



***FlowMagic-3200
Hardware Owner's Manual
And Getting Started Guide***

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Welcome to FlowMagic-3200 Hardware Owner's Manual and Getting Started Guide.

In this Hardware Owner's Manual and Getting Started Guide, you will find comprehensive information about how to verify received package, how to setup and operate FlowMagic-3200 appliance. A fully functional FlowMagic-3200 appliance will be ready to use after the instructions in this guide are completed.

This guide contains the following 7 easy to follow chapters:

- Chapter 1 Check the Items in FlowMagic-3200 Appliance Package
- Chapter 2 Install the FlowMagic-3200 Appliance
- Chapter 3 Installation of Latest Version of Browser
- Chapter 4 Power on and Power off FlowMagic-3200 Appliance
- Chapter 5 Use Command Line Interface to Setup Management Parameters
- Chapter 6 Stress Test FlowMagic Chassis CPU and Memory
- Chapter 7 Overview of FlowMagic-3200 Web User Interface

Should you have any question, suggestion or feature request, please do not hesitate to contact Infinicore support team at Email: support@infinicoreinc.com. We are more than happy to assist you.



Chapter 1 Check the Items in FlowMagic-3200 Package

Before we start installation, it is necessary to check the received contents and make sure they are complete and free of damage. Each FlowMagic-3200 package is shipped with the following 5 or 6 items at the minimum configuration. Please contact support@infinicoreinc.com should you find any item missing.

①



Item Name	FlowMagic-3200 Appliance
Count	1

②



Item Name	Power Cord(s)
Count	2

③



Item Name	Ethernet Cable
Count	1



Item Name	Rack Mounting Kit
Count	1



Item Name	Installation Disk
Count	1



Item Name	FlowMagic-3200 Hardware Owner's Manual and Getting Started Guide
Count	1

Note 1: The above icons are abstract view to the content. The actual look and feel may be different.

Note2: Based on the details of your order, there may be additional items included in the package, such as:

- System Recovery USB Thumb Drive
- Additional SFP modules and/or SFP+ modules
- Factory Tested Ethernet or Other Types of Cables
- Region Specific Certification if Necessary
- Additional Modules and Subsystems

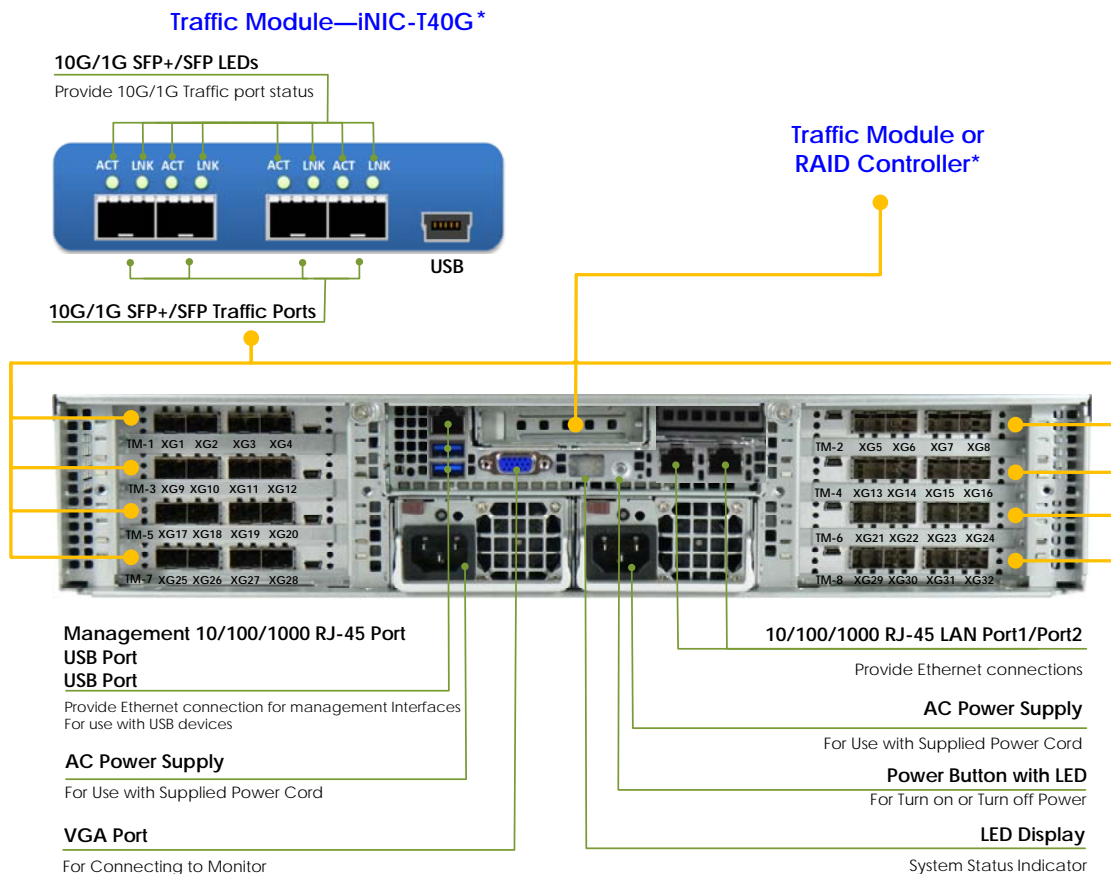
Chapter 2 Install the FlowMagic-3200 Appliance

This chapter provides a quick setup checklist to get your FlowMagic-3200 appliance up and running.

Before we install FlowMagic-3200 Appliance, it is beneficial to spend some time to get familiar with the various interfaces built into FlowMagic-3200 appliance hardware.

2.1 FlowMagic-3200 Rear Panel

A typical layout of FlowMagic-3200 rear panel is displayed in the below picture. Due to various selection of traffic modules and configurations, the names of the ports will be different depending on order configurations, please use the names presented by the web user interface.



A Typical FlowMagic-3200 Rear Panel View with iNIC-T40G Traffic Module

You will find the relative location of the following important interfaces (listed from left to right):

- iNIC-T40G Traffic Modules*
- Ethernet Management Port ×1

- USB Port ×2
- VGA Port ×1
- LED Display ×1
- Ethernet Management Port ×2
- iNIC-T40G Traffic Modules*

* The available iNIC Traffic Modules are listed in the below table:

Part Number	Port Count	Port Specification
iNIC-T2G/T4G/T6G-RJ45	2, 4 or 6	10Mb/100Mb/1Gb RJ45
iNIC-T2G/T4G/T6G-SFP	2, 4 or 6	10Mb/100Mb/1Gb SFP Fiber
iNIC-T20G/40G-RJ45	2 or 4	10Mb/100Mb/1Gb/10Gb RJ45 Copper
iNIC-T20G/T40G-SFP	2 or 4	1Gb/10Gb SFP/SFP+ Fiber
iNIC-T40G	4	1Gb/10Gb SFP/SFP+ Fiber 9.953Gb WAN SFP+ Fiber
iNIC-T50G	2	1Gb/10Gb/25Gb SFP/SFP+/SFP28 Fiber
iNIC-T80G	2	40Gb QSFP+ Fiber
iNIC-T200G	2	40Gb/100Gb QSFP+/QSFP28 Fiber

2.1.1 Traffic Modules and Ports Numbering

FlowMagic-3200 appliance traffic modules and ports numbering follows from top to bottom and left to right sequence. Below figure is an example for the FlowMagic-3200 with eight iNIC-T40G traffic modules installed.



FlowMagic-3200 appliance can be installed with up to eight traffic modules depending on the ordering configuration. Ports are numbered from the top to bottom and from the left to right by default as shown in the below table.

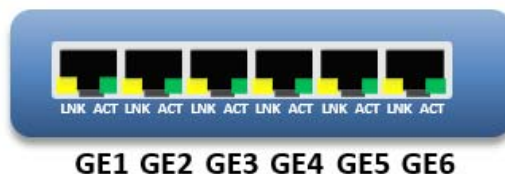
Traffic Module	Traffic Port No.					
iNIC-T2G-RJ45	GE1	GE2				
iNIC-T2G-SFP	GE1	GE2				
iNIC-T4G-RJ45	GE1	GE2	GE3	GE4		
iNIC-T4G-SFP	GE1	GE2	GE3	GE4		
iNIC-T6G-RJ45	GE1	GE2	GE3	GE4	GE5	GE6
iNIC-T6G-SFP	GE1	GE2	GE3	GE4	GE5	GE6
iNIC-T20G-RJ45	XG1	XG2				
iNIC-T20G-SFP	XG1	XG2				
iNIC-T40G-RJ45	XG1	XG2	XG3	XG4		
iNIC-T40G-SFP	XG1	XG2	XG3	XG4		
iNIC-T40G	XG1	XG2	XG3	XG4		
iNIC-T50G	XXVG1	XXVG2				
iNIC-T80G	XLG1	XLG2				
iNIC-T200G	CG1	CG2				

2.1.2 Traffic Module LEDs

The following figure and table describe the traffic ports LEDs status on the FlowMagic-3200 appliance rear panel with various traffic modules that can be used with FlowMagic-3200.

2.1.2.1 iNIC-T2G/T4G/6G-RJ45 Traffic Module LEDs

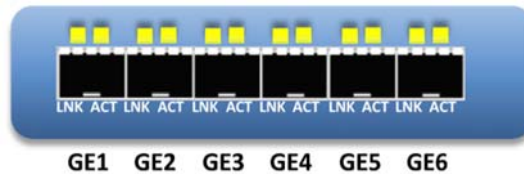
The following figure and table describe the LEDs status of the iNIC-T2G/T4G/6G-RJ45 traffic modules on FlowMagic-3200 appliance rear panel.



LEDs Description-Two LEDs Per Port	
LINK LED	YELLOW: 1Gbps link GREEN: 100Mbps link OFF: 10M link or No link
ACT LED	BLINKING: Data activity OFF: No data activity

2.1.2.2 iNIC-T2G/T4G/6G-SFP Traffic Module LEDs

The following figure and table describe the LEDs status of the iNIC-T2G/T4G/6G-SFP traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	YELLOW: 1Gbps link GREEN: 100Mbps link OFF: 10M link or No link
ACT LED	BLINKING: Data activity OFF: No data activity

2.1.2.3 iNIC-T20G-RJ45 Traffic Module LEDs

The following figure and table describe the LEDs status of the iNIC-T20G-RJ45 traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	GREEN: 10Gbps link YELLOW: 1Gbps link OFF: No link
ACT LED	GREEN BLINKING: Data activity GREEN: No data activity

2.1.2.4 iNIC-T20G-SFP Traffic Module LEDs

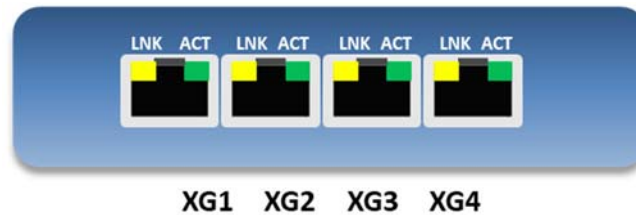
The following figure and table describe the LEDs status of the iNIC-T20G-SFP traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	GREEN: 10Gbps link YELLOW: 1Gbps link OFF: No link
ACT LED	GREEN BLINKING: Data activity GREEN: No data activity

2.1.2.5 iNIC-T40G-RJ45 Traffic Module LEDs

The following figure and table describe the LEDs status of the iNIC-T40G-RJ45 traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	GREEN: 10Gbps link
	YELLOW: 1Gbbps link
	OFF: No link
ACT LED	GREEN BLINKING: Data activity
	GREEN: No data activity

2.1.2.6 iNIC-T40G-SFP Traffic Module LEDs

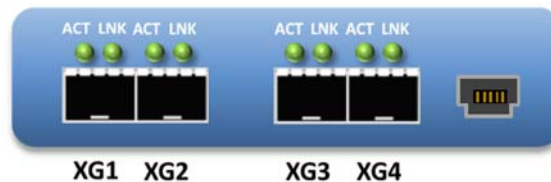
The following figure and table describe the LEDs status of the iNIC-T40G-SFP traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	BLUE: 10Gbps link
	YELLOW: 1Gbbps link
	OFF: No link
ACT LED	GREEN BLINKING: Data activity
	GREEN: No data activity

2.1.2.7 iNIC-T40G Traffic Module LEDs

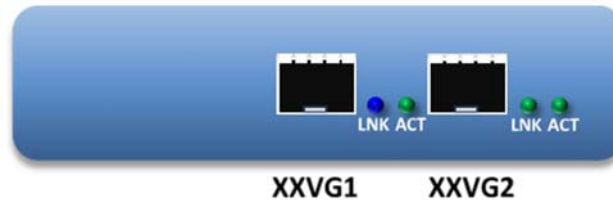
The following figure and table describe the LEDs status of the iNIC-T40G traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	GREEN: 1/10Gbps link OFF: No link
ACT LED	GREEN BLINKING: Data activity GREEN: No data activity

2.1.2.8 iNIC-T50G Traffic Module LEDs

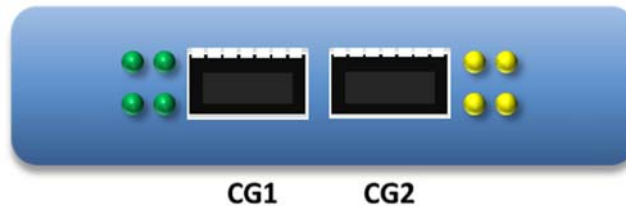
The following figure and table describe the LEDs status of the iNIC-T50G traffic modules.



LEDs Description-Two LEDs Per Port	
LINK LED	GREEN: 25Gbps BLUE: 10Gbps
ACT LED	GREEN BLINKING: Data activity GREEN: No data activity

2.1.2.9 iNIC-T200G Traffic Module LEDs

The following figure and table describe the LEDs status of the iNIC-T200G traffic modules.



LEDs Description-Four LEDs Per Port	
LINK/ACT LED for 100/25/10Gbps LED LINK: ON ACT: BLINK	YELLOW: 100Gbps ORANGE: 25Gbps BLUE: 10Gbps
LINK/ACT LED for 40/25/10Gbps LED LINK: ON ACT: BLINK	YELLOW: 40Gbps ORANGE: 25Gbps BLUE: 10Gbps

2.1.3 Dedicated Management LAN (RJ-45) LEDs

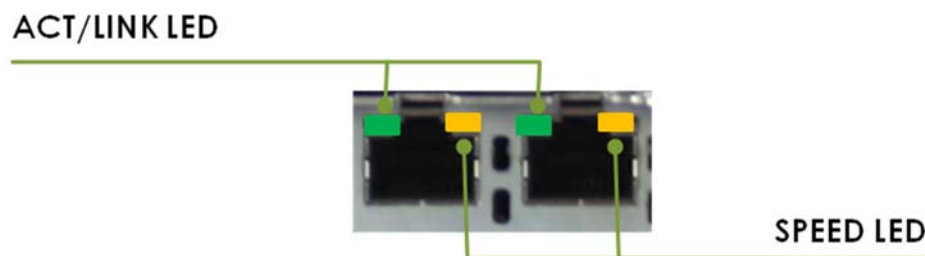
The following figure and table describe the dedicated management LAN (RJ-45) LEDs status on FlowMagic-3200 appliance rear panel.



LAN LEDs Description	
ACT/LINK LED	ORANGE: Linked BLINKING: Data activity OFF: No link
SPEED LED	GREEN: 1Gbps connection ORANGE: 100Mbps connection OFF: 10Mbps connection

2.1.4 LAN (RJ-45) LEDs

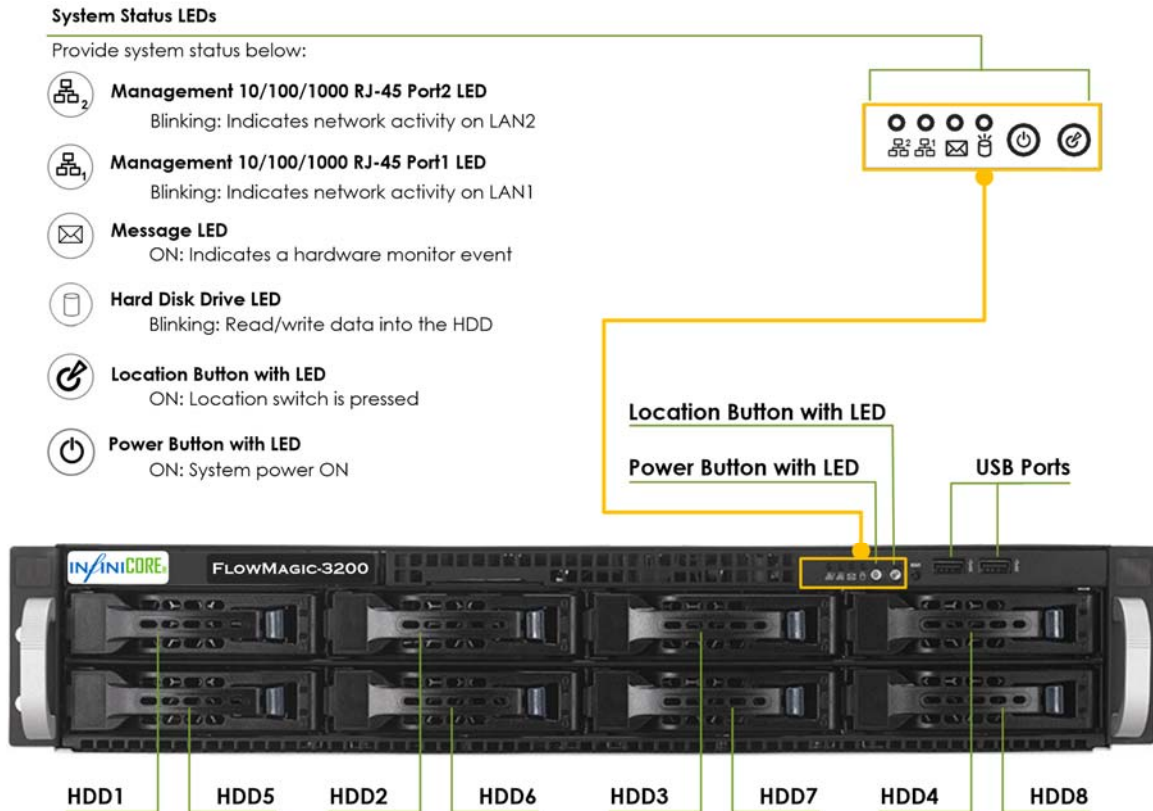
The following figure and table describe the LAN (RJ-45) LEDs status on FlowMagic-3200 appliance rear panel.



LAN LEDs Description	
ACT/LINK LED	GREEN: Linked BLINKING: Data activity OFF: No link
SPEED LED	GREEN: 1Gbps connection ORANGE: 100Mbps connection OFF: 10Mbps connection

2.2 FlowMagic-3200 Front Panel



The below figure displays the layout of FlowMagic-3200 front panel.



There are several LEDs on the control panel as well as others on the drive carriers to keep you being constantly informed of the overall status of the system as well as the activity and health of specific components. There are also two buttons on the chassis control panel. This following session explains the meanings of all LED indicators and the appropriate response you may need to take.

2.2.1 Control Panel Buttons

There are two push-buttons located on the front of the chassis: a power on/off button, and a location switch.

Buttons		Operations
	POWER ON/OFF	Use the power button to apply or remove power from the power supply. Turning off appliance with this button removes the main power but keeps standby power supply to the appliance.
	Location Switch	Use the location button to turn on or turn off location switch





2.2.2. Control Panel LEDs

There are six LEDs on the control panel located on the front panel of the chassis, as shown in the following figure.



Control Panel LEDs

These LEDs provide critical information related to different parts of the system. This section explains what each LED indicates when illuminated and any action that may be required.

LEDs		Meanings
	Power LED	ON: indicates power is being supplied to the appliance's power supply units. This LED should normally be illuminated when the system is operating.
	HDD LED	Blinking: indicates hard drive read/write activities OFF: No HDD activity
	Message LED	ON: With ASMB6-iKVM installed: a hardware monitor event is indicated OFF: System is normal; no incoming event
	Location LED	ON: Location switch is pressed (Press the location switch again to turn off) OFF: Normal status
	Management 10/100/1000 RJ-45 Port2 LED	ON: LAN Connection is present Blinking: indicates network activities on Management 10/100/1000 RJ-45 Port 2 OFF: No LAN connection
	Management 10/100/1000 RJ-45 Port1 LED	ON: LAN Connection is present Flashing: indicates network activities on Management 10/100/1000 RJ-45 Port 1 OFF: No LAN connection

2.2.3 HDD Status LED

There are total 8 Hard disk drive bays which allow a total of 8 HDDs to be installed in the chassis. Each HDD has its own LEDs, please see the following figure and table for LED status details.



SATA II/SAS HDD LED Description	
HDD Activity LED (Green)	ON: HDD present, no activity Blinking: 1. Read/write data from/into the SATA II HDD; 2. Locating (blinking with the HDD status LED) OFF: HDD not present
HDD Status LED (Red)	ON: HDD has failed and should be swapped immediately Blinking: 1. RAID rebuilding 2. Locating (blinking with the HDD activity LED) OFF: HDD not present

2.3 Prerequisites

The following prerequisites are necessary before proceeding to Section 2.4.

- A PC, which required to have the following
 - Ethernet connectivity to the FlowMagic-3200 Appliance
 - Microsoft Windows XP or Microsoft Windows 7 or later
 - The latest browser such as Chrome from Google, or Firefox from Mozilla and Safari from Apple Inc. if running on a MAC OS.
 - Optionally, a working serial port or a USB to serial port converter for debugging purpose
- 110-240V 50-60Hz Power Connector with 2-8Amps capacity

2.4 Steps to connect cables

Please use the following steps to connect FlowMagic to necessary interfaces on PC.

2.4.1 Ethernet based Management Port Connection

Use Ethernet cable Cat.5 or better to connect FlowMagic management port to a switch or PC. The management Ethernet cable is not provided in the packing list.

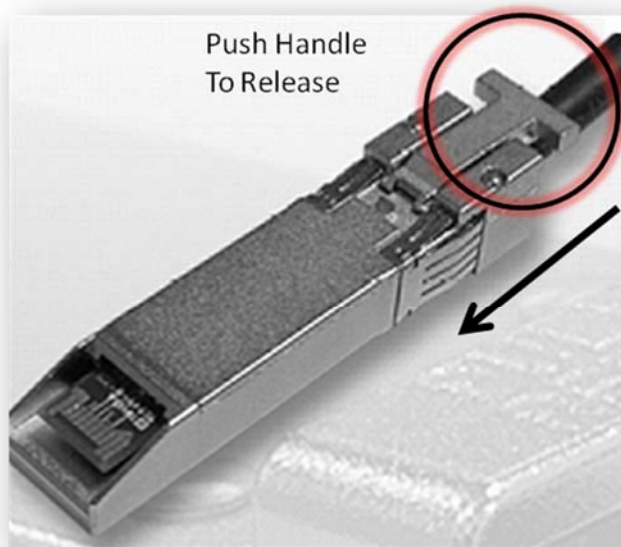
2.4.2 Optional: VGA Connection

Use a VGA cable to connect FlowMagic VGA port to monitor. Fasten the screw on the VGA connector.

2.4.3 Optional: Establish Traffic Port Connections

Depending on the traffic module(s) installed, please use suitable optics modules and fiber cables or DACs, or Ethernet cables to connect the traffic ports.

Tip: For most of the SFP/SFP+/SFP28/QSFP+/QSFP28 DAC cables, please note that to disconnect the cable, there is usually a lock need to be pushed or pulled to release the cable. Below is an example of one kind of DAC with a push handle lock, the handle is located beneath the DAC plug, and push the handle to release the cable, as shown in the following figure.



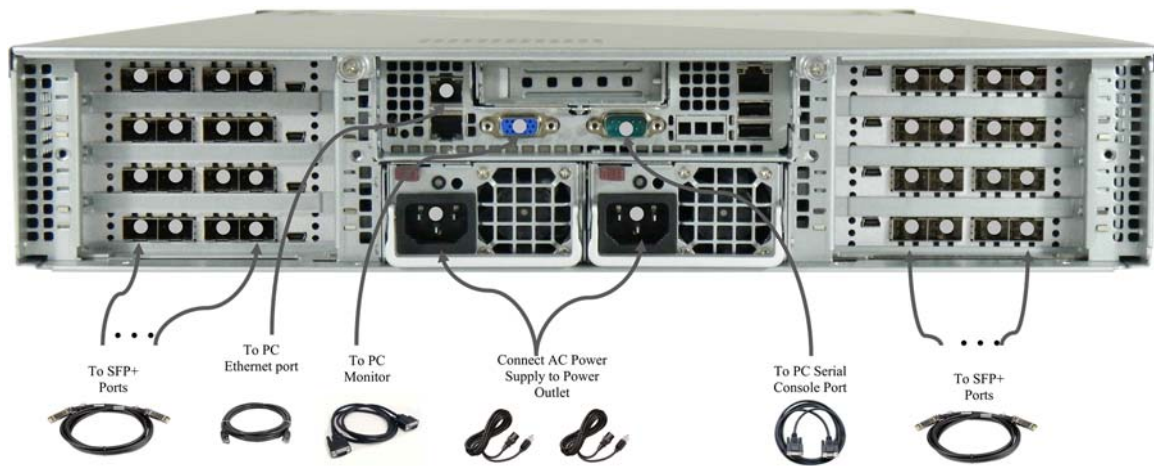
SFP+ DAC Cable Release Latch

2.4.4 Power Cord Connection

At last, use the power codes included in the package to connect FlowMagic-3200 appliance to the power source.

2.4.5 Connections

The following figure displays an example of FlowMagic-3200 Appliance with all previous mentioned connections in place.



An Example of FlowMagic-3200 Cable Connections

Chapter 3 Installation of Latest Version of Browser

This chapter will provide step by step guidance to install a modern browser to a PC used in previous chapter. You may skip this entire chapter if you have one of the following browser installed already.

- [Mozilla Firefox](#)
- [Google Chrome](#)
- [Microsoft Internet Explorer 9 or after](#)
- [Apple Safari](#)

3.1 Prerequisites

3.1.1 Download web browser

Modern web browsers are often provided for free by many different vendors. The following browser products are recommended to use with FlowMagic-3200.

- Microsoft Windows XP, Windows Vista, Windows 7 and Windows 8

Chrome from Google Inc.

<https://www.google.com/intl/en/chrome/browser/>

Firefox from Mozilla Foundation

<https://www.mozilla.org/en-US/firefox/new/>

- Microsoft Windows 8

Internet Explorer 9, 10 from Microsoft Inc.

Chrome from Google Inc.

<https://www.google.com/intl/en/chrome/browser/>

Firefox from Mozilla Foundation

<https://www.mozilla.org/en-US/firefox/new/>

- MAC OS

Safari from Apple Inc.

- Linux Distributions

Firefox from Mozilla Foundation

<https://www.mozilla.org/en-US/firefox/new/>

3.1.2 The TeraTerm

Since Windows 7, Microsoft does not include HyperTerminal program into their operating system, which is often used to establish console access, we recommend you use a program called TeraTerm that can be found at the following link. You can skip this step if you have alternative application that provides console access.

<http://hp.vector.co.jp/authors/VA002416/tterm23.zip>



Chapter 4 Power on and Power off the FlowMagic-3200 Appliance

This chapter describes the power on and power off process of FlowMagic-3200 Appliance.

4.1 Power-On Sequence

Before powering on the FlowMagic-3200 appliance, please be noted that FlowMagic-3200 appliance has a default IP address of “**192.168.0.221/24**”. In order to prevent IP address conflict, when you are not sure, please leave the Ethernet cable unplugged to your network. Instead directly connect the appliance with a desktop or a laptop to change the IP address from GUI.

When ready, please press power on button to turn the appliance on.

It will take about 5 minutes or less before the appliance to be ready to use.

4.2 Power-Off Sequence

There are two ways to initiate power off sequence.

- The Power off sequence is entered when power button is pressed again when the appliance is on.
- When the chassis is not power off, press and HOLD the Power off button for 15 seconds or less will force the appliance to be powered off.

As the last resort, when the chassis still stays on, pull out the power cords when the above methods failed.

Chapter 5 Use Command Line Interface to Setup Management Parameters

After FlowMagic-3200 Appliance has been boot up, it is the time to setup the management parameters through the attached monitor/keyboard, network or serial port. The settings will take effect immediately after the configuration is changed.

Please note the FlowMagic-3200 Appliance allows user to attach a Monitor and Keyboard directly to configure the appliance. It is easier to use than the serial port.

Please note that when serial port is used to connect to PC, a cross-over NULL modem cable is needed for computer to establish connection to FlowMagic-3200.

The following table lists the necessary parameters that are required to be set.

Parameter	Meaning	Importance	Command
Management IP	Management IP address and netmask	Mandatory	config interface mgmt ip
Gateway	Gateway	Optional	Config interface mgmt gateway
Date	Date and Time	Optional	Config system date
Host name	Name of the appliance	Optional	Config system hostname
Description	Description about the appliance	Optional	Config system desc
Location	Location of the appliance	Optional	Config system location
Contact	Administrator Contact Information	Optional	Config system contact

The following sections will guide you through the setup.

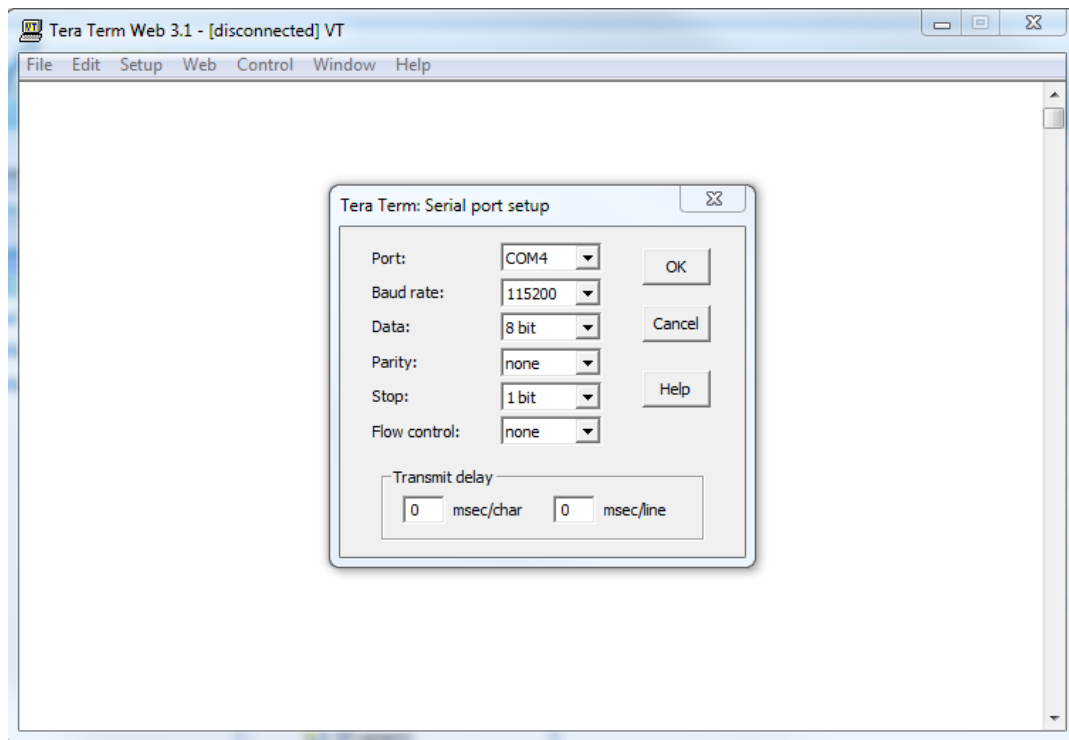
5.1 Set up serial port on PC

The console port of FlowMagic-3200 Appliance runs at the following settings.

- Baud Rate: 115200
- Data Bits: 8 bit
- Stop Bits: 1 bit
- Parity: No
- Flow Control: No

The serial port setting used by your console application needs to match the setting above for successfully communication. The following is screen shots of the port setting using Tera Term and Microsoft HyperTerminal.

5.1.1 Tera Term Serial Port Setting Window



5.1.2 Hyper Terminal Port Setting Window

Configure Hyper Terminal similarly to the settings shown in the 5.1.1.

5.2 Login to Command line interface

Each FlowMagic Appliance comes with default administrator account WITHOUT password:

Username: admin

Password:

5.3 Navigation Keys used in Command Line Interface

The command line interface embedded in FlowMagic-3200 Appliance follows popular Cisco CLI style. One can get help information by pressing "?" key at any time.

```
FlowMagic# help keys

..      : Up one command level
Backspace: Delete one character before cursor
Enter   : execute command
Ctrl+z  : Back to the top level command
Ctrl+c  : Discard current input line

FlowMagic#
FlowMagic# show running
```

Hardware Platform	:	
Serial Number	:	04194951
InfiniOS Version	:	1.0.3
Control Plane CPU	:	Intel(R) Xeon(TM) CPU @ 1.80GHz
Control Plane Version	:	x86-0.9.35
CP Memory Max/Free	:	516472832/309981184
CP Core Temp	:	30.0 (C)
Management IP Address	:	192.168.0.221
Netmask	:	255.255.255.0
Gateway	:	192.168.0.1

5.4 Configure the network parameters and system parameters

The following commands are used as an example to complete the setting of the following parameters:

- IP address: 192.168.0.155/255.255.255.0
- Gateway: 192.168.0.1
- Hostname: QC01
- Location: QClab02-Rack1
- Administrator Contact: "x613 admin"
- Date: 2013-02-29 16:28:00

```
FlowMagic# config interface mgmt ip 192.168.0.155/24
System IP address set to 192.168.0.155 with netmask 255.255.255.0
FlowMagic# config interface mgmt gateway 192.168.0.1
Default gateway address is set to 192.168.0.1
FlowMagic# config system
FlowMagic# system# ?

hostname      - name of the system
description   - description of the system
location      - location of the system
contact       - administrator contact
date          - Date and Time Settings

FlowMagic system# hostname QC01
QC01 system# description QC
QC01 system# location QClab02-Rack1
QC01 system# contact x613 admin
QC01 system# date 2013-02-29 16:28:00
QC01 system#
```

After the management IP address has been configured to the FlowMagic-3200 Appliance, the appliance is expected to be accessible through the network.

Chapter 6 Validation of FlowMagic Appliance Hardware

After the chassis is received from shipping, it is recommended to validate functionality of critical components before commissioning the appliance into production.

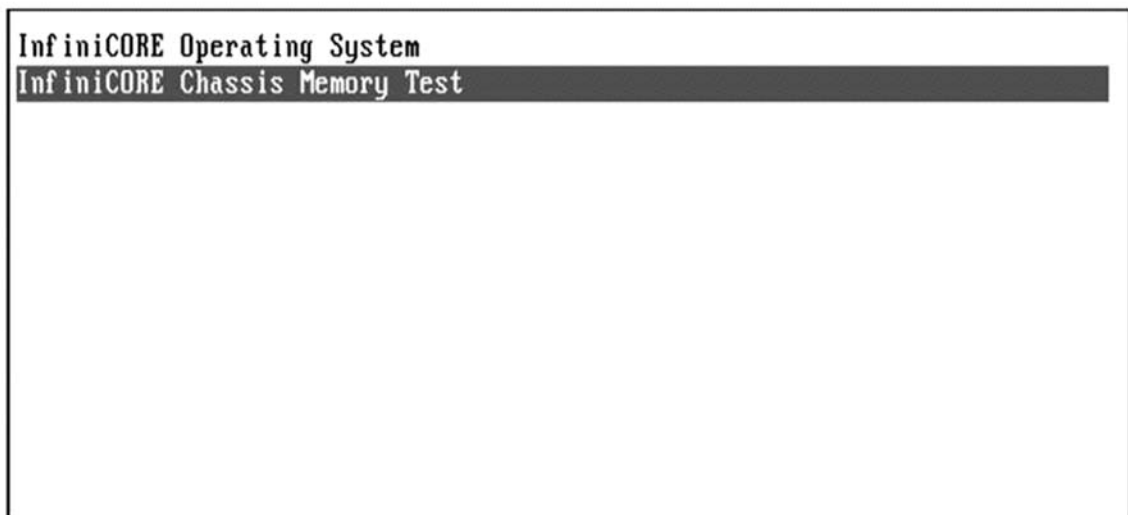
FlowMagic appliance is purposefully shipped with the following easy to use test cases.

- Validation of Processor and Memory Sub System
- Validation of Hard Disk Drives

6.1 Validation of Processor and Memory Sub System

FlowMagic-3200 is equipped with a CPU and memory stress test that can be triggered from the boot up menu. To do this test, please have the VGA monitor and keyboard connected.

After VGA and Keyboard is connected, power on the appliance.



Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the commands
before booting or 'c' for a command-line.

During the boot up pause, please choose the “InfiniCORE Chassis Memory Test” from the boot menu to invoke the memory test. Once the test starts, the following screen shot will be shown up.

```

Memtest86 v4.20 | Pass 0%
Pentium M (0.09) 1800 MHz | Test 3% #
L1 Cache: 32K 60001 MB/s | Test #0 [Address: test, walking ones]
L2 Cache: 256K 25352 MB/s | Testing: 28G - 30G 48G
L3 Cache: 10240 17647 MB/s | Pattern: 00000000
Memory : 48G 11043 MB/s |-----
Chipset :

WallTime  Cached  RsvdMem  MemMap  Cache  ECC  Test  Pass  Errors  ECC  Errs
-----
0:00:03    48G    6760K    e820    on  off  Std    0    0

(ESC)Reboot (c)configuration (SP)scroll_lock (CR)scroll_unlock

```

This test is designed to stress the CPU and memory system.

It is recommended to have the test run for 1 hour or longer to be confident that there is not any defect in the processor sub system and memory sub system.

Press ESC any time to stop the test and reboot.

6.2 Validation of Hard Drive Interface

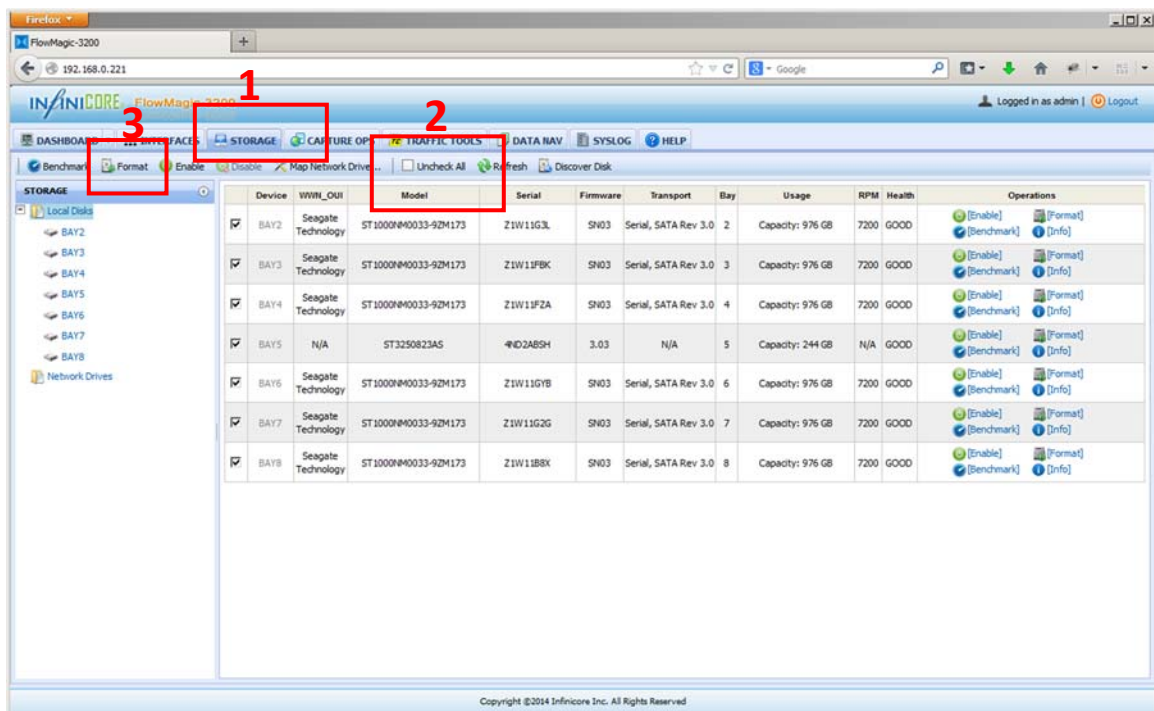
Hard Drive is a critical component to FlowMagic system. The FlowMagic System Software provides a benchmark utility that can be used to stress test hard drive interfaces and drives themselves.

Before we start to validate hard drives, please install the drives properly into the FlowMagic system and power up the FlowMagic.

6.2.1 Format the disk

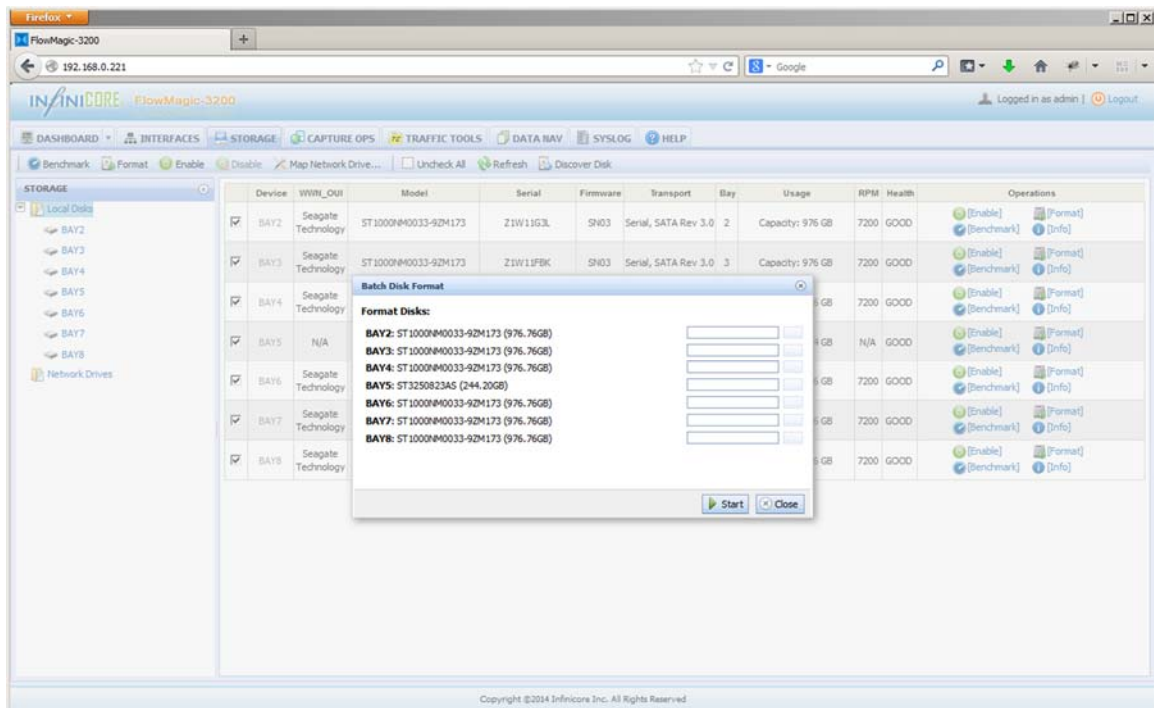
After system is boot up, navigate to “STORAGE” tab, verify the hard drives are properly detected and listed in the client area.

Choose “Check All” then click “Format”



Once “Format” is clicked, the format dialog will show up.

Click on “Start” to start format all drives.

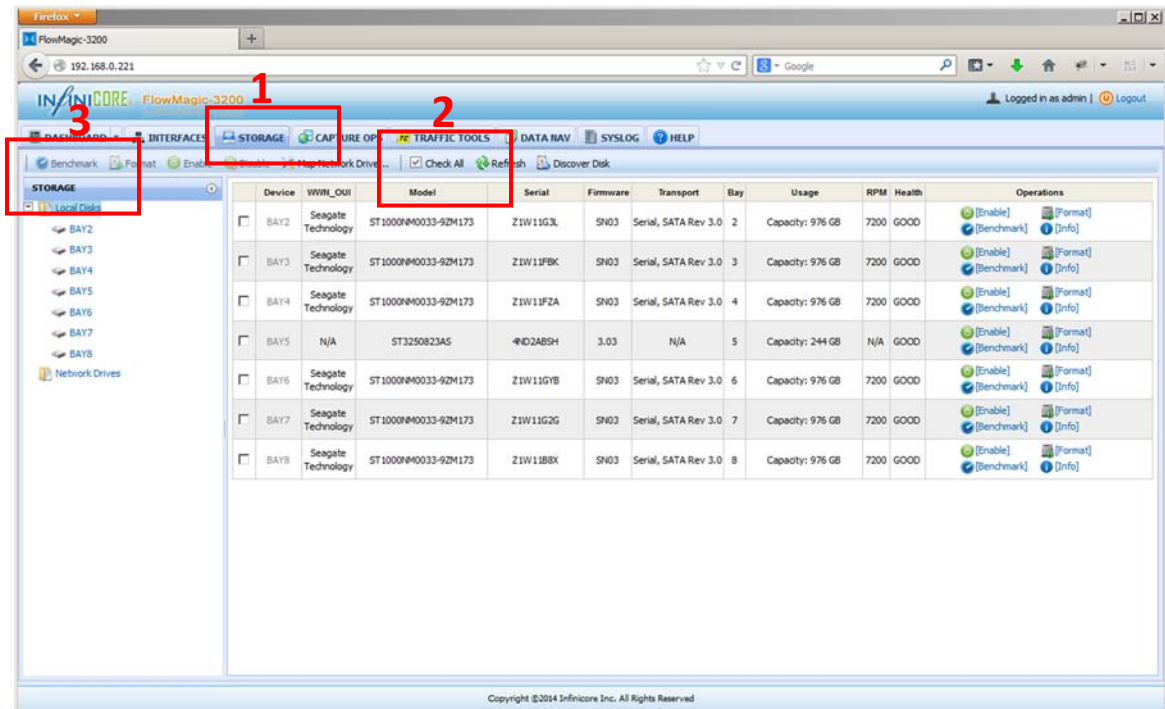


6.2.2 Benchmark and Validate Disk Drives

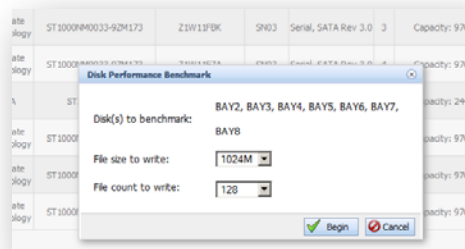
After disk drives are properly formatted. Please navigate to “STORAGE” TAB by clicking “STORAGE” as shown below.

Please click “Check All”;

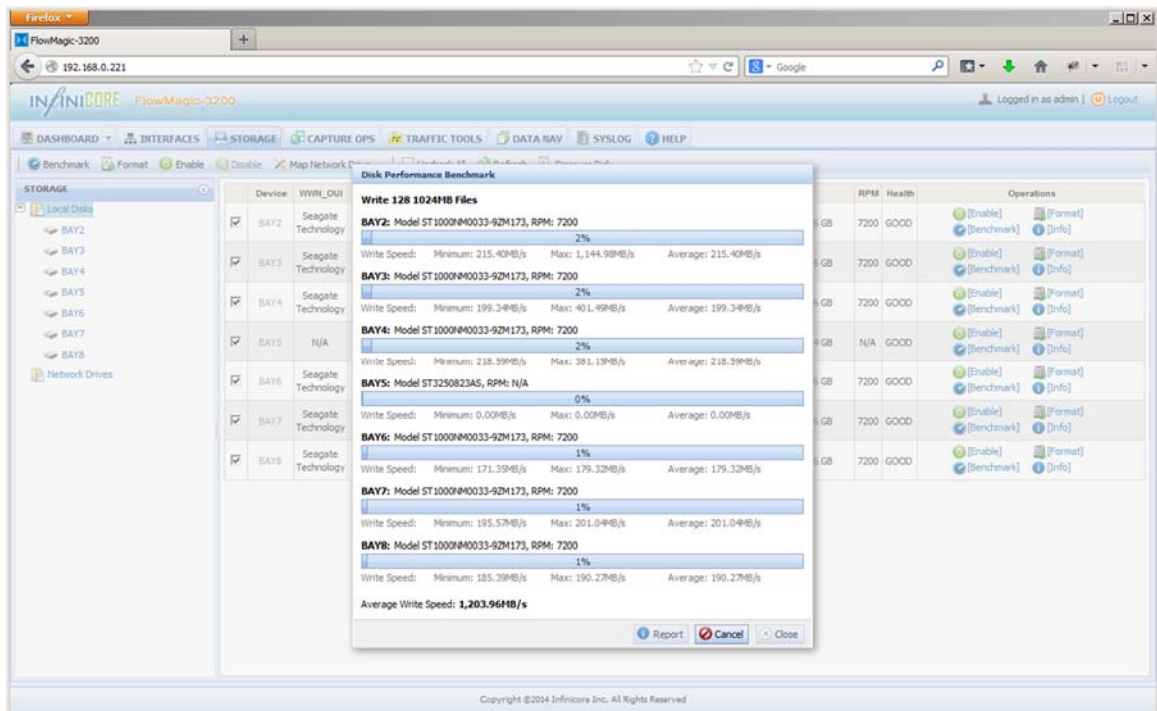
Please click “Benchmark”.



After click “Benchmark”, a dialog will pop up and display the settings for the benchmark.



Select desired file size and count. Please note that the total number of bytes should be smaller than the drive size.



Wait until the test is finished and free of error.

Chapter 7 Overview of FlowMagic-3200 Web User Interface

Once user configured the IP address and FlowMagic-3200 is accessible through network. User can access the FlowMagic-3200 WEB UI by pointing a browser to the IP address of FlowMagic-3200 Appliance. The Web User Interface uses the same administrator account as the command line interface, which is **admin** WITHOUT a password. Please see the following figure for log in window.

Username: admin

Password:



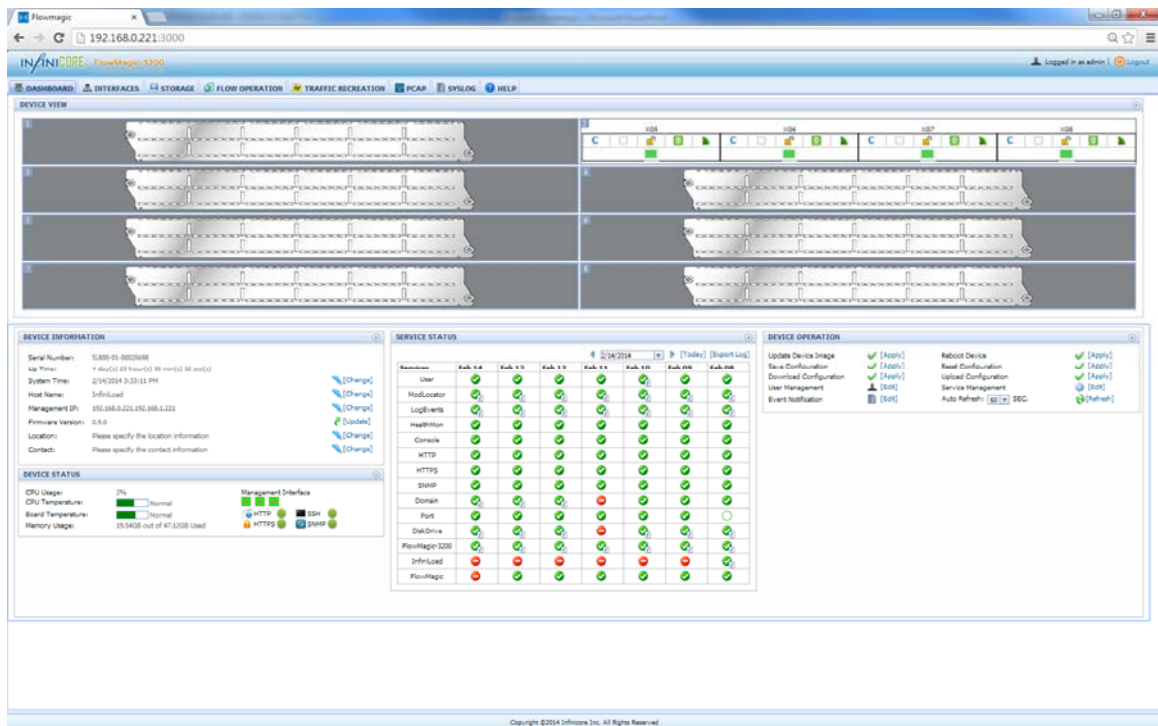
FlowMagic-3200 Login Window

The Web user Interface is a recommended method to interact with FlowMagic appliance. In WebUI, users can perform all the operations such as the following on the device:

- The port management tasks such as allocation, reservation and state management
- Domain management tasks such as creation, deletion, enable, disable domains
- User management tasks such as creation, deletion and edition of users
- Device Information including serial number, firmware version, location and administrator's contact information
- Device operations including the ability to update device firmware, ability to save configuration and ability to reboot the appliance.

7.1 FlowMagic-3200 Web GUI Layout

It is beneficial for users to spend some time to get familiar with the layout of FlowMagic-3200 Web UI layout. Figure below displays a typical Web GUI layout.



FlowMagic-3200 Web GUI Layout

The FlowMagic Web UI has the following eight tabbed views:

- **Dashboard**
Dashboard provides bird's eye view to the device. It also provides a collection of the most frequently used operations without switching the tabs.
- **Interfaces**
Interface tab allows operator to view port settings, admin status, link status, speed, data statistics, interface module types and associated attributes, and manage interface operations.
- **Storage**
Storage tab allows operator to manage storage HDD settings. It also gives a complete view over all available HDDs models, serial, firmware, position, capacity, usage, speed information.
- **Flow Operation**
Flow operation tab gives operator the ability to choose and manage different kinds of traffic operation modes such as flow capture and archival, load balance, traffic replication, traffic aggregation with reverse switching, traffic aggregation and monitor.
- **Traffic Recreation**
Traffic recreation tab gives operator the ability to manage and process all the traffic data created and stored.
- **PCAP**
PCAP tab allows operator to capture and process the network traffic.
- **Syslog**

Syslog gives the operator abilities to view, search and filter log events accumulated since appliance boots.

- [Help](#)
Help view allows operator to view online help documents about the operation of FlowMagic Appliance.

In the following section, we will go through each tab to give you an in-depth overview of the functionalities and typical operations.

Chapter 8 Recommended Reading Material

The following list provides further reading materials when users find the need to gain in-depth knowledge in specific area.

- [UG-101 FlowMagic Firmware Update Guide](#)
- [UG-102 FlowMagic System Recovery Guide](#)
- [UG-103 FlowMagic-3200 Rack Mounting Guide](#)
- [UG-104 FlowMagic-3200 Network Packet Capture Analysis and Export Guide](#)
- [UG-105 FlowMagic-3200 Hard Disk Drive Selection and Storage Management Guide](#)