grass valley

2000NET

NETWORK INTERFACE MODULE

Release Notes

SOFTWARE VERSION 4.0.0

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OCTOBER 2005

the most watched worldwide

A THOMSON BRAND

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Grass Valley Web Site

The www.thomsongrassvalley.com web site offers the following:

Online User Documentation — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

FAQ Database — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

Software Downloads — Software updates, drivers, and patches can be downloaded.

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Version 4.0.0

OCTOBER 2005

2000NET Network Interface Module Release Notes

Introduction

This document provides information on the latest release of the network interface software for use with the 2000NET Network Interface Module for controlling the Kameleon 2000 Series frames. Read this document completely before attempting to download the latest software.

Pertinent reference documents are available on-line or hard copies can be ordered from Grass Valley.

These documents detail:

- New software features, operation, and resolved software issues (page 6),
- Acquiring and Installing Software (page 20), and
- Accessing Reference Documents (page 23).

Version 4.0.0 Software Release

The software requirements, enhancements, and resolved software issues, are summarized below.

Software Requirements

This latest release is required to be compatible with the following modular products:

- KAM-AV/SD, software version 4.0 and higher
- All Kameleon HD products

Enhancements

2000NET Software version 4.0.0 adds the following enhancements:

- Numerical adjustment controls for module parameters have been enhanced (see *Numerical Adjustment Controls* on page 8).
- Enabling and disabling of Frame Alarm and SNMP Reporting have been moved to centralized web pages, and a new Power Supply/Demand web page has been created (see *Frame and 2000NET Alarm and SNMP Reporting* on page 9).
- Operation of the **Locate Frame** indicator has been changed from flashing various LEDs on the front of the 2000NET module to flashing the Frame Status LED green (visible through the front cover) on the 2000NET module (see *Locate Frame Function* on page 18).
- A warning message will now appear if the **Restore Upon Install** box is checked on a module Slot Config page and a different module type is installed in the slot. A **Clear** button has been added to allow the saved configuration to be cleared (see Figure 9 on page 17).
- The Software Update web page has been removed. Software updates are now performed using the NetConfig Configuration Application (see *Acquiring and Installing Software* on page 20).
- The module Health Alarm connector on the rear of the 2000T3 frame can now be configured to stay on continuously instead of pulsing when warnings occur on modules in the frame. This is done by selecting **Closed** in the Output Format for Warnings section of the Frame Alarm web page (see *Frame Alarm Reporting Web Page* on page 11).

  Previously, only frame alarms such as power supply failure could be detected as a continuous voltage level. Frame health warnings generated on 2000 and Kameleon modules reported to this output alarm include loss of signal or reference inputs and module configuration errors

Resolved Software Issues

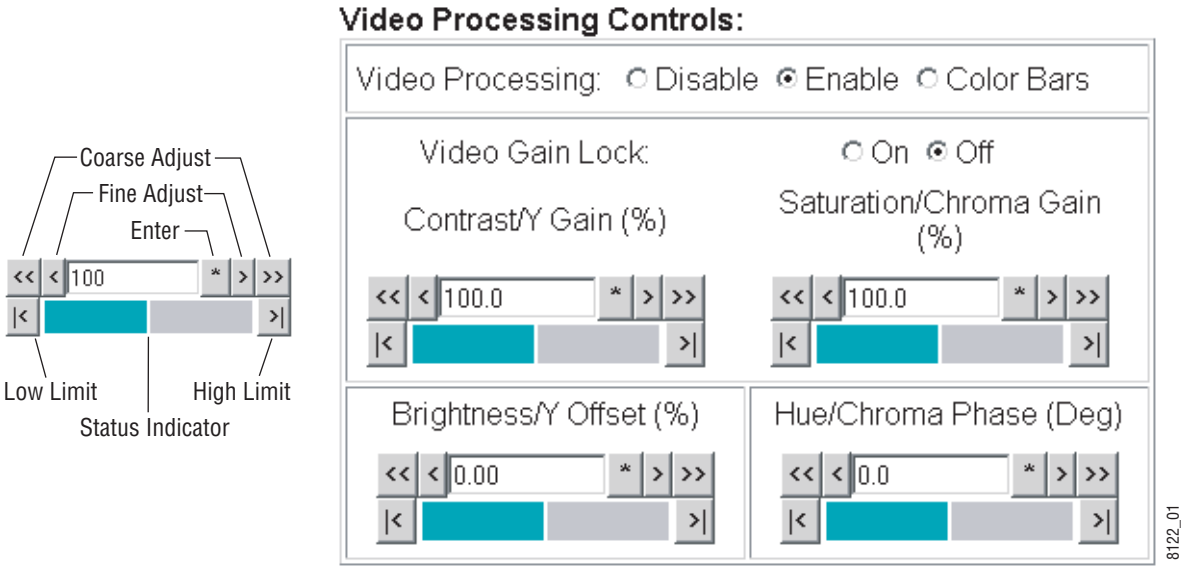
2000NET Software version 4.0.0 resolves the following software issues:

- (57207, 59496, 60226) Ethernet communication has been streamlined in this version software. This release should resolve any issues with slow response or lock-up when the module is communicating over the network to NetConfig, Newton control panels or other devices.
- (57648) The boot-up process has been streamlined allowing the 2000NET module to boot faster.
- (59459) 2000 rear modules that have no frame bus interface were being reported as being offline on NetConfig. These type of modules now appear on-line correctly.
- (44548) Slot Identification Name field on the Slot Config web page for all 2000 and Kameleon modules now allows all 20 possible characters in the name to be viewed at once.

Numerical Adjustment Controls

With a 2000NET module running version 4.0.0 software in the frame, the numerical adjustment controls for setting media module parameters have been enhanced as shown in the example in Figure 1.

Figure 1. Enhanced Numerical Controls



The numerical adjustment controls for all media module parameters now operate as follows:

- Each numerical adjustment control has a **Coarse** adjust button (left and right top double arrows) which increases or decreases the step value by a factor of 10. The **Fine** adjust button (left and right inside single arrows) increases or decreases the step value by 1.

  To change a value, use the arrow button controls or enter a value into the number field and select the **Enter** button (*) or use the **Enter** key on your keyboard. The Status Indicator bar will follow the value selected.

- Use the **Low** and **High Limit** buttons to go directly to the lowest and highest limits for the parameter.

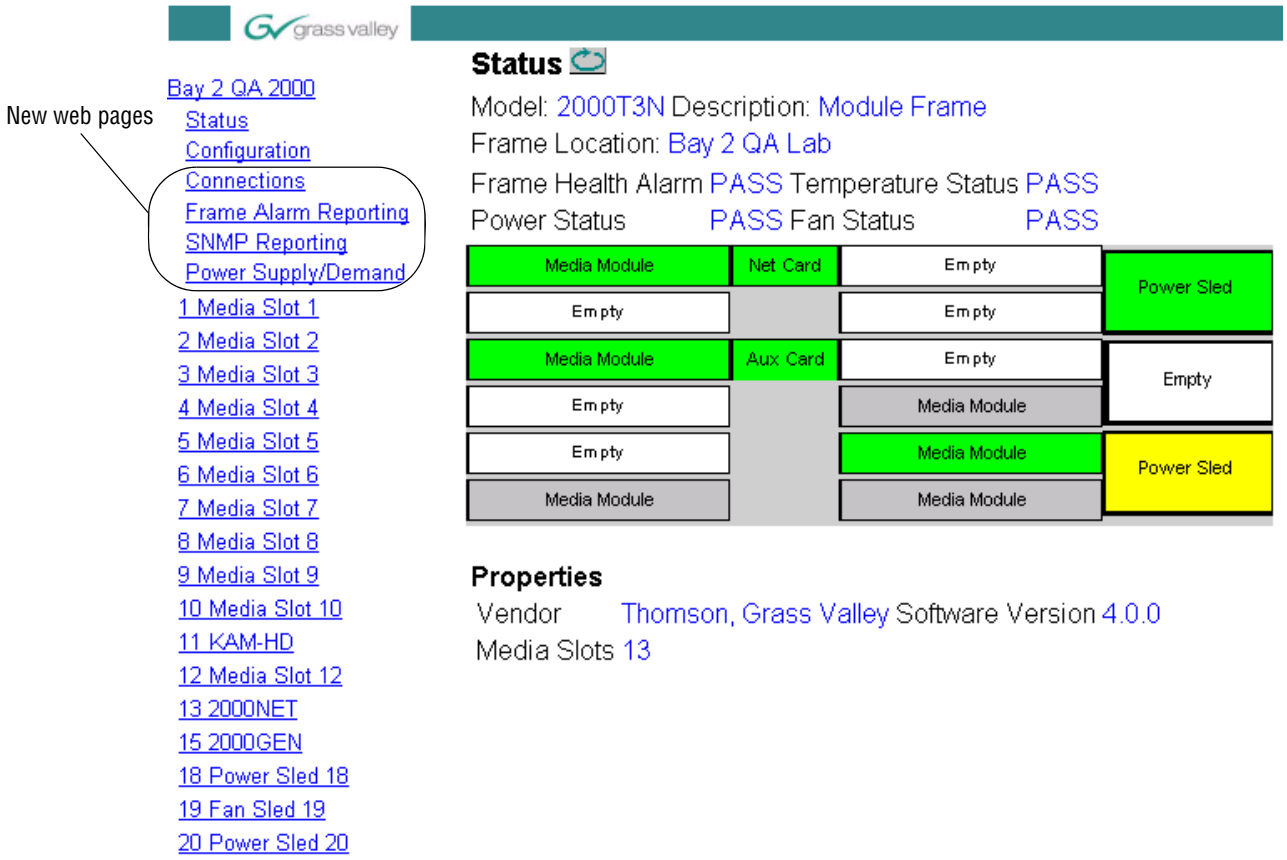
Frame and 2000NET Alarm and SNMP Reporting

A number of web page enhancements have been added to the Kameleon 2000 Frame and 2000NET GUI. These changes have been made to simplify and summarize alarm reporting and power demand.

Frame Alarm reporting (2000T3 frames only) and SNMP reporting enabling and disabling have been moved to a central web page for all of the devices in the frame that have this functionality. Links are provided from each frame device Configuration or Slot Config web page to these new central pages where all functions have been summarized in easy to use tables.

Links for the Kameleon 2000 frame are shown in Figure 2. Each of the new web pages are explained below.

Figure 2. 2000 Frame Links



Connections Web Page

A new Connections web page is now included in the 2000 frame links to show what control panels are connected to the same the network as the 2000 frame. The example in Figure 3 shows one connection to a Newton Control panel. Figure 4 shows there are no control panels on the network.

Figure 3. Connections Web Page

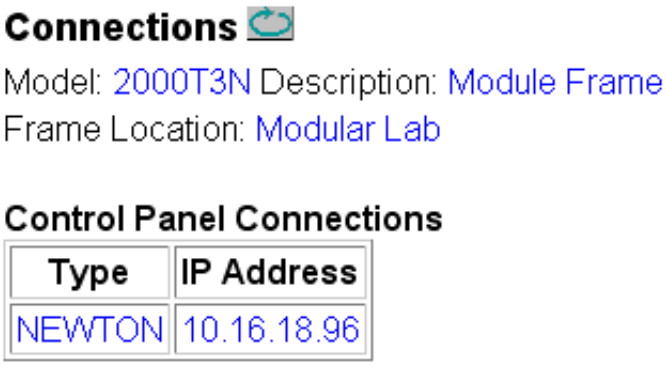
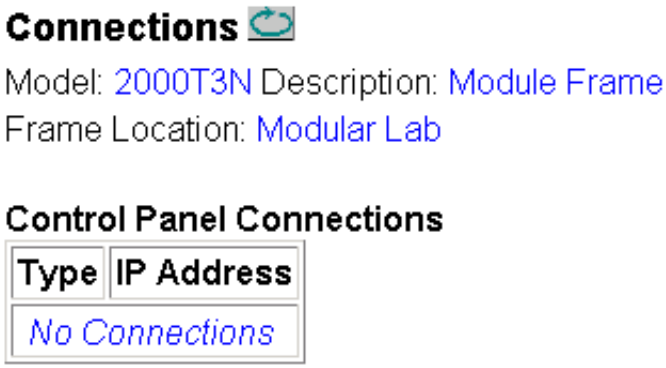


Figure 4. Connections Web Page – No Connections



Frame Alarm Reporting Web Page

The Frame Alarm Reporting web page (Figure 5 on page 12) allows configuration of the alarms and warnings that are reported to the external Frame Health Alarm connector on the rear of the 2000T3 frame. This feature is not included on the 2000T1 frame series.

This web page contains the following sections:

- **Hardware Switch Status** – the Hardware Switch Status section of this web page displays the current settings of the alarm and warning configuration DIP switches, S1 and S2, on the 2000NET circuit board in this frame. These switches allow enabling and disabling of what overall status reporting information is provided to the external Frame alarm.
- **Output Format for Warnings** – set the Output Format for Warnings on the external RS-232 Frame Alarm output on the rear of the frame. When the **Open** radio button is selected, warnings are not reported to the external frame alarm. Selecting the **Closed** radio button, causes warnings to be reported in the same manner as alarms.
- **Frame Health Reporting** – this section provides a table showing the presence and status of all frame devices such as modules, power supplies, and fans and other frame functions such as Module Health and Frame Bus status. Use the corresponding **Report** checkboxes to indicate which alarms and warnings should be reported to the Frame Health alarm for the following conditions:
  - Faults
  - Signal Loss
  - Reference Loss
  - Config Error

  You may also use the **Set Defaults**, **Set All** or **Clear All** buttons.

Figure 5. Frame Alarm Reporting Web Page

Frame Alarm Reporting

Model: 2000T3N Description: Module Frame
Frame Location: Modular Lab

Hardware Switch Status

	HW Switch		HW Switch
PS1 Status Reporting	Enabled	PS2 Status Reporting	Enabled
PS3 Status Reporting	Enabled	PS4 Status Reporting	Enabled
Asynchronous Status Reporting	Enabled	Fan Fault Reporting	Enabled
Module Status Reporting	Enabled	Frame Bus Fault Reporting	Enabled
Frame Remote Control	Enabled	Net Card Remote Control	Enabled

Output Format for Warnings	◉ Open ○ Closed

Frame Health Reporting

Slot	Name	Fault	Signal Loss	Reference Loss	Config Error
	SEVERITY	ALARM	WARNING	WARNING	WARNING
1	Media Slot 1	☑ Report	☑ Report	☑ Report	☑ Report
2	KAM-XM-UNC	☑ Report	☑ Report	☑ Report	☑ Report
3	Media Slot 3	☑ Report	☑ Report	☑ Report	☑ Report
4	Media Slot 4	☑ Report	☑ Report	☑ Report	☑ Report
5	Media Slot 5	☑ Report	☑ Report	☑ Report	☑ Report
6	Media Slot 6	☑ Report	☐ Report	☐ Report	☑ Report
7	Media Slot 7	☑ Report	☐ Report	☐ Report	☑ Report
8	HD-FS-8	☑ Report	☑ Report	☑ Report	☑ Report
9	Media Slot 9	☑ Report	☑ Report	☑ Report	☑ Report
10	HD-FS-10	☑ Report	☑ Report	☑ Report	☑ Report
11	Media Slot 11	☑ Report	☑ Report	☑ Report	☑ Report
12	Media Slot 12	☑ Report	☑ Report	☑ Report	☑ Report
13	2000NET	☑ Report	-	-	-
15	2000GEN	☑ Report	☑ Report	☑ Report	☑ Report
18	PS1	☑ Report	-	-	-
	PS2	☑ Report	-	-	-
20	PS3	☑ Report	-	-	-
	PS4	☑ Report	-	-	-
	Frame Bus Status	☑ Report	-	-	-
	Fan Status	☑ Report	-	-	-
	Set Defaults	Set All / Clear All	Set All / Clear All	Set All / Clear All	Set All / Clear All

SNMP Reporting Web Page

Select the SNMP Reporting link to open the 2000NET SNMP Reporting web page (Figure 6 on page 14). This link will only be present when SNMP Agent software has been installed on the 2000NET module. This web page allows configuration of what alarms and warnings are reported to the SNMP management software.

- **Trap Destinations Link** – this link will take you to the 2000NET Configuration web page where SNMP Trap Destinations are configured.
- **Hardware Switch Status** – the Hardware Switch Status section of this web page displays the current settings of the alarm and warning configuration DIP switches, S1 and S2, on the 2000NET circuit board in this frame. These switches allow enabling and disabling of what overall status reporting information is provided to the SNMP traps.

Note Slot SNMP traps can be enabled only when the hardware switches for Module Fault reporting and Asynchronous Status reporting are in enabled on the 2000NET module (DIP switch S1 segment 7 and DIP switch S2 segment 1).

- **SNMP Trap Reporting** – this section provides a table showing the presence and/or status of all frame devices such as modules, power supplies, power and fan sleds and other frame functions such as fan and Frame Bus status.
- Use the corresponding **Report** checkboxes to indicate what trap warnings and alarms should be reported to the SNMP manager for the following conditions:
  - Faults
  - Devices removed
  - Signal Loss
  - Reference Loss
  - Config Error

  You may also use the **Set Defaults**, **Set All** or **Clear All** buttons at the bottom of the page.

  The enabled SNMP traps will be reported to any SNMP manager that is identified as an SNMP Report Destination in 2000NET configuration. Trap severity is read-only hard-coded information that is interpreted and responded to by the SNMP Manager software configuration.

Figure 6. SNMP Reporting Web Page

SNMP Reporting

Model: 2000T3N Description: Module Frame
Frame Location: Modular Lab
Trap Destinations

Hardware Switch Status

	HW Switch		HW Switch
PS1 Status Reporting	Enabled	PS2 Status Reporting	Enabled
PS3 Status Reporting	Enabled	PS4 Status Reporting	Enabled
Asynchronous Status Reporting	Enabled	Fan Fault Reporting	Enabled
Module Status Reporting	Enabled	Frame Bus Fault Reporting	Enabled
Frame Remote Control	Enabled	Net Card Remote Control	Enabled

SNMP Trap Reporting

Slot	Name	Fault	Removed	Signal Loss	Reference Loss	Config Error
	SEVERITY	ALARM	WARNING	WARNING	WARNING	WARNING
1	Media Slot 1	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
2	KAM-XM-UNC	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
3	Media Slot 3	☑ Report	☐ Report	☑ Report	☑ Report	☑ Report
4	Media Slot 4	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
5	Media Slot 5	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
6	Media Slot 6	☑ Report	☑ Report	☑ Report	☐ Report	☑ Report
7	Media Slot 7	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
8	HD-FS-8	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
9	Media Slot 9	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
10	HD-FS-10	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
11	Media Slot 11	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
12	Media Slot 12	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
13	2000NET Hw Switch	☐ Report	-	-	-	-
		-	☐ Report	-	-	-
15	2000GEN	☑ Report	☑ Report	☑ Report	☑ Report	☑ Report
18	Power Sled 18	-	☑ Report	-	-	-
	PS1	☑ Report	-	-	-	-
	PS2	☑ Report	-	-	-	-
19	Fan Sled 19	☑ Report	☑ Report	-	-	-
20	Power Sled 20	-	☑ Report	-	-	-
	PS3	☑ Report	-	-	-	-
	PS4	☑ Report	-	-	-	-
	Frame Bus Status	☑ Report	-	-	-	-
	Fan Status	☑ Report	-	-	-	-
	Set Defaults	Set All / Clear All	Set All / Clear All	Set All / Clear All	Set All / Clear All	Set All / Clear All

Power Supply/Demand Web Page

Select the Power Supply/Demand link to open the Power Supply/Demand web page (Figure 7). This web page summarizes all devices in the frame and their power usage. If total capacity for the frame is exceeded, a warning will be generated.

Figure 7. Power Supply/Demand Web Page

Power Supply/Demand

Model: 2000T3N Description: Module Frame

Frame Location: Modular Lab

Power Status: PASS

Power

Slot	Device	Demand*	Capacity**
1	Media Slot 1	0.0 Watts	
2	KAM-XM-UNC	27.0 Watts	
3	Media Slot 3	5.5 Watts	
4	Media Slot 4	0.0 Watts	
5	Media Slot 5	0.0 Watts	
6	Media Slot 6	5.5 Watts	
7	Media Slot 7	5.5 Watts	
8	HD-FS-8	0.0 Watts	
9	Media Slot 9	5.5 Watts	
10	HD-FS-10	0.0 Watts	
11	Media Slot 11	0.0 Watts	
12	Media Slot 12	0.0 Watts	
13	2000NET	5.0 Watts	
15	2000GEN	5.0 Watts	
18	Power Sled 18	4.6 Watts	
19	Fan Sled 19	0.0 Watts	
20	Power Sled 20	0.0 Watts	
	TOTAL Demand	63.6 Watts	
	TOTAL Capacity		165.0 Watts

* Worst Case Power Demand

** A function of power supplied and capacity to dissipate heat

Configuration and Slot Config Web Pages

Frame, Power Supply, Fan Sled, and other device Configuration and Status web pages and media module Slot Config web pages that formerly provided the enabling and disabling for frame health and SNMP reporting, now have links to the main Frame Health Reporting and SNMP Reporting web pages as shown in the examples in Figure 8 (Frame Configuration), Figure 9 on page 17 (Media Module Slot Config), and Figure 10 on page 17 (Power Supply Status).

Figure 8. Frame Configuration Web Page

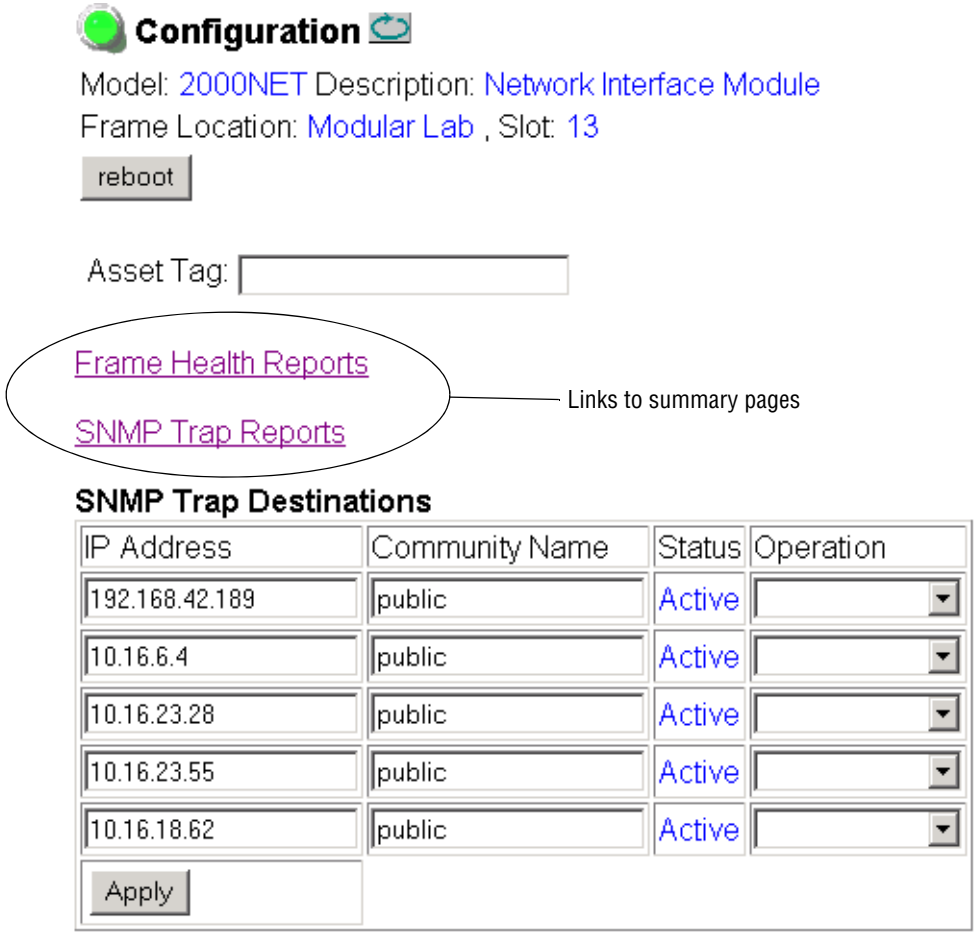


Figure 9. Media Module Slot Config Web Page

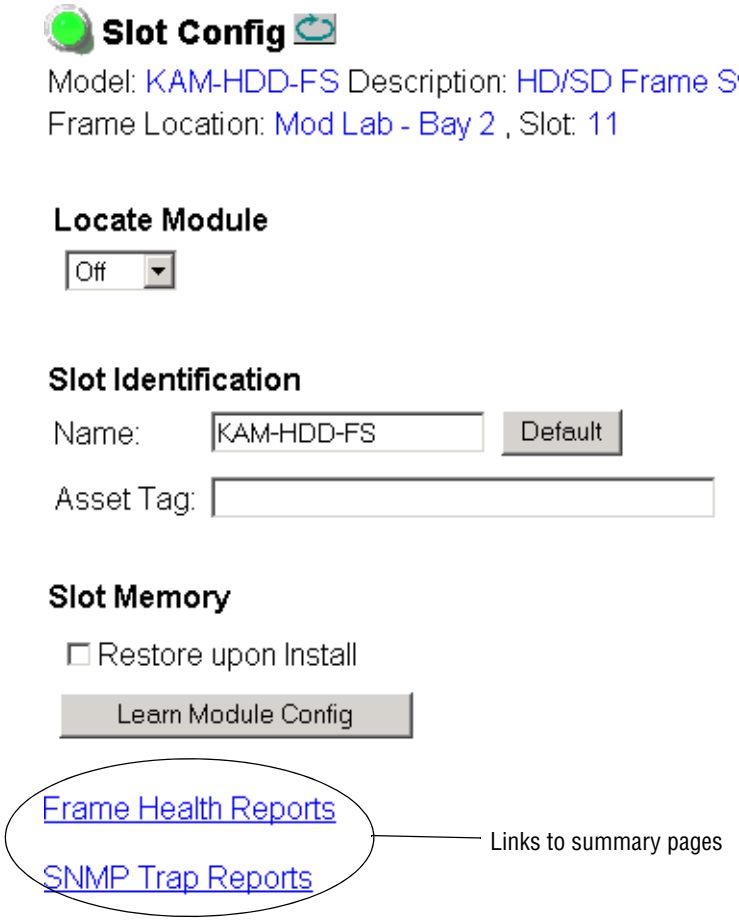
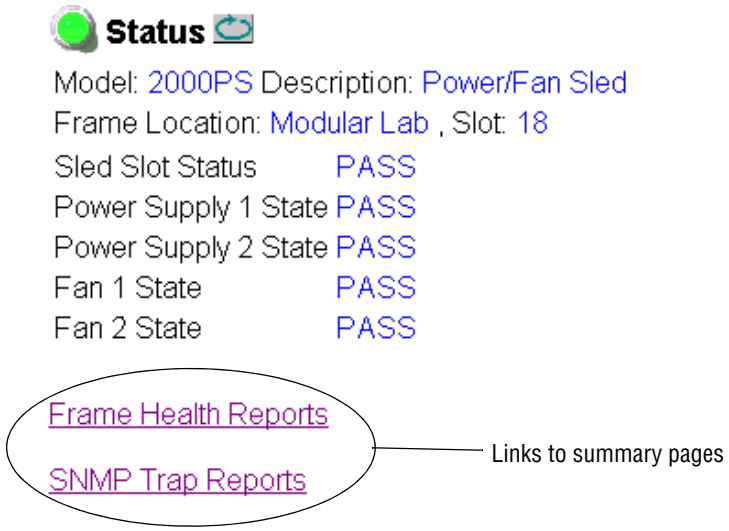


Figure 10. Power Sled Status Web Page



Locate Frame Function

The **Locate Frame** function on the Frame Configuration web page (Figure 11) has been changed from flashing various LEDs on the front of the 2000NET module to flashing the Frame Status LED green (visible through the front cover) on the 2000NET module (Figure 12) for a 50 ms on then 50 ms off duty cycle to help locate the 2000 frame.

Figure 11. Locate Frame Function On Frame Configuration Web Page

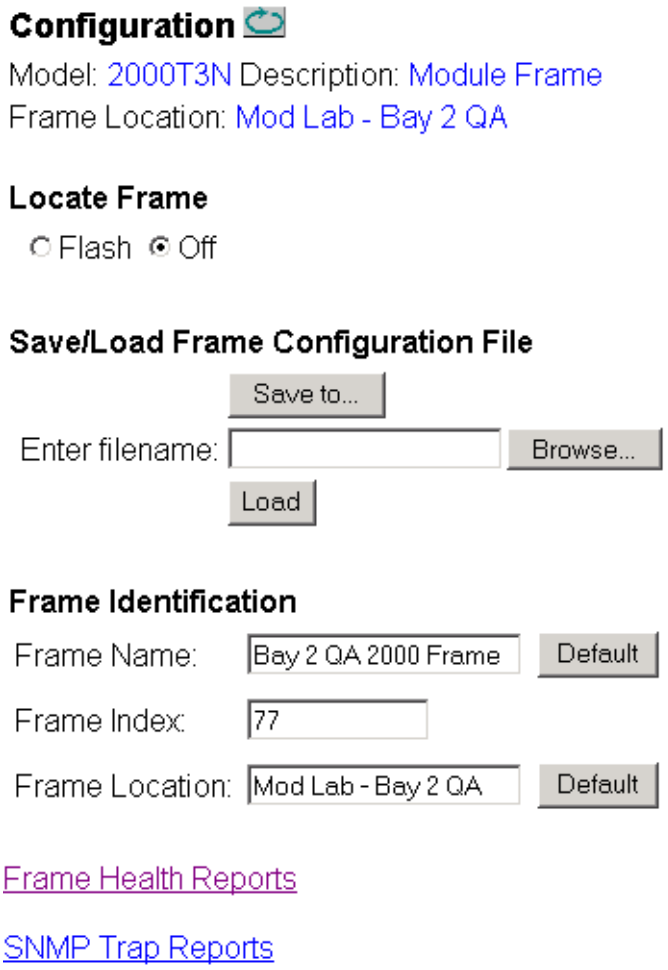
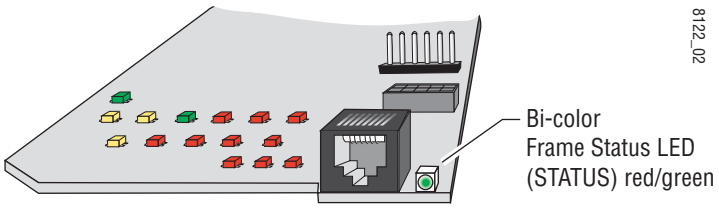


Figure 12. Frame Status LED on 2000NET Module

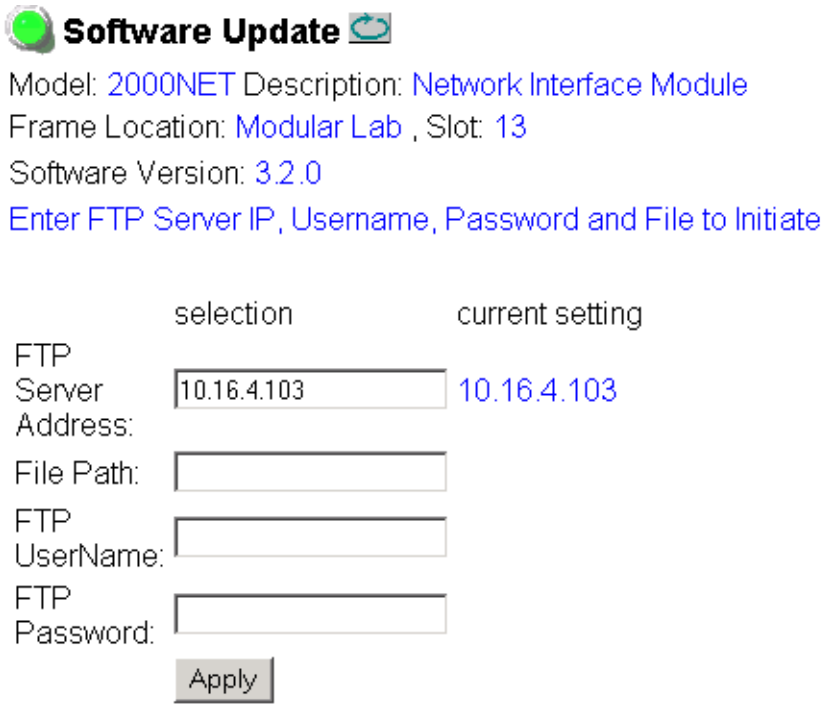


Software Updating with NetConfig

The Software Update web page (Figure 13) has been removed from appearing on any module in the Kameleon 2000 frame including the 2000NET module.

Software updating for applicable modules is now done using the Net-Config Networking application available from Thomson Grass Valley as described in *NetConfig Software Updating Method* on page 21.

Figure 13. Software Update Web Page



Acquiring and Installing Software

Use the NetConfig Networking application to update all software for 2000NETmodules running version 3.2.0 and later. The latest version of the NetConfig Networking application, version 2.0.6 or later, is recommended.

To determine your NetConfig version, open NetConfig click on the **About** link on the top of the NetConfig Toolbar.

Acquiring NetConfig Software

If you do not have NetConfig or the latest version, you can download it from the Thomson Grass Valley ftp site at this URL:

ftp://ftp.thomsongrassvalley.com/pub/router/NetConfig/Version 2.0.6/

1. Right-click on the latest NetConfig link to download the zipped file to the C:\temp folder or other convenient location on your PC.
2. Extract the zipped files onto your local drive:
3. Double-click on the NetConfig.EXE file to install NetConfig.

Note Installing NetConfig into the default location given in the install script (C:\Programs\Grass Valley Group) is recommended for future NetConfig and module software updates.

Acquiring 2000NET Software

The latest software for the 2000NET module is available from the Thomson Grass Valley ftp site at the following URL:

`ftp://ftp.thomsongrassvalley.com/pub/modular/2000/2000NET`

To download the latest 2000NET software, do the following:

4. Select the 2000 Series link.
5. Select the link to the latest 2000NET Interface module software.
6. If you are updating from version 3.2.0 or higher to version 4.0.0, you may use either the .fld or .bin file. If you are updating from an earlier version than 3.2.0, use the .bin file and the FTP Server procedure described in detail in the *2000NET Instruction Manual* available on-line.
7. You may also use the NetConfig Networking Application option to update from version 3.2.2 to version 4.0.0 with the .fld file as described next.

NetConfig Software Updating Method

Two files are required for updating 2000NET software with NetConfig, an .fld and an .sw2. For acquiring software, refer to *Acquiring and Installing Software* on page 20.

To use NetConfig for software updating, follow the steps below:

1. Locate the PC directory in which the NetConfig application has been installed. The default location is C:\Program Files\Grass Valley Group\NetConfig.

   If this is not where NetConfig was installed, right-click on the NetConfig desktop shortcut and select **Properties**, click on the **Shortcut** tab and note the location of the installation in the **Start In** field.

2. Copy the .sw2 file for the 2000NET module update into the main NetConfig directory.

3. Create a subdirectory named **modular** (if one does not already exist) in the main NetConfig directory.

4. Copy the .fld file for the update into this **modular** subdirectory in the NetConfig directory.

5. Open NetConfig and click on the **Load SW** icon on the top toolbar (shown at left).

6. The NetConfig Update Devices window will open showing the software files available (NetConfig version 2.0.6 is shown in Figure 14 on page 22).

   These device types and versions represent the .sw2 and .fld files loaded in the NetConfig main directory and the modular subdirectory. These files must be present on the PC running NetConfig for them to appear in the Device Type list.

   Note If the software does not appear in the modular directory, open the Misc directory.

7. Select the Device Type you wish to update. In the example in Figure 14 on page 22, the 2000NET module Device Type has been selected and will be highlighted. All of the modules of this type accessible on the network will appear in the window on the right under the **Client Name** heading as shown.

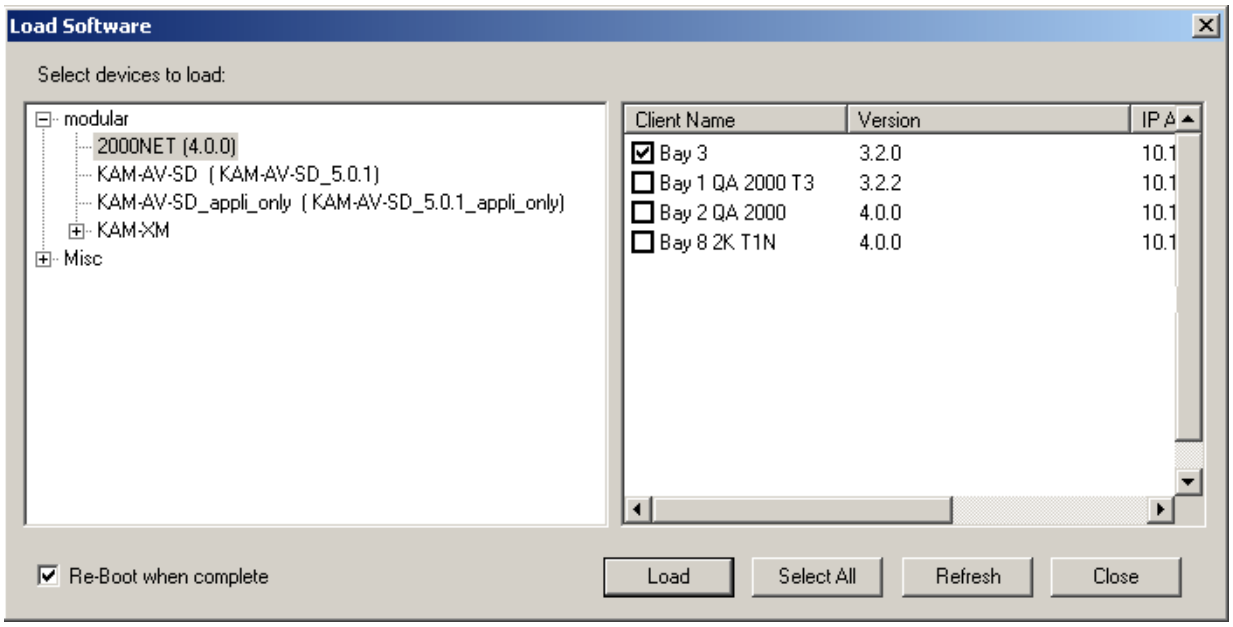
   The current software loaded on each module will be listed as well as the IP address and other information for the module client.

8. Check the corresponding **Client Name** boxes to upgrade the modules or use the **Select All** button to update all modules of this type present on the network.

9. Press the **Load** button to perform the update to all the selected modules.

10. Once the loading is complete, select the **Refresh** button to make sure all selected modules have updated to the correct software version which will be reported in the window.

Figure 14. NetConfig Update Devices Window



For more information on using NetConfig, refer to the *NetConfig Networking Application Instruction Manual* which is included with the option, available on the Thomson Grass Valley web site, and may also be present in the NetConfig directory during some NetConfig installations (Newton Control Panel installation is one example).

Accessing Reference Documents

For on-line access to any of the reference documents referred to in this Release Note, return to the Thomson Grass Valley home page and select the links described below.

- On-line access to instruction manuals in PDF format is available at http://www.thomsomgrassvalley.com/docs. For this module, select Broadcast Products/Modular Products/Kameleon AV Media Processing System Products/Control and Monitoring, then select the 2000NET Network Interface Module link.

All of the documents referred to may also be ordered in hard copy from any Thomson Grass Valley Sales or Customer Service source. Refer to *Contacting Grass Valley* at the front of this document.