grass valley

K2 Dyno Production Assistant

LIVE PRODUCTION CONTENT MANAGEMENT SYSTEM

Configuration Manual

Software Version 2.0

KEMA

Affiliate with the N.V. KEMA in The Netherlands

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H. Pierre Sallé

H. Pierre Sallé
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K2 Dyno Production Assistant

LIVE PRODUCTION CONTENT MANAGEMENT SYSTEM

Configuration Manual

Software Version 2.0

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World Wide Web: *http://www.grassvalley.com/support/*

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Grass Valley Knowledge Base: *http://grassvalley.novosolutions.net/*

In the Knowledge Base you can search by topic, search by product, or browse the Table of Contents to find Frequently Asked Questions (FAQ).

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Region	Country	Telephone
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	Southeast Asia - Malaysia	+603 7492 3303
	Southeast Asia - Singapore	+65 6379 1313
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	New Zealand	0800 846 676
	For callers outside Australia or New Zealand	+61 3 8540 3650
Central America, South America	All	+55 11 5509 3440
North America	North America, Mexico, Caribbean	+1 800 547 8949; +1 530 478 4148
Europe	UK, Ireland, Israel	+44 1189 230 499
	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	+7 495 258 09 20
	Northern Europe	+45 404 72 237
	Southern Europe – Italy	+39 06 87 20 35 28
	Southern Europe – Spain	+34 91 512 03 50
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Chapter **1**

Configuring the standalone K2 Summit system and K2 Dyno PA

This section contains the following topics:

- *About K2 Summit standalone system and K2 Dyno PA DLC configuration*
- *About unique file systems and K2 Dyno PA*
- *Ordering the network adapters for K2 Dyno PA*
- *Configuring the DLC server on a K2 Summit standalone*
- *About the K2 Dyno PA application and the Dyno Production Assistant platform service*
- *Starting the K2 Dyno PA application*
- *Adding a standalone server*
- *Editing the FsNameServers file on the Dyno PA PC with a standalone K2 Summit system*
- *Enabling SNFS on the K2 Dyno PA PC in a standalone K2 Summit system*

About K2 Summit standalone system and K2 Dyno PA DLC configuration

The following diagram shows the two paths you can follow when installing and configuring a K2 Summit standalone system with K2 Dyno PA. If you are using Dyno PA with a Pro or Elite license, you can follow the right-hand path. If you are using Dyno PA with an Express license, follow the left-hand path.

Installation and configuration path: K2 Dyno PA with a K2 Summit Standalone
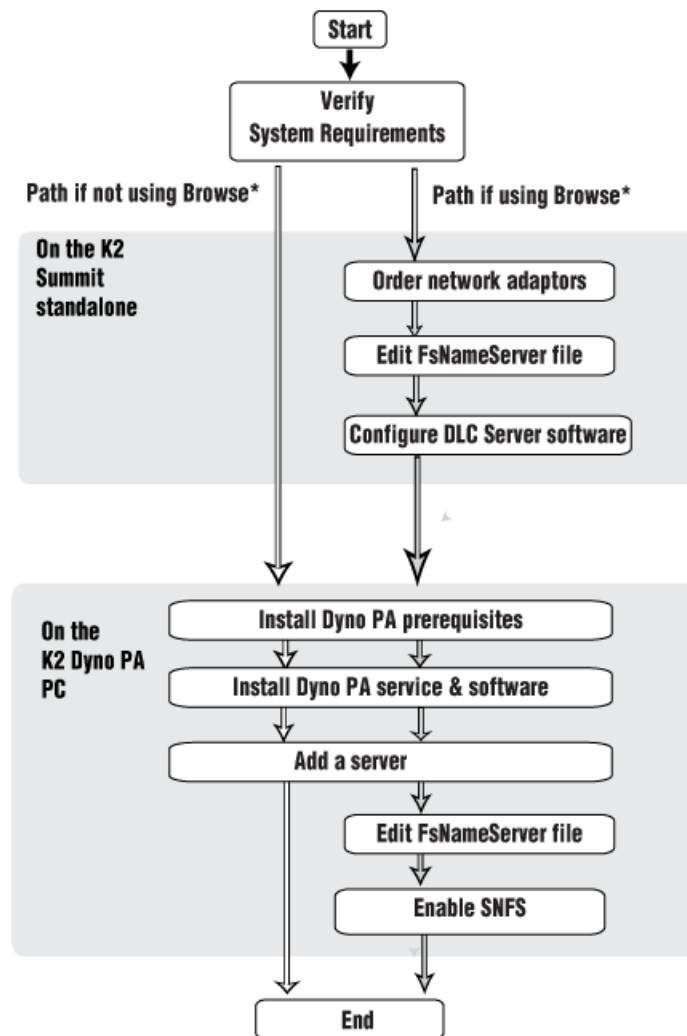
Start

Verify System Requirements

Path if not using Browse*   Path if using Browse*

On the K2 Summit standalone

Order network adaptors

Edit FsNameServer file

Configure DLC Server software

On the K2 Dyno PA PC

Install Dyno PA prerequisites

Install Dyno PA service & software

Add a server

Edit FsNameServer file

Enable SNFS

End

* The Browse feature is available with the Pro and Elite licenses.
If using K2 Dyno PA with the Express license, follow the left-hand path.

Each step in the installation and configuration paths is explained in detail in the following topics.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9
About using Browse with a K2 Summit standalone on page 11

About using Browse with a K2 Summit standalone

To use the Browse feature in a system with a standalone K2 Summit Production Client, the Quantum StorNext Distributed LAN Client (DLC) on the K2 Summit (the DLC server) and K2 Dyno PA (the DLC client) systems must be configured. This requires modifying the FsNameServers file on each machine.

To set up DLC on the K2 Summit and Dyno PA systems, you need:

On the standalone K2 Summit system:

• The requirements described in *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*. For information on configuring the K2 Summit software, consult the K2 Summit Production Client documentation.

• If upgrading from a version earlier than K2 7.2x software, the K2 Summit system needs a unique file system name and storage disk labels, as described in *About unique file systems and K2 Dyno PA*. File system names are case sensitive.

• The FsNameServers file on all the standalone K2 Summit Production Clients must contains the IP address of the Control ports of the name servers. There can be a maximum of three name servers. For more information, see *About the FsNameServers file in a K2 Summit standalone*.

• Network adapters configured for the Dyno PA Browse feature. For more information, see *Ordering the Network Adapters for K2 Dyno PA*.

On the K2 Dyno PA machine:

• The requirements described in *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*.

• The identical FsNameServers file that was required for the K2 Summit system must also be located in the C:\SNFS\Config folder of every Dyno PA machine that is sharing the platform service.

• In the Dyno PA application, the administrator must use the SNFS configuration button to add the SNFS-configured K2 Summit Production Client that will be used with that Dyno PA.

Related Links

About the FsNameServers file in a K2 Summit standalone system

To use the Browse feature of K2 Dyno PA, the FsNameServers file needs to be configured on each K2 Summit standalone and Dyno PA machine in the system. The FsNameServers file contains the Control network port IP addresses for each host name server in the system (up to a total of three host name servers).

For example, if you have the following:

Machine	IP address for the Control network port on the machine
K2 Summit Standalone	10.0.0.1
K2 Dyno PA #1	10.0.0.101
K2 Dyno PA #2	10.0.0.102

In this example, the FsNameServers file on all three machines would look like this:
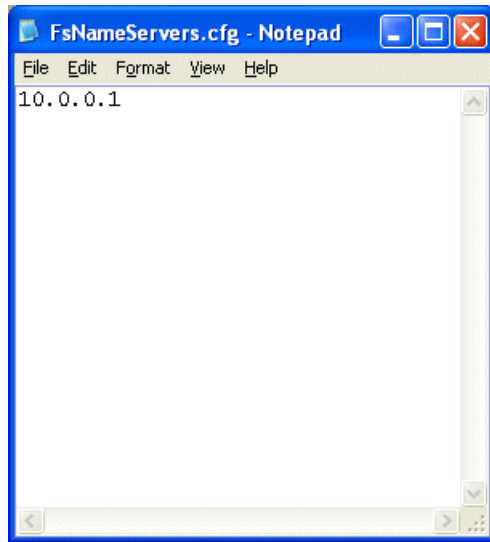
Related Links

About unique file systems and K2 Dyno PA

Read this section if you are upgrading from a K2 Summit system from a software version prior to 7.2. If your Summit system uses a later software version, proceed to "Ordering the network adapters for K2 Dyno PA".

K2 Dyno PA requires that the K2 Summit Production Client or K2 Solo Media Server have a unique file system name and unique storage disk labels. When you make a new file system the name changes to "gvfs_hostname", where hostname is the name of the stand-alone K2 system. (This is the computer name as set in Properties under My Computer, not the name defined in the hosts table.) The file system name is case sensitive.

As of Summit software version 7.2, new systems ship with unique file system names and disk labels. If upgrading a system from an earlier version, the file system needs to be re-created using the Storage Utility tool. This automatically creates unique names for the file system and the disk storage labels.

For more information on using Storage Utility, see the *K2 System Guide*. Once the K2 system has a file system name and disk labels that are unique, proceed to "Ordering the network adapters for K2 Dyno PA".

Ordering the network adapters for K2 Dyno PA

Prerequisites:

- The K2 software must be installed and configured as specified in the K2 Summit documentation.
- The file system name and storage disk labels on the K2 Summit system need to be unique. If the system has been upgraded from an earlier version than 7.2, the file system must be re-created with the Storage Utility tool, as specified in the *K2 System Guide*.

To enable the Browse feature on K2 Dyno PA, SNFS requires that the first network adapter on the K2 Summit system must be the Control connection; the loopback adapter cannot be the first network adapter.

1. Disable the write filter.
2. Reboot the machine.
3. Navigate to `c:\snfs\config`.
4. Edit the FsNameServers file to add a line containing the IP address of the Control network for each host name server. Do not include any loopback IP addresses in this file.
5. On the Windows desktop right-click **My Network Places** and select **Properties**.

   The Network Connections window opens.
6. On the menu bar at the top of the window, select **Advanced**, then **Advanced Settings…**
7. On the Adapters and Bindings tab, order adapters as follows:
   a) Control network
   b) Media network
   c) Loopback adapter
8. To close Advanced Settings and accept the changes, click **OK**.
9. Close the Network Properties window.
10. If you are using a standalone K2 Summit system with Dyno PA, proceed to *Configuring the DLC Server*. If you are using a K2 Summit SAN system with Dyno PA, proceed to *About the K2 Dyno PA application and the Dyno Production Assistant platform service*.

Configuring the DLC server on a K2 Summit standalone

Prerequisites:

- The K2 software must be installed and configured as specified in the K2 Summit documentation.
- The file system name and storage disk labels on the K2 Summit system need to be unique. For more information, see *About unique file systems and K2 Dyno PA*.
- The network adapters need to be ordered as described in *Ordering the network adapters for K2 Dyno PA*.

To enable the Browse feature on the K2 Dyno PA application, the DLC server needs to be configured on the standalone K2 Summit system, and the DLC client software needs to be configured on the Dyno PA machine. This section describes configuring a standalone K2 Summit system.

☞ *Tip: Identical FsNameServer files (same file name, same IP addresses in the same order) must be located on all the Summits and Solos or Dyno PA machines that share the same Dyno Production Assistant platform service. If configuring multiple K2 Summit systems or Dyno PA machines, create the FsNameServers file on one machine and then copy it to the others.*

1. From the **Start** menu, select **Programs | Stornext File System | Client Configuration**.

   The SNFS configuration client opens.

2. Click the **Properties** button.

   The Properties dialog box displays.

3. On the Distributed LAN tab, select **Enable Server**.
4. Select the Control network as the DLC network.
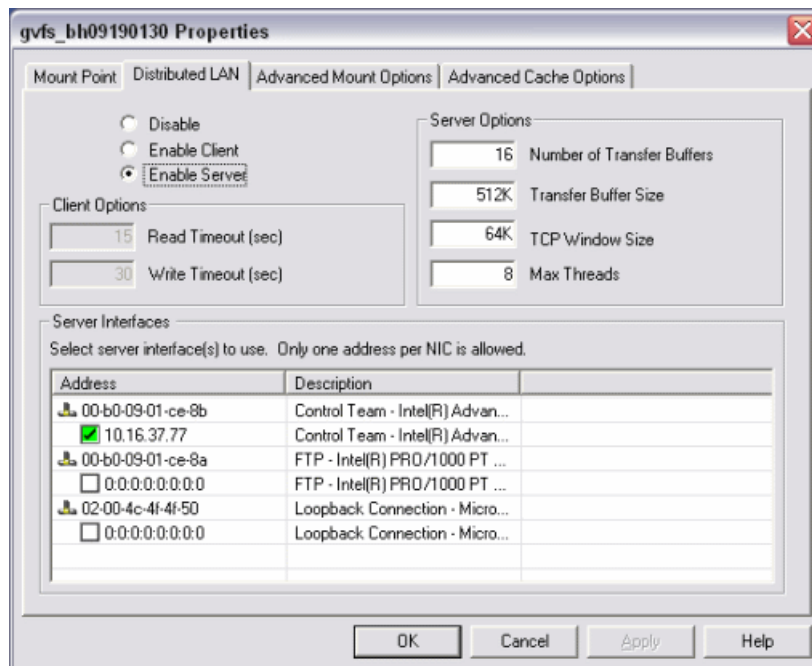
5. Click **OK**.
6. Turn write filter on.

7. Verify that the K2 Summit system is connected to the network.

   ⚠ **CAUTION: If the K2 Summit system is not connected to the network, connect a cable between the Control network to another network port. Otherwise, when you reboot, the machine will not be able to access its own media file system; you will not see the V: drive or be able to access your media.**

8. Reboot the machine.

9. Proceed to "Installing K2 Dyno PA".

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

About K2 Summit standalone system and K2 Dyno PA DLC configuration on page 10

About the K2 Dyno PA application and the Dyno Production Assistant platform service

The K2 Dyno PA application is managed by the Dyno Production Assistant platform service. One platform service can coordinate between multiple Dyno PA clients and multiple K2 systems.

The platform service can be installed on the same machine as the Dyno PA application or on a separate machine. Both machines require the prerequisites file installed first.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

Installing the prerequisite software on page 15

Installing the Dyno Production Assistant platform service on page 16

Installing the K2 Dyno PA application on page 16

Configuring the K2 Summit SAN and K2 Dyno PA on page 21

Installing the prerequisite software on page 15

Installing the Dyno Production Assistant platform service on page 16

Installing the K2 Dyno PA application on page 16

Installing the prerequisite software

Before installing the K2 Dyno PA software, the Dyno PA prerequisites need to be installed. Most prerequisites are bundled into one installer. Depending on your system, additional prerequisites might need to be installed. For more information on the prerequisites, refer to the *Version Compatibility* section of the *K2 Dyno PA Release Notes*.

1. From the K2 Dyno PA download section of www.grassvalley.com, download the prerequisites file

2. On the machine or machines running the K2 Dyno PA application and/or platform service, run the installation wizard.

Related Links

About the K2 Dyno PA application and the Dyno Production Assistant platform service on page 15

Installing the Dyno Production Assistant platform service

Prerequisites:

- Grass Valley does not recommend the use of a firewall with Dyno PA. If using a firewall, ensure that the port 49173 is allowed full access on the PC with the Dyno Production Assistant platform service installed and all PCs running Dyno PA.
- The hardware and software requirements as specified in *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*.
- An administrator-level username and password for the K2 system that Dyno PA communicates with.
- A PC that the service can be run on. Do not run the platform service on the K2 Media Client, K2 Production Client, or K2 Solo Media Server. The platform service can be run on the same PC as the Dyno PA application.

Apart from the Browse feature, the Dyno Production Assistant platform service manages all the interactions between the K2 Dyno PA application and the K2 system or systems. The platform service can be obtained from the K2 Dyno PA download site on www.grassvalley.com.

To install the platform service, follow these steps:

1. Double-click the **Dyno_PA_Installer.exe** file.

2. Follow the installation wizard, and accept the End User License Agreement (EULA).

3. When prompted, select the platform service. By default, the installation wizard installs both the platform service and the Dyno PA application at the same time.

   The platform service is now installed. The service is set to automatic.

4. Proceed to *Installing the K2 Dyno PA application*.

Related Links

Installing the K2 Dyno PA application

The K2 Dyno PA installation software can be obtained from the K2 Dyno PA download site on www.grassvalley.com.

Prerequisites:

- Grass Valley does not recommend the use of a firewall with Dyno PA. If using a firewall, ensure that the port 49173 is allowed full access on the PC with the Dyno Production Assistant platform service installed and all PCs running Dyno PA.
- The hardware and software requirements as specified in *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*.
- If using the Browse feature, follow the procedures described as described in the section on configuring your K2 Summit system, and then copy the FsNameServers file from the K2 Summit system to the K2 Dyno PA machine. Reboot the Dyno PA machine before proceeding.

To install the Dyno PA application, follow these steps:

1. Double-click the **Dyno_PA_Installer.exe** file.
2. Follow the installation wizard, and accept the End User License Agreement (EULA).
3. When prompted, select the Dyno PA application. By default, the installation wizard installs both the platform service and the Dyno PA application at the same time.

   The Dyno PA application is now installed.

4. Once you have installed the platform service and K2 Dyno PA application, you need to start the Dyno PA application to configure it. Proceed to *Starting the K2 Dyno PA application*.

Related Links

Starting the K2 Dyno PA application

The K2 Dyno PA application can be started from the desktop icon or from selecting **Start | Programs | Grass Valley| Dyno PA Client**. Multiple Dyno PA clients can access one Dyno Production Assistant platform service.

Prerequisites:

- The Dyno Production Assistant platform service starts automatically. The platform service must be running before you start the K2 Dyno PA application.

When the Dyno PA application is first started, it runs on a 30-day trial license. To continue using Dyno PA, you need a permanent license to run Dyno PA. For more information on licensing, see the *K2 Dyno PA Release Notes*.

To start the K2 Dyno PA application, follow these steps:

1. Double-click on the Dyno PA icon.

   The Dyno PA login displays. This allows you to log in to the PC that runs the Dyno Production Assistant platform service.

2. Enter the following:

   a) A username and password. If logging in as an administrator, supply the administrator username and password as specified in the *Managing Users* chapter of the Configuration manual. If logging in as a normal user, enter the username and password supplied by your administrator.

   b) The name or IP address of the PC running the Dyno Production Assistant platform service. If the platform service is running on the same machine, enter **localhost**.

3. Click the **Connect** button.

   Dyno PA connects with the platform service. The License Selection dialog box displays. If you have already purchased a permanent license, that license is displayed. For information on licensing, see the *K2 Dyno PA Release Notes*.

4. Highlight the license you want to use. To make this the default license, check the Make Default box. Select the license from the drop-down list.

5. Click **Select**.

   The Dyno PA application displays.

Related Links

Adding a standalone server

Prerequisites:

- You must be logged in as an administrator on the Dyno PA application to add a server.
- You must have an administrator-level username and password on the K2 system that you are going to add as a server.
- The K2 system must have the requirements described in *K2 Dyno PA Prerequisites*.
- The K2 system must have a hosts table set up as described in the K2 System Guide.
- If using the Browse feature, the K2 Summit system must be configured as described in *Configuring the standalone K2 Summit system and K2 Dyno PA*

To add a server, follow these steps:

1. In the Navigation pane, right-click and select **New Server**.

2. Choose **Standalone server**.

   The Add/Edit Standalone Server Device dialog box displays.

3. To have Dyno PA populate the text fields, click the Discovered Devices button and select a K2 system from the drop-down list. Alternately, you can add the information:

   - **Type**: Server (Currently, there is no other option)
   - **Sub Type**: From the drop-down list, select the server you want to add from the list of available servers. A server can be a K2 Summit Production Client, K2 Solo Media Server, or K2 Media Client.
   - **Name**: Enter the name of the server.
   - **Description**: If desired, you can enter a description of the server.
   - **Host**: Enter the host name of the server, for example *Summit2*. Do not use the IP address.
   - **Username**: Enter an administrator-level username for the server.
   - **Password**: Enter the matching administrator-level password for this server.

4. Click **OK.**

   The K2 system appears in the Navigator pane. While Dyno PA is in the process of establishing a connection with the system, the icon next to the K2 system turns yellow.

   NOTE: The V:\ drive and Dyno sessions are all listed under the standalone server.

5. If you are not planning to use the Browse feature of the Dyno PA, proceed to *Adding a bin* or *Adding a repository*, depending on your workflow.

6. If you are planning to use the Browse feature of the Dyno PA, proceed to *Editing the FsNameServers file on the Dyno PA PC* in the *K2 Dyno Production Assistant Configuration Manual*.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

Managing K2 Dyno PA on page 31

Editing the FsNameServers file on the Dyno PA PC with a standalone K2 Summit system

To use the Browse feature with a standalone K2 Summit system, the FsNameServers file on the Dyno PA PC needs to contain the Control IP addresses of the host name servers, as described in *About the FsNameServers* file.

1. In the Dyno PA application, select **SNFS Settings** from the menu.

   The SNFS Configuration dialog box displays.

2. Enter the Control IP address of the host server and click **Add**.

   The IP address is displayed under Host.

3. When you have finished adding host name servers (up to three), click **Close**.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

Enabling SNFS on the K2 Dyno PA PC in a standalone K2 Summit system

Prerequisites:

- The standalone K2 Summit system must have been configured as described in the section on configuring your K2 Summit system.
- A K2 system must have been added to the Dyno PA client as described in *Adding a standalone server*.
- The K2 Dyno PA machine must have the requirements described in the *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*.
- The K2 Dyno PA machine must have the identical FsNameServers file as the K2 system. For more information, see *Configuring the standalone K2 Summit system and K2 Dyno PA* .

To enable the Browse feature on the K2 Dyno PA application to work with a K2 Summit system, the K2 Summit system needs to be configured for K2 Dyno PA and the SNFS software needs to be configured on the Dyno PA machine. This section describes configuring SNFS software for the DLC client on the Dyno PA machine.

1. If you do not already have the K2 Dyno PA application open, start it now.

2. Right-click on the K2 Summit system in the Navigation pane, and select **Edit Server**.

   The Add/Edit Server Device dialog box displays.

3. In the Add/Edit Server Device dialog box, check the Enabled box.

4. Click the **SNFS Configuration** button.

5. Ensure the correct file-system name for the K2 Summit system is displayed, or select a file system name by pressing **Search** button.

   The file system name must be unique to this K2 Summit system, for example *gvfs_summit1*. The name is case sensitive.

6. Click the **Enable SNFS** button.

   Depending on your workflow, proceed to *Adding a bin* or *Adding a repository*.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

Chapter **2**

Configuring the K2 Summit SAN and K2 Dyno PA

This section contains the following topics:
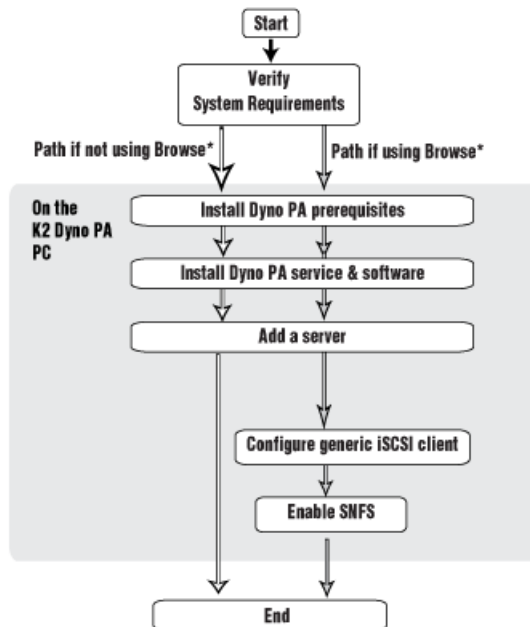
- *About configuring a K2 SAN with K2 Dyno PA*
- *About the K2 Dyno PA application and the Dyno Production Assistant platform service*
- *Installing the generic iSCSI Client Software*
- *Starting the K2 Dyno PA application*
- *Adding a SAN server*
- *Configuring the iSCSI client on the K2 Dyno PA*
- *Enabling SNFS for the iSCSI client on the K2 Dyno PA in a K2 SAN system*

About configuring a K2 SAN with K2 Dyno PA

The following diagram shows the two paths you can follow when installing and configuring a K2 SAN with K2 Dyno PA. If you are using Dyno PA with a Pro or Elite license, you can follow the right-hand path. If you are using Dyno PA with an Express license, follow the left-hand path.

Installation and configuration path: K2 Dyno PA with a K2 SAN

```
                              Start
                                │
                                ▼
                            Verify
                      System Requirements
                         │             │
Path if not using Browse*│             │ Path if using Browse*
                         ▼             ▼
On the        │  Install Dyno PA prerequisites │
K2 Dyno PA    │            │        │            │
PC            │            ▼        ▼            │
              │  Install Dyno PA service & software │
              │            │        │            │
              │            ▼        ▼            │
              │          Add a server            │
              │                     │            │
              │                     ▼            │
              │      Configure generic iSCSI client │
              │                     │            │
              │                     ▼            │
              │              Enable SNFS          │
              │                                   │
              ▼                     ▼
                              End
```

* The Browse feature is available with the Pro and Elite licenses.
If using K2 Dyno PA with the Express license, follow the left-hand path.

Each step in the installation and configuration paths is explained in detail in the following topics.

Related Links

About the FsNameServers file in a K2 Summit SAN system

In a K2 Summit SAN system, the IP address is already in the FsNameServers file on the K2 Media Server (FSM) that acts as the host name server. The FsNameServers file contains the Control network port IP addresses for each host name server in the system (up to a total of three host name servers).

If using the Browse feature on a K2 Dyno PA PC that accesses a K2 Summit SAN system, you need to run the K2 Config application to configure the Dyno PA PC as an iSCSI client. K2 Config creates the FsNameServers file on the Dyno PA PC.

Related Links

About the K2 Dyno PA application and the Dyno Production Assistant platform service

The K2 Dyno PA application is managed by the Dyno Production Assistant platform service. One platform service can coordinate between multiple Dyno PA clients and multiple K2 systems.

The platform service can be installed on the same machine as the Dyno PA application or on a separate machine. Both machines require the prerequisites file installed first.

Related Links

Installing the prerequisite software

Before installing the K2 Dyno PA software, the Dyno PA prerequisites need to be installed. Most prerequisites are bundled into one installer. Depending on your system, additional prerequisites might need to be installed. For more information on the prerequisites, refer to the *Version Compatibility* section of the *K2 Dyno PA Release Notes*.

1. From the K2 Dyno PA download section of www.grassvalley.com, download the prerequisites file
2. On the machine or machines running the K2 Dyno PA application and/or platform service, run the installation wizard.

Related Links

Installing the Dyno Production Assistant platform service

Prerequisites:

- Grass Valley does not recommend the use of a firewall with Dyno PA. If using a firewall, ensure that the port 49173 is allowed full access on the PC with the Dyno Production Assistant platform service installed and all PCs running Dyno PA.
- The hardware and software requirements as specified in *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*.
- An administrator-level username and password for the K2 system that Dyno PA communicates with.

- A PC that the service can be run on. Do not run the platform service on the K2 Media Client, K2 Production Client, or K2 Solo Media Server. The platform service can be run on the same PC as the Dyno PA application.

Apart from the Browse feature, the Dyno Production Assistant platform service manages all the interactions between the K2 Dyno PA application and the K2 system or systems. The platform service can be obtained from the K2 Dyno PA download site on www.grassvalley.com.

To install the platform service, follow these steps:

1. Double-click the **Dyno_PA_Installer.exe** file.
2. Follow the installation wizard, and accept the End User License Agreement (EULA).
3. When prompted, select the platform service. By default, the installation wizard installs both the platform service and the Dyno PA application at the same time.

   The platform service is now installed. The service is set to automatic.

4. Proceed to *Installing the K2 Dyno PA application*.

Related Links

About the K2 Dyno PA application and the Dyno Production Assistant platform service on page 15
About the K2 Dyno PA application and the Dyno Production Assistant platform service on page 15
Installing the K2 Dyno PA application on page 16
Starting the K2 Dyno PA application on page 17

Installing the K2 Dyno PA application

The K2 Dyno PA installation software can be obtained from the K2 Dyno PA download site on www.grassvalley.com.

Prerequisites:

- Grass Valley does not recommend the use of a firewall with Dyno PA. If using a firewall, ensure that the port 49173 is allowed full access on the PC with the Dyno Production Assistant platform service installed and all PCs running Dyno PA.
- The hardware and software requirements as specified in *K2 Dyno PA Prerequisites* in the *K2 Dyno PA Release Notes*.
- If using the Browse feature, follow the procedures described as described in the section on configuring your K2 Summit system, and then copy the FsNameServers file from the K2 Summit system to the K2 Dyno PA machine. Reboot the Dyno PA machine before proceeding.

To install the Dyno PA application, follow these steps:

1. Double-click the **Dyno_PA_Installer.exe** file.
2. Follow the installation wizard, and accept the End User License Agreement (EULA).
3. When prompted, select the Dyno PA application. By default, the installation wizard installs both the platform service and the Dyno PA application at the same time.

   The Dyno PA application is now installed.

4. Once you have installed the platform service and K2 Dyno PA application, you need to start the Dyno PA application to configure it. Proceed to *Starting the K2 Dyno PA application*.

Related Links

About the K2 Dyno PA application and the Dyno Production Assistant platform service on page 15

Installing the generic iSCSI Client Software

To use the Browse feature on the K2 Dyno PA machine with a K2 Summit SAN, you need to install the generic iSCSI Client software on the Dyno PA machine. The generic iSCSI Client software is located on the K2 Dyno PA download site on www.grassvalley.com.

1. Double-click on the generic iSCSI file.
2. Follow the instructions to install the software.
3. Once the generic iSCSI install software is installed, reboot the Dyno PA machine.
4. When the machine comes back up, go to **Start | Settings | Control Panel | Administrative Tools | Services** and verify that the service Grass Valley K2 Config is running.

Related Links

Starting the K2 Dyno PA application

The K2 Dyno PA application can be started from the desktop icon or from selecting **Start | Programs | Grass Valley| Dyno PA Client**. Multiple Dyno PA clients can access one Dyno Production Assistant platform service.

Prerequisites:

• The Dyno Production Assistant platform service starts automatically. The platform service must be running before you start the K2 Dyno PA application.

When the Dyno PA application is first started, it runs on a 30-day trial license. To continue using Dyno PA, you need a permanent license to run Dyno PA. For more information on licensing, see the *K2 Dyno PA Release Notes*.

To start the K2 Dyno PA application, follow these steps:

1. Double-click on the Dyno PA icon.

   The Dyno PA login displays. This allows you to log in to the PC that runs the Dyno Production Assistant platform service.

2. Enter the following:

   a) A username and password. If logging in as an administrator, supply the administrator username and password as specified in the *Managing Users* chapter of the Configuration manual. If logging in as a normal user, enter the username and password supplied by your administrator.

   b) The name or IP address of the PC running the Dyno Production Assistant platform service. If the platform service is running on the same machine, enter **localhost**.

3. Click the **Connect** button.

   Dyno PA connects with the platform service. The License Selection dialog box displays. If you have already purchased a permanent license, that license is displayed. For information on licensing, see the *K2 Dyno PA Release Notes*.

4. Highlight the license you want to use. To make this the default license, check the Make Default box. Select the license from the drop-down list.

5. Click **Select**.

The Dyno PA application displays.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

Configuring the K2 Summit SAN and K2 Dyno PA on page 21

Installing the Dyno Production Assistant platform service on page 16

Installing the K2 Dyno PA application on page 16

Adding a SAN server

Prerequisites:

- You must be logged in as an administrator on the K2 Dyno PA application to add a server.
- You must have an administrator-level username and password on the K2 system that you are going to add as a server. Grass Valley recommends that all the machines in the Dyno PA system, including the Dyno PA client, have the same administrator account (username and password).
- The K2 system must have the requirements described in *K2 Dyno PA Prerequisites* in the *K2 Dyno Production Assistant Configuration Manual*.
- The K2 system must have a hosts table set up as described in the *K2 System Guide*.

This procedure configures the K2 Dyno PA PC to do the following tasks:

- See the file system exposed by the K2 Media Server (FSM).
- Connect to K2 Summit Production Clients or K2 Media Clients, and manage their channels.

In the Dyno PA system, the following terminology is used:

- **Server** — In a K2 SAN system, a server is a K2 Media Server accessed by the K2 Dyno PA application.
- **SAN Client** — A K2 Summit Production Client or K2 Media Client with media storage on a K2 SAN.

In the K2 Dyno PA application, the procedure for adding a SAN server is divided into two sections. You must first configure the server (the K2 Media Server) and then configure the SAN Client (K2 Summit Production Client or K2 Media Client with media storage on that particular K2 Media Server).

1. In the Navigation pane, right-click and select **New Server**.

2. Choose **SAN System**.

   The Add/Edit SAN System dialog box displays.

3. To have Dyno PA populate the text fields, click the Discovered Devices button and select a K2
   system from the drop-down list. Alternately, you can add the information:

   • **Name**: Enter the name of the server.
   • **Description**: If desired, you can enter a description of the server.
   • **SAN Server Host**: Enter the host name of the SAN server, for example *K2SummitSAN2*
   • **FTP Host**: Enter the host name of the FTP server, for example *K2FTP1*. If the FTP server
     is the same as the SAN server host, leave blank.
   • **Username**: Enter an administrator-level username for the server.
   • **Password**: Enter the matching administrator-level password for this server.

4. To add a SAN client, select **Add**.

5. Add the following information:

- **Type**: Server (Currently, there is no other option)
- **Sub Type**: From the drop-down list, select the SAN client you want to add from the list of available SAN clients.
- **Name**: Enter the name of the SAN client.
- **Description**: If desired, you can enter a description.
- **Host**: Enter the host name of the SAN client, for example *Summit-01*.
- **Username**: Enter an administrator-level username for the SAN client.
- **Password**: Enter the matching administrator-level password for this SAN client.

6. Click **OK** to exit the Add/Edit SAN Client dialog box.

7. Click **OK** to exit the Add/Edit SAN Server dialog box.

   The K2 SAN system appears in the Navigator pane. While Dyno PA is in the process of establishing a connection with the system, the icon next to the K2 system turns yellow.

   NOTE: In the SAN system, the V:\ drive is displayed in the Navigator pane under the SAN while the individual Dyno sessions are displayed under each K2 Summit Production Client that uses the SAN for storage. In the standalone server, the V:\ drive and Dyno sessions are all listed under the standalone server.

8. If you are not planning to use the Browse feature of the Dyno PA, proceed to *Adding a bin* or *Adding a repository*, depending on your workflow.

9. If you are planning to use the Browse feature of the Dyno PA, refer to *Installing the generic iSCSI Client software* in the *K2 Dyno Production Assistant Configuration Manual*.

Related Links

Configuring the K2 Summit SAN and K2 Dyno PA on page 21

Configuring the iSCSI client on the K2 Dyno PA

To enable the Browse feature on the K2 Dyno PA application to work with a K2 Summit SAN system, the K2 Dyno PA machine must be configured as an iSCSI client. You use the K2 Configuration application wizard to configure each of the K2 Dyno PA machines on the Media (iSCSI) network. For more information on the K2 Configuration application, see the K2 Summit documentation.

1. On the Control Point PC, open the K2 Configuration application.
2. At the login dialog box, log in with the correct administrator account. By default this is as follows: User name —**administrator** Password — **adminK2**

   The K2 System Configuration application appears, displaying a hierarchy of machines with the K2 Summit SAN at the top, followed by the GigE switch, and then each of the K2 Dyno PA machine clients.

3. If you need to add another K2 Dyno PA client to the hierarchy:

   a) Select the server and click **Add Device**.

   b) In the Add Device window, click iSCSI Client and click **OK**.

   A new iSCSI client device gets added to the hierarchy.

4. Select the iSCSI client to be configured in the hierarchy view and click **Configure**.
5. At the Client Configuration - Page 1 screen, enter the machine name of the K2 Dyno PA client you are configuring (such as Client1) and click **Next**.
6. At the Network Configuration screen, click **Modify** to change the IP address and subnet of any network adapters for this machine, and then click **Next**.
7. At the File System Client Configuration screen, enter the drive letter you want to configure as the iSCSI drive on the K2 Dyno PA machine; click **Next**.
8. At the iSCSI Initiator Configuration screen, enter client bandwidth:

   a) Click **Modify**.

   b) Enter the total bandwidth requirement for this K2 Dyno PA client machine.

   c) Click **Assign TOE**.

   ⚠ *CAUTION: To avoid bandwidth usage issues, assign the K2 Dyno PA machine to a TOE that does not have a K2 Summit client.*

9. Click **Next**.
10. At the Completing the Configuration Wizard screen, click **Finish**.

    The wizard closes and the K2 Dyno PA machine reboots.

11. Repeat this procedure for each K2 Dyno PA machine on the K2 network.
12. Proceed to *Enabling SNFS for the DLC or iSCSI client on the K2 Dyno PA*.

Related Links

Calculating K2 Dyno PA machine bandwidth

One feature of the K2 network is its ability to load balance the K2 Dyno PA machine's iSCSI connection to the K2 storage system. In order to do this, calculate the amount of bandwidth each machine will use, using this formula: *(Video Bit Rate in Mbps x Number of Streams) / 8 (to convert to MB)*

1. Determine the highest bit rate you use on the K2 Dyno PA machine. The bit rates for the DV formats are: DV25 = 28.8 Mbps; DV50 = 57.6 Mbps; and DV100 = 115.2 Mbps for the NTSC and PAL video formats. MPEG bit rates are variable; enter the bit rate set in K2 Dyno PA.
2. Multiply the highest bit rate by the number of streams that are licensed on this machine. For systems such as K2 Dyno PA, only one stream is available for each K2 Dyno PA machine.
3. Divide that number by 8 to convert Mbps to MB.
4. Round the MB number to the nearest integer.
5. Enter this number in the iSCSI Client Bandwidth Input screen in the K2 Configuration application wizard.

Related Links

Enabling SNFS for the iSCSI client on the K2 Dyno PA in a K2 SAN system

Prerequisites:

• The K2 SAN system must have been configured as described in the section on configuring your K2 system.
• A K2 system must have been added to the Dyno PA client, as described in *Adding a SAN server*.
• The K2 Dyno PA machine must have the requirements described in the *K2 Dyno PA Prerequisites*.

To enable the Browse feature on the K2 Dyno PA application to work with a K2 system, the K2 system needs to be configured for K2 Dyno PA and the SNFS software needs to be configured on the Dyno PA machine. This section describes configuring SNFS software for the iSCSI client on the Dyno PA machine.

1. If you do not already have the K2 Dyno PA application open, start it now.
2. Right-click on the K2 system in the Navigation pane, and select **Edit Server**.
   The Add/Edit Server Device dialog box displays.
3. In the Add/Edit Server Device dialog box, check the Enabled box.
4. Click the **SNFS Configuration** button.
5. Assign a drive letter and click **Apply Settings**.
6. Click the **Apply Setting** button.
   Depending on your workflow, proceed to *Adding a bin* or *Adding a repository*.

Related Links

Chapter **3**

Managing K2 Dyno PA

This section contains the following topics:

- *Adding a standalone server*
- *Adding a SAN server*
- *Editing a server*
- *Deleting a server*
- *Adding or replacing a standalone K2 Summit system in an existing K2 Dyno PA system*
- *Restoring the K2 Summit system to a pre-DLC configuration*
- *About K2 Dyno PA administrator and user logins*
- *Creating a K2 Dyno PA user*

Adding a standalone server

Prerequisites:

- You must be logged in as an administrator on the Dyno PA application to add a server.
- You must have an administrator-level username and password on the K2 system that you are going to add as a server.
- The K2 system must have the requirements described in *K2 Dyno PA Prerequisites*.
- The K2 system must have a hosts table set up as described in the K2 System Guide.
- If using the Browse feature, the K2 Summit system must be configured as described in *Configuring the standalone K2 Summit system and K2 Dyno PA*

To add a server, follow these steps:

1. In the Navigation pane, right-click and select **New Server**.
2. Choose **Standalone server**.

   The Add/Edit Standalone Server Device dialog box displays.
3. To have Dyno PA populate the text fields, click the Discovered Devices button and select a K2 system from the drop-down list. Alternately, you can add the information:

   - **Type**: Server (Currently, there is no other option)
   - **Sub Type**: From the drop-down list, select the server you want to add from the list of available servers. A server can be a K2 Summit Production Client, K2 Solo Media Server, or K2 Media Client.
   - **Name**: Enter the name of the server.
   - **Description**: If desired, you can enter a description of the server.
   - **Host**: Enter the host name of the server, for example *Summit2*. Do not use the IP address.
   - **Username**: Enter an administrator-level username for the server.
   - **Password**: Enter the matching administrator-level password for this server.
4. Click **OK.**

   The K2 system appears in the Navigator pane. While Dyno PA is in the process of establishing a connection with the system, the icon next to the K2 system turns yellow.

   NOTE: The V:\ drive and Dyno sessions are all listed under the standalone server.
5. If you are not planning to use the Browse feature of the Dyno PA, proceed to *Adding a bin* or *Adding a repository*, depending on your workflow.
6. If you are planning to use the Browse feature of the Dyno PA, proceed to *Editing the FsNameServers file on the Dyno PA PC* in the *K2 Dyno Production Assistant Configuration Manual*.

Related Links

Configuring the standalone K2 Summit system and K2 Dyno PA on page 9

Adding a SAN server

Prerequisites:

- You must be logged in as an administrator on the K2 Dyno PA application to add a server.
- You must have an administrator-level username and password on the K2 system that you are going to add as a server. Grass Valley recommends that all the machines in the Dyno PA system, including the Dyno PA client, have the same administrator account (username and password).
- The K2 system must have the requirements described in *K2 Dyno PA Prerequisites* in the *K2 Dyno Production Assistant Configuration Manual*.
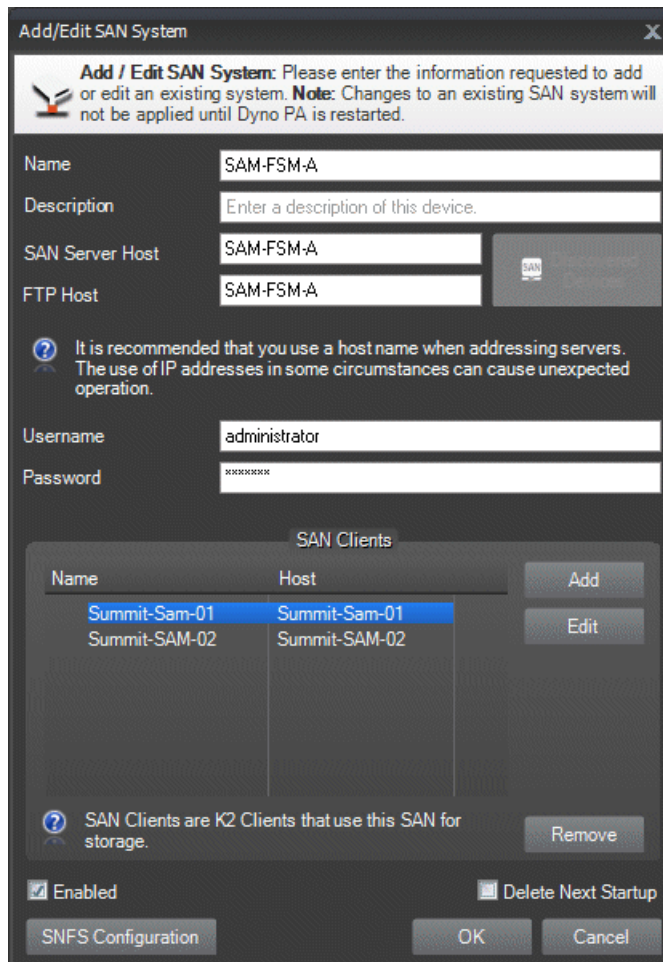- The K2 system must have a hosts table set up as described in the *K2 System Guide*.

This procedure configures the K2 Dyno PA PC to do the following tasks:

- See the file system exposed by the K2 Media Server (FSM).
- Connect to K2 Summit Production Clients or K2 Media Clients, and manage their channels.

In the Dyno PA system, the following terminology is used:

- **Server** — In a K2 SAN system, a server is a K2 Media Server accessed by the K2 Dyno PA application.
- **SAN Client** — A K2 Summit Production Client or K2 Media Client with media storage on a K2 SAN.

In the K2 Dyno PA application, the procedure for adding a SAN server is divided into two sections. You must first configure the server (the K2 Media Server) and then configure the SAN Client (K2 Summit Production Client or K2 Media Client with media storage on that particular K2 Media Server).

1. In the Navigation pane, right-click and select **New Server**.
2. Choose **SAN System**.

   The Add/Edit SAN System dialog box displays.

3. To have Dyno PA populate the text fields, click the Discovered Devices button and select a K2 system from the drop-down list. Alternately, you can add the information:

   • **Name**: Enter the name of the server.
   • **Description**: If desired, you can enter a description of the server.
   • **SAN Server Host**: Enter the host name of the SAN server, for example *K2SummitSAN2*
   • **FTP Host**: Enter the host name of the FTP server, for example *K2FTP1*. If the FTP server is the same as the SAN server host, leave blank.
   • **Username**: Enter an administrator-level username for the server.
   • **Password**: Enter the matching administrator-level password for this server.

4. To add a SAN client, select **Add**.

5. Add the following information:

- **Type**: Server (Currently, there is no other option)
- **Sub Type**: From the drop-down list, select the SAN client you want to add from the list of available SAN clients.
- **Name**: Enter the name of the SAN client.
- **Description**: If desired, you can enter a description.
- **Host**: Enter the host name of the SAN client, for example *Summit-01*.
- **Username**: Enter an administrator-level username for the SAN client.
- **Password**: Enter the matching administrator-level password for this SAN client.

6. Click **OK** to exit the Add/Edit SAN Client dialog box.

7. Click **OK** to exit the Add/Edit SAN Server dialog box.

The K2 SAN system appears in the Navigator pane. While Dyno PA is in the process of establishing a connection with the system, the icon next to the K2 system turns yellow.

NOTE: In the SAN system, the V:\ drive is displayed in the Navigator pane under the SAN while the individual Dyno sessions are displayed under each K2 Summit Production Client that uses the SAN for storage. In the standalone server, the V:\ drive and Dyno sessions are all listed under the standalone server.

8. If you are not planning to use the Browse feature of the Dyno PA, proceed to *Adding a bin* or *Adding a repository*, depending on your workflow.

9. If you are planning to use the Browse feature of the Dyno PA, refer to *Installing the generic iSCSI Client software* in the *K2 Dyno Production Assistant Configuration Manual*.

Related Links
Configuring the K2 Summit SAN and K2 Dyno PA on page 21

Editing a server

1. To modify a K2 system in the K2 Dyno PA application, right-click on the K2 system and select **Edit Server**.

2. Make any desired changes, and click **OK**.

   NOTE: Any changes made to a server do not take effect until the Dyno PA application is re-started.

Related Links

Deleting a server

1. To delete a K2 system as a K2 Dyno PA server, right-click on the system in the Navigation pane and select **Edit Server**.

   The Add/Edit Servers Device dialog box displays.

2. Check the **Delete Next Startup** box and click **OK**.

The K2 system is not deleted until the next time the Dyno PA application is started.

Related Links

Adding or replacing a standalone K2 Summit system in an existing K2 Dyno PA system

If using the Browse feature in Dyno PA, and a standalone K2 Summit system needs to be added or replaced, follow these steps.

1. When adding a new or replacing an existing K2 Summit system in a K2 Dyno PA system, the FsNameServers file in the C:\SNFS\Config folder must be identical to the other FsNameServers files in the system. This file contains the IP addresses of the Control network ports on up to three name servers. You do not need to disable the Write Filter to edit the FsNameServers file.

   • If adding or replacing a K2 Summit system that is not being used as a host name server, copy the FsNameServers file from one of the other machines in the setup to the C:\SNFS\Config folder of the new machine.
   • If replacing a K2 Summit system that is used as a host name server, the same IP address for the Control network can be used on the replacement machine. Since the identical FsNameServers file already exists on the other K2 Summit systems or Dyno PA machines, copy the existing FsNameServers file from one of these to the replacement machine.
   • If adding a new host name server to an existing K2 Dyno PA system, the IP address of the Control network for the new machine needs to be added to the FsNameServers file of all the K2 Summit systems and Dyno PA machines in the current setup. Either add this IP address to all the FsNameservers files or update one FsNameServers file and then copy that file to the other machines. You can have up to three host name servers in a setup.

2. Reboot the K2 Summit systems.
3. Reboot the K2 Dyno PA machines.

Related Links

Restoring the K2 Summit system to a pre-DLC configuration

If you need to roll a K2 Summit system back to its pre-DLC configuration, you can undo the changes.

Related Links

Restoring the network adapter order

To restore the network adapter order to its pre-DLC configuration, the Loopback adapter needs to be the first adapter on the K2 Summit system.

1. Turn the write filter off.
2. On the Windows desktop right-click **My Network Places** and select **Properties**.

   The Network Connections window opens.

3. On the menu bar at the top of the window, select **Advanced**, then **Advanced Settings…**
4. On the Adapters and Bindings tab, order adapters as follows:
   a) Loopback adapter
   b) Control network
   c) Media network

5. To close Advanced Settings and accept the changes, click **OK**.

6. Close the Network Properties window.

7. Proceed to *Undoing the DLC server configuration*.

Related Links

Restoring the K2 Summit system to a pre-DLC configuration on page 37

Undoing the DLC server configuration

Prerequisites:

*   The network adapters need to be ordered as described in *Ordering the network adapters for K2 Dyno PA*.

To undo the DLC server configuration, follow these steps:

1. Turn off the write filter.

2. From the **Start** menu, select **Programs | Stornext File System | Client Configuration**.

   The SNFS configuration client opens.

3. Click the **Properties** button.

   The Properties dialog box displays.

4. On the Distributed LAN tab, select **Disable**.

5. Turn write filter on.

6. Reboot the machine.

Related Links

Restoring the K2 Summit system to a pre-DLC configuration on page 37

About K2 Dyno PA administrator and user logins

There are two types of K2 Dyno PA users: administrators and normal users. Apart from restricting the user from administrator-level tasks, the main purpose of the user login is to allow for the Dyno PA user interface to be customized to the user's preferences and then saved for future access.

By default, the administrator login and passwords are as follows:

Login: **administrator**

Password: **adminK2**

Passwords are case sensitive.

Users are created in the Dyno PA application under **Users & Preferences**. Normal users are restricted from the following tasks:

- Adding a server
- Adding a managed channel
- Creating a user

The Advanced Settings tab of **Users & Preferences** lets you enter a Windows administrator username and password into the Dyno PA system. This is necessary because the Dyno PA platform service cannot access file-system repositories without administrator rights on the PC running the platform service.

☞ *Tip: Grass Valley recommends putting the same administrator username and password on every system in the Dyno PA system that needs to access file-system repositories.*

Related Links
Managing K2 Dyno PA on page 31

Creating a K2 Dyno PA user

K2 Dyno PA users are created in the Dyno PA application by a Dyno PA administrator. Dyno PA users are not linked to the standard Microsoft Windows user accounts.

1. From the Menu, select **Users & Preferences**.

   The Preferences dialog box displays.

2. Under User Accounts, click the **New** button.

   The System User dialog box displays.

3. Enter the following information

   - Name
   - Description (optional)
   - Password (case-sensitive)
   - Type: Normal or Admin

4. If the user needs to create or access a file-system repository, under the Advanced Settings tab enter a Windows administrator username and password for the machine running the Dyno PA platform service.

   ☞ *Tip: Grass Valley recommends putting the same administrator username and password on every system in the Dyno PA system that needs to access file-system repositories.*

5. When finished, click **OK**.

   The Dyno PA user interface can be customized to the user's preferences, and the layout will be saved, so that the next time that user logs in, their customized layout is displayed.

Related Links
Managing K2 Dyno PA on page 31