



Software Version 6.1 Release Notes and Upgrade Information

About Release Version 6.1

FlipFactory software version 6.1 is a major release for all FlipFactory models including: New Media, New Media Broadcast, Pro SD, Pro HD, NewsManager and TrafficManager. This release adds several new format and hardware device support options. Note that some features may not be available for all models. This new release can be downloaded from <http://www.telestream.net/flipfactory> and is available for all FlipFactory customers who have a **current** annual maintenance and support agreement. If you would like to confirm the status of your annual maintenance and support agreement, please email license@telestream.net. **Please note that if your maintenance has expired and you upgrade your FlipFactory system, it will not function after the upgrade.**

! Note: PLEASE TEST BEFORE UPGRADING YOUR PRODUCTION ENVIRONMENT

It is always advisable to run a separate copy of this new build, staging your production workflow in a test environment, before updating your FlipFactory production server. Telestream can provide you with a limited license in order to configure and qualify this new release in a test environment prior to upgrading your production server. For details of how to replicate your FlipFactory Accounts database onto a test/qualification server contact Telestream Support (support@telestream.net or call our technical support team at 877-257-6245 in North America or 1 530-470-1300 outside of North America).

Please see the end of these Release Notes for important installation tips

New Features / Enhancements added for v6.1:

Items marked with (*) indicate that this feature affects a licensed option. Check with Telestream if you are unsure whether your license includes the specified feature.

General	<ul style="list-style-type: none">• <i>New! Codec Optimization</i> Optimized the DNxHD decoder and encoder and the DVCPRO HD decoder to efficiently utilize all available processor cores on a single server. The MPEG encoder has been significantly improved for speed and quality. These speed improvements could potentially cause degradation in performance on older servers with limited RAM (less than 3GB), and a low number of processor cores (less than eight), particularly if a number of jobs involving affected workflows are run on the server at one time. If you are running FlipFactory 6.1 on an older server and you find that there is performance degradation please contact Telestream technical support. Support staff will be able to advise you if your workflow may have been affected and how to adjust FlipFactory settings to optimize performance on your server.• <i>FactoryArray*</i> Significant improvements to the queuing mechanism for FactoryArray; jobs can be intelligently routed to the next available server. The requirement to have all servers licensed identically has been removed. Please see FactoryArray datasheet for more details.• <i>Importing Accounts</i> Automated procedure for account imports, please see the User Guide for more detail.• <i>Job Reports</i> This new feature enables you to capture and report details about jobs that are processed in FlipFactory. FlipFactory stores the results of each job in a comma-separated file you can open, read and use in Microsoft Excel, etc. Please see app note for more details.• <i>KeyFrame Encoder</i> Added support for 2048 x 2048 frames sizes.• <i>Motion Resolve</i> Continued improvements to our MotionResolve™ technology to improve quality when scrolling text (credits).• <i>MXF Decoding and Encoding*</i> Extended support for decoding and encoding MXF files.• <i>Pipeline*</i> Added ability to begin transcoding a file while ingesting from Pipeline. Allows immediate capture from tape or live signal into any FlipFactory-supported output format.• <i>VBI Filter</i> Enhanced functionality of the VBI filter to include line 21 caption decoding from QuickTime files. Added the ability to pick up and process SCC files, allowing them to be used for caption synthesis or
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	<p>insertion. Added the ability to allow users to specify a start timecode value which will override any timecode from the source decoder.</p> <ul style="list-style-type: none"> • Java 1.5.0_12 Support This Java release is supported in v6.1. • QuickTime 7.4.5 Support It is recommended that FlipFactory be used with QuickTime version 7.4.5. QuickTime 7.5 testing is still in process. • SQL Server 2005 FlipFactory 6.1 ships with SQL 2005 Express Edition. Please refer to the User Guide for detailed information on the installing other editions of SQL. • Vista The FlipFactory client can now run under Microsoft Vista • VMware Qualification Telestream has added VMware as part of the standard qualification process for FlipFactory, and is offering limited support for FlipFactory running upon VMware. Please contact customer service if you wish to run any FlipFactory products on a VMware server. • Automatic Factory Upgrades Added an option within the System Status window which will automatically upgrade all factories and accounts to the latest version of FlipFactory. NOTE: It is strongly recommended that you back up your factories before using this tool. Please see Upgrade Installation Tips at the end of this document.
<p>FlipScan™</p>	<ul style="list-style-type: none"> • <i>New! Automatically scan and filter incoming video, audio and metadata*</i> Define filtering rules for screening source content. Extract metadata for downstream processing. Integrate pre-scanning and analysis into your FlipFactory workflow. Dynamically send content to appropriate factories for processing. FlipScan is accessible through the SDK. Please see app note for more details.
<p>IPTV / Mobile / Streaming/ Archive Formats</p>	<ul style="list-style-type: none"> • <i>DV25/50 decoder and encoder</i> Added support for decoding and encoding .dv DV25 and DV50 files with multiplexed video and audio. • <i>New! Flash 9 Encoder</i> Support for Adobe Flash 9 .f4v files • <i>iPod</i> Added support for 640x480 iPod video. • <i>New! IPTV Encoder</i> Enables support for Transport Streams with H.264 essence and AAC or Dolby Digital/5.1 audio. File parameters may be defined using the Main Concept Reference-like dialog and submitting an MEF file. Recommended for applications that require creating files for use on IPTV set top boxes.

	<ul style="list-style-type: none"> • Motion JPEG 2000 Added support for decoding mj2 files. • MPEG4 Apple codec Added streaming server support to the MPEG-4 Apple codec. • PSP Added support for 480x272. • QuickTime Decoder Added support for 24 bit audio, added ability to extract an Alpha channel, extended support for FCP-generated files. • Windows Media Added support for creation of audio-only VBR and multi-bitrate files.
<p>Cable and Broadcast Servers</p>	<ul style="list-style-type: none"> • Avid MediaStream* Expanded support for HD formats including VANC metadata. Removed System Stream encoder and limited bit rate to 30Mbps for MPEG-2 encoded files to match MediaStream capabilities. Added support for extracting ATSC style EIA-608 captions. • Dolby AC3 2.0/5.1 Encoder* Added support for 20 new Dolby parameters in the Dolby, IPTV and VOD encoders. Added the ability to create multiple Dolby Digital/5.1 streams in the IPTV and VOD encoders. • EVS Codec* Added support for 24 bit audio and metadata related to commercial workflows, 4-band HD encoding for the XT[2] server and additional HD resolutions • Grass Valley Profile/K2* Full VANC metadata support for HD workflows, 24 bit audio support, decoding and encoding of K2 MXF wrapped D10 files. Limited support for MXF wrapped MPEG-2 LGOP files. • Harris / Leitch HD Encoding Support* Added support for commercial metadata when available from source material, including Agency field. Added ability to auto-populate the Link field, allowing generation and association of key (transparency) files and color files. Added ability to browse Nexio servers that do not support the FTP NLST command. Added support for 3600 Server. Verified compatibility of FlipFactory created files with AMP server. • Matrox* Added support for HD files. • MXF OP1A Encoder* Added 24 bit audio support. • Omneon Spectrum/MediaGrid/MediaDeck* Added 24 bit audio support. Added support for choosing the output file type: QT Reference Movie, QT Self Contained Movie or MXF Self Contained Movie (Op1a) Preserve source time code - if enabled, then user can choose to save the time code as the "first frame" value and/or

	<p>the "start time code" value. When start time code is enabled the source time code is also preserved into the MPEG2 Omneon user data. Support for Omneon reference movies with multiple files per track Support for Omneon DV files with interleaved audio and video.</p> <ul style="list-style-type: none"> • Program Stream Encoder Added support for ATSC, SCTE-20 or Divicom format captions • SeaChange BML* Expanded support for SeaChange BML server to include HD and VANC metadata. • Superpop Added support for decoding EBU Superpop MXF files. • VOD / Transport Stream* Added option to select open or closed GOP. Added support for Axiom compatible captions. Added ability to specify amount of overhead required (as padding/NULL packets).
NLEs	<ul style="list-style-type: none"> • New! NLE encoder Expanded support for Final Cut Pro formats, and added support for QuickTime-wrapped Avid DNxHD files. • Autodesk WireTap API Expanded audio support, added an Autodesk monitor, allowed use of Autodesk ClipName instead of ClipID when naming a file. • Avid TransferManager Added support for DNxHD to the TransferManager.
Monitors/ Deliveries Notifications	<ul style="list-style-type: none"> • Akamai Added a Monitor and a Delivery destination for Akamai.
TrafficManager Workflows	<ul style="list-style-type: none"> • On The Spot Media Added a Monitor for the On The Spot Media's spot delivery service.
NewsManager Workflows	<ul style="list-style-type: none"> • CBS News Path CBS Newspath affiliates and subscribers equipped with a Newspath Now VOD server can obtain SDTV news media from CBS Newspath Now and use FlipFactory to automatically transcode and deliver the media to the downstream edit system. • iPump Added support for the Fox iPump news service.

FlipFactory 6.1 Bug Fixes

- Increased stability for high volume multiprocessing workflows by adding safe threading techniques to XML-based processing
- Corrected A/V synchronization issues in the MAV70 encoder
- Corrected MXF encoding issues in the Image 360 encoder
- Addressed quality issues with MPEG2 encoding
- TrafficManager: Resolved occasional issues surrounding recovery from network failures when localizing from DG SpotBox
- Email Notification: Resolved occasional issues with the email notification where the file would not properly be attached to the email
- SDK integrations and Stores: Added support for the clean-up of files even when the SDK message is badly formed without a proper “store” element
- ClipMail Delivery: Fixed rare issue when delivering to ClipMail
- Grass Valley: Fixed issue where the header was incorrectly reporting the bitrate for some DV encoding workflows
- QuickTime: Fixed issue reading QuickTime-based MJPEG files. Fixed issue reading FCP 6.01 files where FCP was incorrectly publishing the frame rate as 19.98 instead of 29.97
- Transport Stream decoder: Extended audio decoding support for reading poorly-formed transport stream files
- Keyframe Encoder: Resolved issue with incorrect timecode value in file names when using PAL input sources
- Omneon Encoder: Resolved channel ordering issue for both AIFF and WAV formats
- Windows Media Encoder: Corrected issue with high memory usage during transcodes

FlipFactory 6.1 Known Issues

- There is a known issue with transcoding certain files to MXF XDCam HD at 35 Mbps, 24p
- The IPV Spectreview encoder has issues in certain workflows. Please contact Telestream if you are using the IPV encoder
- EVS files created by FlipFactory in the following resolutions do not playback correctly on an EVS server
 - 1440x1080 60p
 - 1372x1080 60p
 - 1372x1080 50p
- The Grass valley HD encoder does not default to 16x9. This does not cause any playback issues on Grass Valley HD servers. It is recommended that the user manually set the 16x9 check box in the encoder to anticipate any future issues that may occur with playback.
- QuickTime or QuickTime Streaming products that use the Qualcomm PureVoice audio with any profile other than 8 Kbps, 8 kHz, Half Rate or 16 Kbps, 8KHz, Full Rate, do not generate an output file.
- Functionality that has changed default states:
 - Windows Media encoder has indexing turned OFF by default
 - Job Recovery is now ON by default
 - Auto upgrade is now OFF by default

Upgrade Installation Tips

Important Notice:

It is always advisable to run a separate copy of any new build, staging your production workflow in a test environment, before updating your FlipFactory production server. Telestream can provide you with a limited license in order to configure and qualify this new release in a test environment prior to upgrading your production server. For details of how to replicate your FlipFactory Accounts database onto a test/qualification server contact Telestream Support (support@telestream.net or call our technical support team at 877-257-6245 in North America or 1 530 470-1336 outside of North America).

If you are uninstalling FlipFactory 4.0 or 4.1 from a Windows 2000 server please contact Telestream support for instructions.

Note: When you first launch the FlipFactory console, you may be asked to re-install QuickTime. This occasionally happens when the Java components for QuickTime are incorrectly installed. To remove this warning, simply un-install QuickTime, and then re-install QuickTime.

Upgrading from Previous Versions (v2.0 or later)

NOTE: If you are upgrading from a FlipFactory version prior to v3.0.12234, a new license file is required. To request a new license, send an email with your old license attached to: license@telestream.net

Automatic Factory Upgrades

There is a new option within the System Status window which will automatically upgrade all factories and accounts to the latest version of FlipFactory. This feature removes the need to re-build factories by hand when performing an upgrade. The new automatic upgrade option will add new options to all monitors, notifications, and codecs within each Factory. To use, turn on "Automatic Database Upgrades" under Advanced Settings in the FlipFactory System Settings window, and then restart the FlipEngine Service; all accounts and factories in the database will automatically be upgraded when the FlipEngine service starts. When "Automatic Database Upgrades" is enabled, any factories imported using the Import command will also be upgraded automatically.

NOTE: It is strongly recommended that you back up all your factories before using this tool. After using this tool please review all settings to confirm that the factories were correctly upgraded. Some products may need to be recreated by hand.

Known Issue: Both the IPTV and VOD codecs do not upgrade correctly; if your factories use these products, please note your settings before using the automatic factory upgrade tool. You may be required to re-create these products within your factories by hand.

If you are uninstalling FlipFactory v4.0 or v4.1 from Windows Server 2000 please contact Telestream support for instructions.

How to Upgrade from a Previous Version:

1. Before un-installing previous versions: Back up your accounts using the XML account export option, this gives you the ability to go back to your previous version. See your FlipFactory User Guide for more information.
2. It is also recommended that you backup your FlipFactory database before upgrading. Please consult the FlipFactory User Guide or contact support@telestream.net if you need assistance backing up the database.

3. Run the FlipFactory Uninstaller from Start\Program Files\Telestream\FliFactory to uninstall the current FlipFactory release.
4. Download the latest 6.1 release and FlipFactory User Guide onto the server upon which the current release is installed. FlipFactory v6.1 and User Guide are available on the Telestream download site at: <http://www.telestream.net/flifactory>
5. Run the new v6.1 FlipFactory Setup program.