



**Omniplianc<sup>®</sup> Core**  
Getting Started Guide

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See <http://www.wildpackets.com/services> for course catalog, current public course scheduling, web-delivered courses, and consulting services.

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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](http://www.wildpackets.com).

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# Omnpliance Core

## About Omnpliance Core

Congratulations on your purchase of Omnpliance Core from WildPackets! Omnpliance Core is a high-end, 3U rack-mount server with pre-loaded OmniEngine software—a turnkey system optimized for capture and analysis in distributed networks. Omnpliance Core comes with 8TB or 16TB of total disk space, and is available in either a Linux or Windows version:

- **Omnpliance Core Linux:** Includes CentOS Linux and supports 10/100/1000 Ethernet, Gigabit, and 10 Gigabit Ethernet networks.
- **Omnpliance Core Windows (8TB configuration only):** Includes Windows Server 2008 and supports 10/100/1000 Ethernet, Wireless 802.11 a/b/g/n, Gigabit, and 10 Gigabit Ethernet networks.

Omnpliance Core works in conjunction with OmniPeek, a separately purchased software program required for the monitoring and analysis of the packets captured remotely by the OmniEngines.

Omnpliance Core ships with OmniEngine software, and 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. The two Ethernet ports provide an interface between Omnpliance Core and your network.

Additional Gigabit and 10 Gigabit Ethernet adapters, as well as other hardware, can also be ordered with Omnpliance Core.

This *Getting Started Guide* explains how to set up and configure Omnpliance Core. 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 Omnpliance Core.

## What's included

Your standard Omnipliance Core package includes:

- Omnipliance Core main unit
- OmniEngine software pre-installed in Omnipliance Core
- (Omnipliance Core Windows only) Windows Server 2008 software CD. The Windows 2008 Server Operating System is pre-installed in Omnipliance Core.
- *OmniEngine Getting Started Guide*
- *Omnipliance Core Getting Started Guide* (this guide)
- Omnipliance System Disc/Recovery Disc
- Two power cords
- Rack-mount rails

## Hardware summary

Here is a summary of the hardware on the Omnipliance Core:

- 3U rackmount
- Two Intel Xeon Quad Core E5530 2.4GHz CPUs
- Hard disks available in 8TB and 16TB configurations:
  - Eight 1TB SATA Drives, RAID 0 (8TB total disk space)
  - Eight 2TB SATA Drives, RAID 0 (16TB total disk space)
- 160GB SATA Drive (non-RAID) for OS
- DVD-ROM drive
- Four available PCI Express 2.0 x8 slots
- 6GB RAM
- LCD Display
- Two built-in 10/100/1000 Gigabit Ethernet ports
- Intelligent Platform Management Interface (IPMI)

## Optional hardware

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

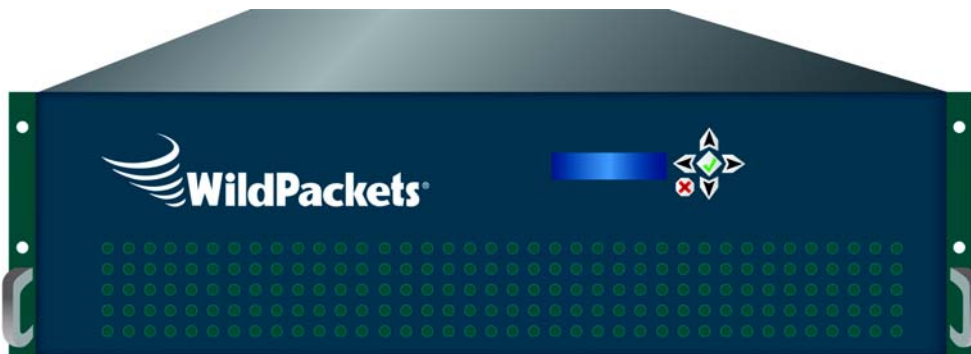
- WildPackets OmniAdapter 1G (Gigabit Analyzer Card)
- WildPackets OmniAdapter 10G (10 Gigabit Analyzer Card)
- Intel® PRO/1000 Server Adapter
- Intel® PRO 10 Gigabit Server Adapter
- Taps
- Matrix switches

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

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## Installing Omnipliance Core



To install Omnipliance Core:

1. Place Omnipliance Core 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.

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

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

## Accessing the DVD-ROM drive

The hinged front bezel on the Omnipliance Core can be easily opened to access the DVD-ROM drive.

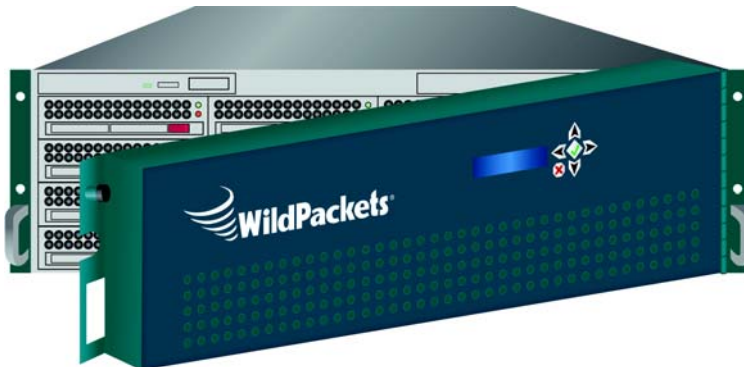
To access the DVD-ROM drive:

- Loosen the thumb screw on the left side of hinged bezel and carefully swing the bezel open wide enough to access the DVD-ROM drive.

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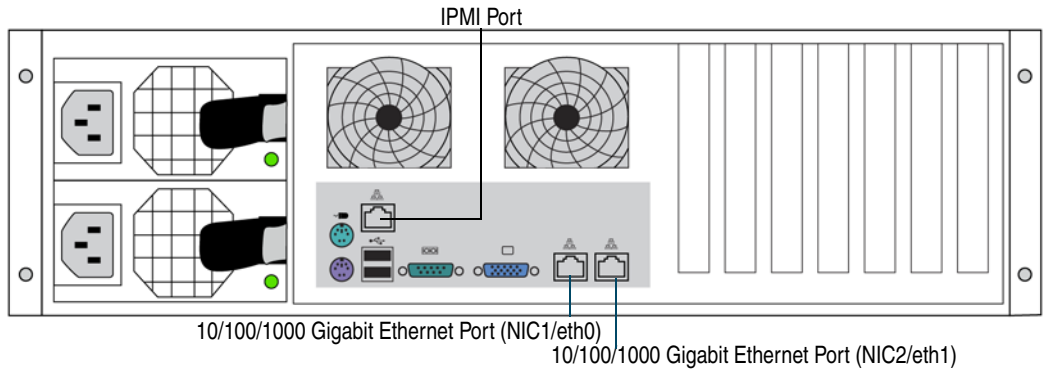
**CAUTION!** Be very careful not to disconnect or damage the LCD control wiring connected to the bezel when opening and closing the hinged bezel and accessing the DVD-ROM drive. The retention bars inside the bezel are used to secure the disk drives in the chassis.

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## Connecting network cables

Omnipliance Core includes two built-in 10/100/1000 Gigabit Ethernet ports and a single Intelligent Platform Management Interface (IPMI) port used for remotely accessing and troubleshooting the Omnipliance Core. For more information about using the IPMI interface, refer to the IPMI guide available at [ftp://ftp.wildpackets.com/pub/outgoing/IPMI\\_Guide.pdf](ftp://ftp.wildpackets.com/pub/outgoing/IPMI_Guide.pdf).



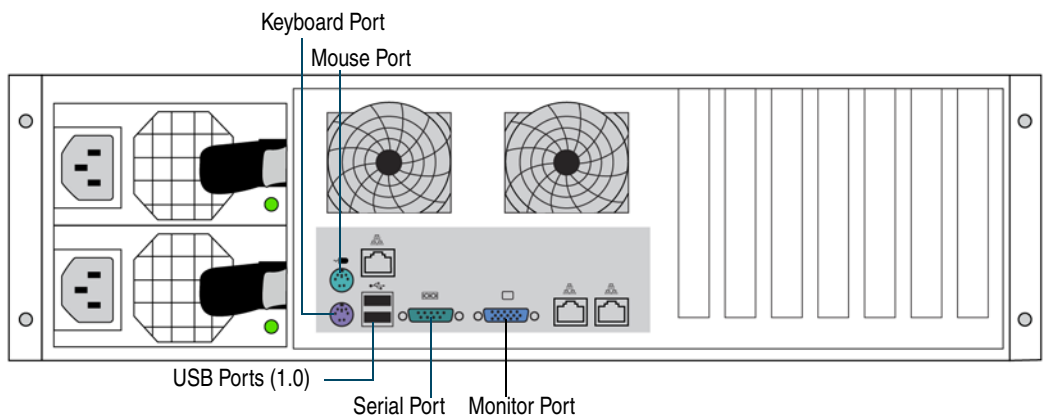
To connect network cables:

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

**Tip** To reach Omnipliance Core through an SSH connection (Linux) or a Remote Desktop (Windows), you can use a cross-over cable connected between the Gigabit Ethernet port on Omnipliance Core and your PC or laptop. The PC or laptop must be configured to be on the same IP subnet.

## Connecting peripherals

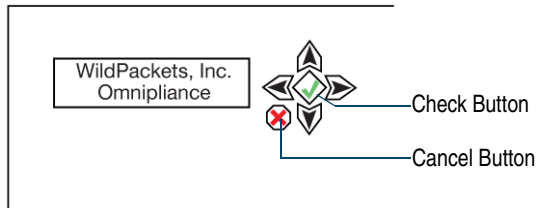
You can connect peripherals such as a mouse, keyboard, and monitor to Omnipliance Core. This allows you to configure any optionally purchased hardware directly from Omnipliance Core. The ports for the peripherals are shown below.



## Starting Omnpliance Core

To start Omnpliance Core:

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



## Shutting down Omnpliance Core

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

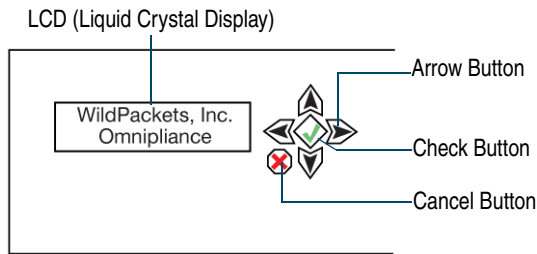
To shut down using the LCD controls:

1. Make sure that multiple users are not logged into the Omnpliance Core.
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 Omnpliance Core allow you to configure the following:

- **Ethernet Adapter Configuration.** See *Ethernet adapter configuration* on page 7.
- **NTP Time Server Configuration** (Omnpliance Core Linux only). See *NTP time server configuration* on page 9.
- **Timezone Configuration** (Omnpliance Core Linux only). See *Timezone configuration* on page 11.



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 Gigabit Ethernet ports on Omnipliance Core can be configured through the LCD controls. If optional cards are purchased, they will already be installed and configured when Omnipliance Core is shipped to you. Further configuration of optionally purchased cards can be done remotely through an SSH connection (Linux) or a Remote Desktop connection (Windows), or locally by connecting a monitor, mouse, and keyboard to Omnipliance Core.

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**Note** For Omnipliance Core Windows, the two Ethernet ports appear as *Intel Gig NIC 01* and *Intel Gig NIC 02* in the Omnipliance LCD controls. For Omnipliance Core Linux, the two Ethernet ports appear as *eth0* and *eth1* in the Omnipliance LCD controls.

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There are four network settings to configure in Omnipliance Core:

- 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 Omnipliance Core. For Omnipliance Core Linux, 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.

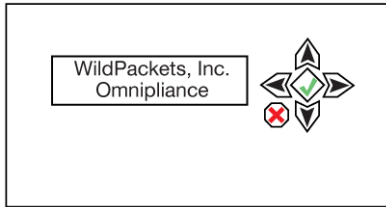
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**Important!** Before configuring the ports on Omnipliance Core, make sure an Ethernet cable is connected from at least one of the Gigabit Ethernet ports to your network.

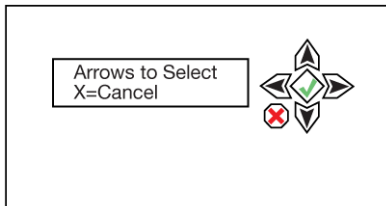
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To view or set the Ethernet adapter configuration settings:

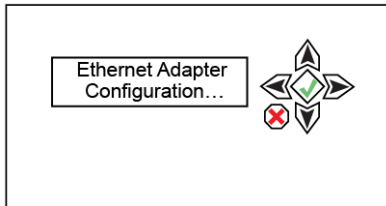
1. From the WildPackets welcome screen press the ✓ (**Check**) button.



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.

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**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.

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**Note** For Omnipliance Core Linux, *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*.

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Subnet Mask X=Cancel ✓ =OK
Default Gateway X=Cancel ✓ =OK
DNS X=Cancel ✓ =OK

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**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 Omnipliance Core and try configuring the setting again.

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## NTP time server configuration

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

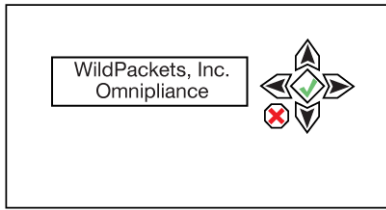
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**Note** NTP time server configuration is not supported through the LCD controls in Omnipliance Core Windows.

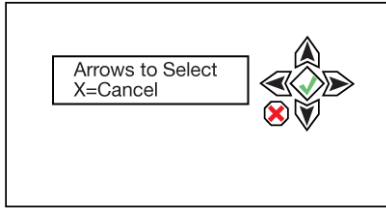
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To view, add, edit, or delete the NTP time server configuration settings:

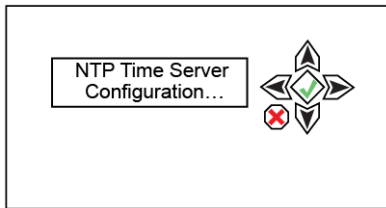
1. From the WildPackets welcome screen press the **✓ (Check)** button.



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.

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**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.

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5. Restart the Omnpliance Core for the changes to take effect.

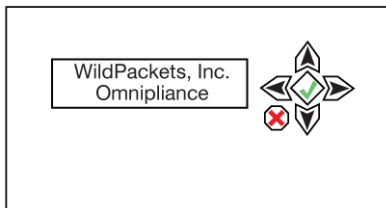
## Timezone configuration

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

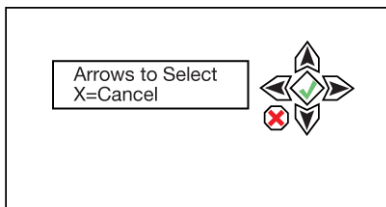
**Note** Timezone configuration is not supported through the LCD controls in Omnipliance Core Windows.

To view or change the Timezone configuration settings:

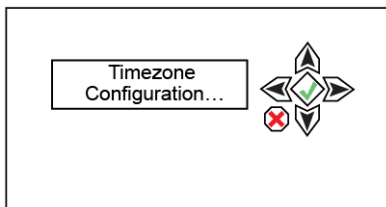
1. From the WildPackets welcome screen press the ✓ (**Check**) button.



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.

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5. Restart the Omnipliance Core for the changes to take effect.

## Assigning default IP addresses

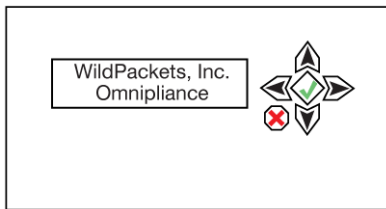
You can assign a default IP address configuration to the two built-in Gigabit Ethernet ports. This may be useful in troubleshooting Omnipliance Core.

**Note** Assigning a default IP address is not supported in Omnipliance Core Linux.

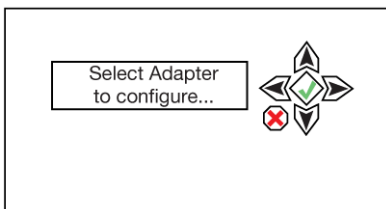
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To assign a default IP address:

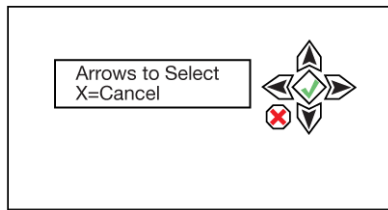
1. From the WildPackets welcome screen press the **✓ (Check)** button.



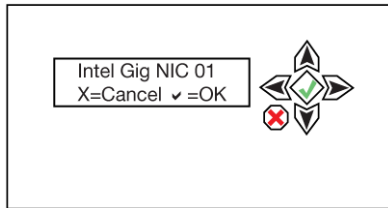
2. Press the **✓ (Check)** button.



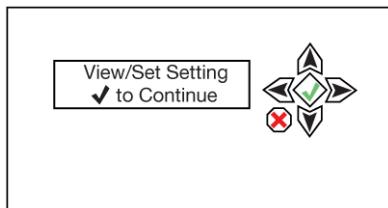
3. Press the **←→ (Arrow)** buttons to select which Gigabit Ethernet port to configure.



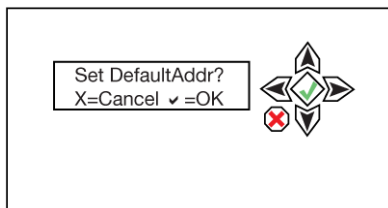
4. Press the ✓ (**Check**) button.



5. Press the up ↑ (**Arrow**) twice.



6. Press the ✓ (**Check**) button to set the default settings.



The default settings are as follows:

- IP Address 1st Gigabit Ethernet Port (Left): 172.16.1.2
- IP Address 2nd Gigabit Ethernet Port (Right): 172.16.1.3
- Subnet Mask (Both): 255.255.0.0
- Gateway (Both): 172.16.1.1
- DNS (Both): 172.16.1.1

## Logging-in for the first time

You can log into Omnipliance Core in one of two ways:

- Remotely, using remote software such as **SSH** (Linux) or **Remote Desktop Connection** (Windows)
- Locally, by connecting a monitor, mouse and keyboard to Omnipliance Core

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

(Omnipliance Core Linux) username: *root*

(Omnipliance Core Windows) username: *administrator*

password: *wildpackets*

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

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

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## Using Omnipliance Core with OmniPeek

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

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

## System fans

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

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**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.

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## Contacting WildPackets support

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

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 ECC FB-DIMM memory
Expansion Slots	Four available PCI Express x8 slots
Chassis Dimensions (WxHxD):	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)

