' state no longer trigger the GPI output.

ITX-9212: The Paste Above action in the Leader channel was not replicated to the Follower channel

Using the Paste Above menu option in the Schedule Grid on the Leader channel is now replicated to the Follower channel.

ITX-9141: Media files dropped into the Delivery Manager inbox were not processed

When a large number of media files are placed in the Delivery Manager inbox, all of the files should now be processed without requiring Delivery Manager to be restarted.

ITX-8996: The Preview window in the Asset Segmentation layout cues to the beginning of the media rather than the in-point of the segment

The Preview Window loads correct in-point with segmented clips.

ITX-8924: Delivery Manager not adding logical audio language tags to some processed assets

There were some scenarios around the re-delivery of content from archives and "external" iTX stores where Deliver Manager would fail to add the correct logical audio language tags to assets. Assets affected had been originally delivered via Interchange or to an external store or archive. When restored to the iTX store, the external store could be left with incorrect logical audio language tags. When subsequently purged and then re-restored at a later date, those incorrect tags would be carried over to the iTX store metadata for the asset and audio processing would not be correct. Now the metadata remains consistent and correct throughout. Incorrect data that may have been present as a result of the problem is also managed correctly.

ITX-8812: Media not found on the secondary domain by the Media Cache 2 service when scheduled

For clips ingested and registered on a secondary domain, referenced on the primary domain by a connection through the Locator service, the media would not be found on the secondary domain by the Media Cache 2 service when scheduled. Multi-domain asset caching has been restored, so now clips present on a different domain can be found and cached locally.

ITX-8811: Unable to search the Delivery Manager's CIFS Store root directory

It is now possible to perform a Delivery Manager CIFS Store search of the System Volume Information in the root directory, which allows you to copy any assets from this location.

ITX-8737: Inventory Service not working with Delivery Manager's PitchBlue endpoint

The Inventory Service can now successfully get the inventory from the Delivery Manager's PitchBlue endpoint and flags as Synchronization finished.

ITX-8684: On-air and items within the schedule lockout period can no longer be replaced

The Find and Replace feature has been changed so that items that are currently on air or within the schedule lockout period cannot be replaced. Users now receive a count of the number of items not replaced when performing a Find and Replace across multiple channels.

ITX-8648: Altering the shuttle speed in the iTX Desktop preview causes video to freeze

When previewing a video asset in the iTX Desktop Preview component, dragging the shuttle slider no longer causes the video on both the iTX Desktop and SDI output device (if enabled) to freeze.

ITX-8645: A sequence without "Allow External Takes" was taken to air when a "Sequence Start" GPI was triggered

In Output Server 2, only sequences with the "Allow External Takes" will be taken when the Sequence Start GPI is triggered.

ITX-8623: Unable to identify invalid video clips

Invalid media which has been imported into iTX is now highlighted and can be searched for. A new PostMediaImport workflow has been added that takes the result of the FPP Deep Analysis or the FPP Generate Proxy and if the job has failed sets the iTX location to be invalid with the reason 'Media analysis failed'. An operator can see which video clips are invalid using the PinPoint media invalid search filter. The job monitoring layout can also show which jobs have failed.

ITX-8509: GPI events are retriggered when a schedule is loaded that contains items with a fixed times that are in the past

Past events now go straight to Done and the GPI events are not retriggered.

ITX-8507: The Schedule Lockout Time in the iTX Desktop incorrectly displays if its value is greater than 24 hours

Adding a day counter ensures that the Schedule Lockout Time in the iTX Desktop is now correctly displayed when its value is greater than 24 hours. For example, 28 hours is now displayed as 1 04:00:00:00.

ITX-8469: Output Server 2 caching stops when Output Server is restarted

When the Output Server 2 service is restarted for any reason, any caching of files that was currently in progress would stop. This could prevent further caching of files for the channel. Caching could continue only if another cache request for the same item was received. The responsibility of copying the files has been moved from the Output Server 2 service to the Media Cache Service 2, which prevents this issue.

ITX-8433: Center aligned subtitles displayed incorrectly

When importing a closed STL file with center justified subtitles, additional spaces are no longer inserted into the subtitle and the justification/alignment remains as expected.

ITX-8395: The Now field in the Channel Control layout displays the name of the graphic element currently on air

The 'Now' field in the iTX Desktop's Channel Control layout displays the name of the main video element rather than the graphic element that is currently on air.

ITX-7796: GPIs are triggered at the wrong time due to time zone settings

GPIs are now triggered at the correct time even if the Output Server and the Framework Server are configured for different time zones.

ITX-7649: Importing a schedule in Media Watcher with a start time over 24 hours results in an SQL exception

When importing an iTXML schedule using Media Watcher, the start time of a clip may be scheduled by setting the Date in Summary/StartDate and the time in Summary/StartTimeCode. If the Timecode is greater than or equal to 24:00:00, the schedule was rejected by Media Watcher and the following log entry was produced: Conversion failed when converting date and/or time from character string. This issue has been resolved so that the schedule is no longer rejected and the schedule start time is calculated correctly.

ITX-7642: OPUS Reindex was slow to process

You can now configure whether the Custom Metadata Types are searchable and if the Metadata Events are included as virtual metadata assets in the index. The time to create the index and the size of the index will be according to these configurations. If everything is set (so all metadata types are searchable and all metadata events will be created as separated metadata assets), then the time to create the index may be hours. On the other hand, if everything is not set, then it can take only minutes (depending on the number of assets). These configurations are in the Management tab of the OPUS Service.

ITX-7606: Logo asset details not applied are correctly

When importing logo events via BXF schedule import, the logo details (e.g. width, height) are now displayed correctly when viewing the logo event in the iTX Desktop's Content Editor.

Version v2.10 SP3 (build 3.210.3.688)

New Features

ITX-8399: iTX Desktop's VizRT plugin allows you to trigger primary VizRT events

iTX Desktop's VizRT plugin allows you to trigger primary VizRT events as well as secondary VizRT events. See "About the VizRT palette" in the *iTX Desktop Operator Guide*.

Fixes

ITX-8740: Schedules disappear from Channel Control layout's Schedule Grid under certain conditions

The contents of the schedule grid in the iTX Desktop's Channel Control layout disappeared and the channel was labeled as 'Off Air' after switching to a second channel and then back again. Despite this behavior, the channel's playout (sound, video and graphics) was not affected. This issue was resolved by fixing a problem with the Channel Health in the Engineering layout.

ITX-8733: Product version, System logs and TXPlay logs missing the iTX version number

An issue existed where the iTX product version field was blank. Consequently, the iTX version was missing from the Framework System and Output Server TXPlay logs. This issue has now been fixed.

ITX-8645: A sequence without "Allow External Takes" was taken to air when a "Sequence Start" GPI was triggered

In Output Server 2, only sequences with the "Allow External Takes" will be taken when the Sequence Start GPI is triggered.

ITX-8636: The Up/Down buttons were missing from Delivery Manager Media Sources window in Missing Materials

The Up/Down buttons used to define the order of Delivery Manager media sources were missing from the Restore tab in Missing Materials configuration. These have now been restored.

ITX-8631: Schedules disappear when selecting a channel view in the iTX Desktop's Live Channel Bypass layout

Schedules disappeared when a channel view was selected in the iTX Desktop's Live Channel Bypass layout if they have not first been selected in the Channel Control layout.

Now the schedules are displayed even if they were not already selected in other layouts.

ITX-8603: Asset Fixer Logical Audio increased SQL timeout

Asset Fixer Logical Audio has an increased SQL timeout so that the job doesn't fail on a large iTX database.

ITX-8600: The Asset Fixer's Set Logical Audio did not apply the selected analysis options

Logical audio groups are now calculated from the original FPP analysis using the analysis options supplied in the job.

ITX-8541: Output Server 2 stopped operating when using the Secondary Recording or On-Demand Process

When using the Secondary Recording or On-Demand Process, Record Monitoring jobs are created to allow monitoring of growing files during the recording process. When complete, these jobs are automatically deleted by the OPUS Service seven days later.

When running on a system with Microsoft .NET Framework 4.0 installed (and no newer version of Microsoft .NET Framework is present), Output Server 2 now accepts the deletion of these jobs and no longer stops operating. It was noted that the undesirable behavior did not happen on systems with Microsoft .NET Framework 4.5 or newer installed.

ITX-8470: SmartClient produced an error when saving changes to a video asset that was imported with Delivery Manager using Audio Import Rules

In SmartClient, modifying and saving a video clip that was ingested using Delivery Manager's Audio Import Rules no longer causes an error upon saving and the language intents remain intact.

ITX-8465: Missing Materials Manager restarts after encountering exception error

The Missing Materials Manager application contains a dictionary of all the clips in the schedule that currently have media missing. When a purge is triggered, items are removed from this list. If there another process is attempting to access an item that has been deleted, an exception occurs and the application restarts. Changes have been made so that only one thread at a time can access and change the contents of the dictionary. This prevents the exception error, which was causing the application to restart.

ITX-8459: Newsflash error appeared stating that the Duration cannot be negative

A "Duration cannot be negative" error appeared when a Newsflash TAKE was executed after the on air clip ended and the channel was on hold. Now the TAKE performs without errors and the Newsflash sequence starts normally.

ITX-8428: A graph pause was experienced when trying to play a clip on an Output Server 1 channel

ITXPlayer/Pandora produced a graph pause when media containing SMPTE 436M ancillary tracks were used frequently in the schedules. An issue related to Pandora's VANC processing has been corrected and the graph pause no longer occurs.

ITX-8420: Manual synchronization of a video clip with an iTX and Proxy location failed to register the video clip

Manual synchronization can now be performed for video clips with both an iTX and Proxy Locations. Note that currently proxy locations are not synchronized with the later system, only the iTX location.

ITX-8374: The first cue and take from the Newsflash caused the playlist to Take Next instead of taking the Newsflash function

When a Newsflash Prepare was made with a secondary event on air, the sequence was wrongly placed in the schedule and it would go immediately to air. Now the Newsflash sequence is correctly inserted in the schedule and is not going to air until TAKE is pressed.

ITX-8331: Media being restored from Diva now gets re-analyzed

Previously, media was not being re-analyzed when being restored from Diva. In a scenario where extra audio tracks were added to the media after it was initially registered with iTX, the modifications were not in place once the media was restored from Diva. This has now been fixed.

ITX-8209: Missing Materials purges secondary events that appear in the schedule

The checks for whether secondary items were in the schedule were not being carried out correctly.

A fix was made in this release to only purge video items and never purge any secondaries irrespective of whether they are scheduled. This fix includes removal of the 'Purge Video Only' button from the Missing Material service.

ITX-8041: Master and Slave channels can display the same Master or Slave status

Master and Slave channels have been replaced with Leader and Follower channels in iTX 2.10 and Network channels in iTX 2.11. This issue has been fixed with the new functionality. It is recommended that you upgrade your system to Output Server 2 on iTX 2.10 (or later) to fix this issue.

ITX-7993: The Channel Assignment Display component caused the iTX Desktop to become unresponsive

When a system consisted of numerous workstations, views and channels, the Channel Assignment Display component of the iTX Desktop sometimes caused the application to become unresponsive.

Several changes were made to the Channel Assignment Display to increase the performance of this component. The functionality didn't change but the response from the component is now quicker and no longer hinders the performance of the iTX Desktop.

ITX-7958: Media's offset was set to zero when imported using Delivery Manager after a BXF dub list

When media with non zero offset was imported using Delivery Manager after a bxf dub list, the offset was set to zero causing the media to not payout. The offset is now set correctly.

ITX-7901: Router Matrix macro parameters are not set via BXF

The Router Matrix parameters are now set when a schedule is imported via BXF.

ITX-7867: Items outside the Caching Look Ahead window were displaying a Not Ready status despite the item being on the Media Store

The status of items outside of the Caching Look Ahead window would be displayed as 'Not ready' despite the item being on the Media Store. Now items outside of the Caching Look Ahead window are now checked and will go to the Ready state. In this state, the item's Cache icon in the Schedule Grid displays a new yellow Cache icon to indicate that a cacheable item has been checked, but not yet cached. Meanwhile the amber/orange Cache icon now means that the item has been checked and is currently caching.

ITX-7865: Over-Run and Under-Run warnings were not displayed in the iTX Desktop's Schedule Grid

When only 'PGM A', 'PGM B' and 'Output' tracks were selected in the OverRun/UnderRun Config, Over-Run and Under-Run warnings were not being displayed in the iTX Desktop's Schedule Grid. This issue has been corrected so that no matter what combination of tracks are selected, Over-Run and Under-Run warnings appear as expected.

ITX-7838: Modifying BXF schedules using the Schedule Management component caused the As-Run extended data to be removed

When modifying schedules using the Modify button in the iTX Desktop's Schedule Management component, the extended data for a BXF schedule was lost. This issue has been resolved and the As Run extended data now writes correctly to the output.

ITX-7775: Manually triggered items that have been completed could not be copied and pasted into the iTX Desktop's Schedule Grid

The context menu commands for pasting items in the Schedule Grid (Paste, Paste Above, Paste End) have been fixed and users are no longer prevented from moving adding item using copy and paste commands.

ITX-7763: Channel Configuration Records were unnecessarily being created per schedule

Channel configuration records were created when schedules were loaded or used by a number of services (e.g. Missing Materials, Schedule Processing or TXPlay). These services no longer create records per schedule.

ITX-7663: The frame that was set as the Out point cannot be viewed in the Asset layout's FPP Viewer player

In the iTX Desktop, setting the Out point of a clip loaded in the Asset layout's FPP Viewer player made it impossible to view the specific frame that the Out point was set to. This issue has been resolved and the frame set as the Out point can now be viewed in the FPP Viewer.

ITX-7361: Standard Purge Workflow incorrectly deletes co-referenced assets

The Delete command has been changed in the Standard Purge Workflow to not delete all co-references. If co-referenced assets fulfill the purge criteria, then they are deleted separately.

ITX-7149: 720p 60DF clips import with a 30DF frame rate

Clips on a MassTech MassStore that are managed using the iTX Inventory Service and Delivery Manager will now correctly have their frame rate set in iTX to match that configured in the asset template used by the Delivery Manager endpoint.

ITX-6873: The default output channel was no longer automatically routed to the external monitor

When automatic routing has been enabled through the iTX Desktop Channel Control's External Monitor Routing component, the default (first) output channel will once again be automatically routed to the external monitor when a channel group is selected from the View panel.

ITX-6415: iControl GSM Gateway failed to read unicode text

The iControl GSM Gateway now reads both unicode text and it will also read the illegal characters in iTX.

ITX-5726: Source not routed to the record device

An encode job rescheduled for the same time as another in-progress job, which is then automatically assigned to another encode device in the same device pool, will now route the correct source for the encode.

In previous versions, the route was not methodical and just encoded from whichever source was currently routed to the encode server.

ITX-4947: iTX Desktop becomes unresponsive when using the VertigoXG plugin's Content Selector

Changes were made so that the VertigoXG plugin's Content Selector does not cause the iTX Desktop to become unresponsive.

Version v2.10 SP2 (build 3.210.2.606)

New Features

ITX-5640: The Duration field is now immediately ready to be edited when the Schedule Grid's Duration Editor is opened

When the Duration cell is clicked in the iTX Desktop's Schedule Grid, the Duration field is now the focus of the dialog and is ready to be immediately edited.

Additional changes were made so that the correct tab order is now observed throughout the dialog and both the space bar and Enter key can be used to operate the Cancel and OK buttons within the dialog.

Fixes

ITX-8293: Central Configuration Layout Dependencies now installed by default

As part of the iTX installer options, Microsoft Visual C++ 2013 Redistributable (x86) is now installed by default. This allows the Central Configuration layout (Configuration) to load on greenfield installs.

ITX-8185: The Multi-Channel Control layout displays empty schedule upon opening the layout

Upon opening the Multi-Channel Control layout, channel schedules were not being displayed. Only after restarting the iTX Desktop would the schedules appear in the layout. This issue has been resolved so that the Multi-Channel Control layout now correctly registers channel services in the iTX Desktop before first use.

ITX-8174: Delivery Manager's Register In Place configuration was corrupted when upgrading from iTX 2.9 to 2.10

After an upgrade, Delivery Manager's Register In Place endpoints would not initialise and an error would be reported when reading the configuration. Now the endpoint initialises successfully and can be used as expected.

ITX-8128: No warning appears when adding the Unknown clip to a schedule and specifying the name of an existing asset

When dragging the Unknown video clip from the iTX Desktop's Content Selector to the Schedule Grid, if you specify the name of an existing asset in the Clip ID field, a warning now appears indicating that the source format differs.

ITX-8094: Delivery Manager's Register in Place fails to identify video assets with two or more locations when performing initial sync

The Delivery Manager Register In Place endpoint would miss some video assets when preparing a list of assets to sync during the initial setup of the endpoint. No video asset with more than one media location would be added to the list. Now all required video assets are correctly added to the list for syncing.

ITX-8084: Pandora Reset

To resolve this issue, we recommend upgrading to iTX 2.10 SP2 and using Output Server 2.

ITX-7976: Channel in Hold goes to air when operator presses Delete with nothing selected in Omnigrid

After deleting an item, the iTX Desktop cleared its list of selected items. Pressing Delete again no longer allows the channel to remove an item that has already been removed.

ITX-7915: Cueing a Live event causes subsequent cued items to remain in a Not Ready state

Cueing a Live event before the media check was complete caused the status of subsequent cued items to be Not Ready, which prevented them from being taken to air. To resolve this issue, items can no longer be cued until the media check is complete.

ITX-7889: Unable to add shots to a previously saved project in iTX SmartClient

In SmartClient if a project was saved before any shots were added, the project would not retain any track information and additional shots could not be added. This issue has been resolved and the project now retains the number of tracks it was created with.

ITX-7836: Unable to load BXF schedules containing SCTE 104 data in the iTX Desktop

BXF schedules containing SCTE 104 data that were imported using the Schedule Processing service can now be successfully loaded and appended in the iTX Desktop.

ITX-7776: BXF response messages contain incorrect ID format

After ingesting a BXF schedule into the system, the response message contained the message ID in the wrong format. The message ID should be in the format "urn:uuid:11419D2A-23B3-44AD-8AC2-2B7A601A0F13" but was written in the response as "11419D2A-23B3-44AD-8AC2-2B7A601A0F13". This issue has been resolved.

ITX-7547: The Edit channel's alias is incorrect in the iTX Desktop when the Main channel's alias is not set

If the Main channel's alias is not set, then the user does not need to add the suffix Edit when setting the Edit channel's alias.

ITX-7544: No channels are displayed in the iTX Desktop's Media Search and Replace dialog

When attempting to replace a video clip, live asset or logo in a schedule event, the Media Search and Replace dialog now displays a list of channels that could be affected by the Search and Replace.

ITX-7481: A warning is raised and the wrong value assigned when the aspect ratio is not supplied in the BXF

When no aspect ratio was supplied in the BXF, the ITXML or OSC schedule item was assigned a "not specified" value and a warning was raised. Now if the aspect ratio is not provided in the BXF, the asset's default value is assigned and no warning is raised.

ITX-7416: Prolonged use of the iTX Desktop client sometimes affects the responsiveness of the application

Prolonged use of the iTX Desktop sometimes caused the iTX Desktop to become slow to respond. Restarting the iTX Desktop would improve its performance, but it would again become sluggish after extended use. Changes were made in this release so that the iTX Desktop's responsiveness does not become slow after prolonged use.

ITX-7363: Asset Source format incorrectly set when a BXF dub list item format is set to 480p

The Asset Source format is now correctly set to 16x9 when a BXF dub list item format is set to 480p.

ITX-7165: iTX Desktop was sometimes unresponsive after changing channels using the Channel Selector

The responsiveness of the iTX Desktop when changing channels has been improved by resolving backend exceptions that occurred in some circumstances.

ITX-6717: Incorrect asset titles are displayed in the Content Selector's CG plugin and Stills plugin

The CG plugin and Stills plugin in the iTX Desktop's Content Selector now load the asset's title rather than the asset's name.

ITX-6407: I/O Device controller does not dynamically update changes to router crosspoints

Changes made to router crosspoints (specifically adding and removing destinations) are now dynamically updated in the I/O Device Controller 'Channel MainInput' Configuration without the need to restart the Device Controller.

ITX-6192: Default Live sources are duplicated in the iTX Desktop's Content Selector

Each time a channel was selected, a new default Live source was added to the Live Content Selector. iTX now checks to see if the Live source already exists before adding it again.

ITX-5274: Media Watcher does not recognise TXRoute events when importing .OSC schedules

Media Watcher can now import TXRoute events (type 10) events from .osc files.

ITX-5208: The state of the Live Logo button is not updated on other iTX Desktop clients

When a logo is turned on/off on one iTX Desktop workstation, the state was not reflected in other workstations. Switching between channels and back would correctly update the status. To resolve this issue, we recommend that you upgrade to iTX 2.10 SP2 and use the Output Server 2. After the upgrade, the live logo button status will update properly on other iTX Desktops.

ITX-5071: Clips that pass the quality check on Amberfin or Omneon fail to playout in iTX

To resolve this issue, we recommend upgrading to iTX 2.10 SP2 and using Output Server 2.

ITX-5009: The Local Start Time column in the Schedule Grid does not indent secondary events

The Local Start Time column in the iTX Desktop's Schedule Grid now indents secondary events for easy recognition.

ITX-4792: After acknowledging an item's warning, the icon in the Schedule Grid's Warnings column remains yellow

After selecting the Acknowledge or Acknowledge All button in the Schedule Grid's Warning dialog, the item's Warning icon in the Schedule Grid will now turn from yellow to grey.

ITX-4656: The tabs in the Content Selector disappear when changing views

The tabs in the Content Selector, on the iTX Channel Control layout, no longer disappear when you change views.

ITX-3530: iTX Desktop is slow when changing channels

Some exceptions in the iTX Desktop logging related to the VANC, SCTE, Clarity and Audio Plugins have been resolved.

These exceptions happened when changing from one channel to another using the Channel Selector with the specific Plugins loaded.

Version v2.10 SP1 (build 3.210.1.565)

New Features

ITX-7688: Added support for Viz Multichannel

The VizRT event driver now supports both Viz Trio and Viz Multichannel devices. The validated Viz Multichannel is version 3.0.0 build 10558 and MSE version 4.10.0.16507. Note that Viz Multichannel only supports secondary Viz playlist items and does not support out transitions.

Improvements

ITX-6944: Boxing not supported in open PAC subtitle files

Boxing was previously not supported when importing open PAC files through Delivery Manager. Now any files which do not display boxing should be re-imported.

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-7821: Unable to delete items skipped in a schedule

Skipped items belonging to a parent sequence or schedule can now be deleted.

ITX-7791: Unable to append to channel if the last primary event is complete

Adding content to a schedule that contains Done items would produce an error message stating that it is not possible to add items in the past. To avoid this error message, you would have had to delete the Done items from the schedule prior to adding new content.

Now, new content can be added to the schedule even if Done items are present in the Schedule Grid.

ITX-7756: Excessive logging by TXPlay2 on large systems affects the performance of the Logging service

TXPlay was frequently logging messages for "Not Ready" items to the central Logging Service. On large systems, the logs would become excessive and the Logging service's memory would be strained and affect performance. This was specifically noted on larger systems using Missing Materials Manager to pull media from Delivery Manager search endpoints.

To resolve this issue, logging has been retained in the local logs for diagnostic use and it has been removed from the system logs.

ITX-7550: Schedule items appended within the protected lockout zone are inserted before the last protected item

Items appended to the end of schedule within the protected lockout zone are no longer inserted before the last locked/protected item.

ITX-7417: Locator Services tab now Remains responsive with ~3000 Services plus Clients now Load Balanced across Locators

Prior to the fix, the Locator Services tab became unresponsive with ~600 Services or more. To resolve this issue, network message processing efficiency has been improved and Discovery mode made configurable so that it can be disabled to further reduce the number of Heartbeating messages, reducing the load on the system. Visually, the filtering drop-down lists have been improved, so that only visible items are being updated rather than the whole list.

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-7379: Locator Services tab now Remains responsive with ~3000 Services plus Clients now Load Balanced across Locators

Prior to the fix, the Locator Services tab became unresponsive with ~600 Services or more. To resolve this issue, network message processing efficiency has been improved and Discovery mode made configurable so that it can be disabled to further reduce the number of Heartbeating messages, reducing the load on the system. Visually, the filtering drop-down lists have been improved, so that only visible items are being updated rather than the whole list.

ITX-7375: Asset Fixer and Import incorrectly grouping mono audio tracks

In the event of there being no DolbyE information, the mono tracks are now correctly grouped. If any assets need to be reprocessed, the Asset Fixer's Configuration now features a Set Logical Audio tab where the Group Mono Tracks option can be set and the Update Assets button can be used to reprocess the assets.

ITX-7180: Incorrect value displayed if the event's duration exceeds 24 hours

Events with a duration of 24 hours or more would only display a duration value between 00:00:00 and 23:59:59. Now the number of days is displayed followed by the time when the duration exceeds 24 hours. For example, a 25 hour duration is represented as "1d 01:00:00".

ITX-7139: Stopped Partnered Locator Services were still Flagged as Available now correctly flagged as Disconnected

Prior to the fix, the Stopped Partnered Locator Services would result in either the Primary or 1st Backup Service or both, still being flagged as 'Available'. This behaviour persisted for about 5 minutes before the Status is correctly flagged as 'Disconnected'. This problem has now been resolved so that the correct Status of 'Disconnected' is flagged, as the Partnered Locator Services are stopped.

ITX-6800: Some fonts not displayed correctly in the CG Template builder and when taken to air

Characters belonging to True Type font sets that are not standard to Windows can now be previewed and played to air without any problems.

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-6078: Adding a logo to the on-air item causes the item to fail

Adding a logo to the on-air item in the Schedule Grid now returns a message stating that the logo cannot be inserted in the past instead of failing the item immediately.

If you want to add a logo to the on-air item, simply drag the logo to the appropriate point on the on-air item in the Timeline.

ITX-6035: Delivery Manager partial restore from DIVA location fix for non-zero based media

DIVA archive location information is now updated if the asset location has no existing analysis information, rather than based on a zero duration (e.g. placeholder assets); this ensures that the inpoints are correctly set when issuing a DIVA partial restore job.

Additionally, if a DIVA archive location contains no media analysis information, an attempt is made to use an alternate location (with media analysis information/correct inpoints) when issuing a partial restore request.

ITX-5770: The Fix All button in the iTX Desktop's Warnings dialog does not work

Fix Warnings has been implemented on all TXPlay2 plugins.

ITX-5477: The AssetTemplate parameter has been added to the DM Restore Rename and Segment workflow

The AssetTemplate parameter has been added to the DM Restore Rename and Segment workflow. This parameter allows a default template to be used to specify the frame rate. If the assetTemplate is not defined, then the default behaviour is to assume FSP30DF. This effects the Masstech, pathfire and pitchblue type archives.

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-5112: The last frames of an animated background in a CG are not displayed

The default In Transition and Out Transition for CG's has been changed from 'Mix' to 'Cut' to ensure the playback of all frames.

ITX-5109: Diva was not synchronising deletion requests

When sending delete jobs to Diva, ITX no longer removes the extensions from the asset names in delete requests.

ITX-4268: Live event's audio was lost when Roll Under was enabled on both the Live event and the next video clip

The Roll Under state when a Live event is on air and the following video clip is in roll under, will now persist through a TXPlay or Output Server restart. There will no longer be any loss of audio as a result.

ITX-4033: Live event's video was lost when Roll Under was enabled on both the Live event and the next video clip

The Roll Under state when a Live event is on air and the following video clip is in roll under, will now persist through a TXPlay or Output Server restart. There will no longer be any loss of video as a result.

Version v2.10 (build 3.210.0.497)

New Features

ITX-7413: Audio Import Rules for Logical Grouping and Language Tagging

It is now possible to create, update and delete audio import rules using the Configuration layout in the iTX Desktop, or its equivalent web client. These rules define how incoming media will be grouped and tagged with audio labels. This extends the original logical audio features allowing media to be dynamically tagged as P#N.

When media is imported through Delivery Manager, it can use an audio import rule to define the logical audio grouping and label/language tagging. This is configured through the existing Delivery Manager configuration tool.

Multiple assets can be ported from the existing logical groups to an Audio Import Rule, or from one rule to another, using the Asset Fixer Service. This action is performed within the Asset Fixer Service's Configuration page, which features a new tab called Apply Audio Import Rule.

It is also possible to tag existing media assets with audio rules from within the iTX Desktop. For video assets, the Properties Editor's Locations tab contains a new field called Audio Import Rule. Selecting the Change button next to this field opens the Change applied Audio Import Rule dialog which allows you to choose and apply an appropriate rule.

ITX-7411: Automatic Loudness Control (ALC) is now supported for iTX Output Server 2 channels

If licenced for ALC, an iTX channel will default to using the 'default' ALC profile. The settings of the ALC profile will be applied to each audio program where it is assigned. This is configured at the audio program level - allowing each audio program can have its own ALC profile selected.

The default profile can be updated to meet the ALC requirements of the channels using the profile. Alternatively it can disabled using the "ALC Bypass" option.

When configuring an ALC profile, three predefined sets of ALC settings are available. Factory Light, Factory Standard and Factory Heavy have been designed to mirror the predefined settings in XVP-3901. A/85 ITU and EBU R128 standards for loudness can also be selected as appropriate for the channel frame rate family.

Changing the profile will update the settings for channels using that profile, upon a Output Server 2 restart. The operator is notified when channels need restarting in order to use the modified ALC profile settings.

ITX-7037: Added support for setting the audio properties of assets using AssetXML

It is now possible to update video assets using AssetXML that specifies the audio programs and their labels for the media. This can be done for existing assets and also for media that has not yet been contributed.

ITX-6922: The directory path of a VizRT page can be specified

The directory path of where the VizRT page is stored on the Viz device can now be specified as part of the page's settings in the Create Page dialog or the Event Editor when the VizRT CG event is selected in the Schedule Grid. If the Directory field is left empty, the system gets the directory from the show.

If the schedule is imported by BXF Schedule Processing and the directory is defined in the BXF, then that directory is used. If the Directory is not specified in the BXF, then the system gets the directory from the show.

ITX-6657: AJA driver upgrade requirement to version 12.4.1.460

Upon installing iTX 2.10, the AJA drivers must be upgraded to version 12.4.1.460. If the upgrade is not performed, the I/O Device Controller will report that the wrong driver is installed.

ITX-6548: Added the iTX Central Configuration layout to the iTX Desktop for creating and managing audio rules and audio labels

The iTX Central Configuration layout in the iTX Desktop allows you to create, configure and manage the audio rules and audio labels that are used to tag audio programs and configure the Output Server 2 audio mappings.

ITX-6155: Kantar Snap watermarking can now be added to audio programs in Output Server 2

Kantar Snap audio watermarking can be added to the audio output programs in the Output Server 2 Audio configuration dialog. This functionality is only available if a valid license is present and the Family Frame Rate is 50 Hz in the I/O Device Controller.

ITX-5889: Live channel is now available in Output Server 2

Live channel is an optional additional instance of the TXPlay application running a channel with “-LIVE” appended to the channel name. It is intended to allow parallel schedule commands to be passed to the same Output Server 2 for ad-hoc playout in news and sports areas.

The Live channel uses the Main channel configuration, so no channel configuration is available for Live channels. Configuration changes must be performed in the Main channel configuration. Note that Live channel functionality is the same as that for Output Server 1. Live channel is not supported for Simulcast or Regional channels, but it is supported in Leader/Follower configurations.

ITX-5883: PinPoint can find video assets that have been imported using an audio import rule

The Audio Import Rule filter has been added to PinPoint Video Search's Media filter. This filter allows you to find all video assets that have been imported using a specific audio import rule.

ITX-5846: Mapping rules for audio programs are now defined as Preferred rules or Alternate rules

The definition of mapping rules for audio programs in the Output Server 2 Audio configuration settings is now divided into Preferred rules and Alternate rules.

The Audio Status icon in the Audio Mapping column of iTX Desktop's schedule grid reflects what kind of match has been found. For example, if there is a Preferred match for all the audio output programs specified in the audio configuration, then the Audio Status icon is green. If one or more of the audio output programs finds no match in the Preferred labels, but there is a match for one of the Alternate labels, then the Audio Status icon is orange. If one or more of the audio output programs finds no match at all, then the Audio Status icon is red.

If one or more of the audio output programs has matched on the 'Silence' label, then this is reflected in the Audio Status icon as a crossed out speaker icon.

ITX-5798: Ability to specify which audio output programs a voice over will be applied to via BXF and itxml

It is now possible to specify which audio output program(s) a voice over will be applied to via BXF and itxml. In most cases, the scheduling of Voice Overs can be covered using the 'Apply VO' checkbox that appears against each audio program in the Output Server 2 Audio configuration page.

If however, two voice overs are in different languages and they must be played at the same time, the only way to achieve this is if the audio program can be set per event. In such a case, you can now schedule the two Voice Over events via bxf/itxml and specifying a different output program for each event.

ITX-5736: iTX Services will use licenses on a local dongle instead of a Site License

If an iTX system has a dongle plugged into the local server and a Site license, iTX services will always use the licenses from the local dongle rather than the Site license.

ITX-5503: iTX Local Time Service installer included in iTX Installer

The installer for the iTX Local Time Service has been included in the iTX installer. Now changes to the Local Time Service appear and are automatically upgraded during iTX upgrade.

ITX-5489: VizRT pages are now identified by a user-specified Item Name in Content Selector and Schedule Grid

When creating a new VizRT page, a new Item Name field allows you to specify a unique name for the new page. The Item Name is then used to identify the page in the Content Selector and Schedule Grid and distinguish it from other pages that were created from the same page.

If the schedule is imported by BXF Schedule Processing, then the Item Name is set to VizRT.

ITX-5430: Ability to change a VizRT CG event's Mode setting after being added to the Schedule Grid

When a VizRT CG event is selected in the Schedule Grid, the On, Off and Duration Mode controls now appear in the Event Editor so that you can change the page's settings. These control are identical to the ones in the Create Page dialog used when creating a new page in the VizRT plugin.

ITX-5271: ITX 2.x Migration endpoint type added to iTX Delivery Manager

The Delivery Manager's new ITX 2.x Migration endpoint type is used to move assets from a source system to a target system where both systems are running iTX v2.x. This is especially relevant for iTX v2.3 systems that do not support the newer asset export functionality.

ITX-5148: Default Show and Profile settings added to the VizRT Graphic Configuration

The Default Show and Profile settings were added to the VizRT Graphic Configuration page to ensure that pages for VizRT secondary events are created within the correct Show and Taken using the Profile relevant to the channel. The default values for both settings is *VizRundown*.

ITX-4725: iTX supports three new IP output target types in Output Server 2

In addition to IP 2022-2, iTX now supports three new IP output target types:

- IP 2022-6
- Http Live Streaming (HLS)
- Real-time Messaging Protocol (RTMP)

These IP output targets are set on the iTX Channel Config dialog (TXPlay2) and configured in the Output Server 2 dialog. See the *Output Server 2 Channel Configuration Guide* for more information.

ITX-4723: X264 video codec is available in Output Server 2 for IP 2022-2, HLS and RTMP channels

The x264 video codec is now available for the following IP output targets in Output Server 2 channels:

- IP 2022-2
- Http Live Streaming (HLS)
- Real-time Messaging Protocol

ITX-2929: Missing Materials Manager detection of restored XG assets

For the Missing Materials Manager to be able to detect that the missing XG assets are restored and remove them from the Missing Material channel, the assets need to be re-imported from an previously backed up copy and not re-created. A manual recheck must be triggered in M3 in order to update the schedule.

ITX-2552: Ability to insert SCTE35 messages in the IP2022-2 stream

iTX can now insert SCTE35 messages in the IP2022-2 stream. To enable this option, select the Enabled checkbox on the IP2022-2 tab at the bottom of the Output Server 2 Configuration > Splice Insert page.

ITX-1530: Delivery Manager Configuration Update

When adding a new Delivery Manager endpoint, a preset list of endpoint types is displayed - one for each driver and mode (e.g. CIFS Export). Selecting an endpoint type exposes the endpoint configuration parameters with appropriate default values.

ITX-330: Manual intervention of audio output programs for Voice Over events

Clicking the Audio Mapping cell of a Voice Over event in the iTX Desktop's schedule grid opens the Voice Over Output Selection dialog. This dialog allows you to view which audio output programs a voice over will be applied to, as well as manually amend which audio output programs a voice over will be applied to. Amendments can be made before the event has gone to air and also while the event is on air.

ITX-328: Manual intervention of the audio mapping for Video and Live Events

Clicking the Audio Mapping cell of a Video or Live event in the iTX Desktop's schedule grid opens the Audio Mapping dialog. This dialog allows you to view how the audio will be mapped for video events and live events, as well as allowing you to manually amend the audio mapping if required. Amendments can be made before the event has gone to air and also while the event is on air. N.B. when using RAW format there may be an unavoidable audio glitch when the audio mapping is changed.

ITX-326: Audio Warnings are now shown in GSM/iControl

If there are any audio mapping issues on an available/ready schedule item, an alert is raised. The alert can be seen within the channel health and on the iControl interface.

ITX-321: Logical audio programs can be selected for preview in the iTX Desktop's Media Viewer

The audio preview in the iTX Desktop's Media Viewer now allows you to preview either physical or logical audio tracks for a given asset. Once selected, the label and the encoding for the track that is being previewed is displayed among the Media Viewer's controls.

ITX-70: Missing Materials Manager Enhancements - Reference files and CGs

Missing Materials Manager now tracks reference files (audio and/or video tracks) for Video assets and internal CGs components (image layers, animated backgrounds, textures, crawl files).

This is enabled by default when Video and CG assets are configured to be monitored by Missing Materials Manager.

ITX-26: Subtitle locations are now supported through the Interchange API

Subtitle locations can now be added, updated and removed via the iTX Interchange REST API.

ITX-25: Support of Subtitles in Missing Materials Manager

It is now possible to track Subtitle assets in Missing Materials Manager (M3) by adding the "Subtitle" type to the list of types to check in M3 configuration.

Missing subtitle assets and missing intents (for Softel Inside subtitles) will be listed in the M3 channel and in the generated reports. It is important to note that any missing subtitle or intent must be manually restore as M3 will not recover this type of asset.

ITX-24: As Run logs include Softel Inside subtitle information

The Standard ITXML and BXF As Run logs now includes subtitle information detailing the Softel Inside service mapping. This functionality is applicable to Output Server 2 only.

Improvements

ITX-6350: Output Server 2 now supports 16 or 24 bits depth for PCM audio outputs

The Bit Depth setting for PCM audio output groups in the Output Server 2 can now be set to either 16 bits or 24 bits.

Fixes

ITX-7656: Importing a clip while it was being cached prevented it from being played out afterwards

If a clip was being cached when a new version of the clip was dropped into an inbox for ingest, this caused the clip to believe it had been cached when in fact the caching had been cancelled. When the clip event reached the on-air point, it would fail to playout. This has now been fixed.

ITX-7572: Language metadata handling for MXF import

Language metadata within MXF files was being ignored on import through Delivery Manager using FPP. Now when "Ignore Language Metadata" is unchecked on a Delivery Manager inbox, the language metadata populates the physical and logical audio tracks.

ITX-7446: GPI-1501 not allowing two GPI outputs to be fired at the same time

It is now possible to fire multiple simultaneous or overlapping GPI-1501 output events.

ITX-7445: GPI-1501 allows the configuration of outputs as Mirror and Master/Slave at the same time

It is no longer possible to enable Mirror and Master/Slave redundancy models at the same time. Only one or the other may be selected.

ITX-7443: GPI-1501 driver does not allow configuration of the same card slot in different Densité frames for Primary and Secondary devices

When configuring Master/Slave or Mirrored GPI-1501 devices, it is now possible to use the same slot number for the GPI device in different Densité frames.

ITX-7325: Missing Materials and Delivery Manager search for media is not type specific

When the Missing Materials Manager searched an item in a schedule that was missing, the asset type was being ignored.

As a result, you were unable to have media files with the same filename but different types in your search folder. For example, if the clip SnapS3E1.mxf is missing, then the graphic SnapS3E.jpg was found instead. Now searches take into consideration the type.

ITX-7324: Missing Materials search query of Delivery Manager endpoints always fails first attempt

After a restart, Missing Materials Manager now issues a search query to the Delivery Manager endpoint to restore media.

ITX-7285: MOV encode preset was not working because it contained an unsupported parameter

The MOV encode preset has been updated. You must reingest the *IPCTemplate_DV_MOV.itxml* and *IPCTemplate_Move_XDC.itxml* files using the Media Watcher's Inbox and then re-create the MOV preset.

ITX-7218: Audio Level Meters only displayed the first Audio Program Group after Preview as Channel was disabled then enabled

When Preview as Channel is enabled, the Audio Level Meters now reflect the Audio Program Groups configured for that channel.

ITX-7217: BXF DUB List Transform not handling 1080i content correctly

The BXF DUB List Transform was not handling the 1080i format correctly and was not setting the source format to 16x9.

The new Transform will be handled correctly and the source format will be set to 16x9.

ITX-7179: Editing an incomplete Audio Program causes Output Server 2 to restart

The Output Server 2 service no longer restarts after creating a new audio program containing no assigned labels and then opening one of the editors (Dolby, Upmix, Watermarking, ALC).

ITX-7168: When upgrading, the Asset Fixer Service always prompts for a configuration

The Asset Fixer configuration utility has been changed so that only one instance of each Job Service can now be added. Also, when adding a new job plugin the concurrency group is preset.

ITX-7147: Out transition plays at the same time as the next VizRT graphic

When playing back to back graphics, the out transition of the outgoing graphic is played out before the start of the next graphic in order to avoid clashes between graphics.

ITX-7146: When scheduling VizRT graphics as On and Off events, the Off event did not use the graphic's out transition

The End Mode Configuration (set in the VizRT Plugin Configuration under Channel Config Plugins) is now used for VizRT 'OFF' events.

If the 'Continue' Mode is selected, then an 'OFF' event is applied to the out transition instead of a Cut. If the 'Off' Mode is selected, then a Cut is applied.

ITX-7144: The latest configured GPI is not used when a Live Event is scheduled

When a Live Event with a GPI configured in the Live Event Plugin was scheduled, the GPI used was not the latest configured GPI. Instead it was using the one that was configured when the Live Event was created. This means that if the Live Event Plugin Configuration was changed after the Live Event was created (in a schedule or in the content selector), this change was not reflected.

Now the Live Event uses the configuration that is set at the On Air time. Any configuration change will not affect the on air item.

ITX-7141: The Media Viewer (FPP mode) only plays a single track and sound meters do not display all tracks

When previewing a video clip with three tracks of encoded DolbyD 2.0 in the Asset Layout's Media Viewer (FPP mode), all three tracks can be heard rather than just one. Also, the Media Viewer's sound meters now display audio on tracks on 1-2, 3-4, 5-6 rather than 1-2, 7-8, 13-14.

ITX-7131: Previewing a Dolby Digital 5.1 clip does not decode the Dolby sound

When previewing an encoded Dolby Digital 5.1 clip in the Asset Layout of the iTX Desktop, the sound produced through the PC is now the decoded Dolby, not the encoded Dolby. Also, the Metadata for an encoded Dolby D 5.1 clip reports the number of channels as 2 (Encoded Dolby) instead of 6 (Discrete Dolby).

ITX-6996: Matrix and Destination fields disabled in the Live Event configuration plugin

When clearing the matrix and/or selecting a router destination, the Matrix and Destination fields remained greyed out (disabled) and would not be enabled until you selected another channel. Now if you clear the matrix and select another matrix, these fields are available (enabled).

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-6747: Original schedule user data was lost

Upon an update to existing schedule from REST client, user data is no longer lost from original schedule.

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-6718: Lives following a skipped sequence fails to go to air

Lives following a skipped sequence will no longer fail to go to air. If the start time of the event is fixed and it is in the past, but not done already, it is now treated as a restored event.

ITX-6691: Missing subtitles in iTX Desktop's Preview as a Channel view

Subtitles are displayed in iTX Desktop's Preview as a Channel view when outputting to SDI.

ITX-6683: Redundant TXPlay/TXPlay2 client connection to Media Watcher

Version 2.8 onwards, TXPlay and TXPlay2 do not require a client connection to Media Watcher as the functionality had moved to the Media Cache service. This connection is no longer required and has been removed.

ITX-6675: VizRT items in BXF are not coming into iTX properly

VizRt items present in a BXF file without the <Title> tag were not imported correctly to the ITX. Now if an item does not have the <Title> tag in a BXF file, it will be imported to ITX with an empty string as its Title.

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-6662: Re-ingesting a Dolby encoded video clip incorrectly shows the audio as PCM stereo

Re-ingesting a Dolby encoded video clip now displays the audio as Dolby in the asset's Logical Audio tab.

ITX-6651: The security service incorrectly expires security tokens

Under certain conditions, the security service was expiring security tokens causing nondeterministic errors in clients. This fix corrects the security token's expiry behavior.

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

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

ITX-6294: Output Server 2 failed to complete the caching of clips

Output Server 2 cached clips up to 99% and then stopped. This problem was related to the cache file size and has since been resolved.

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-6273: Missing Open subtitles in 480i59 and 576i50

Open subtitles at SD resolutions are now rendered in case where there is a VBI line conflict between subtitles and other ancillary data such as AFD, VITC and VLI.

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-6221: Ingest service fails to cue

There was a subtle timing issue which meant that the stop record command was not sent to the Encoder, which caused the next encoding to fail.

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

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

Now the logo is extended together with the live event.

ITX-6176: Embedded subtitle reference files are taking precedence over scheduled subtitles

A scheduled subtitle secondary now always takes precedence over the embedded reference file unless all mapped services in the Subtitle Event Editor are set to 'None'. In such a case, embedded reference files will go to air depending on the 'Caption Passthrough' setting.

This applies to Output Server 2 only; Output Server 1 is unchanged and embedded reference files always take precedence.

ITX-6128: User data missing from the BXF As Run logs

User data, such as Billing Reference and Unique ID, is now transferred from the imported BXF schedule to the BXF As Run log.

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

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

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

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

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

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

ITX-5796: No way to log SCTE 104 messages in Output Server 2

When SCTE 104 inbound and outbound messages are detected by Output Server 2, they are now logged in a user-friendly manner in their own logging subcategory of "iTX Player 2" in the Trace Logs tab of Output Server 2 service.

ITX-5703: The "Take Next Seq" GPI trigger has been renamed to "Seq Start"

The "Take Next Seq" GPI trigger which can be configured in the GPI plug-in configuration within the iTX Desktop has been renamed to "Seq Start". This change reflects its behavior which is the same as the "Sequence Start" button in the Channel Control layout. This change does not affect how the GPI trigger behaves.

ITX-5685: ITXML item with StartDate and Timecode is not imported correctly

Items start times specified with <StartDate /> and <StartTimecode /> are now correctly imported and exported.

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-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-5400: As Run files appended instead of overwritten

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

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

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

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

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

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

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

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

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

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

ITX-5280: Interchange does not return the last page of asset xml results when too high a page is requested

The Interchange now returns the last page of available asset XML search results if the user requests a page after the last available page.

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-5277: SmartClient fails to load 4K proxy media

SmartClient is now able to play 4K proxy media when the proxy media is generated by the FPP Job Service.

ITX-5265: Source Format and Active Region warning

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

ITX-5216: Audio and video out of sync on playout

The supplied media has shown audio and video sync issues using Output Server 1 playout. No audio and video sync issues were detected when played out using Output Server 2 on versions 2.10 and 2.11. We recommend an upgrade to Output Server 2 using one of these version to resolve the problem.

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-5083: With Cue To First Frame set, the first frame of the new clip is not displayed

With Cue To First Frame set and the clip in cue state for 12 hours, cueing another clip resulted in the first frame of the old clip to be displayed instead of the new clip. Now the first frame of the new clip will be shown.

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-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-4938: Timecode of the last clip frame is not displayed

When holding the last frame of the clip, the Timecode of the clip is now displayed.

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

MXF clip was held in Cueing state for more than 15 seconds, which caused the Emergency slide to display on air. The cue delay was related to the MXF Partition Size setting, which was set to 1 MB when 70 MB was needed. To prevent this situation from occurring 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-4627: SmartClient users without Edit permissions cannot scroll multi-line metadata textboxes

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

ITX-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

ITX-4121: The Emergency Audio Slider has the numbering on the audio ducking bar

To resolve this issue, we recommend upgrading to iTX 2.10 SP1 and using Output Server 1. After the upgrade, The Emergency Audio slider numbering works on the audio ducking bar and is responsive.

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

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

ITX-2092: Live Channel Bypass not switching in Output Server 2

The Live channel bypass feature in Output Server 2 now switches the output between live and main channels. Note that schedules containing secondary events will not switch over to the content of the live or main channel.

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

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

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

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

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

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

Accessing the iTX Installer

The iTX 2.10 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 2.10 - Build 3.210.11.XXX.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 v2.10** 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:

- o **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.
- o **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

NOTE: THIS VERSION OF ITX REQUIRES AN UPDATED AJA DRIVER (V 12.4.1.460) FOR OUTPUT SERVER 2, ENCODE SERVERS AND ITX DESKTOPS USING AN AJA CARD FOR SDI PREVIEW. THEY CAN BE FOUND, ALONG WITH INSTRUCTIONS ON INSTALLATION, WITHIN THE DRIVERS DIRECTORY OF THE ITX INSTALL PACKAGE. MORE DETAILS IN THE VIDEO PLAYOUT AND INGEST SECTION BELOW.

iTX 2.10 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 2.10 supports the following devices for on-air control.

External Logo plug-in

- Grass Valley LGK-3901 v4.10.2 card in a Densité frame

External Subtitle plug-in

- Screen Polistream v2.4.1.2
- Softel Swift TX M-Series 2.01
- Cavena STU v3.1.17

Clarity plug-in

- Pixel Power Clarity graphics system v7.2.7.8

VizRT plug-in

- VizRT Viz Engine v3.8.1
- VizRT Viz Trio v3.0.0, MSE v2.0.1.13083
- VizRT Viz Multichannel v3.0.0, MSE v4.10.0.16507

iTX Master Control

- Grass Valley Imagestore 750 , v4.10.6.001
- 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: Vertigo Suite v5.2 (5.2.85.0) for Output Server 1
- XG Inside: Vertigo Suite 5.4 SP3 (5.4.149.0) for Output Server 2
- External Vertigo: Vertigo Suite v4.8 SP7 through to v5.4 SP3 for both Output Server 1 and Output Server 2

Routers

iTX 2.10 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-3901 v1.2.7

GPI devices

iTX 2.10 supports the following GPI devices.

- Grass Valley: Densité GPI-1501 v1.0.0
- Videoframe: VNODE 8x8; VNODE 16x16; VNODE 32x32

External content stores

iTX v2.10 can work with media files on the following types of external storage system.

Devices	Supported functionality
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EMC Isilon OneFS (v8.0.0.7)	Searching, retrieving and storing.
SGL FlashNet Archive (v6.4.13.003)	Searching, restoring, manual archiving and manual restoring.
Front Porch Digital DIVArchive (v7.2.2.14)	Restoring, partial restoring; archiving and deleting of media files.
Front Porch Digital DIVArchive (v7.3.1.109)	Restoring, partial restoring; archiving and deleting of media files.
Viz Ardome	Retrieval of media files.
Suitcase TV archive system	Restoring of media files.
Omneon Server	Retrieval of media files, using FTP.
GVG Profile	Retrieval of media files, using FTP.
Masstech MassStore (v 7.5.3)	Restoring, archiving and deleting of media files.

Third-Party Applications

- Interra Baton automated file-based QC v6.4.62938
- TeleStream Vantage Workflow v4.2.286 (for import, transcode and render jobs)
- iTX SmartClient can export ShotLists as Final Cut Pro v5.0 XML files, which can be 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

- Windows Server 2012 R2 Standard
- Microsoft Windows Server 2008 R2

iTX Database

- Microsoft SQL 2014 Service Pack 2
- Microsoft Windows Server 2008 R2 running Microsoft SQL Server 2008 Service Pack 3

(version 10.0.5500)

iTX Output Server

- Windows Server 2012 R2 Standard
- 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

- Windows 10 Professional 64-bit Edition
- 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 12.4.1.460, Firmware 0x36, dated 11-05-11
- AJA Corvid 44 with Drivers 12.4.1.460, Firmware 0x17, dated 15-10-05
- AJA Corvid 88 with Drivers 12.4.1.460, Firmware 0x25, dated 15-10-05
- AJA Kona 3G with Drivers 12.4.1.460, Firmware 0xA, dated 11-07-04

For desktop SDI Preview:

- AJA Corvid LP with Drivers 12.4.1.460, 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)

Monitoring and Control

- iControl GMS v7.30

iTX Software Anti-Virus Qualification

This version of the iTX software install package was scanned with Symantec Endpoint Protection Version 14 (14.2) build 770 (14.2.770.0000) with Virus and Spyware Protection definitions dated 22nd October 2020 and found to contain no currently known viruses.

Grass Valley User Documentation

Product manuals and other user documentation is available online via the Grass Valley Documentation Library at <http://www.grassvalley.com/docs/page>

Access to 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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