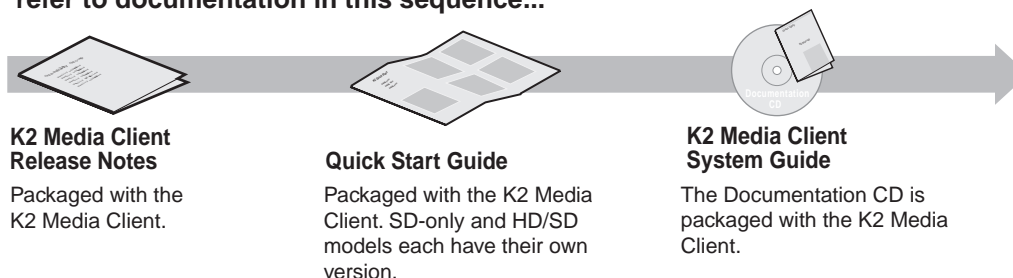![grass valley logo]

071-8456-08

K2 Media Client Version 3.2.21 Release Notes & Upgrade Instructions

These release notes contain the latest information about the K2 Media Client hardware and software. The information in these release notes applies to both internal (stand-alone) storage models and external (shared) storage models of the K2 Media Client.

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

If you are installing new K2 Media Client models with internal 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. SD-only and HD/SD 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...

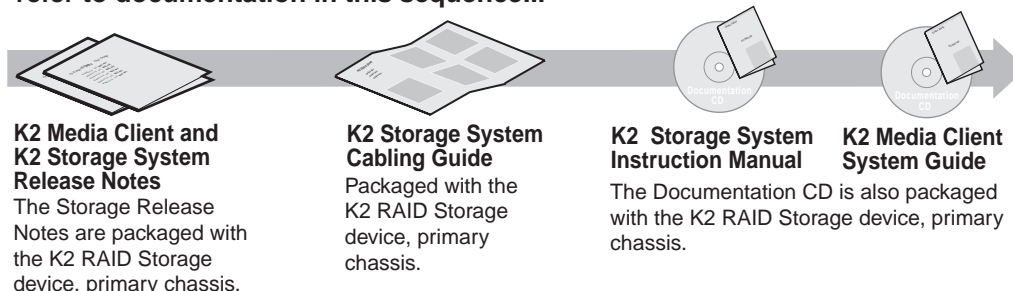**K2 Media Client and K2 Storage System Release Notes**
The Storage Release Notes are packaged with the K2 RAID Storage device, primary chassis.

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. Contact Grass Valley first regarding problems with third party software on Grass Valley products, such as the Microsoft® Windows® operating system, Windows Media® player, Internet Explorer® internet browser, and SQL Server™.

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.

Phone Support

Use the following information to contact product support by phone during business hours. Afterhours phone support is available for warranty and contract customers.

International (France)	+800 80 80 20 20 +33 1 48 25 20 20	Italy	+39 02 24 13 16 01 +39 06 87 20 35 42
International (United States, Canada)	+1 800 547 8949 +1 530 478 4148	Belarus, Russia, Tadzikistan, Ukraine, Uzbekistan	+7 095 258 09 20 +33 (0) 2 334 90 30
Hong Kong, Taiwan, Korea, Macau	+852 2531 3058	Indian Subcontinent	+91 11 515 282 502 +91 11 515 282 504
Australia, New Zealand	+61 1300 721 495	Germany, Austria, Eastern Europe	+49 6150 104 444
Central, South America	+55 11 5509 3440	Near East, Africa	+33 1 48 25 20 20
China	+861 066 0159 450	Netherlands	+31 (0) 35 62 38 421
Belgium	+32 (0) 2 334 90 30	Northern Europe	+45 45 96 88 70
Japan	+81 3 5484 6868	Singapore	+65 6379 1313
Malaysia	+603 7805 3884	Spain	+41 487 80 02
Middle East	+971 4 299 64 40	UK, Ireland, Israel	+44 118 923 0499

Authorized Support Representative

A local authorized support representative may be available in your country. To locate the support representative for your country, visit the product support Web page on the Grass Valley Web site.

What's new in this release

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

- **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 3.2.21 system software. If you are upgrading to version 3.2.21, make sure that you carefully follow the procedures at "Upgrading K2 software" 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 3.2.21 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.

- **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.

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

Changes in previous releases

The following sections describe the changes in recent past releases.

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

- **16 channels audio** — You can have up to 16 channels of embedded audio per video channel. To conserve storage space, on each record channel you can configure how many audio channels are recorded.

- **Four channels 720p** — 720p material on four channels is supported on model HD-22 (two record channels, two play channels).

- **Open GoP support** — If an open GoP clip is imported, it is fully supported on the K2 Media Client. This includes trimming the clip, playout of the clip, using the clip in playlists, and exporting the clip.

- **HD loopback** — HD-00 K2 Media Clients now have a loopback path available for video monitoring purposes.

- **Agile playlist transfer** — GXF transfer (streaming) of media with mixed format, such as an agile playlist or complex movie, is supported solely between K2 systems.

- **Clip Properties** — The Clip Properties dialog box reports additional details.

- **QuickTime support** — QuickTime reference files are created for simple DV-format clips. The reference files allow you to use QuickTime tools, such as FinalCut Pro, to open K2 media for playing and editing.

- **QuickTime 7 required** — You must install QuickTime 7 as part of the upgrade to this version of K2 system software. Refer to the software upgrade procedures later in these release notes.

- **Recovery Boot CD** — A new version of the Client Recovery Boot CD, part number 063-8245-01, is available. This version is recommended for use on all K2 systems. It is required for creating and restoring disk images on Dell D820 and HP xw9300 platforms, which are used for some Grass Valley products. The new version is compatible with disk images made with the previous version of the Client Recovery Boot CD.

Version 3.0.4

- **Media File System** — Version 2.6.5b46 SNFS (StorNext File System) software required. This is the media file system software.

Version 3.0.2

- **K2 Media Client media (iSCSI) port unteamed** — External storage K2 Media Clients shipping new from the factory have media ports that are not teamed. This supports the new networking for redundant systems. To unteam media ports on existing systems, refer to the *K2 Storage System Release Notes*.

- **Media File System** — Version 2.6.4b41 SNFS (StorNext File System) software required. This is the media file system software.

Version 3.0.1.19

- **Media File System** — Version 2.6.3b39 SNFS (StorNext File System) software required. This is the media file system software.

K2 software version compatibility

Versions qualified for compatibility with this 3.2.21 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 3.2.21 release of K2 software as follows:

K2 device	Component	Version	Comment
K2 Media Client	Windows Operating System	Windows XP	With the latest updates
	AppCenter	3.2.21	—
	Media file system (SNFS)	2.6.5b50	—
	QuickTime	7	—

Grass Valley products

Grass Valley products are compatible with this 3.2.21 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	2.0.11 or higher	Some transfer limitations
Aurora products	6.3	Check with Grass Valley Support regarding version availability.
News products	6.3	Check with Grass Valley Support regarding version availability.
NetCentral	4.1.10 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	4.0.0.12	—
K2 TimeDelay	2.1.2.8	—
K2 Avid plug-in	1.0.0.5	—
ContentShare	—	Not supported

Licensing K2 software

This section is divided into two topics

"About K2 software licensing"

"Obtaining and maintaining licenses"

About K2 software licensing

K2 system software version 3.2.21 requires a license from Grass Valley. Licensing is enforced at the K2 Media Client, so every K2 Media Client running version 3.2.21 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 3.2.21 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 to version 3.2.21, 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 AppCenter Pro temporary license will expire and the AppCenter Pro features will stop functioning.

• 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.

Obtaining and maintaining licenses

Use the K2 System 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 software or to the K2 AppCenter Pro application.

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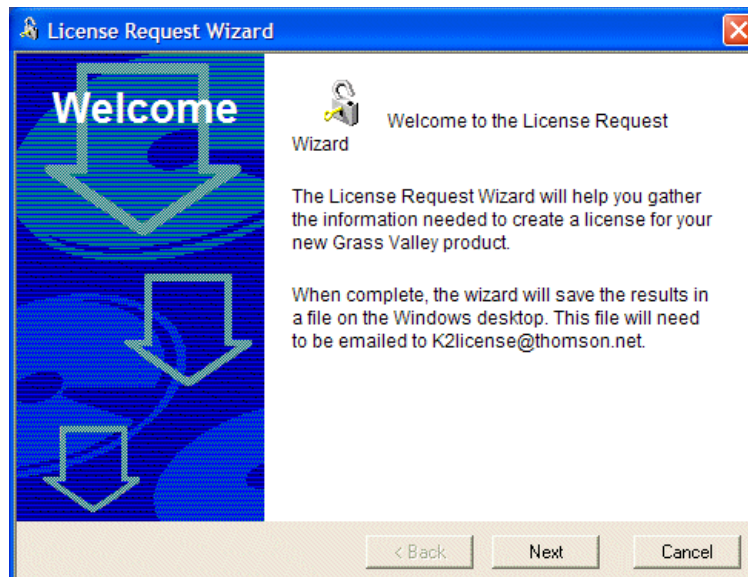
3. Read the on-screen instructions, then click **Next** to proceed to the customer information screen. The Customer dialog box displays.
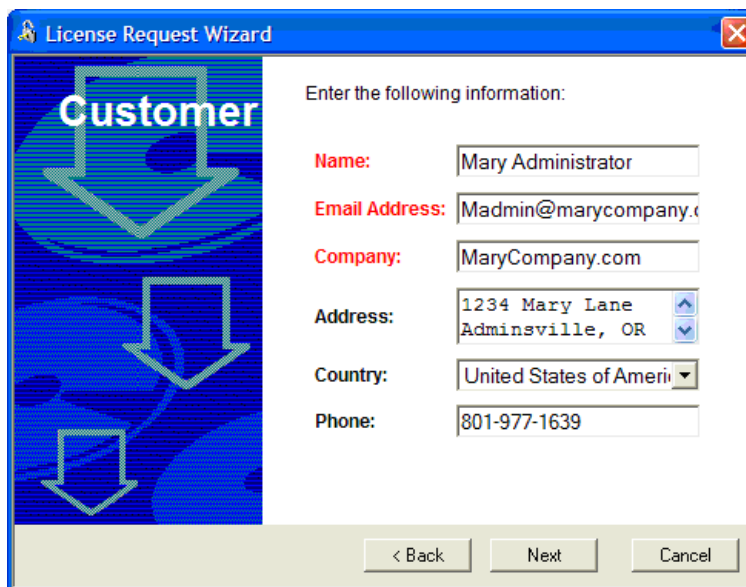
4. Enter the information requested in red font on this page. You must provide a valid email address to receive your license file.

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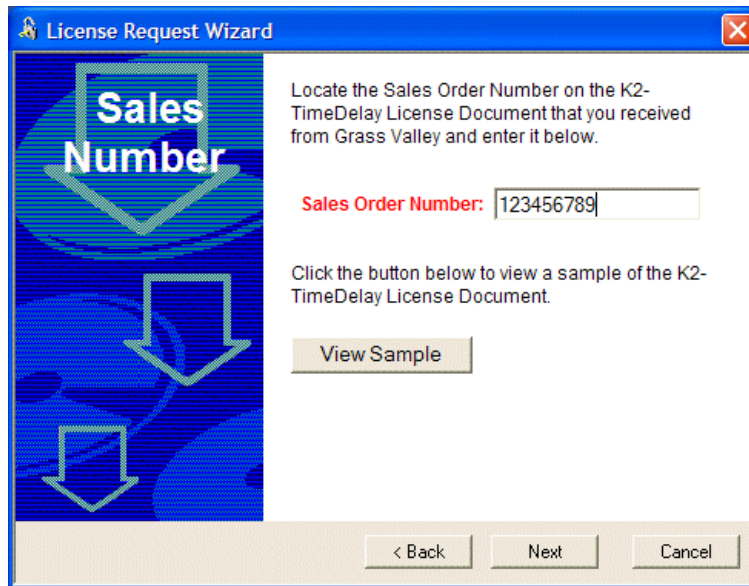
6. Enter the Sales Order Number in the field. The Sales Order Number can be found on the Software License sheet that accompanies the K2 System software CD.

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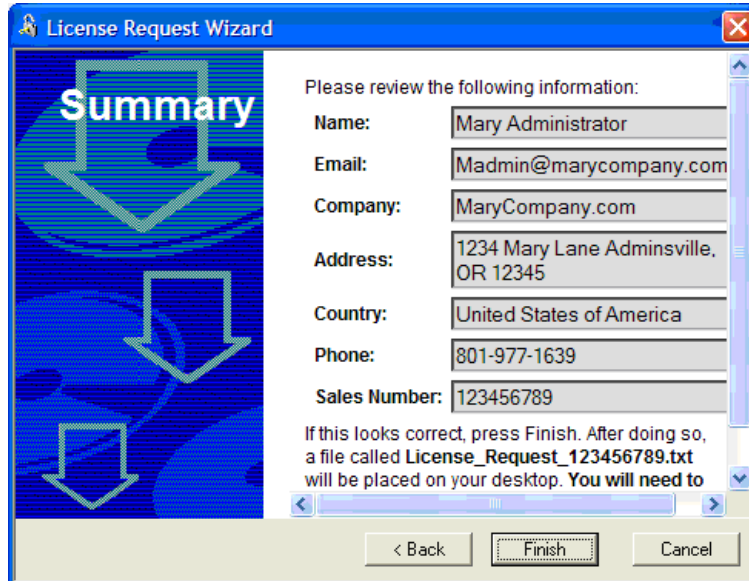
8. Review the License Request information and click **Finish**. A License Request text file, *License_Request_<SalesNumber>.txt*, is generated and saved to the Windows Desktop.

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 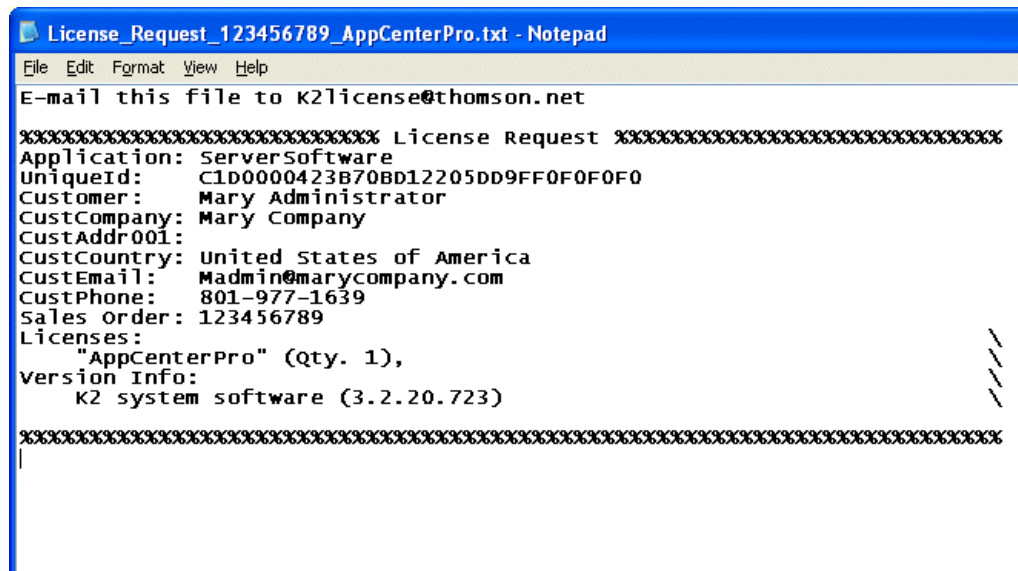it to your desktop. (In Notepad, use the Save As command.) Otherwise, the second License Request text file will overwrite it.

```
License_Request_123456789_AppCenterPro.txt - Notepad
File  Edit  Format  View  Help
E-mail this file to k2license@thomson.net

XXXXXXXXXXXXXXXXXXXXXXXXXX License Request XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Application: ServerSoftware
UniqueId:    C1D0000423B70BD12205DD9FF0F0F0F0
Customer:    Mary Administrator
CustCompany: Mary Company
CustAddr001:
CustCountry: United States of America
CustEmail:   Madmin@marycompany.com
CustPhone:   801-977-1639
Sales Order: 123456789
Licenses:                                                          \
    "AppCenterPro" (Qty. 1),                                       \
Version Info:                                                      \
    K2 system software (3.2.20.723)                               \

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
|
```

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".

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 System.

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.

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 K2 software

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

K2 system software version 3.2.21 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 3.2.21 software. Read the information in these sections carefully before attempting the upgrade.

NOTE: This upgrade installs with a trial license. Before installing, read licensing information earlier in these release notes.

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

Step 1: Make recovery disk image

Skip this step if:

- You previously made a disk image of the K2 Media Client at its current software version. Skip ahead to .

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.

NOTE: If you upgrade and then decide you do not want to permanently license version 3.2.21 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 an internal storage model or an external storage model.

If you are upgrading an internal storage K2 Media Client, do the following:

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

2. Skip ahead to .

If you are upgrading external 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 (external storage only)".

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

Skip this step if:

• You are upgrading an internal storage K2 Media Client. Skip ahead to "Step 4: Install "High Priority" Windows updates (recommended)".

Do this step if:

• You are upgrading external 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 external 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 3.2.21. 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 media file system software (SNFS)

Skip this step if:

• SNFS is currently at version 2.6.5b50. Skip ahead to "Step 6: Upgrade QuickTime".

Do this step if:

• SNFS is at a version lower than 2.6.5b50.

The "simple" SNFS installers, such as *SNFS2.x.xbxxSimple.exe*, are special batch files designed by Grass Valley engineers for use on K2 systems only. When installing SNFS software on a K2 system, make sure that you are using the correct simple installer, as instructed in the detailed procedure. Do not use a standard SNFS installer, such as *snfs2xxbxx.exe*. Likewise, do not use the simple SNFS installers on Aurora Edits or other generic clients.

To upgrade SNFS software on the K2 Media Client, you can install on top of the current version of SNFS software, as instructed in the following steps:

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

2. Insert the version 3.2.21 K2 System Software CD in the K2 Media Client's CD drive or otherwise access the version 3.2.21 installation files.

3. Open one of the following files:

   • If upgrading an internal storage (stand-alone) K2 Media Client, open

     \snfs\SNFS2.6.5b50Simple.exe

   • If upgrading an external storage (shared storage) K2 Media Client, open

     \snfs\SNFS2.6.5b50Simple_clientonly.exe

   The StorNext File System Install Wizard runs automatically.

4. When the automatic installation pauses at the License Agreement page, click **Yes**.

5. When the StorNext File System installation completes, click **Finish**, and when prompted to restart, select **Yes**, then **OK**. When you select OK the K2 Media Client should restart automatically. If it does not, restart it manually. After restart you can safely proceed with the next step.

Step 6: Upgrade QuickTime

Skip this step if:

• QuickTime is currently at version 7. This is 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: Upgrade K2 Media Client system 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.

Before beginning this procedure, make sure that you have upgraded SNFS, as instructed in the previous procedure.

To upgrade QuickTime, do the following:

1. Insert the version 3.2.21 K2 System Software CD in the K2 Media Client's CD drive, if it is not already inserted, or otherwise access the version 3.2.21 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 7: Upgrade K2 Media Client system software

Before upgrading K2 software, make sure that SNFS and QuickTime are at the required versions, 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.

To upgrade K2 Media Client system software, do the following:

1. Make sure you are logged 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 3.2.21 K2 System Software CD in the K2 Media Client's CD drive, if it is not already inserted, or otherwise access the version 3.2.21 installation files.

3. 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:
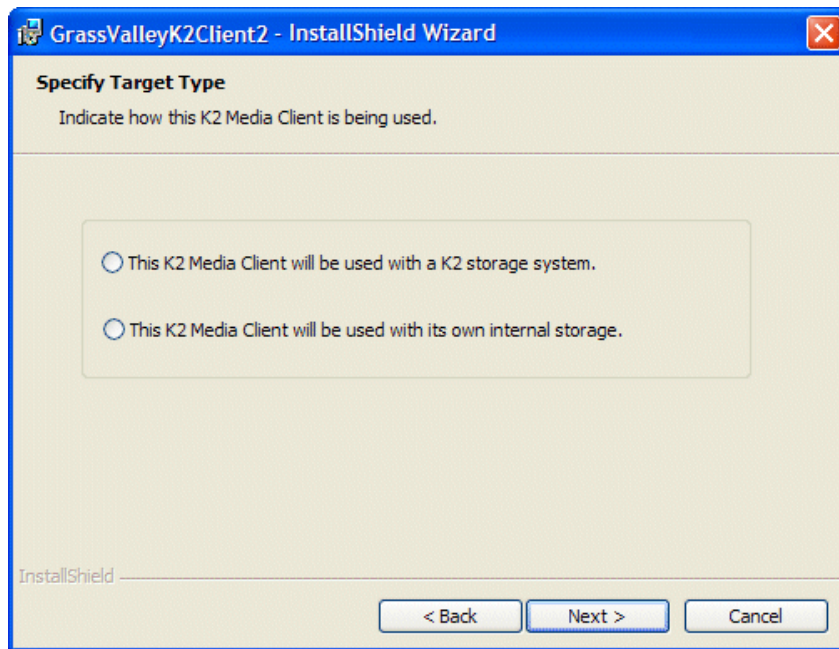
Select the option appropriate for the external storage (connected to K2 Storage System) or internal storage (stand-alone) model K2 Media Client on which you are installing the software.

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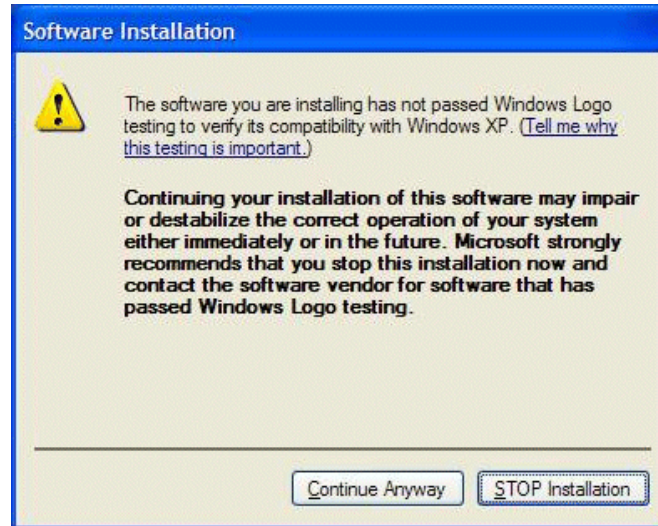
• Click **Yes** or **Continue…** to allow the installation to progress.

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:
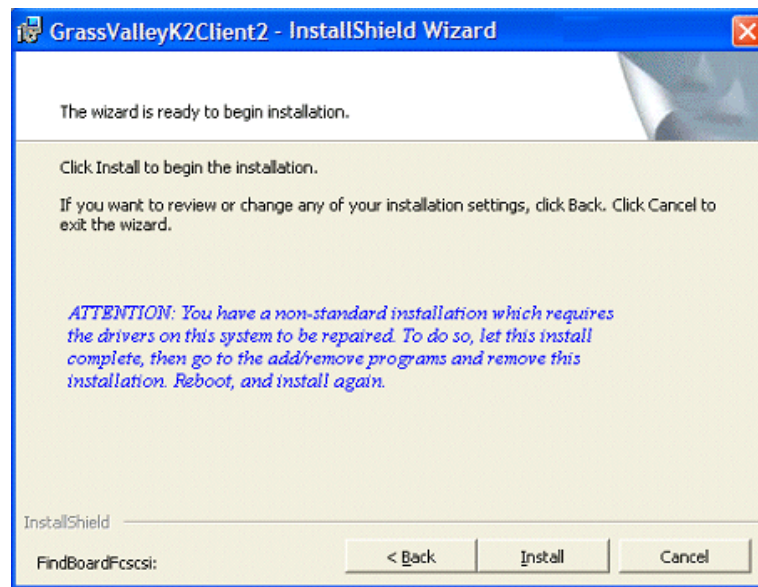
• Complete the installation wizard.

> • Uninstall K2 Media Client software.
> • Restart the K2 Media Client.
> • 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.
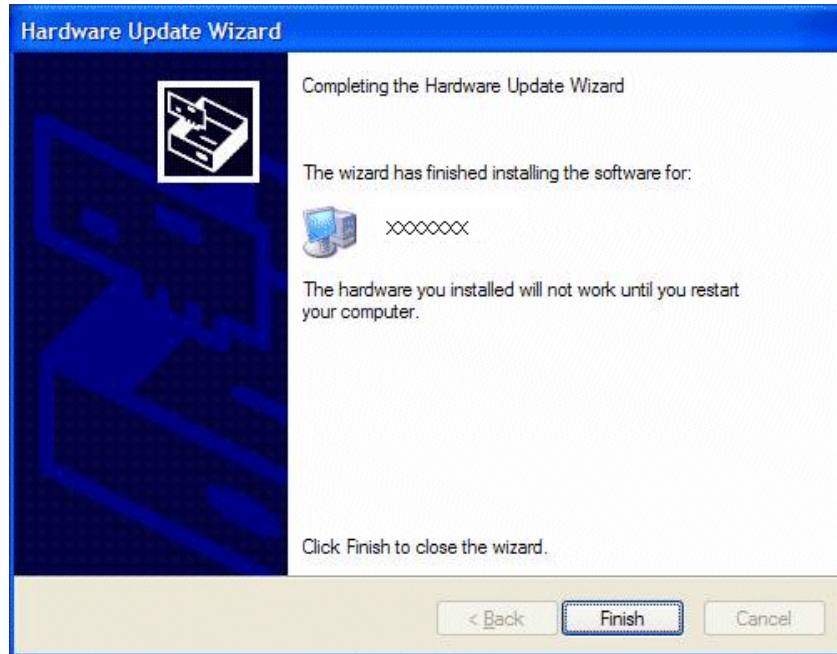
> • Click **Finish** on the Hardware Update Wizard to continue installation.

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

8. When prompted, restart the machine.

NOTE: You must restart after installing K2 software.

The upgrade to the K2 Media Client is now complete.

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

   a. Log on to AppCenter.

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

   c. Identify versions as follows:

System Version	These should both report the same version number. This is the K2 System Software version number.
RTS Version	
Media File System	This is the SNFS version.

10. Proceed as follows, dependent upon if you are upgrading an internal storage model

or an external storage model.

If you are upgrading an internal storage K2 Media Client, do the following:

a. If you have other internal storage K2 Media Clients, repeat these steps to upgrade these other machines.

b. When you have upgraded all your K2 Media Clients, proceed with "Step 8: Upgrade software on Control Point PC".

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

a. Repeat these 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 8: Upgrade software on Control Point PC

To upgrade Control Point software, do the following:

1. Insert the version 3.2.21 K2 System Software CD in the Control Point PC's CD drive or otherwise access the version 3.2.21 installation files.

2. Run the Control Point installation program. No special procedures are required.

You must upgrade the control point PC if it is to access an upgraded K2 Media Client. 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 9: Configure settings for protocol control

Skip this step if:

• You do not control any K2 Media Client channels with remote control protocols. Skip ahead to "Step 10: Make recovery disk images".

Do this step if:

• 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 10: 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.

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	8	Power Console Plus[a]	5.00n
ATI video driver for Radeon 9250	—	J2SE Runtime Environment	6, Update 1
Intel Pro Software	12.1	StorNext software	2.6.5.50
QuickTime	7	Supero Doctor	3
Microsoft iSCSI Initiator	2.0	Texas Instruments VCP[b]	1.2.11.3
MS XML	6	Windows PowerShell	1.0
.NET Framework	1.1, 1.1 Hotfix, 2.0, 3.0	Windows XP Professional	SP2 with recent updates
MS-SQL Desktop Engine	SP3		

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

[b.] For USB RS422 ports

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	Software	Version
Broadcom Gigabit Integrated Controller	—	.NET Framework	1.1, 1.1 Hotfix
QuickTime	7	MS XML	4.0
Dell Resource CD	—	Windows Installer	3.1
HighMAT Extension to WinXP CD Writing Wizard	—	Conexant D850 V.9x DFVc Modem	—
Windows Media Connect	—		

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.

- If you are making multiple changes to a playlist, especially a long playlist, you can improve response time by playing the list while editing it. This allows you to add/remove/modify events without waiting for database updates, since changes to the playlist are not saved until playout stops.

- If you want to open the same playlist simultaneously on multiple channels, the channels must be running on the same K2 Media Client, otherwise, a "Failed to open…" message is displayed.

- When you switch a channel to the Playlist application, you must first create a new playlist before you can begin loading clips into the playlist. A new playlist is not created by default when you switch to the Playlist application.

- Changing the channel application in AppCenter to Playlist switches the working bin to the bin displayed in the Clips pane rather than the bin specified for that channel. This behavior is also observed if you have the working bin set to one bin but load a clip from another bin onto the channel.

- If you want to trigger record via GPI input on four channels simultaneously, make sure all the channels have new clips waiting for the GPI input, in the cue record state.

- To set in and out points with BVW protocol, load clips only from the working bin.

- To over-record a clip with remote protocol commands, after a "record cue" command you must send a "record duration" command (a41d) to set the out point of the record. If you attempt to over-record by sending transport commands (Stop, jog0, etc.) or by sending the "out preset" command, the over-record is not successful.

- MXF supports D10 clips with up to 8 audio tracks. If you want to export clips with more than 8 audio tracks, export as GXF.

- 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.

- On a SD-00 K2 Media Client, while it is possible to create and play out a D10 subclip with a non-zero mark, take care when transferring to other devices. Some devices, such as eVTRs, accept a clip only if it has a zero mark in.

- 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.

- If a clip is created with more than 16 audio tracks, but only one video track, when you play it back on a gang of play channels, only the first video channel plays the video track. (A ganged clip with 16 audio tracks or less plays the video track in all the play channels in the gang.)

Known problems

The following limitations are present in this 3.2.21 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 clips recorded on ganged channels. (CR78336)

Workaround: To create QuickTime reference files, record clips on channels that are not ganged.

Description: Audio tags are not correctly applied to audio tracks 17-32. (CR 77566)

Workaround: None. Do not assign tags to audio tracks 17-32. For these tracks, which are recorded by the second channel in a gang, the tag from the 17th audio track is incorrectly applied to all labeled audio tracks. You can assign tags to audio tracks 1-16, which are recorded by the first channel (the master channel) in a gang, as these tags are correct.

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.

Description: GPI cue events for Playlist do not initialize correctly. (CR 82019)

Workaround: After changing the channel to Playlist, open Configuration Manager, change any GPI setting for the channel, and click OK. This causes the settings to re-initialize and the cue settings work properly.

Description: LogViewer becomes inoperable if left open for more than 24 hours. (CR73855)

Workaround: Close LogViewer between uses.

Description: If autologin is enabled, AppCenter will not run on a Control Point PC. (CR 81042)

Workaround: Disable autologin before running AppCenter on the Control Point PC. Once a suite configuration has been setup, you can run autologin.

K2 InSync

Description: If you try to transfer files, and a bin with that name does not already exist on the destination unit, K2 InSync no longer automatically creates a bin. (CR 82032)

Workaround: To mirror a bin that exists on the source unit, create a bin on the destination first.

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.

Storage Utility

Description: The "Make New File System" operation in Storage Utility fails on an internal 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 internal storage models.)

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.

System

Description: 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.

Description: At restart, a "Network Connection Not Found" or "Network Path Not Found" message box pops up. (CR6135)

Workaround: This occurs if you attempt to enter an AppCenter login password before the focus is on the AppCenter login dialog box. The message comes from the SQL Server Service manager. If the problem occurs, do the following:
1. On the Windows taskbar, in the system tray, right-click on the SQL Server icon.
2. Select SQL Server Service Manager.
3. Type in the local K2 name or select from the list.
The SQL Server Service Manager then reports the information from the local K2 unit. On the next restart, the SQL Server tray icon shows the correct K2 unit.

Transfer

Description: On 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.