



TimeLine™

Getting Started Guide

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Contacting WildPackets

Mailing Address

WildPackets, Inc.
1340 Treat Blvd., Suite 500
Walnut Creek, CA 94597

Voice/Fax

8 AM - 5 PM (PST)
(925) 937-3200
(800) 466-2447 (US only)
Fax: (925) 937-3211

Sales

sales@wildpackets.com

Web

<http://www.wildpackets.com>

Technical Support

<http://www.wildpackets.com/support>

Resources

See <http://www.wildpackets.com/support/resources> for white papers, tutorials, technical briefs and more.

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WildPackets Academy
(800) 466-2447
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About WildPackets, Inc.

WildPackets delivers software and hardware solutions that drive network performance, enabling organizations of all sizes to actively monitor, analyze, troubleshoot, optimize, and secure their wired and wireless networks. WildPackets products are sold in over 60 countries and deployed in all industrial sectors, including 80 percent of the Fortune 1000. WildPackets is a Cisco Technical Development Partner. For further information, please visit www.wildpackets.com.

20100826-TL_65a

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TimeLine Network Recorder

About TimeLine

Congratulations on your purchase of a TimeLine Network Recorder from WildPackets! TimeLine is a high-performance, turnkey hardware and software solution that gives network engineers unprecedented, real-time and post-capture visibility into remote network segments. TimeLine runs WildPackets OmniEngine and sends real-time analytics and monitoring results to a central OmniPeek console. TimeLine is an ideal data recorder for network forensics applications, such as incident response operations and policy compliance investigations.

TimeLine ships with CentOS Linux, OmniEngine software, OmniPeek Connect, and an OmniAdapter 1G or 10G analysis card. TimeLine also includes two built-in 10/100/1000 Gigabit Ethernet ports. OmniEngine is a full-featured remote engine that provides packet capture, statistics, graphing, and Expert analysis. OmniPeek Connect manages an organization's TimeLine network recorders, and provides all the console capabilities of OmniPeek Enterprise with the exception of local capture and VoIP call playback. The OmniAdapter 1G or 10G, and the two Ethernet ports provide an interface between TimeLine and your network.

TimeLine is available in different hard disk capacities, including 8TB, 16TB, and 32TB of total disk space. Additional Gigabit and 10 Gigabit network adapters, as well as other hardware, can also be ordered with TimeLine.

This *Getting Started Guide* explains how to set up and configure TimeLine. For detailed instructions on how to view and analyze remote captures from within the OmniPeek console, please see the *OmniPeek User Guide* or OmniPeek online help. For more information on the OmniEngine, please see the *OmniEngine Getting Started Guide* that ships with TimeLine.

What's included

Your standard TimeLine package includes:

- TimeLine main unit
- OmniEngine software pre-installed in TimeLine
- *OmniEngine Getting Started Guide*
- OmniPeek Connect software pre-installed in TimeLine
- *OmniPeek Getting Started Guide*
- OmniAdapter 1G or OmniAdapter 10G
- *OmniAdapter 1G Getting Started Guide* or *OmniAdapter 10G Getting Started Guide*
- *TimeLine Getting Started Guide* (this guide)
- Omnipliance/TimeLine System Disc
- Two power cords
- Rack-mount rails

Hardware summary

Here is a summary of the hardware on the TimeLine:

- 3U rackmount
- Two Intel Xeon Quad Core X5560 2.8GHz CPUs
- Hard disks available in 8TB, 16TB, & 32TB configurations:
 - 16 x 500GB SATA drives, 7200 RPM, RAID 0 (8TB total disk space)
 - 16 x 1TB SATA drives, 7200 RPM, RAID 0 (16TB total disk space)
 - 16 x 2TB SATA drives, 7200 RPM, RAID 0 (32TB total disk space)
- Two 160GB SATA drives (non-RAID) for OS (8TB or 16TB configurations only); or two 250GB SATA drives (non-RAID) for OS (32TB configuration only)
- Two RAID controllers
- DVD-ROM
- Four available PCI Express 2.0 x8 slots
- 18GB RAM

- LCD Display
- Two built-in 10/100/1000 Gigabit Ethernet ports
- OmniAdapter 1G or 10G
- Intelligent Platform Management Interface (IPMI)

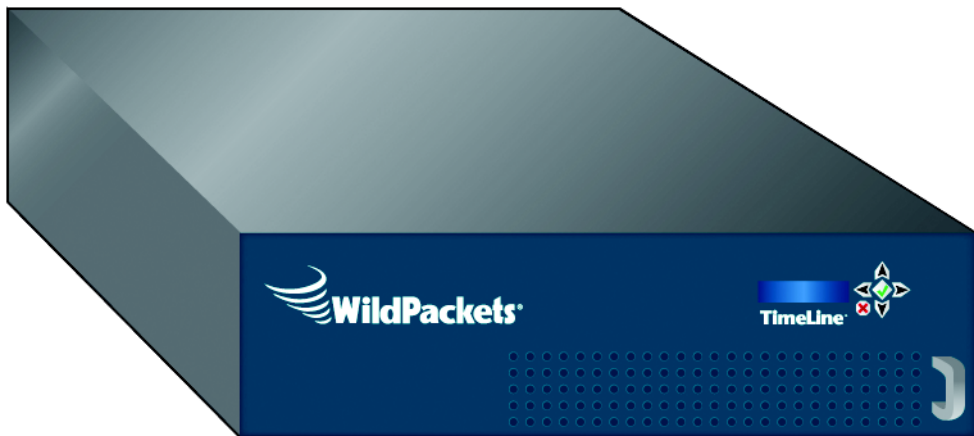
Optional hardware

In addition to the standard TimeLine software and hardware, you can order the following hardware with TimeLine:

- WildPackets OmniAdapter 1G (Gigabit Analyzer Card)
- WildPackets OmniAdapter 10G (10 Gigabit Analyzer Card)
- Intel® PRO/1000 Server Adapter
- Intel® PRO 10 Gigabit Server Adapter
- Taps
- Matrix switches

Note Refer to the documentation for the optional hardware for information on connecting cables, installing drivers, configuring settings, troubleshooting, and more.

Installing TimeLine



Important! The front bezel on TimeLine can be unscrewed to access the DVD-ROM drive; however, be very careful not to disconnect or damage the LCD control wiring connected to the bezel when accessing the DVD-ROM drive.

To install TimeLine:

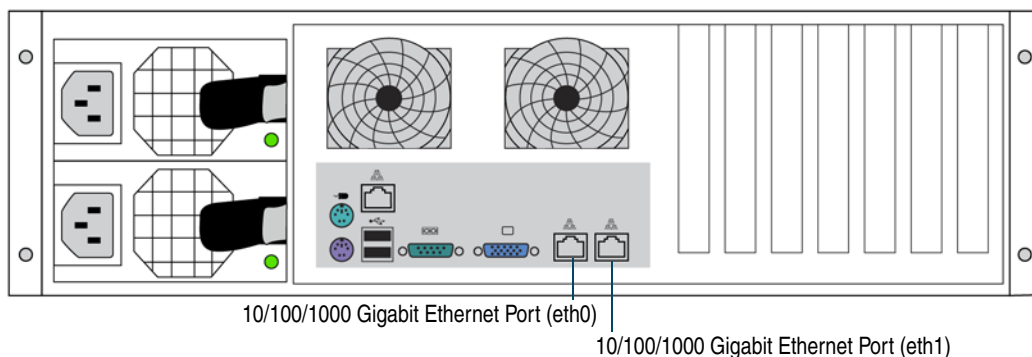
1. Place TimeLine on a flat surface, or mount it in a standard 19-inch equipment rack.
 2. Connect a power cable to each of the two power outlets at back of the unit.
-

Note TimeLine has an 800 watt redundant high-efficiency “hot-swappable” power supply. Once a power module fails, it should be replaced immediately. If your TimeLine is under warranty, please contact WildPackets Technical Support to arrange for a replacement power supply.

3. Plug the other end of the power cables to an AC outlet.

Connecting network cables

TimeLine includes two built-in 10/100/1000 Gigabit Ethernet ports.



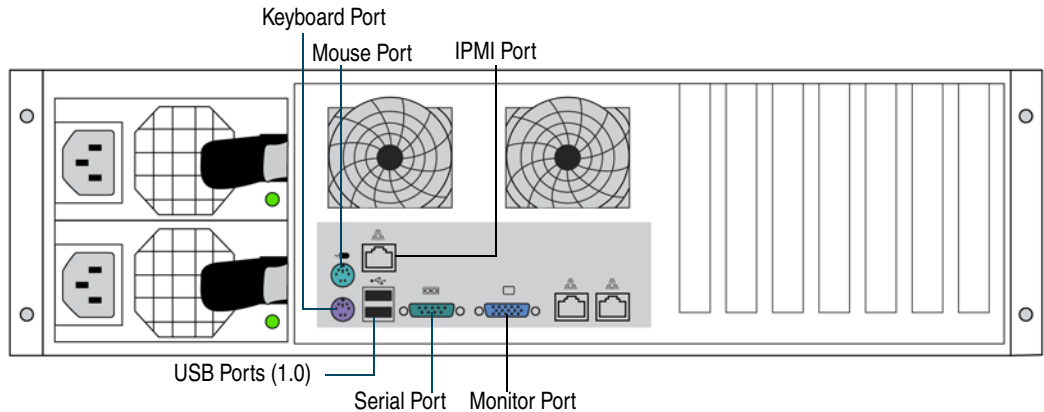
To connect network cables:

- Use a standard Ethernet cable to connect these ports to your network.
-

Tip To reach TimeLine through an SSH connection, you can use a cross-over cable connected between the Gigabit Ethernet port on TimeLine and your PC or laptop. The PC or laptop must be configured on the same IP subnet.

Connecting peripherals

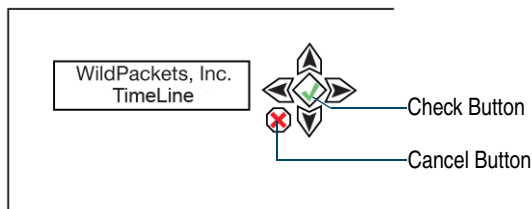
You can connect peripherals such as a mouse, keyboard, and monitor to TimeLine. This allows you to configure any optionally purchased hardware directly from TimeLine. The ports for the peripherals are shown below.



Starting TimeLine

To start TimeLine:

- Turn on TimeLine by pressing and holding down the ✓ (**Check**) button LCD control. After TimeLine has finished loading, the LCD displays the WildPackets welcome screen.



Shutting down TimeLine

You can shut down TimeLine from the LCD controls (described below) or from the OS.

To shut down using the LCD controls:

1. Make sure that multiple users are not logged into TimeLine.
2. From the welcome screen press the ✕ (**Cancel**) button twice to display the option to initiate a system shut down.

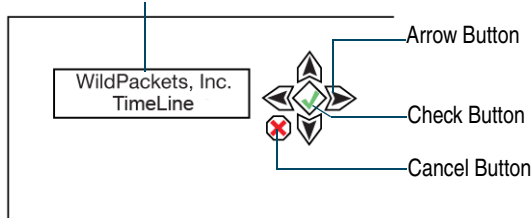
3. Press the ✓ (**Check**) button to shut down.

Using the LCD controls to configure settings

The LCD and LCD controls on the front bezel of TimeLine allow you to configure the following:

- **Ethernet Adapter Configuration.** See *Ethernet adapter configuration* on page 6.
- **NTP Time Server Configuration.** See *NTP time server configuration* on page 8.
- **Timezone Configuration.** See *Timezone configuration* on page 9.

LCD (Liquid Crystal Display)



Here are descriptions of the LCD controls:

- Pressing the ✓ (**Check**) button allows you to continue to the next screen and/or to confirm your settings.
- Pressing the ✕ (**Cancel**) button returns you to an earlier screen.
- Pressing one of the four ←→↑↓ (**Arrow**) buttons allows you to scroll up and down or right and left.

Ethernet adapter configuration

The two built-in Gigabit Ethernet ports (*eth0* and *eth1*) on TimeLine can be configured through the LCD controls. If optional cards are purchased, they will already be installed and configured when TimeLine is shipped to you. Further configuration of optionally purchased cards can be done remotely through an SSH connection, or locally by connecting a monitor, mouse, and keyboard to TimeLine.

There are four Ethernet adapter configuration settings in TimeLine:

- IP Address
- Subnet Mask
- Default Gateway

- DNS (Domain Name Server) address

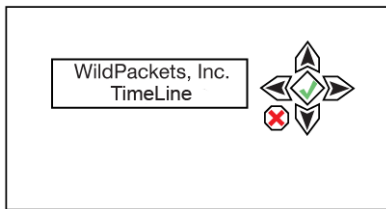
You can configure these network settings in one of two ways:

- Obtain them automatically from a DHCP server, which is the default for most of the network settings in TimeLine. By default, *eth0* is configured for DHCP and *eth1* is configured as “static” but with no specified IP address. These settings can be modified manually through the LCD controls. The DHCP server must be accessible from one of the built-in Gigabit Ethernet ports.
- Set static addresses manually through the LCD controls.

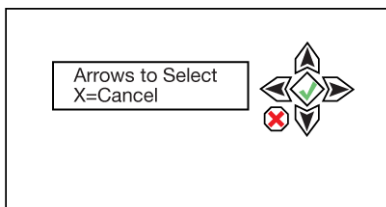
Important! Before configuring the ports on TimeLine, make sure an Ethernet cable is connected from at least one of the Gigabit Ethernet ports to your network.

To view or set the Ethernet adapter configuration settings:

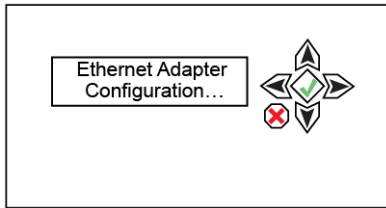
1. From the WildPackets welcome screen press the ✓ (**Check**) button.



2. Press the ←→ (**Arrow**) buttons to select the *Ethernet Adapter Configuration...* settings.



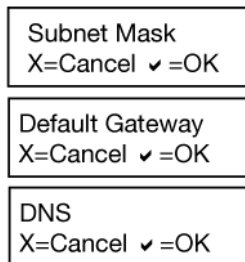
3. Press the ✓ (**Check**) button.



4. Follow the LCD prompts to view or set the four Ethernet adapter configuration settings.

Note To enter or change IP addresses, press the up and down **↑↓ (Arrow)** buttons to change the number at the current cursor position, and the **←→ (Arrow)** buttons to change cursor positions.

Note Ethernet ports *eth0* and *eth1* are set up to use the same *Default Gateway* and *DNS* settings. You can configure the *Default Gateway* and *DNS* address for either *eth0* or *eth1*.



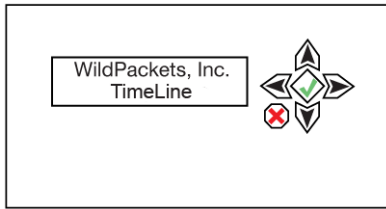
Important! If a setting cannot be configured, the LCD displays an *IP Config Error* message. Press the **✖ (Cancel)** button to return you to the welcome screen. From the welcome screen, press the **✖ (Cancel)** button twice to initiate a system shut down. Once shut down, restart TimeLine and try configuring the setting again.

NTP time server configuration

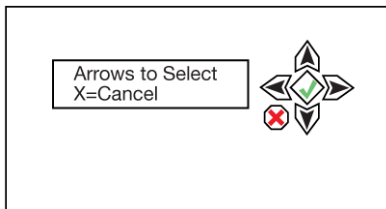
The Network Time Protocol (NTP) is used to synchronize the clocks of computers over a network. To synchronize the TimeLine clock, you can specify the IP address of an NTP server on either the local network or on the Internet.

To view, add, edit, or delete the NTP time server configuration settings:

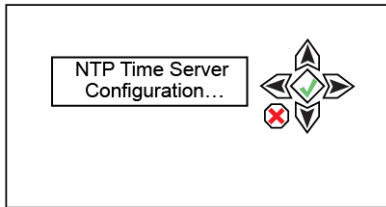
1. From the WildPackets welcome screen press the ✓ (**Check**) button.



2. Press the ←→ (**Arrow**) buttons to select the *NTP Time Server Configuration...* settings.



3. Press the ✓ (**Check**) button.



4. Follow the LCD prompts to view, add, edit, or delete the NTP Time Server configuration settings.

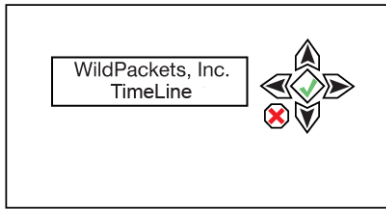
Note To enter or change IP addresses, press the up and down ↑↓ (**Arrow**) buttons to change the number at the current cursor position, and the ←→ (**Arrow**) buttons to change cursor positions.

Timezone configuration

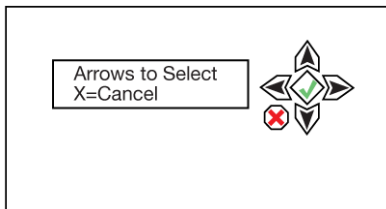
You can set the time zone for TimeLine by selecting your computer's physical location.

To view or change the Timezone configuration settings:

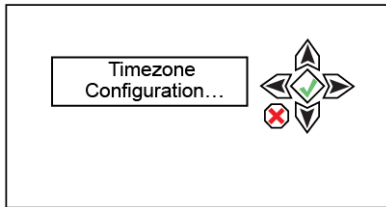
1. From the WildPackets welcome screen press the ✓ (**Check**) button.



2. Press the ←→ (**Arrow**) buttons to select the *Timezone configuration...* settings.



3. Press the ✓ (**Check**) button.



4. Follow the LCD prompts to view or to change the current time zone setting.

Note To enter or change IP addresses, press the up and down ↑↓ (**Arrow**) buttons to change the number at the current cursor position, and the ←→ (**Arrow**) buttons to change cursor positions.

Logging-in for the first time

You can log into TimeLine in one of two ways:

- Remotely, using remote software such as **SSH**
- Locally, by connecting a monitor, mouse and keyboard to TimeLine

The first time you log into TimeLine, use the following as your username and password:

username: *root*

password: *wildpackets*

After you have logged into TimeLine for the first time, you can then change your password and add users and privileges.

Note For security reasons, we strongly recommend changing the default password.

Using TimeLine with OmniPeek

Any computer on the network with an installed OmniPeek console can now access the OmniEngine running on TimeLine. From the **Remote Engines** window in OmniPeek, you can configure, control, and view the results of the OmniEngine remote captures on TimeLine.

For more information on how to view and analyze remote captures using the OmniPeek console, please see the *OmniPeek User Guide* or OmniPeek online help.

System fans

TimeLine has three front fans, an air shroud, and two rear exhaust fans that are used to the cool the system chassis. If any one of the fans fail, it should be replaced immediately. If your TimeLine is under warranty, please contact WildPackets Technical Support to arrange for a replacement fan.

Important! The chassis top cover must be properly installed in order for the cooling air to circulate correctly through the chassis and cool the components.

Contacting WildPackets support

Please contact <http://www.wildpackets.com/support/contact> if you have any questions about the installation and use of TimeLine.

An RMA (Return Material Authorization) number must be obtained from WildPackets before returning hardware. Please contact WildPackets Support at <http://www.wildpackets.com/support/contact> for instructions.

Technical specifications

Specification	Description
Memory Capacity	12 240-pin DIMM sockets. Supports up to 32GB 667/533MHz DDR2 ECC FB-DIMM memory.
Expansion Slots	Four available PCI Express x8 slots
Chassis Dimensions (HxWxD):	3U Rackmount 17.1 x 5.1 x 25.5 in. (434 x 132 x 648 mm)
System Cooling	Five chassis cooling fans (hot-pluggable)
System Input Requirements AC Input Voltage: Rated Input Current: Rated Input Frequency:	100-240 VAC 100 (11A) - 240V (5A) 50-60 Hz
Power Supply (2 units) Rated Output Power:	800W
Operating Environment Operating Temperature: Non-operating Temperature: Operating Relative Humidity: Non-operating Relative Humidity:	10° to 35° C (50° to 95° F) -40° to 70° C (-40° to 158° F) 8% to 90% (non condensing) 5% to 95% (non condensing)
