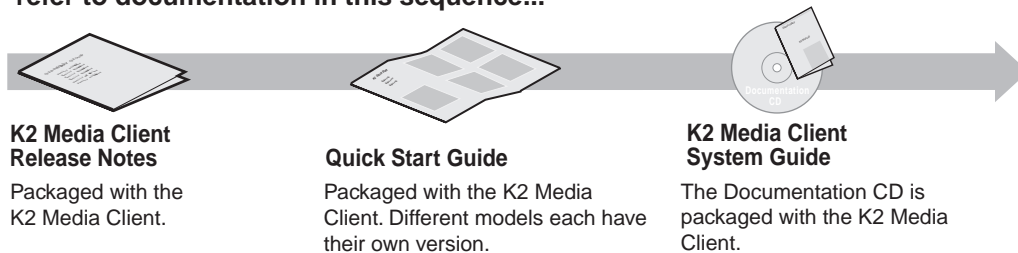# K2 Media Client Version 3.2.74 Release Notes & Upgrade Instructions

These release notes contain the most recent information and supersede previous publications, as of October 17, 2008. Check the Grass Valley website at *www.thomsongrassvalley.com/docs* for an updated version that contains additional important information.
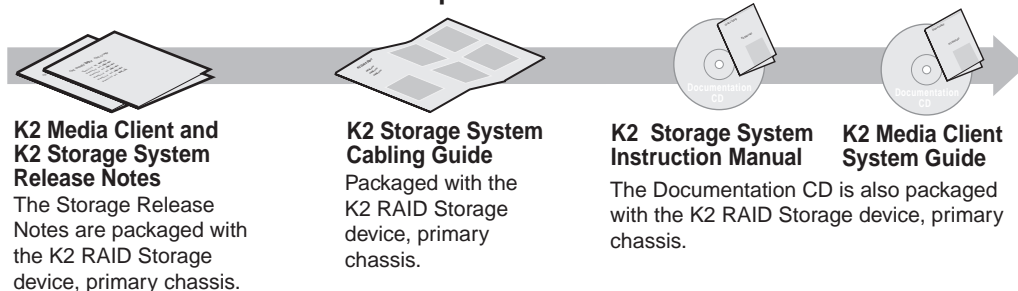
These release notes provide information about the K2 Media Client hardware and software. The information in these release notes applies to both stand-alone (local) storage models and shared storage models of the K2 Media Client.

For additional information that relates to only shared storage K2 Media Clients, also read the *K2 Storage System Release Notes.*

If you are installing new K2 Media Client models with stand-alone storage, refer to documentation in this sequence...

K2 Media Client Release Notes

Packaged with the K2 Media Client.

Quick Start Guide

Packaged with the K2 Media Client. Different models each have their own version.

K2 Media Client System Guide

The Documentation CD is packaged with the K2 Media Client.

If you are installing a K2 Storage System with connected K2 Media Clients, refer to documentation in this sequence...

K2 Media Client and K2 Storage System Release Notes

The Storage Release Notes are packaged with the K2 RAID Storage device, primary chassis.

K2 Storage System Cabling Guide

Packaged with the K2 RAID Storage device, primary chassis.

K2 Storage System Instruction Manual

The Documentation CD is also packaged with the K2 RAID Storage device, primary chassis.

K2 Media Client System Guide

Table of Contents

Grass Valley Product Support

To get technical assistance, check on the status of a question, or to report new issue, contact Grass Valley Product Support via e-mail, the Web, or by phone or fax.

Web Technical Support

To access support information on the Web, visit the product support Web page on the Grass Valley Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: http://www.thomsongrassvalley.com/support/
Technical Support E-mail Address: gvgtechsupport@thomson.net.

Telephone Support

Use the following information to contact Product Support by phone.

International Support Centers

Our international support centers are available 24 hours a day, 7 days a week.

Support Center	Toll free	In country
France	+800 80 80 20 20	+33 1 48 25 20 20
United States	+1 800 547 8949	+1 530 478 4148

Authorized Local Support Representative

A local support representative may be available in your country. To locate a support center during normal local business hours, refer to the following list. This list is regularly updated on the website for Thomson Grass Valley Product Support (http://www.thomsongrassvalley.com/support/contact/phone/).

After–hours local phone support is also available for warranty and contract customers.

Region	Country	Telephone
Asia	China	+861 066 0159 450
	Hong Kong, Taiwan, Korea, Macau	+852 2531 3058
	Japan	+81 3 5484 6868
	Southeast Asia - Malaysia	+603 7805 3884
	Southeast Asia - Singapore	+65 6379 1313
	Indian Subcontinent	+91 11 515 282 502 +91 11 515 282 504
Pacific	Australia, New Zealand	+61 1300 721 495
Central America, South America	All	+55 11 5509 3440
North America	North America, Mexico, Caribbean	+1 800 547 8949 +1 530 478 4148

Grass Valley Product Support

Region	Country	Telephone
Europe	UK, Ireland, Israel	+44 118 923 0499
	Benelux – Netherlands	+31 (0) 35 62 38 421
	Benelux – Belgium	+32 (0) 2 334 90 30
	France	+800 80 80 20 20 +33 1 48 25 20 20
	Germany, Austria, Eastern Europe	+49 6150 104 444
	Belarus, Russia, Tadzhikistan, Ukraine, Uzbekistan	+7 095 258 09 20 +33 (0) 2 334 90 30
	Nordics (Norway, Sweden, Finland, Denmark, Iceland)	+45 40 47 22 37
	Southern Europe – Italy	+39 02 24 13 16 01 +39 06 87 20 35 42
	Southern Europe – Spain	+34 91 512 03 50
Middle East, Near East, Africa	Middle East	+971 4 299 64 40
	Near East and Africa	+800 80 80 20 20 +33 1 48 25 20 20

What's new in release 3.2.74

- This version of K2 system software includes several improvements, in addition to correcting some problems that were present in earlier releases.

- **Standard Definition Ancillary Data Support** — The new software can record SD Ancillary data on a separate track. Supports Closed Captioning and Teletext. Refer to the *K2 Media Client User Manual*.

- **Ancillary timecode** — Supports VITC and LTC ancillary timecode on HD channels for record and playout. SD ancillary timecode is preserved only. Refer to the *K2 Media Client User Manual*.

- **SD Compressed VBI** — Support for Standard Definition (SD) Compressed VBI closed captioning. Refer to "Compressed VBI import" later in these release notes.

- **Subtitles** — An API is provided for access to subtitling data, allowing Closed Captioning and Teletext systems to produce timecode correlated subtitles for an existing K2 clip.

- **House LTC Input** — HD-00 models have an updated codec board that provides a House LTC input. With this connector you can input LTC time code as a Time of Day source. The part number of the new codec board is 691-0031-51. Contact your Grass Valley representative for information on upgrading existing systems to the new codec board.

- **K2 XML Import capture service** — Imports media from 3rd party applications, as defined by an XML file. Refer to the *K2 Media Client System Guide*.

- **K2 Pathfire capture service** — The K2 Pathfire capture service now supports SD content. This is in addition to the HD content currently supported.

- **HotBin sub-directories** — In the watched folder, the HotBin service creates directories named *Archive*, *Fail*, and *Success*. Refer to the *K2 Media Client System Guide* for details.

- **XDCAM support** — XDCAM-HD422, XDCAM-HD, and XDCAM-EX are supported.

- **Media File System** — Upgrade to version 3.1.2.RC25225.6138 SNFS (StorNext File System) software is required. This is the media file system software. Refer to the upgrade procedure later in these release notes.

- **Windows operating system qualification** — K2 control point software is now qualified on Windows Vista and Windows 2003 Server operating systems. Control point software remains qualified on the Windows XP operating system. Upgrade from Windows XP is not required. If you are using NetCentral on the control point PC, be advised that NetCentral is not qualified on Windows Vista.

- **Windows operating system licensing** — The type of license used for Microsoft Windows has changed. It is no longer necessary to activate the license after restoring from the generic recovery disk image.

- **15 K drives** — K2 Media Clients shipping from the factory can contain 15K drives, rather than the previous 10K drives. The 15K drives are identified as model "MBA" by a label on the drive. 15K drives are also provided as Field Replaceable Units (FRU). If you have a LUN of 10K drives, you may replace one of the 10K drive with a 15K drive. If you have a LUN of 15K drives, you must ***not*** replace one

of the 15K drives with a 10K drive.

- **Playlist enhancement** — For the AppCenter Pro "Import text file as playlist" feature, the clip name can now include a path. The format for specifying a path with the clip name is volume:/binname/clipname. For example, *V:/default/Clip_1*.

- **ProductFrame support** — Microsoft .NET Framework 3.5 SP1 and SiteConfig Network Configuration Connect Kit is required on the K2 Media Client. These software components provide support for Grass Valley system management tools.

- **Documentation for this 3.2.74 release** — Use the documents on the K2 Documentation CD, part number 063-8244-06. The following documents have been revised:

Document	Part number
K2 Media Client Field Kit Upgrade Instructions	071-8450-02
K2 Media Client Quick Start Guide for SD-00 models	071-8453-04
K2 Media Client Quick Start Guide for HD-00 models	071-8454-04
K2 Media Client User Manual	071-8459-03
K2 Media Client System Guide	071-8460-05
K2 Storage System Instruction Manual	071-8461-04
Monitoring the K2 Media Client with NetCentral	071-8464-02
Monitoring the K2 Media Server with NetCentral	071-8465-02
Monitoring the K2 Level 2 and Level 3 RAID with NetCentral	071-8467-01
K2 Media Client Service Manual	071-8468-06
K2 Media Client Quick Start Guide for SDA-00 models	071-8576-02
K2 Storage System Level 10 Cabling Guide	071-8596-01
K2 Lx0 RAID Instruction Manual	071-8614-01
K2 InSync User Guide	071-8529-01

Feature limitations in this release

- Combining play channels and record channels in one gang is not supported.

- The gang feature does not support playlists.

- The track mapping feature does not support playlists.

- AVI import/export is supported only via AppCenter import/export features and only for DVCAM/DV25/DV50 clips.

- QuickTime FTP import/export is not supported.

Changes in previous releases

The following sections describe the changes in past releases.

Version 3.2.58

- **Catch server support** — The K2 Capture Service provides licensable features for automatically importing media from DG and Pathfire catch servers. Refer to the *K2 Media Client System Guide* for procedures.

- **Playlist enhancements** — Playlist has new features. Refer to the *K2 Media Client User Manual*.

- **AppCenter Pro track management enhancement** — Audio track mapping in the licensable AppCenter Pro option has new rules. Refer to the *K2 Media Client User Manual*.

- **Timecode labeling enhancement** — On the SD-00 K2 Media Client, AppCenter provides additional information to clarify timecode settings. The channel Options dialog box Timecode tab has modified text and layout. On the channel pane, the Timecode Source indicator reports source during playout.

- **E-to-E (LoopThru) mode** — On the SD-00 K2 Media Client, the Player/Recorder application has a new "E-to-E (LoopThru) mode" selection on the Control menu. This mode applies when the channel is under local AppCenter control as well as when it is under remote control, for all protocols.

  When E-to-E is selected, the channel behaves as follows:

  - "EE" is displayed on the channel pane, next to the Timecode Source indicator.

  - When no clip is loaded, the signal that is currently present at the channel input plays out.

  - When a record operation stops, Recorder stays Recorder and the clip remains in the Recorder. The signal that is currently present at the channel input plays out.

  When E-to-E is not selected, the channel behaves as follows:

  - "PB" is displayed on the channel pane, next to the Timecode Source indicator.

  - When no clip is loaded, black plays out.

  - When a record operation stops, Recorder becomes Player and the clip remains in the Player. The clip's last frame plays out.

- **Media File System** — Upgrade to version 3.0.3b.56 SNFS (StorNext File System) software is required. This is the media file system software.

- **RS-422 connection** — RS-422 connectivity reverts to the pre-3.2.56 configuration, which is two dual-port USB cards. The motherboard has been modified to resolve all RS-422 and USB compatibility issues. This modified motherboard is known as the Type III motherboard. Refer to the *K2 Media Client Service Manual*.

- **Documentation for this 3.2.74 release** — The following manuals have been revised

for this release:

Document	Part number
K2 Media Client Service Manual	071-8468-04
K2 Media Client System Guide	071-8460-04

The revised manuals are on the December 2007 K2 Documentation CD, part number 063-8244-05, labeled "Software version 3.2".

- **Restoring from a generic recovery disk image on E:** — An issue with Windows operating system licensing has been discovered. The problem occurs only when restoring the K2 Media Client from the generic recovery disk image stored on the E partition. To avoid the problem, make sure you follow the procedure in the *K2 Media Client Service Manual* part number 071-8468-03 or higher.

Version 3.2.56

- **K2 Media Client motherboard** — The previous K2 Media Client motherboard (now known as the Type I motherboard) has reached end of life status, so a new "Type II" motherboard has been qualified and is installed in new systems. The Type II motherboard supports USB 2.0. To identify the motherboard in a K2 Media Client, view the rear panel. The Type I motherboard has a parallel port. The Type II motherboard does not have a parallel port.

- **RS-422 connection** — In this release, RS-422 connectivity is provided by a single PCI card. This is required for compatibility with the Type II motherboard. The PCI card replaces the previous configuration of two dual-port USB cards. The PCI card includes an 8-port external interface, which must be connected as shown in the following illustration. On the external interface, only ports 1–4 are active.
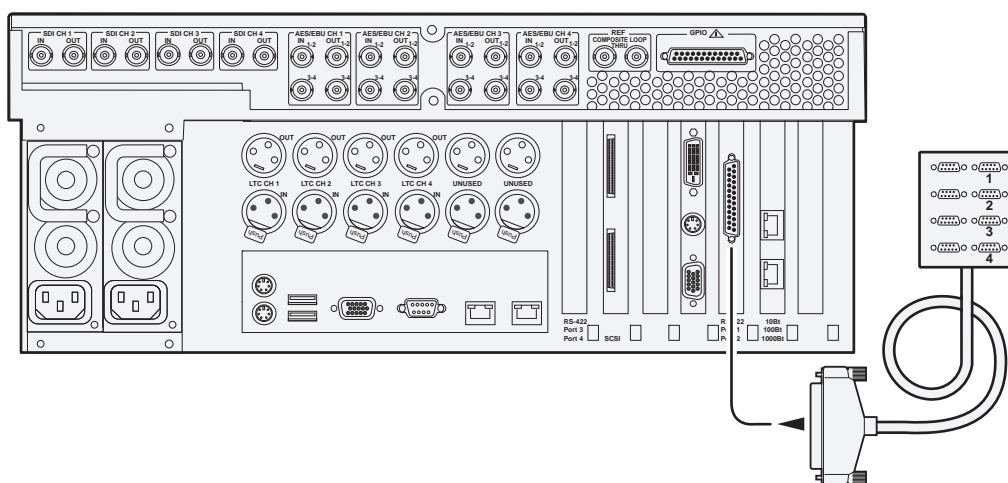
- **Direct-connect storage** — There is a new model of K2 Media Client, with its own external RAID storage directly connected. Like a K2 Media Client with internal storage, this model is referred to as "stand-alone" storage, as opposed to K2 Media Clients that connect to external shared storage.

- **HotBins feature** — A watched folder can be configured to automatically import clips into the K2 System. Refer to the *K2 Media Client System Guide* for complete specifications.

- **Media File System** — Upgrade to version 3.0.1b.39 SNFS (StorNext File System) software is required. This is the media file system software.

- **QuickTime support** — AppCenter import supports QuickTime D10/IMX, XDCAM-HD, and HDV.

- **New storage infrastructure** — There are new devices and levels of K2 Storage Systems available. Refer to *K2 Storage System Release Notes* for more information.

- **Documentation for this 3.2.56 release** — Use the September 2007 K2 Documentation CD (part number 063-8244-04) with release 3.2.56. This CD is labeled "Software version 3.2", and contains the following documents:

Document	Part number
Fibre Channel Switch Installation Manual - QLogic 5202 SANbox	071-8429-01
K2 Level 2 RAID Instruction Manual	071-8462-01
K2 Level 3 RAID Instruction Manual	071-8463-00
K2 Lx0 RAID Instruction Manual	071-8614-00
K2 Media Client Field Kit Upgrade Instructions	071-8450-01
K2 Media Client Quick Start Guide for HD-00 models	071-8454-03
K2 Media Client Quick Start Guide for SD-00 models	071-8453-03
K2 Media Client Quick Start Guide for SDA-00 models	071-8576-01
K2 Media Client Service Manual	071-8468-03
K2 Media Client System Guide	071-8460-03
K2 Media Client User Manual	071-8459-02
K2 Storage System Instruction Manual	071-8461-03
K2 Storage System Level 10 Cabling Guide	071-8596-00
K2 Storage System Level 2 Cabling Guide	071-8593-00
K2 Storage System Level 20 Cabling Guide	071-8597-00
K2 Storage System Level 3 Cabling Guide	071-8594-00
K2 Storage System Level 30 Cabling Guide	071-8598-00
K2 Storage System Nearline 10 Cabling Guide	071-8599-00
K2 TimeDelay User Manual	071-8510-01
Monitoring the HP ProCurve Ethernet Switch with NetCentral	071-8466-01
Monitoring the K2 Level 2 and Level 3 RAID with NetCentral	071-8467-00
Monitoring the K2 Lx0 RAID with NetCentral	071-8615-00
Monitoring the K2 Media Client with NetCentral	071-8464-01
Monitoring the K2 Media Server with NetCentral	071-8465-01

Document	Part number
Monitoring the Qlogic SANbox Fibre Channel Switch with NetCentral	071-8471-00

Do not use documents from the July 2007 K2 Documentation CD. The July 2007 CD is also labeled "Software version 3.2".

Version 3.2.21

- **SDA-00 K2 Media Client** — There is a new model of Standard Definition (SD) K2 Media Client that records and plays analog media as well as the digital media types supported by the SD-00 K2 Media Client. The SDA-00 K2 Media Client has two fixed recorder channels and two fixed player channels. Refer to the *K2 Media Client System Guide* for complete specifications.

- **Licensing for K2 system software** — There are licensing requirements for version 3.2 system software. If you are upgrading to version 3.2.21 or higher, make sure that you carefully follow the procedures at "Upgrading software on the K2 Media Client" and "Licensing K2 software" later in these release notes, so that licensing features are correctly installed.

- **Four channels 720p** — 720p material on four channels is supported on the following HD-00 models:

    HD-13 — One record channel, three play channels

    HD-22 — Two record channels, two play channels

- **Player/Recorder application** — On the SD-00 K2 Media Client, a Player/Recorder application replaces the Player application and the Recorder application.

- **Channel protocol control** — To configure a channel for protocol control, click the **Options** button and find settings on the **Control** tab. There are no longer separate applications for protocol control.

- **AppCenter Pro** — The AppCenter Pro product is a licensed software plug-in for version 3.2.74 K2 system software. The plug-in adds the following features to AppCenter:

    - **Channel ganging** — You can combine channels in a gang for synchronous record/play operations.

    - **Track management** — You can add and remove video and audio tracks to a clip. You can also label audio tracks and configure rules for playout on different channels.

    - **GPI features** — You can set GPI output triggers as follows:

        - On a channel basis

        - On Start Of Material (SOM), End of Material (EOM), SOM + x seconds, or EOM – x seconds

        - On channel state idle, cued-for-play, playing, cued-for-record, and recording

    - **Schedule play/record** — You can start play and record operations based on time of day.

- **Support for 32 audio tracks** — A clip with up to 32 audio tracks can be stored on a K2 system. Standard features support record and playout of up to 16 audio tracks.

AppCenter Pro features are required to create and playout more than 16 audio tracks.

- **Channel connect for protocols** — Even if AppCenter is not running, such as when a K2 Media Client starts up, channels are available for connection by remote control protocols.

- **1440 resolution support** — Recording and playout of 1440 resolution (XDCAM-HD) material is supported.

- **HDV support** — If HDV format material is transferred to a K2 system, it can be played out.

- **MPS/MTS support** — Select MPEG Program/Transport Streams (MPS/MTS) can be imported. This supports the import of graphics.

- **Security** — Based on Windows user accounts and groups, you can set permissions on bins and on channels.

- **Improved downconvert** — Video quality has been improved on downconversion from HD to SD.

- **Clip aspect ratio** — In clip properties there is an aspect ratio setting that overrides the channel's aspect ratio conversion setting.

- **Auto logon** — If you set the K2 Media Client to automatically log on to Windows at startup, AppCenter honors the setting by bypassing its log on dialog box and opening automatically as well. For more information about automatic logon in Windows XP, refer to the related Microsoft knowledge base article (KB 315231).

- **Internal storage options** — On an internal storage K2 Media Client, you have the option of 5 or 10 media drives, configured as RAID 0 or RAID 1.

- **MXF HD support** — MXF transfers now support High Definition material. DMS metadata is not supported.

- **AMP enhancements** — Developers can take advantage of new AMP protocol functionality.

- **EULA at first startup** — When you receive a K2 Media Client new from Grass Valley, at first startup an End User License Agreement (EULA) dialog box opens automatically on the screen. This is normal behavior and occurs only at the first startup.

- **Time of Day source** — The system clock and LTC are available as the source for time of day. VITC is no longer available.

Version 3.1.14

- **SQL Server 2005** — This release of K2 system software is compatible with both Microsoft SQL Server 2005, which is on new systems shipping from Grass Valley, and with Microsoft SQL Server 2000, which is on previously shipped systems. For systems currently running SQL Server 2000, there is no requirement to upgrade to SQL Server 2005.

Version 3.1.13

- **Factory installation** — This release provides updated software for pre-installation at the factory and for upgrade of existing systems at customer sites. The release

contains quality and performance improvements.

- **Product compatibility** — This release is qualified with updated versions of Grass Valley News products.

- **Media File System** — Upgrade to version 2.6.5b50 SNFS (StorNext File System) software is required. This is the media file system software.

Version 3.1.12

- **Auto logon** — You can configure a K2 Media Client so that when it starts up, it automatically logs on to Windows and AppCenter.

- **Dell 2950** — The Dell 2950 PowerEdge server is now qualified as a platform for the K2 Media Server. Refer to *K2 Storage System Release Notes* for more information.

- **FTP connections** — The K2 FTP interface supports ten connections. The number of concurrent transfers remains at four. The additional connections can be used for FTP control operations, such as file/directory management. This applies to internal storage (stand-alone) K2 Media Client transfers, as well as K2 Storage System transfers via the K2 Media Server.

Version 3.1.9 and lower

Refer to previous release notes for information about these older releases.

K2 software version compatibility

Versions qualified for compatibility with this 3.2.74 release of K2 software are summarized in the following tables:

Components on the K2 Media Client

Components that reside on the K2 Media Client are compatible with this 3.2.74 release of K2 software as follows:

K2 device	Component	Version	Comment
K2 Media Client	Windows Operating System	Windows XP	With the latest updates
	AppCenter	3.2.74	—
	Media file system (SNFS)	3.1.2.RC25225.6138	—
	QuickTime	7	—
	Microsoft .NET Framework	3.5 SP1	—
	SiteConfig Network Configuration Connect Kit	1.0	—

Grass Valley products

Grass Valley products are compatible with this 3.2.74 release of K2 software as follows:

Product	Version	Comments
Profile XP Media Platform	5.4.8 or higher	From a K2 system you can browse/transfer assets on a Profile XP system.
M-Series iVDR	2.0.13 or higher	Some transfer limitations
Aurora products	6.5	Check with Grass Valley Support regarding version availability.
NetCentral	4.1.18 or higher	Upgrade to the latest Service Pack is recommended. Information is provided when you license NetCentral.
UIM	2.1.1.223 or higher	—
K2 InSync	4.0.1	Refer to licensing information later in these release notes for special procedures.
K2 TimeDelay	2.1.3	—
K2 Avid plug-in	1.0.0.6	—
ContentShare	—	Not supported

Third party products

Products by manufacturers other than Grass Valley are compatible with this 3.2.74 release of K2 software as follows:

Product	Version	Comments
Pathfire Transfer Service	5.4.3.0	This version required for operation with the licensable K2 Pathfire capture service option.
DG	1.4.7.0 or higher	This version required for operation with the licensable K2 DG capture service option.

Recovery CD compatibility and cautions

To create a recovery disk image of a K2 Media Client or Grass Valley control point PC, use a compatible version of the Client/Workstation recovery CD, as follows

Device	Recovery CD(s), by part number
K2 Media Client, all versions/platforms	063-8245-00 063-8245-01
Control point PC on Dell 820	063-8245-00 063-8245-01 063-8245-02 063-8245-03
Control point PC on Dell 830	063-8245-03

After restoring from a generic recovery disk image, use caution when installing software, such as K2 Media Client software and SNFS software. Some software must be uninstalled before it can be installed. Refer to software upgrade instruction in these Release Notes.

Passwords and other security considerations

To provide a basic level of security, K2 systems recognize four different security levels based on Windows users and groups, and the systems ship from the factory with accounts pre-configured accordingly. To access the system you must login with the username and password for one of the pre-configured accounts.

The following table shows the different types of K2 users and their privileges. Passwords are case sensitive. The term "unknown user" applies to any user who logs in to the K2 System without using the Windows administrator, K2 administrator, or K2 user login and password.

	Windows administrator	K2 administrator	K2 user	Unknown user
Login	Administrator	K2Admin	K2User	N/A[a]
Password	adminK2	K2admin	K2user	N/A
AppCenter Configuration Manager	Full access	Full access	Can view	Can't access
AppCenter	Full access	Full access	Full access; requires an account on the K2 Media Client(s)	Can view channel suites, channel status, on-line help and System Status pane. Can export logs.
Storage Utility	Full access[b.]	Full access	Can't access	Can't access
K2 Config	Full access[b]	Full access	Can't access	Can't access
Windows Operating System	Full access	Limited access (based on Windows login privileges)	Limited access (based on Windows login privileges)	Limited access (based on Windows login privileges)

[a.] The unknown user, like all others who access the K2 system, must have a valid Windows login for the K2 Media Client or the control point PC through which the K2 system is being accessed.

b. For more information about Storage Utility or K2 Config security, see the *K2 Storage System Instruction Manual*.

AppCenter also provides security features for restricting access to channels and media in bins. These features are also based on Windows users and groups. By default these features are configured to grant full access to everyone.

To support FTP security features, K2 Media Clients have *movie* and *mxfmovie* accounts.

K2 and NetCentral security considerations

When using K2 with NetCentral, keep in mind that NetCentral has its own levels of security. Grass Valley recommends mapping the NetCentral administrator with the K2 administrator level. If you are using the Grass Valley Control Point PC, this mapping is already done for you at the factory, so you can log on to NetCentral as administrator using the K2 administrator (K2Admin/K2admin) logon. You can also assign other NetCentral groups to users, as necessary for your site's security policies. You need Windows administrator privileges to add or modify a user's privileges.

For information on mapping a NetCentral administrator to the K2 administrator level, see the *K2 Media Client System Guide*. For more information on NetCentral security, see the *NetCentral User Guide*.

Upgrading software on the K2 Media Client

K2 system software version 3.2.74 is installed on new K2 systems as they come from the factory. If you have a new K2 system, you should not need to upgrade software. For general information about K2 software, refer to the *K2 Media Client System Guide*.

The following installation steps provide information specifically for the upgrade to version 3.2.74 software. Read the information in these sections carefully before attempting the upgrade.

Prerequisites for this procedure are as follows:

• These upgrade instructions assume that current K2 system software is at version 3.0.1.4 or higher. If you have a lower version of software, contact Grass Valley Support before upgrading.

• If you are upgrading a K2 Storage System with connected shared K2 Media Clients, review the upgrade steps in the K2 Storage System Release Notes, as you must follow those instructions as well.

NOTE: When upgrading from a version lower than 3.2, K2 system software installs with a 30 day trial license. You will need a permanent license to operate beyond the trial period. Before beginning this upgrade process, read licensing information elsewhere in these release notes.

Step 1: Make recovery disk image

Do not do this step if:

• You previously made a disk image of the K2 Media Client at its current software version. Skip ahead to "Step 2: Take K2 Media Client offline".

Do this step if:

• You do not have a disk image of the K2 Media Client at its current software version.

The recommended procedure is to make a recovery disk image immediately after a software upgrade. If you neglected to do this when you last upgraded software you should make the recovery disk image now, before upgrading to the new version. Refer to the *K2 Media Client Service Manual* for instructions.

⚠ *CAUTION: If you upgrade and then decide you do not want to permanently license version 3.2.74 system software, you must use the recovery disk image process to downgrade to your previous version.*

Step 2: Take K2 Media Client offline

This step is dependent upon if you are upgrading a stand-alone model or a shared storage model.

If you are upgrading a stand-alone storage K2 Media Client, do the following:

1. Stop all media access. This includes all record, play, and transfer operations

2. Skip ahead to "Step 4: Install "High Priority" Windows updates (recommended)".

If you are upgrading shared storage K2 Media Clients, do the following:

1. Stop all media access. This includes all record, play, and transfer operations

2. Shutdown all the K2 Media Clients on the K2 Storage System.

3. Proceed to "Step 3: Upgrade K2 Media Servers (shared storage only)".

Step 3: Upgrade K2 Media Servers (shared storage only)

Do not do this step if:

- You are upgrading a stand-alone storage K2 Media Client. Skip ahead to "Step 4: Install "High Priority" Windows updates (recommended)".

Do this step if:

- You are upgrading shared storage K2 Media Clients as part of the upgrade to your K2 Storage System.

After shutting down all the K2 Media Clients on the K2 Storage System, follow the upgrade steps in the *K2 Storage System Release Notes* to upgrade all your K2 Media Servers to the same software version. Then, when directed to do so by the upgrade steps in the *K2 Storage System Release Notes*, continue with the steps in these *K2 Media Client Release Notes* to upgrade K2 Media Clients.

NOTE: For shared storage K2 Media Clients, do not follow the upgrade procedure in these K2 Media Client Release Notes alone. You must also follow the upgrade procedure in the K2 Storage System Release Notes.

Step 4: Install "High Priority" Windows updates (recommended)

Windows "High Priority" updates are recommended, but not required, for version 3.2.74. While you have the K2 Media Client in an offline state to upgrade software, you should check to see if there are any new updates that you need to install. Use standard Windows procedures.

⚠ *CAUTION: Only "High Priority Updates" should be installed. Do not install other Windows or driver updates.*

Step 5: Upgrade QuickTime

Do not do this step if:

- QuickTime is currently at version 7. This is the case if the current K2 software is a 3.1.x version or higher, as QuickTime 7 is required beginning with 3.1 versions. Skip ahead to "Step 7: Uninstall K2 software".

Do this step if:

- QuickTime is at a version lower than 7. This is the case if the current K2 software is a 3.0.1 version.

To upgrade QuickTime, do the following:

1. Insert the version 3.2.74 K2 System Software CD in the K2 Media Client's CD drive, if it is not already inserted, or otherwise access the version 3.2.74 installation

files.

2. Locate and open the QuickTime install file:

   QuickTimeInstaller.exe

3. Work through the install wizard. Choose **English** and respond with **Next**, **Yes**, **Next**, **Finish**, and **No Thanks**.

Step 6: Install ProductFrame support

Before doing this step:

Determine if ProductFrame support is already installed, as follows:

• Open **Add/Remove Programs** and look for the following:

  • SiteConfig Network Configuration Connect Kit

  • Microsoft .NET Framework 3.5 SP1

Do not do this step if:

• The Connect Kit and .Net 3.5 are already installed. This is the case if the K2 Media Client shipped new from the factory with version 3.2.74 or higher, or if the K2 Media Client was previously upgraded to version 3.2.74 or higher using these upgrade instructions. Skip ahead to "Step 7: Uninstall K2 software".

Do this step if:

• The Connect Kit and .Net 3.5 are not both already installed.

Install ProductFrame support by installing the Connect Kit. When you install the Connect Kit, .Net 3.5 is also installed, as follows:

1. Insert the version 3.2.74 K2 System Software CD in the K2 Media Client's CD drive, if it is not already inserted, or otherwise access the installation files that are associated with version 3.2.74.

2. On the CD in the *ConnectivityKit* directory find *GVG_ConnKit.exe*. This is a self-extracting archive. Extract it to *C:\temp*.

3. In *C:\temp* open the *ConnectivityKit* directory and run *setup.exe*.

4. Wait while .Net 3.5 installs. This can take up to 15 minutes. During this time there is minimal indication of progress. Do not shutdown or otherwise interfere with the installation process.

   After the .Net installation process completes, a message appears that prompts you to restart.

5. Restart as prompted.

   After startup processes complete, the Connect Kit installation wizard opens

6. Work through the install wizard. Accept all defaults. Respond with **Next** and **Close**.

7. When prompted, you do not need to restart the machine.

   It is not necessary to restart at this point. The restart after you uninstall SNFS in a later step is sufficient.

Step 7: Uninstall K2 software

1. Stop all media access on the K2 Media Client.

2. Use the Windows **Add/Remove Programs** control panel and uninstall GrassValleyK2Client software.

   It is not necessary to restart the K2 Media Client at this point. The restart after you uninstall SNFS in the next step is sufficient.

3. Identify the currently installed version of SNFS software. If you are not sure, check **Start | Programs | StorNext File System | Version Information**.

4. Depending on the version of SNFS currently installed, proceed to one of the following steps:

   • "Step 8: Uninstall SNFS versions lower than 3.0"

   • "Step 8: Uninstall SNFS version 3.0.1b.39 or 3.0.3b.56"

Step 8: Uninstall SNFS versions lower than 3.0

Do not do this step if:

   • SNFS version 3.0.1b.39 or 3.0.3b.56 is currently installed. Instead do the next "Step 8: Uninstall SNFS version 3.0.1b.39 or 3.0.3b.56".

Do this step if:

   • A SNFS is version lower than 3.0.x is currently installed.

   NOTE: Do not use Windows Add/Remove Programs to uninstall.

1. Make sure you are logged in to the K2 Media Client with a local administrator account.

2. Insert the version 3.2.74 K2 System Software CD in the K2 Media Client's CD drive or otherwise access the version 3.2.74 installation files.

3. Locate and open the following file:

   gvRemoveSnfs26.bat

4. When prompted, follow on-screen instructions to confirm removal of SNFS software. Click Yes, OK, and press any key to proceed.

   NOTE: Do not uninstall a SNFS version lower than 3.0 using Windows Add/Remove Programs.

5. Restart the K2 Media Client using the Windows operating system restart procedure.

6. Proceed to "Step 9: Install K2 software".

Step 8: Uninstall SNFS version 3.0.1b.39 or 3.0.3b.56

Do not do this step if:

   • A SNFS version lower than 3.0.x is currently installed. Instead do the previous

"Step 8: Uninstall SNFS versions lower than 3.0".

Do this step if:

- SNFS version 3.0.1b.39 or 3.0.3b.56 is currently installed.

1. Make sure you are logged in to the K2 Media Client with a local administrator account.

2. Use the Windows **Add/Remove Programs** control panel and uninstall SNFS.

3. Restart the K2 Media Client using the Windows operating system restart procedure.

4. Proceed to "Step 9: Install K2 software".

Step 9: Install K2 software

Before installing K2 system software, make sure that QuickTime is at the required version, as instructed in the previous steps. If QuickTime 7 is not installed, the installation program pops up an informative message and you are prevented from completing the installation.

Before installing a new version of K2 system software, make sure that the K2 Media Client has been restarted at least once since the previous version of K2 system software was uninstalled.

1. Log in to the K2 Media Client with a local administrator account. This is required to support K2 System Software licensing.

NOTE: When installing K2 system software, you must be logged in with a local administrator account. Do not install software using a domain account.

2. Insert the version 3.2.74 K2 System Software CD in the K2 Media Client's CD drive, if it is not already inserted, or otherwise access the version 3.2.74 installation files.

3. Locate and open the following file:

    \K2Client\setup.exe

4. Follow the onscreen instructions, and work through each page.

5. When you arrive at the Specify Target Type page, you have the following options:
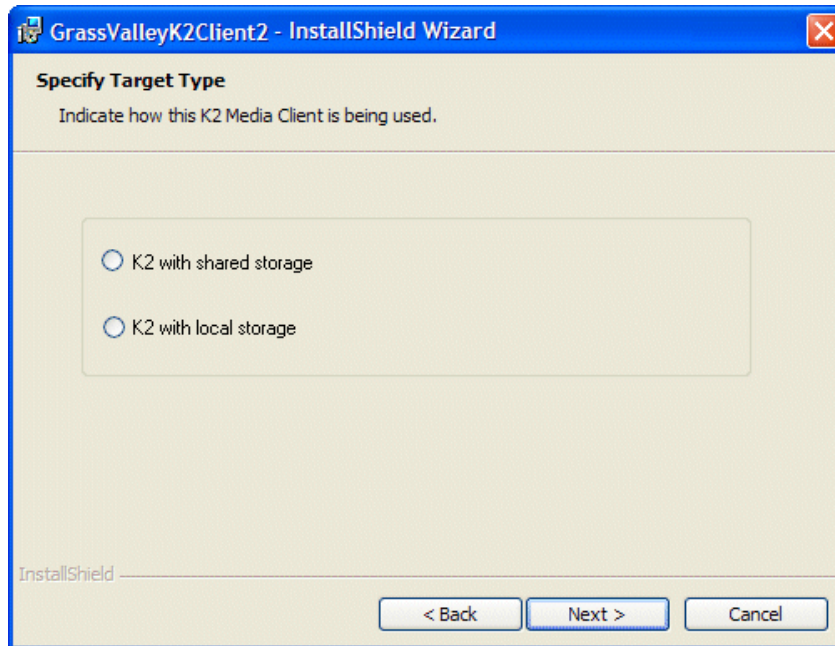
- **K2 with shared storage** — Select this option if you are installing on a shared storage (SAN) K2 Media Client.

- **K2 with local storage** — Select this option if you are installing on an internal storage K2 Media Client or on a direct-connect storage K2 Media Client.

6. Depending on the state of the system when upgrading, you might see one or more of the following screens or messages as you work through the installation wizard. Proceed as instructed, and then continue with this procedure:

If a "…insert disk…" message appears while installing from a CD, cancel the installation wizard and do one of the following:

- Uninstall the current version of K2 Media Client system software, then repeat this procedure and re-install K2 Media Client system software.
- Copy the directory that contains the installation files from the CD to the local hard drive, then repeat this procedure, opening the local *setup.exe* file rather than the file on the CD.

If one or more messages appear referring to "…has not passed Windows logo testing…", you can safely continue. This is a normal part of the upgrade.

- Click **Yes** or **Continue…** to allow the installation to progress.

If a "…non-standard installation…" message is displayed in the installation wizard in blue text, as in the image below, follow the instructions in the message, as follows:
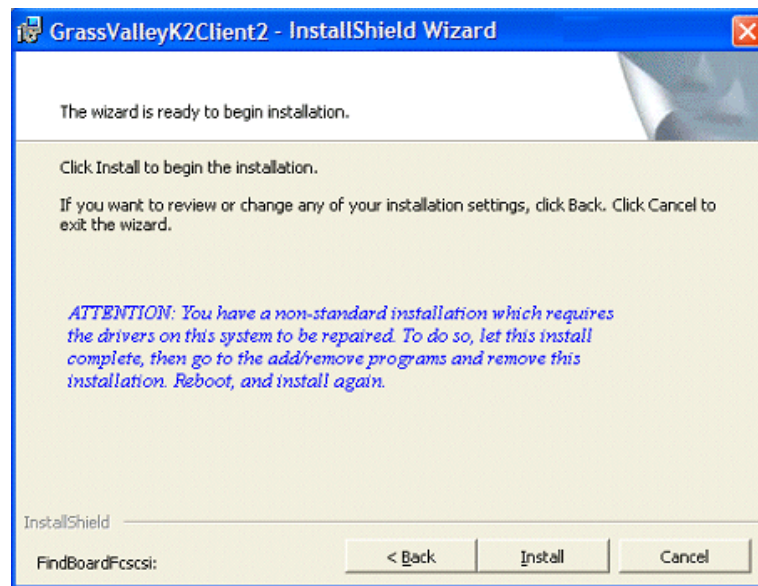
- Complete the installation wizard.
- Uninstall K2 Media Client software.
- Restart the K2 Media Client using the Windows operating system restart procedure.

• Repeat this procedure and install software again.

If installation progress stops after about a minute and does not proceed, look in the Windows taskbar for a Hardware Update Wizard window that has opened.
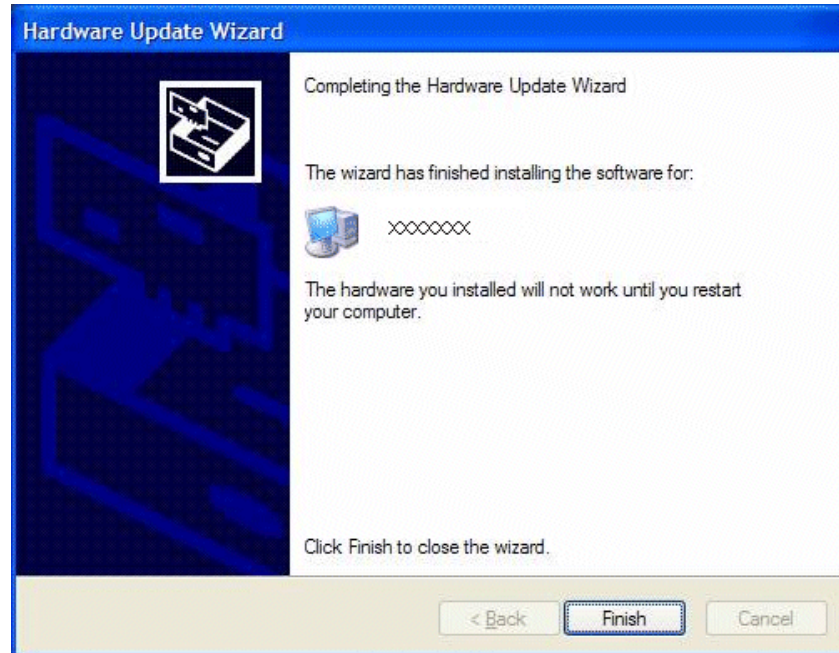
• Click **Finish** on the Hardware Update Wizard to continue installation.

7. Click **Next** and **Finish** to complete the installation.

8. When prompted, you do not need to restart the machine.

   It is not necessary to restart the K2 Media Client at this point. The restart after you install SNFS in the next step is sufficient.

Step 10: Install SNFS

Before installing a new version of SNFS software, make sure that the K2 Media Client has been restarted at least once since the previous version of SNFS software was uninstalled.

1. Insert the version 3.2.74 K2 System Software CD in the K2 Media Client's CD drive or otherwise access the version 3.2.74 installation files.

2. Locate and open the following file:

   gvSnfs312SetupK2.bat

   The command window appears. After a pause, messages confirm setup complete.

3. Press any key to proceed.

4. Restart media file system services as follows:

   a. Click **Start | Programs | SNFS File System | Stop File System Services**.

   b. Click **Start | Programs | SNFS File System | Start File System Services**.

5. Restart the K2 Media Client using the Windows operating system restart procedure.

Step 11: Verify upgraded software

When the K2 Media Client starts up, you can verify that the correct versions of software are installed as follows:

1. Log on to AppCenter.

2. In AppCenter click **Help | About**. The About dialog box opens.

3. Identify versions as follows:

System Version	3.2.74.xxx	These should both report the same version number. This is the K2 System Software version number.
RTS Version	3.2.74.xxx	
Media File System	3.1.2.RC25225.6138	This is the SNFS version.

Step 12: Verify network adapter order

Upgrades can alter network adapter order. Before proceeding, you must check the order of the network adapters and reorder them if necessary.

1. On the Windows desktop right-click **My Network Places** and select **Properties**. The Network Connections window opens.

2. On the menu bar at the top of the window, select **Advanced**, then **Advanced Settings…**

3. On the **Adapters and Bindings** tab, depending on the K2 Media Client's storage, make sure that adapters are ordered as follows. Reorder if necessary:

Internal storage unteamed	Internal storage teamed	Direct-connect storage	Shared (SAN) storage
Loopback	Loopback	Loopback	Control Team
Control Connection #1	Control Team	Control Connection #1	Media Connection #1
Control Connection #2	FTP Team	Media Connection #1	Media Connection #2
Media Connection #1	—	—	Loopback
Media Connection #2	—	—	—

4. Click **OK** to close Advanced settings and accept the changes.

5. Close the Network Properties window.

6. Proceed as follows, dependent upon if you are upgrading a stand-alone storage model or a shared storage model.

If you are upgrading a stand-alone storage K2 Media Client, do the following:

a. If you have other stand-alone storage K2 Media Clients, repeat the previous steps to upgrade these other machines.

b. When you have upgraded all your K2 Media Clients, proceed with "Step 14:

Upgrade software on Control Point PC".

If you are upgrading shared storage K2 Media Clients, do the following:

a. Repeat the previous steps to upgrade the other K2 Media Clients on the K2 Storage System.

b. When all the K2 Media Clients on the K2 Storage System are upgraded, return to the *K2 Storage System Release Notes* and complete the upgrade steps for the K2 Storage System.

Step 13: Upgrade MPIO

Do not do this step if:

- The K2 Media Client has internal storage.

- The K2 Media Client has shared storage on a non-redundant K2 Storage System.

- The K2 Media Client has direct-connect storage with a 2 Gb/s GVG SCSI Fibre Channel card.

- The K2 Media Client has direct-connect storage with a dual port 4 Gb/s LSI Fibre Channel card, but only one port is connected to a RAID controller.

Do this step if:

- The K2 Media Client has shared storage on a redundant K2 Storage System.

- The K2 Media Client has direct connect storage with a dual port 4 Gb/s LSI Fibre Channel card with each port connected to a different RAID controller.

The installation files for the Multi-Path I/O software are copied on to the K2 Media Client when the K2 Client software is installed.

To install Multi-Path I/O software, do the following:

1. On the K2 Media Client, click **Start | Run**, type cmd and press **Enter**. The MS-DOS command prompt window opens.

2. From the command prompt, navigate to the *C:\profile\mpio* directory.

3. Type the following at the command prompt:

   gdsminstall.exe -i c:\profile\mpio gdsm.inf Root\GDSM

4. Press **Enter**. The software is installed. The command prompt window reports the following:

```
Pre-Installing the Multi-Path Adapter Filter...
Success


Installing the Multi-Path Bus Driver...
Success


Installing the Device Specific Module...
```

```
Success


Installing the Multi-Path Device Driver...
Success


Restarting all SCSI adapters...
Success (but need a reboot)
```

5. Restart the K2 Media Client.

6. After restart, to verify that the software is installed, on the Windows desktop right-click **My Computer** and select **Manage**. The Computer Management window opens.

7. In the left pane select **Device Manager**.

8. In the right pane open the **System devices** node and verify that **GVG ISCSI Multi-Path Device Specific Module** is listed.

9. Proceed to "Step 14: Upgrade software on Control Point PC".

Step 14: Upgrade software on Control Point PC

To upgrade Control Point software, do the following:

1. Use the Windows **Add/Remove Programs** control panel and remove K2 control point software.

2. Insert the version 3.2.74 K2 System Software CD in the Control Point PC's CD drive or otherwise access the version 3.2.74 installation files.

3. Run the Control Point installation program (setup.exe). No special procedures are required.

You must upgrade the control point PC to 3.2 or higher if it is to access a K2 Media Client upgraded to 3.2 or higher. K2 software versions lower than 3.2 do not support K2 security features, therefore a control point PC at a lower version is not authorized to access an upgraded K2 Media Client.

Step 15: Configure settings for protocol control

Do not do this step if:

• You do not control any K2 Media Client channels with remote control protocols. Skip ahead to "Step 16: Make recovery disk images".

Do this step if:

• You have upgraded from a version lower than 3.2 and you control one or more K2 Media Client channels with remote control protocols.

With K2 system software release 3.2 and higher, there are no longer protocol applications for each channel. Instead, you configure settings for protocol control in each channel's Options dialog box. Therefore, if you had a protocol application assigned to a channel in a pre-3.2 version of K2 system software, your protocol settings are lost when you upgrade to a 3.2 version.

• To configure a channel's settings for protocol control, click the channel's **Options** button and find settings on the **Control** tab. Select the protocol type and control setting. Refer to the *K2 Media Client User Manual* for detailed instructions.

Step 16: Make recovery disk images

After you have upgraded software as instructed in these release notes and verified that your system is working properly, you should always make a recovery disk image of each of your K2 systems.

• To make a recovery disk image of the K2 Media Client or Control Point PC, refer to the *K2 Media Client Service Manual* for procedures.

The upgrades to your K2 systems are now complete.

Licensing K2 software

This section is divided into two topics

About K2 software licensing

K2 system software version 3.2.74 requires a license from Grass Valley. Licensing is enforced at the K2 Media Client, so every K2 Media Client running version 3.2.74 must have a valid license in place. No license is required on the K2 Media Server.

K2 Media Clients shipping new from the factory have version 3.2.74 pre-installed with a permanent license in place, so no licensing steps are required unless you want to add optional features such as AppCenter Pro. However, if you upgrade an existing K2 Media Client from a version lower than 3.2 to software version 3.2.74, the software installs with a trial license in place. You must obtain a permanent license from Grass Valley and install it on the K2 Media Client before the trial period expires. For licensing procedures, see "Requesting a license".

Licenses are requested through the K2 License Wizard and managed through the SabreTooth License Manager, which is installed with K2 software. The K2 License Wizard and SabreTooth License Manager must be located on the K2 Media Client.

License information is stored in text files that you can manage just like any other file on your system. Licenses are unique to the system for which they are requested and cannot be used on any other machine.

Licenses are based on your system's unique identifier, which is partially derived from your system's Media Access Control (MAC) address. If you change your system's MAC address by performing operations such as changing the System Processor card, or changing an Ethernet card, you must obtain a new license based on the new MAC address.

After temporary licenses expire

After the temporary license expires, if you have not yet obtained a permanent license, the following occurs:

• The K2 system 3.2 software temporary license will expire. You will not be able to start AppCenter once the license has expired. If running, AppCenter will not stop working, and any remote control protocols will continue to function. However, you will not be able to make any changes in AppCenter, such as altering the configuration.

• The AppCenter Pro temporary license will expire and the AppCenter Pro features will stop functioning.

Obtaining and maintaining licenses

Use the K2 Media Client License Wizard for the following task:

-

Use the SabreTooth License Manager for the following tasks:

-
-
-
-

Requesting a license

Software licenses are unique to the system for which they are purchased. They cannot be used on any other system. This requires that you provide a generated unique ID for the desired system to Grass Valley, which is then used to create your unique license. These instructions apply to K2 3.2.74 software or to the K2 AppCenter Pro application.

NOTE: If you are upgrading K2 software on a K2 Media Client with a permanent K2 InSync license, your K2 InSync license will operate as usual. However, if you install K2 InSync for the first time on a K2 Media Client running K2 software version 3.1.14 or higher, refer to "If you encounter difficulties when requesting a license" on page 32.

To get a license number, follow these steps:

1. Log on to the K2 Media Client that you want to license.

NOTE: You must log in as an Administrator with a local account, not a domain account.

2. On the Windows desktop of the computer where you want to install the license, click the appropriate license request icon. Alternately, you could select **Programs | Grass Valley | Request AppCenter Pro license** or **Request K2-ClientSoftware license**.

   Based on your selection, the License Request Wizard for K2 3.2.74 or K2 AppCenter Pro displays.
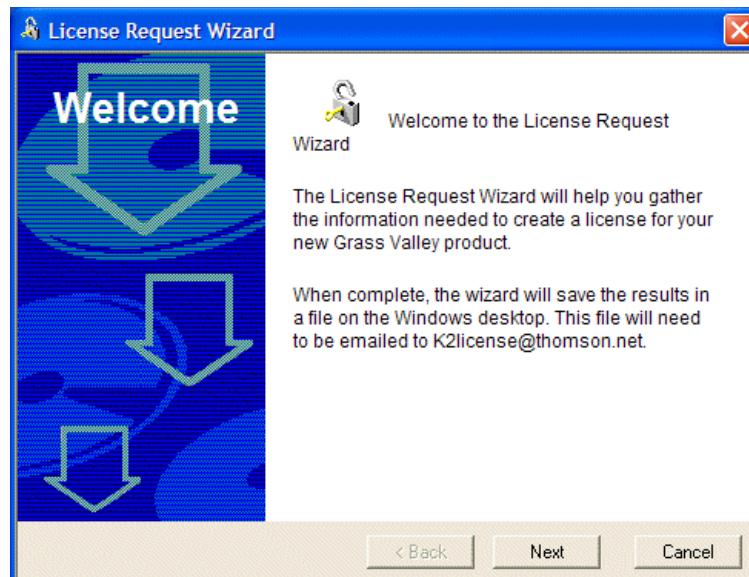
3. Read the on-screen instructions, then click **Next** to proceed to the customer information screen. The Customer dialog box displays.
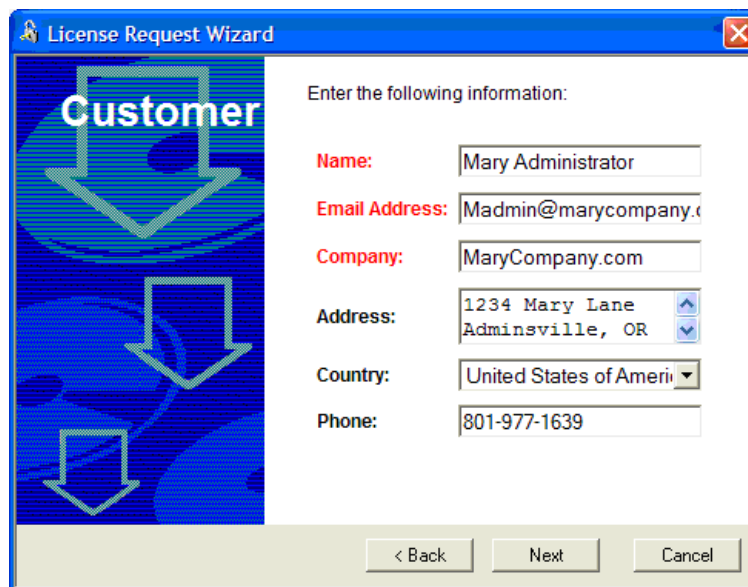
4. Enter the information requested in red font on this page. You must provide a valid email address to receive your license file.

5. Click **Next** to continue. The Sales Number dialog box displays.
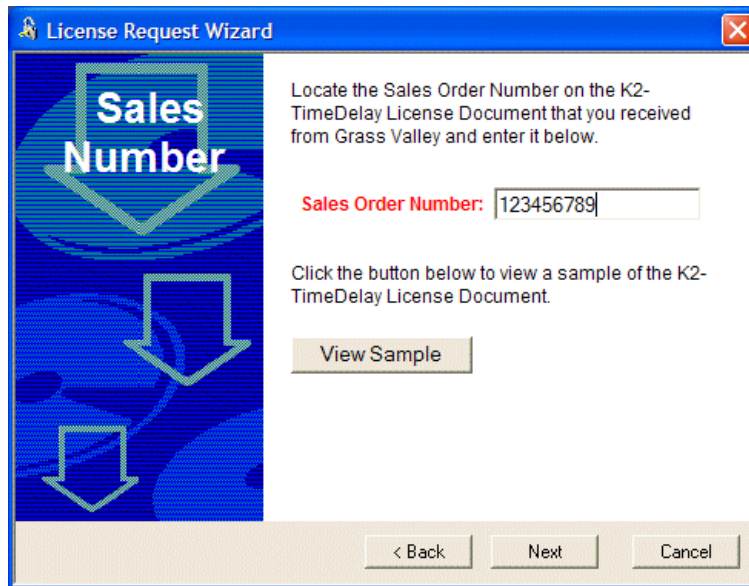
6. Enter the Sales Order Number in the field. The Sales Order Number can be found on the Software License sheet that accompanies the K2 Media Client software CD.

7. Click **Next** to continue. The Summary dialog box displays.
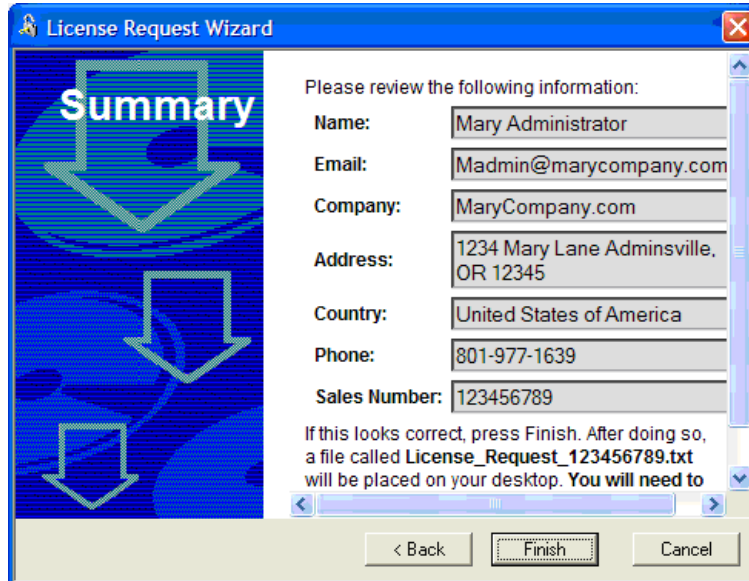
8. Review the License Request information and click **Finish**. A License Request text file, *License_Request_<SalesNumber>.txt*, is generated and saved to the Windows Desktop.

NOTE: If you are requesting licenses for more than one application, be sure to modify the name of the first License Request text file before saving it to your desktop. (In Notepad, use the Save As command.) Otherwise, the second License Request text file will overwrite it.

9. Attach this text file to an email and send it to K2License@thomson.net. You can also paste the text directly into an email message. You might want to keep a copy of the message for your records.

10.An email will be sent from Grass Valley to the return email address you specified; your SabreTooth software license will be provided as a text file. (Save this email in case you ever need to re-image this machine.)

NOTE: If you are requesting licenses for more than one application, be sure to modify the name of the first License text file before saving it. (In Notepad, use the Save As command.) Otherwise, the second License text file will overwrite it.

Now that you have obtained a license, you need to add it to the SabreTooth License Manager. For more information, see "Adding a license".

If you encounter difficulties when requesting a license

If you encounter difficulties running the License wizard (for example, if installing K2 InSync on a K2 Media Client running software version 3.1.14 or higher), try this alternate method:

Send an email to K2License@thomson.net and include the following information:

• Customer Name

• Customer Email

• Sales Order Number (this is sent with your purchase of Grass Valley software)

• Unique ID of the K2 Media Client where you will install software. For more information, see "Generating a unique id".

The SabreTooth license number will be emailed to the email address you specified.

Generating a unique id

To generate a unique id:

1. Click on the License Manager icon on the Windows Desktop. The SabreTooth License Manager opens.

2. Choose **File | Generate Unique Id** the License Manager.

3. Click **Copy to clipboard** to copy the generated id, and **OK** to exit.

Adding a license

Your software license, *Licenses_<SalesNumber>.txt*, is provided as a text file. Use the License Manager to add this file to your system and enable the desired feature.

To add a license:

1. Click on the License Manager icon on the Windows Desktop. The SabreTooth License Manager opens. When K2 is first installed, a temporary 30-day license is automatically provided.

2. Choose **File | Import License** and navigate to the file location to open the text file, or drag and drop the text file onto the License Manager. You will now see the permanent license in SabreTooth, as well as any other licenses, permanent or temporary, that have been installed on this machine.

Once you have added the permanent license, you can delete the temporary license. If the temporary license is still in SabreTooth you will continue to get temporary license notifications, even with the permanent license installed, unless you delete the temporary license. For more information, see "Deleting licenses".

You might want to save the permanent license to a backup system, such as a thumb drive. For more information, see "Archiving licenses".

Deleting licenses

Deleting a license disables the feature that it enabled. You might want to delete a temporary license prior to its expiry if you have decided not to purchase the feature. You can delete a temporary license after the permanent license has been installed without disabling K2 Media Client.

To delete a license:

1. Select the license in the SabreTooth License Manager.

2. Use the Delete key on your keyboard or right click with your mouse and select Delete.

Archiving licenses

You can archive your licenses to a secure external location. This allows you to quickly re-install a license should it be deleted or should you have to downgrade and then re-install K2 3.2x software. You can archive multiple licenses at the same time.

To archive a license:

1. In the SabreTooth License Manager, select the license or licenses.

2. Choose **File | Export License** to open the Save As dialog box.

3. Assign a meaningful name to the file, and save it to the desired location. Grass Valley recommends saving the license file to a flash drive or other external location.

NOTE: If you downgrade to an earlier version of K2 software, make sure to archive the licenses first.

K2 Media Client licenses

The following table provides a list of the Grass Valley licenses that can be installed on a K2 Media Client, as of October 17, 2008. Contact your Grass Valley representative for more information about these licenses.

License	License type
K2 System Software	SabreTooth
AppCenter Pro	SabreTooth
K2 TimeDelay	SabreTooth
K2 InSync	SabreTooth
K2 Pathfire Capture Service	SabreTooth
K2 DG Capture Service	SabreTooth
K2 XML Import Capture Service	SabreTooth
50 Mbs/D10/DV50 Codec Upgrade	Codec Upgrade CD
Avid-TM	SabreTooth

K2 Media Client pre-installed software

The following software is pre-installed on the K2 Media Client when you receive it new from Grass Valley.

Software	Version		Software	Version
Adobe Acrobat Reader	9.0.0		MS-SQL Desktop Engine	8.00.761 SP3
ATI video driver for Radeon 9250	8.252.0.0		Power Console Plus[a]	5.00n
Intel Pro Software	13.1.2		J2SE Runtime Environment	6, Update 7
QuickTime	7.55.90.70		StorNext software	3.1.2.RC252 25.6138
Microsoft iSCSI Initiator	2.07		Supero Doctor	3
MS XML	4.0 6		Windows XP Professional	SP3 with recent updates
.NET Framework	1.1 1.1 Hotfix 2.0 3.0 3.5 SP1		SiteConfig Network Configuration Connect Kit	1.0

[a.] Do not use this utility on a K2 Media Client. This utility is for use by Grass Valley Service personnel only. When this utility is opened it scans the SCSI bus and interferes with record and play operations.

K2 Control Point PC pre-installed software

The following software is pre-installed on the K2 Control Point PC when you receive it new from Grass Valley.

Software	Version
.NET Framework	1.1 1.1 Hotfix 3.5 SP1
QuickTime	7
MS XML	4.0
Windows Installer	3.1
SiteConfig Network Configuration Connect Kit	1.0

Compressed VBI import

The K2 system can be set up to import Standard Definition (SD) Compressed VBI closed captioning. The feature can be useful for workflows that include SD clips from Profile XP and other video servers, or for facilities transitioning from SD to HD. If you are interested in this feature, contact Grass Valley Support to determine if it is appropriate for your system design. If appropriate, Grass Valley Support can provide you with the instructions to enable the feature.

About compressed VBI import processes

The K2 system extracts closed captioning by decoding the compressed video. The K2 system then inserts the extracted closed captioning as an SD ancillary data track into the K2 clip. These processes occur as the material is being transferred into the K2 system.

These processes take place on the K2 device performing the import. This can be a stand-alone K2 Media Client or a K2 Media Server. During these import processes the CPU consumption on the system performing the import is higher than with conventional imports. Take this into consideration when planning to use this feature.

Specifications

The compressed VBI import is supported as follows:

- SD MPEG only.

- All forms of import are supported, such as FTP, automation protocols, AppCenter, Capture services, and InSync.

- GXF, MXF, MPEG, and MOV imports extract closed captioning from SD 720x512 video.

- D-10/IMX SD MPEG video is supported

- SD 525 line (NTSC) closed captioning is supported

- SD 625 line (PAL) teletext is not supported

- The first SD video track encountered is processed for compressed VBI. Multiple video tracks are not processed.

- If the incoming video contains compressed VBI lines but closed caption data is not present, the resultant K2 clip has an ancillary data track containing "blank" closed caption data. On playout, the blank closed caption data is inserted into the video, but no closed caption is displayed for the video.

- If an MPEG program/transport stream contains both ATSC Closed Captioning inserted into the MPEG picture user data and compressed VBI lines, the K2 system ignores the compressed VBI lines and processes for the ATSC Closed Captioning instead.

- The K2 system does not process the incoming video when the following occurs:

  - The video does not contain compressed VBI lines

  - The video already contains an ancillary data track

- The video is High Definition (HD)

- The video is a GXF complex movie, such as a program or a playlist.

Operation considerations

- Do not neglect to make a "first birthday" disk image shortly after the K2 Media Client is installed and configured. Refer to the *K2 Media Client Service Manual* for procedures.

- Changing system video standards (NTSC/PAL) requires a restart as part of the channel changes as soon as the new standard is selected. Configuration Manager causes an immediate restart of the K2 Media Client if the system reference standard is changed and AppCenter is being used.

- Refer to the "Remote control protocols" appendix in the *K2 Media Client System Guide* for operation considerations related to AMP, VDCP, BVW, Harris, RS-422, etc.

- To import/export between systems using AppCenter, in Configuration Manager on the Remote tab, add each system that you want to have available as a source or a destination. Do this for K2 systems as well as non-K2 systems, such as Profile XP and M-Series.

- To create clips from still images (graphics), import as MPEG transport stream.

- Tri-level sync is not supported on K2 systems.

- Use the CD drive to burn CDs only as part of the recovery disk image process, while booted from the Recovery CD. Do not attempt to burn CDs for other purposes.

- Before configuring audio tracks on a channel, eject all clips. This is required to put changes into effect.

- The K2 Media Client can operate continuously for a long period of time, but eventually a restart is necessary, as follows:
  -Recommended: Restart at least once every three months
  -Required: Restart at least once every six months

Known problems

The following limitations are present in this 3.2.74 release of the K2 Media Client. If you wish to obtain more information about these limitations, please mention the reference numbers that follow the description of each limitation.

AppCenter

Description:	QuickTime reference files are not created for those DV clips recorded on ganged channels. (CR78336)
Workaround:	To create QuickTime reference files, record clips on channels that are not ganged.

Description:	Only 4 tracks of embedded audio are operational on a channel. (CR85903)
Workaround:	The problem occurs as a result of multiple configuration changes between Embedded and AES audio input. To make all 16 audio tracks operational, do the following: 1. Open Configuration Manager, change the number of audio tracks to 6 tracks, then click OK to save the configuration. 2. Open Configuration Manager, change the number of audio tracks to 16 tracks, then click OK to save the configuration.

Description:	AppCenter does not launch on a K2 Media Client controlled by IngestStation. (CR70382)
Workaround:	This occurs if both the IngestStation PC and the K2 Media Client are logged in to the "administrator" account, but the accounts have different passwords. To solve the problem, assign the same password to both administrator accounts, or use a different account on the IngestStation PC.

Capture Services

Description:	Pathfire software install deletes files in C:\temp. (CR96822)
Workaround:	Before installing Pathfire Software Service software, if you have any files in C:\temp that you want to save, copy the files to a different location.

Description:	When a Pathfire or DG Capture Service transfer loses connectivity, such as when a network cable is unplugged mid-transfer, the transfer stalls and the directory or bin that receives the transfer becomes unresponsive. This state persists long-term. (CR85666)

Workaround: Restore connectivity and the transfer resumes.

Macintosh

Description: On an Apple system, can't open .MOV files exported from K2 system. (CR72939)

Workaround: Set the identity of the transfer session to "interactive user" instead of "launching user", as follows:
1. On the K2 system, in the Windows operating system Control Panel, open Administrative Tools | Component Services. The Component Services window opens.
2. In the Component Services window tree view, expand Component Services | Computers | DCOM Config, right-click movsession and select Properties. The Properties dialog box opens.
3. On the Identity tab, select The interactive user.
4. Click OK to save settings and close windows.

Description: When using an Apple system to simultaneously placing multiple .MOV files into a HotBin, the first file is not transferred to the HotBin. (CR84274)

Workaround: After placing multiple .MOV files into a HotBin, check for the first file. If necessary, re-transfer it to the HotBin.

NetCentral

Description: NetCentral reports a Failover Monitor fault, even though Failover Monitor is actually running with no problem. Also, there is no report of database replication currently underway. (CR 62119)

Workaround: Verify that Failover Monitor is still running and database replication is underway by using the Server Control Panel in the K2 System Configuration application.

Protocols

Description: AMP PlayAt and StopAt commands do not work on a SD-00 K2 Media Client channel that is cued for play or is playing, if the channel is configured for VITC timecode. (CR79653)

Workaround: Under these conditions the VITC-input reader is not connected. To make those commands work, configure the channel for a different timecode source.

Description: When running down a playlist under AMP control, the thumbnail that appears in AppCenter is not correct. (CR85193)

Workaround: Ignore the thumbnail in AppCenter. The playlist playout is correct.

Storage Utility

Description: When making a new file system, occasionally a "Failed to remove the media database ..." message appears. Then after restart, the clips that were present in the former file system are still displayed in AppCenter. (CR76576)

Workaround: The new file system is made successfully. No additional Storage Utility procedures are necessary. In AppCenter, delete all bins except the default bin and the recycle bin. Then delete all clips in the default bin and the recycle bin.

Description: The bind process fails when binding 73 Gig disks into LUNs. (CR64486)

Workaround: Do not unbind LUNs, especially with 73 Gig disks. If you must unbind or bind LUNs with 73 Gig disks, contact your Grass Valley Support representative for assistance.

Description: The "Make New File System" operation in Storage Utility fails on a stand-alone (local) storage K2 Media Client. (CR61478)

Workaround: From the local K2 Media Client, close AppCenter, wait two minutes, and then open Storage Utility as a stand-alone application. In this stand-alone mode the "Make New File System" operation succeeds. (This operation is supported only on local storage models.)

System

Description: On K2 Media Clients shipped from Grass Valley before September 2007, when teaming Ethernet ports, due to a bug in the Intel teaming software, one of the following conditions can occur:
A. Virtual adapter installed when control team is setup
B. No virtual adapter installed during team is setup
C. Device manager gets into a '"loop" mode where it constantly refreshes the NIC list (CR63016)

Workaround: Make disk images of the K2 Media Client so if there is a need for recovery, you do not need to team. If you do need to team, use the procedure in the K2 Media Client Service Manual. This procedure assumes condition A, as it is most common. If the other conditions occurs, contact Grass Valley Support.