Autodesk®
Inferno® 2010 SP3
A Discreet® Systems product

Autodesk®
Flame® 2010 SP3
A Discreet Systems product

Autodesk®
Flint® 2010 SP3
A Discreet Systems product

Autodesk®
Flare™ 2010 SP3

Release Notes

Autodesk®

Trademarks

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Contents

Introduction 1

Topics in this chapter:

New in these Release Notes

The following sections are new or have been updated since the previous Release Notes:

About these Release Notes

This document provides requirements and last-minute system information for the following Autodesk® applications:

- Autodesk Inferno®2010 SP3
- Autodesk Flame® 2010 SP3

- Autodesk Flint® 2010 SP3
- Autodesk Flare™ 2010 SP3
- Autodesk Burn® 2010 SP3

Before upgrading your application, read this document thoroughly, as it contains important notes about the current release, including the required *Discreet Kernel Utilities* (DKU) version and AJA OEM 2K firmware version.

- For important notes about this service pack, see Important Notes for 2010 SP 3 on page 11.
- For the DKU version and AJA OEM 2K firmware version required for this service pack see Verifying and Upgrading the DKU and Verifying and Upgrading the AJA OEM 2K Firmware on page 7.
- For a quick overview of the steps required to upgrade your application to the current service pack, see Quick Upgrade Workflow on page 3.
- For information on major and minor known issues, as well as issues fixed in this service pack, see the *Autodesk Visual Effects and Finishing 2010 Fixed and Known Bugs* document. You can get the latest version of this document from the Autodesk Web site at *http://www.autodesk.com/me-documentation*.

Related Documentation

This release has documentation that helps you install, configure, and use your product. It is available from your product as a Web-based help system and as PDF files.

- To view the Help from anywhere in the application, press **Ctrl+=**.
- To view PDF documentation from the application, go to the Preferences menu and select a document from the PDF Preference box.

For complete information on viewing PDF documentation and Help, see the “Introduction” chapter of your application User Guide.

For a list of all the latest documentation that is available to you, see:

- *www.autodesk.com/inferno-documentation*
- *www.autodesk.com/flame-documentation*
- *www.autodesk.com/flint-documentation*
- *www.autodesk.com/flare-documentation*
- *www.autodesk.com/burn-documentation*

Contacting Autodesk

For Autodesk Media and Entertainment Customer Support, visit *http://www.autodesk.com/support*.

Customer support is also available through your Autodesk reseller. To find a reseller near you, consult the reseller look-up database at *http://www.autodesk.com/resellers*.

Application Requirements and Installation

2

Topics in this chapter:

Quick Upgrade Workflow

If you are upgrading your application from a previous release or service pack, consult the following overview of the main upgrade steps.

NOTE This chapter does not apply to Autodesk Flare. For a list of qualified hardware platforms, minimum hardware requirements, supported operating systems and required driver versions for Autodesk Flare, consult the Autodesk Flare System Requirements Web page at *www.autodesk.com/flare_sysrequirements*. For Flare installation instructions see the latest *Autodesk Flare Installation and Configuration Guide* available at *www.autodesk.com/flare-documentation*.

If this is the first time you are installing an Autodesk Visual Effects and Finishing application, we recommend reading the latest *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for detailed information on each step in the installation procedure.

To upgrade your application to the current service pack:

1. Before beginning the upgrade procedure, read the information in Important Notes for 2010 SP 3 on page 11.
2. Make sure your workstation and operating system meet the minimum requirements for the current service pack. See System Requirements on page 4.
3. Open a terminal and log in as root.
4. Perform the following steps to obtain your service pack installation package:
   - Download the DKU *tar* file and the application *tar* file from the links provided in the service pack release announcement.
   - Go to the directory where the *tar* files were downloaded, and unpack each file by typing:
     `tar -zxvf` `<tar_file>`
     Each *tar* file is unpacked into a new directory.
5. Install the required version of the DKU. See Verifying and Upgrading the DKU.
6. If your HP workstation is equipped with an AJA OEM 2K card, upgrade the AJA firmware. See Verifying and Upgrading the AJA OEM 2K Firmware on page 7.
7. If you need to change your system date or time, do it **before** installing the new release.
8. If you are upgrading from a previous release, make sure there are no missing frames in your previous release clip libraries before performing the upgrade. See Cleaning up Missing Frames Before Upgrading to the 2010 Release on page 13.
9. Go to the application installation directory, for example *Flame_2010.SP3_LINUX64*, and start the installation script by typing:
   `./INSTALL_``<APPLICATION_NAME>`
   The script starts and guides you through the installation process. See the *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for detailed information on each step.
10. If you are upgrading from a previous release, run the *copyProjects* utility to copy projects from previous versions of the application to the most recently installed version. See the "Compatibility" topic in the application Help for details.

   NOTE This step is not necessary if you are upgrading from a service pack of the same application release or extension.

System Requirements

The following table lists the workstations and operating systems supported in this release, as well as the supported BIOS versions for each workstation.

Workstation	Supported BIOS Versions	Operating System
HP Z800	1.06	Red Hat® Enterprise Linux® Desktop 5.3 with Workstation Option (64-bit)
HP xw8600	1.24	Red Hat Enterprise Linux Workstation 4, Update 3 (64-bit)
HP xw9400	3.05	Red Hat Enterprise Linux Workstation 4, Update 3 (64-bit)

Workstation	Supported BIOS Versions	Operating System
HP xw8400	2.13 for CPU stepping 6F6 2.26 for CPU stepping 6FB	Red Hat Enterprise Linux Workstation 4, Update 3 (64-bit)

The following table lists the supported BIOS versions and operating system distributions for HP ProLiant DL160 Burn Render Nodes.

Render Node	BIOS version	Operating System
HP ProLiant DL160 G5	04/09/2008	Red Hat Enterprise Linux WS4 Update 3 (64-bit) or CentOS 4.6 (64-bit)

See the latest *Autodesk Visual Effects and Finishing Installation and Configuration Guide* or *Hardware Setup Guide* for your workstation for wiring diagrams, BIOS settings, and BIOS update instructions.

If you need to reinstall your operating system (for example if you replaced your system drive), use only the custom Autodesk 64-bit distributions of Red Hat Enterprise Linux, and not the commercial distributions. The custom Autodesk DVD is distributed with your release shipment, and installs the Linux software packages required by Autodesk applications. These applications do not run under commercial distributions of Red Hat Enterprise Linux.

WARNING A fresh install of Linux erases the contents of the system disk. Before performing the upgrade, archive user settings, project settings, and any media that you want to preserve.

See the *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for information on installing Linux.

Memory Requirements

Use the following table to determine the minimum memory requirement for your Visual Effects and Finishing system. This requirement depends on the resolution of your projects, the type of work you perform and, in some cases, the platform on which you are running the application. In general, more memory is better. Large projects, in particular, may benefit from increased memory.

The table also includes the recommended amount of memory where appropriate. The recommended amount of memory ensures optimal interactivity and stability when using complex setups.

Project Resolution	Minimum RAM	Recommended RAM
NTSC, PAL, HD	12.0 GB for HP Z800 4.0 GB for other platforms	12.0 GB for HP Z800 16.0 GB for other plaftorms
Long-form editing (Smoke)	12.0 GB for HP Z800 8.0 GB for other platforms	12.0 GB for HP Z800 16.0 GB for other plaftorms (highly recommended)
Long-form editing with 2K or 4K film (Flame, Inferno, Smoke, Backdraft Conform)	12.0 GB for HP Z800 8.0 GB for other platforms	12.0 GB for HP Z800 16.0 GB for other plaftorms (highly recommended)
2K film (Smoke, Backdraft Conform)	12.0 GB for HP Z800 8.0 GB for other platforms	12.0 GB for HP Z800 16.0 GB for other plaftorms (highly recommended)

Project Resolution	Minimum RAM	Recommended RAM
2K film (Flame, Inferno)	12.0 GB for HP Z800 8.0 GB for other platforms	12.0 GB for HP Z800 16.0 GB for other plaftorms (highly recommended)
4K film (Flame, Inferno, Smoke, Backdraft Conform)	12.0 GB for HP Z800 8.0 GB for other platforms	12.0 GB for HP Z800 16.0 GB for other plaftorms (highly recommended)

For projects based on long form 2K or 4K film on workstations other than the HP Z800, 16 GB of system memory are highly recommended for optimal interactivity and stability while using complex setups.

You can adjust the MemoryApplication keyword in the software initialization file (*init.cfg*). For example, a system running at 8GB with a 2K project could benefit from having the MemoryApplication keyword set to 5500. For more information about this keyword, consult the *Autodesk Visual Effects and Finishing Installation and Configuration Guide*.

Verifying and Upgrading the DKU

Before installing the current release, upgrade the DKU to the required version.

Consult the following table to identify the required DKU version for your application release.

Autodesk Inferno, Autodesk Flame, and Autodesk Flint 2010 Version	DKU
2010 SP3	4.0.4

The DKU is available as a download from Autodesk. The download link is provided in the Release Announcement you received from Autodesk.

To install the DKU:

1. Open a terminal and log in as root.
2. If you are upgrading an existing application, check the currently installed DKU version by typing:

   `head -n1 /etc/DKUversion`

   If the DKU version output by the command does not match the version required for the new application version, perform the remaining steps in this procedure.
3. Access your DKU installation package:
   - If you are installing from an application disc, insert and mount the disc.
     The DKU installation directory is located at the top level directory of the disc.
   - Otherwise, download the latest DKU *tar* file from the download link provided in the release announcement, then go to the directory where the *tar* file was downloaded, and unpack it by typing:
     `tar -zxvf DKU_``<version_number>`**`.tar.gz`**

     The DKU *tar* file is unpacked into a new directory.
4. Go to the DKU installation directory and launch the DKU installation script:

   `./INSTALL_DKU`

   WARNING If you attempt to install the DKU on an unsupported platform, the installation script only installs a generic configuration. Such a configuration can render your operating system unusable. Never attempt to install the current version of the DKU on unsupported platforms, including older Visual Effects and Finishing or Colour Grading systems that are no longer supported in the current version.

When the DKU installation script completes, a warning to update the AJA card or DVI-Ramp may appear and you are returned to the command prompt.

5 If you installed from a disc, return to the root directory, and eject the disc. Type:

```
cd /
eject /mnt/cdrom
```

6 Before rebooting the system, do the following:

- Ensure the Wacom tablet is connected.
- If storage devices (external disk arrays or internal storage) were previously disconnected or turned off as part of an operating system installation, reconnect them and power them up.

  NOTE Power on the XE expansion enclosures first and the XR RAID controller units last. This ensures the RAID controllers detect the other units in the Stone Direct storage.

  Wait for all the disks in the storage devices to power up before rebooting the system. The green light for each disk stops flashing once it is fully powered up

7 Reboot the system. Type:

```
reboot
```

NOTE After the workstation reboots and until you install the application, the Wacom tablet might not behave correctly. Installing the application, then logging out of the KDE desktop and logging back in should eliminate this problem.

Verifying and Upgrading the AJA OEM 2K Firmware

If your HP workstation is equipped with an AJA OEM 2K board, the firmware of the board must be upgraded to use it with the current release of your Visual Effects and Finishing application.

Consult the following table to identify the required AJA firmware version for your workstation model.

Workstation Model	AJA OEM 2K Firmware
HP Z800	0x75
HP xw8600 HP xw9400 HP xw8400	0x73

To verify and upgrade the AJA OEM-2K firmware:

1 Open a terminal and type:

```
cat /proc/driver/aja
```

If the `PCI version` line in the output lists a different version than the required one, perform the following steps to upgrade the firmware.

NOTE Before upgrading the AJA firmware, make sure you have upgraded the DKU, and that you have restarted the system.

2 Go to the */usr/discreet/DKU/current/Utils/AJA_firmwareUpdate* directory.

3 Run the *AJAfw_update* utility to scan the AJA current firmware and, if required, update to the latest firmware version. Type:

```
./AJAfw_update
```

If the utility detects that the firmware and drivers need to be updated, it prompts you to start the update.

4 Start the firmware update by typing **Y** and then pressing **Enter**.

While the AJA firmware and drivers are being updated, your workstation appears to be frozen and your mouse and keyboard do not work. This is normal and indicates that the firmware is being updated. Once the firmware update is complete, you are returned to the terminal.

5 Shut down your workstation by typing:

```
shutdown -g0
```

If your workstation does not prompt you to power down, press the power button for 10 seconds to force a power down.

6 Disconnect the power cord.

7 Wait 10 seconds, reconnect the power cord, then restart your workstation.

NOTE For more details about the AJA firmware procedures, consult the *README* file located in the current directory.

Licensing

As an eligible subscription customer, you will receive a new license for the 2010 version of your product. See the *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for instructions on installing your license code.

NOTE You do not need a new license if you are upgrading to a service pack of the same release or extension.

Compatibility

Projects and clip libraries created in previous releases are read-only in your application.

To access media in projects created in previous releases, you must first create new projects in the current release. Then, you must transfer the media from your old projects to the new ones using the Network panel in the Clip Library (Autodesk® Wire®).

There is a tool that copies your old projects to new projects, which can ease the process of migrating many projects to the new version. For details, see the "Compatibility" topic of your application Help or User Guide.

Previous releases cannot read clip libraries from this release.

Autodesk recommends archiving your media and project data before you upgrade.

Uninstalling Visual Effects and Finishing Applications

The *rmsoft* utility enables you to easily uninstall Visual Effects and Finishing applications from your workstation.

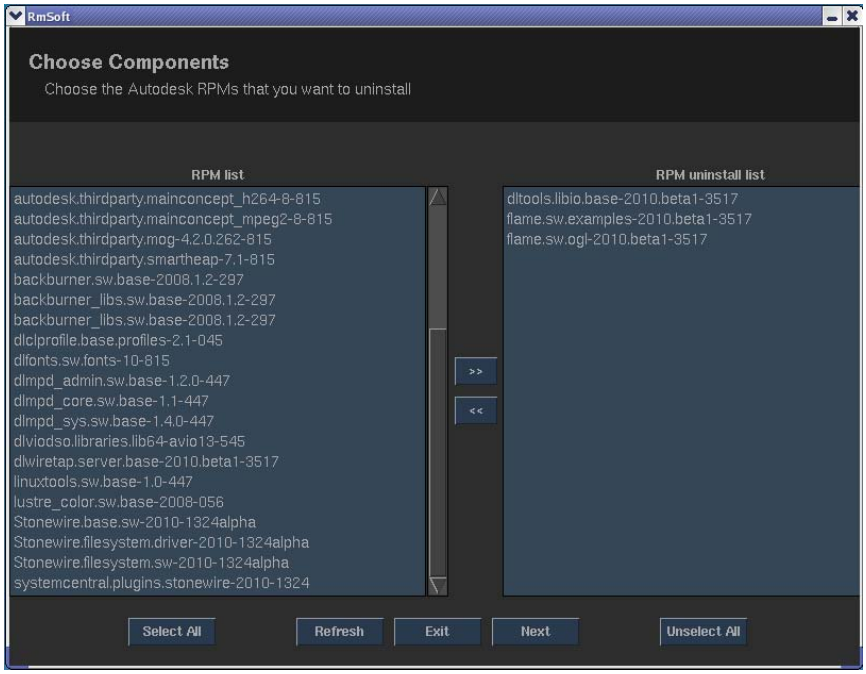
To uninstall your application using rmsoft:

1 Optional: if you are logged in as the application user in KDE, log out.

2 Log in as root, open a terminal, and type:

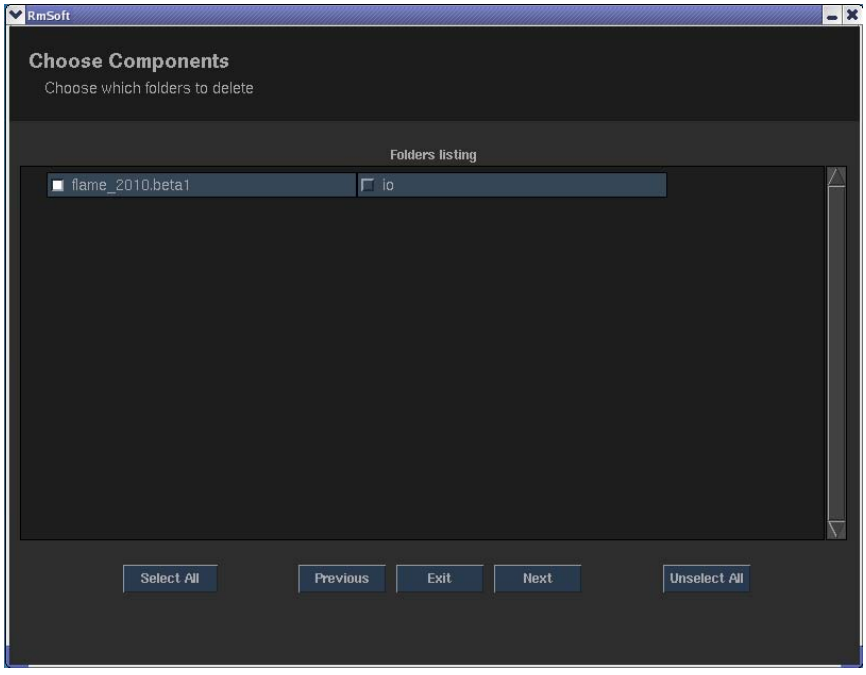
```
rmsoft
```

The rmsoft user interface appears.



3 Select the RPM packages you want to uninstall in the RPM list on the left (click Select All to select all the packages), then click  to move them to the RPM uninstall list on the right.

4 Click Next.
The Choose folders window appears.



5 Select the application directories you want to remove from the */usr/discreet* directory, and click Next.
A confirmation dialog appears.

6 Click Uninstall & Remove to confirm the removal of the selected packages and directories. The uninstallation starts and *rmsoft* displays details on the process.

7 When the operation completes, click Exit to close *rmsoft*.

8 Optional: You can also delete the log files associated with a given application version in the */usr/discreet/log* directory.

Additional Software For this Release

The following table lists the version numbers for supporting software for this release.

Software	Version
Autodesk® Backburner™	2008.1.2
Autodesk® Lustre® Color Management	build 056
Autodesk® WiretapCentral™	2010
Autodesk® Wiretap Gateway™	2010.0.1
Autodesk® SystemCentral™	2010
Autodesk® Cleaner® XL	1.5.2

Important Notes for 2010 SP 3

3

Topics in this chapter:

Introducing the new HP Z800 Workstation and Red Hat Enterprise Linux 5.3

The 2010 SP3 version introduces support for the new HP Z800 workstation, equipped with the NVIDIA Quadro FX5800 Graphics Card and the ATTO Celerity FC-84EN 8-Gigabit fibre channel host adapter.

Only version 2010 SP3 or later of Visual Effects and Finishing applications can be used on the HP Z800 workstation. Previous releases and service packs do not support the new hardware.

Service Pack 3 also introduces support for Red Hat Enterprise Linux Desktop 5.3 (with Workstation option). This is the only operating system supported on the HP Z800 workstation, and it is not supported on older workstations. Older workstations still require Red Hat Enterprise Linux WS 4 Update 3.

See the *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for Linux installation instructions.

StoneFS not Supported in Red Hat Enterprise Linux 5

Note that the StoneFS filesystem is not supported in Red Hat Enterprise Linux 5.

If you plan to upgrade to the new HP Z800 workstation running Red Hat Enterprise Linux Desktop 5, you can only use a standard filesystem (on a Stone Direct array or SAN device) for media storage. Autodesk recommends the XFS filesystem. See the *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for information on setting up a standard filesystem as media storage for your application.

New DKU Version 4.0.4 Required

2010 SP3 applications require DKU version 4.0.4. This version of the DKU fixes a number of bugs, and provides support for the HP Z800 workstation, and Red Hat Enterprise Linux 5.3 operating system.

Download this version of the DKU from the link provided in your release announcement, and install it before installing your 2010 SP3 application.

See Verifying and Upgrading the DKU for installation instructions.

720@50p Now Supported on the Miranda DVI-Ramp2

The 720@50p format is now supported for workstations equipped with the Miranda DVI-Ramp2 as a video preview device.

The application installer detects that your workstation is equipped with a DVI-Ramp2, it adds a line for 720@50p in the `Video Preview Device Keyword` section of the *init.cfg* software initialisation configuration file. Make sure you keep this line when the installer opens the old and new *init.cfg* files in *xxdiff*.

NOTE This format does not work with DVI-Ramp1 devices. If you manually add the line to the *init.cfg* file, and you do not have a DVI-Ramp2 device, the application displays an error message and ignores the setting.

New Installation and Configuration Guide Available

This service pack introduces the new *Autodesk Visual Effects and Finishing Installation and Configuration Guide*. This guide provides complete information on setting up your workstation, including hardware set-up, Linux installation, media storage configuration, application installation and licensing.

You can download the latest version of this guide from *www.autodesk.com/me-documentation*.

Wacom Intuos4 Pen Tablets Supported

Since version 2010 SP2, Visual Effects and Finishing applications support the new Wacom Intuos4 (model PTK-640) pen tablets.

Install the latest DKU in order to benefit from this feature.

Cleaning up Missing Frames Before Upgrading to the 2010 Release

If you are upgrading to the 2010 release on a workstation where a previous release was installed, it is recommended to make sure there are no missing frames in your previous release clip libraries before performing the upgrade.

See Troubleshooting Missing Frames on page 17 for instructions on how to detect and troubleshoot missing frames.

The 2010 Release Cannot Coexist with Older Releases on the Same Workstation

The DKU required by the 2010 release installs new drivers that are not compatible with older releases.

If you plan to use 2009 Extension 1 applications on the same workstation as the 2010 release, upgrade your 2009 Extension 1 applications to Service Pack 4 after installing the 2010 release.

Older releases, such as 2009 and 2008 cannot be used on the same workstation as the 2010 release.

NOTE Projects and clip libraries created in these older releases can still be transferred and used in the 2010 release. See the compatibility topic in your application Help for details.

See the *Autodesk Inferno, Autodesk Flame, and Autodesk Flint 2009 Extension 1 SP 4 Release Notes*, or the *Autodesk Smoke and Autodesk Backdraft Conform 2009 Extension 1 SP4 Release Notes* for information on upgrading your 2009 Extension 1 applications to Service Pack 4.

NOTE You do not need to install DKU 3.5.2 that comes with version 2009 Extension 1 SP4 if you have already upgraded your workstation to DKU 4.0.0.

Xpdf Not Available on Flare Workstations

Note that the *Xpdf* PDF reader application is not included in Red Hat Enterprise Linux 5 and CentOS 5. Therefore, when selecting a PDF from the Documentation box in Autodesk Flare, the document opens in one of the available PDF readers (such as *Kpdf*), and not in *Xpdf*, as stated in the Autodesk Flare Workflow Guide, and in the Flare help.

Irrelevant Error Message When Starting the Flare or Burn License Server

When running the Burn or Flare License Server for the first time, the following error message is displayed in the terminal:

```
license manager: can't initialize: Cannot find license file.
The license files (or license server system network addresses) attempted are listed below.
 Use LM_LICENSE_FILE to use a different license file, or contact your software provider for
 a license file.
Filename: /usr/local/flexlm/licenses/license.dat
License path:  /usr/local/flexlm/licenses/license.dat
```

The license file name specified in this error message is incorrect. The correct license file path for the License Server is */usr/discreet/licserv/DL_license.dat*. If you receive this error message after having entered the license in the correct file, ignore the message.

Support for New Timings

It is now possible to input or output material with the following HDCAM SR timings:

- 1080@60p
- 1080@59,94p
- 1080@50p

The new timings do have the following requirements and limitations:

- They are only available on HP 8600 workstations.
- Input and output is done through the AJA video card. The NVidia 5600 SDI card does not support the new timings.
- Audio monitoring is not available during input, nor when at idle, but is available during output.
- The break-out-box must be connected to the VTR with a dual-link connection, as if transferring 4:4:4 material.
- For performance reasons, proxies cannot be generated simultaneously, and will be generated after input.

NOTE When inputting or outputting the new timings, the VTR and the Engineering menu (from the Input Clip and Output Clip menus) show that they are in 4:2:2 mode. This is expected as the material that is captured or output is 4:2:2, even if a dual-link connection is required. The dual-link is used because a single-link does not have the bandwidth necessary to accommodate the new timings.

Changes in the Clip Library Backup Structure

To accommodate the collaborative workflow promoted by Flare, dedicated Flare clip libraries have been introduced in this release. This insures that each Flare workstation has its exclusively owned libraries. These libraries cannot be modified by any other Flare workstation, and by default, cannot be modified by Flame or Inferno.

On disk, the file names of Flare clip libraries use the following naming scheme:

`<library_name>`*.flare_*`<workstation_name>.<version>`*.clib*

Note also that clip library backups for each project are now saved to a directory using the following naming scheme:

/usr/discreet/clip/`<volume_name>/<project_name>`*_AUTO_BACKUP/*

Backups of Flare clip libraries contain the prefix *flare_* in the filename, and backups of Inferno, Flame, Smoke or Backdraft Conform libraries contain the prefix *master_* in the filename. For example:

/usr/discreet/clip/stonefs/myproject_AUTO_BACKUP/flare_myworkstation.back1.tar

/usr/discreet/clip/stonefs/myproject_AUTO_BACKUP/master_myworkstation.shared.back1.tar

WARNING Do not manipulate the clip library backup files unless instructed to do so by Autodesk Customer Support.

FBX 2009.3 Support

This release now supports FBX® version 2009.3.

New Application Linux Privileges

WARNING Skipping the procedures in this section may result in permission issues later (incorrect access privileges, inaccessible projects, restricted write permissions). To minimize disruption, please read thoroughly.

Visual Effects and Finishing applications now run with the credentials of the user account currently logged in. They no longer run as root, except for some very specific operations or areas, including the project database, integrity checks, volume locks (.ref), and text dictionaries.

This change affects project settings and user profiles, it does not impact media, except for soft-imported media which was previously accessed as root.

Soft-imported media is now accessed using the credentials of the currently logged in user, which might cause access problems. You can solve this issue by using the **`chmod 666`** command to set read and write permissions for everyone on the media files you plan to soft-import, or by starting the application from a user account with read and write access to the soft-imported media files.

Perform one of the following operations to update project permissions before starting the application for the first time.

- Open a terminal as root, and run the */usr/discreet/*`<application_directory>`*/bin/copyProjects* script. The script creates a copy of all existing projects, sets project ownership to root, and permissions to 666 (read and write access for everyone). See the Compatibility topic of the application Help for details.
- Open a terminal as root, and run the */usr/discreet/*`<application_directory>`*/bin/changePermissions* script.
  This script does not change project ownership, but it changes project permissions to 666. See Running the changePermissions Script on page 15.
- Create new projects, and discard the old ones.
  The logged in user is set as the owner of the new projects, and project permissions are set to 666. This is the built-in solution, used from now on whenever new projects are created.

The application installation script still creates an application user, just as before. You can run the application from the application user account, or from your personal Linux user account. The logged in user (be it the application user, or your personal user account) is set as the owner of any new projects, and project permissions are set to 666.

Using the application from a personal Linux user account, has the following limitations:

- There are no shortcuts to launch the application on the Desktop. You must create a shortcut yourself, or launch the application from a terminal, using the */usr/discreet/*`<application_directory>`*/bin/startApplication* script.
  For example */usr/discreet/flame_2010/bin/startApplication*
- There can be incompatibilities (such as hotkeys misbehaving) between the desktop environment and the Visual Effects and Finishing application, due to your custom window manager preferences.

Running the changePermissions Script

The *changePermissions* script changes the permissions of every project and user profile to 666 (read and write access for everyone).

To run the changePermissions script:

1. Open a terminal and log in as root.
2. Type the following command:

   /usr/discreet/<application_directory>**/bin/changePermissions -p** <project_list> **-u** <user_list>

   Where <project_list> is the list of projects you want to change permissions for, separated by space, and <user_list> is the list of user accounts you want to change permissions for, separated by space

   If you do not specify a list of projects or users, the script lists the first project it finds, and asks if you want to change permissions for it. Type one of the following answers:

   - **y** to change permissions on the current project, and move to the next project found.
   - **n** to keep current project permissions, and move to the next project found
   - **all** to change permissions on all projects found, and move to the next category (Editing user accounts)
   - **go** to keep the current permissions of all projects, and skip to the next category (Editing user accounts)
   - **quit** to exit the script without making any permission changes.

After you confirm or deny the changes for all three categories (projects, Editing user accounts, and Effects user accounts), the script changes permissions and exits.

Setting a Custom UID and GID for the Application Linux Account

The application installer now allows you to set a custom UID and GID for the application Linux account created by the installer.

NOTE By default the application Linux account is created under the "users" group.

To install an application and create an application Linux account using a custom GID and UID, run the application installation script with the `--uid` and `--gid` parameters. For example:

```
./INSTALL_SMOKE --uid=1234 --gid=12
```

Smoke/Flame: Preparing Timelines for Autodesk Lustre

Smoke and Flame optimize timewarps to speed up processing. As a result of the optimization, timewarps appear as multiple shots when the Smoke or Flame timelines are brought into Autodesk Lustre. Multiple shots can be more difficult to grade in Lustre.

To prevent the optimization you can either:

- Use Autodesk Burn™ to process your timeline, or
- Turn off timewarp optimization for processing

To turn off timewarp optimization for processing, enable the following environment variable before you start Smoke or Flame. Open a terminal and type:

```
setenv DL_DISABLE_NOOP_SOFT_FX_OPTIMISATION 1
```

After you enable this environment variable, you must process all timelines you want to share with Lustre to remove the optimization.

When timewarp optimization is off, processing time slows down and more space is consumed on your framestore.

NOTE The environment variable is set for the current session only. To set it permanently, open the *~/.cshrc* file in a text editor and add the following on a new line: setenv **DL_DISABLE_NOOP_SOFT_FX_OPTIMISATION 1**

Troubleshooting Missing Frames

If the application cannot find some of the frames referenced by your clips, the following error message is displayed when the application starts:

- In the terminal:
  `WARNING: <nnnn> <volume_type> frames are missing on this volume; see Release Notes for corrective measures.`
  Where `<nnnn>` represents the number of missing frames, and `<volume_type>` can be *stonefs* or *standardfs*.

- In the application start-up screen:
  `VOLUMEMGT: WARNING: Some frames not found; see Release Notes for corrective measures.`

The error message appears in one or both of the following situations:

- Some clips in your libraries or desktops reference frames on a remote volume.
- Some clips in your libraries or desktops reference local frames that no longer exist.

To identify the type of issue:

➤ Open a terminal and type:
`vic -v` `<volume_name>` **`-s remote -s lost`**
where `<volume_name>` is the name of the affected volume, for example *stonefs* or *stonefs7*.

NOTE The -s parameter of vic is only available as of the 2008 SP6 release.

The output of this command should be similar to the following:

```
Checking libraries for remote and lost frames...
/usr/discreet/clip/stonefs/My_Project1/editing.000.desk has none
/usr/discreet/clip/stonefs/My_Project1/Default.000.clib references 30 missing frames.
/usr/discreet/clip/stonefs/My_Project2/editing.000.desk has none
/usr/discreet/clip/stonefs/My_Project2/from_caplan.000.clib references 70 remote frames
```

Depending on the result of the previous command, do one of the following:

- For clips with frames listed as remote, see To recover remote frames on page 18.
- For clips with frames listed as missing, see To remove unrecoverable frames on page 18.

To recover remote frames:

1. Archive all clip libraries that are reported as containing remote frames. In the previous example, the fourth library (*from_caplan*) contains remote frames.
2. Rename the libraries you just archived, such as by adding the remote suffix to the library name.
3. Restore the clip libraries from the archive. All the frames referenced by the clips should now be stored locally.
4. Delete the original libraries.

To remove unrecoverable frames:

1. In the terminal, type:

   `vic -v` `<volume_name>` **`-r`**

   Each unrecoverable frame in the clip is replaced with a generic black frame containing the text “LOST”.
2. Open the Visual Effects and Finishing application.

   The names of clips that contained unrecoverable frames are displayed in red in the Clip Library.
3. Load each affected clip on the Desktop.
4. Scrub through the clip, identify the black frames containing the text “LOST”, and delete them from the clip.

Sending MTBF Reports to Autodesk

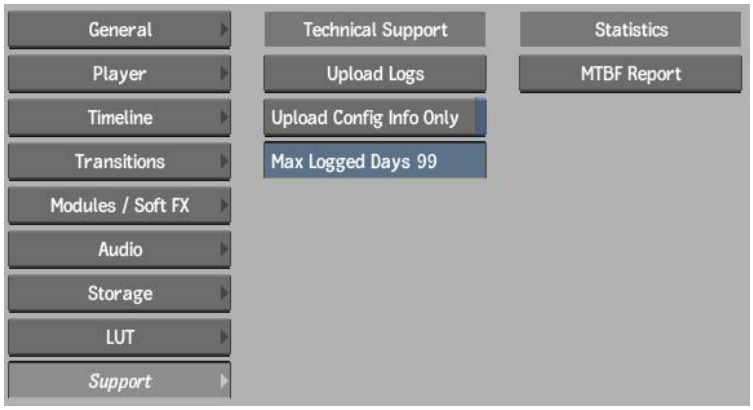
Autodesk may ask users to submit MTBF (Mean Time Between Failures) reports from time to time.

MTBF reports allow Autodesk to evaluate system stability using uptime and crash information about your product. Note that no confidential project information is collected through this report.

You can generate MTBF reports from the UI of the Visual Effects and Finishing applications.

To generate an MTBF report from an application:

1. Enter the Preferences menu of your application.
2. Select the Support Menu.



3. Click the MTBF Report button.

   An MTBF report is generated from the application logs, and is automatically uploaded to the Autodesk FTP if the workstation is connected to the Internet.

NOTE If the workstation is not connected to the Internet, the following error message is displayed: "Cannot access the FTP server. Please upload the file */tmp/*<report_file_name> manually.", where <report_file_name> represents the name of the XML report file. Contact Autodesk Customer Support for information on manually sending the report file to Autodesk.

Application Feature Changes

4

Topics in this chapter:

Introduction

This chapter describes changes to the application that were not documented in the user guide or new features guide.

Image Data Type Hot Keys

The Bypass button, located in the Image Data Type panel of the View menu, has a hot key assigned to it. Use **Ctrl+Shift+B** to toggle the Bypass button.

The Bypass button in the Image Data Type panel of the Preferences now has an empty hot key entry that can be customized by the user.

New Sapphire Sparks from GenArts

If you are using Sapphire® Sparks from GenArts®, please upgrade to the latest version (at least 4.061). See your GenArts representative for information.

Colour Decision List Spark

Using a new Spark®, you can load and apply files that use the American Society of Cinematographers Color Decision List (ASC CDL) format.

Using SparkCDL, you can load an XML-based file that includes basic colour grading metadata and apply it to a clip.

The following is an example of a colour decision list that uses an XML schema:

```
<ColorDecisionList xmlns="urn:ASC:CDL:v1.01">
      <ColorDecision>
            <ColorCorrection>
                  <SOPNode>
                        <Description>dark blue</Description>
                        <Slope>1.0000 1.0000 1.4000</Slope>
                        <Offset>0.000 0.0000 0.0000</Offset>
                        <Power>1.3 1.3 1.3</Power>
                  </SOPNode>
                  <SatNode>
                        <Saturation>1.000000</Saturation>
                  </SatNode>
            </ColorCorrection>
      </ColorDecision>
</ColorDecisionList>
```

For each colour channel, the Sparks menu displays the slope (gain), offset, or power (gamma) values. You can manually adjust or reset these values.

See Using Sparks® as a Plug-in in the Sparks chapter of your application help or user guide.

Smoke/Flame: Preparing Timelines for Autodesk Lustre

Smoke and Flame optimize timewarps to speed up processing. As a result of the optimization, timewarps appear as multiple shots when the Smoke or Flame timelines are brought into Autodesk Lustre. Multiple shots can be more difficult to grade in Lustre.

To prevent the optimization you can either:

- Use Autodesk Burn™ to process your timeline, or

- Turn off timewarp optimization for processing

To turn off timewarp optimization for processing, enable the following environment variable before you start Smoke or Flame. Open a terminal and type:

```
setenv DL_DISABLE_NOOP_SOFT_FX_OPTIMISATION 1
```

After you enable this environment variable, you must process all timelines you want to share with Lustre to remove the optimization.

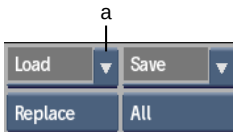
When timewarp optimization is off, processing time slows down and more space is consumed on your framestore.

NOTE The environment variable is set for the current session only. To set it permanently, open the *~/.cshrc* file in a text editor and add the following on a new line: setenv **`DL_DISABLE_NOOP_SOFT_FX_OPTIMISATION 1`**

Batch

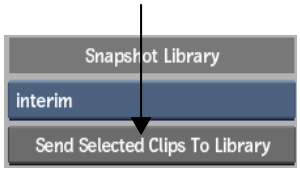
From the main Batch level, you can either load an existing Batch setup or create a new setup.

Select Load Batch or New Batch from the Load dropdown list. If you select to create a new Batch setup, you must confirm that you want to delete the current setup.



(a) Load dropdown list

When saving clips, you can choose to save only selected clips to the Snapshot library. Select the clips in the schematic, and then click Send Clips To Library in the Batch Setup menu.



Importing RED Media Files From a Final Cut Pro XML

To import RED media files using a Final Cut Pro XML file in an Autodesk Visual Effects and Finishing system, you must use WiretapCentral.

Creating XML Files in Final Cut Pro

To maximize interoperability between Final Cut Pro (FCP) and WiretapCentral, perform the following steps before importing your XML in WiretapCentral.

1. Ensure that the original R3D files are stored in a location accessible to FCP.
2. Using REDRUSHES™, convert the R3D files into the QuickTime format of your choice for offline editing, with burned-in timecode as an option.

We recommend using the DVCPRO HD format, referred to as DVCPRO720 in REDRUSHES. You can easily import it into Autodesk Visual Effects and Finishing system, while keeping your entire edit, audio included, as a reference.

NOTE Do not modify the R3D filenames. Instead, use the comment columns to identify your clips. The name of the clip must be the 16-character R3D filename (without the segment number or the extension). For example, a clip name, and its corresponding filename, is A001_C002_0815EX. The tape or reel name must be the same as the clip name, so in REDRUSHES, make sure the Reel ID option is set to use the full 16-character filename.

3 In FCP, edit using the QuickTime files that contain the original R3D filename. Remember that not all transitions, effects, and speed changes are supported.

4 Export an FCP XML of the final sequence for use in your Autodesk Visual Effects and Finishing software. Use the following settings:

- Select Apple XML Interchange Format, version 4.
- Select Save project with latest clip metadata.
- Do not select Include Master Clips Outside Selection.

The generated XML file points to the QuickTime files that you used for your offline editing. Use WiretapCentral to relink to the original R3D files. This FCP XML file is also used in your Autodesk Visual Effects and Finishing software.

5 Copy the source R3D files, the QuickTime files, and the FCP XML to a media directory on a SAN or NFS. The storage must be accessible to WiretapCentral and Autodesk Visual Effects and Finishing systems.

Keep the same file/directory hierarchy, where one directory contains all .RDM and .RDC directories and subdirectories. This makes it easier to search and match events to media when loading the XML file.

Also, leave the FCP XML in this main directory, with all the media in their subdirectories. This allows WiretapCentral to automatically locate the media during the import task.

Avoiding the Log&Transfer Tool

If you use the Log&Transfer tool to ingest R3D files, the Reel name of the imported clips has a directory name. You will then have to manually rename each Reel to their 16-character RED filename.

Also, the Log&Transfer tool often imports only parts of clips over 4 GB, dividing them up while adding a "_1", "_2" to the filename, which hinders relink operations later on.

Examples of faulty filenames: A clip named A001_C004_0206T9, imported in FCP using Log&Transfer, is renamed A001_C004_0206T10. A clip named A001_C004_0206TB, imported in FCP using Log&Transfer, is renamed A001_C004_0206TB1.

Using the xml_adsk_tapename Script

The QuickTime files created in REDCINE™ have tape names that match the first four characters of the R3D filenames, such as A001. But WiretapCentral requires the full 16-character tape names. If you edit in FCP and export an XML with those QuickTime files, you need to convert the tape names back to 16-character format. Use the Python script installed by WiretapCentral to perform this conversion.

The Python script is located in the `/usr/discreet/wiretapcentral/scripts/` directory. Use it to process the FCP XML: it replaces the four-character tape names with the ones extracted from the header of the QuickTime file. You can then use the FCP XML in WiretapCentral.

The script creates a new copy of the processed XML file. To use it, put the script in a same directory as the FCP XML file and type:

```
xml_adsk_tapename.py name_of_the_file_to_modify.xml name_of_the_destination_file.xml
```

For example, to modify the tape names in `abc.xml`, navigate to the directory containing `abc.xml` and type:

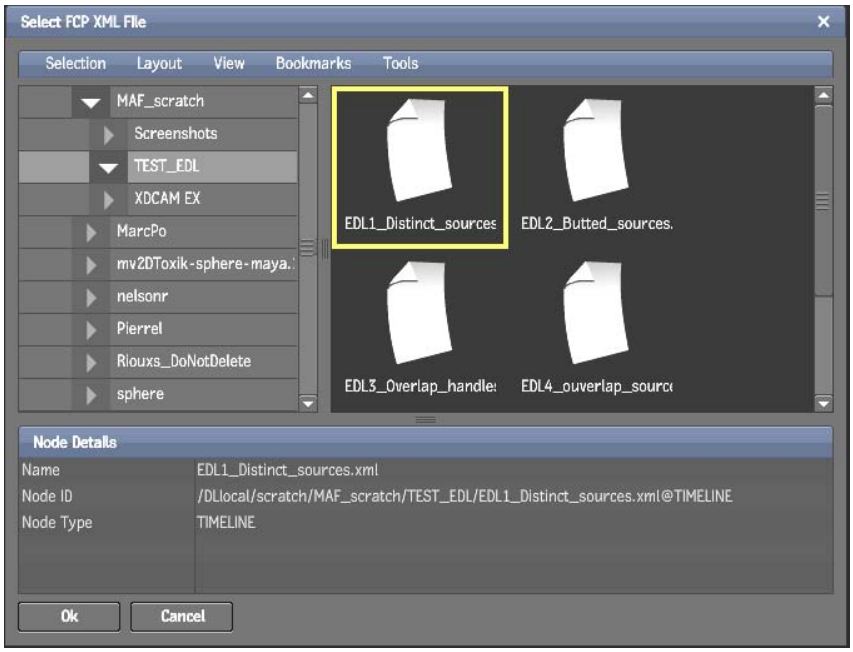
```
xml_adsk_tapename.py abc.xml abc_fixed.xml
```

Importing FCP XML Files in WiretapCentral

Using WiretapCentral, import the RED media as an FCP XML file containing R3D files through the Import RED menu, on the FCP XML tab.

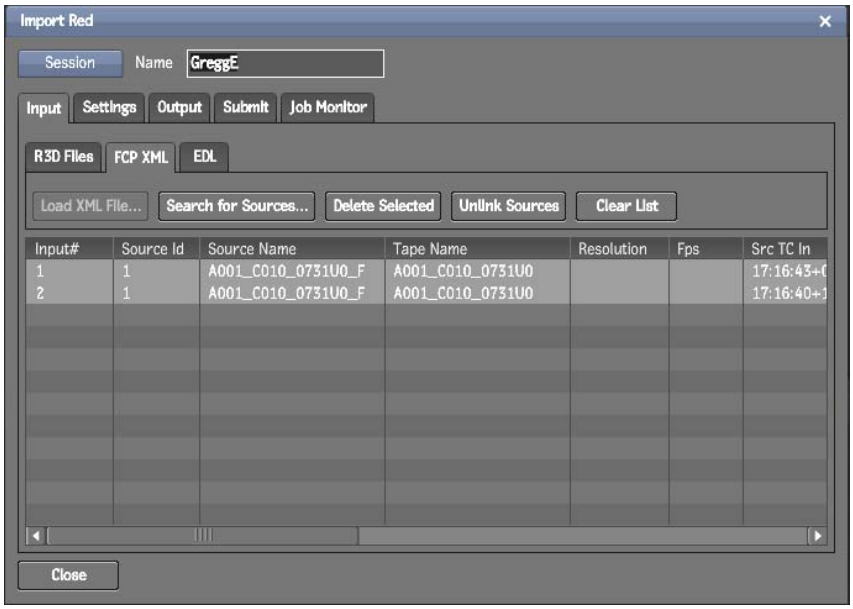
1. From the Input tab, make sure that the FCP XML pane is selected.
2. Click Load XML File to open the WiretapCentral browser.
3. Navigate to the location of your XML file.
4. Select the FCP XML file .
5. Click Ok to close the browser window.

   WiretapCentral automatically searches for each clip referenced in the XML file. The R3D files appear in the input list.



If the media is in another location, locate it using the Search for Sources button.

Remember to save your session.



Importing RED Media Files from an EDL

To import RED media files using an Avid EDL file in an Autodesk Visual Effects and Finishing system, you must use WiretapCentral.

Creating EDL Files in Avid

If you are editing in an Avid application, export your sequences as one or more EDL.

Because of the inherent limitations in EDL, limit your edit to one video track. If you must edit using several video tracks, make as many duplicates of your sequence as there are video tracks. Also remove any additional video from the duplicates. Then export several EDL files, one per video track.

NOTE When editing in Avid Media Composer, export an EDL using Avid EDL Manager and the RED16 template (available at www.avid.com/red). The tape name of each event then has the required 16 characters. Use the Python script provided with WiretapCentral to modify the Avid EDL and build a tape source table which works in WiretapCentral and in your Autodesk Visual Effects and Finishing software.

Export each Avid sequence as a new EDL with Avid EDL Manager using the following settings:

- Set EDL type to RED16.
- In the Options menu, set Reel ID Type to Cameraroll.
- If Edgecode was used instead of TOD Timecode, set the Source TC option to Auxiliary TC 1.
- Select the option that includes the source table with the saved EDL.

Copy the source R3D files and the fixed EDL to a media directory on a SAN or NFS that is accessible to WiretapCentral and Autodesk Visual Effects and Finishing systems.

Keep the same file/directory hierarchy, where one directory contains all .RDM and .RDC directories and subdirectories. It makes it easier to search for and match events to media when loading the EDL file. Also, if you leave the EDL in this main directory, with all the media in subdirectories, WiretapCentral can find automatically the underlying media during the import task.

Using the edl_adsk_tapename Script

The Avid RED16 EDL Manager template has the EDL source table and the tape name of each event which uses the full 16-character tape name. But the EDL parsing mechanism in WiretapCentral reads standard CMX events with tape names containing 8 characters or less. It also reads the tape source table.

WiretapCentral installs a Python script, which converts the events and the source table into a format compatible with WiretapCentral and Autodesk Visual Effects and Finishing systems.

The Python script is located in the `/usr/discreet/wiretapcentral/scripts/` directory. It creates a new copy of the processed EDL. To use it, put the script in a same directory as the Avid EDL file and type:

```
edl_adsk_tapename.py name_of_the_file_to_modify.edl name_of_the_destination_file.edl
```

For example, to modify the tape names in `abc.edl`, navigate to the directory containing `abc.edl` and type:

```
xml_adsk_tapename.py abc.edl abc_fixed.edl
```

See Appendix B for an example of an Avid EDL before and after being processed by the Python script.

Importing the EDL in WiretapCentral

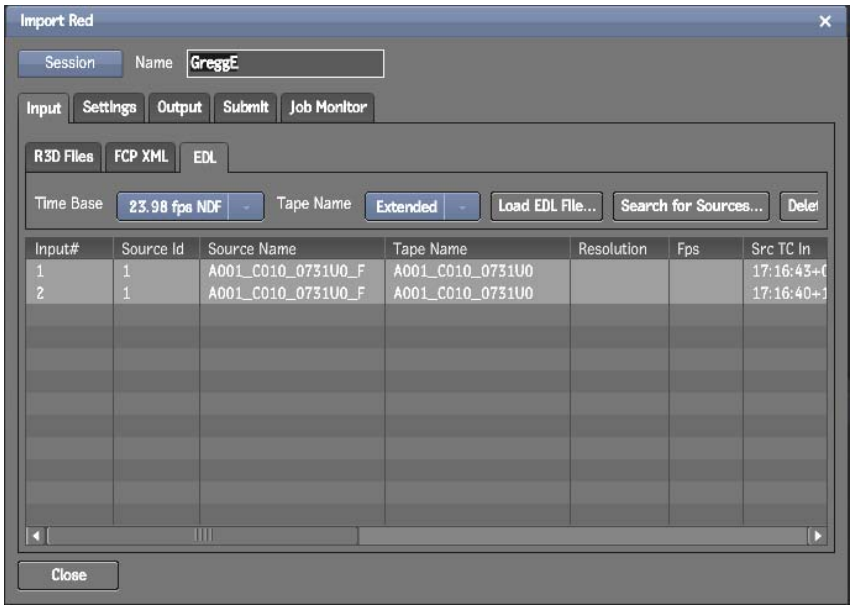
Using WiretapCentral, import the RED media as generic EDL containing R3D files through the Import Red menu, on the EDL tab.

1. From the Input tab, make sure that the EDL pane is selected.
2. Select the Time Base that corresponds to your edit.
3. Set the Tape Name menu to Extended.
4. Click Load EDL File to open the WiretapCentral browser.
5. Navigate to the location of your EDL file.
6. Select the EDL.
7. Click Ok to close the browser window.

   WiretapCentral finds the source media. The associated metadata (such as Source Id and Source Name) appears in the Input List.

If the media is in another location, locate it using the Search for Sources button.

Remember to save your session.


Import Red
Session
Name
GreggE
Input
Settings
Output
Submit
Job Monitor
R3D Files
FCP XML
EDL
Time Base
23.98 fps NDF
Tape Name
Extended
Load EDL File...
Search for Sources...
Input#
Source Id
Source Name
Tape Name
Resolution
Fps
Src TC In
1
1
A001_C010_0731U0_F
A001_C010_0731U0
17:16:43+
2
1
A001_C010_0731U0_F
A001_C010_0731U0
17:16:40+
Close