

# EQX Server Version 2.0.0

## USER MANUAL

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Version 2.2, March 2010

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## REVISION HISTORY

<u>REVISION</u>	<u>DESCRIPTION</u>	<u>DATE</u>
1.0	First Release	May 2008
2.0	Added Linux and EQX install directions Added information on operating the EQX Server	Jun 2008
2.1	Updated specifications	Nov 2008
2.2	Updated to reflect EQX Server Version 2.0.0	Mar 2010

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## 1. OVERVIEW

The EQX Server has been designed from the ground up to provide enterprise level, highly available routing infrastructure, which not only facilitates managing a large campus, region or world wide routing infrastructure but also simplifies the control of an operator or engineer with only local scope in mind while interfacing with the routing controller.

The EQX server itself is a real-time service that can be run in a variety of operating system environments, but most favorably in the Debian build of the Linux OS. The EQX Server is provided with MySQL, a very robust database built upon the foundation of SQL. This means that should additional features be required or should end users have a need for special interfacing not typically found in a routing control system, applications can quickly be developed by SQL savvy engineers or typically skilled IT personnel. The EQX Server also includes an industry standard robust web server for hosting the Web Configuration tool.

Actual installation of the Linux OS is performed by Evertz personnel. Evertz personnel are available to assist in hardware recommendations or troubleshooting with the Linux OS. Linux is a very powerful OS, however it is typically very simple to bring online.

For more information go to: <http://www.linuxhelp.net/> or <http://groups.google.com/group/linux.debian.user/>.

The actual process of installing the core EQX server is simple. The files provided will be in type DEB or EFP, a package installer (a technique with various names such as RPM etc used by all Linux OS variations), on USB key or CD/DVD ROM. Simply insert the disk, follow the simple accompanying instructions and in a few minutes the EQX sever will be running and ready to begin interfacing with the Router and the Web Config Tool. Details for deploying your own Debian build of Linux on an enterprise class device can be found on the Debian's website at <http://www.debian.org/>. Additional documentation on MySQL can be found at <http://www.mysql.com/>.

### 1.1. EQX SERVER SPECIFICATIONS

- Quad-Core Intel® Xeon® processor X3220 (2.4GHz, 8MB L2 cache, 95 Watts, 1066MHz FSB) or similar performance
- Minimum 2GB Unbuffered Advanced ECC PC2-6400 DDR 2x1GB Memory or similar
- Integrated Serial ATA host controller
- RAID array controller
- RAID 5 drive set (Requires 3 matching drives with beneficial performance from 4 matching drives)
- Each drive for the RAID array should be at least 100GB (or greater) SATA 7,200 rpm (or faster) Hard Drive
- Dual Port Gigabit NIC Adapter
- Serial port
- Optical Drive
- An X86 (intel) platform certified to run Debian Linux (ETCH version). HP Servers (specifically the DL360 series) are recommended for their redundant PSUs, RAID capability and Debian Linux certification.

## 2. INSTALLING DEBIAN ETCH OS

Prior to installation of the linux OS, the following information should be prepared:

- Server class hardware which meets the EQX server specifications, ready to power up, connected to monitor and keyboard with a NULL modem serial cable between Primary and secondary (if secondary is in use).
- IP information (Address, Netmask, Gateway etc) for each machine plus one for the virtual system.
- A “name” for each machine (EQXPRI/ EQXSEC or something similar).



**Tip: Although each EQX server PC requires at least one IP in order to facilitate ease of use and reliability for router panel and 3<sup>rd</sup> party connection to the system, a “virtual” or system IP masks the individual hardware IP addresses. No matter which server is active it still holds the “virtual” IP.**

### Getting Started:

1. Power on the machine and insert the debian etch CD.
2. The debian installation will begin automatically, when prompted press *enter* to continue booting.
3. When prompted for a language, select appropriately “English” as standard, and then continue.
4. Select the appropriate Country, and then continue.
5. From the keymap, select *American English* as standard, and then continue.
6. When prompted to choose a primary network interface, choose *eth0* and then continue.
7. Choose to configure the network and then continue.
  - a. Enter settings as prompted for address, netmask, gateway, and nameserver.
  - b. Enter EQXPRI or something similar for the host name of the primary EQX server. (EQXSEC for redundant, etc)
8. When prompted to configure partitions choose “*guided setup*”, select the disk and the option to put “*all files in one partition*”.
9. When prompted choose to “*finish partition*” and “*write all changes to disk*”. At this point the machine will format the drives, which can take 5 to 30 minutes depending on hard drive configuration, etc.
10. When prompted select your timezone.
11. When prompted to setup users use the following settings:
  - a. The password for the “root” user (equivalent to admin in linux systems) should be set to “*evertz*”.
  - b. The user account username should be set to “*evertz*” and the password for user account should be set to “*evertz*”.
  - c. Once this step is complete, please wait until prompted.

12. When prompted to configure a network mirror for the packet manager select “no” and wait for the “could not connect” message and then continue.
13. When prompted to participate in the package survey, select “NO”.
14. When prompted for software selection, choose only “standard system” (ensure **no other items** such as “desktop environment” are selected).
15. When prompted to choose the installation of the GRUB bootloader, select “yes” and then continue.
16. When prompted select *continue*, remove the CD and the machine will reboot.
17. Repeat this process for the redundant server, if present.

### **3. INSTALLING THE EQX SERVER**

1. Copy the two EQX server files onto a USB stick. (There will be a large base file and a small update file).
2. Insert the USB stick into the linux server (Note the location where it is automatically installed. It will install to *sda(x)*, which will probably be *sda1*)
3. To mount the USB drive: Type *mkdir /mnt/usb* and then press *<enter>*. Doing this creates a directory in the */mnt* directory called *usb*. Then type *mount /dev/sdax /mnt/usb* (where the *x* value entered will be the same as the previous step)
4. Copy the two eqx server files onto the machines: *cp /mnt/usb/eqx\_ .....efp /tmp* and press *<enter>*. Repeat this step for the other file.
5. Run the larger file: *sh /tmp/ evertz-server-base-1.1.0.efp* and then press *<enter>*. This process may take several minutes.
6. Now run the second file: *sh/tmp/ eqx-server-2.0.x.efp* and then press *<enter>*. When prompted choose *OK* to finish.
7. Once the installation of the update file is complete on the primary server shut it down by using “*shutdown -h now*” and press *<enter>*.
8. At this point return to the beginning of this section and follow the same procedure for the secondary server.
9. Once this step is reached for the secondary server and it is shutdown, power on the primary server first and then the secondary server. Refer to *Section 4: EQX Server Control Configuration Shell* to complete server configuration.

## 4. EQX SERVER CONTROL CONFIGURATION SHELL

The server control tool enables the user to set up the EQX server parameters. Launching the EQX Server Control Configuration tool will reveal a number of operations that can be performed in order to properly set up your server.



**Tip: Changes that affect the operation of the EQX Server or admin level actions will cause an authentication prompt to be displayed**

To login to the EQX Server Control Configuration Shell, the user will have to enter the following information when prompted by the debian server:

- Enter *admin* as the username and then press <enter>
- Enter *admin* as the password and then press <enter>

Figure 4-1 displays the main setup menu. Section 4.1 to 4.6 will guide you through the process of setting up your server and identifying the function of each configuration tool.

You will use the arrow keys, tab, and enter keys to navigate through the EQX Server Configuration Shell.

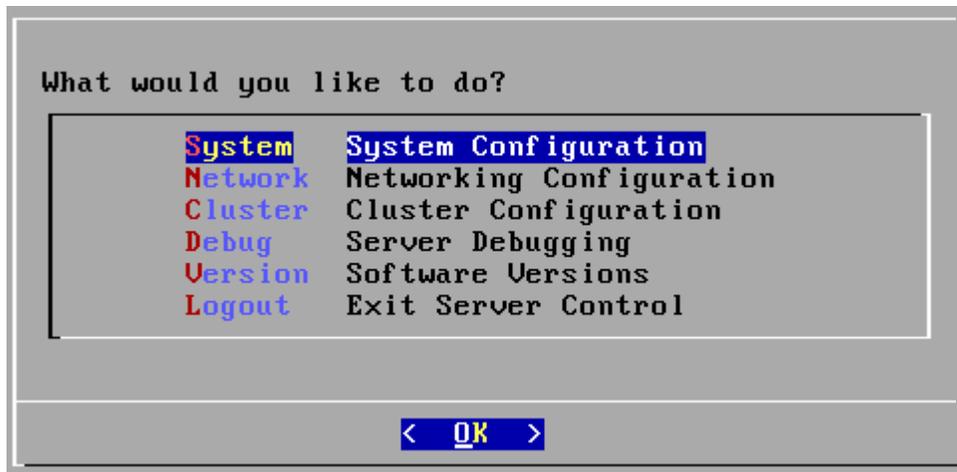


Figure 4-1: Main Server Control Menu

### 4.1. SYSTEM CONFIGURATION

Selecting the **System Configuration** option will reveal the screen displayed in Figure 4-2. The main function of the system configuration menu is to complete the set up of the server configuration. The System Configuration Menu allows the user to verify or change system level configuration, such as Date/Time, Hostname, etc; or to perform system level operations such as changing the admin password, upgrading, rebooting, etc.

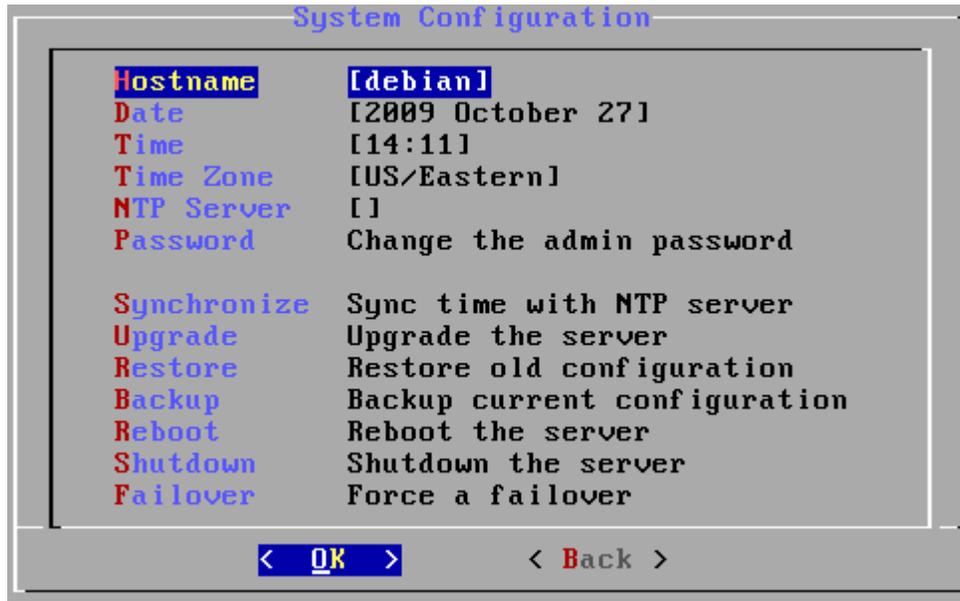


Figure 4-2: System Configuration Menu

#### 4.1.1. Setting the Host Name

Selecting the **Hostname** option from the System Configuration menu will enable the user to set the host name for the server. The dialog box in Figure 4-3 will appear when this option is selected. The user will be prompted to enter the desired name for the host into the "Set current host name:" field. This name was set during initial installation but can be changed using this menu option.

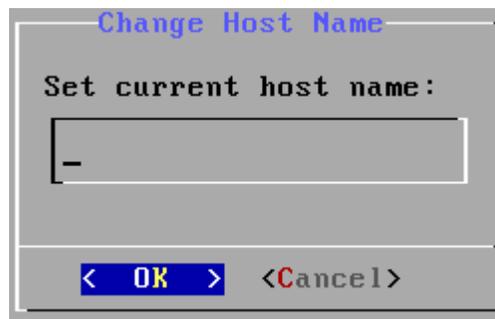


Figure 4-3: Change Host Name

### 4.1.2. Setting the Server Date

Selecting **Date** from the System Configuration menu will enable the user to set the date for which the server will reference. Select the current day, month and year from the calendar identified in Figure 4-4.

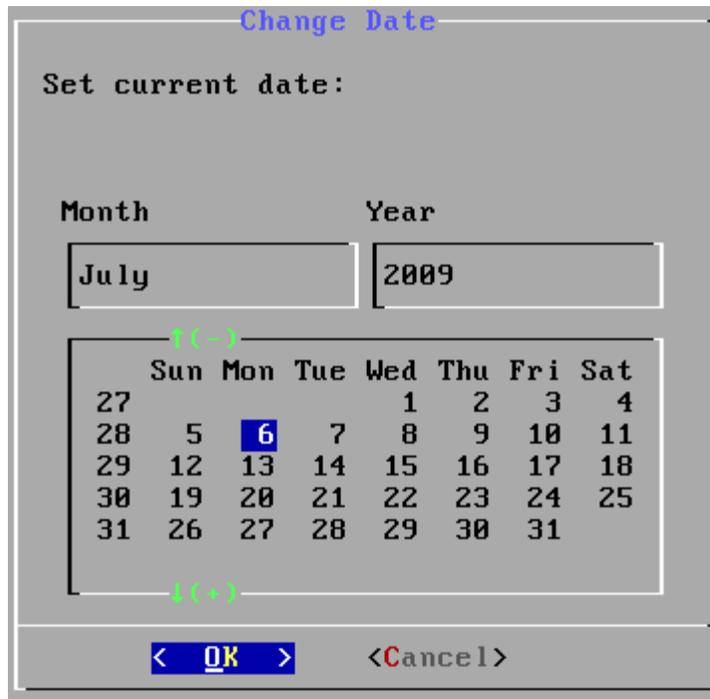


Figure 4-4: Change Date

### 4.1.3. Setting the Server Time

Selecting **Time** from the System Configuration menu will enable you to set the current time for which the server will reference. Select the hour, minute and second identified in the **Change Time** dialog box as shown in Figure 4-5. Use the up and down arrow keys to set the values and tab to switch boxes.

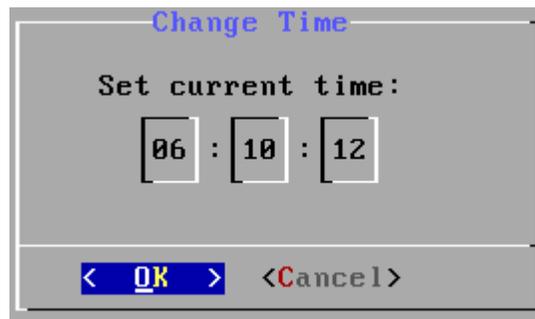


Figure 4-5: Change Time

### 4.1.4. Setting the Server Time Zone

Selecting **Time Zone** from the System Configuration menu will enable you to set the current time zone for the region you are in. Toggle through the list of countries and zones to select your region. Refer to Figure 4-6.

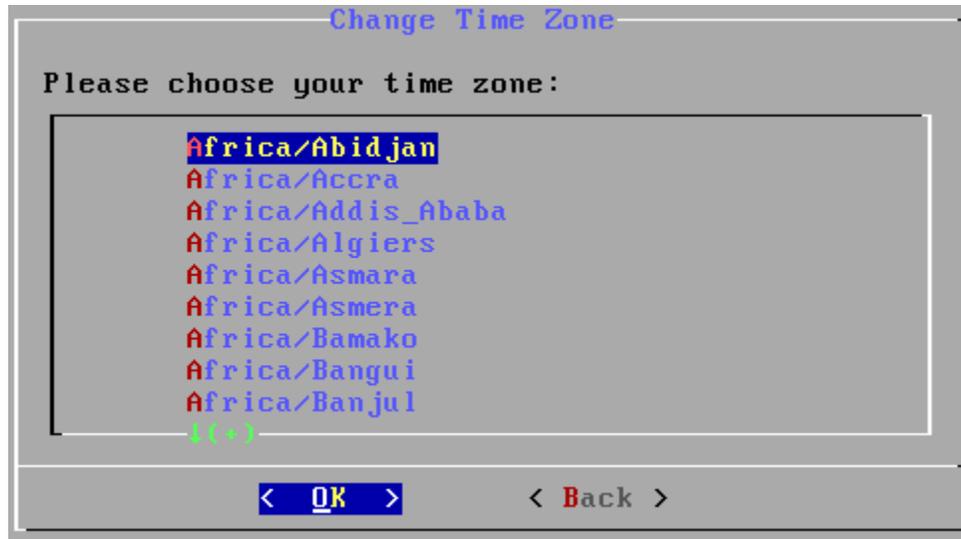


Figure 4-6: Change Time Zone

### 4.1.5. Setting the IP Address of the NTP Server

Selecting **NTP Server** from the System Configuration menu will enable you to set the IP address for the NTP Server. The dialog box in Figure 4-7 will appear when this option is selected. The user will be prompted to enter the IP address of the NTP Server into the empty field.

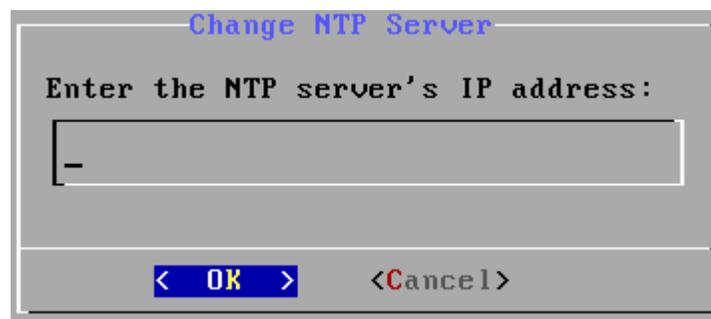


Figure 4-7: Change NTP Server

### 4.1.6. Changing the Server Password

Selecting the **Password** option from the System Configuration menu will enable you to change the *admin* password and set a new password for the “admin” account used to access the Server Configuration Shell. The dialog box in Figure 4-8 will appear when this option is selected. The user will be prompted to enter the current password into the “*enter current password to change*” field.

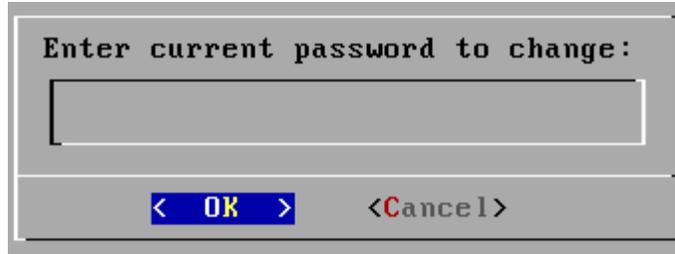


Figure 4-8: Change Password

Once the current password is entered, a new dialog box will appear as shown in Figure 4-9. This dialog box will prompt the user to enter the new password for the server. Type the new password into empty field and select **OK** to set the password.



Figure 4-9: Enter New Password Dialog Box

#### 4.1.7. Syncing Time with NTP Server

Selecting the **Synchronize** option from the System Configuration menu will enable the user to force a sync with the NTP server.

#### 4.1.8. Upgrading the Server

Selecting the **Upgrade** option from the System Configuration menu will enable you to upgrade the server. The dialog box in Figure 4-10 will appear when this option is selected. Enter the current "admin" password into the "Enter password to upgrade server:" field and press **OK**.

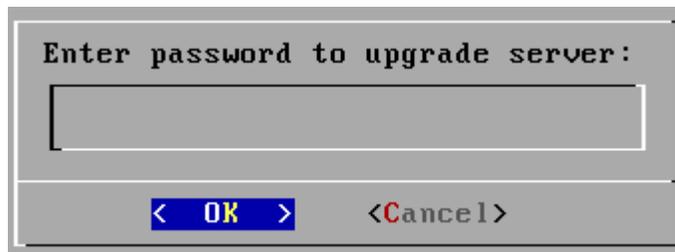


Figure 4-10: Enter Password to Upgrade Server

Once the correct password is entered, the user should connect the USB device containing the correct upgrade files. When the USB device is recognized, the dialog box in Figure 4-11 will disappear. If you do not wish to upgrade the server, select the **Cancel** button.



Figure 4-11: Waiting for USB Device

#### 4.1.9. Restoring the Configuration

Selecting the **Restore** option from the System Configuration menu will enable the user to restore an old configuration. The dialog box in Figure 4-12 will appear when this option is selected. Choose the configuration that you wish to restore from the list provided and then select **OK**. This is a low level configuration restore, please refer to section 4.1.10 for normal configuration backup and restore operations.



Figure 4-12: Restore Configuration

#### 4.1.10. Backing Up Configuration

Selecting the **Backup** option from the System Configuration menu will enable you to backup the current configuration. The dialog box in Figure 4-13 will appear when this option is selected. Enter the current "admin" password into the "Enter password to backup configuration:" field and press **OK**.

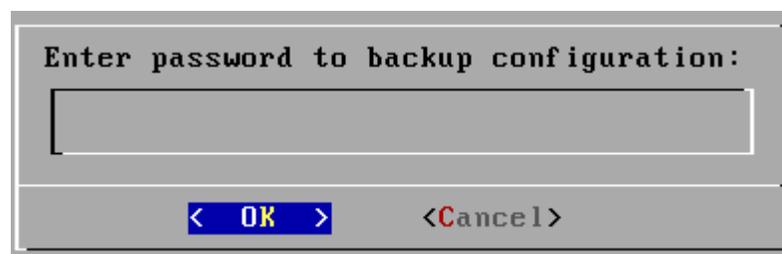


Figure 4-13: Enter Password to Backup Configuration

The current configuration will begin backing up and the following screen will be displayed:

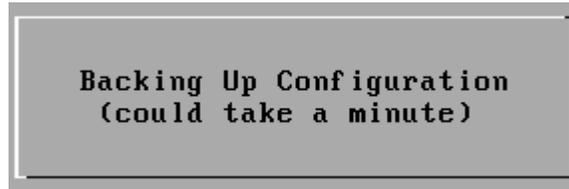


Figure 4-14: Backing Up Configuration

Once the configuration has been successfully backed up the following screen will appear informing the user that the configuration has been saved:

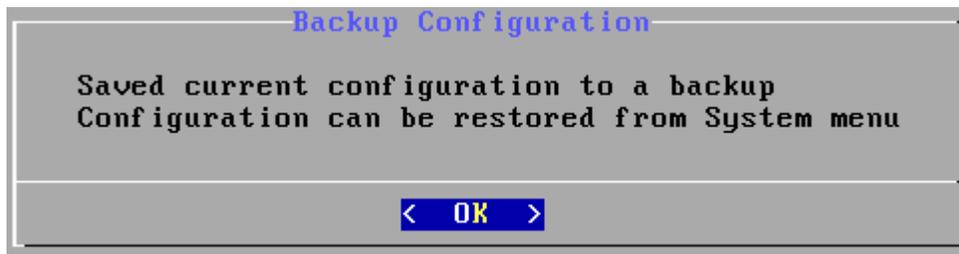


Figure 4-15: Backup Configuration

#### 4.1.11. Rebooting the Server

Selecting the **Reboot** option from the System Configuration menu will enable you to reboot the server. The dialog box in Figure 4-16 will appear when this option is selected. Enter the current “*admin*” password into the “Enter password to reboot the server:” field and press **OK**. The server will reboot.

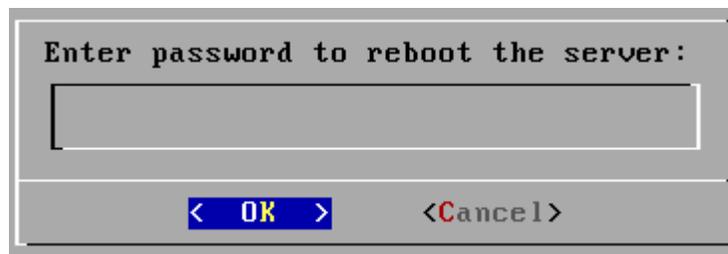


Figure 4-16: Enter Password to Reboot Server

#### 4.1.12. Shutting Down the Server

Selecting the **Shutdown** option from the System Configuration menu will enable you to shutdown the server. The dialog box in Figure 4-17 will appear when this option is selected. The user will be prompted to enter the current password into the “Enter password to shutdown the server” field. Once the password is entered, press the **OK** button.



Figure 4-17: Enter Password to Shutdown Server

#### 4.1.13. Forcing a Failover

Selecting the **Failover** option from the System Configuration menu will enable the user to force a fail-over from the active server to the redundant server. Please note that a forced fail-over can only be done from the active server.

### 4.2. NETWORKING CONFIGURATION

The **Networking Configuration** menu will enable the user to set the network information (IP, Netmask, Gateway, and Broadcast).

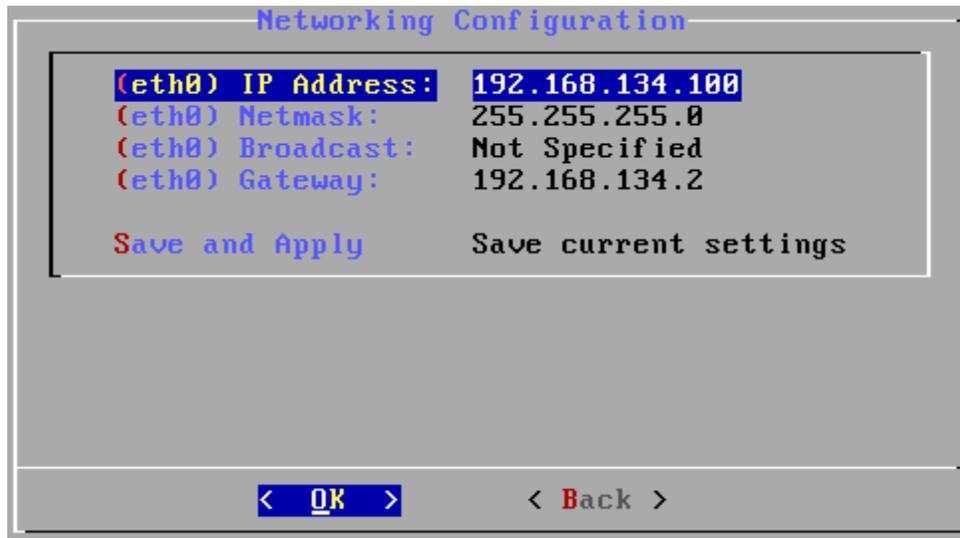


Figure 4-18: Network Configuration Menu

#### 4.2.1. Assigning an IP Address for eth1

To assign an IP Address, select the **(eth1) IP Address** option from the Networking Configuration menu. The dialog box in Figure 4-19 will appear when this option is selected. The user will be prompted to enter the desired IP address into the “New IP address for eth1 (DHCP if available)” field and then select the **OK** button. Please note that the settings must be saved using the **Save and Apply** option from the Networking Configuration menu. Please note that DHCP is NOT recommended at any time.

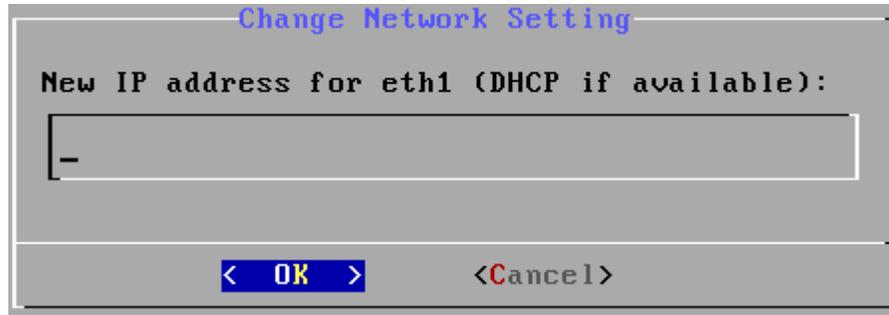


Figure 4-19: Enter New IP Address for eth1

#### 4.2.2. Assigning a Subnet Mask for eth1

To assign a subnet mask for eth1, select the **(eth1) Netmask** option from the Networking Configuration menu. The dialog box in Figure 4-20 will appear when this option is selected. The user will be prompted to enter the desired subnet mask into the "New subnet mask for eth1" field and then select the **OK** button. Please note that the settings must be saved using the **Save and Apply** option from the Networking Configuration menu.

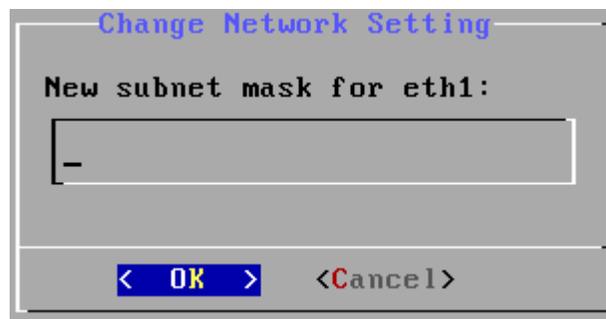


Figure 4-20: Enter New Subnet Mask for eth1

#### 4.2.3. Assigning a Gateway Address for eth1

To assign a gateway for eth1, select the **(eth1) Gateway** option from the Networking Configuration menu. The dialog box in Figure 4-21 will appear when this option is selected. The user will be prompted to enter the desired gateway into the "New gateway address for eth1" field and then select the **OK** button. Please note that the settings must be saved using the **Save and Apply** option from the Networking Configuration menu.

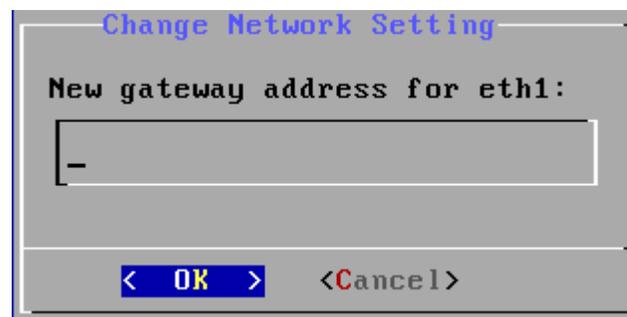


Figure 4-21: Enter New Gateway Address for eth1

### 4.2.4. Assigning a Broadcast Address for eth1

To assign a broadcast address for eth1, select the **(eth1) Broadcast** option from the Networking Configuration menu. The dialog box in Figure 4-22 will appear when this option is selected. The user will be prompted to enter the desired subnet mask into the “New broadcast address for eth1” field and then select the **OK** button. Please note that the settings must be saved using the **Save and Apply** option from the Networking Configuration menu.

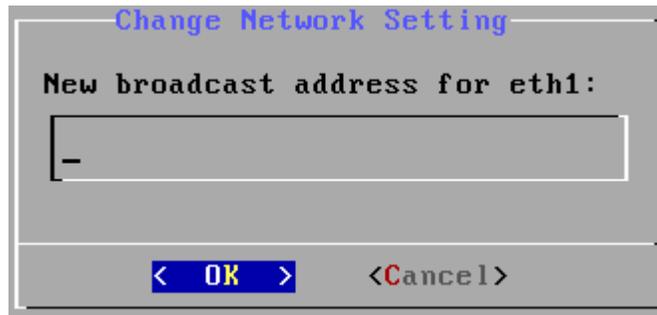


Figure 4-22: Enter New Broadcast Address for eth1

### 4.2.5. Bonding Multiple Interfaces

The **Create Bond** option enables the user to create an active/backup network configuration using two network ports on the EQX Server. This feature allows the user to bond two adapters together to function as one. For example, if one of the adapters of the bond were to fail (link loss as a result of cable failure, NIC failure, switch port failure, switch failure etc) the second adapter would automatically continue network connectivity. To create a bond, toggle to the **Create Bond** menu item as shown in Figure 4-23 and use this command to bond multiple interfaces.

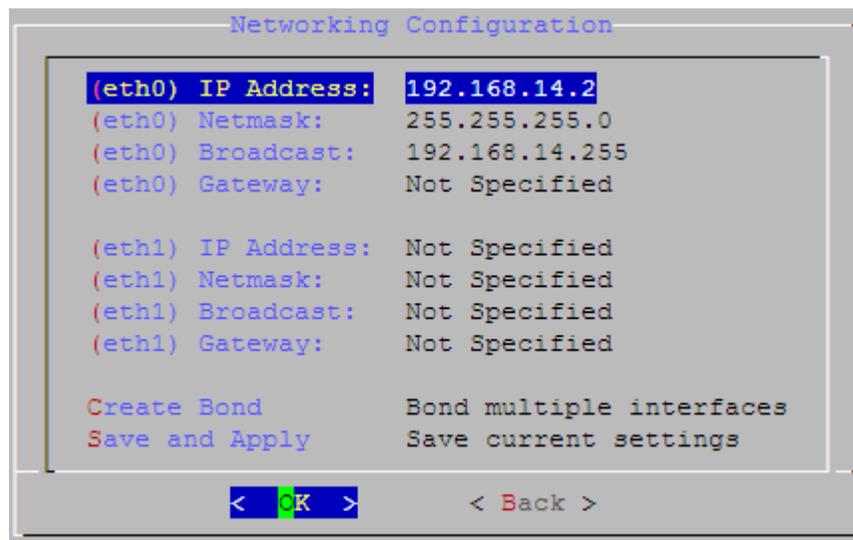


Figure 4-23: Creating a Bond

Once the network ports are bonded, the user can specify an IP address, Netmask, and Gateway for the bonded adapters. The network ports that are bonded together will be identified in the **Slaves** field. For example, *eth0* and *eth1* would be listed under the *Slaves* item as shown in Figure 4-24.

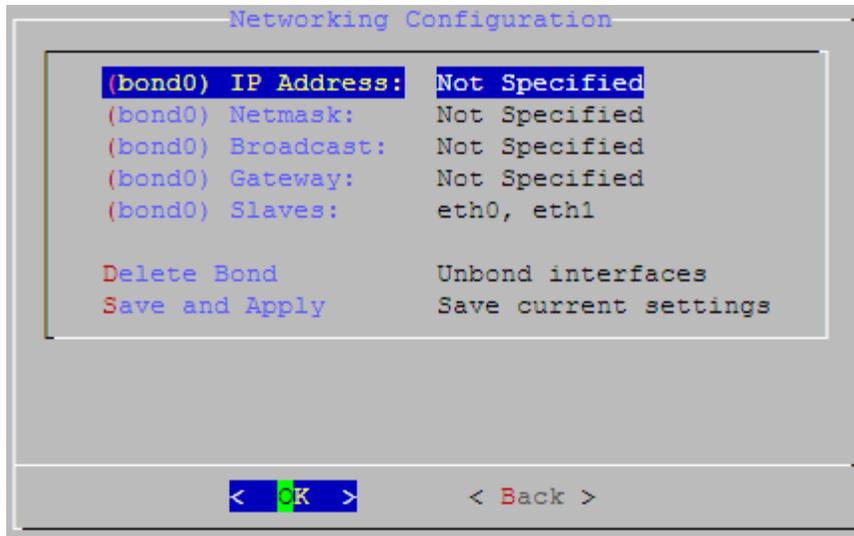


Figure 4-24: Bonded Network Ports

The bond between the interfaces can be removed by selecting the **Delete Bond** function.

### 4.3. CLUSTER CONFIGURATION

The **Cluster Configuration** menu will enable the user to set the cluster information for primary and redundant EQX Servers.. (host names and IP addresses, preferred hosts, and cluster IP addresses).



Figure 4-25: Cluster Configuration

#### 4.3.1. (host x) Host Name

To assign a host name to the primary host (Host 1), select the **(host 1) Host Name** option from the Cluster Configuration menu. The dialog box in Figure 4-26 will appear when this option is selected. The user will be prompted to enter the primary host name into the “Enter host name” field and then select the **OK** button.



Figure 4-26: Change Host Setting

To assign a host name to the redundant server, select the **(host 2) Host Name** option and enter the desired redundant server name into the “Enter host name” field and then select the **OK** button.

#### 4.3.2. (host x) IP Address

To assign a host IP address to the primary server, select the **(host 1) IP Address** option from the Cluster Configuration menu. The dialog box in Figure 4-27 will appear when this option is selected. The user will be prompted to enter the desired host IP address into the “Enter (*host name*)’s IP address” field and then select the **OK** button.

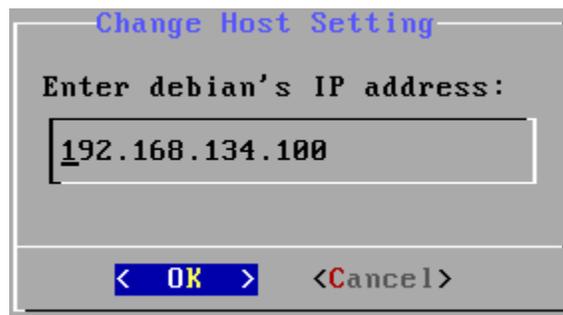


Figure 4-27: Host IP Address

If you wish to assign an IP address to the redundant server, select the **(host 2) IP Address** option and enter the desired redundant server name into the “Enter (*host name*)’s IP address” field and then select the **OK** button.

### 4.3.3. Preferred Host

The **Preferred Host** field will display the name of the primary server. If there is more than one server available, the user can select the server that they wish to assign as the preferred, primary server. To assign the preferred host, toggle to the *Preferred Host* option and select the **OK** button.

A **Preferred Host** dialog will appear (as shown in Figure 4-28) enabling the user to select a preferred host from the list of servers available. Toggle to the host in the list that you wish to make the primary server and then select the **OK** button. The selected server will be set as the primary server. A preferred host is the server that will be made active if both primary and secondary servers are brought online at the same time. This requires the cluster is configured correctly and communication links between both servers are functioning correctly.

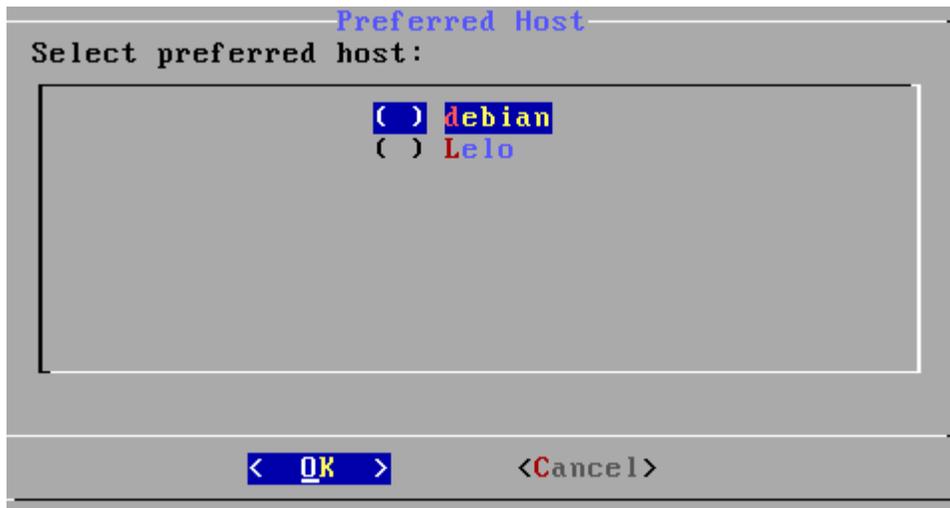


Figure 4-28: Select Preferred Host

### 4.3.4. Change Cluster IP Address

To change the cluster IP address, select the **Cluster IP Address** option from the Cluster Configuration menu. The dialog box in Figure 4-29 will appear when this option is selected. If the user wishes to change the cluster IP address, enter a new IP address into the “Enter the Cluster IP address” field and then select the **OK** button. The cluster IP address is the IP address assigned to the Active EQX server so that all clients have a single address connected to them regardless of which EQX Server is Active. This is the IP address you will use to access the WEB Configuration Tool, and which will be manually programmed into any advanced panels for EQX-SERVER connectivity.

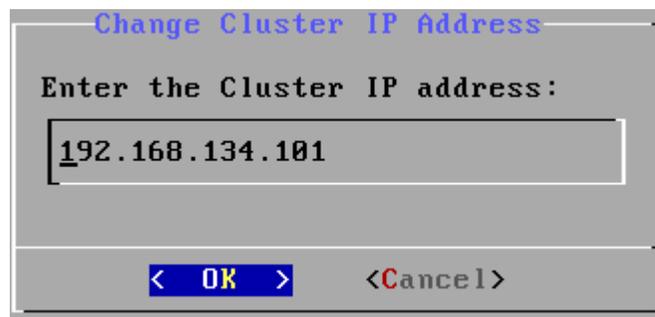


Figure 4-29: Change Cluster IP Address

## 4.4. SERVER DEBUGGING

The **Server Debugging** menu enables the user to view the server debugging features.



Figure 4-30: Server Debugging Main Screen

### 4.4.1. Viewing the Cluster Status

To view the cluster status, select the **Cluster Status** option from the Server Debugging menu. The **Cluster Status** window will display the details of all the elements in the cluster and whether or not the cluster is running properly, as shown in Figure 4-31. To return to the main **Server Debugging** screen toggle to the **Exit** option and press <enter>.

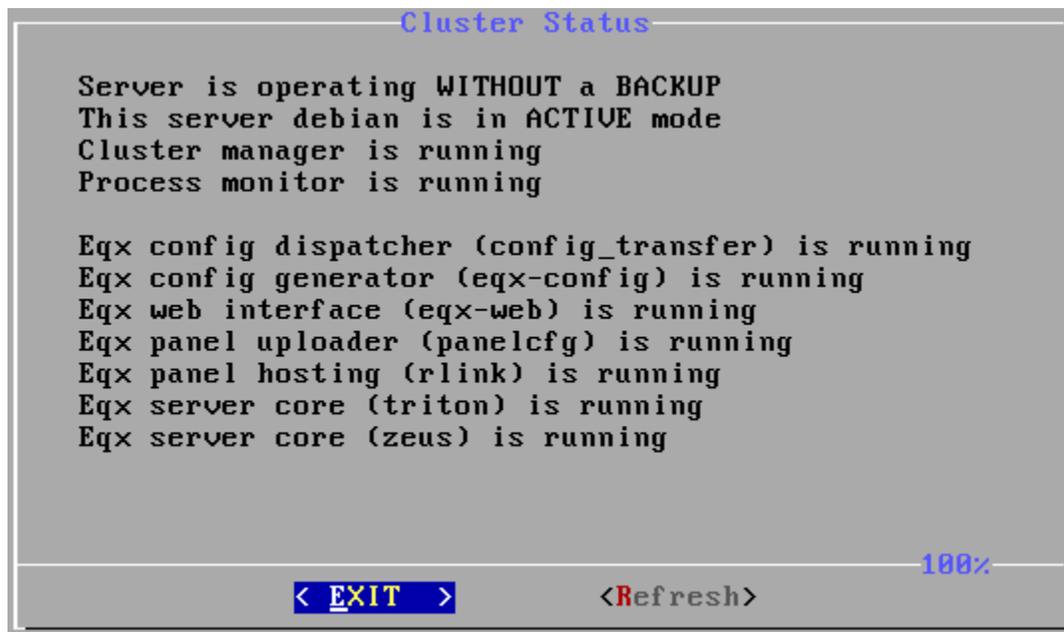


Figure 4-31: Cluster Status

#### 4.4.2. Viewing the Ethernet Status

To view the status of the Ethernet connection, select the **Interface** option from the Server Debugging menu. The **Interface** window will display the details of the Ethernet interface status, as shown in Figure 4-32. To return to the main **Server Debugging** screen toggle to the **Exit** option and press <enter>.

```

Ethernet Status

eth0      LINK CONNECTED
eth0      Link encap:Ethernet  HWaddr 00:0C:29:0D:95:67
          inet addr:192.168.134.100  Bcast:192.168.134.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe0d:9567/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:24948 errors:0 dropped:0 overruns:0 frame:0
          TX packets:136385 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1740706 (1.6 MiB)  TX bytes:6801162 (6.4 MiB)
          Interrupt:177 Base address:0x1400

eth0:0    LINK CONNECTED
eth0:0    Link encap:Ethernet  HWaddr 00:0C:29:0D:95:67
          inet addr:192.168.134.101  Bcast:192.168.134.255  Mask:255.255.255.0

((+)) 47%
< EXIT >
    
```

Figure 4-32: Ethernet Interface Status

#### 4.4.3. Observing Open Ports

To observe the status of the open ports select the **Open Ports** menu item to display network connections, routing tables, and interface statistics, as shown in Figure 4-33. To return to the main **Server Debugging** screen toggle to the **Exit** option and press <enter>.

```

Open Ports

Proto Recv-Q Send-Q Local Address           Foreign Address
tcp      0      0 0.0.0.0:8064           0.0.0.0:*
tcp      0      0 127.0.0.1:8065         0.0.0.0:*
tcp      0      0 127.0.0.1:3306        0.0.0.0:*
tcp      0      0 0.0.0.0:6444          0.0.0.0:*
tcp      0      0 0.0.0.0:80            0.0.0.0:*
tcp      0      0 0.0.0.0:6996          0.0.0.0:*
tcp      0      0 0.0.0.0:2812          0.0.0.0:*
tcp      0      0 127.0.0.1:44048        127.0.0.1:6444
tcp      0      0 127.0.0.1:6444         127.0.0.1:44048
tcp      0      0 192.168.134.100:1022   192.168.134.100:6996
tcp      0      0 192.168.134.100:1023   192.168.134.100:6996
tcp      0      0 192.168.134.100:6996   192.168.134.100:1023

((+)) 81%
< EXIT >      <Refresh>
    
```

Figure 4-33: Observe Open Ports

#### 4.4.4. Observing Network Traffic

Selecting the **Traffic** menu item enables the user to view the network traffic on a specific Ethernet interface, as shown in Figure 4-34. To exit the **Network Traffic** screen press the 'q' key on your keyboard to quit the screen.

	12.5Kb	25.0Kb	37.5Kb	50.0Kb	62.5Kb
192.168.134.100	=>	192.168.14.1	0b	0b	0b
	<=		0b	504b	504b
192.168.134.100	=>	192.168.1.56	588b	294b	294b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.153	144b	72b	72b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.210	144b	72b	72b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.151	144b	72b	72b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.152	144b	72b	72b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.51	0b	36b	36b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.50	0b	36b	36b
	<=		0b	0b	0b
192.168.134.100	=>	192.168.14.52	0b	36b	36b
	<=		0b	0b	0b
TX: cumm: 762B peak: 1.13Kb rates: 1.14Kb 762b 762b					
RX: 504B 1.97Kb 0b 504b 504b					
TOTAL: 1.24KB 2.39Kb 1.14Kb 1.24Kb 1.24Kb					

Figure 4-34: Observing Network Traffic

#### 4.4.5. Test if the Host is Reachable

Select the **Ping** menu item to test if devices on the network are reachable. When the **Ping** option is selected the **Ping Host** field will appear as shown in Figure 4-35. Enter the host name or IP address into the "Enter host name or IP address" field.



Figure 4-35: Ping Host Dialog Box

#### 4.4.6. Send Commands to Remote Machine

Select the **Telnet** menu item to test if devices on the network support a telnet connection. When the **Telnet** option is selected the **Telnet** field will appear as shown in Figure 4-36. Enter the host name or IP address into the “Enter host name or IP address” field.

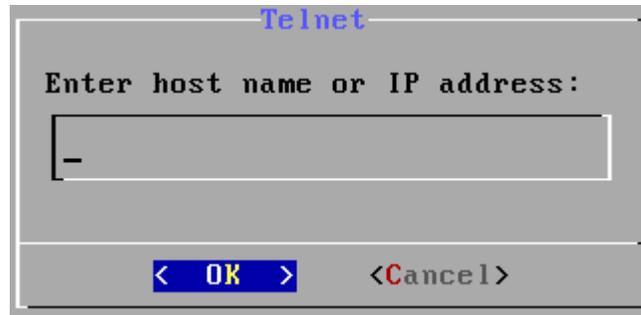


Figure 4-36: Telnet Dialog Box

#### 4.4.7. Watch a Log File

Selecting the **View Logs** menu option will allow the user to view log files in real time. The **Watch Logfiles** dialog box will appear enabling the user to toggle through the log files, as shown in Figure 4-37. Toggle to the desired log file and select it by highlighting the file in the list and pressing the **OK** button.

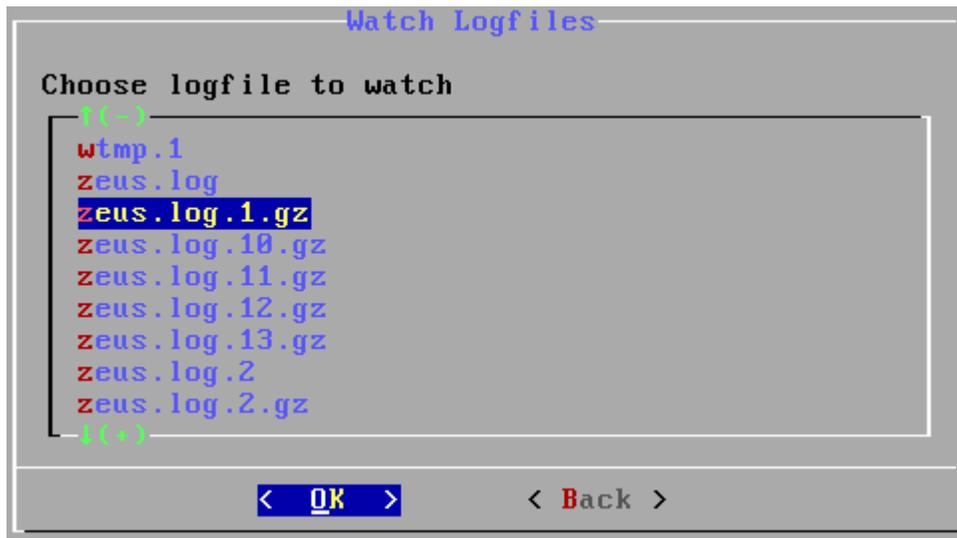


Figure 4-37: Watch Logs Dialog Box

Once the log file is selected, the corresponding information will be displayed as shown in Figure 4-38. To exit the **logfile** screen press the ‘q’ key on your keyboard to quit the screen.

```
Oct 27 14:01:01 debian zeus: INFO:pantheos.zeus:Version 1.4.0rc53
Oct 27 14:01:01 debian zeus: INFO:license:System ID = 1718666178
Oct 27 14:01:01 debian zeus: INFO:license:License is not correct
Oct 27 14:01:01 debian zeus: ERROR:pantheos.zeus:License not valid for this system! Going into standby..
Oct 27 14:01:01 debian zeus: INFO:pantheos.zeus:loading configuration from /opt/eqx-server/config.d
Oct 27 14:01:01 debian zeus: DEBUG:pantheos.zeus:Tweak enabled: virtual_destination_availability -> all
Oct 27 14:01:01 debian zeus: DEBUG:pantheos.zeus:Tweak enabled: guess_virtual_source_tally -> 1
Oct 27 14:01:01 debian zeus: WARNING:pantheos.zeus:Tweak 'salvo_delay_interval' not recognized - it will have no effect.
Oct 27 14:01:01 debian zeus: INFO:pantheos.zeus:initializing internal structures
Oct 27 14:01:02 debian zeus: DEBUG:pantheos.letto.devices:Creating crosspoint device 'EQX'
Oct 27 14:01:02 debian zeus: DEBUG:pantheos.letto.devices:Creating destination monitor device 'EQX.MON'
Oct 27 14:01:02 debian zeus: DEBUG:pantheos.letto.devices:Creating multipoint device 'ADMX'
Oct 27 14:01:02 debian zeus: DEBUG:pantheos.letto.devices:Creating avip device 'EQX.AVIP.9'
Oct 27 14:01:02 debian zeus: DEBUG:pantheos.letto.devices:Creating avip device 'EQX.AVIP.10'
[Shift-F] to follow / [Q] to quit_
```

Figure 4-38: Viewing Logs Dialog Box

### 4.4.8. Export Logs

Selecting the **Export Logs** menu option will allow the user to export logs to USB. When this option is selected, the user will be required to enter the password in order to export the log files. This is a Low level operation, Webconfig interface allows for an easy method of exporting logs from the active server. The following dialog box will prompt the user to enter a password:



Figure 4-39: Enter Password to Export Logfiles

Once a password is entered the user will be required to connect a USB device to which the log files will be exported to.

#### 4.4.9. Export the Configuration

Selecting the **Export Config** menu option will allow the user to export the configuration to USB. When this option is selected, the user will be required to enter the password in order to export the configuration. This is a Low Level operation, Webconfig interface allows for an easy method of exporting the configuration from the active server. The following dialog box will prompt the user to enter a password:



Figure 4-40: Enter Password to Export the Configuration

Once a password is entered the user will be required to connect a USB device to which the log files will be exported to.

#### 4.4.10. Viewing Server Process Details

Selecting the **View Processes** menu item enables the user to view the server process details. When this option is selected, the user will be prompted to enter a password.



Figure 4-41: Enter Password to View Processes

Once the password is entered, the processes information will be displayed as similarly shown in Figure 4-42. To exit the **Server Process** screen press the 'q' key on your keyboard to quit the screen.

```
top - 11:39:17 up 21:38, 1 user, load average: 0.00, 0.01, 0.00
Tasks: 51 total, 1 running, 50 sleeping, 0 stopped, 0 zombie
Cpu(s): 0.0%us, 0.7%sy, 0.0%ni, 99.3%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Mem: 516864k total, 505800k used, 11064k free, 112604k buffers
Swap: 409616k total, 0k used, 409616k free, 81624k cached
```

PID	USER	PR	NI	UIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
3812	admin	18	0	2228	1104	860	R	0.7	0.2	0:00.03	top
1	root	15	0	1948	644	548	S	0.0	0.1	0:00.91	init
2	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
3	root	34	19	0	0	0	S	0.0	0.0	0:00.00	ksoftirqd/0
4	root	10	-5	0	0	0	S	0.0	0.0	0:00.16	events/0
5	root	10	-5	0	0	0	S	0.0	0.0	0:00.00	khelper
6	root	10	-5	0	0	0	S	0.0	0.0	0:00.00	kthread
9	root	10	-5	0	0	0	S	0.0	0.0	0:00.10	kblockd/0
10	root	20	-5	0	0	0	S	0.0	0.0	0:00.00	kacpid
66	root	10	-5	0	0	0	S	0.0	0.0	0:00.00	kseriod
102	root	25	0	0	0	0	S	0.0	0.0	0:00.00	pdflush
103	root	15	0	0	0	0	S	0.0	0.0	0:00.33	pdflush
104	root	10	-5	0	0	0	S	0.0	0.0	0:00.08	kswapd0
105	root	20	-5	0	0	0	S	0.0	0.0	0:00.00	aio/0
636	root	11	-5	0	0	0	S	0.0	0.0	0:00.00	scsi_eh_0
881	root	10	-5	0	0	0	S	0.0	0.0	0:01.96	kjournald
1038	root	21	-4	2180	592	352	S	0.0	0.1	0:00.28	udevd
1312	root	15	-5	0	0	0	S	0.0	0.0	0:00.00	kpsmoused

Figure 4-42: Server Processes Page

#### 4.4.11. Search for Running Processes

Selecting the **Search Processes** menu item enables the user to search for the running processes. When this option is selected, the user will be prompted to enter a password in the **Search Processes** dialog box.

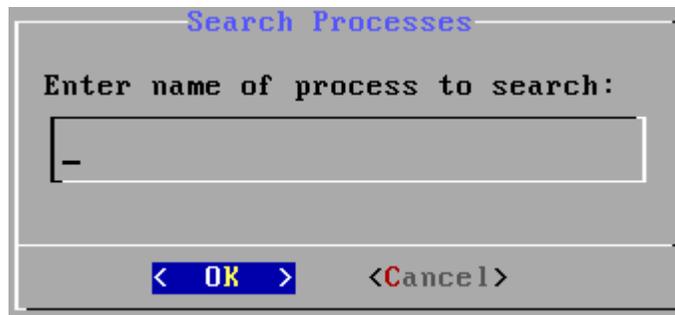


Figure 4-43: Enter Password for Search Processes

Once the password is entered, a list of processes will appear (as shown in Figure 4-44) enabling the user to view the running processes returned by the search. To return to the main **Server Debugging** screen toggle to the **Exit** option and press <enter>.

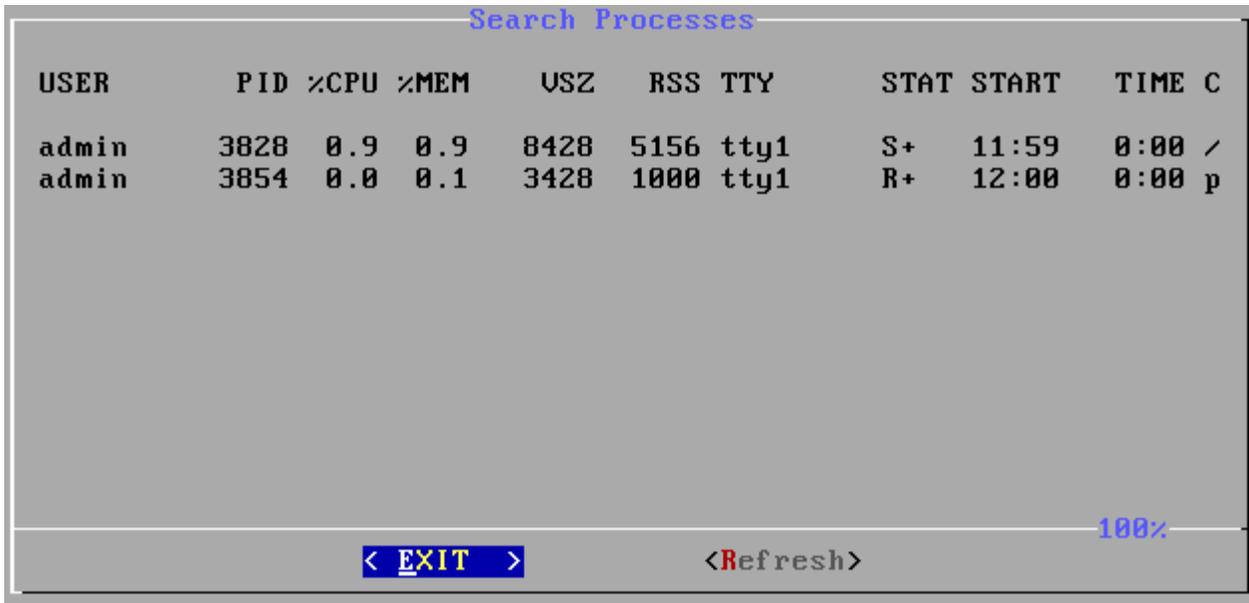


Figure 4-44: Search Processes

#### 4.4.12. Control Server Process

Selecting the **Control Processes** menu item enables the user to control core server processes. The Control Process screen will appear as shown in Figure 4-45. The user can toggle through the various control processes to view the specific process details or stop the process from running.



This should only be used with the support of Evertz Technical personnel.

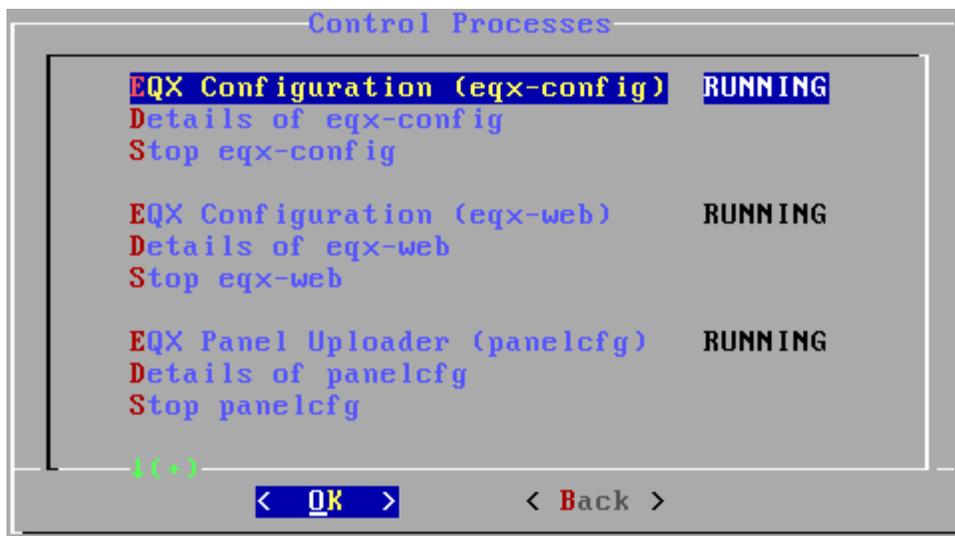


Figure 4-45: Control Processes

To view the process details, toggle to the *details* menu item for the desired process and select **OK**. A screen similar to the one in Figure 4-46 will appear allowing the user to view the process details. To return to the main **Server Debugging** screen toggle to the **Exit** option and press <enter>.

```
Details of zeus

USER:      root
PID:       2249
%CPU:      0.0
%MEM:      5.0
VSZ:       28436
RSS:       25920
TTY:       ?
STAT:      Ss
START:     Oct27
TIME:      0:03
COMMAND:   /opt/eqx-server/zeus/bin/python2.4 /opt/eqx-server/zeus/

100%
< EXIT >      <Refresh>
```

Figure 4-46: Details of Process

To stop a process, use the up and down arrows on your keyboard to toggle to the process that you wish to stop, and then select the **OK** button when you have selected the *stop* function for that process. For example, if you wish to stop the **Panel Uploader (panelcfg)** process, toggle to the **Stop panelcfg** item and select the **OK** button. The *Panel Uploader* process will be stopped.

### 4.4.13. Terminate Process

Selecting the **Terminate Process** menu item enables the user to force a process to terminate. Upon selecting this option a *Terminate Process* screen will appear as shown in Figure 4-47.



This should only be used with the support of Evertz Technical personnel.

To return to the main **Server Debugging** screen toggle to the **Exit** option and press <enter>.

```

                Terminate Process
PID COMMAND
3995 /opt/configshell/bin/python2.4 /opt/configshell/bin/configsh
3986 /bin/login --
2681 /opt/eqx-server/eqx-web/bin/python2.4 /opt/eqx-server/eqx-we
2675 /opt/eqx-server/eqx-web/bin/python2.4 /opt/eqx-server/eqx-we
2666 /opt/eqx-server/panelcfg/bin/python2.4 /opt/eqx-server/panel
2660 /opt/eqx-server/rlink/bin/python2.4 /opt/eqx-server/rlink/bi
2356 heartbeat: heartbeat: read: ucast eth0
2355 heartbeat: heartbeat: write: ucast eth0
2354 heartbeat: heartbeat: read: serial /dev/ttyS0
2353 heartbeat: heartbeat: write: serial /dev/ttyS0
2352 heartbeat: heartbeat: FIFO reader
2347 heartbeat: heartbeat: master control process
2299 /opt/eqx-server/zeus/bin/python2.4 /opt/eqx-server/zeus/bin/
2283 /sbin/getty 38400 tty6
  
```

(+) 44%  
< EXIT >      <Enter PID>

Figure 4-47: Terminate Process

#### 4.5. ABOUT THIS SERVER

Selecting the **About** option from the main menu will display the current EQX Server, Configshell and Kernel version.

```

                Software Versions
Kernel: 2.6.18-4-686
Configshell: 1.0.0rc53
EQX Server: 2.0.0rc30
  
```

< OK >

Figure 4-48: About...

#### 4.6. LOGOUT

To safely logout of the EQX Server Configuration tool, toggle to the **Logout** option and then select the **OK** button.

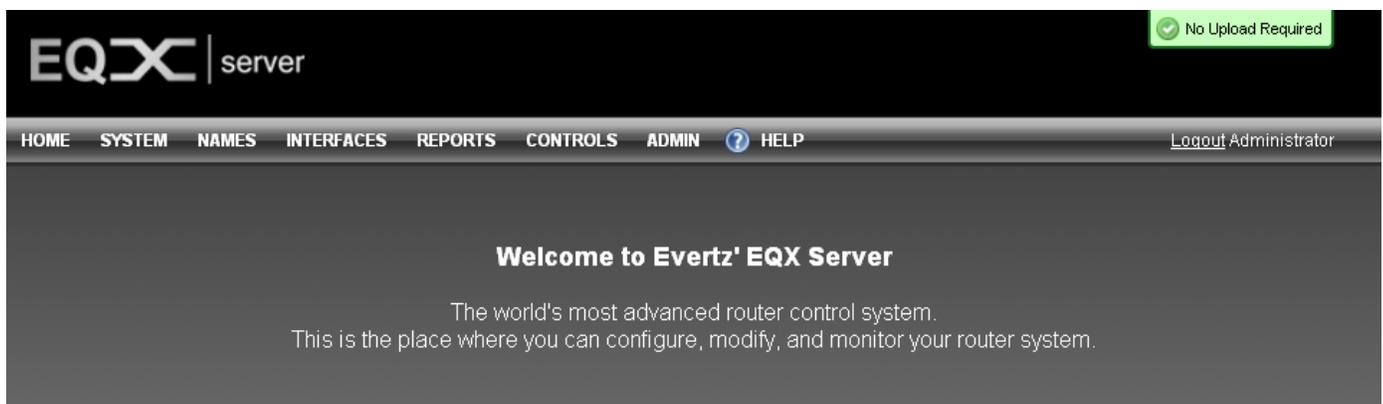
### 5. OPERATING THE EQX SERVER

#### 5.1. REQUIREMENTS FOR USING THE WEB CONFIG TOOL

1. Ensure the EQX Server is installed and operational, and the IP Address is set correctly.
2. Ensure the computer is attached to the same network as the EQX Server.
  - a. Since the EQX Web Config Tool (WCT) uses standard HTML, XHTML, CSS, etc any web browser on any platform that complies with these formats can be used.
    - i. Currently the most adopted browser that is completely compliant is Mozilla Foundations Firefox. We recommend that you use this browser, if available to you, for the best performance of the WCT. For a free download of the current Mozilla Firefox browser navigate to the following website:  
<http://www.mozilla.com/en-US/firefox/>
3. It is not required, but it is an asset to have a solid general understanding of routing systems. Knowing how your system is wired in terms of inputs, outputs, tielines to terminal equipment and other routers and names for resources makes moving through the process of configuring your router control system far easier.

#### 5.2. GETTING STARTED: SETTING UP YOUR ROUTER SYSTEM

1. Launch the firefox web browser and enter the numeric address chosen as the system IP address (also called the virtual or CLUSTER IP address which was entered into the Cluster configuration page during initial setup) into the address bar followed by "/eqx" (for example: 192.168.1.4/eqx) and then press the <enter> key; you should see the login page for the EQX server web configuration tool.
2. Click the **Login** link button and enter the username and password. The default administrator username and password (as set during EQX server install) is:  
**USERNAME:** admin  
**PASSWORD:** admin
3. Once the username and password is filled in, click the **Login** button. A *Welcome* screen will appear as shown in Figure 5-1.



**Figure 5-1: Home Page**

### 5.3. CONFIGURING THE SYSTEM

#### 5.3.1. Defining the Servers

The **Servers** tab will enable the user to view, add and delete servers. The existing servers will be listed in the *Name* column alongside the corresponding IP Address in the *IP Address* column. The *Active* column will identify whether a server is active or inactive. If a server is active a green check mark will appear in the *Active* column. The *Upload Required* column will identify if an upload is required depending on if changes have been made. The *Server License* field identifies the validity of a license. If the user has a valid license loaded, the *Server License* field will read “License Valid”; if a license is invalid or missing it will be indicated in this column. The *License Virtual Panels* column identifies the number of virtual panels that can connect to EQX Server at one time. (Eg. In Figure 5-3 there are 15 valid virtual panels licenses available).

To access the server screen:

1. Click on the **SYSTEM** drop down menu and select the **Servers** menu item.

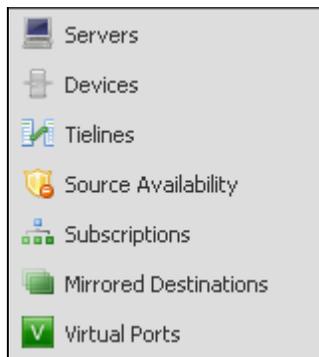


Figure 5-2: System Menu

2. The **Server** screen, as shown in Figure 5-3, enables the user to add, view and edit the properties of the servers.

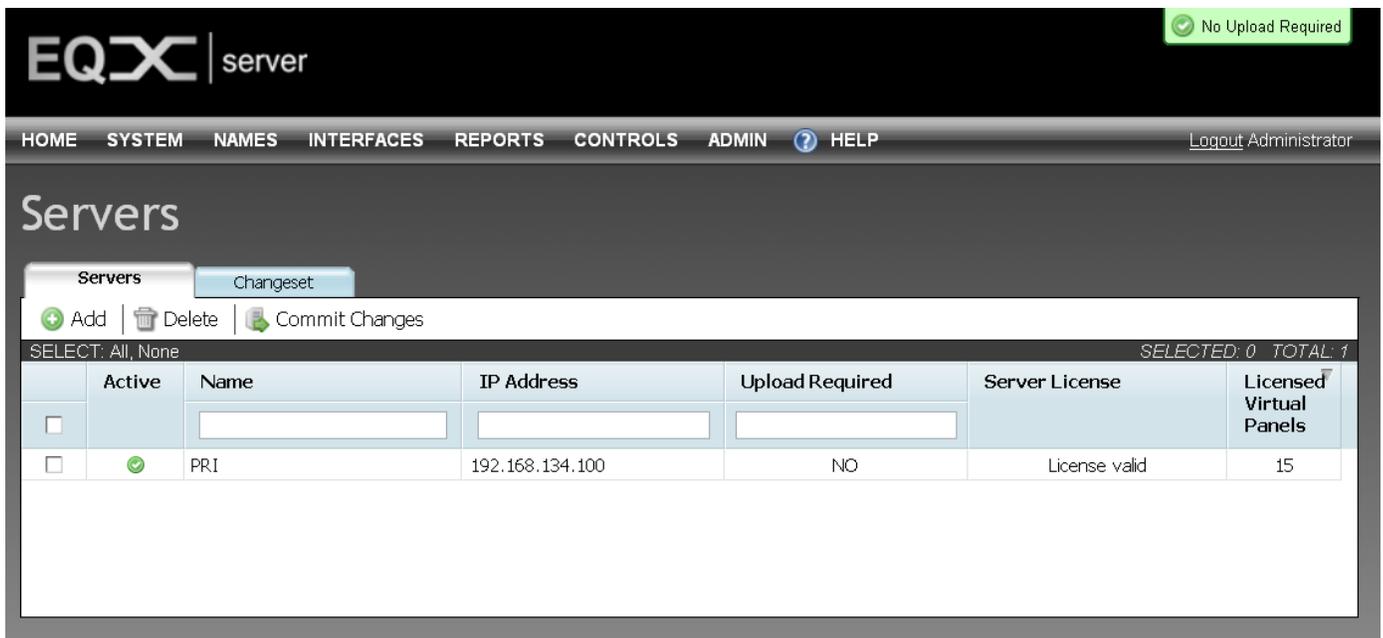
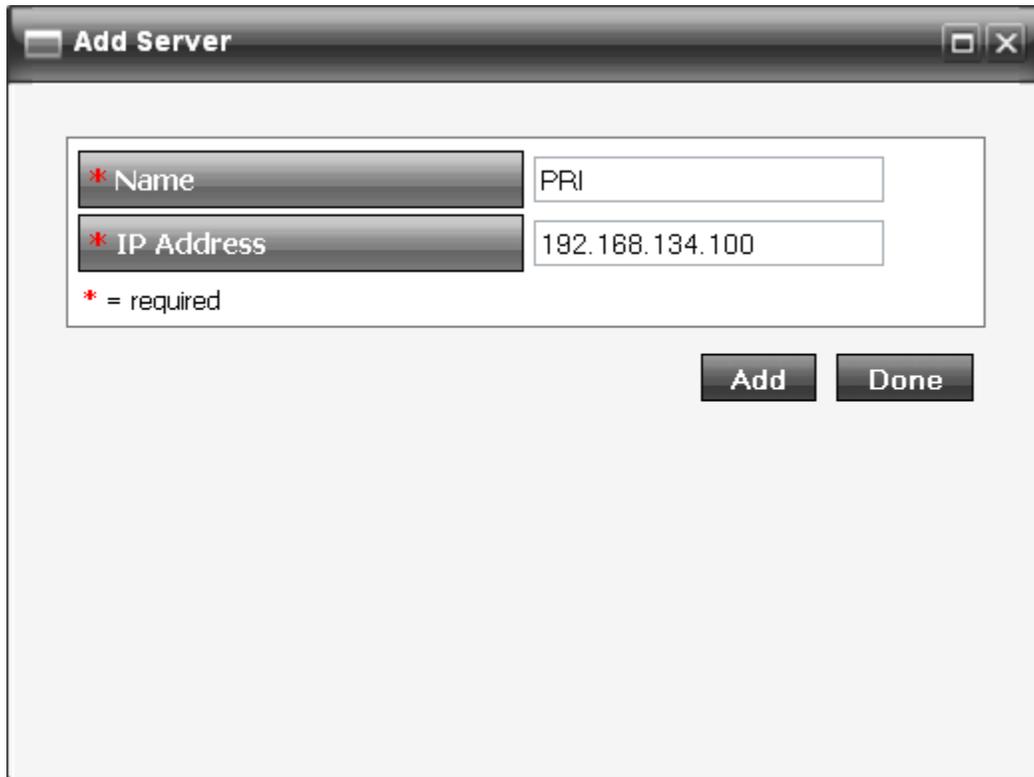


Figure 5-3: Servers Page

- To add a new server, click on the **Add** button and an **Add Server** dialog box will appear, as shown in Figure 5-4.



**Figure 5-4: Add Server**

- To add a new server, enter a unique server name and IP address into the fields provided. Once the information is entered, select the **ADD** button to add the server to the Server List. If you have finished adding servers, click the **Done** button to exit and return to the main server page.
- The user can apply changes to the system using the controls on the server screen.
- If changes have been made that require uploading, **YES** will be displayed in the **Upload Required** field and the button at the top right of the page will be orange in colour and state "Upload Required". To upload the changes, select the **Commit Changes** button.



**Figure 5-5: Upload Required Button**

- Should a major change be required, the changes will be listed under the **Changeset** tab. This area lists the major changes like deleting a router, changing the I/O size, renaming a device or servers etc. Anytime a change to the system is made the change will be listed in the Change Set section. The **Change Details** column lists the individual details of the changes made to each object.
- To upload the changes to the server, select the **Commit Changes** button.

EQX

server

Upload Required

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP
Logout Administrator

## Servers

Servers

Changeset

Undo | Refresh | Commit Changes

SELECT: All, None
SELECTED: 0 TOTAL: 4

<input type="checkbox"/>	Object	Type	Change Details	Created
<input type="checkbox"/>	Panel "CP1000E - 3 edit		"CP1000E - 2" PANEL LAYOUT CLONED	2009-10-20 08:53:56
<input type="checkbox"/>	Panel "CP1000E - 3 edit		"CP1000E - 2" PANEL PROFILE CLONED	2009-10-20 08:53:56
<input type="checkbox"/>	Panel "CP1000A - 2 edit		"CP1000E - 2" PANEL LAYOUT CLONED	2009-10-20 08:53:56
<input type="checkbox"/>	Panel "CP1000A - 2 edit		"CP1000E - 2" PANEL PROFILE CLONED	2009-10-20 08:53:56

Figure 5-6: Change Sets

### 5.3.2. Defining the Routing Devices

1. From the **SYSTEM** drop down menu, select the **Devices** option.
2. The *Devices* screen shown in Figure 5-7 will enable the user to Add, Delete, or Group devices. To group the devices displayed in the devices list, select the *Group By...* drop down menu.

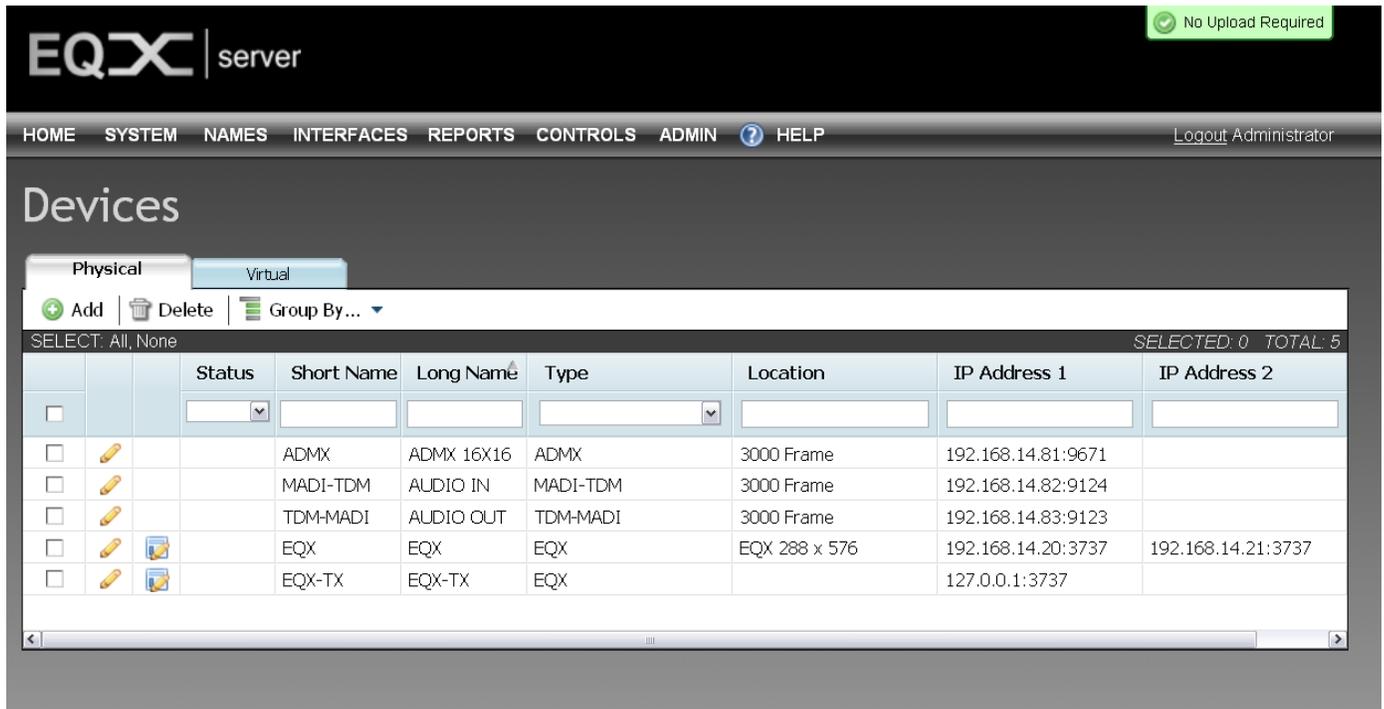


Figure 5-7: Device Type Drop Down Menu

- The user has three “Group By...” options; *None*, *Type*, and *Location*.
  - None** will display all of the devices present in no specific order.
  - Selecting the **Type** option from the drop down menu will separate the devices into categories based on the device type. Refer to Figure 5-8.
  - Selecting the **Location** option from the drop down menu will separate the devices into categories based on the device location. Refer to Figure 5-9.

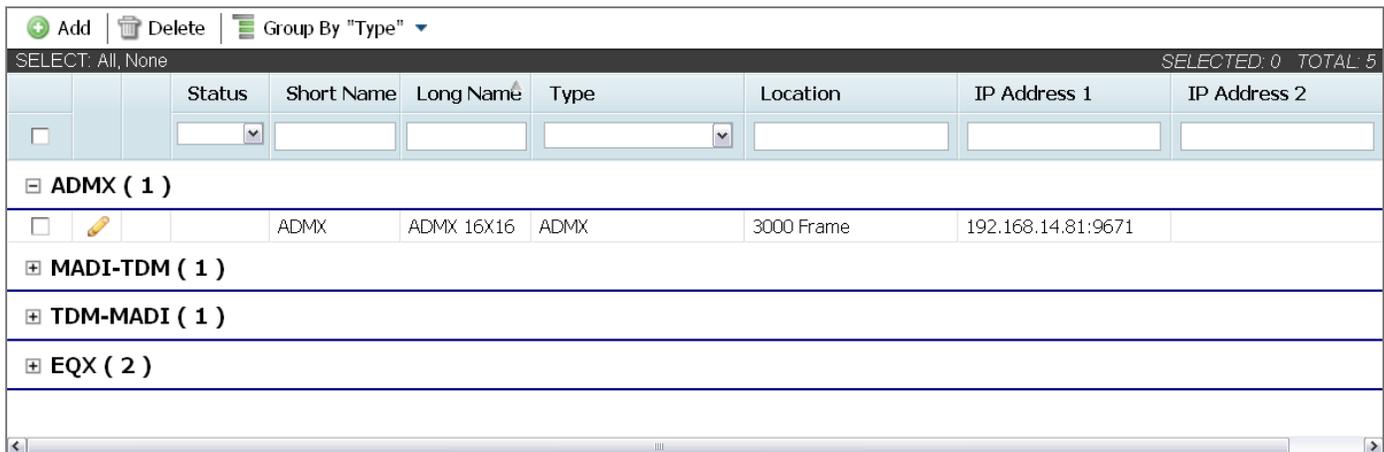


Figure 5-8: Group By “Type”

<input type="button" value="Add"/> <input type="button" value="Delete"/> <input type="button" value="Group By 'Location'"/>		Status	Short Name	Long Name	Type	Location	IP Address 1	IP Address 2
SELECT: All, None		SELECTED: 0 TOTAL: 5						
<input type="checkbox"/>								
[-] 3000 Frame ( 3 )								
<input type="checkbox"/>			ADMX	ADMX 16X16	ADMX	3000 Frame	192.168.14.81:9671	
<input type="checkbox"/>			MADI-TDM	AUDIO IN	MADI-TDM	3000 Frame	192.168.14.82:9124	
<input type="checkbox"/>			TDM-MADI	AUDIO OUT	TDM-MADI	3000 Frame	192.168.14.83:9123	
[+] EQX 288 x 576 ( 1 )								
[+] ( 1 )								

Figure 5-9: Group By “Location”

- To add a new device, select the **Add** button. An *Add Device* screen will appear enabling the user to choose a device to add using the “Select a Device Type” drop down menu. Once the device type is selected, the corresponding device fields will appear which enable the user to enter the router parameters.

Add Device
[X]

Select a Device Type:

Device Type	EQX
* Short Name	<input type="text" value="EQX"/>
* Long Name	<input type="text" value="EQX in TOC area"/>
* Inputs	<input type="text" value="288"/>
* Outputs	<input type="text" value="288"/>
* Primary IP (address:port)	<input type="text" value="127.0.0.1:3737"/>
Secondary IP (address:port)	<input type="text"/>
Monitor Port	<input type="text"/>
Location	<input type="text"/>

\* = required

Figure 5-10: Server: Devices Tab

- Define the router by entering information in the **Required** and **Optional** information fields. Below is a list of the parameters and a description of their function:

PARAMETER	DESCRIPTION
<b>Device Type</b>	The router type to be controlled.
<b>Short Name</b>	The name used to build default names for source destinations and tielines.
<b>Long Name</b>	A more descriptive title for the device.
<b>Inputs</b>	Define the number of the inputs available on the router to be controlled.
<b>Outputs</b>	Define the number of the outputs available on the router to be controlled.
<b>Primary IP (address:port)</b>	The network information of the primary FC is required for the router to be controlled.
<b>Secondary IP (address:port)</b>	The network information of the secondary FC is optional.
<b>Monitor Ports:</b>	The port entered will allow control of the EQX's dedicated signal monitoring ports.
<b>Location</b>	Information pertaining to the physical location (Los Angeles or ER-227) can be optionally entered here.

- Once complete, click the **Add** button. If you have added all the desired devices, select the **Done** button to finish adding products. In order for the addition of these devices to be applied to the server, the user must navigate to the **Server** page and upload the changes by pressing the "Commit Changes" button. Any changes or additions to the system will be listed in the Server Change Set tab. You may upload these changes now or move onto further configuration.



**Tip: Remember your changes will not be lost, even if the web browser is closed. They will be stored in the web host portion of the EQX server, but will not be applied to the system until you navigate to the Server menu and select the "Commit Changes" button.**

- To remove a device, place a check mark in the box beside the device or devices that you wish to remove. Once the desired devices are selected press the **Delete** button.
- To find a particular device(s), use the filter toolbar to search through the list of existing devices. Enter a property into one of the blank fields at the top. As you type, the list of devices will be narrowed down to display only the properties that match the data being entered.

	Status	Short Name	Long Name	Type	Location	IP Address 1	IP Address 2
<input type="checkbox"/>	<input type="text"/>						

**Figure 5-11: Device Filter**

### 5.3.3. Adding Virtual Devices

To create a virtual device, navigate to the **SYSTEM** menu and select the **Devices** menu item. From the **Devices** page select the **Virtual** tab. The *Virtual Device Management* page will appear enabling the user to add virtual devices. A virtual device is a tool to subdivide a single router into what appears to the user as multiple physical routers.

1. Select a router from the one's listed in the *Physical Router* drop down menu. All the destinations and sources for the corresponding router will be listed in the DSTs and SRCs fields.

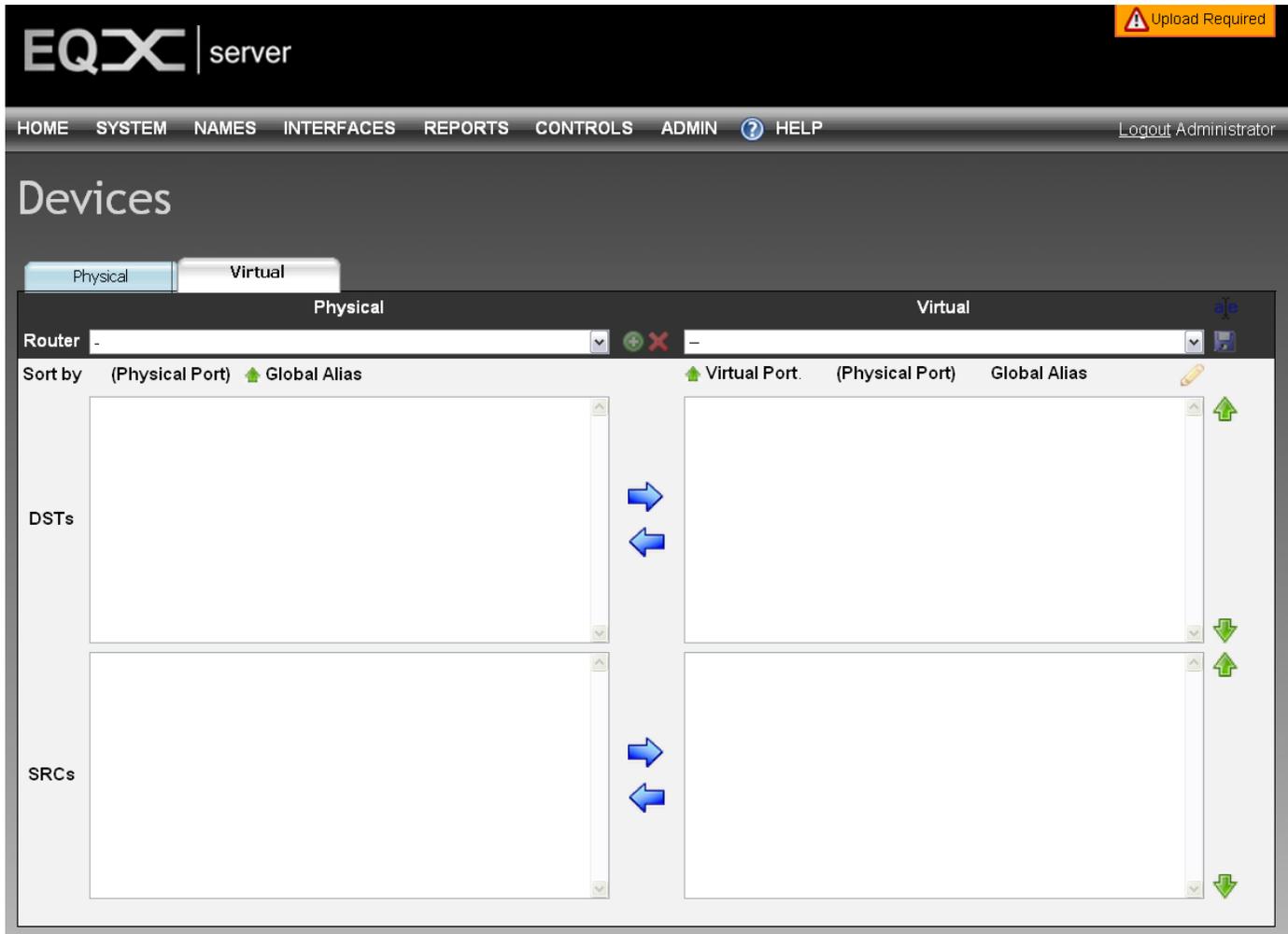
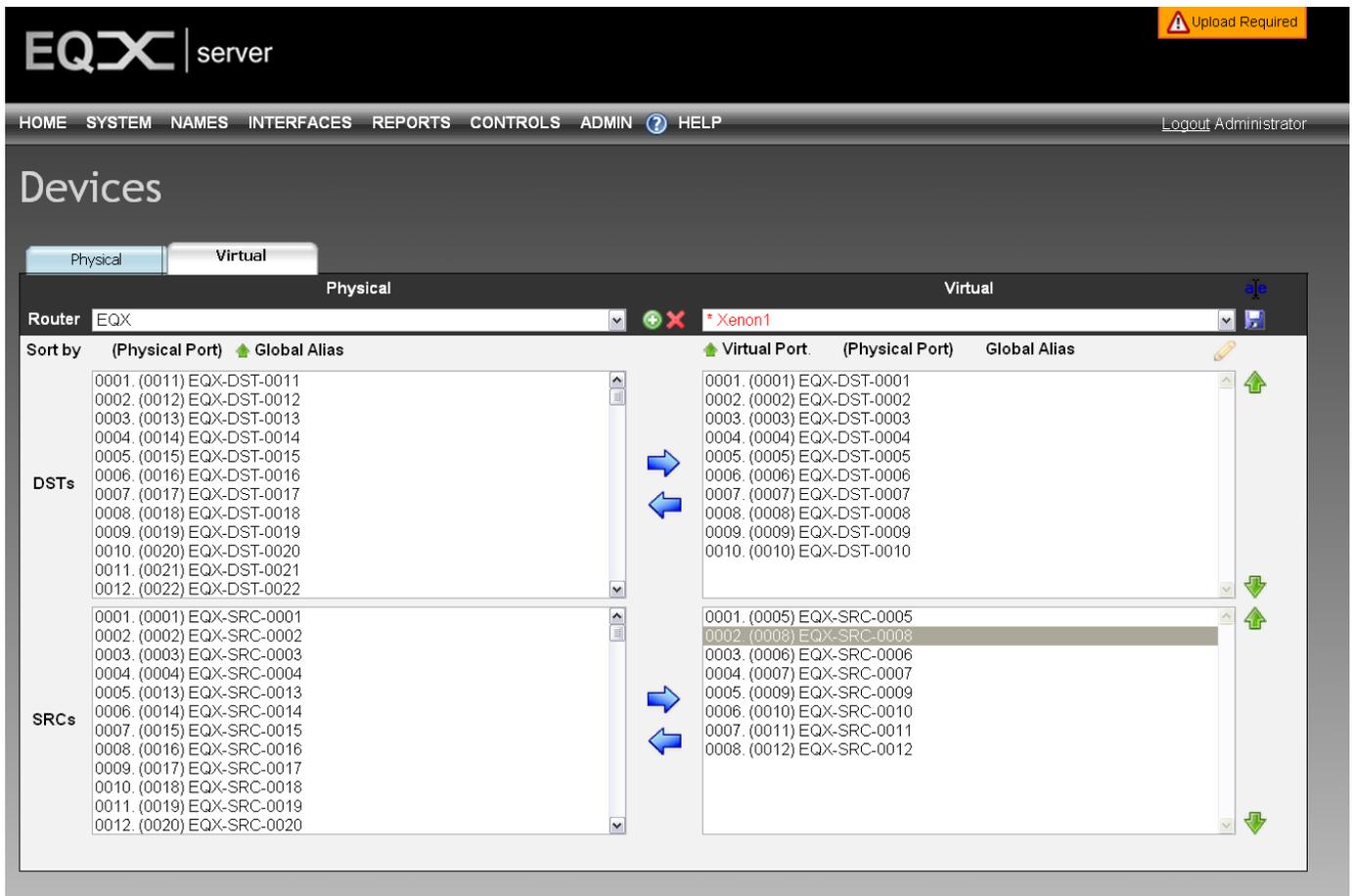


Figure 5-12: Virtual Device Management Tab

2. Use the green  button to add a new virtual device. To remove a virtual device select an item from the *Virtual Router* drop down list and hit the red  delete button.
3. Once a physical device is selected and a virtual device is created, use the right and left arrows to move the DSTs and SRCs to and from the Virtual device. Select one or multiple destinations (select one item and hold down Shift and click another item to select a series of multiple items) and then use the arrows to move the destinations and sources to and from the virtual device.



**Figure 5-13: Destinations and Sources Added to Virtual Hardware**

- To re-arrange the order of a destination or source, select the item in the field, and use the green up  and down  arrows on the right hand side of the screen to re-arrange the item in the list.
- To edit the name of the *Virtual* device select the *rename this virtual device* icon . A dialog box will appear enabling the user to change the name of the virtual device, as shown in Figure 5-14.



**Figure 5-14: Change Name of Virtual Device**

- Before navigating away from the Virtual Devices page, select the *Save this Virtual Device* icon  so that the Virtual Device configuration will be saved.

### 5.3.4. Establishing Tielines

There are two Tieline types that can be created in the EQX server:

- 1) A **Normal** tieline is added to a pool that can be utilized by any device downstream depending on availability.
- 2) A **Reserved** tieline is reserved for a SINGLE downstream destination and is NOT part of a pool.

**STEPS:**

1. Select the **Tielines** option from the **SYSTEM** drop down menu.

Status	Name	From	To	Reserved For	Attributes
<input type="checkbox"/>	EQX-DST-0352 - EQX-TX-SR	EQX-DST-0352	EQX-TX-SRC-0001	EQX-TX-DST-0001	SD
<input type="checkbox"/>	EQX-DST-0353 - EQX-TX-SR	EQX-DST-0353	EQX-TX-SRC-0002		SD
<input type="checkbox"/>	EQX-DST-0354 - EQX-TX-SR	EQX-DST-0354	EQX-TX-SRC-0003		HD
<input type="checkbox"/>	EQX-DST-0355 - EQX-TX-SR	EQX-DST-0355	EQX-TX-SRC-0004		HD
<input type="checkbox"/>	EQX-DST-0356 - EQX-TX-SR	EQX-DST-0356	EQX-TX-SRC-0005		FLEX
<input type="checkbox"/>	TL-ADMX.3-EQX.AVOP.25.1	ADMX-DST-0001	EQX.AVOP.25-SRC-0001		
<input type="checkbox"/>	TL-ADMX.4-EQX.AVOP.26.1	ADMX-DST-0002	EQX.AVOP.26-SRC-0001		
<input type="checkbox"/>	TL-ADMX.4-EQX.AVOP.28.1	ADMX-DST-0004	EQX.AVOP.28-SRC-0001		
<input type="checkbox"/>	TL-ADMX.5-EQX.AVOP.27.1	ADMX-DST-0003	EQX.AVOP.27-SRC-0001		
<input type="checkbox"/>	TL-ADMX.5-EQX.AVOP.29.1	ADMX-DST-0005	EQX.AVOP.29-SRC-0001		
<input type="checkbox"/>	TL-ADMX.13-TDM-MADI.1	ADMX-DST-0013	TDM-MADI-SRC-0001		
<input type="checkbox"/>	TL-ADMX.14-TDM-MADI.2	ADMX-DST-0014	TDM-MADI-SRC-0002		
<input type="checkbox"/>	TL-ADMX.15-TDM-MADI.3	ADMX-DST-0015	TDM-MADI-SRC-0003		
<input type="checkbox"/>	TL-ADMX.16-TDM-MADI.4	ADMX-DST-0016	TDM-MADI-SRC-0004		
<input type="checkbox"/>	TL-EQX.AVIP.9.1-ADMX.1	EQX.AVIP.9-DST-0001	ADMX-SRC-0001		
<input type="checkbox"/>	TL-EQX.AVIP.10.1-ADMX.2	EQX.AVIP.10-DST-0001	ADMX-SRC-0002		
<input type="checkbox"/>	TL-EQX.AVIP.11.1-ADMX.3	EQX.AVIP.11-DST-0001	ADMX-SRC-0003		

**Figure 5-15: Server - Tielines Tab**

2. To create a new tieline, select the **Add** **Add** button. A dialog box enabling the user to create a new tieline will appear, as shown in Figure 5-16.

**Figure 5-16: Add Tieline Dialog Box**

3. The **Add Tieline** screen enables the user to choose the upstream (From) and downstream (To) of each tieline. It also enables the user to reserve the tieline for a given destination. It is not required but it is recommended that the user enter a Name into the **Name** field to easily identify the tieline. If a name is not defined, a name will be auto-generated on the creation of the tieline. A tieline without reservation is added to a pool and can be utilized by any device downstream depending on availability. A **Reserved** tieline is reserved for a SINGLE downstream destination and is NOT part of a tieline pool.
4. The **Attributes** field enables the user to assign tieline attributes. Attributes are generic labels that the end user can add to indicate capabilities that a particular tieline possesses. These attributes can then be specified while performing a route to limit the paths that the signal can take. Enter an attribute into this field (ie. HD, SD, Flex, etc).



**Please note that attributes are available only to the advanced control panels such as the CP-2200E.**

5. After selecting the **From** and **To** for each tieline, click the **ADD** button to complete and save it. It will be added to the **Change Set**.



**Tip: Tieline names are used throughout the system to identify paths between a source and destination that you are working with. You do NOT have to manually specify a tieline name, therefore for time efficiency an appropriate name is generated from the “From” router’s short name and port, and the “To” router’s short name and port. You are welcome to overwrite this name with any name that you wish but be sure to include details that distinctly identify the path from the name.**



Once complete be sure to return to the server change sets tab to upload any changes.

6. To remove a tieline, place a check mark in the box beside the tieline or tielines you wish to remove and then select the **Delete** button **Delete** .
7. To sort or filter the tielines, enter a property into one of the blank fields at the top. As you type, the list of tielines will be narrowed down to display only the ones that match the property being entered.

SELECT: All, None						SELECTED: 0 TOTAL: 8	
Status	Name	From	To	Reserved For	Attributes		
<input type="checkbox"/>	<input type="text"/>						

Figure 5-17: Tieline Filter

### 5.3.5. Global Source Availability

In a routing system it is beneficial to “permanently” limit the scope of some destinations. This enables the user to control from a high level which destinations have access to which sources. Imagine a facility where 2 channels are broadcast: (1) a music channel for teens and (2) a religious affiliate. The best way to avoid content from one spilling over to the other is to limit the destination of the one to only its appropriate designated sources. This makes it IMPOSSIBLE without returning to this page for panels or automation systems to route the incorrect source. Once this setting is applied and if the sources are not available to the destinations, then the system filters the sources as if they do not exist for the chosen destination. By default the system is open and available on creation of a device. If tielines are used, availability will need to set in order to use upstream router sources on downstream router destinations via the tielines.

1. From the **SYSTEM** drop down menu, select the **Source Availability** menu option.
2. From the **Devices** drop down list, select the router that contains the destination(s) that you want to work with. The list will populate in the Destinations and Sources field.
3. Once populated, select one or more destinations by placing a check mark in the box beside the desired destination. A list of sources (both available and unavailable) will populate in the right hand **Sources** column.
  - a. If you have selected multiple DSTs, any SRCs common to ALL DSTs will be in green. If the sources and/or destinations are white then this identifies that they are “unavailable”.

EQX

server

Upload Required

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP
Logout Administrator

## Source Availability

**Destinations**

SELECTED: 0 TOTAL: 566					
	Device	Port	Global Name	# Srcs	Selected
<input type="checkbox"/>	EQX				
<input type="checkbox"/>	EQX	11	EQX-DST-0001	576	no
<input type="checkbox"/>	EQX	12	EQX-DST-0002	576	no
<input type="checkbox"/>	EQX	13	EQX-DST-0003	576	no
<input type="checkbox"/>	EQX	14	EQX-DST-0004	576	no
<input type="checkbox"/>	EQX	15	EQX-DST-0005	576	no
<input type="checkbox"/>	EQX	16	EQX-DST-0006	576	no
<input type="checkbox"/>	EQX	17	EQX-DST-0007	576	no
<input type="checkbox"/>	EQX	18	EQX-DST-0008	576	no
<input type="checkbox"/>	EQX	19	EQX-DST-0009	576	no
<input type="checkbox"/>	EQX	20	EQX-DST-0010	576	no
<input type="checkbox"/>	EQX	21	EQX-DST-0011	576	no
<input type="checkbox"/>	EQX	22	EQX-DST-0012	576	no
<input type="checkbox"/>	EQX	23	EQX-DST-0013	576	no
<input type="checkbox"/>	EQX	24	EQX-DST-0014	576	no
<input type="checkbox"/>	EQX	25	EQX-DST-0015	576	no

**Sources**

Available: 0 Avail. To Some: 0 Unavailable: 568 No Path: 840 TOTAL: 1408					
	Device	Port	Global Name	Availability	Applies To
<input type="checkbox"/>	EQX	538	EQX-SRC-0530	Unavailable	All
<input type="checkbox"/>	EQX	2	EQX-SRC-0002	Unavailable	All
<input type="checkbox"/>	EQX	118	EQX-SRC-0110	Unavailable	All
<input type="checkbox"/>	EQX	440	EQX-SRC-0432	Unavailable	All
<input type="checkbox"/>	EQX	92	EQX-SRC-0084	Unavailable	All
<input type="checkbox"/>	EQX	185	EQX-SRC-0177	Unavailable	All
<input type="checkbox"/>	EQX	34	EQX-SRC-0026	Unavailable	All
<input type="checkbox"/>	EQX	417	EQX-SRC-0409	Unavailable	All
<input type="checkbox"/>	EQX	498	EQX-SRC-0490	Unavailable	All
<input type="checkbox"/>	EQX	473	EQX-SRC-0465	Unavailable	All
<input type="checkbox"/>	EQX	320	EQX-SRC-0312	Unavailable	All
<input type="checkbox"/>	EQX	184	EQX-SRC-0176	Unavailable	All
<input type="checkbox"/>	EQX	266	EQX-SRC-0258	Unavailable	All
<input type="checkbox"/>	EQX	558	EQX-SRC-0550	Unavailable	All
<input type="checkbox"/>	EQX	347	EQX-SRC-0339	Unavailable	All

**Figure 5-18: Global SRC Availability**

- To add a source to the selected destination, place a check mark beside the source that you wish to add (the source will be highlighted green when it is available). To remove a source from the selected destination, remove the check mark or leave the box blank beside the source that you do not want available (the source will be highlighted white when it is unavailable).

EQX

server

Upload Required

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP
Logout Administrator

## Source Availability

**Destinations**

SELECTED: 0 TOTAL: 566					
	Device	Port	Global Name	# Srcs	Selected
<input type="checkbox"/>	EQX				
<input type="checkbox"/>	EQX	11	EQX-DST-0001	576	no
<input type="checkbox"/>	EQX	12	EQX-DST-0002	576	no
<input checked="" type="checkbox"/>	EQX	13	EQX-DST-0003	576	yes
<input type="checkbox"/>	EQX	14	EQX-DST-0004	576	no
<input type="checkbox"/>	EQX	15	EQX-DST-0005	576	no
<input type="checkbox"/>	EQX	16	EQX-DST-0006	576	no
<input type="checkbox"/>	EQX	17	EQX-DST-0007	576	no
<input type="checkbox"/>	EQX	18	EQX-DST-0008	576	no
<input type="checkbox"/>	EQX	19	EQX-DST-0009	576	no
<input type="checkbox"/>	EQX	20	EQX-DST-0010	576	no
<input type="checkbox"/>	EQX	21	EQX-DST-0011	576	no
<input type="checkbox"/>	EQX	22	EQX-DST-0012	576	no

**Sources**

Available: 572 Avail. To Some: 0 Unavailable: 0 No Path: 840 TOTAL: 1408					
	Device	Port	Global Name	Availability	Applies To
<input checked="" type="checkbox"/>	EQX	2	EQX-SRC-0002	Available	All
<input checked="" type="checkbox"/>	EQX	118	EQX-SRC-0110	Available	All
<input type="checkbox"/>	EQX	440	EQX-SRC-0432	Unavailable	All
<input type="checkbox"/>	EQX	92	EQX-SRC-0084	Unavailable	All
<input checked="" type="checkbox"/>	EQX	185	EQX-SRC-0177	Available	All
<input type="checkbox"/>	EQX	34	EQX-SRC-0026	Unavailable	All
<input checked="" type="checkbox"/>	EQX	417	EQX-SRC-0409	Available	All
<input checked="" type="checkbox"/>	EQX	498	EQX-SRC-0490	Available	All
<input type="checkbox"/>	EQX	473	EQX-SRC-0465	Unavailable	All
<input checked="" type="checkbox"/>	EQX	184	EQX-SRC-0176	Available	All
<input checked="" type="checkbox"/>	EQX	266	EQX-SRC-0258	Available	All
<input checked="" type="checkbox"/>	EQX	347	EQX-SRC-0339	Available	All

**Figure 5-19: Selecting Sources**

- (Optional) To find a destination that is available for that source, right click on a source and perform a reverse destination availability lookup, as shown in Figure 5-20.

Sources

Available: 573 Avail. To Some: 0 Unavailable: 0 No Path: 840 TOTAL: 1408

	Device	Port	Global Name	Availability	Applies To
<input type="checkbox"/>	EQX			Available	
<input checked="" type="checkbox"/>	EQX	406	EQX-SRC-0398	Available	All
<input checked="" type="checkbox"/>	EQX	541	EQX-SRC-0533	Available	All
<input checked="" type="checkbox"/>	EQX	2	EQX-SRC-0002	Available	All
<input checked="" type="checkbox"/>	EQX	440	EQX-SRC-0432	Available	All
		52	EQX-SRC-0444	Unavailable	All
<input checked="" type="checkbox"/>	EQX	92	EQX-SRC-0084	Available	All
<input checked="" type="checkbox"/>	EQX	509	EQX-SRC-0501	Available	All
<input checked="" type="checkbox"/>	EQX	442	EQX-SRC-0434	Available	All
<input checked="" type="checkbox"/>	EQX	401	EQX-SRC-0393	Available	All
<input checked="" type="checkbox"/>	EQX	204	EQX-SRC-0196	Available	All
<input checked="" type="checkbox"/>	EQX	74	EQX-SRC-0066	Available	All
<input checked="" type="checkbox"/>	FOX	185	FOX-SRC-0177	Available	All

Figure 5-20: Reverse Lookup Selection

- Selecting a reverse lookup option will open the *Destination Availability* dialog box as shown in Figure 5-21. The dialog box will display all the available destinations for the selected source.

Source "EQX-SRC-0005 (EQX port 5)"
□ ×

### Destination Availability

SELECT: All, None *Available: 1086 Unavailable: 573 Restricted: 5 TOTAL: 1664*

	Device	Port	Global Name	Availability
<input checked="" type="checkbox"/>	EQX-TX			
<input type="checkbox"/>	EQX-TX	1	EQX-TX-DST-0001	Unavailable
<input checked="" type="checkbox"/>	EQX-TX	2	EQX-TX-DST-0002	Available
<input checked="" type="checkbox"/>	EQX-TX	3	EQX-TX-DST-0003	Available
<input type="checkbox"/>	EQX-TX	4	EQX-TX-DST-0004	Unavailable
<input checked="" type="checkbox"/>	EQX-TX	5	EQX-TX-DST-0005	Available
<input type="checkbox"/>	EQX-TX	6	EQX-TX-DST-0006	Unavailable
<input type="checkbox"/>	EQX-TX	7	EQX-TX-DST-0007	Unavailable

**Figure 5-21: Reverse Destination Availability Lookup Dialog Box**

- Place a check mark in the box beside the destination that you wish to use. Once all the desired destinations are selected, press the **Save** button.



**TIP: Sources from all routers that a given destination MAY have access to will appear in the list. (Meaning if tielines exist connecting the selected DST to an upstream router all SRCs on both the local and upstream router will appear in the SRCs lists)**

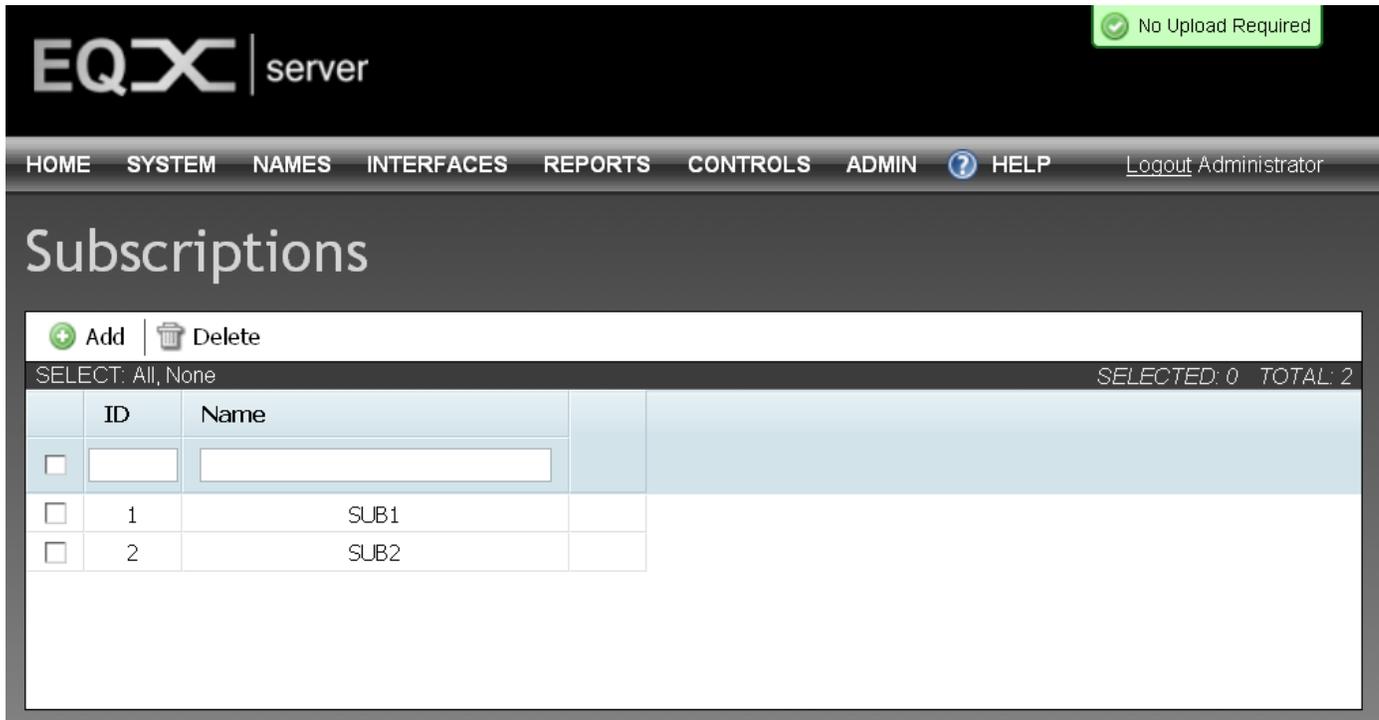


**Once complete be sure to return to the server change sets to upload any changes.**

### 5.3.6. Defining Subscriptions

A **Subscription** allows users to subscribe or un-subscribe to routes that are being made in the system. This is sometimes referred to as Mirroring on the fly or Virtual re-entry.

1. From the **SYSTEM** drop down menu, select the **Subscriptions** menu option. A subscription gives the user the ability to create a mirror on the fly or in other terms allow destinations/sources to subscribe to a specific route. A subscription is both a source and destination within the control system. The subscription screen will appear as shown in Figure 5-22.



EQX server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP Logout Administrator

## Subscriptions

+ Add | Delete

SELECT: All, None SELECTED: 0 TOTAL: 2

	ID	Name
<input type="checkbox"/>		
<input type="checkbox"/>	1	SUB1
<input type="checkbox"/>	2	SUB2

**Figure 5-22: Subscriptions Page**

2. To add a subscription, select the **Add** button  **Add**. An *Add Subscription* dialog box will appear enabling the user to create a subscription. Enter a name into the *Name* field of the dialog box and select **Add**. To create multiple subscriptions, continue to enter new names and then click the **Add** button to continue adding items. Once all the desired subscriptions have been added, select the **Done** button. (See Figure 5-23)



Figure 5-23: Add Subscription Dialog Box

3. The Subscriptions will be added to the main subscription list. To remove a subscription, place a checkmark in the box beside the item you wish to remove and select the **Delete** button.

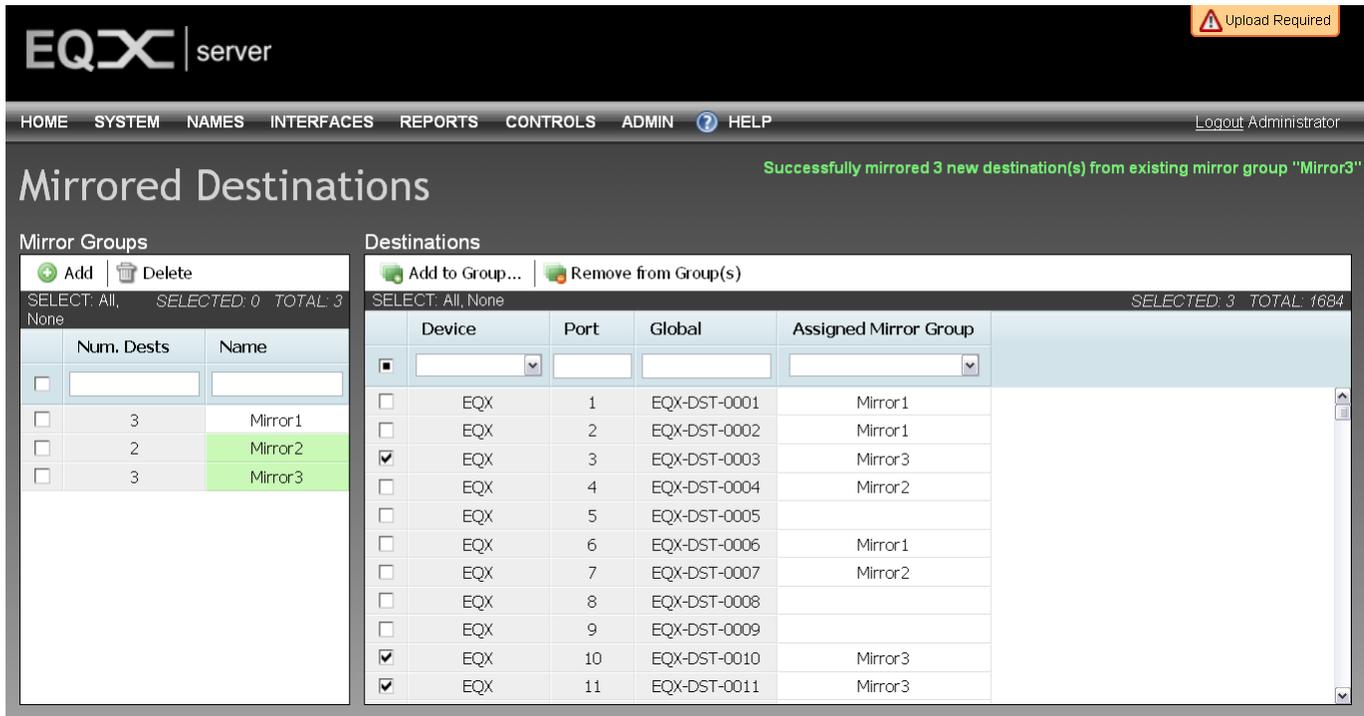


Once complete be sure to return to the server change sets tab to upload any changes.

### 5.3.7. Setting Mirrored Destinations

Mirrored Destinations allow the user to group destinations so that if a source is routed to one destination in the mirror, then all destinations in that mirror will also have the same source.

1. If you wish to mirror destinations, select the **Mirror Destinations** option from the main *System* drop down menu. A screen divided into two sections will appear, *Mirror Groups* and *Destinations*. The *Mirror Groups* window displays the available mirrored groups, and enables the user to add or remove mirrored groups.



**Figure 5-24: Mirror Destinations Window**

2. To create a new mirror group, select the **Add** button  **Add** in the *Mirror Groups* window. An **Add Mirror** dialog box will appear enabling the user to create a new mirror, as shown in Figure 5-25. Enter a unique mirror name into the *Name* field and then select the **Add** button. Once you have finished adding all the desired mirror groups, select the **Done** button to apply changes to the mirror groups. To remove a mirror group, place a checkmark in the box beside the mirror that you wish to remove and then select the **Delete** button.

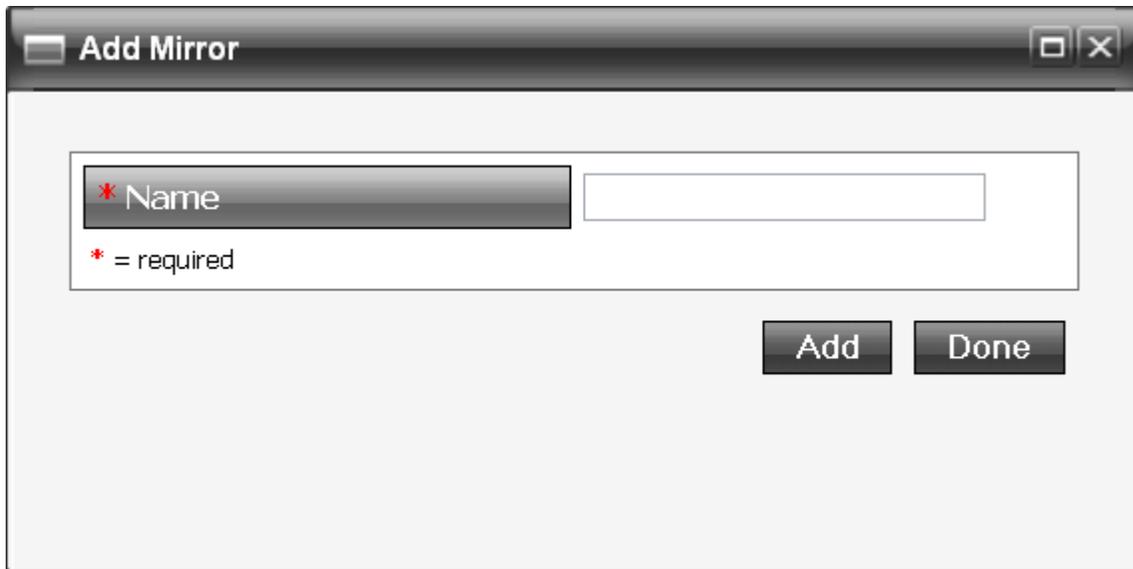


Figure 5-25: Add Mirror Dialog Box

- To filter a mirror group name, select a mirror name from the *Name* drop down menu. To filter a destination name, type the desired parameter into the destination filtering field.



Figure 5-26: Mirror Group Filtering Toolbar

- If you wish to set up the destinations, first select the device you wish to assign mirrored destinations to by navigating to the **Device** drop down menu and then selecting the desired device from the list in the destinations window.
- The destinations will be populated under the *Destinations* window. To assign a destination to a mirror group, place a checkmark in the box beside the desired destination and then select the **Add to Group** button.
- An **Add To Mirror Group...** dialog box will appear, as shown in Figure 5-27. If one or more Mirror groups already exist, they will be listed under the *Mirror* field dialog box. As you begin typing the mirror name into the *Mirror* field, the list will filter the existing mirror names based on what you have typed. If your desired mirror group is visible use the down arrows to toggle to the appropriate mirror name. Once you have assigned the selected destinations to the appropriate mirror groups, select the **done** button.

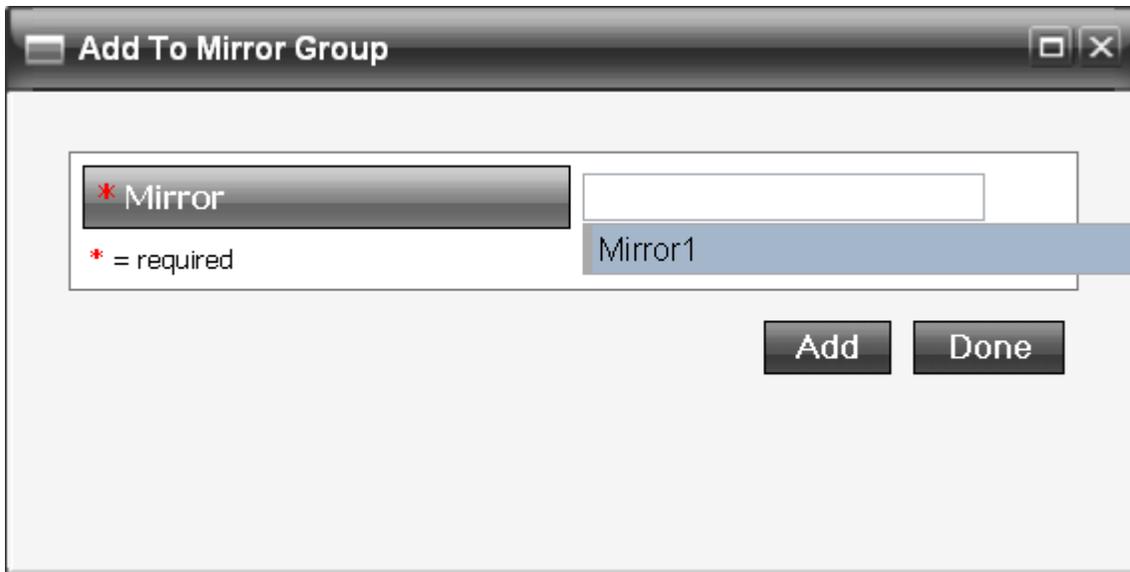


Figure 5-27: Add To Mirror Dialog Box

7. The *Mirror Name* will be listed in the **Assigned Mirror Group** column beside the corresponding destination. To remove a destination from a mirror group, place a check mark beside the destination and then select the **Remove from Group(s)** button.
8. To find a specific port, global destination or set of mirror groups, use the filter toolbar to sort through the parameters. Place the cursor in the field which you wish to search and type the desired parameter. The list will adjust to show only the destinations with the properties that you listed in the filtering column. (See Figure 5-28)



Figure 5-28: Destination Filtering Toolbar

### 5.3.8. Virtual Ports

Selecting the **Virtual Ports** menu item from the **SYSTEM** drop down menu allows the user to add virtual destinations and virtual sources. Virtual sources are a method of creating sources that span levels and frames. This facilitates level routing with virtual sources lining up routing to matching levels on virtual destinations. Breakaways are also performed within virtual sources and destinations on the panel by allowing you to choose new source assignments on the fly to route into particular levels of a virtual destination.

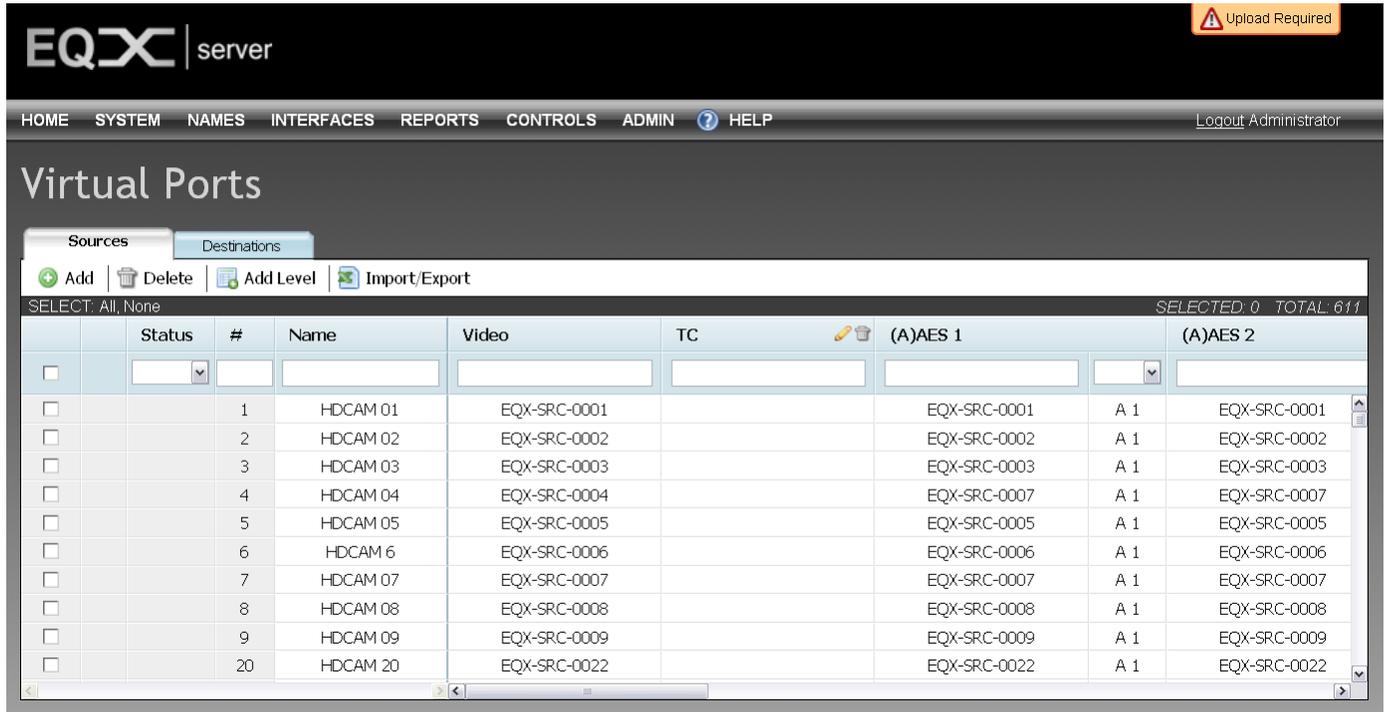


Figure 5-29: Virtual Sources

- The user can import or export a virtual port using the **Import/Export** function. To import a virtual source, navigate to the virtual ports page and select the **Import/Export** button. When the **Import/Export CSV** dialog box appears, select the **Browse** button and navigate to the desired file. Select the **Open** button in the dialog box and then click the **Import** button once the file is listed in the file field.



Figure 5-30: Import/Export CSV Dialog Box

- To export a virtual port, select the **Export** button. The following dialog box will appear, as shown in Figure 5-31. **Microsoft Office Excel** is the default program that the .csv file will open in and export to. If you wish to open the .csv file in a program other than excel, use the *Open with* function to select a new program, otherwise select the **OK** and the .csv file will open and display the current content in an excel spreadsheet. Once all import and export functions are complete, select the **Done** button.

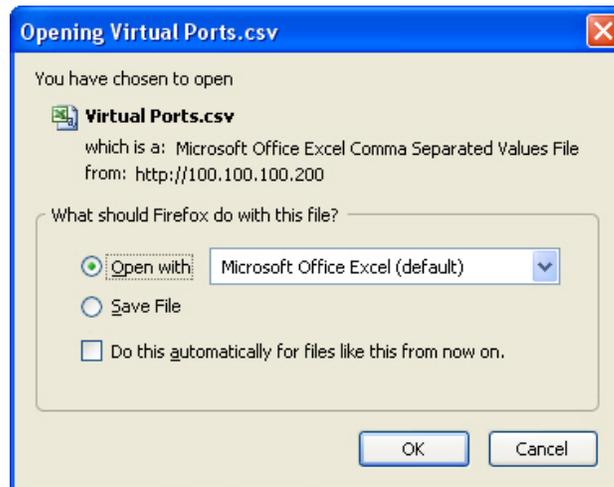


Figure 5-31: Opening Virtual Ports.csv Dialog Box

- To add a virtual port to the source tab, select the **Add** button at the top of the **Sources** tab. An “Add Virtual Port” dialog box will appear enabling the user to create a virtual port. Enter the desired name of the new virtual port into the *Name* field and then select the **Add** button. Once all virtual ports have been added, select the **Done** button to apply your changes. To add a virtual port to the destination tab, follow the same procedure.

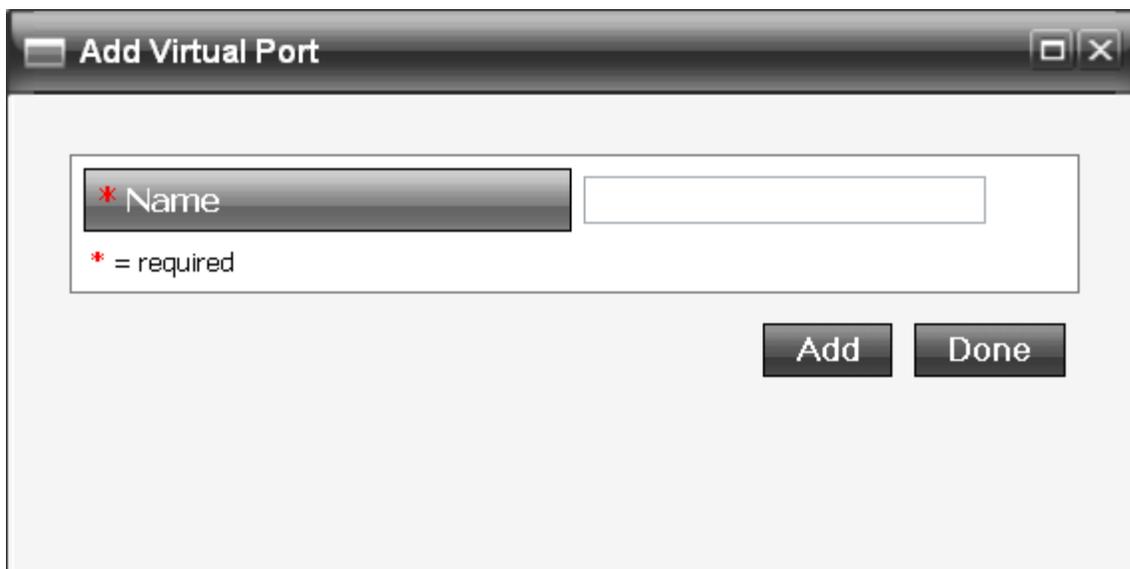
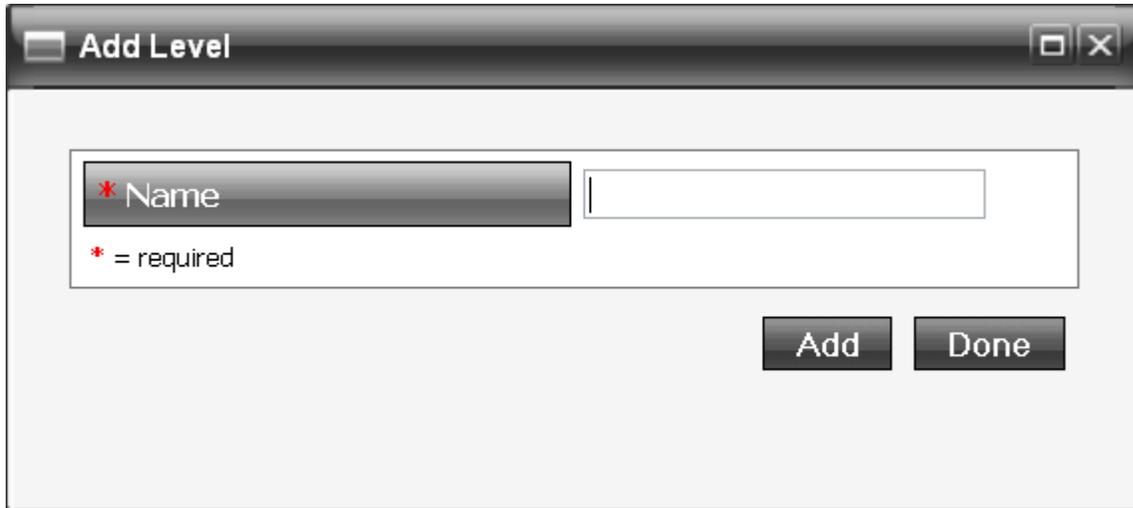


Figure 5-32: Add Virtual Port

4. To add a level to the source or destination, select the **Add Level** button. An **Add Level** dialog box will appear enabling the user to enter a unique level name into the *Name* field. Once all the desired levels have been entered select the **Done** button. Repeat this step each time the user wishes to add another virtual source or virtual destination.



**Figure 5-33: Add Level**

5. To remove a virtual source or destination, place a check mark beside the items that you wish to remove and select the **Delete** button.
6. The user can also perform a reverse lookup on a source or destination by selecting the cell and holding down the **Shift** key. To perform a reverse lookup on an entire row hold down the **Ctrl** and **Shift** keys when you have selected the cell in the row that you wish to view. The reverse lookup cells are shown highlighted in blue in Figure 5-34.

## Virtual Ports

Sources
Destinations

Add
 Delete
 Add Level
 Import/Export

SELECT: All, None
SELECTED: 0 TOTAL: 612

	Status	#	Name	Video	TC		(A)AES 1
<input type="checkbox"/>							
<input type="checkbox"/>		1	HDCAM 01	EQX-SRC-0001			EQX-SRC-0001
<input type="checkbox"/>		2	HDCAM 02	CAM 1			CAM 1
<input type="checkbox"/>		3	HDCAM 03	EQX-SRC-0003			EQX-SRC-0003
<input type="checkbox"/>		4	HDCAM 04	CAM 3	CAM 6		CAM 6
<input type="checkbox"/>		5	HDCAM 05	CAM 4			CAM 4
<input type="checkbox"/>		6	HDCAM 06	CAM 5			CAM 5
<input type="checkbox"/>		7	HDCAM 07	CAM 6			CAM 6
<input type="checkbox"/>		8	HDCAM 08	CAM 7			CAM 7
<input type="checkbox"/>		9	HDCAM 09	CAM 8			CAM 8
<input type="checkbox"/>		20	HDCAM 20	EQX-SRC-0022			EQX-SRC-0022
<input type="checkbox"/>		21	SDCAM 01	EQX-SRC-0165			
<input type="checkbox"/>		70	LINK MIXER	EQX-SRC-0133			MADI-TDM-SRC-0139
<input type="checkbox"/>		71	STUDO CAM 1	EQX-SRC-0130			MADI-TDM-SRC-0139

Figure 5-34: Reverse Lookup

7. The user can also copy and paste existing cells or rows. To copy a cell or row, right click on the cell that you wish to copy and select **Copy Cell** or **Copy Row** from the pop up menu that appears. Once the data is copied to the clipboard, navigate to the cell or row that you wish to paste the information onto, then right click on the cell and select the **Paste** option. You can also copy and paste using the keyboard controls: Copy (**Ctrl + C**) and Paste (**Ctrl + V**).



**Please note that the keyboard copy (Ctrl + C) and paste (Ctrl + V) control can be used globally on almost any cell in the EQX Server Interface.**



**Once complete be sure to return to the server change sets to upload any changes.**

7. To add or delete a destination, add a level to the destination tab, or import/export destinations, the user must follow the same procedure outlined for creating a virtual source.



**Tip: Virtual destinations enable the user to build up destinations with multiple level assignments. In this way a destination that naturally spans frames and levels can be routed to with sources sorting into the correct levels automatically.**

### 5.4. ASSIGNING NAMES

A **NameSet** allows the user to create multiple names for the same source or destination within the system. To assign names to organize the sources and destinations select the **Names** item from the main toolbar.

#### 5.4.1. Sources Tab

To create a Nameset for the sources, navigate to the **Sources** tab.

1. Select a device from the **Device** drop down menu. The device list will populate in the sources tab.

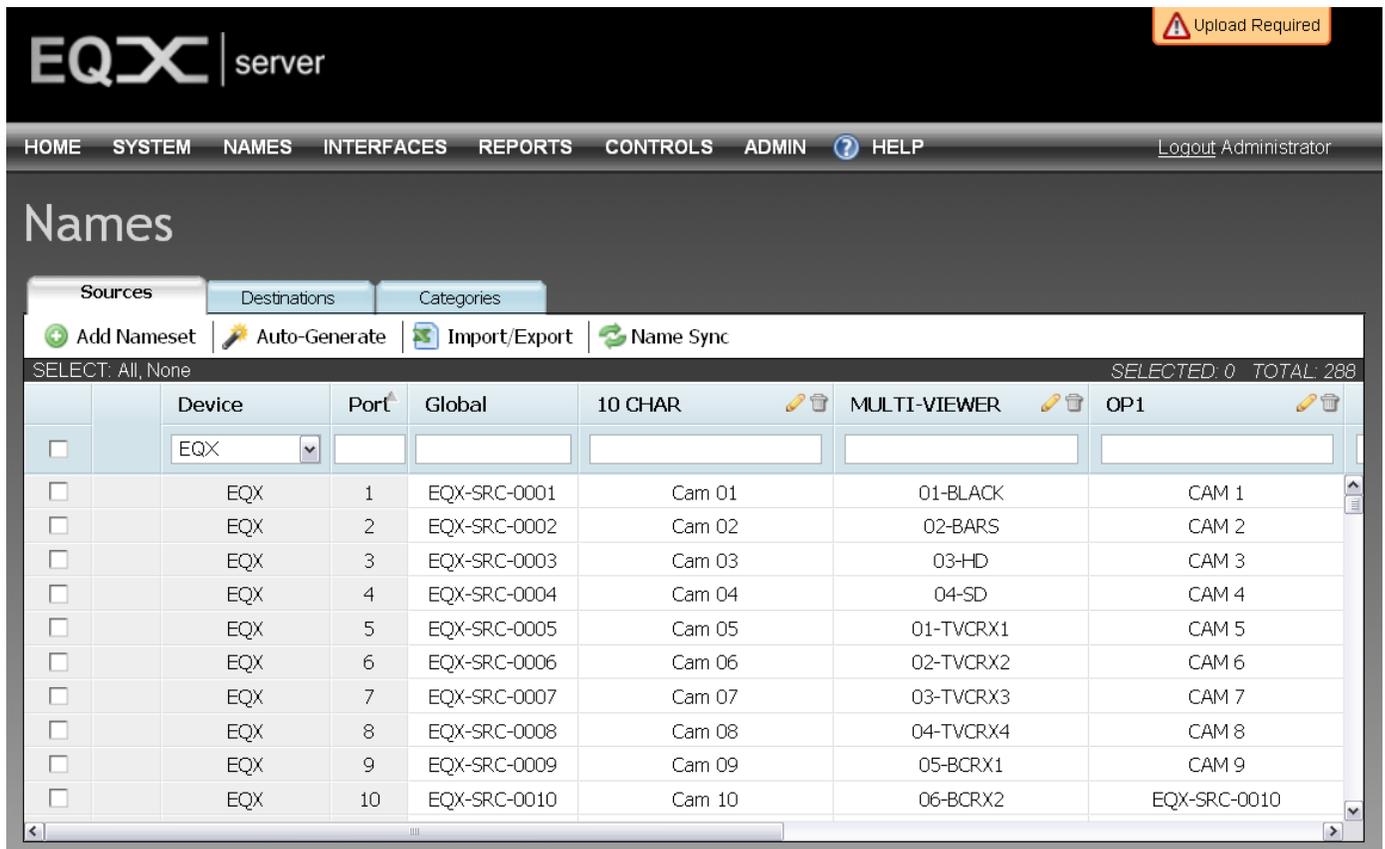


Figure 5-35: Names Sources Tab

2. To assign ports to a certain name set, select the desired ports by placing a check mark in the box or boxes beside the port name(s) and then select the **Auto-Generate** button.
  - a. An **Auto-Generate Names** dialog box will appear enabling the user to generate names automatically based on the properties selected in this dialog box. From the *Nameset* drop down menu select one of the nameset items for which you are auto-generating the list.

Auto-Generate 3 Names
□ ×

Nameset	Global <span style="float: right;">▼</span>
Category	DVD <span style="float: right;">▼</span> <span style="margin-left: 10px;">New...</span>
Separator	<input style="width: 100%;" type="text"/>
*Suffix Begin At	<input style="width: 100%;" type="text" value="1"/>

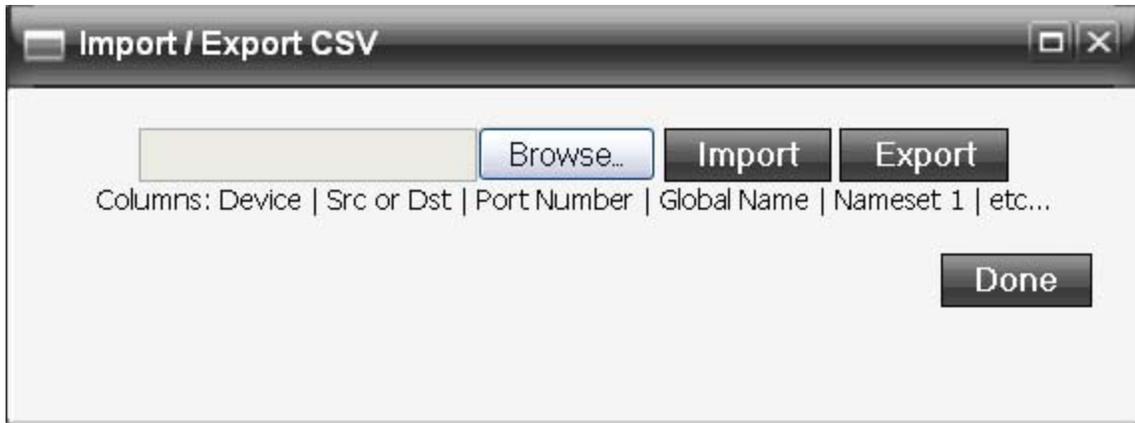
\* = required

Device	Port <span style="font-size: small;">▲</span>	Global	Existing (Global)	Auto-Generated (Global)
EQX	2	EQX-SRC-0002		DVD1
EQX	3	EQX-SRC-0003		DVD2
EQX	5	EQX-SRC-0005		DVD3

Preview
Apply
Close

**Figure 5-36: Auto-Generate Names Dialog Box**

- b. The user must assign a category which will be used in the naming process when the names are generated. Select a category from the drop down menu. If a category does not exist or if you would like to create a new category, select the **New...** button and enter a unique name into the *New Category Name* field.
  - c. If you wish to separate the category and suffix using a specific character, you can optionally enter a character into the separator field (ie. -, :, etc).
  - d. It is required that the user enter a beginning alpha-numeric suffix. The number or letter entered in the **Suffix Begin At** field will be the starting character for which the generated names will be counted up from (ie. 1, 2, 3..etc)
  - e. Once all the fields are filled in, select the **Preview** button to view how the names will be displayed. The names will be generated based on your selections and will be displayed in the *Auto-Generated* field. If you are satisfied with your changes, select the **Apply** button and then **Close** to return to the original screen.
  - f. Your changes will be generated and displayed under the corresponding columns.
3. To import or export a CSV file, select the **Import/Export** button. To import a file, select the **Browse** button and then navigate to the appropriate CSV file. Once the file is selected, click on the **Import** button and the data will be imported to the name set list.



**Figure 5-37: Import/Export CSV for Name Sets**

4. To export a CSV file, select the **Export** button. The information displayed in the current name set list will be exported to an excel CSV file as shown in Figure 5-38.

	A	B	C	D	E	F	G	H	I	J
1	Device Short Name	Src or Dst	Port Num	Global	10 CHAR	MULTI-VIEWER	OP1	OP2	QUARTZ	TD
2	EQX	SRC	1	EQX-SRC-0001	Cam 01	01-BLACK	CAM 1	TEST-0	1	HD CCU 01
3	EQX	SRC	2	EQX-SRC-0002	Cam 02	02-BARS	CAM 2	TEST-1	2	HD CCU 02
4	EQX	SRC	3	EQX-SRC-0003	Cam 03	03-HD	CAM 3	TEST-2	3	HD CCU 03
5	EQX	SRC	4	EQX-SRC-0004	Cam 04	04-SD	CAM 4	TEST-3	4	HD CCU 04
6	EQX	SRC	5	EQX-SRC-0005	Cam 05	01-TVCRX1	CAM 5	TEST SD-0	5	HD CCU 05
7	EQX	SRC	6	EQX-SRC-0006	Cam 06	02-TVCRX2	CAM 6	TEST SD-1	6	HD CCU 06
8	EQX	SRC	7	EQX-SRC-0007	Cam 07	03-TVCRX3	CAM 7	TEST SD-2	7	HD CCU 07
9	EQX	SRC	8	EQX-SRC-0008	Cam 08	04-TVCRX4	CAM 8	NET 10	8	HD CCU 08
10	EQX	SRC	9	EQX-SRC-0009	Cam 09	05-BCRX1	CAM 9	NET 11	9	HD CCU 09
11	EQX	SRC	10	EQX-SRC-0010	Cam 10	06-BCRX2	EQX-SRC-0010	NET 12	10	HD CCU 10
12	EQX	SRC	11	EQX-SRC-0011	Cam 11	07-ATTRX1	EQX-SRC-0011	NET 13	11	HD CCU 11
13	EQX	SRC	12	EQX-SRC-0012	Cam 12	08-ATTRX2	EQX-SRC-0012	NET 14	12	HD CCU 12
14	EQX	SRC	13	EQX-SRC-0013	Cam 13	09-TSWRX2	HDCAM 1	NET 15	13	HD CCU 13
15	EQX	SRC	14	EQX-SRC-0014	Cam 14	10-TSWRX4	HDCAM 2	NET 20	14	HD CCU 14
16	EQX	SRC	15	EQX-SRC-0015	Cam 15	11-TSWRX6	HDCAM 3	NET 21	15	HD CCU 15
17	EQX	SRC	16	EQX-SRC-0016	Cam 16	12-TSWRX8	HDCAM 4	NET 22	16	HD CCU 16
18	EQX	SRC	17	EQX-SRC-0017	Cam 17	EQX-SRC-17	HDCAM 5	NET 23	17	EQX-SRC-17
19	EQX	SRC	18	EQX-SRC-0018	Cam 18	EQX-SRC-18	HDCAM 6	NET 31	18	EQX-SRC-18
20	EQX	SRC	19	EQX-SRC-0019	FS-19	15-SATRX1	HDCAM 7	NET 32	19	HD CCU 17
21	EQX	SRC	20	EQX-SRC-0020	FS-20	16-SATRX2	EQX-SRC-0020	NET 99	20	HD CCU 18
22	EQX	SRC	21	EQX-SRC-0021	FS-21	EQX-SRC-21	EQX-SRC-0021	NET 98	21	HD CCU 19
23	EQX	SRC	22	EQX-SRC-0022	FS-22	SYND01	EQX-SRC-0022	SAT-11	22	HD CCU 20
24	EQX	SRC	23	EQX-SRC-0023	FS-23	SYND02	HDCAM 8	SAT-12	23	FSYNC 1
25	EQX	SRC	24	EQX-SRC-0024	FS-24	SYND03	HDCAM 9	SAT-13	24	FSYNC 2
26	EQX	SRC	25	EQX-SRC-0025	FS-25	SYND04	HDCAM 10	SAT-14	25	FSYNC 3
27	EQX	SRC	26	EQX-SRC-0026	FS-26	PCR	HDCAM 11	SAT-15	26	FSYNC 4
28	EQX	SRC	27	EQX-SRC-0027	FS-27	INSPCR	HDCAM 12	SAT-16	27	FSYNC 5
29	EQX	SRC	28	EQX-SRC-0028	FS-28	NEWS01	HDCAM 13	SRC 28	28	FSYNC 6
30	EQX	SRC	29	EQX-SRC-0029	FS-29	NEWS02	EQX-SRC-0029	SRC 29	29	FSYNC 7
31	EQX	SRC	30	EQX-SRC-0030	FS-30	PROMPT	EQX-SRC-0030	SRC 30	30	FSYNC 8
32	EQX	SRC	31	EQX-SRC-0031	FS-31	PROMPTINS	EQX-SRC-0031	SRC 31	31	XCONV 1
33	EQX	SRC	32	EQX-SRC-0032	FS-32	ENGSHOP	EQX-SRC-0032	SRC 32	32	XCONV 2
34	EQX	SRC	33	EQX-SRC-0033	FS-33	SWR01-PGM	D CAM 1	SAT 41	33	XCONV 3
35	EQX	SRC	34	EQX-SRC-0034	FS-34	SWR02-SUB	D CAM 2	SAT 42	34	XCONV 4
36	EQX	SRC	35	EQX-SRC-0035	FS-35	SWR03-CLN	D CAM 3	SAT 43	35	EQX-SRC-0035
37	EQX	SRC	36	EQX-SRC-0036	FS-36	SWR04-ME01	D CAM 4	SAT 44	36	EQX-SRC-0036
38	EQX	SRC	37	EQX-SRC-0037	EV 37	SWR05-ME02	EQX-SRC-0037	SAT 45	37	VT 1
39	EQX	SRC	38	EQX-SRC-0038	EV 38	SWR06-ME03	EQX-SRC-0038	SAT 46	38	VT 2
40	EQX	SRC	39	EQX-SRC-0039	EV 39	SWR07-AUX01	E CAM 1	SAT 47	39	VT 3
41	EQX	SRC	40	EQX-SRC-0040	EV 40	SWR08-AUX02	E CAM 2	SAT 48	40	VT 4
42	EQX	SRC	41	EQX-SRC-0041	EV 41	SWR09-AUX03	E CAM 3	SAT 49	41	VT 5

Figure 5-38: Name Sets Exported to CSV File

- To retrieve names from the selected device, click on the **Name Sync** button. This will connect to the device and load the names from the device onto the name set page.

### 5.4.2. Destinations Tab

To create Names for the destinations, navigate to the **Destinations** tab.

1. Select a device from the **Device** drop down menu. The device list will populate in the destinations tab.

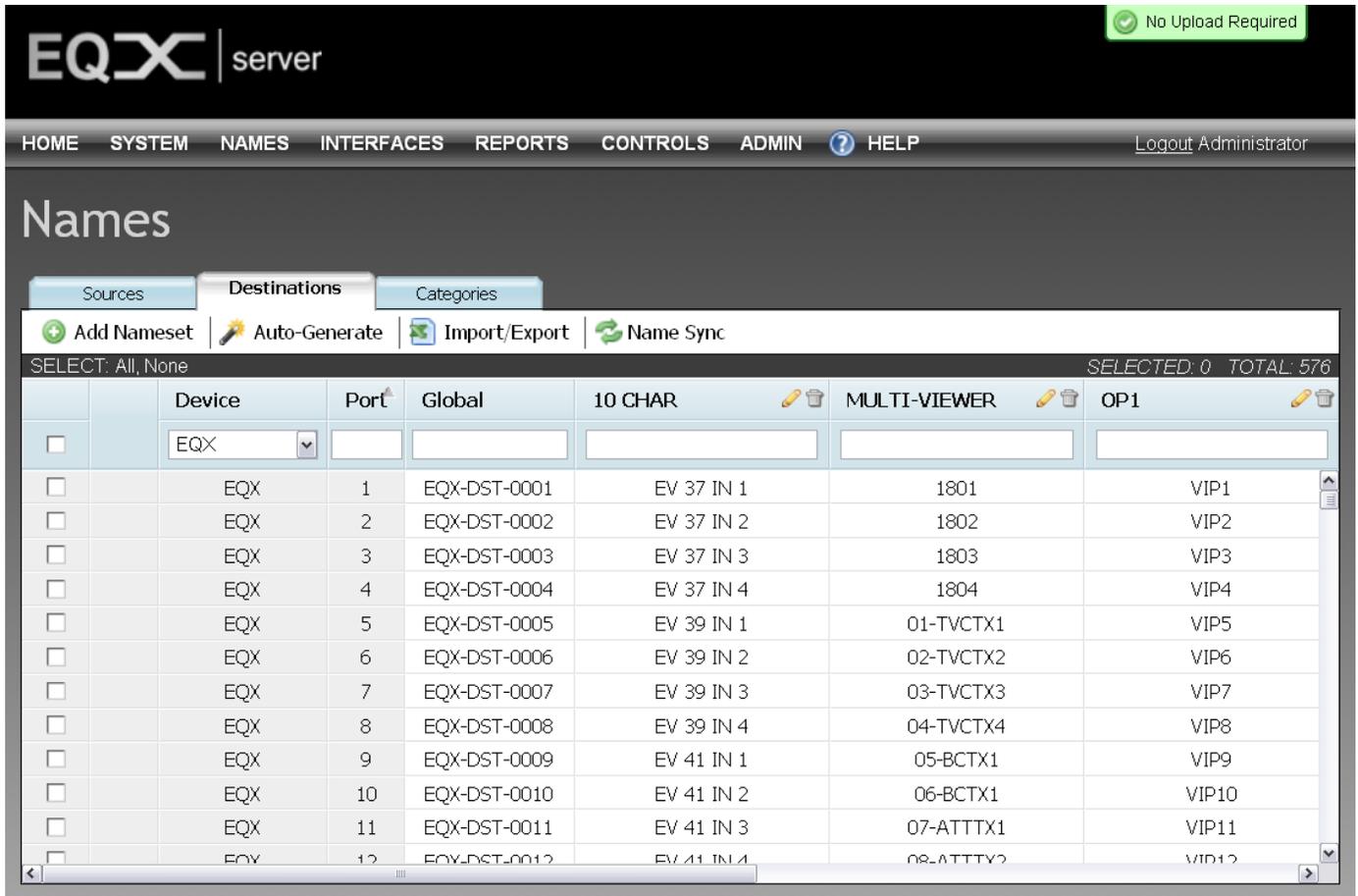


Figure 5-39: Names Destinations Tab

2. To assign ports to a certain name set, select the desired ports by placing a check mark in the box or boxes beside the port name(s) and then select the **Auto-Generate** button.
  - a. An **Auto-Generate Names** dialog box will appear enabling the user to generate names automatically based on the properties selected in this dialog box. From the *Nameset* drop down menu select one of the nameset items for which you are auto-generating the list.

Auto-Generate 5 Names
□ ×

Nameset	OP2 <span style="float: right;">▼</span>
Category	HD <span style="float: right;">▼</span> <span style="background-color: #333; color: white; padding: 2px 5px;">New...</span>
Separator	<input style="width: 100%;" type="text"/>
* Suffix Begin At	<input style="width: 100%;" type="text" value="1"/>

\* = required

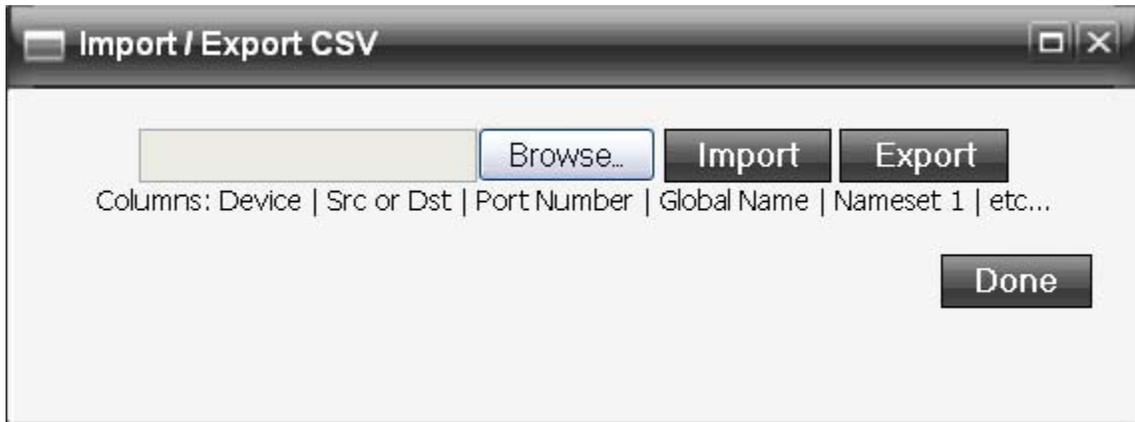
Device	Port ▲	Global	Existing (OP2)	Auto-Generated (OP2)
EQX	3	EQX-DST-0003	QC 12	HD1
EQX	5	EQX-DST-0005	QC 14	HD2
EQX	6	EQX-DST-0006	QC 15	HD3
EQX	7	EQX-DST-0007	QC 16	HD4
EQX	10	EQX-DST-0010	DST 10	HD5

Preview
Apply
Close

**Figure 5-40: Auto-Generate Names - Destinations**

- b. The user must assign a category which will be used in the naming process when the names are generated. Select a category from the drop down menu. If a category does not exist or if you would like to create a new category, select the **New...** button and enter a unique name into the *New Category Name* field.
- c. If you wish to separate the category and suffix using a particular character, you can optionally enter a character into the separator field (ie. -, :, etc).
- d. It is required that the user enter a beginning alpha-numeric suffix. The number or letter entered in the **Suffix Begin At** field will be the starting character for which the generated names will be counted up from (ie. 1, 2, 3..etc).
- e. Once all the fields are filled in, select the **Preview** button to view how the names will be displayed. The names will be generated based on your selections and will be displayed in the *Auto-Generated* field. If you are satisfied with your changes, select the **Apply** button and then **Close** to return to the original screen.
- f. Your changes will be generated and displayed under the corresponding columns.

- To import or export a CSV file, select the **Import/Export** button. To import a file, select the **Browse** button and then navigate to the appropriate CSV file. Once the file is selected, click on the **Import** button and the data will be imported to the name set list.



**Figure 5-41: Import/Export CSV for Name Sets**

- To export a CSV file, select the **Export** button. The information displayed in the current name set list will be exported to an excel CSV file.
- To retrieve names from the selected device, click on the **Name Sync** button. This will connect to the device and load the names from the device onto the name set page.

### 5.4.3. Adding a Nameset

The user can create a *nameset* when they want to realiaise sources and destinations. When a user creates a new nameset, the new nameset will be added alphanumerically to the list of columns in both the sources and destinations tab.

- To add a new name set column to the list, select the **Add Nameset** button.

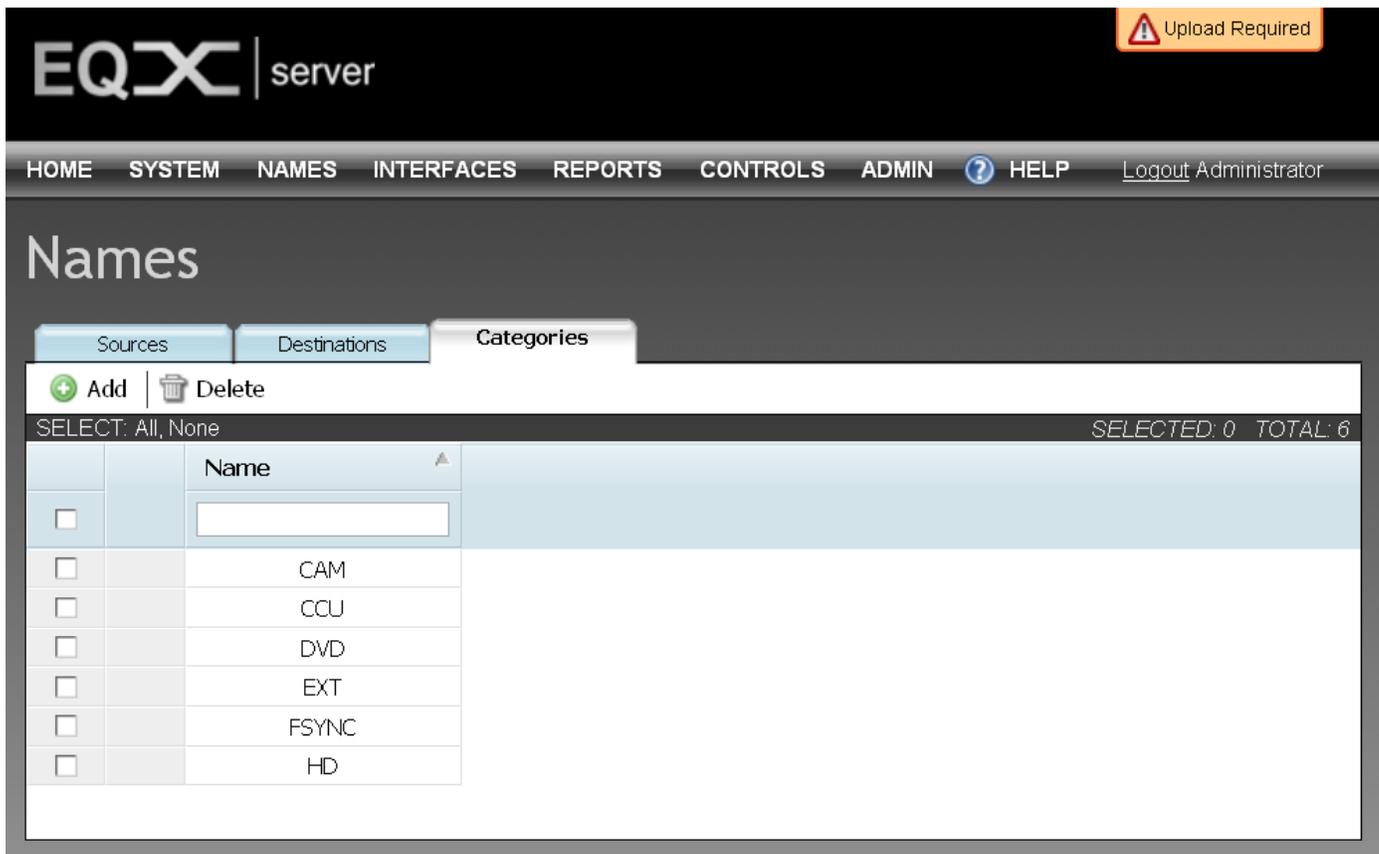


**Figure 5-42: Add Name Set**

- When the dialog box appears, enter a unique name into the *Name* field and then press the **Add** button. Once you have added all of the desired names, select the **Done** button. The name will be added as a new column in alphabetical order.

#### 5.4.4. Categories Tab

The **Categories** tab enables the user to create and view nameset categories. A category is a prefix; it allows the user to quickly locate sources or destinations by using prefix keys on the control panel (ie. CP-2200E). Creating a category will help the user to easily identify what group the destination or source is associated with.

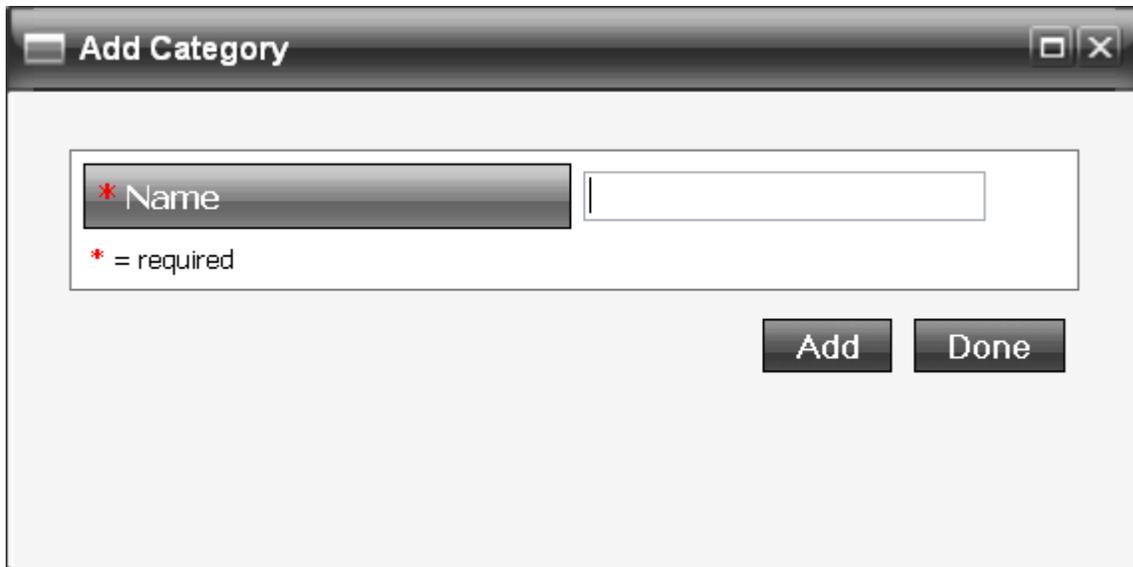


The screenshot shows the EQX server web interface. At the top right, there is a red warning box that says "Upload Required". The navigation menu includes: HOME, SYSTEM, NAMES, INTERFACES, REPORTS, CONTROLS, ADMIN, HELP, and Logout Administrator. The main heading is "Names". Below it are three tabs: Sources, Destinations, and Categories. The Categories tab is selected. Above the table are "Add" (with a plus icon) and "Delete" (with a trash icon) buttons. The table has a "SELECT: All, None" dropdown on the left and "SELECTED: 0 TOTAL: 6" on the right. The table has a header row with "Name" and a search input field. Below the header are six rows, each with a checkbox and a category name: CAM, CCU, DVD, EXT, FSYNC, and HD.

		Name
<input type="checkbox"/>		<input type="text"/>
<input type="checkbox"/>		CAM
<input type="checkbox"/>		CCU
<input type="checkbox"/>		DVD
<input type="checkbox"/>		EXT
<input type="checkbox"/>		FSYNC
<input type="checkbox"/>		HD

Figure 5-43: Name Set Categories Tab

- To create a new Name Category select the **Add** button.
- An **Add Category** dialog box will appear prompting the user to enter a category name into the **Name** field.



**Figure 5-44: Add Category**

3. Select the **Add** button after you have entered the name. This will add the name to the category list. If you wish to create more than one group, continue to add category names, and then once you are complete, select the **Done** button.
4. Once the name is added it will be listed in the Category list. To remove a category, place a check mark in the box beside the category you wish to remove and then select the **Delete** button.

## 5.5. CONFIGURING THE INTERFACES

The EQX Server based router control system has many advanced features. One of the most powerful is the ability to generate Profiles for panels. These profiles are essentially a collection of sources and destinations along with a new set of aliases for those sources and destinations. You do NOT have to explicitly add tielines to a profile, nor do you have to design a panel layout for intelligent panels. The intelligent panels themselves find the best way to layout the various sources, destinations, prefixes, etc, that the user has decided to use. In the case of traditional panels a simple but powerful GUI is provided to determine the explicit actions that the panel can make, from defining menus to adding sources and destinations. Creating profiles is very similar to setting up the Router system itself. The steps are: create a profile, add destinations, sources and prefixes, and then alias anything as you see fit.

5.5.1. Multi-Profile

The **Multi-Profile** tab enables the user to view, add, edit and delete Multi-Profiles capable panels, such as the CP-2200E.

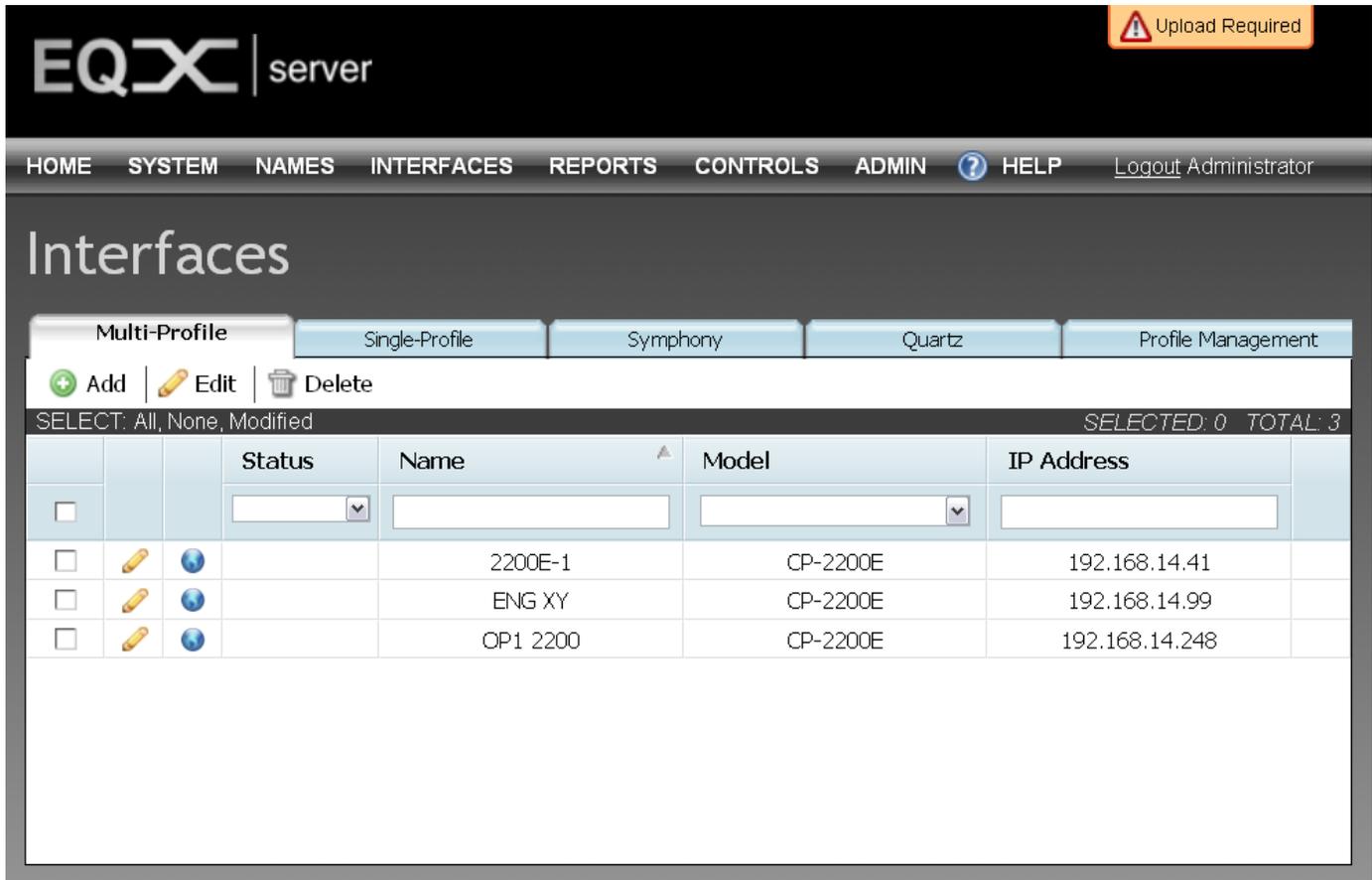
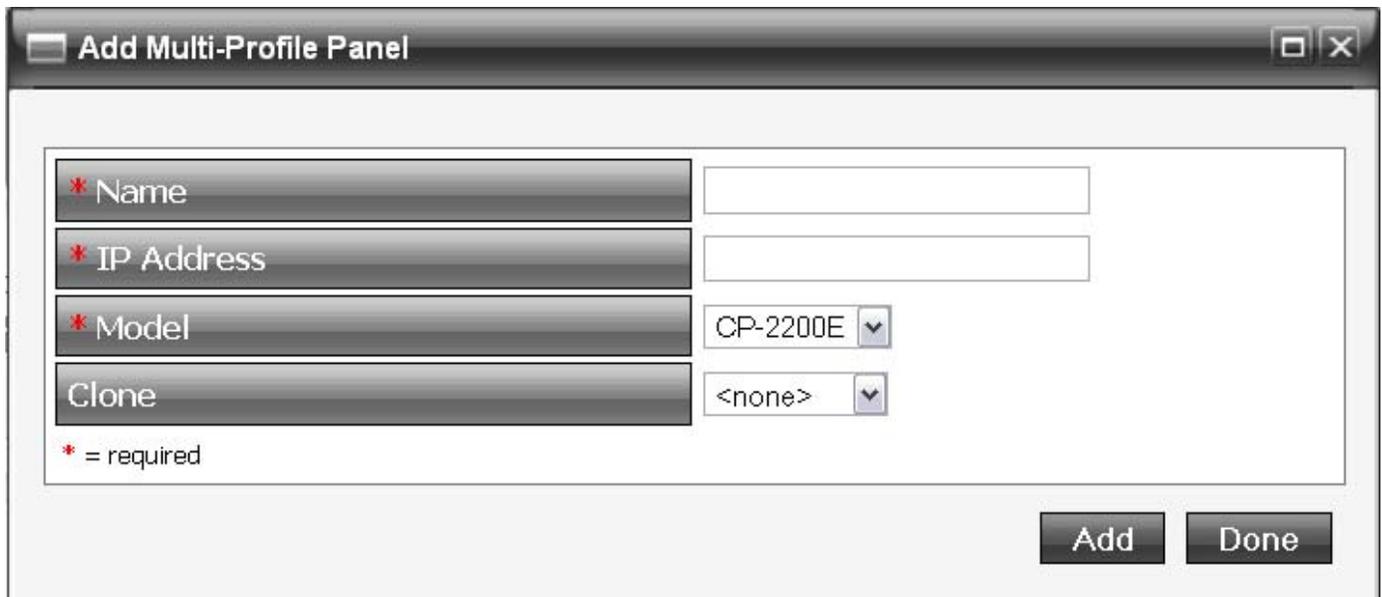


Figure 5-45: Multi-Profile Tab

The following table provides descriptions of the toolbar button functions for the Multi-Profile Tab:

Icon	Description
Add	<b>Add:</b> To add a multi-profile panel, select the Add button from the main toolbar. An <b>Add Multi-Profile Panel</b> dialog box will appear as shown in Figure 5-46.
Edit	<b>Edit:</b> To edit a panel(s) profile, place a check mark in the box beside the profile(s) that you wish to edit and then select the edit icon. This function is particularly useful if you are editing multiple panels at one time. Otherwise if you are just editing one panel, select the pencil icon beside the panel that you wish to edit.
Delete	<b>Delete:</b> To remove a panel profile, place a check mark in the box beside the profile that you wish to remove, and select the delete icon.

Table 5-1: Multi-Profile Toolbar



**Figure 5-46: Add Multi-Profile Panel**

The following items describe the *Add Multi-Profile Panel* dialog box functions:

- **Name:** Enter a unique name for the multi-profile that you wish to create.
- **IP Address:** Enter the IP address of the panel.
- **Model:** Select the model number from the model drop down list.
- **Clone:** If you wish to replicate an already existing Multi-Profile, select one of the profiles from the **Clone** drop down menu. This profile will be created based on the selected clone.

#### 5.5.1.1. Editing a Multi-Profile

The following procedure will describe how to edit a multi-profile interface.

1. Select the **Edit** icon beside the profile that you wish to edit. An **Interface Layout** screen will appear identifying the name of the multi-profile you selected, the control panel interface display, profiles available in the multi-profile, and the configuration tabs (*Sources*, *Destinations*, *Categories*, and *Settings*).
2. The **Sources** tab enables the user to view the status of the sources and set the sources to available or unavailable status.
3. The user can use the Nameset **Name** drop down menu to select and load another nameset. Once the nameset is loaded the user will be able to edit the source status to available or unavailable.

4. The **Sources** tab provides two top level menu options which include; *Editing Mode* and *Full Screen* mode:

Menu Option	Description
Availability ▾	The <b>Editing Mode</b> drop down menu in the top left hand corner of the tab enables the user to change how the source availability is displayed. There are three availability options: <ol style="list-style-type: none"> <li>i. <b>Availability:</b> Lists all the sources in alphanumeric order.</li> <li>ii. <b>Availability (Group):</b> Places the sources into alphanumeric device groups.</li> <li>iii. <b>Re-order:</b> Enables the user to physically drag and drop the sources into a specific order.</li> </ol>
Full-screen	Selecting the <b>Full-Screen</b> option will hide the panel interface and expand the source tab to populate the entire length of the screen.

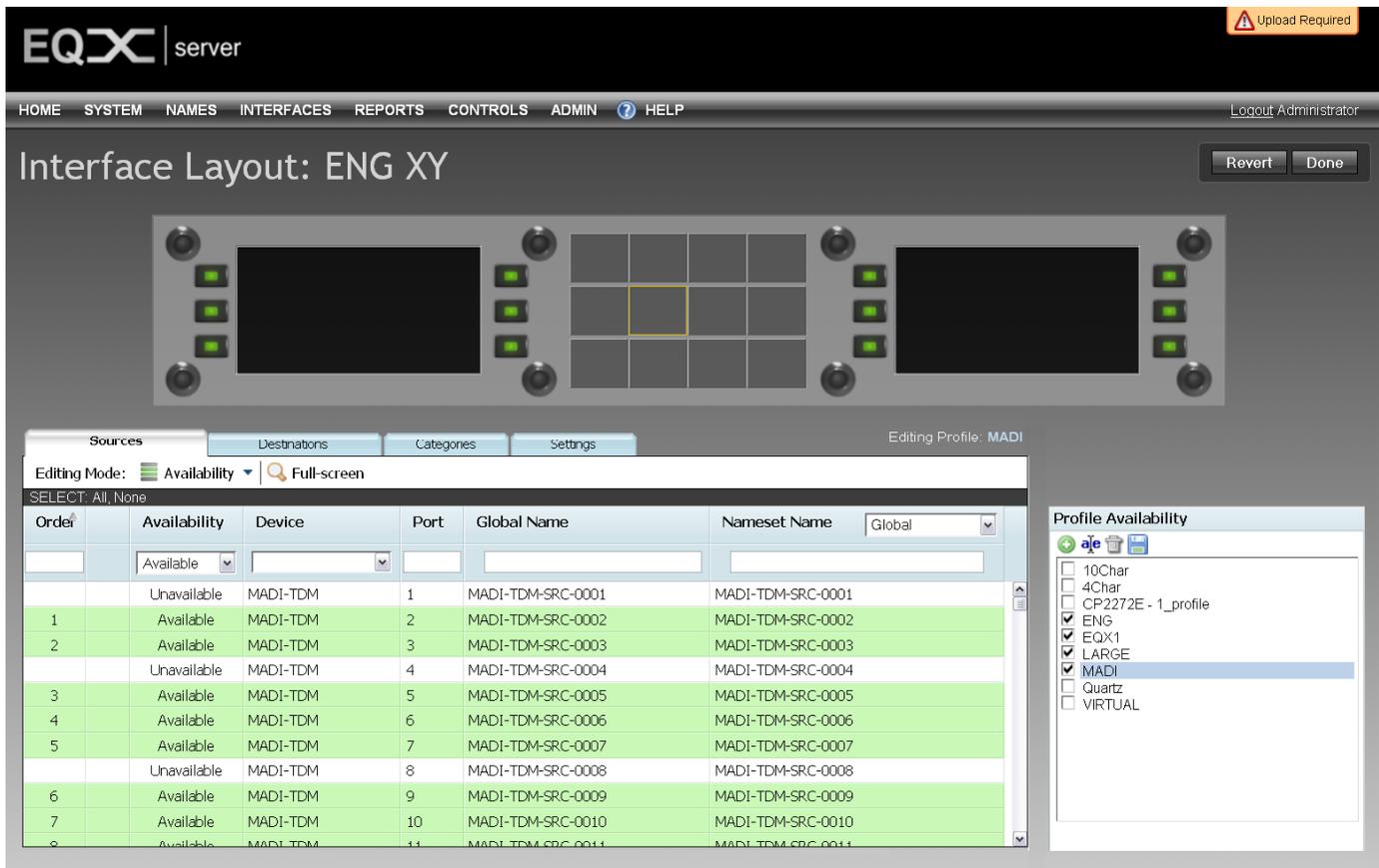


Figure 5-47: Interface Layout – Sources

5. Next, toggle to the **Destinations** tab as shown in Figure 5-48, and perform the same functions as described above for editing the sources tab.

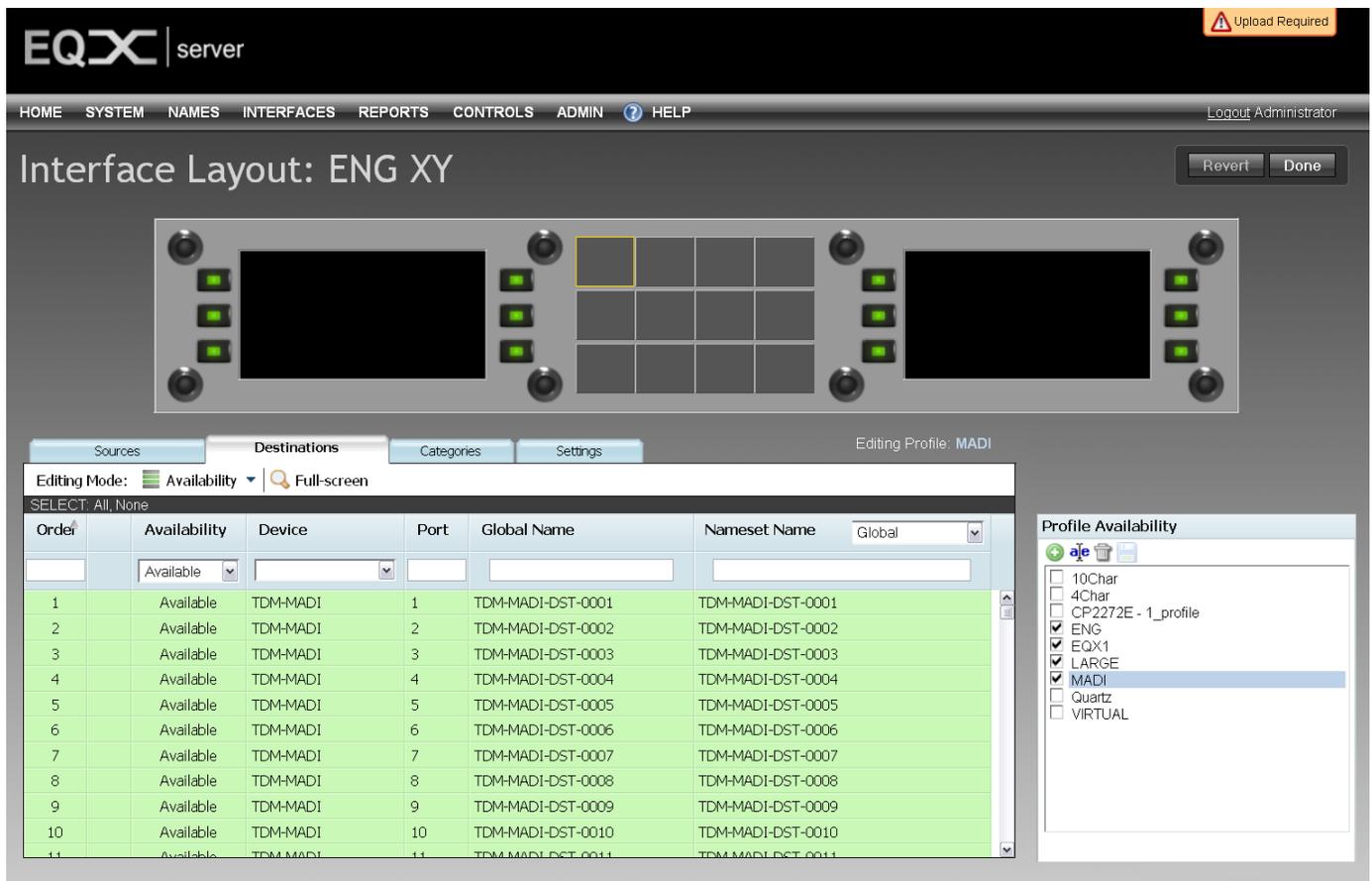


Figure 5-48: Interface Layout – Destinations

- The user can also add a new category or edit one of the existing categories associated with the selected profile. Select the **Category** tab to edit the category settings; the **Source Categories** will be listed on the left side of the screen and the **Destination Categories** will be listed on the right side of the screen. If a category is listed as *unavailable* (white), then single click on the category row to change it to *available* (green). If you wish to make an *available* category *unavailable*, single click on the desired row to change the status.

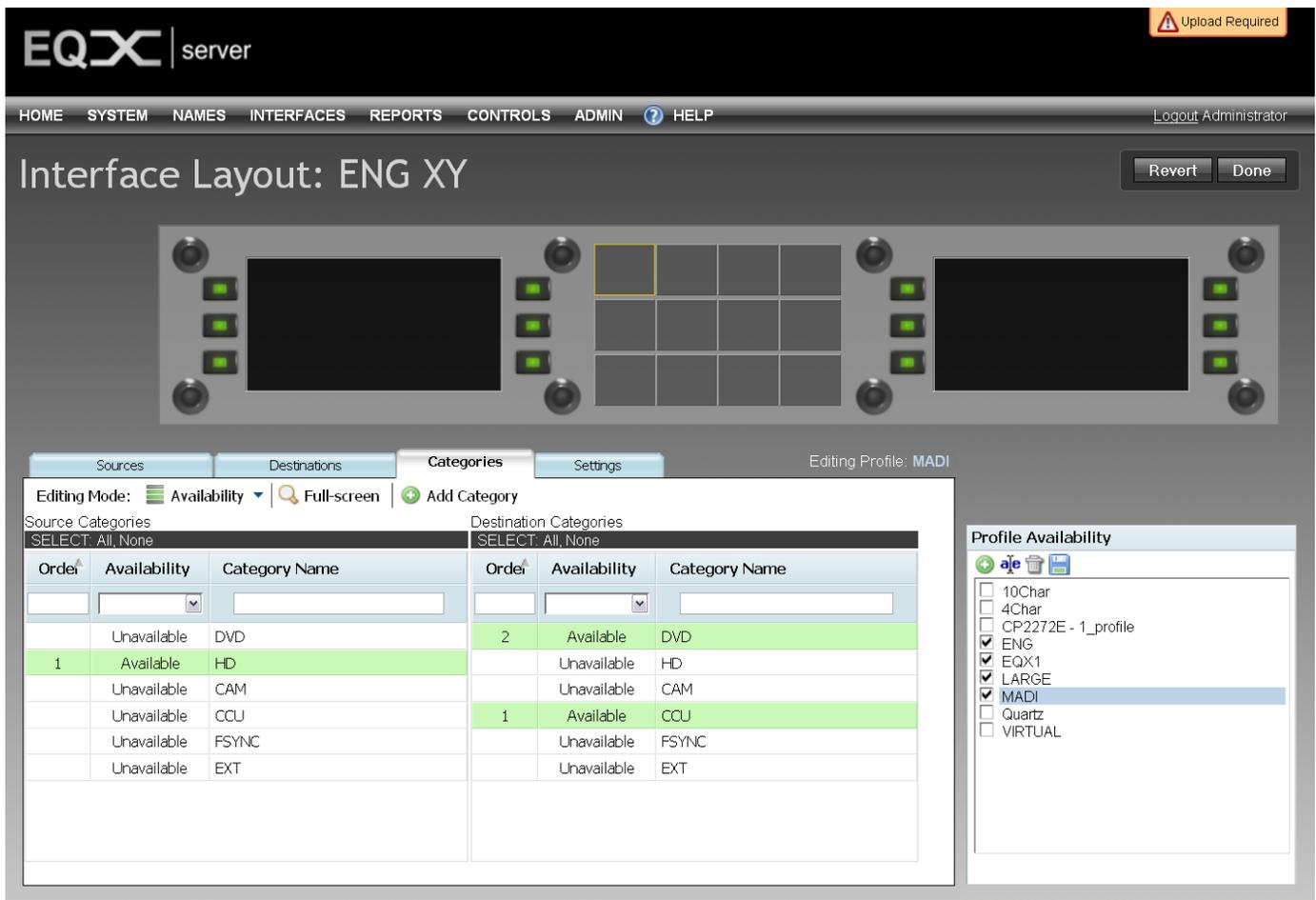


Figure 5-49: Interface Layout – Categories

- To modify the profile settings, select the **Settings** tab. The profile settings for the selected profile will be displayed as shown in Figure 5-50.

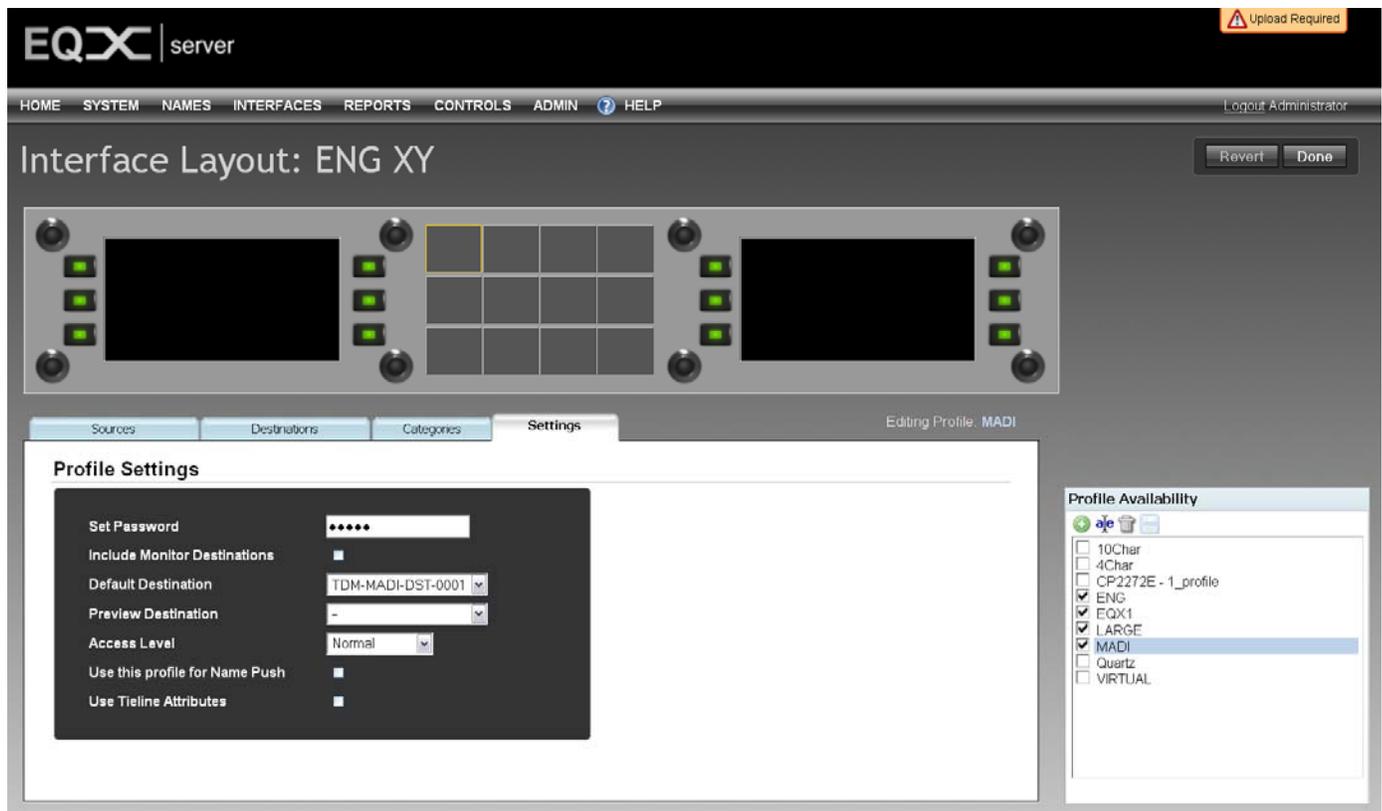


Figure 5-50: Interface Layout - Settings

8. Below is a list of the parameters that can be edited in the settings tab:

- a. **Set Password:** The *Set Password* field enables the user to assign a password to the selected profile. If a password already exists, it is not required that the user know the original password in order to overwrite it. Enter the desired password into this field.
- b. **Include Monitor Destinations:** If you wish to control the monitor destinations of the EQX router from the selected profile, place a check mark in the *Include monitor destinations* check box. This add the four EQX router monitor destinations automatically to the selected profile and will appear on any Advanced control panels that use this profile.
- c. **Default Destination:** To set a default destination, select a destination from the drop down menu.
- d. **Preview Destination:** To set a preview destination, select a destination from the drop down menu. When you preset a source (prior to pressing take) your source will be routed automatically to the Preview Destination you have selected.
- e. **Access Level:** To set an access level, select either *Normal* or *Administrator* from the drop down menu. The access level defines who has access to the selected profile.
- f. **Use this profile for Name Push:** Placing a check mark in this box will force name updates from the EQX server onto a device that supports local name updates.
- g. **Use Tieline Attributes:** Place a check mark in this box will allow the panel to present the user with an attribute selection in order to use a specific tieline for a route.

- If you are unhappy with the changes you have made to the multi-profile, you can revert back to the original profile settings by selecting the **Revert** button at the top right of the screen. After you have completed making your changes, select the **Done** button to finalized your updates.

### 5.5.2. Single-Profile

The **Single-Profile** tab enables the user to view, add, edit and delete Single-Profile interfaces.

The screenshot shows the EQX server web interface. At the top right, there is a green notification box that says "No Upload Required". The navigation menu includes HOME, SYSTEM, NAMES, INTERFACES, REPORTS, CONTROLS, ADMIN, and HELP. The user is logged in as Administrator. The main content area is titled "Interfaces" and has several tabs: Multi-Profile, Single-Profile (selected), Symphony, Quartz, and Profile Management. Below the tabs is a toolbar with icons for Add, Edit, Delete, Make Like..., and Send. Below the toolbar is a table with the following columns: Status, Name, Model, IP Address, Nameset, Disabled, Locate, and Send Status. The table contains 13 rows of interface profiles.

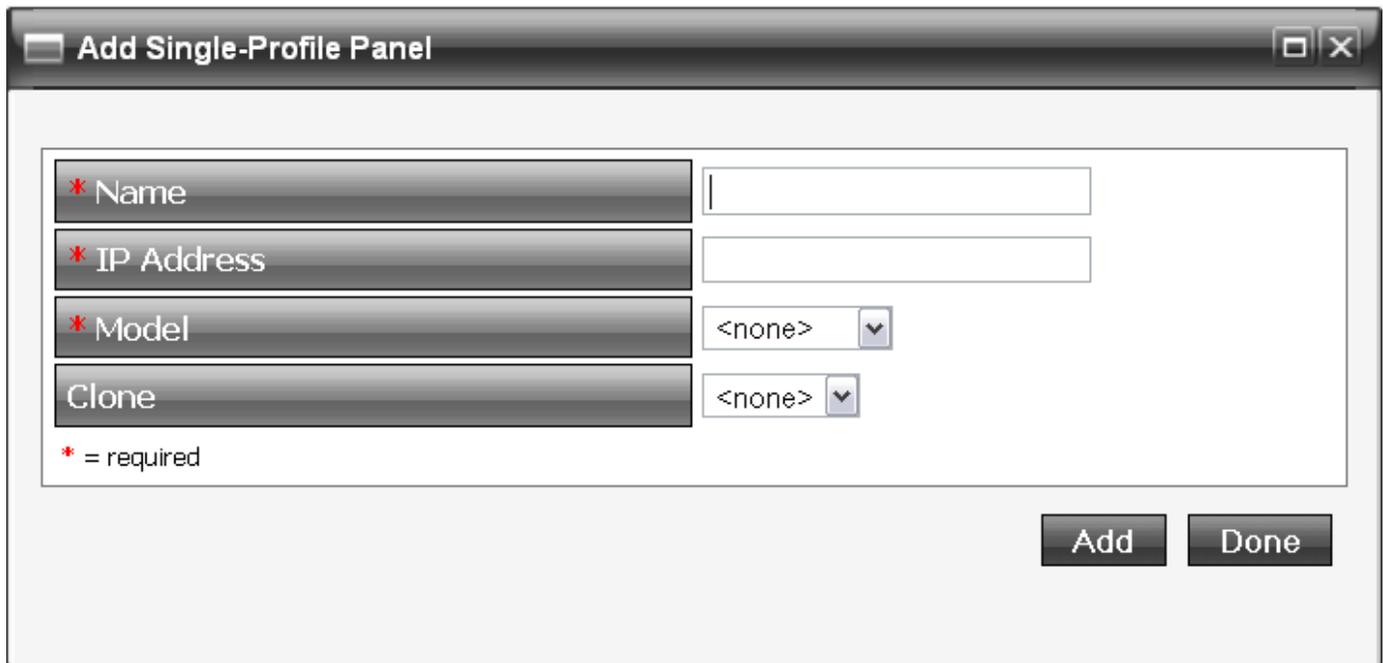
Status	Name	Model	IP Address	Nameset	Disabled	Locate	Send Status
<input type="checkbox"/>	CP3201A - 1	CP-3201E	192.168.14.7:19	Global	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000A - 1	CP-1000E	192.168.14.7:1B	10 CHAR	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000A - 2	CP-1000E	192.168.14.7:3F	10 CHAR	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000E - 1	CP-1000E	192.168.14.50	Global	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000E - 2	CP-1000E	192.168.14.51	10 CHAR	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000E - 3	CP-1000E	192.168.14.52	Global	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000E - 4	CP-1000E	192.168.14.53	Global	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP1000E - 5	CP-1000E	192.168.14.54	Global	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP2032E -1	CP-2032E	192.168.14.7:15	10 CHAR	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP2048A - 1	CP-2048E	192.168.14.7:21	10 CHAR	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP2048A - 2	CP-2048E	192.168.14.7:12	10 CHAR	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	CP2272E - 1	CP-2272E	192.168.14.14	10 CHAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Figure 5-51: Single-Profile

The following table provides descriptions of the toolbar button functions for the Single-Profile Tab:

Icon	Description
 Add	<b>Add:</b> To add a single-profile panel, select the <b>Add</b> button from the main toolbar. An <b>Add Single-Profile Panel</b> dialog box will appear as shown in Figure 5-52.
 Edit	<b>Edit:</b> To edit a panel(s) profile, place a check mark in the box or boxes beside the profile that you wish to edit and then select the edit icon. This function is particularly useful if you are editing multiple panels at one time. Otherwise if you are just editing one panel, select the pencil icon beside the panel that you wish to edit.
	<b>Delete:</b> To remove a panel profile, place a check mark in the box beside the profile that you wish to remove, and select the delete icon.
 Make Like...	<b>Make Like:</b> The <i>Make Like</i> function enables the user to clone an existing panel. Place a check mark beside the profile(s) that you wish to change and then select the <i>Make Like</i> button. The <i>Make Like</i> dialog box will appear (as shown in Figure 5-53). From the clone drop down menu select a panel that you wish to clone and then press the <b>Apply</b> button.
 Send	<b>Send:</b> To apply the panel configuration to the physical panel(s), select the panel(s) that you wish to update and then press the <i>Send</i> button. The changes will be sent and applied to the selected panel

**Table 5-2: Single Profile Toolbar**



**Add Single-Profile Panel**

\* Name

\* IP Address

\* Model

Clone

\* = required

Add Done

**Figure 5-52: Add Single-Profile Panel Dialog Box**

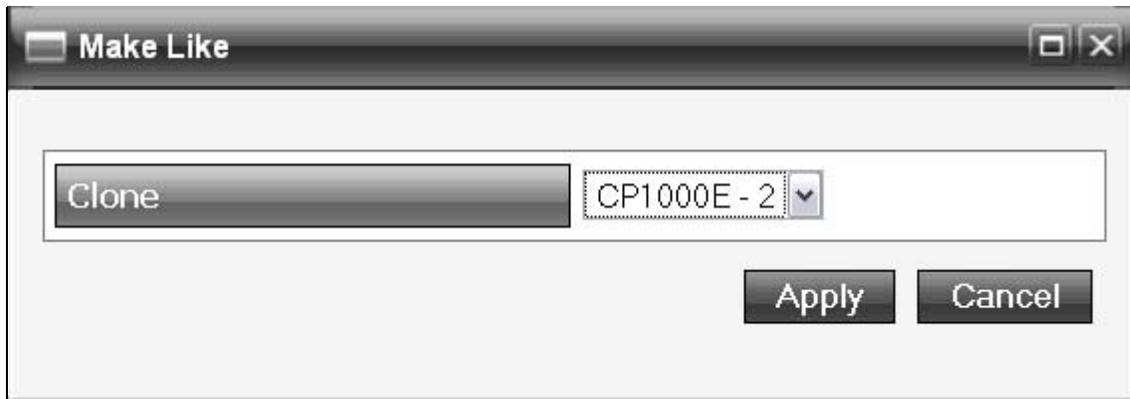


Figure 5-53: Make Like Dialog Box

To search for a particular profile, use the filter toolbar to sort through the list of profiles. Enter a property into one of the blank fields or use the drop down menu to narrow down your search. As you type or select an item, the list of devices will be narrowed down to display only the properties that match the data being entered.



Figure 5-54: Single Profile Filter

The **Locate** function is used to find single profile simple panels (such as the CP-1000E or CP-2048E). When this function is turned on it will cause the panel to keep flashing in order for the user to find it.

### 5.5.2.1. Editing a Single Profile

To edit a single profile, navigate to the **Single Profile** Tab and follow the instructions listed below. Please note that the configuration controls for the sources and destinations tabs are the same, therefore for the sake of simplicity only the controls for the sources tab will be listed in detail below.

1. Select the **Edit** icon beside the profile that you wish to edit.
2. An **Interface Layout** screen will appear identifying the name of the single profile panel that you selected, as shown in Figure 5-55. The **Interface Layout** screen enables the user to assign sources and destinations to the control panel buttons. This screen also allows the user to configure the key settings, panel reset settings, sub-panel defaults, joystick ports and key colours, which will be later discussed in the manual.

The screenshot displays the EQX server management interface. At the top, there is a navigation menu with options like HOME, SYSTEM, NAMES, INTERFACES, REPORTS, CONTROLS, ADMIN, and HELP. The main area is titled 'Interface Layout: CP1000E - 5'. Below this, there is a row of buttons representing different camera sources, including CAM 1, CAM 3, CAM 5, CAM 6, and several EQX-S and EQX-D sources. The 'Sources' tab is active, showing a table with the following data:

Order	Availability	Device	Port	Global Name	Nameset Name
1	Available	EQX	2	CAM 1	CAM 1
2	Available	EQX	4	CAM 3	CAM 3
3	Unavailable	EQX	5	CAM 4	CAM 4
4	Available	EQX	6	CAM 5	CAM 5
5	Available	EQX	7	CAM 6	CAM 6
6	Unavailable	EQX	9	CAM 8	CAM 8
7	Unavailable	EQX	10	CAM 9	CAM 9
8	Available	EQX	11	EQX-SRC-0011	EQX-SRC-0011
9	Available	EQX	12	EQX-SRC-0012	EQX-SRC-0012
10	Available	EQX	13	EQX-SRC-0013	EQX-SRC-0013
11	Available	EQX	14	EQX-SRC-0014	EQX-SRC-0014

Figure 5-55: Single Profile – Sources Tab

- The **Sources** tab provides a list of sources that are available and unavailable for the selected control panel. By single clicking on a source cell the user can perform three functions: Make a source available (green), make a source unavailable (white – *unavailable*) or create a placeholder/blank cell (white – *blank*). To see all available sources, set your availability filter to *Available*. To see all unavailable sources, set your availability filter to *Unavailable*. Finally, to view all sources (*available* and *unavailable*) clear the Availability drop down filter so that it is blank.

A pop up menu will be revealed when the user right clicks on a cell. By right clicking on a source, the menu shown in Figure 5-56 will appear. The following provides a list of actions that can be applied using the right-click menu, these items include:

- **Make Available:** Allows the user to make an unavailable source available to the control panel. Available sources can be assigned to a control panel key using the **Key Settings** function.
- **Hide:** Selecting the *Hide* function will turn the selected source row grey and blank out the corresponding button on the control panel. The term *Blank* will be displayed in the device column and on the corresponding control panel key. The blank features functions as a placeholder, allowing the user to reserve that source for future use.
- **Make Unavailable:** Selecting this feature will make the source unavailable and remove it from the current display. If a source is made unavailable, it cannot be referenced to the control panel.
- **Insert Blank:** Selecting this option will insert a blank source row and control panel key. Inserting a blank row will act as a placeholder.

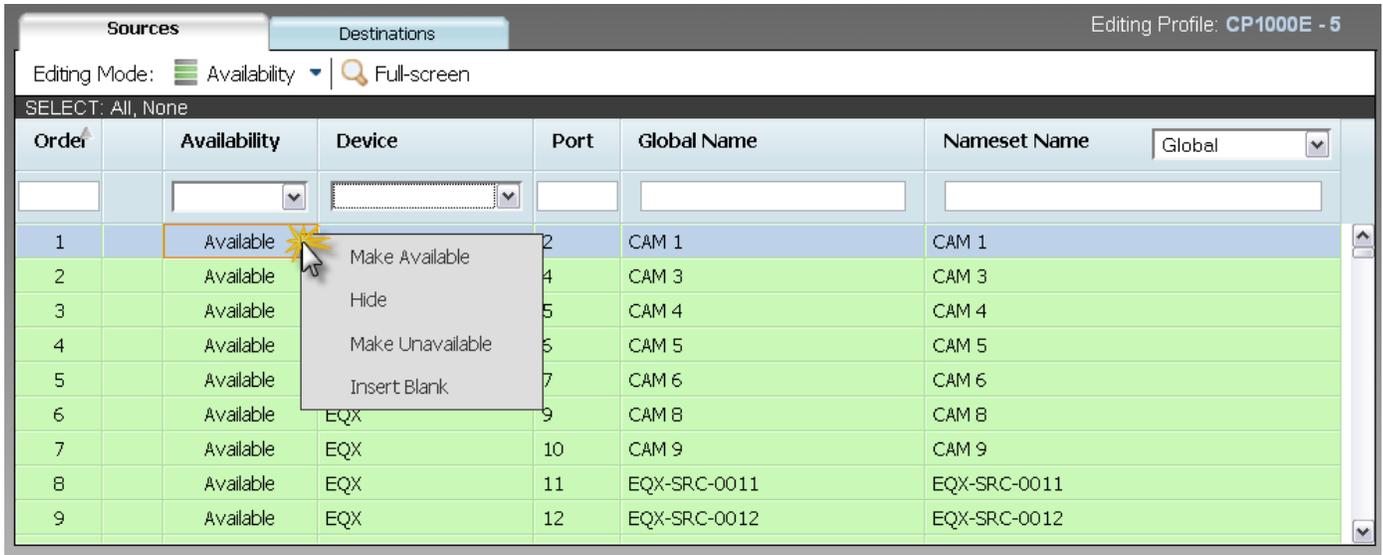


Figure 5-56: Right Click Menu for Interfaces

- The **Sources** tab provides two top menu level options which include; *Editing Mode* and *Full Screen* mode.

Menu Option	Description
Availability ▾	The <b>Editing Mode</b> drop down menu in the top left hand corner of the tab enables the user to change how the source availability is displayed. There are three availability options: <ul style="list-style-type: none"> <li><b>a) Availability:</b> Lists all the sources in alphanumeric order.</li> <li><b>b) Availability (Group):</b> Places the sources into alphanumeric device groups.</li> <li><b>c) Re-order:</b> Enables the user to physically drag and drop the sources into a specific order. The user can select multiple items by holding down the <b>shift</b> key and selecting a block of rows; they can select various random items by clicking the <b>Ctrl</b> key and selecting multiple cells. These items can then be dragged and dropped to a specific location in the column. See Figure 5-57.</li> </ul>
Full-screen	Selecting the <b>Full-Screen</b> option will hide the panel interface and expand the sources tab to populate the entire length of the screen.

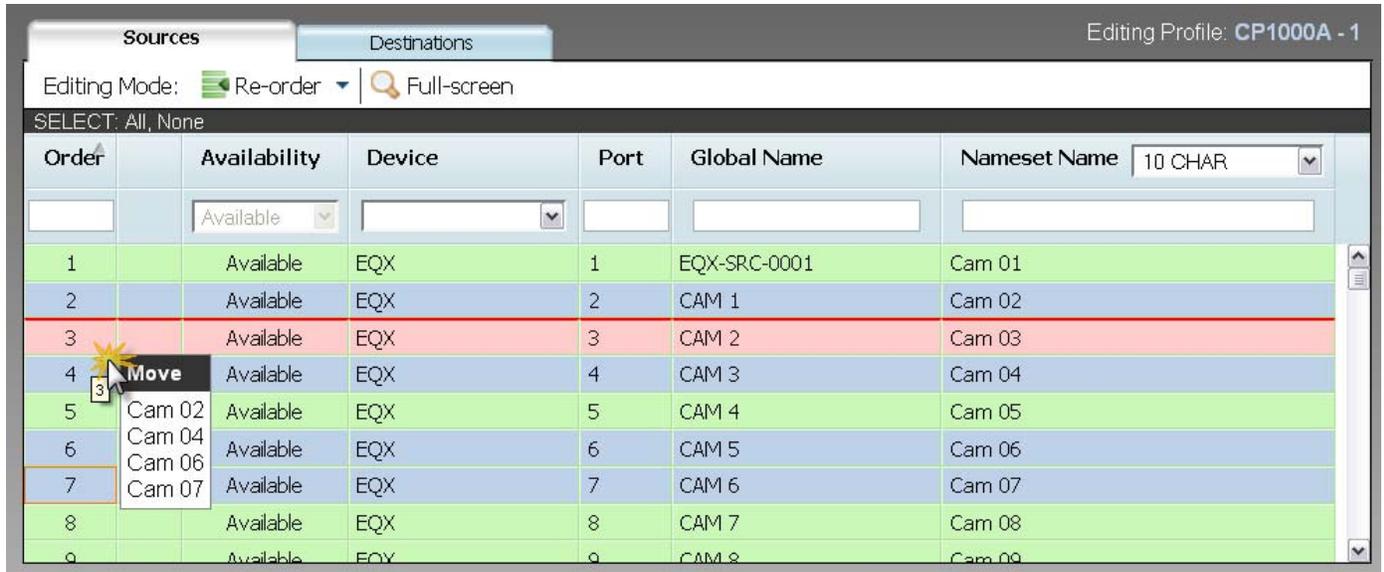


Figure 5-57: Re-order Availability – Drap & Drop Multiple Items

- Using the **Key Settings** window (located on the right side of the screen and shown in Figure 5-58), the user can assign a specific source to a particular control panel key. Highlight a key on the control panel by selecting the panel button with your mouse; the selected key will be highlighted with a faint yellow box around the button.

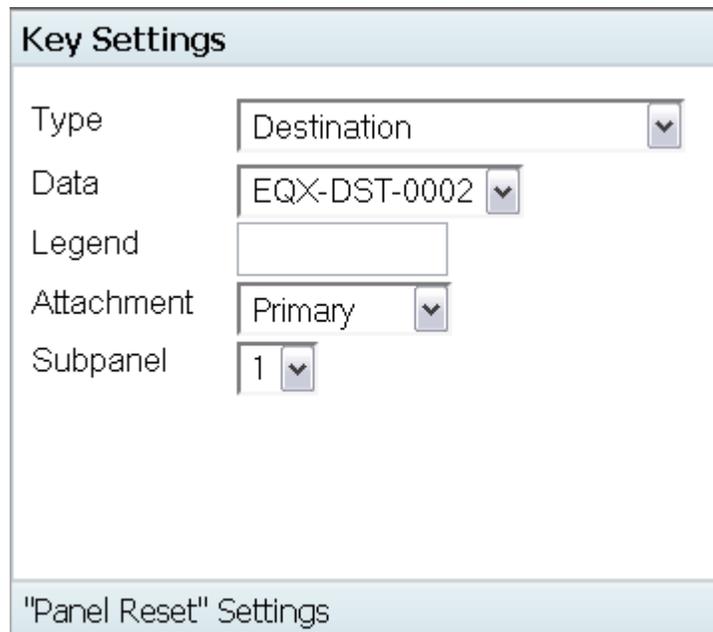


Figure 5-58: Key Settings

6. Once the desired button is selected, navigate to the **Key Settings** window and configure the following parameters:

Parameter	Description
<b>Type</b>	The <b>Type</b> drop down menu enables the user to select what type of button the selected key will be assigned to. There are numerous key options, therefore you must use the drop down menu to define the function of the key. See Table 5-3 for a list of the possible button assignments.
<b>Data</b>	The <b>Data</b> drop down menu enables the user to assign data to the selected button. Depending on your selection in the <b>Type</b> drop down menu, the <b>Data</b> drop down menu will adjust to accommodate the data related to the button type. For example, if the button <b>Type</b> is set to <i>Destination</i> , then the <b>Data</b> may be set to <i>EQX-DST-0008</i> .
<b>Legend</b>	The <b>Legend</b> function enables the user to uniquely label the button. Type a name into the <b>Legend</b> field and the name will be displayed on the selected control panel button.
<b>Attachment</b>	The <b>Attachment</b> drop down menu enables the user to set an attachment status for the selected button. The attachment options are <i>Primary</i> , <i>Secondary</i> , and <i>Static</i> . This determines if the button will be affected by Primary menu or Secondary menu navigation. Static prevents any navigation affecting the button.
<b>Sub-panel</b>	The <b>Sub-panel</b> drop down menu enables the user to assign a sub-panel number to the selected button.

The following is a list of buttons that are used to configure the Control Panel.

<b>Button</b>	<b>Description</b>
<b>Add String</b>	This will clear the preset string and add the name field string defined for this key to it.
<b>Add String/Character</b>	This key will perform two different functions dependant on the content of the preset string. If the preset string is empty then it will add the name string defined for this key to it, otherwise it will append the single character defined for this key to the preset string providing there are less than 8 characters already in the string.
<b>Append String</b>	This will append a name field string to the current content of the preset string
<b>Current Destination Display</b>	Displays the name of the currently selected destination.
<b>Current dst src Display</b>	Displays the name of the currently routed source to the currently selected destination.
<b>Current Source Display</b>	Displays the currently routed source to a specific destination.
<b>Delete Last Character</b>	Deletes the last character in a string
<b>Destination Mode</b>	Toggles the preset window between source and destination mode
<b>Destination Protect</b>	Protects the destination from being routed from any other interface except the one that is protecting the destination.
<b>Destination</b>	Changes the currently selected destination.
<b>Dst Scroll Up</b>	Scrolls up and through the Destination List.
<b>Dst Scroll Down</b>	Scrolls down and through the Destination List.
<b>Enable</b>	Inhibits any source key from being taken to a destination unless this button is held down.
<b>Last menu</b>	Displays and navigates to the previously displayed menu.
<b>Level</b>	Toggles the level <i>on/off</i> to affect possible breakaways on subsequent takes. Displays the level name.
<b>Locks</b>	Allows access to the locks functionality.
<b>Next Destination</b>	Changes the current destination to the next one defined in the name table.
<b>Next Source Preset</b>	This key increments the source that is routed to the pre-select. This key does not change any destination on the system but is used when a take or level take key is pressed. It will then take this pre-selection to the current destination.
<b>Not Used</b>	This key will not be used to control any function.
<b>Panel Lock</b>	Locks all functionality of the local panel.
<b>Preset Clear</b>	This key will clear the current preset string.
<b>Prev. Source Preset</b>	This key decrements the source that is routed to the pre-select. This key does not change any destination on the system but is used when a take or level take key is pressed. It will then take this pre-selection to the current destination.
<b>Previous Destination</b>	Changes the current destination to the previous one defined in the name table.

<b>Primary menu</b>	Allows access to a primary menu.
<b>Secondary menu</b>	Allows access to a secondary menu.
<b>Setup</b>	Allows access to the Setup menu.
<b>Source</b>	Takes this source to a currently selected source.
<b>Source Chop</b>	Allows the user to create a chop between two sources at a pre-determined rate.
<b>Source Preset</b>	This key changes the source that is routed to the pre-select. This key does not change any destination on the system but is used when a take or level take key is pressed. It will then take this pre-selection to the current destination.
<b>Source Toggle</b>	This key toggles sources.
<b>Src Scroll Up</b>	Scrolls up and through the Source List.
<b>Src Scroll down</b>	Scrolls down and through the Source List.
<b>Static Destination</b>	Destinations that are not affected by re-ordering or scroll list navigation
<b>Static Source</b>	Sources that are not affected by re-ordering or scroll list navigation – CP2272E
<b>Static Source Preset</b>	Sources that are not affected by re-ordering or scroll list navigation – CP2272E. The Static Source Preset is used in conjunction with Take, the source is not routed unless the Take is used.
<b>System Salvo</b>	This key type allows one of the system salvos (defined by the salvo combo box) to be fired.
<b>Take</b>	This key takes the current preset source selection to the current destination on all the currently enabled levels. The button will display the currently routed source on the lowest enabled level, unless a legend is given to this key.
<b>Take Clear</b>	Clear selected source on Take.
<b>Take Level Preset</b>	Source take on a specific level.

**Table 5-3: Button Description**

- To assign panel reset buttons, select the **'Panel Reset' Settings** button to expand the reset instructions and put the control panel interface into *Panel Reset* mode. Using your cursor, select two buttons that will be used to reset the physical panel. When the buttons are selected they will flash black, as shown in Figure 5-59. Once the configuration is sent to and loaded on the physical control panel, the user will be able to physically hold down these two keys in order to reset the panel.



**Figure 5-59: Panel Reset Selection**

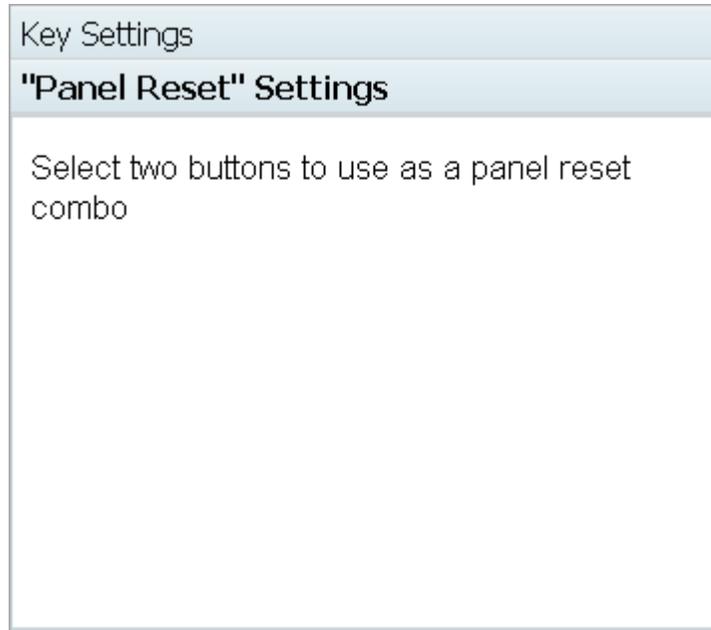


Figure 5-60: 'Panel Reset' Setting Window

8. To configure the sub-panel defaults, navigate to the **Subpanel Defaults** window and use the window to configure your settings.

Parameter	Description
<b>Subpanel</b>	Use the <b>Subpanel</b> drop down menu to select the sub-panel number.
<b>Level(s)</b>	Use the <b>Levels</b> menu to select the level that you wish to assign as the default.
<b>Destination</b>	Assign a default destination by selecting a destination from the <b>Destination</b> drop down menu.
<b>Highlight</b>	Place a check mark in the <b>Highlight</b> box if you wish to highlight the selected subpanel.

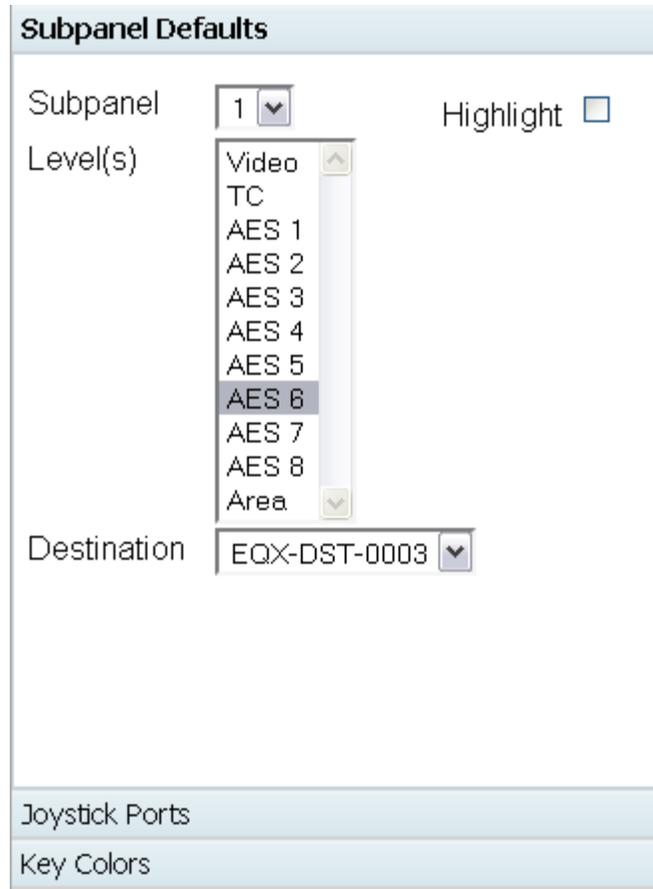


Figure 5-61: Subpanel Defaults Window

9. To configure the joystick ports, expand the **Joystick Ports** window and configure your settings using the parameters listed below:

Parameter	Description
<b>Port</b>	Use the <b>Port</b> drop down menu to select the port number.
<b>Level(s)</b>	Use the <b>Levels</b> menu to select the level that you wish to assign to the joystick.
<b>Mode</b>	Use the <b>Mode</b> drop down menu to select the joystick port mode. The mode options are: <ul style="list-style-type: none"> <li>i. <b>Disabled:</b> Disables the joystick port.</li> <li>ii. <b>Momentary:</b> Switches to new source then back to previous</li> <li>iii. <b>Permanent:</b> Switches to new source and does not revert</li> </ul>
<b>Source</b>	Use the <b>Source</b> drop down menu to assign a source to the joystick port.
<b>Destination</b>	Use the <b>Destination</b> drop down menu to assign a destination to the joystick port.

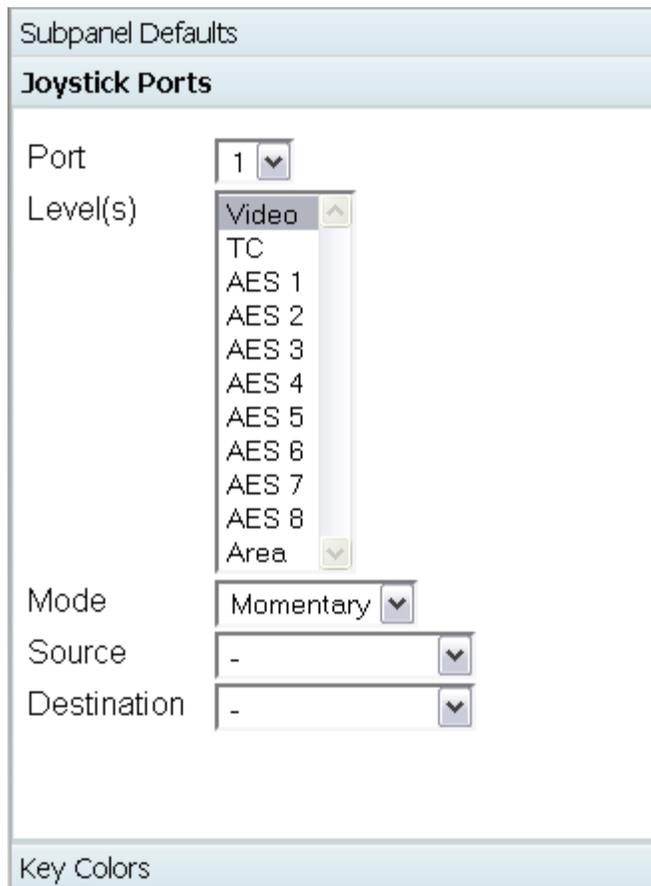


Figure 5-62: Joystick Ports Window

10. To configure the button key colors, expand the **Key Colors** window and configure your settings using the parameters listed below:

Parameter	Description
<b>Source</b>	This parameter enables the user to set the key colors for the source buttons. To set the <i>Off</i> color, highlight the <i>Source Off</i> key and then select a color from the palette. Follow the same procedure for the <i>On</i> button. Be sure to select different colors for the <i>On</i> and <i>Off</i> state so that they can be easily identified.
<b>Preset</b>	Use the color palette to set the <i>On/Off Preset</i> key colors.
<b>Destination</b>	Use the color palette to set the <i>On/Off Destination</i> key colors.
<b>Level</b>	Use the color palette to set the <i>On/Off Level</i> key colors. Use the drop down menu to set the colors for each level key.
<b>Lock</b>	Use the color palette to set the <i>On/Off Lock</i> key colors.
<b>Display</b>	Use the color palette to set the <i>Display</i> key colors.
<b>Take</b>	Use the color palette to set the <i>On/Off Take</i> key colors.
<b>Level Take</b>	Use the color palette to set the <i>On/Off Level Take</i> key colors.
<b>Salvo</b>	Use the color palette to set the <i>On/Off Salvo</i> key colors.
<b>Other</b>	Use the color palette to set the <i>On/Off Other</i> key colors.
<b>Reset</b>	Select the <b>Reset</b> button to set the button keys to their original designated color palette.
<b>Set to Panel Defaults</b>	Select the <b>Set to Panel Defaults</b> button to set the button keys to the panel's designated key colors.

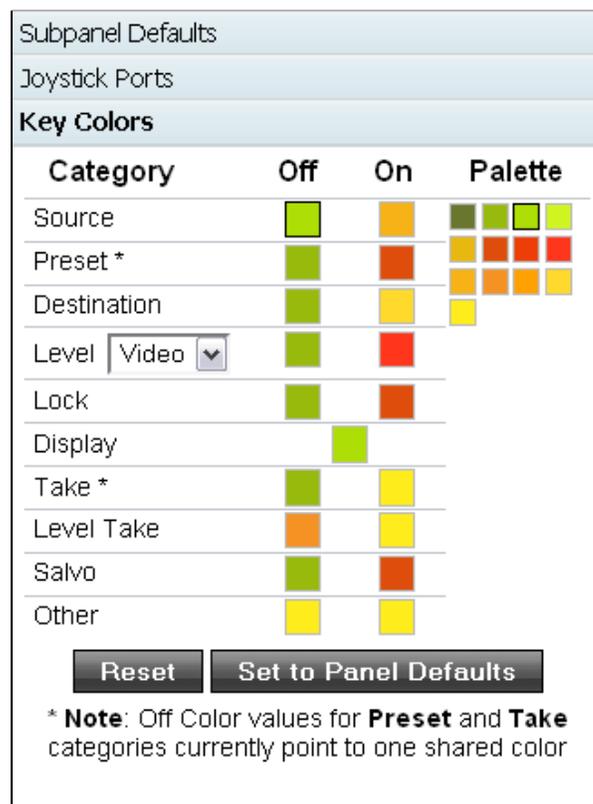


Figure 5-63: Key Colors Window

11. The control menu at the top of the screen enables the user to navigate the menu structure created for the Interface. Table 5-4 will describe the functions of the menu, as shown in Figure 5-64:



Figure 5-64: Interface Layout Menu

Control	Description
<b>Menu:</b>	Use the drop down menu to select a pre-existing interface from the list. Selecting one of these options will navigate to the selected menu.
	Using the <i>Back</i> button will toggle back through the drop down menu.
	Using the <i>Forward</i> button will toggle the user to the next menu layout listed in the drop down menu.
	Select the <i>Copy</i> button if you wish to copy the contents of the currently selected menu.
	Select the <i>Paste</i> button if you wish to paste the contents of the selected menu during the “copy” and paste into the layout.
	The <i>Revert</i> button will load the original interface layout. Select the <i>Revert</i> button if you have made changes that you are not satisfied with and you would like to revert back to the original layout.
	To send the interface layout to the physical control panel, select the <b>Send</b> button and the control panel configuration will be sent and loaded onto your control panel.
	If you have finished configuring the interface layout, select the <b>Done</b> button to save the changes and return back to the <i>Interfaces</i> main screen.

Table 5-4: Menu Controls

12. If you wish to configure the destinations on the interface, select the **Destinations** tab from the *Interface Layout* screen, as shown in Figure 5-65 and follow the same procedures to edit destinations as outlined above for sources.

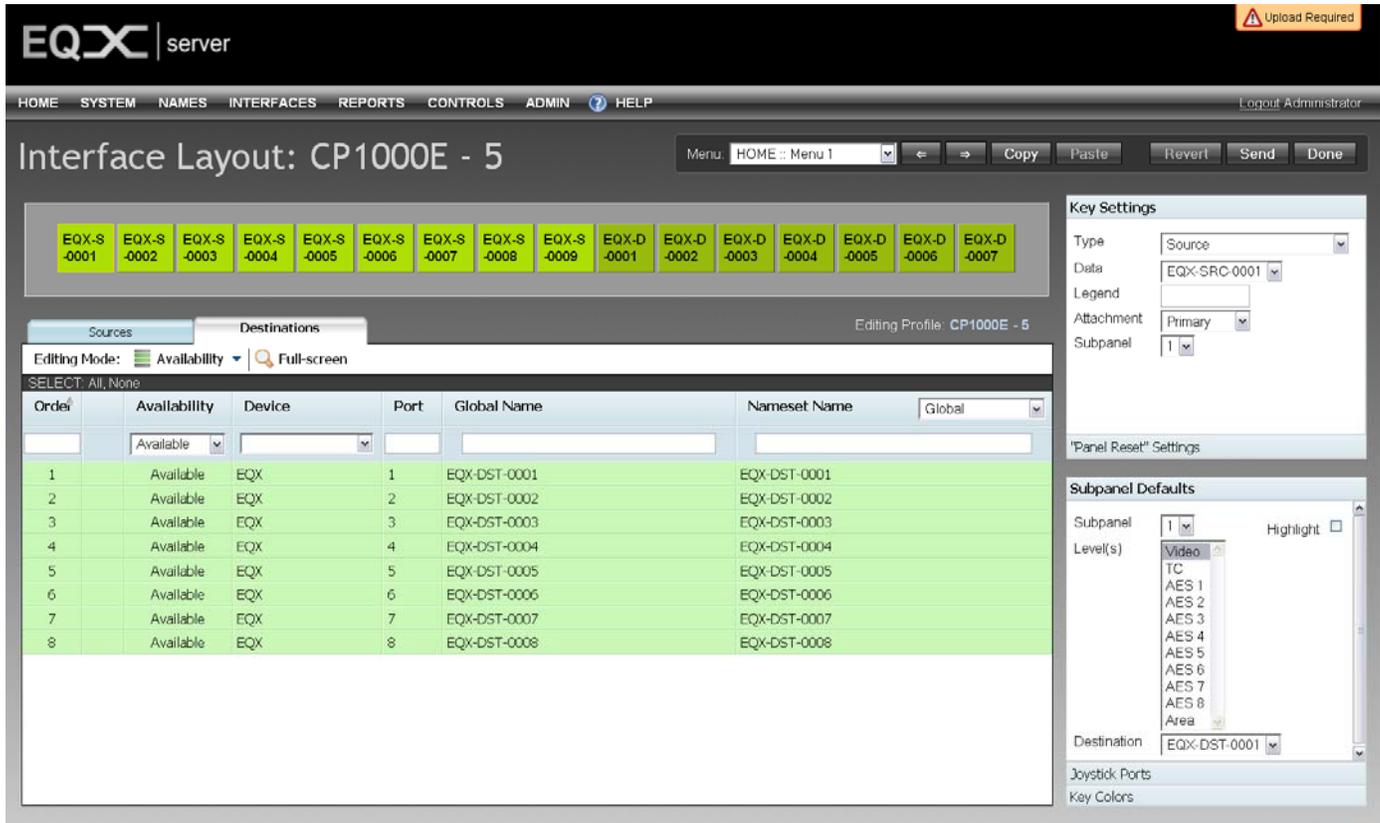


Figure 5-65: Single Profile – Destination Tab

### 5.5.2.2. Editing Multiple Interfaces Simultaneously

1. The user can edit multiple single-profile panels simultaneously by placing a check mark(s) in the SELECT column beside the panels that you wish to edit, as shown in Figure 5-66.
2. Once the desired panels have been selected, click on the **Edit** icon at the top menu bar.

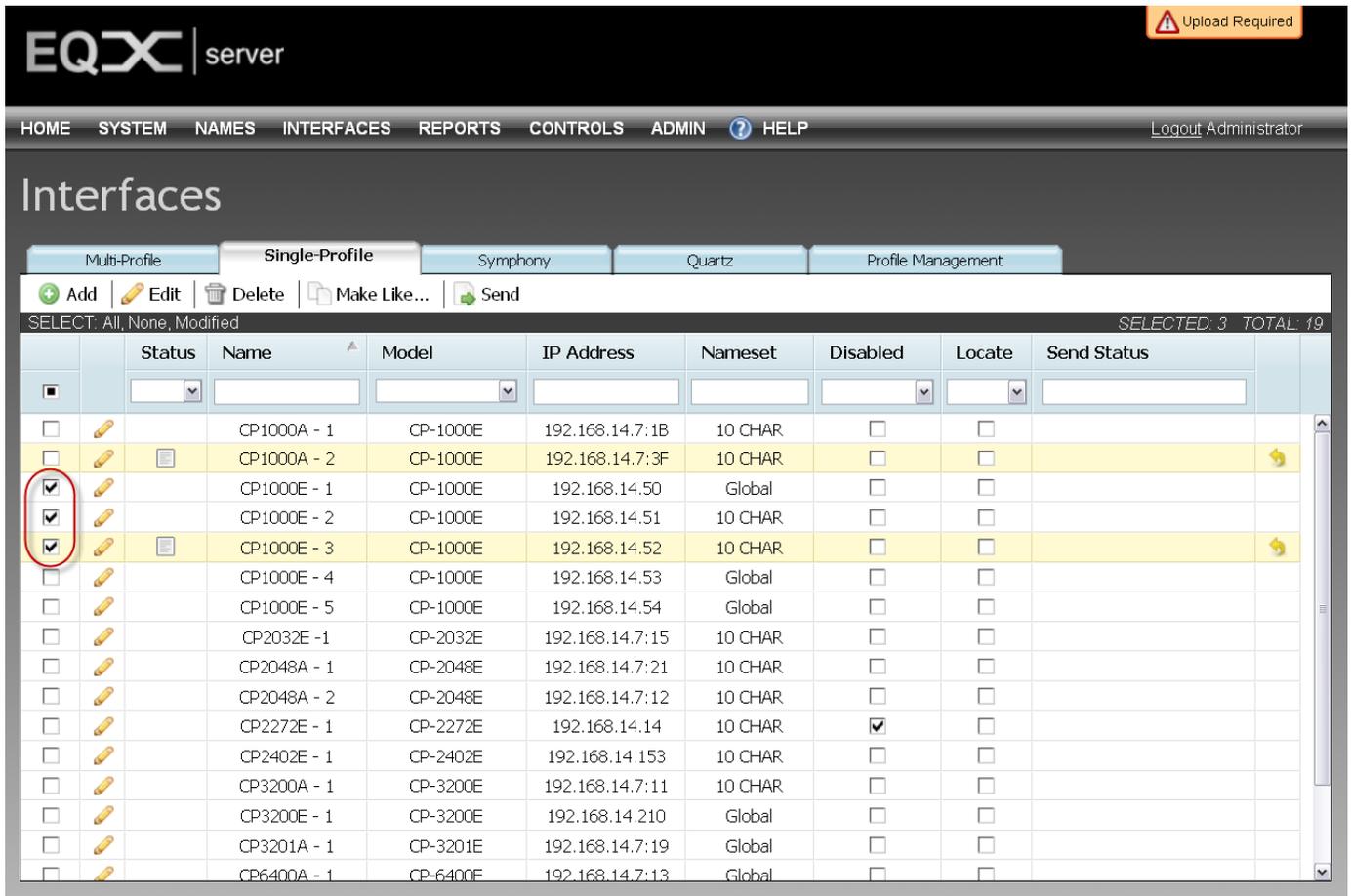
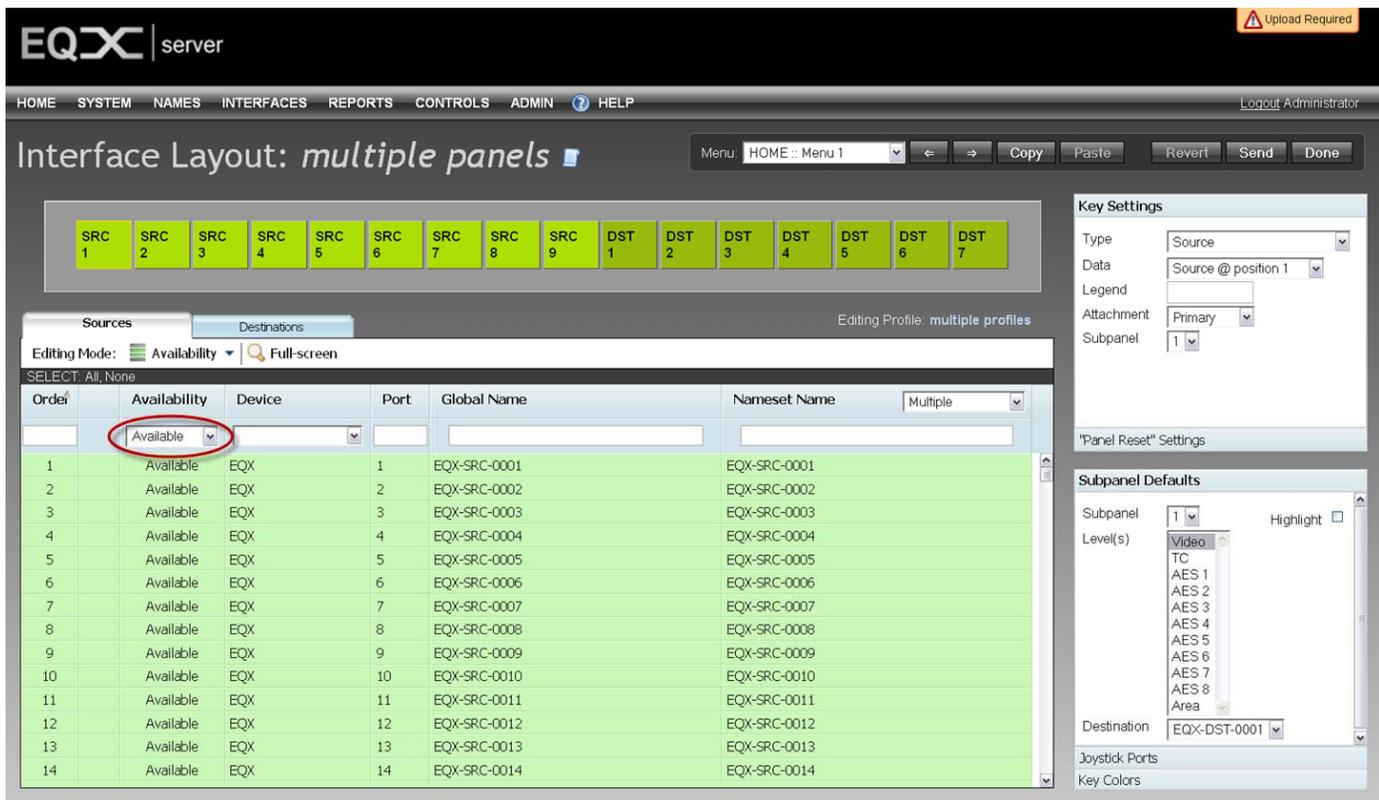


Figure 5-66: Multiple Panels Selected on a Single Profile

3. The **Interface Layout** screen will appear enabling the user to edit all of the selected panels at once. Edit the panels using the same instructions as listed in section 5.5.2.1.



EQX server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN HELP Logout Administrator

Interface Layout: *multiple panels*

Menu: HOME:: Menu1 Copy Paste Revert Send Done

Sources Destinations Editing Profile: multiple profiles

Editing Mode: Availability Full-screen

SELECT: All, None

Order	Availability	Device	Port	Global Name	Nameset Name
1	Available	EQX	1	EQX-SRC-0001	EQX-SRC-0001
2	Available	EQX	2	EQX-SRC-0002	EQX-SRC-0002
3	Available	EQX	3	EQX-SRC-0003	EQX-SRC-0003
4	Available	EQX	4	EQX-SRC-0004	EQX-SRC-0004
5	Available	EQX	5	EQX-SRC-0005	EQX-SRC-0005
6	Available	EQX	6	EQX-SRC-0006	EQX-SRC-0006
7	Available	EQX	7	EQX-SRC-0007	EQX-SRC-0007
8	Available	EQX	8	EQX-SRC-0008	EQX-SRC-0008
9	Available	EQX	9	EQX-SRC-0009	EQX-SRC-0009
10	Available	EQX	10	EQX-SRC-0010	EQX-SRC-0010
11	Available	EQX	11	EQX-SRC-0011	EQX-SRC-0011
12	Available	EQX	12	EQX-SRC-0012	EQX-SRC-0012
13	Available	EQX	13	EQX-SRC-0013	EQX-SRC-0013
14	Available	EQX	14	EQX-SRC-0014	EQX-SRC-0014

Key Settings

Type: Source  
Data: Source @ position 1  
Legend:  
Attachment: Primary  
Subpanel: 1

"Panel Reset" Settings

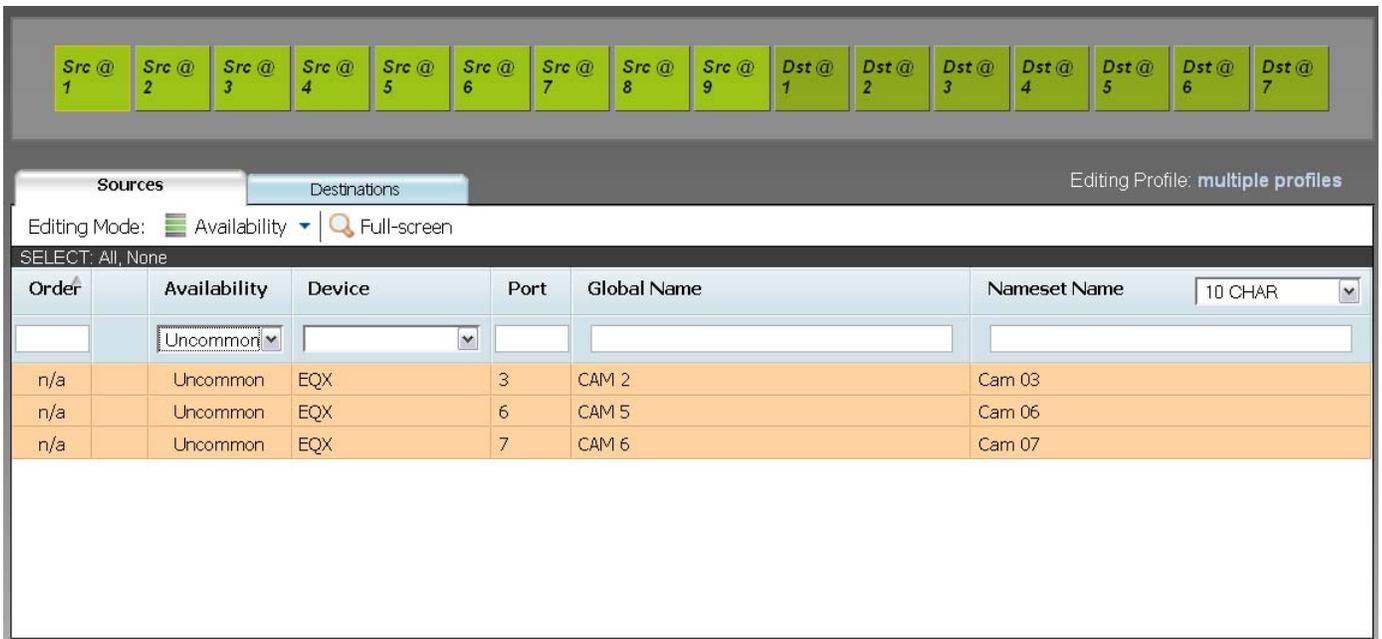
Subpanel Defaults

Subpanel: 1  
Level(s): Video  
TC  
AES 1  
AES 2  
AES 3  
AES 4  
AES 5  
AES 6  
AES 7  
AES 8  
Area  
Destination: EQX-DST-0001  
Joystick Ports  
Key Colors

Figure 5-67: Multiple Panel Interface Layout

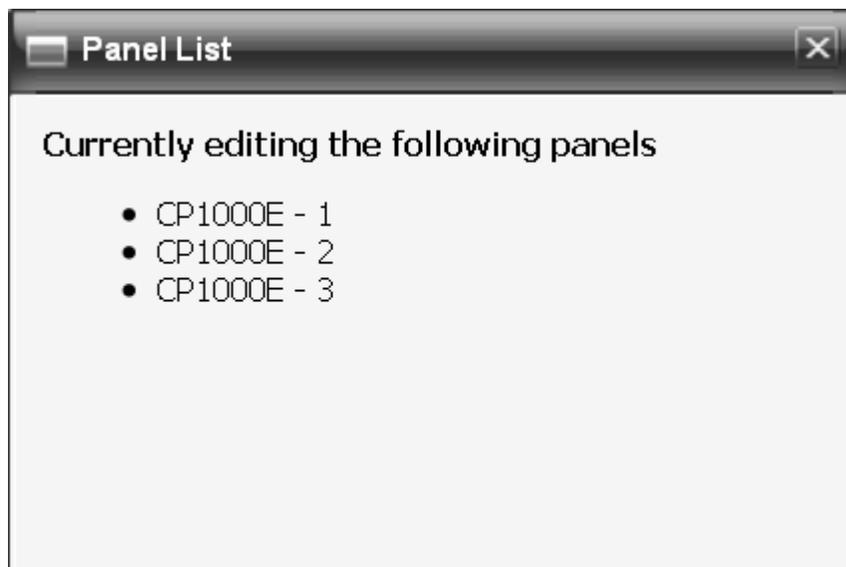
4. The user can sort and filter the devices using the **Availability** drop down menu highlighted in Figure 5-67. There are three menu options in the availability filter drop down menu: *Available*, *Unavailable*, and *Uncommon*. The function of these options are as follows:

- **Available:** Displays all the common available sources/destinations.
- **Unavailable:** Displays all the common unavailable sources/destinations.
- **Uncommon:** Displays all the sources/destinations that are dissimilar. If a selected profile does not have the same availability then the source or destination that is uncommon to the other items in the profile will be displayed. For example, Figure 5-68 shows the uncommon items present in a multi-panel selection.



**Figure 5-68: Availability – ‘Uncommon’ in Multi-Panel Selection**

- To review the panels that you have selected, select the **paper scroll** icon at the top of the screen beside the *‘multiple panels’* text. Selecting this icon will display a **Panel List** dialog box (as shown in Figure 5-69) that lists all of the panels in the selected group.



**Figure 5-69: Panel List Dialog Box**

### 5.5.3. Symphony

The **Symphony** section enables the user to setup the symphony 3<sup>rd</sup> party protocol access.

The user can select a previously created profile and assign it to the Symphony interface from the Profile Availability selection box.

Once the profile is selected, it will be applied to the Symphony and the message “*Successfully changed the Profile*” will be displayed.

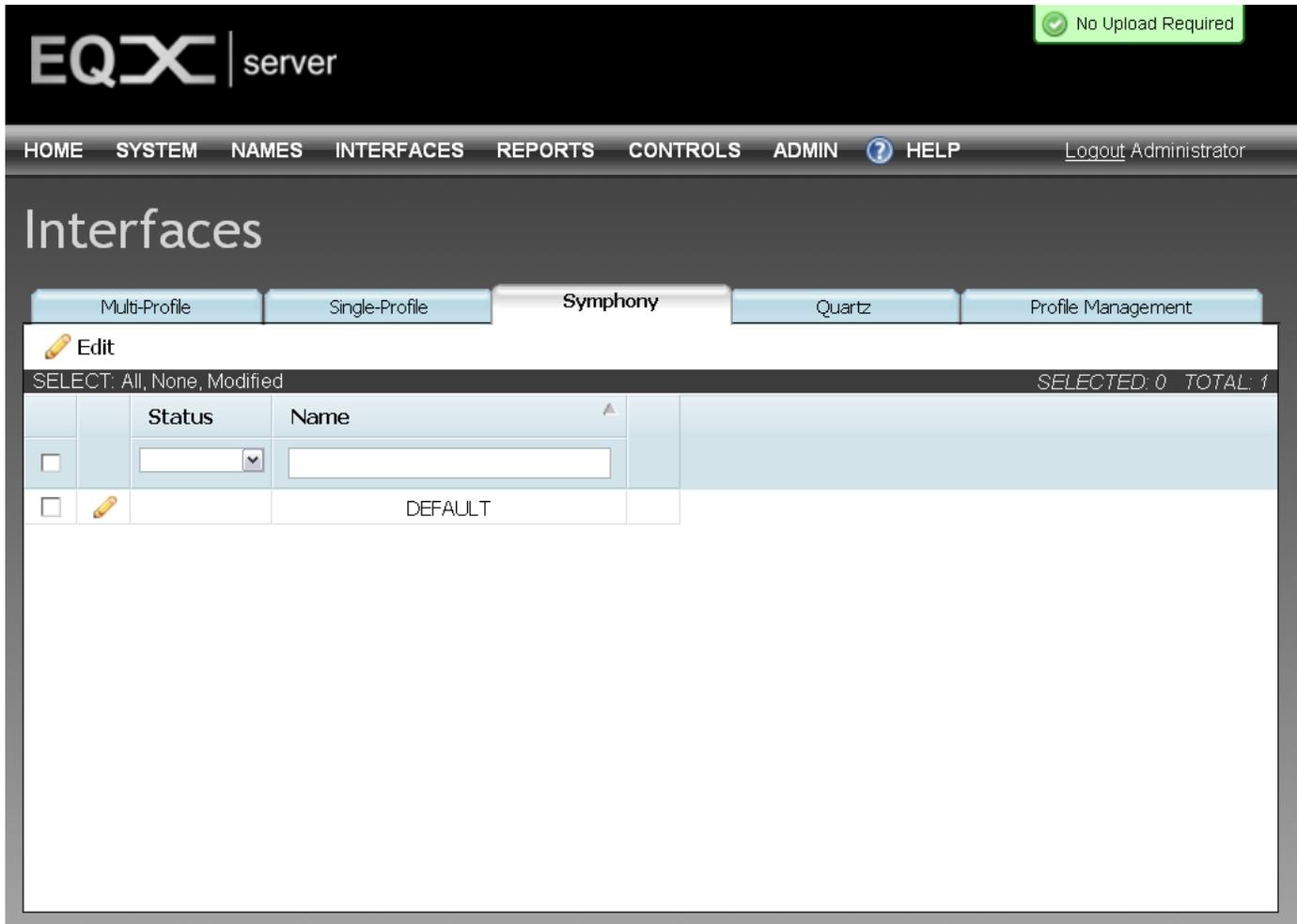


Figure 5-70: Symphony Tab

The *Symphony* tab has one main control button, as described below:

Icon	Description
Edit	<b>Edit:</b> To edit a symphony profile, place a check mark in the box beside the profile that you wish to edit and then select the edit icon. This function is particularly useful if you are editing multiple panels at one time. Otherwise if you are just editing one panel, select the pencil icon beside the panel that you wish to edit.

Table 5-5: Symphony Toolbar

### 5.5.4. Quartz

Selecting the **Quartz** menu item from the **INTERFACES** menu enables the user to configure a Quartz interface to the EQX Server that acts like a Quartz device. Quartz is an integer based protocol, and therefore, a Nameset using a number to name the mapping is required for this interface to function.

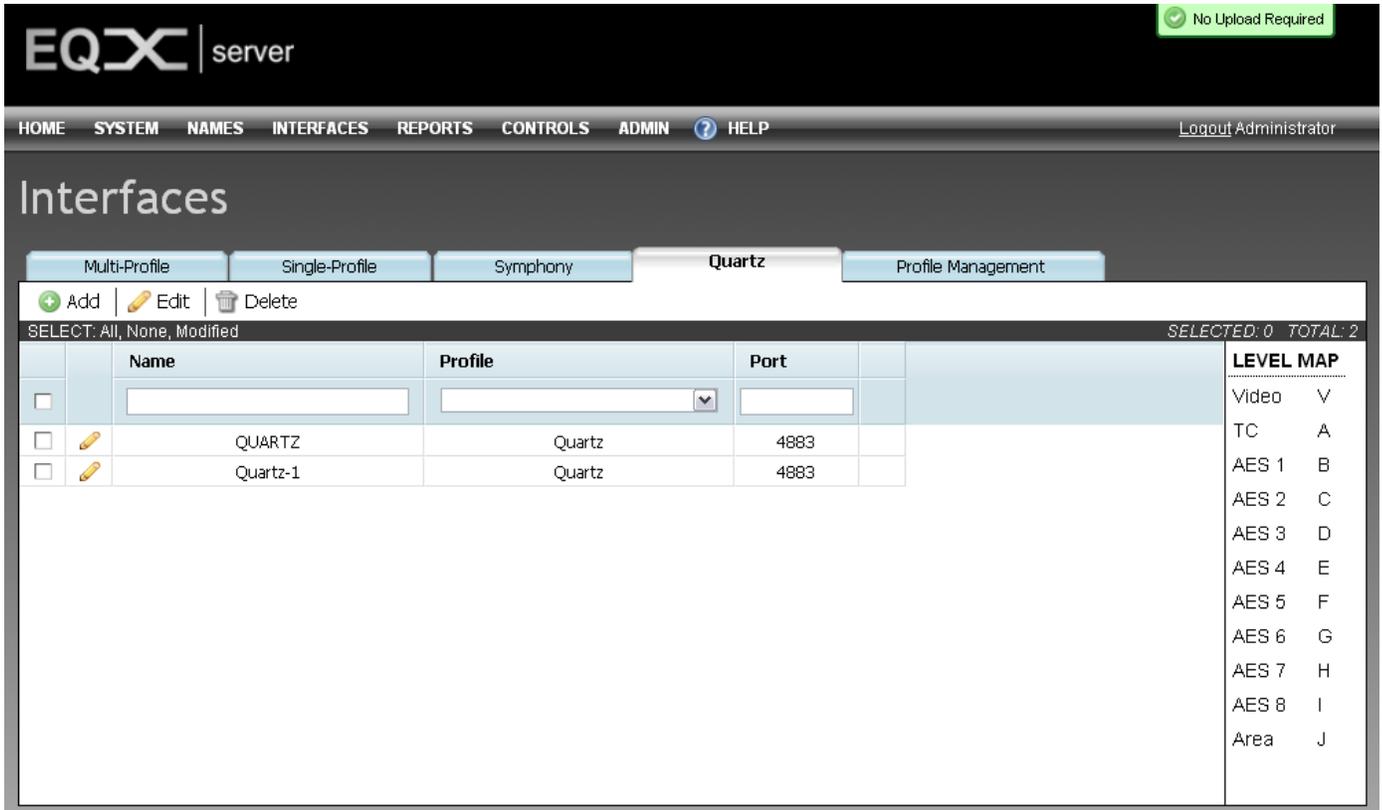


Figure 5-71: Quartz Tab

Icon	Description
Add	<b>Add:</b> To add a Quartz interface, select the <b>Add</b> button from the main toolbar. An <b>Add Quartz Interface</b> dialog box will appear as shown in Figure 5-72.
Edit	<b>Edit:</b> To edit a panel(s) profile, place a check mark in the box beside the profile that you wish to edit and then select the edit icon. This function is particularly useful if you are editing multiple panels at one time. Otherwise if you are just editing one panel, select the pencil icon beside the panel that you wish to edit.
	<b>Delete:</b> To remove a panel profile, place a check mark in the box beside the profile that you wish to remove, and select the <b>Delete</b> icon.

Table 5-6: Quartz Toolbar



The dialog box titled "Add Quartz Interface" contains three required fields: "Name", "Profile", and "Port". The "Name" field is a text input. The "Profile" field is a dropdown menu currently showing "4Char" with a "New..." button next to it. The "Port" field is a text input. A legend below the fields states "\* = required". At the bottom right of the dialog are "Add" and "Done" buttons.

**Figure 5-72: Add Quartz Interface Dialog Box**

To create a new quartz interface, follow the instructions listed below:

1. The user can add a quartz interface by entering a unique identifier name into the *Name* field.
2. Select a profile from the *Profile* drop down menu. The selected profile must have a NameSet applied that contains integers because Quartz is an integer based protocol.
3. In the *Port* field, enter the port that will be used for the Quartz interface.
4. Once all the appropriate information is entered, select the **Add** button to add the Quartz interface to the list on the main Quartz tab.
5. When you have finished adding interfaces, select the **Done** button to return to the main Quartz interface screen.

### 5.5.5. Profile Management

The **Profile Management** section enables the user to create, edit or remove profiles. A profile is essentially a list of sources, destinations and a nameset which can be applied to panels, protocol interfaces etc.

The screenshot displays the EQX server interface for Profile Management. At the top, there is a navigation bar with options: HOME, SYSTEM, NAMES, INTERFACES, REPORTS, CONTROLS, ADMIN, and HELP. The 'INTERFACES' section is active, and the 'Profile Management' tab is selected. Below the navigation bar, there is a toolbar with buttons for 'Add', 'Edit', 'Delete', and 'Make Like...'. The main area contains a table with columns for 'Status', 'Name', and 'Nameset'. The table lists profiles: 4Char (OP1), 10Char (10 CHAR), ENG (Global), EQX1 (Global), LARGE (Global), MADI (Global), Quartz (Global), and VIRTUAL (Global). A status bar at the bottom indicates 'SELECTED: 0 TOTAL: 8'.

Figure 5-73: Profile Management

Icon	Description
 Add	<b>Add:</b> To add a profile, select the <b>Add</b> button from the main toolbar. An <b>Add Profile</b> dialog box will appear as shown in Figure 5-74.
 Edit	<b>Edit:</b> To edit profile(s), place a check mark in the box beside the profile(s) that you wish to edit and then select the edit icon. This function is particularly useful if you are editing multiple panels at one time. Otherwise if you are just editing one panel, select the pencil icon beside the panel that you wish to edit.
	<b>Delete:</b> To remove a profile, place a check mark in the box beside the profile that you wish to remove, and select the delete icon.
 Make Like...	<b>Make Like:</b> The <i>Make Like</i> function enables the user to clone an existing profile. Place a check mark beside the profile(s) that you wish to change and then select the <i>Make Like</i> button. The <i>Make Like</i> dialog box will appear (as shown in Figure 5-75). From the clone drop down menu select a panel that you wish to clone and then press the <b>Apply</b> button.

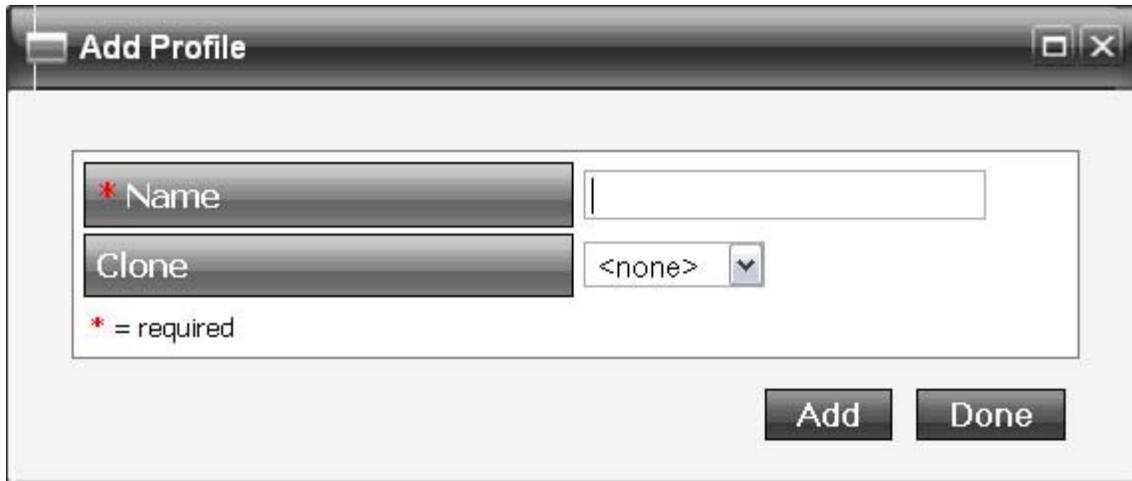


Figure 5-74: Add Profile



Figure 5-75: Make Like Dialog Box

### 5.5.5.1. Editing a Single Profile

The following section will describe how to edit a single profile.

1. To edit a profile, select the edit icon beside the corresponding profile that you wish to edit, as shown in Figure 5-76.

<input type="checkbox"/>			4Char	OP1	
<input type="checkbox"/>			10Char	10 CHAR	
<input type="checkbox"/>			ENG	Global	
<input type="checkbox"/>			EQX1	Global	
<input type="checkbox"/>			LARGE	Global	
<input type="checkbox"/>			MADI	Global	
<input type="checkbox"/>			Quartz	Global	
<input type="checkbox"/>			VIRTUAL	Global	

**Figure 5-76: Selecting a Profile to Edit**

2. Once the single profile is selected, the **Edit Profile** screen will appear enabling the user to configure four different sections: Sources, Destinations, Categories, and Settings.
3. The **Sources** tab enables the user to view and change sources to be available or unavailable.

⚠ Upload Required

EQX
server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP
[Logout Administrator](#)

## Edit Profile: *ENG*

Revert
Done

Sources
Destinations
Categories
Settings

Editing Mode: █ Availability ▾

SELECT: All, None

Order	Availability	Device	Port	Global Name	Global Nameset Name
	Available ▾				
1	Available	EQX	1	EQX-SRC-0001	EQX-SRC-0001
2	Available	EQX	2	EQX-SRC-0002	EQX-SRC-0002
3	Available	EQX	3	EQX-SRC-0003	EQX-SRC-0003
4	Available	EQX	4	EQX-SRC-0004	EQX-SRC-0004
5	Available	EQX	5	EQX-SRC-0005	EQX-SRC-0005
6	Available	EQX	6	EQX-SRC-0006	EQX-SRC-0006
7	Available	EQX	7	EQX-SRC-0007	EQX-SRC-0007
8	Available	EQX	8	EQX-SRC-0008	EQX-SRC-0008
9	Available	EQX	9	EQX-SRC-0009	EQX-SRC-0009
10	Available	EQX	10	EQX-SRC-0010	EQX-SRC-0010

**Figure 5-77: Edit Profile – Sources Tab**

4. The user can use the **Nameset** drop down menu to select and load another Nameset. Once the Nameset is loaded the user can to edit the sources to be available or unavailable.
5. Next, toggle to the **Destinations** tab, and perform the same functions as described above for editing the sources tab.

⚠ Upload Required
EQX server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP [Logout Administrator](#)

## Edit Profile: *ENG*

Revert
Done

Sources
Destinations
Categories
Settings

Editing Mode: █ Availability ▼

SELECT: All, None

Order	Availability	Device	Port	Global Name	Global Nameset Name
1	Available	EQX	1	EQX-DST-0001	EQX-DST-0001
2	Available	EQX	2	EQX-DST-0002	EQX-DST-0002
3	Available	EQX	3	EQX-DST-0003	EQX-DST-0003
4	Available	EQX	4	EQX-DST-0004	EQX-DST-0004
5	Available	EQX	5	EQX-DST-0005	EQX-DST-0005
6	Available	EQX	6	EQX-DST-0006	EQX-DST-0006
7	Available	EQX	7	EQX-DST-0007	EQX-DST-0007
8	Available	EQX	8	EQX-DST-0008	EQX-DST-0008
9	Available	EQX	9	EQX-DST-0009	EQX-DST-0009
10	Available	EQX	10	EQX-DST-0010	EQX-DST-0010

**Figure 5-78: Edit Profile – Destinations Tab**

6. The user can also add a new category or edit one of the current categories associated with the selected profile. Select the **Category** tab to edit the category settings; the **Source Categories** will be listed on the left side of the screen and the **Destination Categories** will be listed on the right side of the screen. If a category is listed as *unavailable* (white), then single click on the category row to change it to *available* (green). If you wish to make an *available* category *unavailable*, single click on the desired row to change the status.

⚠ Upload Required
EQX | server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP Logout Administrator

## Edit Profile: *ENG*

Revert
Done

Sources
Destinations
Categories
Settings

Editing Mode: Availability ▼ + Add Category

Source Categories

SELECT: All, None

Order	Availability	Category Name
1	Available	DVD
2	Available	FSYNC
3	Available	HD
4	Available	EXT
5	Unavailable	CAM
6	Unavailable	CCU

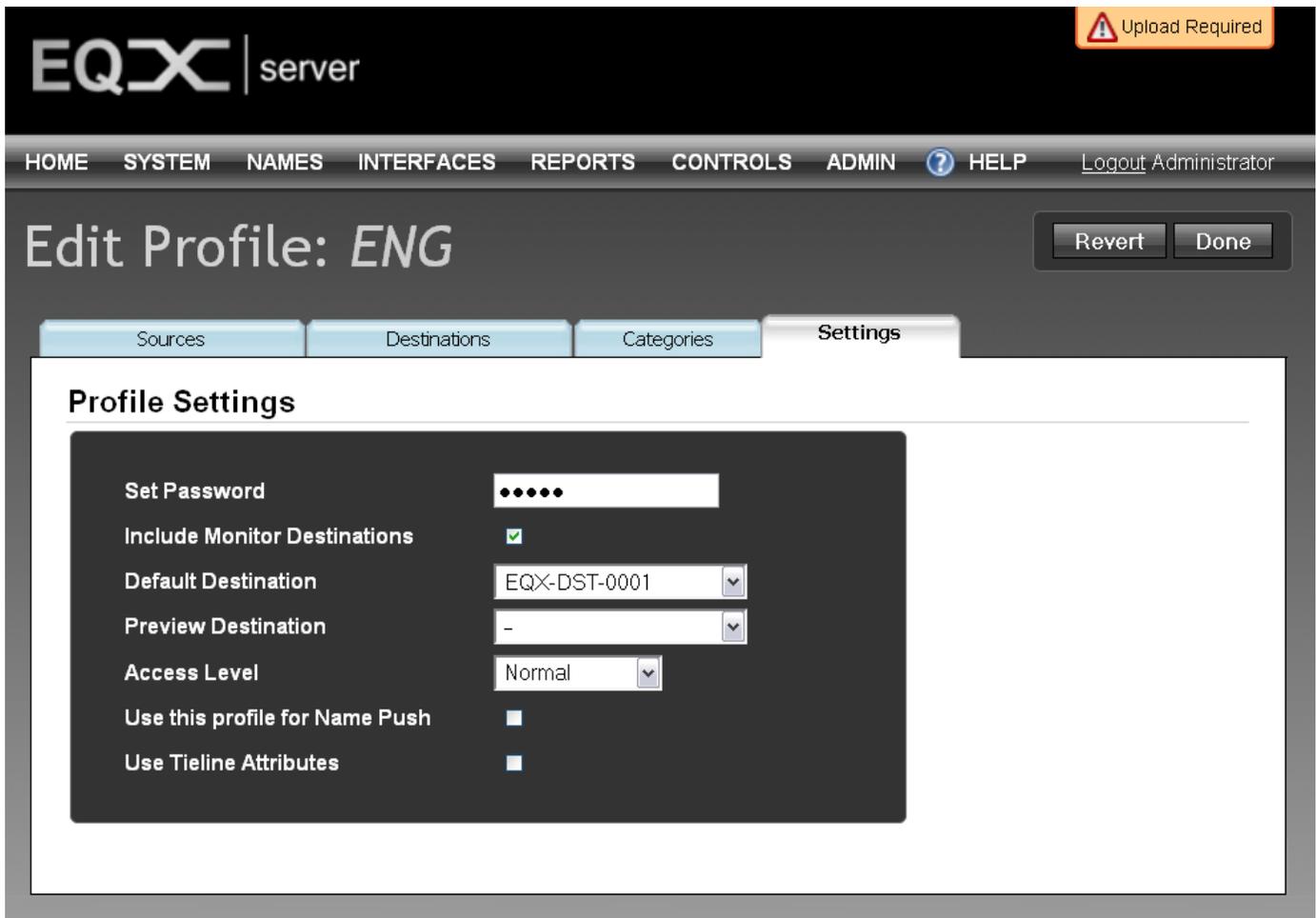
Destination Categories

SELECT: All, None

Order	Availability	Category Name
1	Available	DVD
2	Available	FSYNC
3	Available	CCU
4	Available	CAM
5	Available	EXT
6	Unavailable	HD

**Figure 5-79: Edit Profile - Categories Tab**

7. To modify the profile settings, select the **Settings** tab. The profile settings for the selected profile will be displayed as shown in Figure 5-80.



**Figure 5-80: Edit Profile - Settings**

8. Below is a list of the parameters that can be edited in the settings tab:

- a. **Set Password:** The *Set Password* field enables the user to assign a password to the selected profile. If a password already exists, it is not required to know the original password in order to overwrite it. Enter the desired password into this field.
- b. **Include Monitor Destinations:** If you wish to monitor the destinations for this profile, place a check mark in the *Include monitor destinations* check box, otherwise leave this box blank if you do not wish to monitor the destinations.
- c. **Default Destination:** To set a default destination, select a destination from the drop down menu. This destination will be set as your default destination.
- d. **Preview Destination:** To set a preview destination, select a destination from the drop down menu. This destination will be set as your preview destination.
- e. **Access Level:** To set an access level, select either *Normal* or *Administrator* from the drop down menu. The access level defines who has access to the selected profile.

- b. **Use this profile for Name Push:** Place a check mark in this box, to force the name updates from the EQX server onto a device that supports local name updates.
  - c. **Use Tieline Attributes:** Place a check mark in this box, to allow the panel to present the user with an attribute selection in order to use a specific tieline for a route.
9. If you are unhappy with the changes you have made to the profile, you can revert back to the original profile settings by selecting the **Revert** button in the top right of the screen. After you have completed making your changes, select the **Done** button to finalize your updates.

### 5.5.5.2. Simultaneously Editing Multiple Profiles

The following section describes how to edit multiple profiles at the same time.

- 4. To simultaneously edit multiple profiles, place a check mark in the box beside the corresponding profiles that you wish to edit (the selected profiles are highlighted yellow in Figure 5-81).
- 5. Once all of the desired profiles have been selected, click the **Edit** button in the *Profile Management* main toolbar.

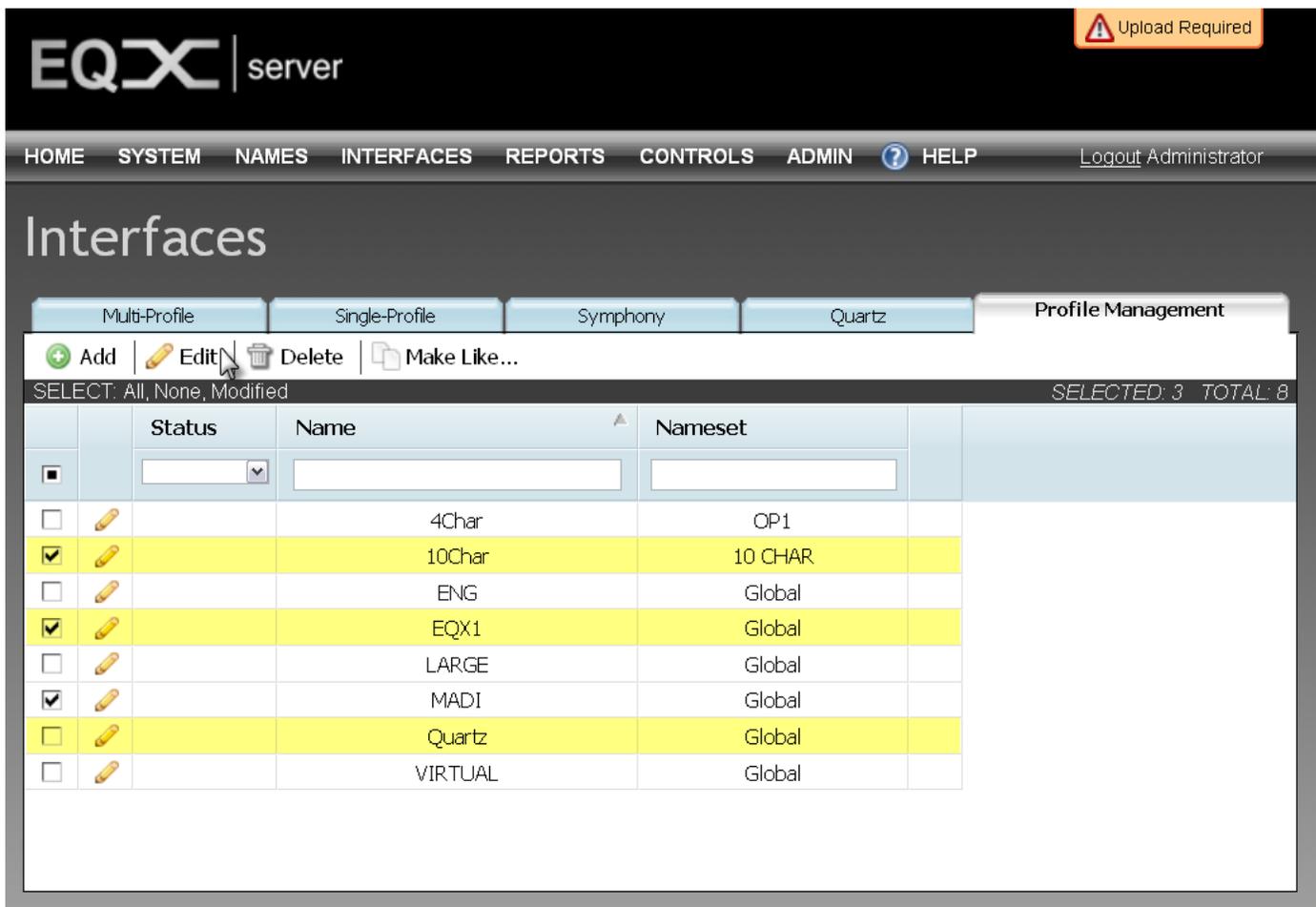


Figure 5-81: Selecting Multiple Profiles

6. The **Edit Profile: *multiple profiles*** page will appear and the user will be presented with a list of Sources and Destinations. The user can change the availability of the Sources and Destinations by single clicking the desired row.
7. The **Editing Mode** drop down menu in the top left hand corner of the tab enables the user to change how the availability is displayed in the sources columns. There are three availability options:
  - i. **Availability:** Lists all the sources in alphanumeric order.
  - ii. **Availability (Group):** Places the sources into alphanumeric device groups.
  - iii. **Re-order:** Enables the user to physically drag and drop the sources into a specific order.



**Please note that making changes to any source and/or destination will merge the profiles of the panels currently being edited.**

Order	Availability	Device	Port	Global Name	Nameset Name
1	Available	EQX	1	EQX-SRC-0001	EQX-SRC-0001
2	Available	EQX	2	EQX-SRC-0002	EQX-SRC-0002
3	Available	EQX	3	EQX-SRC-0003	EQX-SRC-0003
4	Available	EQX	4	EQX-SRC-0004	EQX-SRC-0004
5	Available	EQX	5	EQX-SRC-0005	EQX-SRC-0005
6	Available	EQX	6	EQX-SRC-0006	EQX-SRC-0006
7	Available	EQX	7	EQX-SRC-0007	EQX-SRC-0007
8	Available	EQX	8	EQX-SRC-0008	EQX-SRC-0008
9	Available	EQX	9	EQX-SRC-0009	EQX-SRC-0009
10	Available	EQX	10	EQX-SRC-0010	EQX-SRC-0010

**Figure 5-82: Editing Multiple Profiles**

10. If you are unhappy with the changes you have made to the profile, you can revert back to the original profile settings by selecting the **Revert** button at the top right of the screen. After you have completed making your changes, select the **Done** button to finalize your updates.

### 5.6. VIEWING REPORTS

The reporting pages allow the user to view specific information concerning the state of the Devices, Panels, Tielines, Evertz Audio Routing, and Subscriptions.



Figure 5-83: Reports Drop Down Menu

#### 5.6.1. Tieline Reports

Using the **Reports** drop down menu, navigate to the **Tielines** menu item. There is a report for tieline usage which, amongst other things; displays a tieline, what source is on it and who is currently viewing it. Selecting the **Tielines** sub-tab from the **REPORTS** section will display the current tieline information. The time the information was received is displayed below the owner field. If changes were made but are not displayed, press the **REFRESH** button to retrieve the latest information.

Enabled	Tieline Name	Sources	Users	Owner
	EQX-DST-0352 - EQX-TX-SRC-C			EQX-TX-DST-0001
	EQX-DST-0353 - EQX-TX-SRC-C			
	EQX-DST-0354 - EQX-TX-SRC-C			
	EQX-DST-0355 - EQX-TX-SRC-C			
	EQX-DST-0356 - EQX-TX-SRC-C			
	TL-ADMX.3-EQX.AVOP.25.1			
	TL-ADMX.4-EQX.AVOP.26.1			
	TL-ADMX.4-EQX.AVOP.28.1			
	TL-ADMX.5-EQX.AVOP.27.1			
	TL-ADMX.5-EQX.AVOP.29.1			

Figure 5-84: Reports Tab



Please note that clicking on the green icon under the **Enabled** column will disable the corresponding tieline and prevent any routing using that tieline.

### 5.6.2. Devices Report

Selecting the **Devices** menu item from the **REPORTS** drop down menu will display the current device information. The report for the Devices will display the device name, related components and the status of the device (whether it is connected or not). If changes were made but are not displayed, press the **REFRESH** button to retrieve the latest information.

The screenshot shows the EQX server interface. At the top left is the EQX server logo. A navigation menu contains: HOME, SYSTEM, NAMES, INTERFACES, REPORTS, CONTROLS, ADMIN, and HELP. On the right, there is a 'Logout Administrator' link and an 'Upload Required' warning icon. The main content area is titled 'Devices Report'. Below the title is a 'Refresh' button. A table displays the following data:

Enabled	Device Name	Component	Status
<input type="checkbox"/>	ADMX		NOT CONNECTED
<input type="checkbox"/>	EQX		NOT CONNECTED
<input type="checkbox"/>	EQX-TX		NOT CONNECTED
<input type="checkbox"/>	EQX.AVIP.9		NOT CONNECTED
<input type="checkbox"/>	EQX.AVIP.10		NOT CONNECTED
<input type="checkbox"/>	EQX.AVIP.11		NOT CONNECTED
<input type="checkbox"/>	EQX.AVIP.12		NOT CONNECTED
<input type="checkbox"/>	EQX.AVIP.13		NOT CONNECTED

Figure 5-85: Devices Reports Tab



Please note that clicking on the green icon under the *Enabled* column will disable the corresponding device and prevent any routing on the device.

### 5.6.3. Subscription Report

Selecting the **Subscriptions** menu item from the **REPORTS** drop down menu will display the current device information. The report for the subscriptions will display the subscription name, level, subscribed destination(s) and the subscribed source. If changes were made but are not displayed, press the **REFRESH** button to retrieve the latest information.

Name	Level	Subscribed Destination(s)	Subscribed Source
Refresh			
<input type="checkbox"/> SUB1	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> SUB1	AES 7		<Uninitialized Src>
<input type="checkbox"/> SUB1	AES 8		<Uninitialized Src>
<input type="checkbox"/> SUB1	AES 3		<Uninitialized Src>
<input type="checkbox"/> SUB1	Video		<Uninitialized Src>
<input type="checkbox"/> SUB1	AES 2		<Uninitialized Src>
<input type="checkbox"/> SUB1	Area		<Uninitialized Src>
<input type="checkbox"/> SUB1	AES 4		<Uninitialized Src>
<input type="checkbox"/> SUB1	AES 6		<Uninitialized Src>
<input type="checkbox"/> SUB1	AES 5		<Uninitialized Src>

Figure 5-86: Subscription Reports Tab

### 5.6.4. Panels Report

Selecting the **Panels** menu item from the **REPORTS** drop down menu will display the current panel information. The report generated for the *Panels* section displays the panel name, the panel IP address, the current profile and the panel status (whether it is connected or not). If changes were made but are not displayed, press the **REFRESH** button to retrieve the latest information.

Panel Name	Panel Type	Panel IP Address	Current Profile	Status
CP1000E - 1	CP-1000E	192.168.14.112:2001	_CP1000E - 1_profile_	NOT CONNECTED
CP1000E - 2	CP-1000E	192.168.14.113:2001	_CP1000E - 2_profile_	NOT CONNECTED
CP1000E - 3	CP-1000E	192.168.14.115:2001	_CP1000E - 3_profile_	NOT CONNECTED
CP1000E - 4	CP-1000E	192.168.14.124:2001	_CP1000E - 4_profile_	NOT CONNECTED
CP1000E - 5	CP-1000E	192.168.14.132:2001	_CP1000E - 5_profile_	NOT CONNECTED
CP1000E - 6	CP-1000E	192.168.14.134:2001	_CP1000E - 6_profile_	NOT CONNECTED
CP1000E - 7	CP-1000E	192.168.14.145:2001	_CP1000E - 7_profile_	NOT CONNECTED

Figure 5-87: Panels Reports Tab

### 5.6.5. TDM Audio Report

Selecting the **TDM Audio Report** menu item from the **REPORTS** drop down menu will display the current routes of the Evertz TDM routing system.

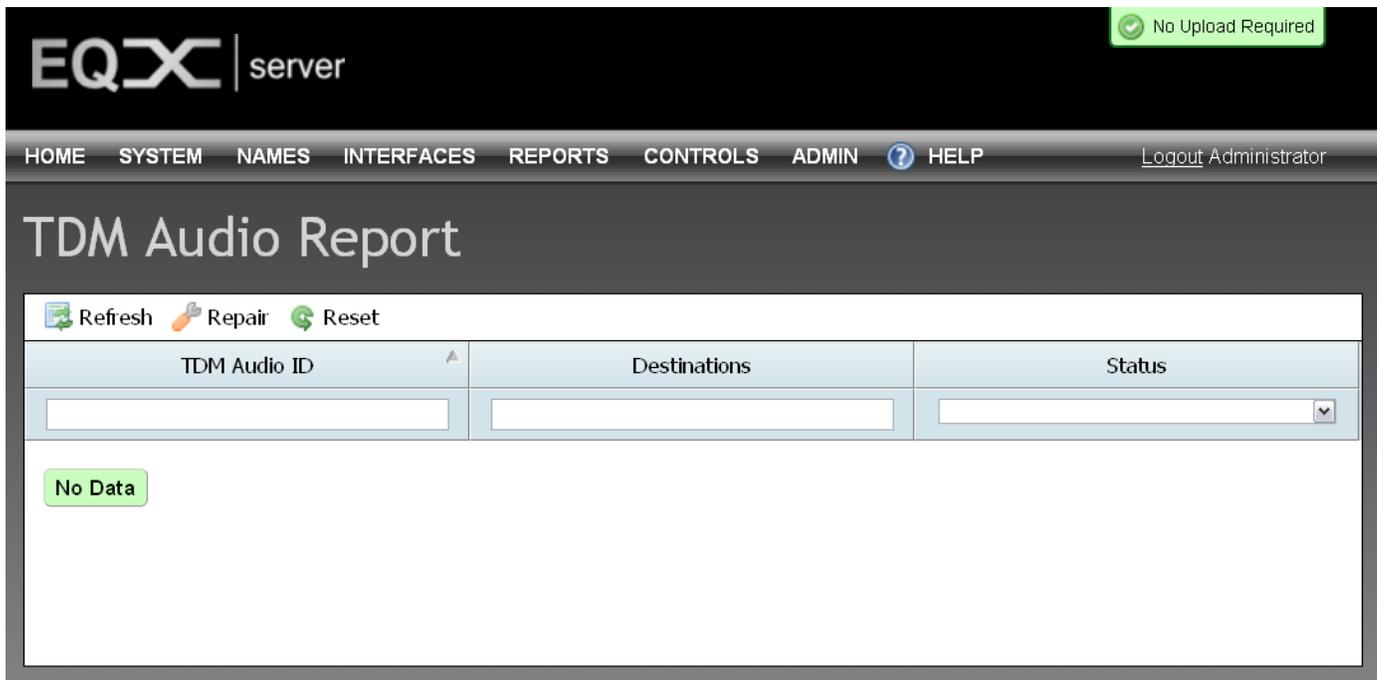


Figure 5-88: Snapshot Reports Tab

## 5.7. CONTROLS

The user can use the Quick route or Advanced Route pages to route the destination and sources using the WCT.

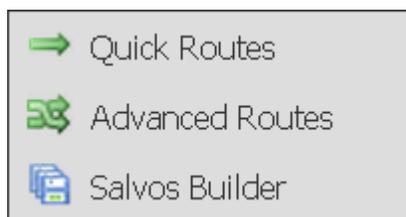


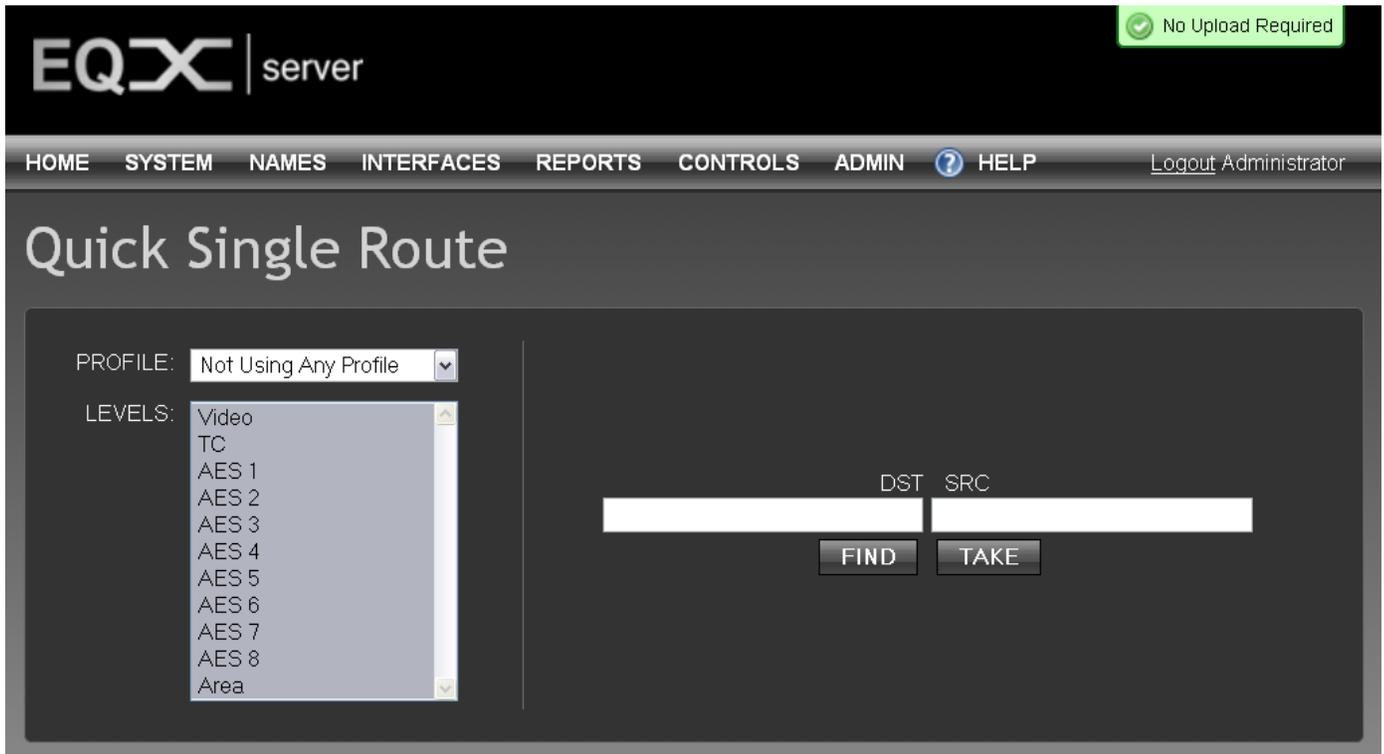
Figure 5-89: Controls Menu

### 5.7.1. Quick Routes

To access quick routes, select the **Quick Routes** option from the **CONTROLS** menu. The *Quick Single Route* page will appear enabling the user to select a profile, destination, source and level.

1. From the *Profile* drop down menu select one of the profiles from the list to filter and use names and available sources/destinations that are contained within that profile.
2. Begin typing a destination into the DST field and as the destination is recognized, a list of possible destinations will be revealed. If you know the exact name of the destination enter it in the field,

otherwise select from the list that appears. You may enter the physical port name or the nameset name.



**Figure 5-90: Selecting a Destination**

3. To select a Source, begin typing the source name into the SRC field and as the source is recognized, a list of possible sources will be revealed. If you know the exact name of the source, enter it in the field, otherwise select from the list that appears. Again, you may enter the physical port name or the nameset name.
4. From the **Levels** list select a level or multiple levels that you wish to send the information to.
5. Use the **FIND** button to interrogate a destination for the currently routed source.
6. Use the **TAKE** button to route the currently populated source to the selected destination.

5.7.2. Advanced Routes

The Advanced routes page displays the status of all cross-points for the entire system at a current point in time. Upon selecting the **Advanced Routes** menu option from the **CONTROLS** drop down menu, the advanced routes screen will appear as shown in Figure 5-91.

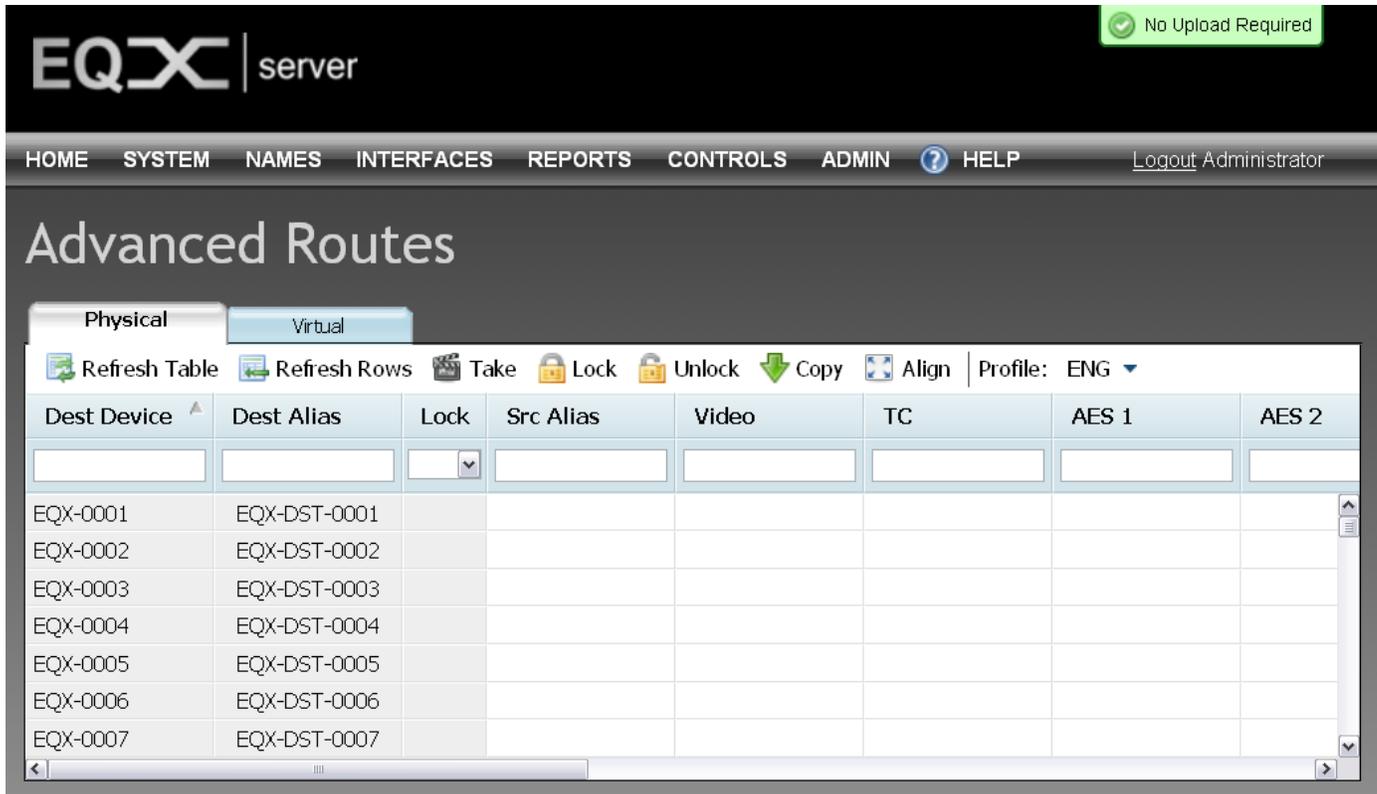


Figure 5-91: Advanced Routes – Physical Tab

1. The **Physical** tab enables the user to configure the destinations for the selected route.

Icon	Description
Refresh Table	<b>Fill Table:</b> Selecting this button enables the user to refresh the current routes for the entire table with the latest destination information extracted from the system.
Refresh Rows	<b>Fill Rows:</b> Selecting this button enables the user to refresh routes for the selected rows.
Take	<b>TAKE:</b> Selecting this button will route the currently populated source to the selected destination.
Copy	<b>Copy:</b> Selecting this button will copy the selected cell value onto the next line.
Align	<b>Align:</b> Selecting this button will expand all of the columns to fit the data.

Lock	<b>LOCK:</b> The lock button enables the user to lock the route so that it can not be changed or manipulated.
Unlock	<b>UNLOCK:</b> Selecting the unlock button will unlock a previously locked route.
<b>Profile:</b>	<b>PROFILE:</b> The profile menu enables the user to select a control panel profile from the items listed in the profile.

**Table 5-7: Advanced Routes Toolbar Controls**

- To search for a particular route, use the filter toolbar to search through the list of existing devices. Enter a property into one of the blank fields at the top. As you type, the list of devices will be narrowed down to display only the properties that match the data being entered.

Dest Device ▲	Dest Alias	Lock	Src Alias	Video	TC	AES 1
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Figure 5-92: Advanced Routes Filter Toolbar**

- Table 5-7 applies to both physical and virtual route tabs. Please use the table above to identify the functions of the buttons on the virtual tab. The virtual routes can be edited in the same way as the physical routes.

**Figure 5-93: Advanced Routes – Virtual Tab**

### 5.7.3. Salvos Builder

To access the Salvos Builder, navigate to the **CONTROL** menu and select the **Salvos Builder** from the drop down menu.

1. Select a salvo from the salvo folder on the left hand side of the screen. Depending on the salvo selected, the physical destination information for that salvo will be displayed under the **Physical** tab on the right.

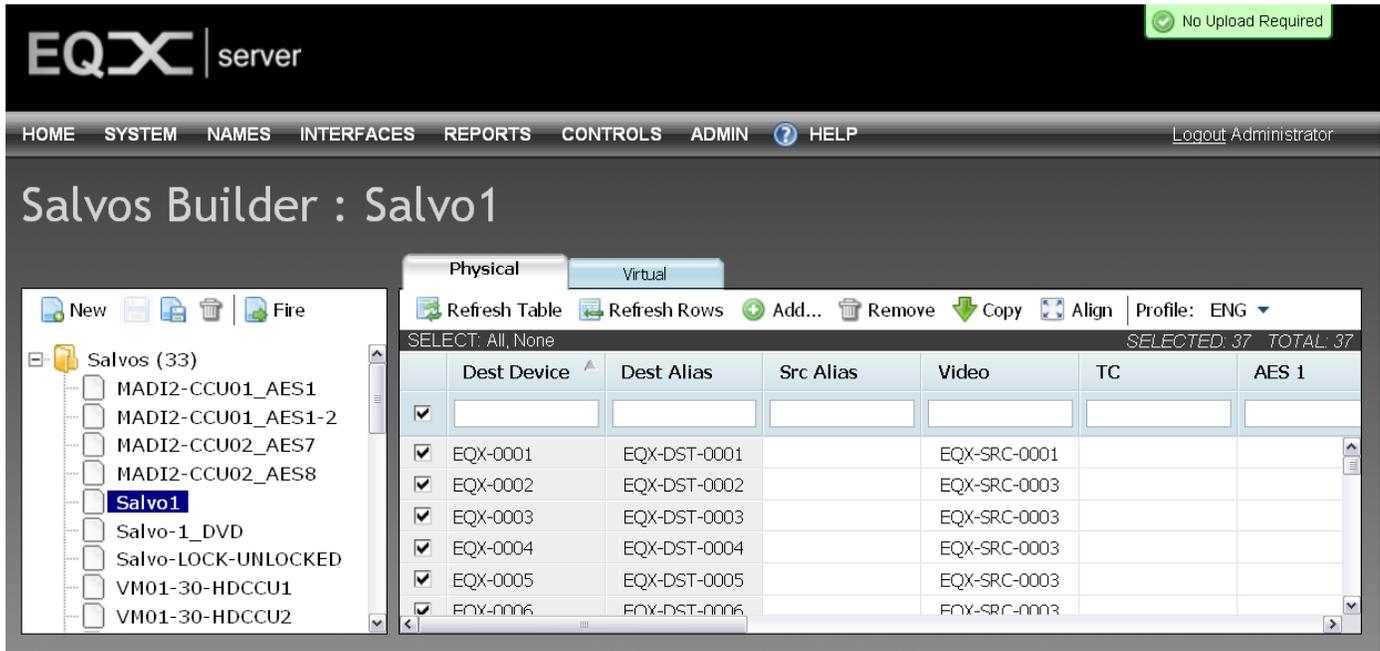


Figure 5-94: Salvos Builder

2. The left Salvo menu enables the user to manage the salvos:

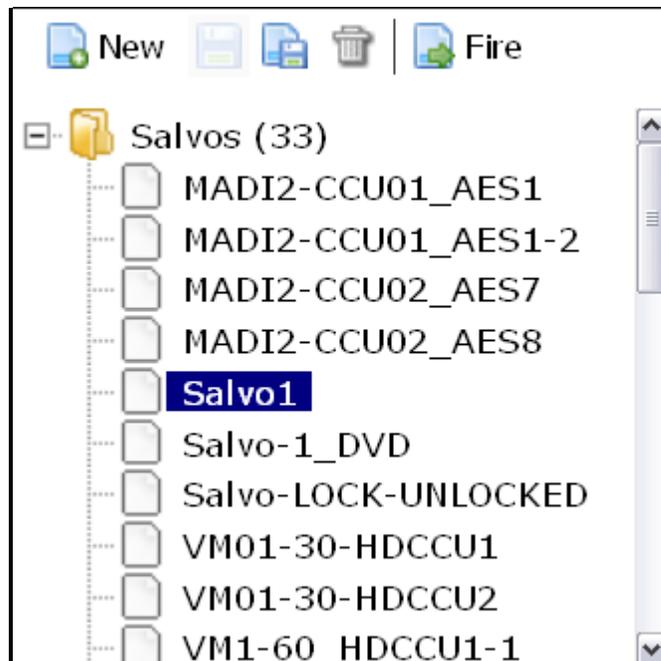


Figure 5-95: Salvo Menu and Folder

Icon	Description
New	<b>New Salvo:</b> Selecting this icon will enable the user to add a new salvo to the list.
	<b>Save:</b> If changes have been made, then this icon will be illuminated (not greyed out). Selecting this icon will enable the user to save the changes made to the highlighted salvo.
	<b>Save As:</b> Selecting this icon will enable the user to save the highlighted salvo as a different filename.
	<b>Delete:</b> To remove a salvo from the salvo folder, highlight the salvo in the list and select the delete icon.
Fire	<b>Fire Salvo:</b> Executes the selected salvo on the EQX Server.

**Table 5-8: Salvo Menu Controls**

- The **Physical** tab on the left side of the screen enables the user to configure the destinations for the selected salvo.

Icon	Description
Refresh Table	<b>Fill Table:</b> Selecting this button enables the user to refresh the current routes for the entire table with the latest destination information extracted from the selected salvo.
Refresh Rows	<b>Fill Rows:</b> Selecting this button enables the user to refresh routes for the selected rows.
Add...	<b>Add...:</b> Selecting this button will enable the user to add another destination to the selected salvo. An <b>Add Destinations</b> dialog box will appear, as shown in Figure 5-102, which enables the user to add single or multiple destinations.
Remove	<b>Remove:</b> Selecting this button will enable the user to remove the selected destination from the salvo. Place a check mark beside the destination which you wish to delete and then press the <b>Remove</b> button.
Copy	<b>Copy:</b> Selecting this button will copy the selected cell value onto the next line.
Align	<b>Align:</b> Selecting this button will expand all of the columns to fit the data.
Profile:	<b>PROFILE:</b> The profile drop down menu enables the user to select a control panel profile from the items listed in the profile. When the profile is selected, the NameSet applied to that profile will be used for information displayed in the <i>Physical</i> or <i>Virtual</i> tab. Profile also enforces salvo availability for the advanced panels such as the CP2200E

**Table 5-9: Salvo Toolbar Controls**

- Use the device filter fields (as shown in Figure 5-96) to sort through the destinations and narrow your search to a particular destination.

	Dest Device	Dest Alias	Src Alias	Video	A1
<input type="checkbox"/>	<input type="text"/>				

Figure 5-96: Salvo Filter Toolbar

### 5.7.3.1. Building a Salvo

- To build a salvo, select a profile from the profile drop down menu, and the Nameset and salvo availability for that profile will be displayed on the main screen, as shown in Figure 5-97.

The screenshot shows the EQX server interface. At the top, there is a navigation bar with 'HOME', 'SYSTEM', 'NAMES', 'INTERFACES', 'REPORTS', 'CONTROLS', 'ADMIN', and 'HELP'. A 'Logout Administrator' link is on the right. The main area is titled 'Salvos Builder'. On the left, there is a sidebar with 'New' and 'Free' icons, and a message 'No Salvos'. The main content area has two tabs: 'Physical' (selected) and 'Virtual'. Below the tabs is a toolbar with 'Refresh Table', 'Refresh Rows', 'Add...', 'Remove', 'Copy', and 'Align' icons. A 'Profile: 10Char' dropdown is on the right. Below the toolbar is a table with the following columns: Dest Device, Dest Alias, Src Alias, Video, TC, and AES 1. The table is populated with 11 rows of data. The first row is empty, and the following 10 rows contain device IDs and aliases. The table has a 'SELECT: All, None' header and 'SELECTED: 0 TOTAL: 1666' footer.

	Dest Device	Dest Alias	Src Alias	Video	TC	AES 1
<input type="checkbox"/>	<input type="text"/>					
<input type="checkbox"/>	EQX-0001	EV 37 IN 1				
<input type="checkbox"/>	EQX-0002	EV 37 IN 2				
<input type="checkbox"/>	EQX-0003	EV 37 IN 3				
<input type="checkbox"/>	EQX-0004	EV 37 IN 4				
<input type="checkbox"/>	EQX-0005	EV 39 IN 1				
<input type="checkbox"/>	EQX-0006	EV 39 IN 2				
<input type="checkbox"/>	EQX-0007	EV 39 IN 3				
<input type="checkbox"/>	EQX-0008	EV 39 IN 4				
<input type="checkbox"/>	EQX-0009	EV 41 IN 1				
<input type="checkbox"/>	EQX-0010	EV 41 IN 2				
<input type="checkbox"/>	EQX-0011	EV 41 IN 3				

Figure 5-97: Destination List Populated

- Place a check mark beside the destinations that you wish to add to the new salvo. Begin typing a source alias into the **Src Alias** field beside the check marked destination. A menu will appear enabling the user to select a source from the source list, as shown in Figure 5-98.

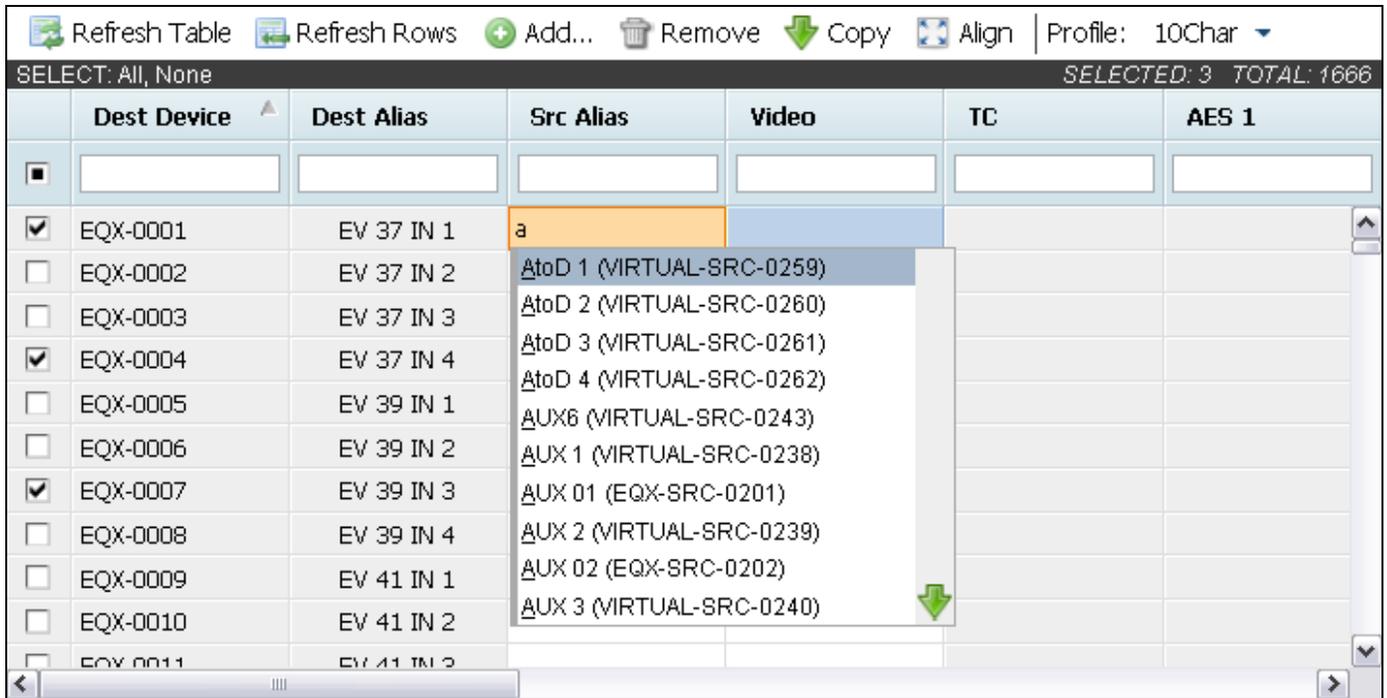


Figure 5-98: Accessing the Src Alias Menu

- Use the up and down arrows to toggle to the desired source and then select the source. Once you have selected the source, the **Video** column will populate with the video information for the selected source.
- Continue to build the salvo contents by adding sources to the destinations you selected. Once all the desired destinations have been selected, navigate to the left window and select the **Save** or **Save As** button, identified in Figure 5-99.

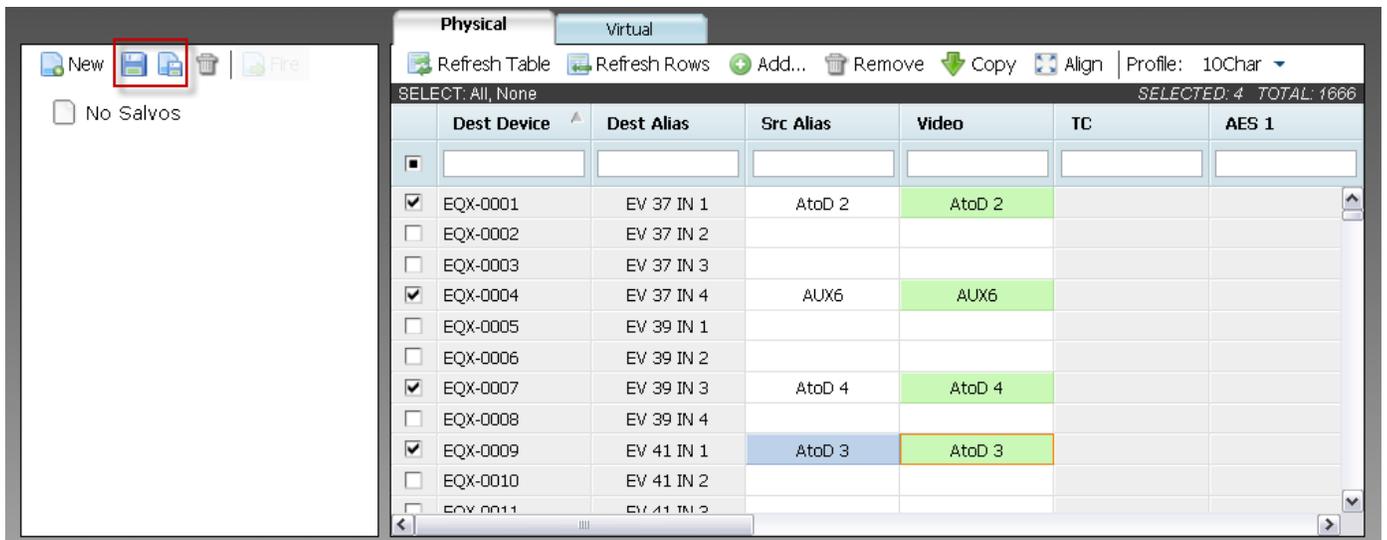


Figure 5-99: Saving the Salvo

- A dialog box will appear prompting the user to enter a new salvo name, as shown in Figure 5-100. Enter a unique name into the dialog box and then select **OK**.

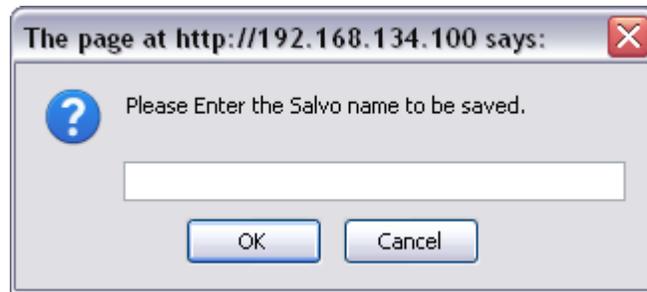


Figure 5-100: Enter New Salvo Name

- The new salvo will be created and all the selected destinations will be contained within the salvo. The main screen will display the newly created salvo and the destinations currently associated with it.



Please note that when a salvo is created the user must return to the **Servers** page to commit the changes. The salvo will not be recognized unless an upload to the server is performed.

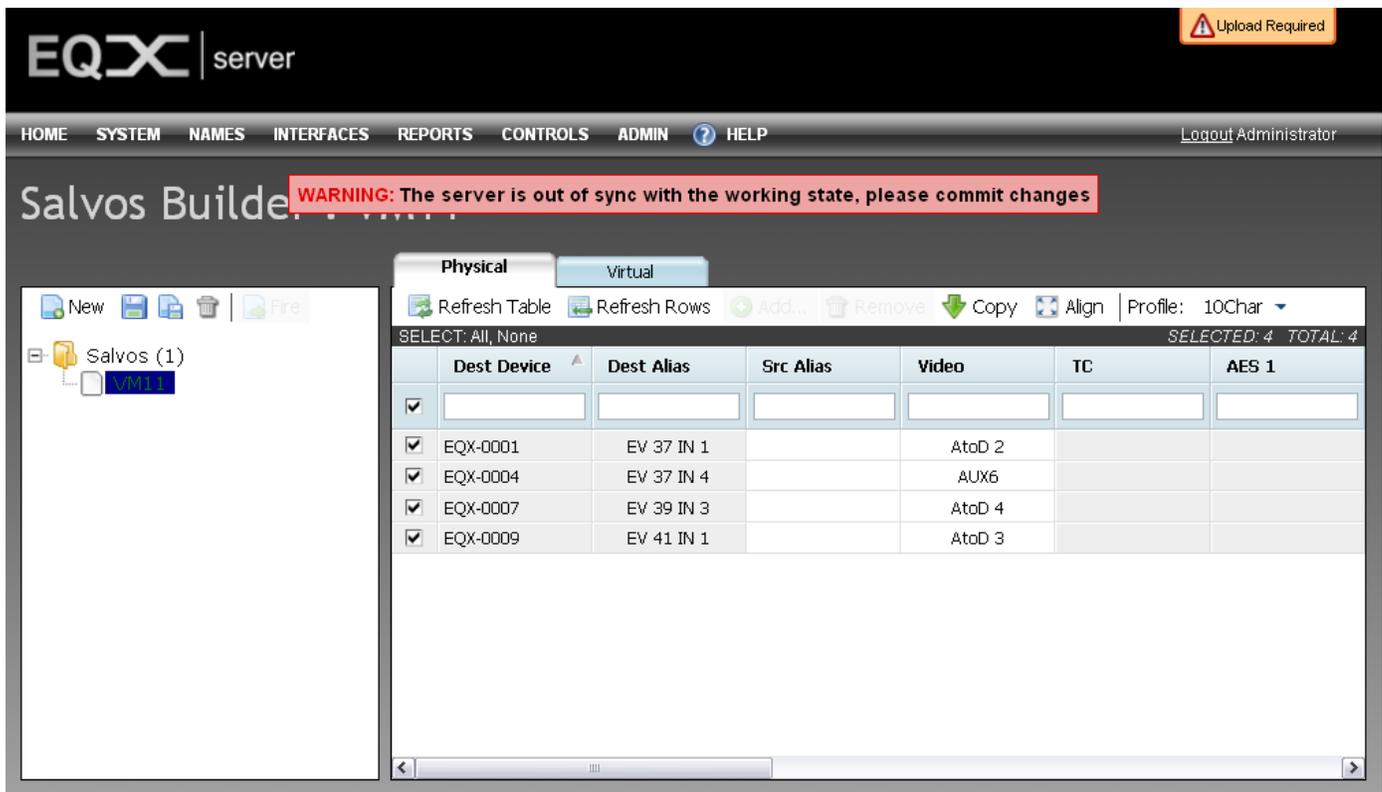


Figure 5-101: Selected Salvo Contents

- Pressing the **New** button will clear the salvo from the screen and return the user back to the selected profile’s list of destinations so that new salvos can be created. Any available salvos will be listed in the left window and can be viewed by selecting the salvo name.

8. To add destinations to an existing salvo, select the salvo from the salvo menu on the left side of the page. Click the **Add** button on the tool bar to see a list of available destinations to add to the salvo. Click the box beside each destination that you want to add to the existing salvo and then click the **Add** button. Select the **Save** button to save the destination to the existing salvo.

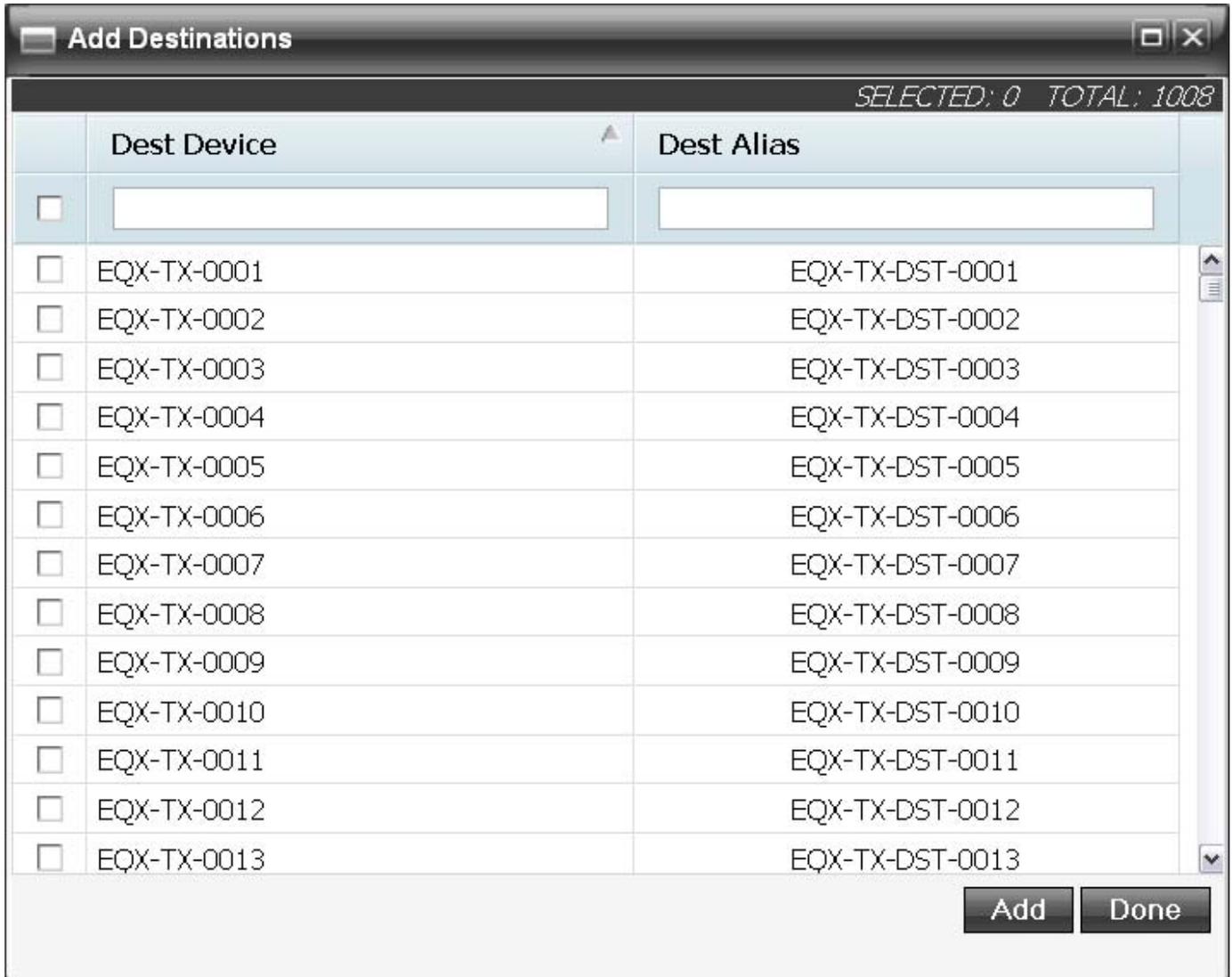


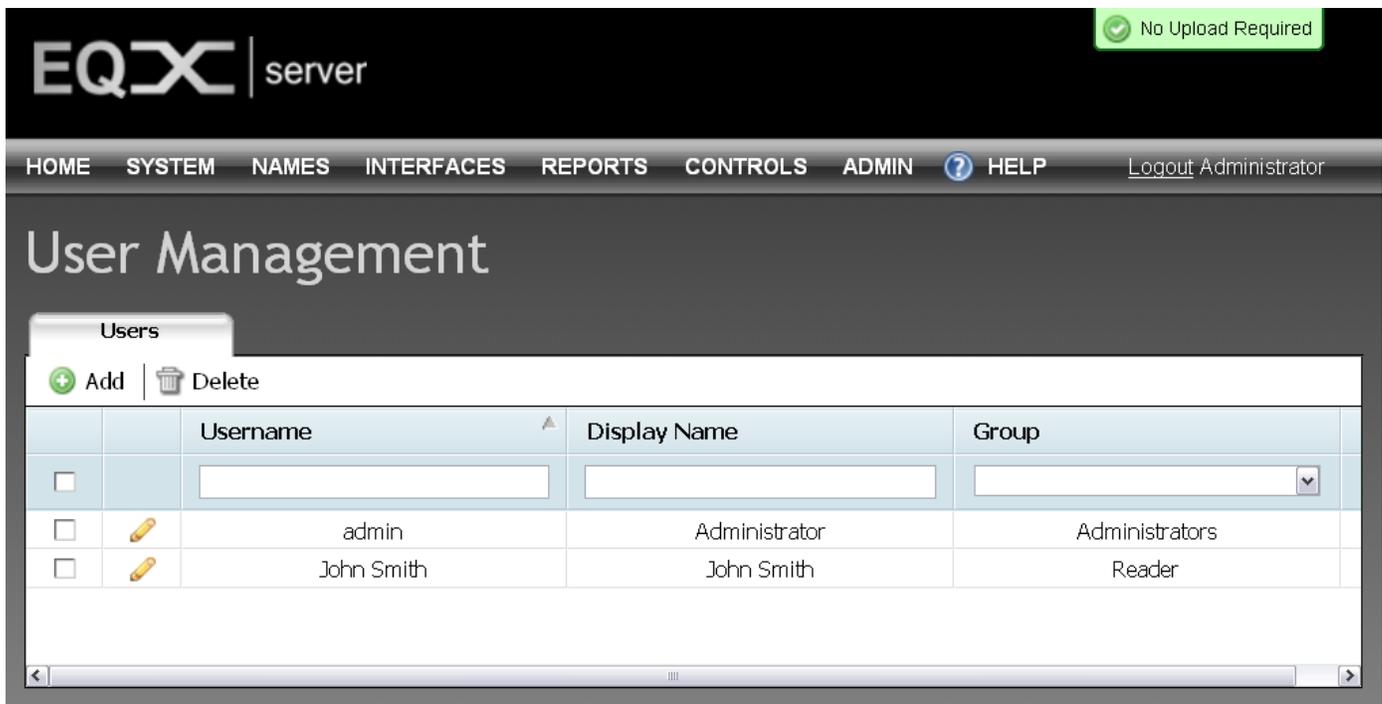
Figure 5-102: Add Destinations

## 5.8. SERVER ADMINISTRATION

### 5.8.1. Creating User Accounts

A core routing system is extremely powerful. With great power comes great responsibility, and as a result managing who has access to view or change important information is key.

Selecting the **Users** menu item from the **ADMIN** drop down menu enables the administrator to create new accounts for users.



EQX server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP Logout Administrator

## User Management

Users

+ Add | Delete

		Username	Display Name	Group
<input type="checkbox"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>		admin	Administrator	Administrators
<input type="checkbox"/>		John Smith	John Smith	Reader

**Figure 5-103: Users Page**

- To add a user, select the **Add** button from the *Users* toolbar. An **Add User** dialog box will appear enabling the user to create a new user profile. The following information will have to be entered into the appropriate fields:
  - Username:** Enter the desired username into this field. This will be the name that is entered into the login field when the user is logging into the EQX Server.
  - Display Name:** This name will be shown as your screen username when you are logged into the EQX server. It will be displayed in the top right hand corner beside the logout button.
  - Password:** Create a password that will be used to log into the EQX Server.
  - Confirm Password:** Enter the password again into the **Confirm Password** field. The **Confirm Password** field verifies that the value entered in the *password* field is the same as the value entered in the **Confirm Password** field.
  - Group:** Assign the user to a group using the **Group** drop down menu. The group options are *reader* and *administrator*. Adding a user in the **Administrator** group will give them full permissions. If a user is added as a **Reader**, the user will have limited permissions.

The dialog box titled "Add User" contains the following fields and controls:

- \* Username: Text input field
- \* Display Name: Text input field
- \* Password: Text input field
- \* Confirm Password: Text input field
- Group: Dropdown menu with "Administrators" selected
- \* = required: Legend for required fields
- Add: Button
- Done: Button

Figure 5-104: Add User Dialog Box

2. Once all the fields are filled in, select the **Add** button. If you have added all the desired users, select the **Done** button to save the changes and return back to the main *User Management* screen. The users that you have added will be listed in the *Users* table.
3. To remove a user, place a check mark in the box beside the user that you wish to remove and then press the **Delete** button.
4. If you would like to find a particular name in an expansive list of users, use the filter toolbar to narrow down your search. Type the username or display name into the appropriate search fields, or sort by the specific group by selecting the group name from the **Group** drop down menu.

	Username	Display Name	Group
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Administrators"/>

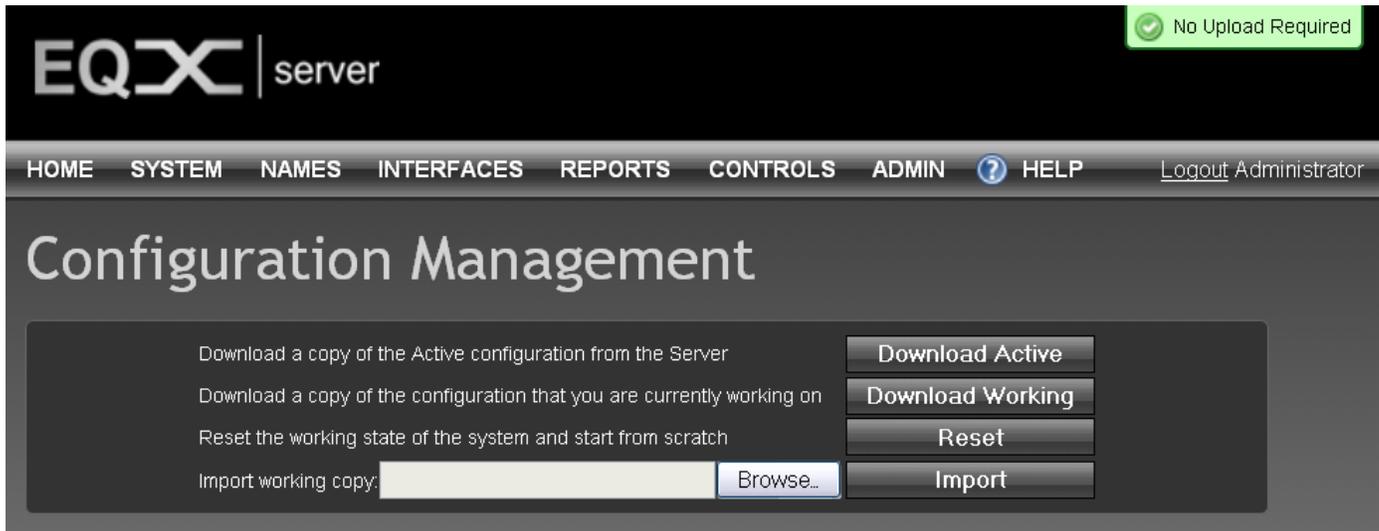
Figure 5-105: Filter Toolbar



Once complete be sure to return to the server change sets to upload any changes.

## 5.8.2. Configuration Management

The **Configuration Management** section enables the user to download the configuration.



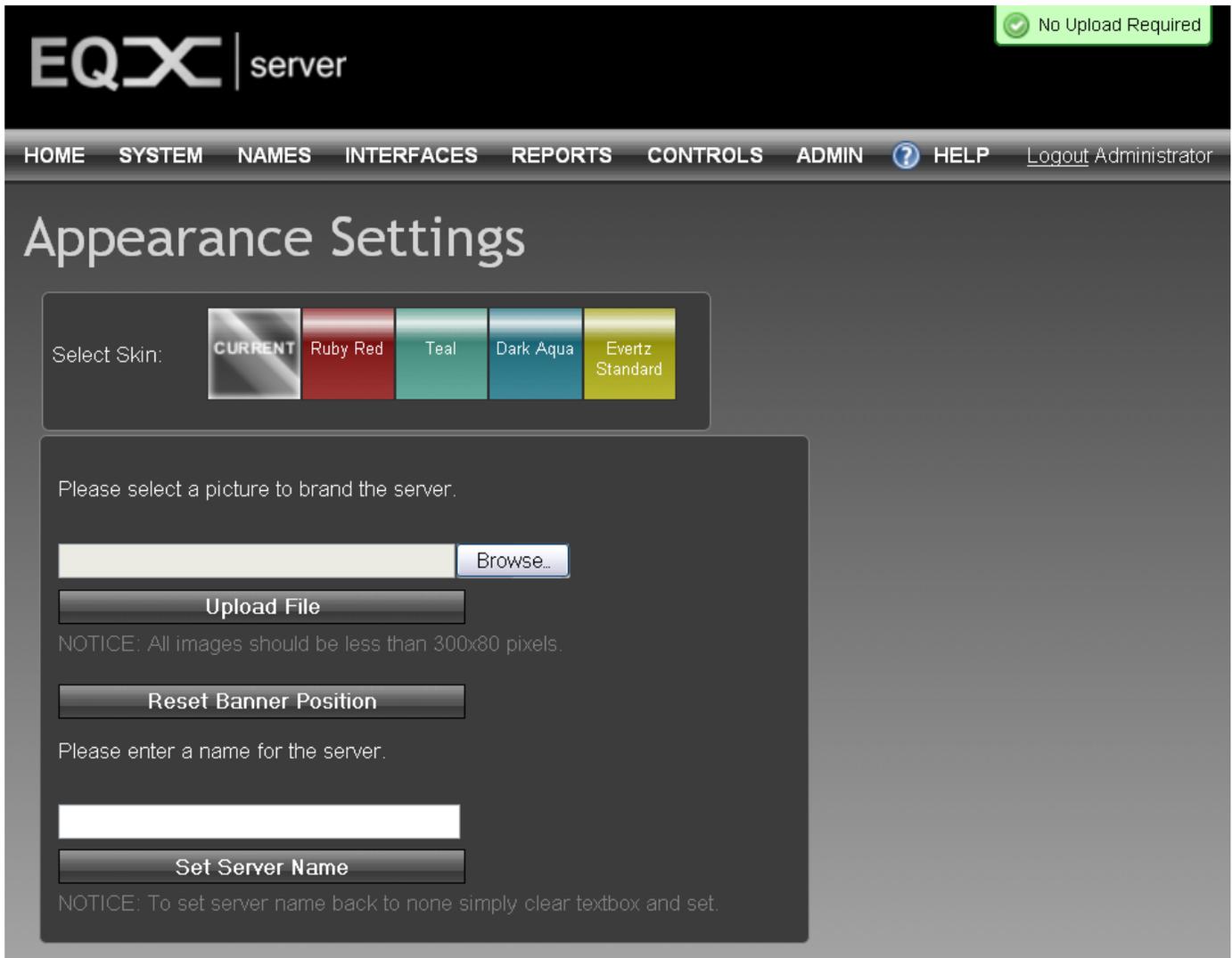
**Figure 5-106: Configuration Management**

1. Select the **DOWNLOAD ACTIVE** button to download a copy of the active configuration from the server.
2. Select the **DOWNLOAD WORKING** button to download a copy of the configuration that the user is currently working on.
3. To import another configuration, select the **Browse...** button beside the *Import Working Copy* field and navigate to your desired configuration.
4. Open the desired file so that the name is displayed on the main page and then click the **IMPORT** button to import a working copy of the configuration.
5. Select the **Reset** button if you wish to reset the working state of the system and start from scratch.

USING THE **RESET** BUTTON WILL COMPLETELY DELETE ALL ROUTER CONTROL SYSTEM INFORMATION INCLUDING DELETING ALL ROUTERS, PANELS, NAMES, TIELINES, ALL CONFIGURATION INFORMATION. DO NOT USE THIS BUTTON UNLESS IT IS YOUR INTENT TO COMPLETELY DELETE YOUR ENTIRE SYSTEM AND START FROM ABSOLUTELY NO CONFIGURATION.

### 5.8.3. Setting the Preferences – Appearance Settings

The *Appearance Settings* screen enables the user to change the colour scheme and branding options of the EQX Server interface.



**Figure 5-107: Appearance Settings**

1. To change the colour scheme of the interface, select the desired skin from the *Select Skin* options. The colour of the interface will instantly change to reflect the skin you selected.
2. If you wish to brand your EQX Server interface with an image or logo, you can upload an image file (ie. .jpeg or .png of your company logo). Click on the **Browse...** button and navigate to the image you wish to upload.
3. Once you have located your image, select **Open** to load the file.
4. When the filename is listed on the main screen in the **Browse** field, select the **Upload File** button. Your image will be displayed across the top banner of the interface.



**NOTE:** All images should be less than 300x80 pixels.



**NOTE:** If you wish to **DELETE** the image that you have uploaded, select the **Delete Current Image** button that appears only when an image is loaded.

**Delete Current Image**

- If you wish to assign a name to the server, type a name into the *Set Server Name* field and click on the **Set Server Name** button.

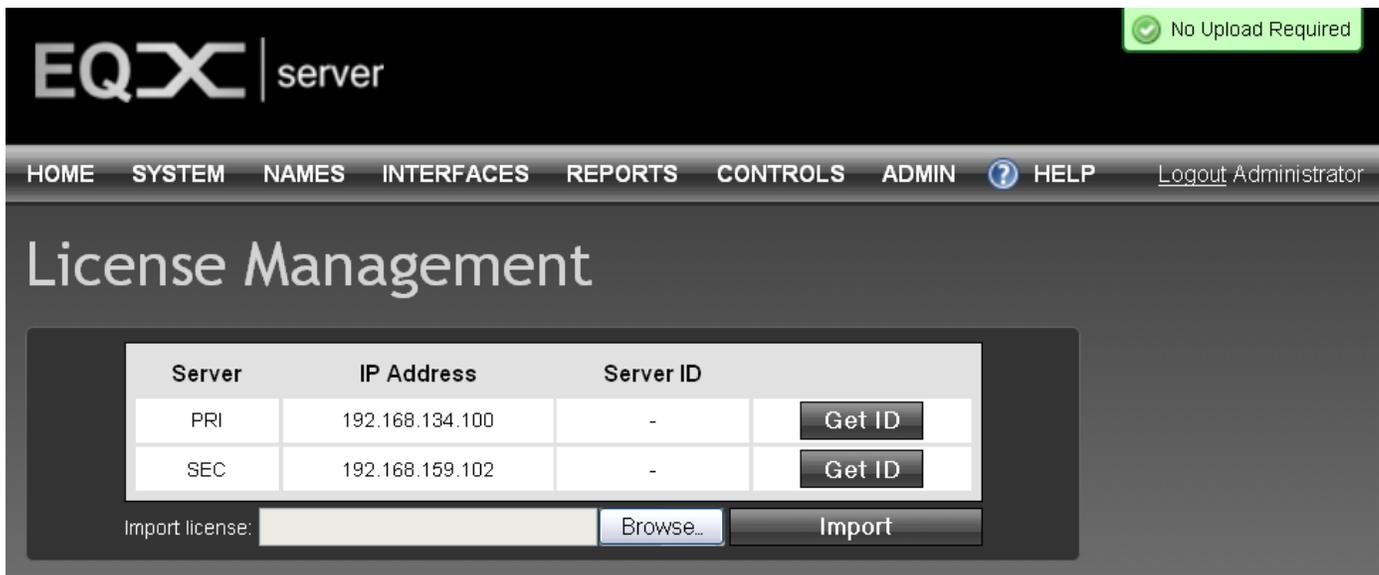


**NOTE:** To clear the server name, remove the name from the text field and select the **Set Server Name** button. The server name will be removed.

- If the banner position has shifted due to the addition or subtraction of logos and text, select the **Reset Banner Position** to send the banner to its original center justified location.

#### 5.8.4. License Management

In order for the user to obtain an authorized license for the EQX Server an ID number must be generated. To obtain a license, navigate to the main toolbar and from the **ADMIN** drop down menu select the **License Management** button.



EQX server

HOME SYSTEM NAMES INTERFACES REPORTS CONTROLS ADMIN ? HELP Logout Administrator

## License Management

Server	IP Address	Server ID
PRI	192.168.134.100	-
SEC	192.168.159.102	-

Import license:

No Upload Required

**Figure 5-108: License Management**

- Your server name(s) and IP address will be listed in the *License Management* window. Select the **Get ID** button to generate a Server ID number.
- A generated number will appear in the **Server ID** column, as shown highlighted in Figure 5-109.

- Once the Server ID has been regenerated, the user must submit the ID number to EQX service in order to acquire an authorized license.

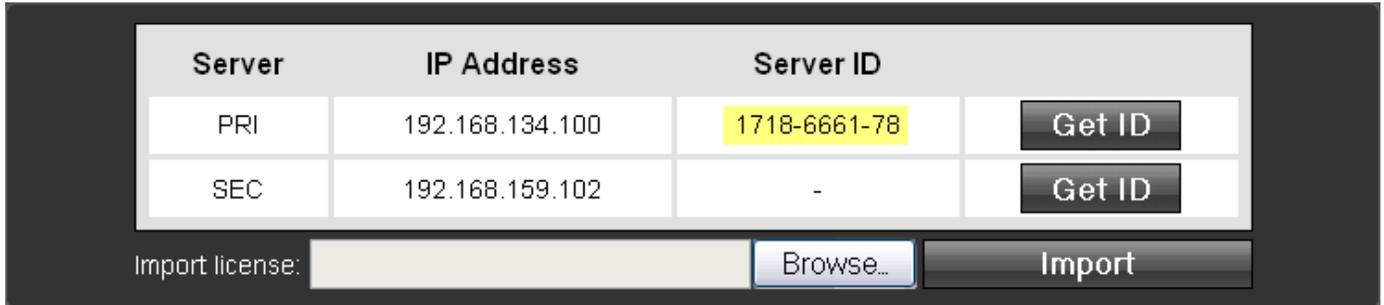


Figure 5-109: Generating a Server ID

- Once the license is obtained by the user, the user must import the license. Click on the **Browse** button and then navigate to the appropriate file.
- Once the appropriate file is selected, click the **Open** button.
- The filename will be listed in the *Import license* field.
- Finally, select the **Import** button to import the selected file and load the user license.
- In order for changes to take effect the user must restart the server from the configuration GUI in the first part of this manual. ALL SERVERS must be restarted.

## 5.9. HELP TAB

The **Help** menu displays the current version of the EQX server and retrieve logs.

### 5.9.1. Viewing the Version Information

To view the version information, select the **About** item from the **Help** drop down menu. The *About* screen will display the software version, as shown in Figure 5-110.



Figure 5-110: About Window

### 5.9.2. Retrieving Logs

To download the server logs, select the **Retrieve Logs** menu item from the **HELP** drop down menu. By selecting the **Download Logs** button the user can download a zip file containing all of the server logs.



Figure 5-111: Retrieve Logs Window