

Autodesk®

Inferno® 2010 Extension 1 SP2

A Discreet® Systems product

Autodesk®

Flame® 2010 Extension 1 SP2

A Discreet Systems product

Autodesk®

Flint® 2010 Extension 1 SP2

A Discreet Systems product

Autodesk®

Flare™ 2010 Extension 1 SP2

Release Notes

Autodesk® Visual Effects and Finishing 2010 Extension 1

© 2009 Autodesk, Inc. All rights reserved. Except as otherwise permitted by Autodesk, Inc., this publication, or parts thereof, may not be reproduced in any form, by any method, for any purpose.

Certain materials included in this publication are reprinted with the permission of the copyright holder.

Portions relating to MD5 Copyright © 1991-2, RSA Data Security, Inc. Created 1991. All rights reserved. License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function. License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work. RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind. These notices must be retained in any copies of any part of this documentation and/or software.

Trademarks

The following are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and other countries: 3DEC (design/logo), 3December, 3December.com, 3ds Max, ADI, Algor, Alias, Alias (swirl design/logo), AliasStudio, AliasWavefront (design/logo), ATC, AUGI, AutoCAD, AutoCAD Learning Assistance, AutoCAD LT, AutoCAD Simulator, AutoCAD SQL Extension, AutoCAD SQL Interface, Autodesk, Autodesk Envision, Autodesk Intent, Autodesk Inventor, Autodesk Map, Autodesk MapGuide, Autodesk Streamline, AutoLISP, AutoSnap, AutoSketch, AutoTrack, Backburner, Backdraft, Built with ObjectARX (logo), Burn, Buzzsaw, CAiCE, Can You Imagine, Character Studio, Cinestream, Civil 3D, Cleaner, Cleaner Central, ClearScale, Colour Warper, Combustion, Communication Specification, Constructware, Content Explorer, Create>what's>Next> (design/logo), Dancing Baby (image), DesignCenter, Design Doctor, Designer's Toolkit, DesignKids, DesignProf, DesignServer, DesignStudio, DesignStudio (design/logo), Design Web Format, Discreet, DWF, DWG, DWG (logo), DWG Extreme, DWG TrueConvert, DWG TrueView, DXF, Ecotect, Exposure, Extending the Design Team, Face Robot, FBX, Fempro, Filmbox, Fire, Flame, Flint, FMDesktop, Freewheel, Frost, GDX Driver, Gmax, Green Building Studio, Heads-up Design, Heidi, HumanIK, IDEA Server, i-drop, ImageModeler, iMOUT, Incinerator, Inferno, Inventor, Inventor LT, Kaydara, Kaydara (design/logo), Kynapse, Kynogon, LandXplorer, Lustre, MatchMover, Maya, Mechanical Desktop, Moldflow, Moonbox, MotionBuilder, Movimento, MPA, MPA (design/logo), Moldflow Plastics Advisers, MPI, Moldflow Plastics Insight, MPX, MPX (design/logo), Moldflow Plastics Xpert, Mudbox, Multi-Master Editing, NavisWorks, ObjectARX, ObjectDBX, Open Reality, Opticore, Opticore Opus, Pipeplus, PolarSnap, PortfolioWall, Powered with Autodesk Technology, Productstream, ProjectPoint, ProMaterials, RasterDWG, Reactor, RealDWG, Real-time Roto, REALVIZ, Recognize, Render Queue, Retimer, Reveal, Revit, Showcase, ShowMotion, SketchBook, Smoke, Softimage, Softimage|XSI (design/logo), Sparks, SteeringWheels, Stitcher, Stone, StudioTools, Topobase, Toxik, TrustedDWG, ViewCube, Visual, Visual Construction, Visual Drainage, Visual Landscape, Visual Survey, Visual Toolbox, Visual LISP, Voice Reality, Volo, Vtour, Wire, Wiretap, WiretapCentral, XSI, and XSI (design/logo).

Adobe, Flash and Reader are either trademarks or registered trademarks in the United States and/or countries. Automatic Duck and the duck logo are trademarks of Automatic Duck, Inc. FFmpeg is a trademark of Fabrice Bellard, originator of the FFmpeg project. Python is a registered trademark of Python Software Foundation. All other brand names, product names or trademarks belong to their respective holders.

Disclaimer

THIS PUBLICATION AND THE INFORMATION CONTAINED HEREIN IS MADE AVAILABLE BY AUTODESK, INC. "AS IS." AUTODESK, INC. DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THESE MATERIALS.

Published by: Autodesk, Inc.
111 McInnis Parkway
San Rafael, CA 94903, USA

Title: Autodesk Inferno, Autodesk Flame, Autodesk Flare, and Autodesk Flint 2010 Extension 1 SP2 Release Notes
Document Version: 1
Date: December 15, 2009

Contents

- Chapter 1 Introduction 1**
 - New in these Release Notes 1
 - About these Release Notes 1
 - Related Documentation 2
 - Contacting Autodesk 2

- Chapter 2 Application Requirements and Installation 3**
 - Quick Upgrade Workflow 3
 - System Requirements 5
 - Memory Requirements 5
 - Verifying and Upgrading the DKU 6
 - Verifying and Upgrading the AJA OEM 2K Firmware 7
 - Licensing 8
 - Compatibility 8
 - Autodesk Flare Compatibility 8
 - The 2010 Extension 1 Release Cannot Coexist with Older Releases on the Same Workstation 8
 - StoneFS not Supported in Red Hat Enterprise Linux 5 9
 - Avid MXF Limitations 9
 - Uninstalling Visual Effects and Finishing Applications 9
 - Additional Software For this Release 11

- Chapter 3 Important Notes for Service Pack 2 13**
 - RED SDK 2.4 Included in SP2 13
 - Determining the Camera Firmware Version of a R3D File 14
 - New Wacom Driver Available 14
 - Removing Corrupt Records from the Stone and Wire Database 15
 - Changing the Interpolation Type for Variable Speed Timewarps 16
 - Restoring a Pre-2010 Project 17
 - Cleaning up Missing Frames Before Upgrading to the Current Release 17
 - Troubleshooting Missing Frames 17

Chapter 4	Application Feature Changes	19
	Introduction	19
	Auto-Consolidation of Clips with Handles in Recapture	19
	Disabling Graphics Tablet Buttons	19
	WiretapCentral Updates	20
	Negative Speed and Non-Constant Timewarps	20
	RED RSX Settings Support	20

Introduction

1

Topics in this chapter:

- [New in these Release Notes](#) on page 1
- [About these Release Notes](#) on page 1
- [Related Documentation](#) on page 2
- [Contacting Autodesk](#) on page 2

New in these Release Notes

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

- [Quick Upgrade Workflow](#) on page 3
- [RED SDK 2.4 Included in SP2](#) on page 13

About these Release Notes

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

- Autodesk Inferno® 2010 Extension 1 SP2
- Autodesk Flame® 2010 Extension 1 SP2
- Autodesk Flint® 2010 Extension 1 SP2
- Autodesk Flare™ 2010 Extension 1 SP2
- Autodesk Burn® 2010 Extension 1 SP2

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 version, see [Important Notes for Service Pack 2](#) on page 13.
- For the DKU version and AJA OEM 2K firmware version required for this version see [Verifying and Upgrading the DKU](#) on page 6 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 version, see [Quick Upgrade Workflow](#) on page 3.
- For information on known issues, as well as issues fixed in this version, see the *Autodesk Visual Effects and Finishing 2010 Extension 1 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 online as PDF files.

- To view the Help from anywhere in the application, press **Ctrl+=**.

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

Access the latest documentation at:

- 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](#) on page 3
- [System Requirements](#) on page 5
- [Verifying and Upgrading the DKU](#) on page 6
- [Verifying and Upgrading the AJA OEM 2K Firmware](#) on page 7
- [Licensing](#) on page 8
- [Compatibility](#) on page 8
- [Uninstalling Visual Effects and Finishing Applications](#) on page 9
- [Additional Software For this Release](#) on page 11

Quick Upgrade Workflow

This section provides system requirements for the current version of Autodesk Visual Effects and Finishing applications, as well as an overview of the application upgrade workflow.

NOTE This chapter does not apply to Autodesk Flare. For the 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 version:

- 1 Before beginning the upgrade procedure, read the information in [Important Notes for Service Pack 2](#) on page 13.
- 2 Make sure your workstation and operating system meet the minimum requirements for the current version. See [System Requirements](#) on page 5.
- 3 Open a terminal and log in as root.
- 4 Perform the following steps to obtain your service pack installation package:
 - If your workstation is running a DKU version older than 4.5.0, download DKU version **4.5.0** from the link provided in the release announcement.

NOTE If your workstation is already running DKU 4.5.0, you do not need to upgrade the DKU.

- Download the application *tar* file from the link provided in the 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 If you have downloaded the DKU package, install it. See [Verifying and Upgrading the DKU](#) on page 6.
 - 6 If your HP workstation is equipped with an AJA OEM 2K card, verify and upgrade the AJA firmware if necessary. See [Verifying and Upgrading the AJA OEM 2K Firmware](#) on page 7.
 - 7 Install the upgraded Wacom pen tablet driver. See [New Wacom Driver Available](#) on page 14
 - 8 If you need to change your system date or time, do it **before** installing the new release.
 - 9 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 Current Release](#) on page 17.
 - 10 Go to the application installation directory, for example *Flame_2010.1.SP2_LINUX64*, and start the installation script by typing:
./INSTALL_<APPLICATION_NAME>
The script starts and guides you through the installation process. See the latest *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for detailed information on each step.
 - 11 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 or User Guide for details.

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

- 12 Clear your browser cache to make sure the latest version of WiretapCentral loads properly.
- 13 License your new software version. See [Licensing](#) on page 8.

NOTE This step is not necessary if you are upgrading from a service pack of the same application release or from a service pack of the same 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	1.17	Red Hat® Enterprise Linux® Desktop 5.3 with Workstation Option (64-bit)
HP xw8600	1.32	Red Hat Enterprise Linux WS 4, Update 3 (64-bit)
HP xw9400	3.05	Red Hat Enterprise Linux WS 4, Update 3 (64-bit)
HP xw8400	2.26	Red Hat Enterprise Linux WS 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 DL160se G6	07/05/2009	Red Hat Enterprise Linux Desktop 5.3 with Workstation Option (64-bit)
HP ProLiant DL160 G5	04/09/2008	Red Hat Enterprise Linux WS4 Update 3 (64-bit)

See the latest *Hardware Setup Guide* for your workstation for wiring diagrams, BIOS settings, and BIOS update instructions.

If you need to reinstall your workstation operating system (for example if you replaced your system drive), use the custom Autodesk 64-bit distribution of Red Hat Enterprise Linux, and not the commercial distribution. 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 the commercial distribution 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. 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	12.0 GB for HP Z800
	4.0 GB for other platforms	16.0 GB for other platforms
Long-form editing (Smoke)	12.0 GB for HP Z800	12.0 GB for HP Z800

Project Resolution	Minimum RAM	Recommended RAM
	8.0 GB for other platforms	16.0 GB for other platforms (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 platforms (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 platforms (highly recommended)
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 platforms (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 platforms (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 latest *Autodesk Visual Effects and Finishing Installation and Configuration Guide*.

Verifying and Upgrading the DKU

The Discreet Kernel Utilities (DKU) version required for this service pack is **4.5.0**, the same version that shipped with the 2010 Extension 1 release.

If your workstation is already running DKU 4.5.0, you do not need to upgrade the DKU.

If your workstation is running an older DKU, make sure you upgrade the DKU before installing the new version of your Visual Effects and Finishing application.

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

To upgrade the DKU:

- 1 Check the currently installed DKU version. As root, open a terminal and type:

```
head -n1 /etc/DKUversion
```

If the DKU version output by the command does not match the version required for the current release, perform the remaining steps in this procedure.
- 2 Download the latest DKU *tar* file from the download link provided in the release announcement.
- 3 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 newly-created DKU installation directory, and launch the DKU installation script:

```
./INSTALL_DKU
```

- 5 When the DKU installation completes, reboot the system. Type:
reboot

Verifying and Upgrading the AJA OEM 2K Firmware

If your HP workstation is equipped with an AJA OEM 2K board, make sure that the firmware of the board is the correct version for the current release of your Visual Effects and Finishing application.

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

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 current version of your product.

Use the software License Wizard to license your application. The Wizard starts automatically when you launch an unlicensed Visual Effects and Finishing application.

See the *Autodesk Visual Effects and Finishing Installation and Configuration Guide* for detailed instructions on installing your license code.

For information about licensing Autodesk Burn and Autodesk Wiretap Gateway, see the latest *Autodesk Burn Installation and User Guide*, and *Autodesk WiretapCentral and Wiretap Gateway Installation and Configuration Guide*.

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

Compatibility

Projects and clip libraries created in previous releases are read-only in the new version of the 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.

Autodesk Flare Compatibility

Note that, when using Autodesk Flare in a remote workflow, the Autodesk Flame or Autodesk Inferno application to which the Autodesk Flare workstation connects must be the same version as the Flare software.

See the *Autodesk Flare Installation and Configuration Guide* for information on upgrading Autodesk Flare software to the latest version.

The 2010 Extension 1 Release Cannot Coexist with Older Releases on the Same Workstation

The DKU required by the 2010 extension 1 release installs new drivers that are not compatible with older releases.

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

Older releases, such as 2009 and 2008 cannot be used on the same workstation as the 2010 Extension 1 release.

NOTE Projects and clip libraries created in these older releases can still be transferred and used in the 2010 extension 1 release. See the compatibility topic in your application Help for details.

See the *Autodesk Inferno*, *Autodesk Flame*, and *Autodesk Flint 2010 SP 4 Release Notes*, or the *Autodesk Smoke and Autodesk Backdraft Conform 2009 2010 SP 4 Release Notes* for information on upgrading your 2010 applications to Service Pack 4.

NOTE You do not need to install DKU 4.0.6 that comes with version 2010 SP4 if you have already upgraded your workstation to DKU 4.5.0.

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 5.3, 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.

Avid MXF Limitations

Keep in mind the following limitations when working with Avid MXF files.

- Support for Avid MXF files is currently limited to DNxHD encoded files. IMX, DV and uncompressed formats are not supported at this time.
- Conforming of Avid AAF -> Avid MXF files is limited to material generated from an Avid system that does not reference P2 Spanned clips.
- Conforming of Avid audio MXF files imported from stereo source material and split into single channel MXF files will only relink to one channel.
- Problems may occur when MXF files greater than 2GB are accessed through NFS, due to a limitation of the NFS protocol. This may cause the application to crash

Uninstalling Visual Effects and Finishing Applications

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

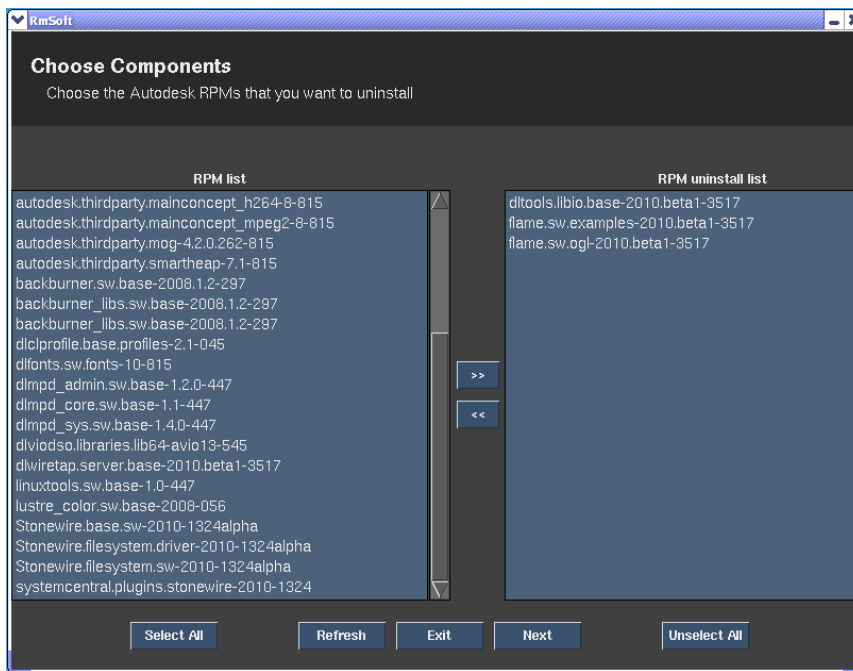
To uninstall your application using *rmsoft*:


1 If you are logged in as the application user in KDE, log out and log back into KDE as root.

2 As root, open a terminal, and type:

```
rmsoft
```

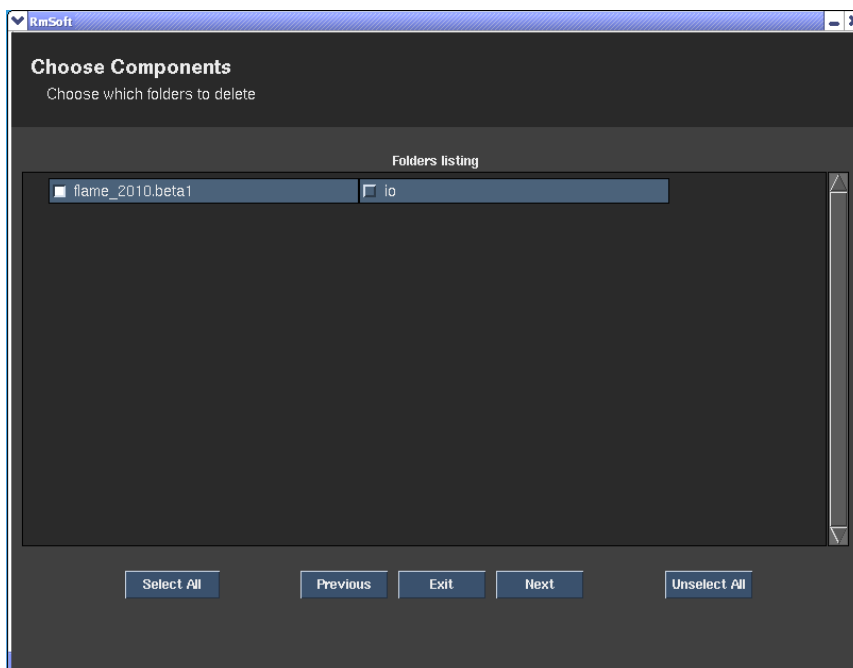
The *rmsoft* user interface appears.



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™	2010.1
Autodesk® Lustre® Color Management	2008
Autodesk® WiretapCentral™	2010.1.1
Autodesk® Wiretap Gateway™	2010.1.1
Autodesk® Backburner™ Media I/O Adapter	2010.1.1

Important Notes for Service Pack 2

3

Topics in this chapter:

- [RED SDK 2.4 Included in SP2](#) on page 13
- [New Wacom Driver Available](#) on page 14
- [Removing Corrupt Records from the Stone and Wire Database](#) on page 15
- [Changing the Interpolation Type for Variable Speed Timewarps](#) on page 16
- [Restoring a Pre-2010 Project](#) on page 17
- [Cleaning up Missing Frames Before Upgrading to the Current Release](#) on page 17
- [Troubleshooting Missing Frames](#) on page 17

RED SDK 2.4 Included in SP2

The updated WiretapCentral, Wiretap Gateway and Backburner Media I/O Adapter packages that are automatically installed with Autodesk Visual Effects and Finishing applications version 2010 Extension 1 SP2 make use of the new RED® SDK version 2.4. This version of the RED SDK provides full backwards compatibility with footage shot with RED camera firmware older than build 20.

Upgrade your Visual Effects and Finishing workstations to version 2010 Extension 1 SP2 to ensure all workstations on your network are running the same version of the RED SDK. A service pack containing the new RED SDK is also available for Autodesk® Lustre® 2010. Autodesk® Smoke® 2010 for Mac OS® X also includes the new RED SDK.

If you are running older versions of WiretapCentral, Wiretap Gateway or the Media I/O Adapter on dedicated systems in your network, it is highly recommended to update all systems to the latest version of these components. Download links for these components are provided in the service pack release announcement you received from Autodesk. Consult the latest *Autodesk WiretapCentral and Wiretap Gateway Installation and Configuration Guide* for installation instructions.

Note that importing footage shot with camera firmware build 20 or newer through the latest version of WiretapGateway and the Media I/O Adapter will produce slightly different colors than when importing the same footage through an older version of these components. If you are in the middle of a project, it is therefore recommended to re-import your footage using the latest versions of WiretapCentral, Wiretap Gateway and Backburner Media I/O Adapter. You can also touch up the colour on your imported material to compensate for the gamma and white balance differences between the old and new SDK output.

Read the following section for instructions on how to determine the camera firmware version of a R3D file.

Determining the Camera Firmware Version of a R3D File

Perform the following tasks to determine which camera firmware version was used when shooting a R3D file.

- 1 Open a terminal, and log in as root.
- 2 Browse to the directory of the current Backburner Media I/O Adapter
cd /usr/discreet/mio/current
- 3 Type the following command to obtain information about your R3D file:

```
./dl_get_media_info <path_to_R3D_file>
```

For example:

```
./dl_get_media_info  
/SAN/My_Red_Movie/A001_C017_1230QP.RDC/A001_C017_1230QP_001.R3D
```

The version and build number of the camera firmware is displayed at the beginning of the output, in the `<cameraFirmwareVersion>` section. In the example below, the firmware version is 3.5.2, and the build number is 16.

```
<XML Version="1.0">  
  <clips version="1">  
    <clip index="0">  
      <cameraFirmwareVersion type="string">3.2.5#16</cameraFirmwareVersion>
```

New Wacom Driver Available

A new driver is available for Wacom® pen tablets. This driver fixes an issue where the pen would randomly freeze for a few seconds.

Since 2010 Extension 1 SP2 does not come with a new version of the DKU, the updated Wacom driver is available as a separate download from Autodesk. Perform the following steps to download and install the updated driver.

To update the Wacom driver:

- 1 Open a terminal and log in as root.
- 2 Go to a temporary directory (for example, `/usr/tmp`) and download the driver update package by typing:
**wget
ftp://ftp.discreet.com/pub1/release/Utilities/wacom-0.8.3-5_ADSK.tar.gz**
- 3 Unpack the downloaded file by typing:
tar zxvf wacom-0.8.3-5_ADSK.tar.gz
- 4 Go to the newly-created `wacom-0.8.3-5_ADSK` directory, and start the installer by typing:
./INSTALL

- 5 When the installer finishes, log out of the KDE desktop and log back in. This action restarts the X server and activates the new driver.

Removing Corrupt Records from the Stone and Wire Database

A new script is available to help eliminate corruption issues in the Stone and Wire database.

The script opens an existing corrupt database file, extracts the records that are not corrupted, and rebuilds a new database file from these records. Corrupt records and empty records are not carried over to the new database file. Note that the script does not attempt to repair corrupt records.

WARNING Use this script only if you are sure the Stone and Wire database is corrupt, otherwise serious data loss can occur.

To remove corrupt records from a Stone and Wire database file:

- 1 Open a terminal and log in as root.
- 2 Make sure the database is actually corrupt by searching for corruption errors in the Stone and Wire database log file `/usr/discreet/sw/log/sw_dbd.log`.
If you do not find any corruption errors in the log file **DO NOT** continue this procedure.

- 3 Stop Stone and Wire by typing:

```
/etc/init.d/stone+wire stop
```

- 4 List the contents of the `/usr/discreet/sw/swdb/` directory, including hidden files:

```
ls -al /usr/discreet/sw/swdb/
```

The output is similar to the following:

```
drw-r--r-- 2 root users 4096 Jun 19 12:41 .  
drwxr-xr-x 8 root root 4096 Jul 20 11:31 ..  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part0.db  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part1.db  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part2.db  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part3.db  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part4.db  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part5.db  
-rw-r--r-- 1 root users 16384 Jul 20 11:32 part6.db  
-rw-r--r-- 1 root users 1126400 Jul 20 11:32 part7.db
```

The directory contains a `.db` file for each Stone and Wire partition. The number and the end of the filename corresponds to the partition number.

- 5 Identify the corrupt file based on the errors you found in the log file.
- 6 Go to the `/usr/discreet/sw/tools/` directory.
- 7 Run the `swdb_recover` script on the database file you identified in step 5. For example:

```
./swdb_recover /usr/discreet/sw/swdb/part0.db
```

The script asks you for confirmation, then removes corrupt entries from the specified database file.

A backup of the original file is created in the `/tmp/sw_dbd_backups/` directory.

NOTE The `swdb_recover` tool also removes empty records from the database and optimizes the database structure. Therefore it is normal for the size of the recovered database files to be much smaller than the original file size.

- 8 Restart Stone and Wire by typing:
`/etc/init.d/stone+wire restart`
- 9 Start the Visual Effects and Finishing application. If no error message is displayed and the application starts properly, the database recovery was successful.
- 10 Optional: delete the backup file if you no longer need it.

Changing the Interpolation Type for Variable Speed Timewarps

Apple® Final Cut Pro® uses Bezier interpolation when creating variable time remaps. Since Visual Effects and Finishing applications do not use Bezier interpolation, variable time remaps from imported Final Cut Pro XML files might not be correctly translated into variable timewarps.

A new environment variable has been introduced that allows you to easily change the interpolation type of variable speed timewarps to one of the four interpolation types used by Visual Effects and Finishing applications.

The environment variable `DL_XML_VSTW_INTERPOLATION` can take one of the following four values:

- **0** for CONSTANT interpolation
- **1** for LINEAR interpolation
- **2** for HERMITE interpolation
- **3** for NATURAL interpolation

Try each of these four interpolation types to determine which one of them produces the closest results to the original Final Cut Pro variable time remaps.

To set the variable to one of these four values, perform the following procedure before importing the XML.

- 1 Close the Visual Effects and Finishing application, if it is running.
- 2 Open a terminal and set the environment variable to the interpolation type you want to use by typing:
`setenv DL_XML_VSTW_INTERPOLATION <value>`

Where `<value>` is one of the four possible values listed above.

NOTE If no value is specified, or if an incorrect value is used, the variable defaults to LINEAR.

- 3 Restart your Visual Effects and Finishing application, and import the XML.
If variable timewarps do not look satisfactory, close the application and try setting the environment variable to one of the other possible values.

Restoring a Pre-2010 Project

When restoring a project created in a version of an Autodesk Visual Effects and Finishing application prior to 2010, you must convert the permissions of the project so they are compatible with the 2010 Extension 1 version of the application. Use the procedure below for such a conversion.

To make the permissions of a pre-2010 project compatible with the 2010 Extension 1 release:

- 1 In the 2010 Extension 1 application, restore the pre-2010 project.
- 2 Close the application.
- 3 In a command line, execute the `changePermissions` script. Type:

```
/usr/discreet/APPLICATION_NAME/bin/changePermissions -p PROJECT_NAME
```

Where `APPLICATION_NAME` is the directory of the 2010 Extension 1 application, and `PROJECT_NAME` is the name of the project just restored.

Cleaning up Missing Frames Before Upgrading to the Current Release

If you are upgrading to the current 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 the following section for instructions on how to detect and troubleshoot missing frames.

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.

Application Feature Changes

4

Topics in this chapter:

- [Introduction](#) on page 19
- [Auto-Consolidation of Clips with Handles in Recapture](#) on page 19
- [Disabling Graphics Tablet Buttons](#) on page 19
- [WiretapCentral Updates](#) on page 20

Introduction

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

Auto-Consolidation of Clips with Handles in Recapture

In the Recapture menu, the application now tries to match the available clips to the timeline with minimal handles. If excess handles are detected, it proposes to consolidate the timeline using the lowest common amount of handles shared by the clips.

Accepting the consolidation makes the clips relinkable. Refusing the consolidation renders the same clips unlinkable.

Disabling Graphics Tablet Buttons

You can enable and disable the tablet buttons by enabling or disabling the Tablet Buttons option located in the Pointer section of the Preferences menu.

WiretapCentral Updates

This section contains additional information about WiretapCentral.

Negative Speed and Non-Constant Timewarps

Clips with negative speed or non-constant timewarps are imported in full, without consideration for in and out points.

RED RSX Settings Support

Use REDAlert! Version 3.6 and lower to create RSX settings. Changes in the RED Color Science introduced with RedAlert! Versions 20.0.1 are not supported in WiretapCentral.