

iTX v2.5.1

Integrated Playout

Release Notes

Build 3.25.0.86

16 January 2015



www.grassvalley.com

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Introducing iTX v2.5.1

iTX v2.5.1 is an official full version of the iTX software with the addition of feature enhancements and bug fixes that have been implemented since iTX v2.4.11. It also includes a number of hot fixes, introduced since the original iTX v2.5 build 3.25.0.69 was released in November 2014.

iTX v2.5.1 is a cumulative release, in that it contains all the features and fixes from the initial v2.5 release and supplemental releases since. As such, it can be used for new installations, for upgrading from one major and minor release to another (i.e. v2.4.10 to v2.5), or for updating the same release stream (i.e. v2.4.1 to 2.5).

These release notes provide details of the specific feature enhancements and bug fixes that were added to the released software. They also provide installation instructions, identify any outstanding or unresolved issues that may affect functionality, and reference the devices and components which have been qualified to be supported by or compatible with iTX v2.5.1.

Introducing Output Server 2

iTX 2.5 introduces Grass Valley's next generation video engine, **Output Server 2** and our latest automation control system, **TXPlay 2**. Output Server 2 provides improved standards compliance, more flexibility and greater stability, and forms the basis for future iTX development.

Among the new features and functionality provided by Output Server 2 are improved image quality, the ability to perform on-air updates for AFD and duration changes, per stream configuration for Dolby D and E and full audio processing for XG inside.

iTX user documentation

A selection of iTX user documentation (including Release Notes and user guides) is available on the worldwide web via the Support Portal:

<http://www2.grassvalley.com/support/details/product/iTX>

The iTX documentation section is password protected, so you must be logged onto the Support Portal to access the iTX user documentation.

If you do not already have an account, click "**Not a support services member yet?**" and complete the online form. Customer Support will issue a user name and password (normally within 1-2 business days).

Note: If you require information about installing the Vertigo XG video rendering software components in an iTX system, see the latest Release Notes for the Vertigo Suite. These are also available via the Grass Valley Support Portal.

2 What's New

In our effort to continuously improve iTX, Grass Valley encourages users to provide feedback regarding any feature requests or defects encountered. This section provides details about the new features, enhancements and bug fixes introduced since the previous release of iTX.

Summary

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New Features

This release includes the following new features:

iTX-233: Output Server 2 - next generation video engine

iTX Output Server 2 (OS2) is Grass Valley's next generation iTX video engine. Introduced in iTX v2.5, Output Server 2 (OS2) integrates with the current iTX framework, allowing customers to easily upgrade their existing iTX channels. Working alongside our next generation video engine is our new automation controller, TXPlay 2, which supports the new features and functionality that Output Server 2 provides.

Output Server 2 includes the following new features:

- On-air update: Active Format Description (AFD) change
- On-air update: Duration change
- Dolby E and D per stream configuration
- XG Inside: Full audio processing. Audio flows from OS2 to XG and back to OS2.
- Improved image quality (including deinterlacer, 3:2 detection and color space converter).

Whilst Output Server 2 supersedes the previous video engine, Output Server 1 (OS1) is still supported. It is possible to run both video engines Output Server 1 and Output Server 2 within the same iTX System.

Note:

Customers who use XG Inside graphics and are upgrading to Output Server 2 will require the iTX IntegratedXG license.

For more information about licensing, please contact:

itxlicensing@grassvalley.com

For more information on Output Server 2 see the *iTX Output Server 2 Guide*, available from the Grass Valley Support Portal.

<http://www2.grassvalley.com/support/details/product/iTX>

ITX-232: Time codes can now be displayed in non-drop frame format

For TV and Radio channels, iTX can now display drop frame time codes as non-drop frame on media duration, time of day and in/out point fields within certain Opus and TXPlay components. This is controlled by a new configuration option called 'Show DF as non-DF', on the Engineering layout > Channel Config > System Wide Config tab.

So that PinPoint searches can display non-drop frame time codes, the Opus service must be halted and re-indexed. See the iTX System Administrator Guide for more information.

ITX-181: Improvements made to the caption editor and rendering

The following improvements have been made to the caption editor:

- Fit-to-Fill: The text now reduces the font size instead of overwriting the existing text.
- Drop Shadow: Now only the main text element has an outline, previously there was an outline on the drop shadow as well.
- The X,Y coordinates in the editor can now be manually entered, the x= and y= has been removed and the box is now outlined in white.
- Snap-to-Grid position has been improved for better screen accuracy.
- Text element Drop Shadow is now a x,y coordinate system in a white box.

Change of database location for Aspect Ratio information

Note: The following information is only applicable to customers who are upgrading to iTX v2.5 from iTX v2.4.9 or earlier and who use Aspect Ratio information contained within the clip assets.

The location for Aspect Ratio information in the database has changed. When new assets are imported or ingested into the system, the asset's Aspect Ratio information is written to the new location. However, since iTX now looks for the Aspect Ratio data in a different table within the database, any media registered prior to upgrading will need to be updated to transfer its aspect ration information to the new location, before being loaded into an iTX v2.5 channel.

See "Updating Aspect Ratio information database location" in the *iTX System Administrator Guide* for more information.

Feature Enhancements

The following features and functionality have been enhanced in this release.

ITX-246: Re-cue control for on-air items

For semi-automated news channels, the Re-cue control has been updated with a new configuration property called Follow On-Air Item. When this property is enabled, clicking

Re-cue stops and re-cues the current on-air item without the operator having to select it in the schedule grid.

IXT-242: BXF File Processor media updated for playoutAllow attribute

The BXF File Processor media update feature now dynamically sets the attribute that controls whether playout is allowed on the media (playoutAllowed) to either True or False, based on the attribute in the iTX asset. This allows users to indicate when media has passed QC by setting this attribute to True.

ITX-193: SCTE104 enhancements

iTX's implementation of SCTE104 VANC events has been enhanced in the following areas:

- Inbound SCTE message now support multiple operations within Multiple Operation Messages.
- Improved SCTE message pass through, including sending whole commands and the enabling and disabling of pass-through.
- Improved outbound SCTE message support, including new commands for segmentation (to identify local and national avail inserts) and the generation and reception of insert DTMF descriptor data request operations.

These features are controlled via a new SCTE 104 plug-in and user interface items for configuring the Output Server, selecting content to insert into the Schedule Grid and editing events.

ITX-105: iTX SwiftTX Driver Multi-Lingual Support

The new external subtitler plugin exclusively supports Softel Swift TX Classic, Softel Swift mTX and Softel Swift mTX Multi-Language external subtitlers. Both the new and legacy plugins are installed with iTX but are mutually exclusive.

The new plugin has additional features as described below plus a general improvement in resilience following various failure conditions.

- Channel Configuration: Ability to select either the legacy driver or the new driver via the TXPlay Config window.
- Plugin Configuration: A new Schedule Duration option controls the look ahead window on the Softel subtitler.
- Subtitle Availability Checking: Availability checks will continue throughout the duration of playout until either subtitle material become available or the next item goes to air.
- Subtitler In Manual Mode: When the subtitler is in Manual Mode, the schedule grid will display a message saying the subtitler is "Under alternative control".
When Automatic Mode is resumed, the subtitler schedule is resynchronized with the iTX schedule, ensuring the currently on-air item continues to play.
- Master/Slave: Each iTX channel must now control its own dedicated external subtitler.
- Start Of Media: After failure conditions or during certain manual interventions of the iTX schedule (e.g. roll-under) the plugin will always ensure the current item is playing from the correct position in order to keep it in-sync with the video.
- Live Mode: When scheduling a live event, the subtitler can be put into 'live' mode.

BZ23263: Studio Countdown local time offset

Within Studio Countdown, the clock in the top right-corner of the next live event can now be configured to display the channel's UTC offset (as specified in the Channel Config dialog, on the Channel Config 2 tab).

BZ22978: Studio Countdown live mode

Within Studio Countdown, the Next break timer can now be configured to use live mode. If the schedule has split breaks or multiple sequences in a break, live mode displays the total time remaining to the next live event, including the duration of the split breaks and sequences.

Bugs Fixed

Below is a selection of user-reported defects and requests that were resolved in this release.

ITX-1054: Configure tracks button on Channel Config fails to respond

The 'Configure tracks ...' button on the Channel Config 1 tab of the Channel Config pop-up layout (usually located on the Engineering layout) failed to call the Track Selection dialog when clicked.

The 'Configure tracks...' button now responds as expected.

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

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

ITX-746: Master \ slave failover not reflected on Desktop

Failover between master and slave channels was not reflected on the Desktop.

Now the timeline and grid show the correct status for the master and the slave.

ITX-563: CGs with image elements will not load into the CG plug-in or editor

CGs with image elements would not load into the CG plug-in or editor. This would happen if the image elements were missing. CGs have been updated so that if a CG is loaded which has missing image elements, a warning appears displaying the file and path to the missing element.

ITX-561: CG with parent name dynamic text does not draw correctly if clip id is long

A CG with parent name dynamic text did not draw correctly if the clip id was long. This has been updated so the text displays correctly.

ITX-555: Unable to load CG that has been created in a previous Caption editor with a

missing fill texture

CGs created with a missing fill texture would not load into the CG plug-in or editor. Loading a CG that has been created with a missing fill texture now shows a warning displaying the file and path to the missing element.

iTX-554: Using the CG editor and loading a template without saving is adding _OMN onto the asset name

Using the CG editor and loading a template without saving was adding _OMN onto the asset name when the editor was closed. This has been updated to remove the _OMN path allowing the asset to be used on the schedule grid.

iTX-376: TXPlay requires primary and secondary items to complete before writing them to the AsRun log

TXPlay only writes a primary item to the AsRun logs once its secondary items have finished playing. This leads to situations where primary items appear out of sequence in the logs, as some secondary items (such as a logo) may extend beyond the play time of their parent item.

A new option called "Don't Wait for Secondaries" has been added to Channel Config > Channel Config 3 tab, under the "Create AsRun" button. When this option is enabled, primary items are written to the AsRun log as they finish playing out, regardless of the state of their children. When this new option is disabled (the default), TXPlay continues to write primary items to the AsRun log once their children have played out.

iTX-375: When heavily scheduling SPG logos, main and backup servers could failover

A race condition has been removed which could lead to iTX Player crashing while removing SPG logos from air. This was most noticeable on channels processing high numbers of SPG logos.

iTX-370: Fractional milliseconds failing to import via Interchange and Thomson Interface

Fractional milliseconds or Timecodes that resolve to fractional milliseconds failed to import in the AMP Processor and/or Interchange service. This issue has been resolved.

iTX-252: Cue and Take not working for first item in a schedule

When a schedule was dragged on to an empty playout channel from the Schedule Content Selector, the Cue and Take buttons did not work for the first item in the schedule. The same would happen with a MOS schedule or when TXPlay was restarted and the schedule was restored. This release includes a fix that ensures the Cue and Take buttons work for the first item in schedules and MOS schedule.

iTX-251: Semi-Automated News MOS stories for another channel that have been skipped have a 30 second duration

In the Semi-Automated News configuration, all skipped MOS stories intended for another channel now have a zero duration, so they do not interfere with the cueing of items for the current channel.

To support this configuration, a new option called Semi-Auto News has been added to the Type drop-down list on the Channel Config > Channel Config 3 tab.

IMPORTANT: If you need to downgrade your iTX to a version earlier than 2.5, you must change the Type from Semi-Auto News to News before beginning the downgrade.

ITX-250: Previous clip is displayed as on air, despite first frame of next clip being displayed on output

When the previous clip finished playing and the next event was cued to first frame on the output, the previous clip was still shown as on air in the schedule grid and timeline. As the first frame of the next clip is on the server output, the Cue to First Frame functionality has been updated so that the previous clip is set as done and the next clip remains ready to commit.

ITX-244: Modified auto-load schedule events are duplicated after reload

An issue was discovered with the Auto Update On-Air Schedules function, which is used to chain schedules so that the next day's schedule is loaded as the final item in the current day's schedule. If a change was made to the schedule on the edit channel, when the Modify button was clicked the schedule would be reloaded and item containing the next day's schedule would be duplicated.

Chained schedules are now assigned a unique ID as they are added to the channel, which prevents the reloaded schedule from being duplicated.

ITX-243: "Cannot access a disposed object" error on Delivery Manager

Delivery Manager end points were pausing due to SQL timeouts connecting to the database and failing to resume. This was caused by excessive orphaned job records in the System_SAL_AccessList table in the SQL database.

The expired jobs duration in the Opus service has been decreased from 30 minutes to 5 minutes, to better handle the number of failed jobs appearing in this table.

ITX-240: Vertigo not being triggered at start of live events

When a manual take was performed on a live event with a secondary Vertigo XG event that has already cued, the Vertigo event could become stuck in an un-cued state, causing it to fail to play out. This was most likely to happen when there was not enough time to un-cue and re-cue the XG Inside event before playout. This issue has been resolved so that if a secondary Vertigo XG event is about to go to air it will not be un-cued on a manual take of its primary event.

ITX-168: As Run Service BXF plug-in fails to add correct start/end dates in header

BXF schedules created using the Workflow Application Service were sometimes not creating the correct header information. The correct header information is now created.

ITX-164: Sound issues with VAF files imported into Vertigo XG and played out by scheduling a page in iTX

When VAF files were imported into the Vertigo XG and played out by scheduling a page in iTX, the sound would be garbled. This was caused by a buffer over-write, resulting from a timing error between VisionMixer and Vertigo XG.

Now, when audio is received from XG, the audio packet is copied to a local audio packet, which is protected by a mutex. This prevents the sound from becoming garbled on playout.

ITX-163 External schedule update alerts

The channel status indicator and Service Provider Status messages can now be reset for externally updated schedules alerts. This is done by selecting the alert from the Active Alerts pane on the Engineering layout and clicking Acknowledge Alert.

BZ23532: "Cannot access a disposed object" error on Delivery Manager

Delivery Manager end points were pausing due to SQL timeouts connecting to the database and failing to resume. This was caused by excessive orphaned job records in the System_SAL_AccessList table in the SQL database.

The expired jobs duration in the Opus service has been decreased from 30 minutes to 5 minutes, to better handle the number of failed jobs appearing in this table.

BZ23356: Slow routing of live radio events

Intermittent delays (of a few seconds) were reported when switching between live events. The processing of Live Events Takes has been optimized to reduce the chance of these delays from occurring in the future.

BZ23583: Black value on last two lines of NTSC and XG graphics is below 0v

In NTSC it was discovered that the black level on the last two lines of video and any black on an XG event was not 0v, but actually -20mV.

iTX Player has been updated so that active video frames are filled with UYVY black when video stream is initialized. This will prevent any YUV black on output and the received picture will have UYVY black.

BZ23564: Video on field 1 line 22 overwriting caption data and picture delayed

While XG graphics are running, the video could be delayed and pushed down by two lines, causing it to overwrite caption data. This issue has been resolved.

BZ23517: External GPIs fail to take following multiple schedule restores

While playing out a live event, if the schedule was restored multiple times, external GPI triggers to roll the next sequence would not respond. For example, if the system failed over to the slave, then (once the schedule had restored), the system was forced to fail back to the master and restore the schedule again, this problem could occur.

The problem was being caused by the live events sometimes being marked as Done on schedule restores. This behavior has been corrected.

BZ23456: Emergency slide went to air although logs suggest that media was available

Despite being available for playout, media could be replaced by the emergency slide instead of going to air. This was due to media failing to cue in time.

The caching mechanism in Output Server (Pandora) has been updated to reduce the time it takes to cue media for playout.

BZ23454: OPUS Service becomes unresponsive and TXPlay unexpectedly shows items as Not Ready

During times of high volume AsRun channel updates by TXPlay across multiple channels, the Opus Service could become unresponsive and TXPlay would start showing scheduled items as Not Ready.

The OPUS service has been updated to better manage large volumes of AsRun updates, preventing the high CPU usage that could cause the Opus Service to become unresponsive and TXPlay to incorrectly show items as Not Ready.

BZ23408: Media checks stop if an essence file is found with no media.dir folder

Media that failed to cache because it had a missing media.dir folder caused any media that followed it to also fail. The handling of these exceptions has been updated to prevent this problem from occurring.

BZ23289: On-air subtitle items in a channel remain stuck in PostScheduleRestore state after a schedule restore

Support for Polistream's external subtitling did not handle manual schedule restores correctly. This would cause subtitles to fail on both main and backup servers. Subtitles have been updated to ensure the on-air subtitling items always comes back on-air after a restart, fail over or manual schedule restore.

BZ20753: Nielsen causing audio echo when using media with mono tracks

Media with grouped mono tracks would present an audio echo when used with Nielsen watermarking. The audio tracks would be configured to be grouped, but the grouping was not being applied. This was because of a bug that only occurred when audio tracks were duplicated.

Now, when Nielsen watermarking is enabled on grouped mono audio tracks, any duplicated tracks are saved as stereo rather than mono.

BZ23503: Auto Update On-Air Schedules option being ignored when disabled

Changes to on-air schedules were being automatically processed even when the Auto Update On-Air Schedules option in the Schedule Event Configuration was not enabled. This issue has been corrected so that changes to on-air schedules are only automatically processed when this option is enabled.

BZ23469: Updates to caption text are lost when loaded on a playout channel

When captions were modified on one channel, then saved and loaded on a different channel, the default caption text would be shown, not the updated text.

To address this issue, the data in the Caption Fields is now stored in the internal text dictionary of the data that comes from the Generic Secondary Event, as originally scheduled. This text dictionary data is then processed correctly to ensure updated caption field data is included in the final version of the item (rather than the defaults from the asset).

BZ23404: Subtitles failed to play out with overlapping time codes

If a clip had multiple subtitle files and the time code of the last subtitle was earlier than the time code of the start of the clip, the clip could fail to play out.

This issue has been resolved so that the clip continues to play out, whether or not there are any subtitles remaining for its duration.

BZ23389: Cumulative subtitles not displayed as expected

An issue was discovered with subtitles containing add-ons (also known as cumulative subtitles), which caused the text to flash or appear jumbled. This issue was caused by the lack of support for cumulative subtitles in iTX Player.

iTX Player has now been updated to support cumulative subtitles, as per the EBU Subtitling Data Exchange Format.

BZ23298: "Request entity too large" error on large schedule assets

Schedule assets over 65,536 bytes in size were being rejected on import with a "Request entity too large" error. To prevent this error from occurring Interchange Service 2 has been updated to handle post messages up to 2GB in size.

BZ23141: Imported or copied GPI data is not added to schedules

GPI data was only added to a schedule when an event was added via the iTX Desktop's Item Selector, not when it was added via BXF, ITXML or OSC imports nor by copying and pasting between schedules.

The New Item handler for live events has been updated so that GPI data is added to events if it is not already present. This check is done whenever the item goes through the New Item handler, which ensures that all methods of import are included. As the configuration is specific to each channel, the schedules are also portable.

As part of this fix, GPI data for Live events can now be seen in the Event Editor Properties dialog.

BZ22998: Join-In-Progress flag not clearing when item is changed to 'Auto'

If a Join-In-Progress (JIP) mode item had its JIP flag set, changing the item to **Auto** mode did not clear this flag. As a result, the item was never considered available for on-air. This issue has now been resolved.

BZ22822: VAF files imported into Vertigo and played out by scheduling a page in iTX have garbled audio

When VAF files have been imported into Vertigo XG and played out by scheduling a page in iTX, the audio would be garbled. This was caused by a buffer over-write, resulting from a timing error between VisionMixer and Vertigo XG.

Now, when audio is received from XG, the audio packet is copied to a local audio packet, which is protected by a mutex. This will prevent the audio from becoming garbled on playout.

BZ23486: Repeated Cue Next and Take Next can cause subtitles to go out of sync

An intermittent issue was discovered with both Softel SwiftTX and Polistream subtitles when playing on a backup channel. If Cue Next and Take Next were pressed repeatedly, the channel could go black or the subtitles could go of sync with the video. When the schedule had played out an item remained in its timeline. This issue has been resolved.

BZ23330: Parts of the As Run logs are missing after upgrading output servers to 2.4.10

iTX 2.4.11 contained a fix for the AsRun service to ensure that secondary events that end before their primary event starts are written to the As Run logs. However, if a secondary event/item was added that both started and finished before its parent started (using start-), as soon as the secondary event/item finished its status changed to "Done". If the parent item was then skipped, it caused the secondary item's status to change from "Done" to "Skipped" (as per its parent), resulting in the secondary item not being written to the AsRun logs.

The As Run service has been updated to ensure that secondary events that end before their primary event starts are written to the As Run logs, regardless of whether the primary event is successful or not.

BZ22449: Frame stutters and repeats

If an iTX appliance server had been running non-stop for 14 days, playout of MXF files could exhibit frame stutter and frame repeats. The caching process has now been updated, which should eliminate this problem.

BZ22399: Items following a live event are not always cueing, causing a failure when triggered via GPI

Items following a live event that had an associated secondary logo event were not always cueing when triggered via a GPI. This issue has been resolved, so that secondary logo events are cued from a GPI trigger.

iTX v2.5.1 (Build 3.25.0.86)

Feature Enhancements

The following features and functionality have been enhanced in this release.

ITX-1292: Caching improvements for Output Server 2

Media file caching has been improved in the following ways:

- The caching prioritization has been improved and is now performed at a low I/O priority. This means media file caching will have less impact on other disk read/write activities.
- A new Configuration panel has been added to the Media Cache 2 user interface which contains the following options:
 - 'Max Transfer Rate (MB/s)', which allows users to set the maximum caching speed, up to 1024MB/s (or 8.192 Gbit/sec). This option defaults to 0 MB/s, which means the speed is uncapped.

- 'Block Size (MB)' allows users to control the size of the data blocks that are written to disk. The default is 8MB. Increasing this value can reduce the amount of throttling that is required during caching and improve the overall performance.
- The Media Watcher and domain selection controls, which were previously located on the Channel Config layout in the iTX Desktop.
- The status and speed of the cache can now be monitored from the Cache channel view on the iTX Desktop.

Bug Fixes

Below is a selection of user-reported defects and requests that were resolved in this release.

ITX-1359: TX Play automatically saves schedules on asset update when required

TX Play now automatically updates the live schedule and stores it to the database when asset durations affect the schedule.

FPP-41: Field inversion when playing 525 live events

Live events in the 525 standard would cause field inversions on the SDI output. This issue has now been resolved.

3 Accessing the iTX Installer

The iTX 2.5 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 2.5 - Build 3.x.x.xx.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 v2.5** folder.

The iTX Suite 2.5 folder contains the Setup.exe file which you use to launch the iTX Installer.

The following two subfolders are also included to support the installation, but require no immediate attention:

- **Drivers:** contains the required device drivers for the SDI video cards that are used with the iTX Output and Encode servers. You must ensure you are using the correct AJA drivers for the version of the Output Server service you have installed. For more information on installing the Output Server service see the iTX System Administrator Guide.
- **iTX Install:** contains the iTX installation and iTX system files that are required to manage and run the iTX software.

IMPORTANT

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.

4 Supported Devices and Software

iTX v2.5 can work with a range of devices, including those listed below.

For more details of which firmware versions are supported, contact Grass Valley Technical Support.

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External playout devices

With the appropriate plug-in licenses, iTX v2.5 supports the following devices for on-air control.

External Logo plug-in

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

External Subtitle plug-in

- Screen Polistream
- Softel Swift TX
- Cavena STU

Clarity plug-in

- Pixel Power Clarity graphics system

VizRT plug-in

- VizRT Trio graphics system, via the Media Sequence Engine

iTX Master Control

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

Vertigo XG plug-in

- Grass Valley Vertigo XG graphics system

Routers

iTX v2.5 can work with a range of broadcast routers via the following router controllers:

- Nvision NV9000 and Nvision 920

It can also control the following routers directly.

- Grass Valley Densité HCO

GPI devices

iTX v2.5 supports the following GPI devices:

- Videoframe: VNODE 8x8; VNODE 16x16; VNODE 32x32
- DNF Universal Switch Panels: USP-8; USP-8A; USP-EM-8; USP-SNMP-8; USP-16; USP-EM-16; USP-SNMP-16

External content stores

iTX v2.5 can work with media files on the following types of external storage system:

Device	Supported functionality
Front Porch Digital DIVArchive (v6.5.3.5.0)	Restoring, partial restoring; archiving and deleting of media files.
Viz Ardome	Retrieval of media files.
Suitcase TV archive system	Restoring of media files.
Omneon Server	Retrieval of media files, using FTP.
GVG Profile	Retrieval of media files, using FTP.
Masstech MassStore (v 7.5.3)	Restoring, archiving and deleting of media files.

Third-party applications

Currently, iTX supports ENPS versions 5 and 6. MOS Protocol 2.83 is required

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Known Issues and Limitations

The following known issues are scheduled to be addressed in the next release of iTX. Please note that many of these have been found internally by Grass Valley QA engineers in particular testing environments or scenarios; or they may be specific to a certain customer configuration.

As such, they may not be applicable to or present in your particular system. They are also still under investigation by the iTX development team and therefore not yet fully described, so only the ticket's title and summary are included below.

Summary

<i>Output Server 1</i>	19
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Output Server 1

The following issues relate to Output Server 1 only:

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

On the Configure Output Server pop-up layout (found on Channel Config 4), lowering the value of the Cache Throttle in Mb/s field to lower than 16Mb/s causes caching to fail (despite messages saying that caching is still taking place). As a result, iTX will attempt to stream media for playout directly from the NAS. This may be a design decision, however, no message is raised to alert the user of this consequence.

Until this issue is resolved, it is recommended that customers use a minimum value of 40Mb/s for the Cache Throttle in Mb/s field.

BZ22683: Off Air slide goes to air if a clips take over 17 seconds to cue

Off Air slide goes to air because clips take over 17 seconds to cue when reading MOG Metadata in some MXF files.

BZ23653: Output Server 1 crash when trying to add logo

iTX was unable to load a logo due to memory issues caused by iTX trying to load two large logos within 1 second of each other.

BZ23647: Text and logo missing from CG events

Text was present in the field but there was no text or underlying animated logo displayed on the output from the CG events.

BZ23573: Cross fade transitions glitch/stutter

Cross fade transitions from a clip into a live event causes audio and video output to stutter during the transition.

BZ23443: News Flash throws an exception when you hit Take if the current On Air clip has a secondary event

When using either of the two News Flash methods (Manual Return or Auto Return) and you have inserted it into the On Air schedule by clicking the Prepare button, it will cause an exception when you hit the Take button, but only if the current On Air clip has a secondary Event.

BZ22891: SD/HD Mov/MXF clip plays back with around 40ms lip sync error (before Enhanced Resize is enabled)

Audio clips that have been encoded using Harmonic Media Deck play back with (on average) a 40ms lip sync error.

BZ20340: Dolby AC3 cyclic redundancy check (CRC) errors

Trimmed audio packets that are not aligned at a transition point can cause the AC3 card to report CRC errors.

BZ18740: Interlacing Issue playing SD clips on a 1080i channel

Upscaling of NTSC SD clips in a 1080i channel results in poor field interlacing.

iTX Core Services

The following issues have been noted against iTX Core services:

BZ21900: SmartClient shotlists not playing using a URL

Opening a shotlist using the URL plays out the whole clip instead of the shot.

BZ23581: Missing Materials Purge will disable if a schedule cannot be loaded

Missing Materials Manager tried and failed to load a schedule and subsequently disabled the purge feature. Eventually this caused DIVA restores to fail due to the content store being at the high water mark.

BZ23056: iTX Desktop clients are locking up randomly

Operators have reported their iTX Desktop clients can randomly lock up when working in the Asset layout, including playing clips, searching for assets or checking segmentation, and when performing segmentations.

BZ22392: GPI Mirroring behaves differently in 2.4 compared to 1.4

In 1.4 if Mirrored VNodes were configured in the GPI service, both VNodes would fire simultaneously. In 2.4, the option to add Mirrored VNodes is still available and the configuration tab looks the same, but the VNodes actually function as Primary/Backup, meaning only one of the VNodes will fire and if it becomes unresponsive the other VNodes will take over. This does not meet the description of mirroring.

BZ21898: HCO Service logs large volumes of data if the HCO card is disconnected from the iControl service

The iTX HCO Router service logs large volumes of data if the HCO card it is connected to loses communications with iControl. For example, if the iControl server is re booted or the Ethernet cable is pulled from the frame controller card, the HCO Router Service gets into a loop logging messages about data not recognized as headers.

The impact of this is that these messages are relayed to the Logging service that then writes these to disk leading to large log files.

BZ21632: iTX GSM Gateway will stop updating a channel that has been failed over to its backup

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

BZ21900: SmartClient plays out whole clips instead of the shots

If a shotlist is opened in SmartClient using a URL, the whole clip is played out instead of the shot.

QA Environment and Platform



This release of iTX has been qualified by Grass Valley QA using the following third-party software, hardware and operating systems.

Summary

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<i>iTX software anti-virus qualification</i>	24

Operating systems and other software

iTX Framework Services

- Microsoft Windows Server 2008 R2 SP1 (Version 6.1 build 7601)

iTX Database

- Microsoft SQL Server 2008 Service Pack 3 (version 10.0.5500)
- Microsoft SQL Server 2005 Service Pack 3 (version 9.0.4060)

iTX Output Server

- Microsoft Windows 2008 R2 SP1 for HP output servers (version 6.1 build 7601)
- Microsoft Windows 7 Ultimate SP1 for Grass Valley Appliance Servers (version 6.1 build 7601)

iTX Desktop Client

- Microsoft Windows 7 Ultimate SP1 64 bit edition. (version 6.1 build 7601)
- Microsoft Windows XP Version 5.1 build 2600 xpsp_sp3_gdr. 130307-0422-sp3

Other hardware and software

Video Playout and Ingest Cards

For output or encode servers running Output Server (Pandora):

- AJA Corvid with Drivers 7.4.0.49 FW 20-01-10
- AJA Kona 3G with Drivers 7.4.0.49 FW 04-07-11

For output or encode servers running Output Server 2:

- AJA Corvid with Drivers 12.0.2.140
- AJA Kona 3G with Drivers 12.0.2.140

System Time Code Generation

- Adrienne Time Code Card with drivers 1.0.0.7

Video Router and Router Controller

- Nvision NV8576+ router (software version 14.0.0.11)
- Nvision NV9000 router controller (software 6.2.0.1674)

iTX software anti-virus qualification

This version of the iTX software install package was scanned with Sophos Endpoint Security anti-virus software version 10.3.11.221 (detection data version 5.07) and found to contain no currently known viruses.



Grass Valley Technical Support

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1 514 333 1772.

To obtain a local phone number for the support center nearest you, please consult the Product Support section of Grass Valley's Web site, at <http://www.grassvalley.com/support/contact>.

An online form for e-mail contact is also available from the Web site.

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