



ExtremeManagement™

# Extreme Application Analytics<sup>®</sup> PV-A-305 Installation Guide



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# About This Guide






This document describes the installation and initial configuration of the Extreme Application Analytics PV-A-305 hardware engine.

This document is intended for experienced network administrators who are responsible for implementing and maintaining communications networks.

## Text Conventions

The following tables list text conventions that are used throughout this guide.

**Table 1: Notice Icons**

| Icon  | Notice Type    | Alerts you to...   |
|---|----------------|--|
|    | General Notice | Helpful tips and notices for using the product.          |
|    | Note           | Important features or instructions.                      |
|    | Caution        | Risk of personal injury, system damage, or loss of data. |
|  | Warning        | Risk of severe personal injury.                          |
|  | New            | This command or section is new for this release.         |

**Table 2: Text Conventions**

| Convention                             | Description   |
|--|---|
| Screen displays                        | This typeface indicates command syntax, or represents information as it appears on the screen.  |
| The words <b>enter</b> and <b>type</b> | When you see the word “enter” in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says “type.”                                |
| <b>[Key]</b> names                     | Key names are written with brackets, such as <b>[Return]</b> or <b>[Esc]</b> . If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press <b>[Ctrl]+[Alt]+[Del]</b> |
| <i>Words in italicized type</i>        | Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.  |

## Related Publications

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### Extreme Management Center™ Documentation

Extreme Management Center (EMC, formerly NetSight) documentation, including release notes, are available at: <http://documentation.extremenetworks.com>.

Extreme Management Center online help is available by clicking the ? icon in all EMC pages. The online help provides detailed explanations of how to configure and manage your network using EMC.

For complete regulatory compliance and safety information, refer to the document *Intel® Server Products Product Safety and Regulatory Compliance*.

## Getting Help

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If you require assistance, contact Extreme Networks using one of the following methods:

- **GTAC (Global Technical Assistance Center) for Immediate Support**
  - **Phone:** 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. For the support phone number in your country, visit: [www.extremenetworks.com/support/contact](http://www.extremenetworks.com/support/contact)
  - **Email:** [support@extremenetworks.com](mailto:support@extremenetworks.com). To expedite your message, enter the product name or model number in the subject line.
- **GTAC Knowledge** — Get on-demand and tested resolutions from the GTAC Knowledgebase, or create a help case if you need more guidance.
- **The Hub** — A forum for Extreme customers to connect with one another, get questions answered, share ideas and feedback, and get problems solved. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.
- **Support Portal** — Manage cases, downloads, service contracts, product licensing, and training and certifications.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

## Providing Feedback to Us

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We are always striving to improve our documentation and help you work better, so we want to hear from you! We welcome all feedback but especially want to know about:

- Content errors or confusing or conflicting information.

- Ideas for improvements to our documentation so you can find the information you need faster.
- Broken links or usability issues.

If you would like to provide feedback to the Extreme Networks Information Development team about this document, please contact us using our short [online feedback form](#). You can also email us directly at [internalinfodev@extremenetworks.com](mailto:internalinfodev@extremenetworks.com).



# 1 Engine Overview and Setup

**Kit Contents**  
**Specifications**  
**Front Panel Features**  
**Back Panel Features**  
**Removing and Installing the Front Bezel**  
**Installing the Engine into a Rack**

This chapter lists the components shipped with the PV-A-305 engine, describes the front and back panels, and provides information on engine specifications.

For complete regulatory compliance and safety information, refer to the document *Intel® Server Products Product Safety and Regulatory Compliance*, available at the following links:

[http://download.intel.com/support/motherboards/server/sb/g23122003\\_safetyregulatory.pdf](http://download.intel.com/support/motherboards/server/sb/g23122003_safetyregulatory.pdf)  
<http://www.extremenetworks.com/support/documentation/>

## Kit Contents

The PV-A-305 engine ships with the following components:

- Extreme Networks URL card
- Front bezel label
- A rack mounting kit
- Two rack handles and appropriate screws
- Two AC power cables
- AC power cord bracket and cable clamp kit
- One USB flash drive

## Specifications

The physical specifications for the engine are listed in [Table 3](#). The environmental requirements are listed in [Table 4](#) on page 8.

**Table 3: PV-A-305 Physical Specifications**

|                  |  |
|------------------|--|
| <b>Processor</b> |  |
| Processor type   | PV-A-305 - Intel® Xeon® E5-2620 v4 processor |
| Processor speed  | 2.1 GHz                                      |
| CPU Cores        | 8  |
| <b>Memory</b>    |  |

**Table 3: PV-A-305 Physical Specifications (continued)**

|                                    |   |
|------------------------------------|---|
| Architecture                       | 2400 MHz Dual Ranked Registered (RDIMM) ECC DDR4  |
| Memory module capacities           | 4 GB DIMMs  |
| Minimum RAM (included)             | 64 GB (sixteen 4 GB DIMMs)  |
| Maximum RAM                        | 128 GB (thirty-two 4 GB RDIMMs)   |
| RAID Configuration                 | RAID 1 with BBU   |
| <b>Drives</b>                      |   |
| Hard drives                        | One 960 GB SSD hard drive   |
| <b>Connectors</b>                  |   |
| Back                               |   |
| NIC                                | Four RJ-45  |
| Serial                             | 9-pin, DTE, 16550-compatible  |
| USB                                | Three 4-pin, USB 2.0-compliant  |
| Video                              | 15-pin VGA  |
| Networking                         | Two 1 GB Ethernet   |
| Front                              |   |
| USB                                | Two 4-pin, USB 2.0-compliant  |
| Video                              | 15-pin VGA  |
| <b>Power</b>                       |   |
| AC power supply (per power supply) | Redundant power supply  |
| Wattage                            | 750 watts   |
| Input voltage                      | <ul style="list-style-type: none"> <li>• 90 – 132 V at 47/63 Hz 8.2 A</li> <li>• 180 – 264 V at 47/63 Hz 4.4 A</li> </ul> |
| Output voltage                     | <ul style="list-style-type: none"> <li>• 62.0A at 12 V</li> <li>• 2.1A at 12 VSB</li> </ul>                               |
| <b>Physical</b>                    |   |
| Height                             | 4.45 cm (1.72 in.)  |
| Width                              | 43.0 cm (16.93 in.)   |
| Depth                              | 70.99 cm (27.95 in.)  |
| Weight (maximum configuration)     | 13.15 kg (29 lb.)   |

**Table 4: PV-A-305 Environmental Specifications**

| Parameter             | Limits   |
|-----------------------|--|
| Operating temperature | +10°C (+50°F) to +35°C (+95°F) with the maximum rate of change not to exceed 10°C (+50°F) per hour |
| Storage temperature   | -40°C (-40°F) to +70°C (+158°F)  |

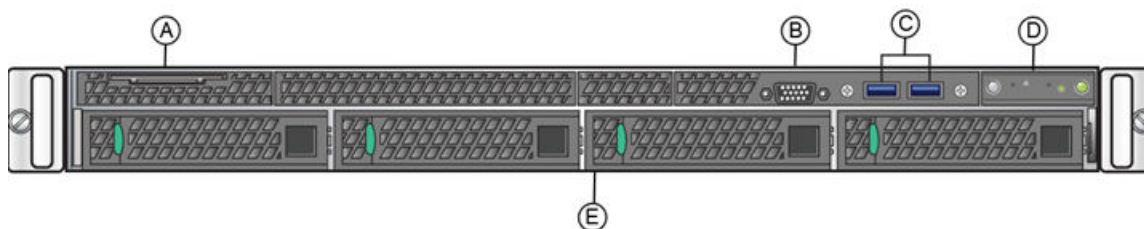


**Table 4: PV-A-305 Environmental Specifications (continued)**

| Parameter                     | Limits   |
|-------------------------------|--|
| Storage humidity              | 50% to 90%, non-condensing at 28°C (82°F)                                |
| Vibration, unpackaged         | 5 Hz to 500 Hz, 2.20 g RMS random  |
| Shock, operating              | Half sine, 2 g-force peak, 11 milliseconds                               |
| Shock, unpackaged             | Trapezoidal, 25 g, velocity change 136 inches/second (40 lb to < 80 lb)  |
| Shock, packaged               | Non-palletized free fall in height 24 inches (40 lb to < 80 lb)          |
| ESD                           | ±12 KV except I/O port ±8 KV per Intel® Environmental test specification |
| Estimated thermal dissipation | 1550 BTU/Hr  |

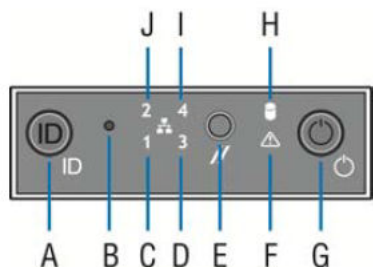
## Front Panel Features

The following figure shows the PV-A-305 engine front panel features. [Figure 2](#) on page 9 shows the front control panel.



**Figure 1: PV-A-305 Front Panel Features**

|   |                       |   |  |
|---|-----------------------|---|--|
| A | System label pull-out | D | Front control panel (see <a href="#">Figure 2</a> on page 9) |
| B | Video Connector       | E | Hard disk drive bays   |
| C | USB 3.0 Ports         |   |  |



**Figure 2: Front Control Panel**

|   |  |   |                               |
|---|--|---|-------------------------------|
| A | System ID button w/integrated LED            | F | System status LED             |
| B | NMI button (recessed, tool required for use) | G | Power button w/integrated LED |

|   |                          |   |                         |
|---|--------------------------|---|-------------------------|
| C | Mgmt port activity LED   | H | Hard drive activity LED |
| D | Not used                 | I | Not used                |
| E | System cold reset button | J | Not used                |

## Hard Drive LED Indicator Patterns

The hard drive has two LED indicators visible from the front of the system: one is a green LED for disk activity, and the other is amber and indicates hard drive status. The LEDs have the following states, as described in [Table 5](#).

**Table 5: Hard Drive Activity LED Indicator Patterns**

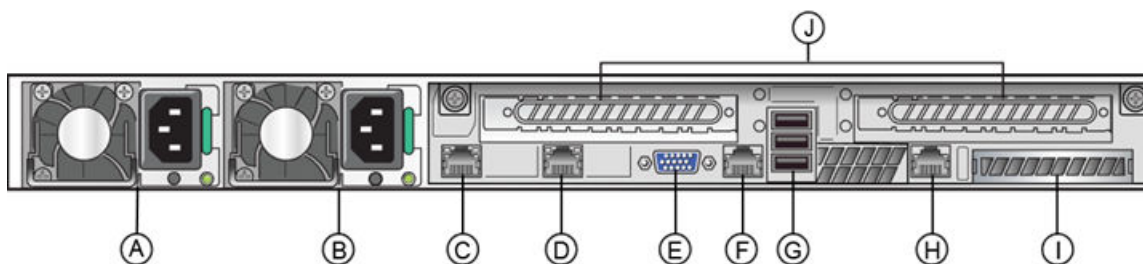
| Hard Drive Condition                            | Activity LED Patterns |
|---|-----------------------|
| Power on and drive spinning up or spinning down | Off                   |
| Power on with drive activity                    | Blinking green        |

**Table 6: Hard Drive Status LED Indicator Patterns**

| Hard Drive Condition          | Status LED Patterns |
|-------------------------------|---------------------|
| No access or no fault         | Off                 |
| Hard drive fault has occurred | Solid amber         |

## Back Panel Features

[Figure 3](#) shows the PV-A-305 engine back panel.



**Figure 3: PV-A-305 Back Panel**

|   |                        |   |                        |
|---|------------------------|---|------------------------|
| A | Power supply module #1 | F | Serial port            |
| B | Power supply module #2 | G | USB 2.0 ports          |
| C | eth0                   | H | Mgmt port, out of band |
| D | eth1                   | I | I/O Module Bay         |
| E | Video connector        | J | Riser cards            |

[Table 7](#) describes the LEDs for the RJ45 management port.

**Table 7: RJ45 Port LEDs (Management Port)**

| LED Type              | LED Pattern    | Status Indication     |
|-----------------------|----------------|-----------------------|
| Network speed (right) | Off            | 10 Mbps               |
|                       | Amber          | 100 Mbps              |
|                       | Green          | 1000 Mbps             |
| Link activity (left)  | Off            | No link               |
|                       | Solid Green    | Active link           |
|                       | Blinking Green | Data traffic activity |

## Power Supply Status Indicator Patterns

The engine has two power supplies, supplying hot-pluggable power redundancy. The system distributes the power load across both power supplies to maximize efficiency.

Each power supply has a single bi-color LED to indicate power supply status, as described in [Table 8](#).

**Table 8: Power Supply Status LED Indicator Patterns**

| LED Pattern        | Power Supply Condition  |
|--------------------|---|
| Green              | Output on and OK  |
| Off                | No AC power to all power supplies   |
| 1Hz blinking green | AC present / Only 12VSB on (PS off) or PS in cold redundant state   |
| Amber              | AC power cord unplugged or AC power lost. With a 2nd PS in parallel still with AC input power             |
| 1Hz blinking amber | Power supply warning events where PS continues to operate — high temp, high power, high current, slow fan |
| Amber              | Power supply critical event causing a shutdown, failure, OCP, OVP, fan fail                               |
| 2Hz blinking green | Power supply firmware updating  |

## Removing and Installing the Front Bezel

The PV-A-305 engine comes with an optional front panel bezel that can be attached to the front of the chassis by snapping the bezel onto the chassis handles. A key lock allows you to lock the bezel in place so that front panel controls cannot be used. You can still monitor system status indicators with the bezel in place.

### Removing the Front Bezel

To remove the front bezel:

- 1 Unlock the bezel if it is locked.
- 2 Remove the left end of the front bezel from rack handle.

- 3 Rotate the front bezel counterclockwise to release the latches on the right end from the rack handle.

## Installing the Front Bezel



### Note

Before installing the bezel, you must install the rack handles. See [Installing the Engine into a Rack](#) on page 12.

To install the front bezel:

- 1 Lock the right end of the front bezel to the rack handle.
- 2 Rotate the front bezel clockwise till the left end clicks into place.
- 3 Lock the bezel, if needed.

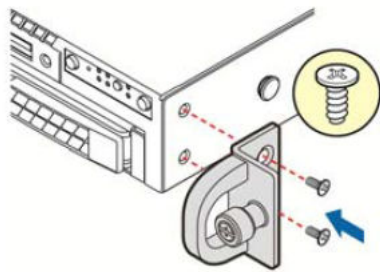
## Installing the Engine into a Rack

A rack mounting kit and installation guide are included with the PV-A-305 engine. The rack mounting kit allows you to install the engine into a four-post rack cabinet. Refer to the installation guide for complete installation instructions.

If you are table mounting the engine, ensure at least 6 cm of clearance on all sides of the engine for proper ventilation.

If you are installing the engine in a rack:

- 1 Install the rack handles by aligning a rack handle with the two holes on each side of the engine and attaching each handle to the engine with two screws as shown in [Figure 4](#).



**Figure 4: Installing the Rack Handles**

- 2 Read the installation guide included with the rack mounting kit.
- 3 Install the rails and mount the controller in the rack as instructed.

## Torque Values

[Table 9](#) describes the recommended torque values to use when installing the engine using standard threaded fastener machine screws and bolts.

**Table 9: Recommended Torque Values by Screw Size**

| Screw Size |        | Torque in Pounds |         |       | Bit Size |
|------------|--------|------------------|---------|-------|----------|
| English    | Metric | -%5              | Nominal | +%5   |          |
| N/A        | N/A    | 1.42             | 1.5     | 1.57  | 0        |
| 2 - 56     | 1.5    | 2.85             | 3.0     | 3.15  | 0        |
| 4 - 40     | 2.5    | 4.75             | 5.0     | 5.25  | 0/1      |
| 6 - 32     | 3.5    | 8.55             | 9.0     | 9.45  | 1        |
| 8 - 32     | 4.5    | 17.10            | 18.0    | 18.90 | 2        |
| 10 - 32    | 5      | 30.40            | 32.0    | 33.60 | 2        |
| 1/4 - 20   | 6.5    | 63.65            | 67.0    | 70.35 | 3        |

# 2 Configuration

---

## Pre-Configuration Tasks

Configuring the Application Analytics Engine

Launching the Application Analytics Application

Adding the Application Analytics Engine

Changing Application Analytics Engine Settings

Upgrading Application Analytics Engine Software

Once the PV-A-305 engine is physically installed into a rack, you need to connect a monitor and a USB keyboard, connect the power cord and network cable, and power it on (see [Figure 1](#) on page 9 and [Figure 3](#) on page 10).

After the engine boots and the engine installation is complete, you must go through the initial configuration process described in this chapter.

This chapter also includes information on how to change your engine settings following your initial configuration and how to upgrade the Extreme Management Center application software. For information on reinstalling the Extreme Management Center engine software, see [Reinstalling Engine Software](#) on page 26.

## Pre-Configuration Tasks

---

Ensure that you have the following information prior to executing the configuration steps in the next section:

- Engine hostname, IP address, and netmask
- Default gateway IP address
- Name server IP address and domain name
- NIS (Network Information Services) server IP address
- Network Time Protocol (NTP) server IP address

In addition, you need to obtain the appropriate Extreme Management Center software license prior to launching the Extreme Management Center applications. You will be prompted to enter a license when you launch the application. (When you purchased Extreme Management Center, you received a Licensed Product Entitlement ID. This Entitlement ID allows you to generate a product license. Refer to the instructions included with the Entitlement ID that was sent to you.)

## Configuring the Application Analytics Engine

---

After the initial engine installation is complete, use the following steps to configure the virtual engine to run the Application Analytics application:

- 1 Login as root with no password, and press **[Enter]**.

The following screen appears:

```

=====
Extreme Networks - Application Analytics Engine -

Welcome to the Application Analytics Engine Setup

=====

Please enter the information as it is requested to continue with the configuration.
Typically a default value is displayed in brackets. Pressing the [enter] key without
entering a new value will use the bracketed value and proceed to the next item.
If a default value cannot be provided, the prompt will indicate that the item is either
(Required) or (Optional). The [enter] key may be pressed without entering data for
(Optional) items. A value must be entered for (Required) items.
At the end of the setup process, the existing settings will be displayed and
opportunity will be provided to correct any errors.

=====

Press [enter] to begin setup or CTRL-C to exit:

```

- 2 Press **[Enter]** to begin the setup. The **Root Password Configuration** screen appears:

```

=====
Root Password Configuration
=====

There is currently no password set in the system administrator
account (root). It is recommended that you set one that is
active the first time the machine is rebooted.

=====

Would you like to set a root password (y/n) [y]?

```



**Note**

You must set a new root password. This new root password will be used by the initial user when logging in to the Application Analytics application.

- 3 Enter **y** to set the new root password.
- 4 Press **[Enter]** and enter the new password as prompted.

```

Enter new UNIX password:

Retype new UNIX password:

Password updated successfully.

```

The **Application Analytics Engine Deployment** screen appears.

- 5 Select the deployment mode that matches your network environment. The default deployment mode is 2.

```

=====
Application Analytics Engine Deployment Modes
=====

This engine supports multiple deployment modes to suit different network environments
and connectivity characteristics. Please select a deployment mode below that best fits
your requirements.

1. Single Interface
   A single interface is used for both management and monitoring traffic.
   A GRE Tunnel will be configured for traffic monitoring.

```



## 2. Interface Mirrored

Separate interfaces are configured for management and monitoring traffic.  
The monitoring interface will put into tap mode for traffic monitoring.

## 3. Interface Tunnel Mirrored

Separate interfaces are configured for management and monitoring traffic.  
The monitoring interface will get its own IP Address and GRE Tunnels will be configured for traffic monitoring.

## 4. Manual Mode

The interface and tunneling configurations will not be modified by this script, leaving them to be manually edited by the user instead.

Please select a deployment mode [2]:

**Note**

If you select deployment mode 4, refer to the Extreme Application Analytics Deployment Guide for information on how to configure your deployment manually.

- 6 If you selected deployment mode 1, 2, or 3, the **Application Analytics Engine Network Configuration for eth0** screen appears. For each line, type the requested configuration information and press **[Enter]**.

If you will be using DNS, provide the IP address of the name server. If you are using a name server enter a domain name for the engine. The NIS server is used to authenticate users logging into the engine. If you are using an NIS server, make sure the NIS domain name is valid or users may not be able to log in to the Management Center applications.

```
=====
Application Analytics Engine Network Configuration for eth0
=====
Enter information below to configure eth0

Enter the hostname for the engine (Required):

Enter the IP address for eth0 on 10.54.56.141 [10.54.56.141]:

Enter the IP netmask [255.255.255.0]:

Enter the gateway address [10.54.56.2]:

Enter the IP address of the name server (Optional):

Enter the domain name for 10.54.56.141 (Optional):

Enable NIS (y/n) [n]?
```

- 7 Continue to the appropriate section:
- For deployment mode 1, proceed to step 9.
  - For deployment mode 2, proceed to step 7.
  - For deployment mode 3, proceed to step 8.
- 8 Specify one or more tap ports. If you have an installed the optional PV-A-305-10G-UG I/O module, the ports are eth4 and eth5. For each line, type the requested configuration information and press **[Enter]**.

```
=====
Application Analytics Engine Network Configuration for Tap Mode
=====

Enter the interface name for Tap Mode [eth1]: eth4
```



```

Would you like to add another interface for Tap Mode (y/n) [n]? y
Enter the interface name for Tap Mode [eth2]: eth5
Would you like to add another interface for Tap Mode (y/n) [n]? n
    
```

Proceed to step 10.

- 9 Specify one or more GRE tunnel interfaces. If you have an installed the optional PV-A-305-10G-UG I/O module, the ports are eth4 and eth5. For each line, type the requested configuration information and press **[Enter]**.

```

=====
Application Analytics Engine Network Configuration for Tunnel Interfaces
=====

Enter the interface name for Tunnel Configuration [eth1]: eth4

Enter information below to configure eth4

Enter the IP address for eth4 on pv88 [10.54.211.116]:

Enter the IP netmask [255.255.255.0]:

Enter the gateway address [10.54.211.1]:

Would you like to add another interface for Tunnel Configuration (y/n) [n]? y

Enter the interface name for Tunnel Configuration [eth1]: eth5

Enter information below to configure eth5

Enter the IP address for eth5 on pv88 [10.54.222.117]:

Enter the IP netmask [255.255.255.0]:

Enter the gateway address [10.54.222.1]:

Would you like to add another interface for Tunnel Configuration (y/n) [n]? n
    
```

- 10 Enter the IP addresses for one or more GRE tunnels. For each line, type the requested configuration information and press **[Enter]**.

```

=====
Application Analytics Engine GRE Configuration
=====
Remote mirroring can be configured in Coreflow Switches using GRE tunnels.
This requires a specific mirroring configuration enabled on the switches.

Enter the SRC IP address for the GRE Tunnel [10.54.211.116]:

Enter the DST IP address for the GRE Tunnel [192.168.1.1]: 10.54.1.116

Add another GRE Tunnel (y/n) [n]? y

Enter the SRC IP address for the GRE Tunnel [10.54.222.117]:

Enter the DST IP address for the GRE Tunnel [192.168.1.1]: 10.54.2.117

Add another GRE Tunnel (y/n) [n]? n
    
```

- 11 A screen appears asking you to confirm your network setting. Enter 0 to accept the settings. The following example shows the Confirm Network Settings screen for deployment mode 2.

```

=====
Confirm Network Settings
    
```



```

=====
These are the settings you have entered. Enter 0 or any key other than a valid
selection to continue. If you need to make a change, enter the appropriate number now
or run the /usr/postinstall/dnetconfig script at a later time.
=====

0. Accept settings and continue
1. Hostname: pv88
2. Deployment Mode: Dual Interface Mirrored
3. Management Interface Configuration (eth0):
   Address: 10.54.184.88
   Netmask: 255.255.255.0
   Gateway: 10.54.184.1
   Nameserver: 10.54.188.120
   Domain name: nac2003.com
4. NIS Server/Domain: Not Configured
5. Monitor Interface Configuration:
   Tap Mode Interfaces: eth4, eth5

```

The following example shows the Confirm Network Settings screen for deployment mode 3.

```

=====
Confirm Network Settings
=====
These are the settings you have entered. Enter 0 or any key other than a valid
selection to continue. If you need to make a change, enter the appropriate number now
or run the /usr/postinstall/dnetconfig script at a later time.
=====

0. Accept settings and continue
1. Hostname: pv88
2. Deployment Mode: Dual Interface Tunnel Mirrored
3. Management Interface Configuration (eth0):
   Address: 10.54.184.88
   Netmask: 255.255.255.0
   Gateway: 10.54.184.1
   Nameserver: 10.54.188.120
   Domain name: nac2003.com
4. NIS Server/Domain: Not Configured
5. Mirror Interface Configuration:
   Name: eth4
   Address: 10.54.211.116
   Netmask: 255.255.255.0
   Gateway: 10.54.211.1
   Name: eth5
   Address: 10.54.222.117
   Netmask: 255.255.255.0
   Gateway: 10.54.222.1
6. GRE tunnels: 10.54.211.116/10.54.1.116
                10.54.222.117/10.54.2.117

```

- 12 In the **SNMP Configuration** screen, type the requested information for each line and press **[Enter]**.

```

=====
SNMP Configuration
=====
The following information will be used to configure SNMP management of this device. The
SNMP information entered here must be used to contact this device with remote
management applications such as Extreme Management Center Console.
=====
Please enter the SNMP user name [snmpuser]:
Please enter the SNMP authentication credential [snmpauthcred]:
Please enter the SNMP privacy credential [snmpprivcred]:

```

- 13 A summary screen appears asking you to accept your SNMP Configuration settings. Enter 0 to accept the settings.

```

=====
SNMP Configuration
=====
These are the current SNMP V3 settings. To accept them and complete SNMP configuration,
enter 0 or any key other than the selection choices. If you need to make a change,
enter the appropriate number now or run the /usr/postinstall/snmpconfig script at a
later time.
0. Accept the current settings
1. SNMP User: snmpuser
2. SNMP Authentication: snmpauthcred
3. SNMP Privacy: snmpprivcred
4. Modify all settings
=====
Enter selection [0]: 0

```

- 14 In the **Configure Date and Time Settings** screen, select whether you want to use an external Network Time Protocol (NTP) server. Enter **y** to use NTP, and enter your NTP server IP address(es). Enter **n** to configure the date and time manually and proceed to step 15.

```

=====
Configure Date And Time Settings
=====
The engine date and time can be set manually or using an external
Network Time Protocol (NTP) server. It is strongly recommended that
NTP is used to configure the date and time to ensure accuracy of time
values for SNMP communications and logged events. Up to 5 server IP addresses may be
entered if NTP is used.
=====
Do you want to use NTP (y/n) [y]? y
Please enter a NTP Server IP Address (Required): 144.131.10.120
Would you like to add another server (y/n) [n]? y
Please enter a NTP Server IP Address (Required): 144.131.10.121
Would you like to add another server (y/n) [n]? n

```

- 15 In the **NTP Servers validate selection** screen, enter 0 to accept the current settings and proceed to the **Set Time Zone** screen at step 17.

```

=====
NTP Servers
=====
These are the currently specified NTP servers. Enter 0 or any key other than a valid
selection to complete NTP configuration and continue.
If you need to make a change, enter the appropriate number from the choices listed
below.
144.131.10.120
144.131.10.121
0. Accept the current settings
1. Restart NTP server selection
2. Set date and time manually
=====
Enter selection [0]: 0

```

- 16 If you answered "no" to using an NTP server to set date and time, set the date and time in the **Set Date and Time** screen.

```

=====
Set Date And Time
=====
The current system date and time is: Thu Oct 28 09:34:08 2013
Please enter the values for date and time as directed where input is expected in the
following format:
MM - 2 digit month of year
DD - 2 digit day of month
YYYY - 4 digit year

```

```

hh - 2 digit hour of day using a 24 hour clock
mm - 2 digit minute of hour
ss - 2 digit seconds

```

```

=====
Please enter the month [08]:
Please enter the day of the month [02]:
Please enter the year [2016]:
Please enter the hour of day [09]:
Please enter the minutes [34]:
Please enter the seconds [08]:

```

- 17 In the **Use UTC** screen, select whether you want the system clock to be set to use UTC.

```

=====
Use UTC
=====
The system clock can be set to use UTC. Specifying no for using UTC,
sets the hardware clock using localtime.
=====
Do you want to use UTC (y/n) [n]?

```

- 18 In the **Set Time Zone** screen, select the appropriate time zone and press **[Enter]**.

```

=====
Set Time Zone
=====
You will now be asked to enter the time zone information for this system. Available
time zones are stored in files in the /usr/share/zoneinfo directory. Please select from
one of the following example time zones:
1. US Eastern
2. US Central
3. US Mountain
4. US Pacific
5. Other - Shows a graphical list
=====
Enter selection [1]:

```

- 19 The **Modify Settings** screen summarizes the settings you have entered and provides an opportunity to modify the settings, if desired. Enter 0 to accept the settings.

```

=====
Modify Settings
=====
All of the information needed to complete the installation of the Application Analytics
Engine has been entered. Enter 0 or any key other than a valid selection to continue.
If you need to make a change, enter the appropriate number from the choices listed
below.
=====
0. Accept settings and continue

1. Set the root user password

2. Set user to run server as

3. Set hostname and network settings

4. Set SNMP settings

5. Set the system time

6. Modify all settings

Enter selection [0]:

```

The Application Analytics application software is automatically installed. This may take a few minutes. When the installation is complete, you see the following screen.

```
=====
Extreme Networks - Application Analytics Engine - Setup Complete
=====
```

```
Setup of the Application Analytics Engine is now complete. The engine is now operational
and ready to accept remote connections. Details of the installation are located in
the /var/log/install directory.
=====
```

## Launching the Application Analytics Application

Now that you have configured the Application Analytics engine, you are ready to access the Extreme Management Center Launch Page and run the applications from a remote client machine.

- 1 Open a browser window on the remote client machine and enter the Extreme Management Center Launch page URL in the following format:

```
http://<servername>:8080/
```

where **<servername>** is the Extreme Management Center engine IP address or hostname, and 8080 is the required port number. For example,

```
http://10.20.30.40:8080/
```

The Extreme Management Center Launch Page opens.

- 2 Enter your Extreme Management Center username and password and click **Login**.
- 3 Click the **Analytics** tab at the top of the window.

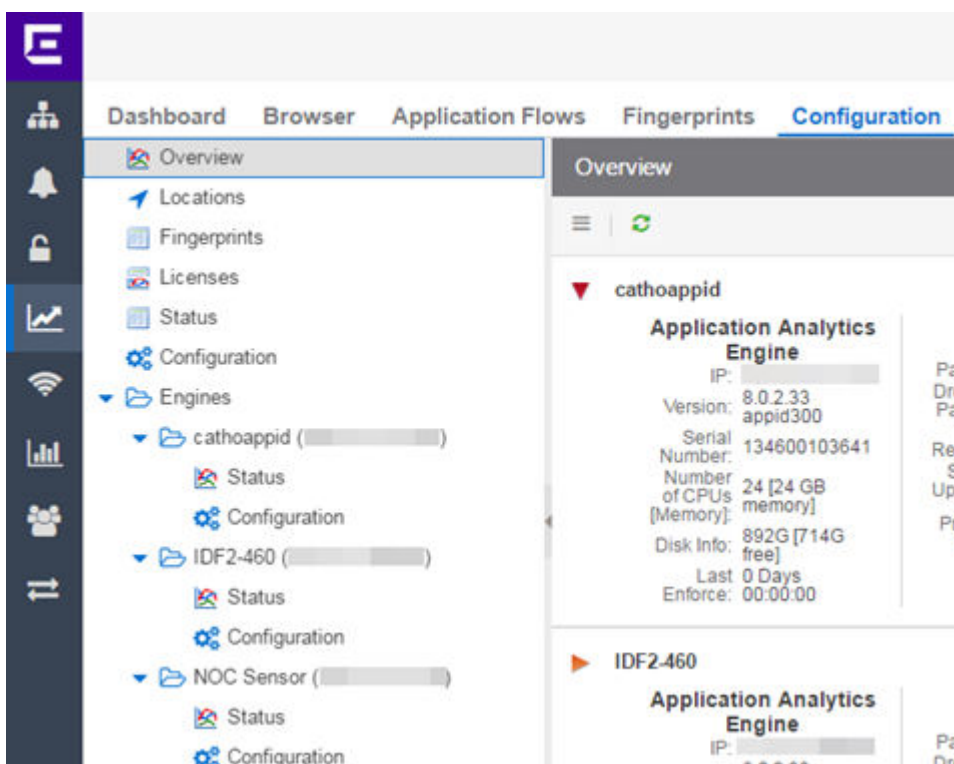
The **Analytics** tab displays.

For more information on the Extreme Management Center Launch page, access the Online Help by clicking on **?** in top-right corner. In the Online Help Table of Contents, select *Installation Guide* and then read the section titled "Remote Client Launch."

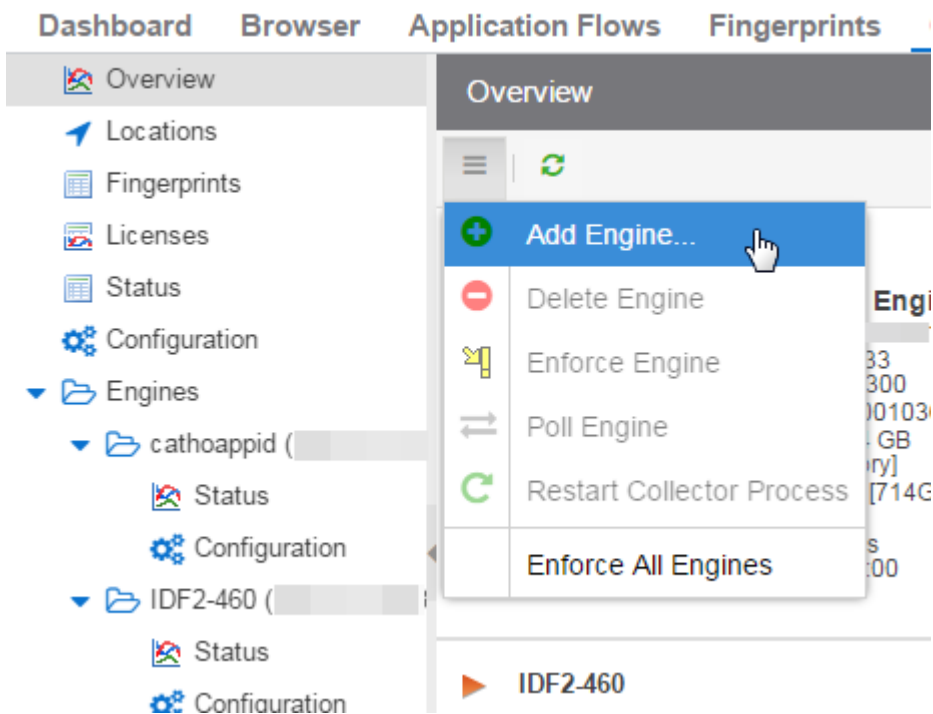
## Adding the Application Analytics Engine

To add the Application Analytics engine to the **Analytics** tab in Extreme Management Center:

- 1 Select the **Configuration** tab in the **Analytics** tab.



- 2 Click the **Menu** icon and select **Add Engine**.



The Add Application Analytics Engine window displays.

**Add Application Analytics Engine** ✕

IP Address:

Name:

Profile:

After adding an engine, go to the engine's Configuration page to add a wireless controller flow source, enable Access Control integration, or change the default web credentials.

OK Cancel

- 3 Enter the **IP Address** of the eth0 interface and the **Name** of the Application Analytics engine.
- 4 Select the appropriate SNMP Profile from the **Profile** drop-down menu.
- 5 Click **OK**.
- 6 Select **Enforce Engine** from the drop-down menu.

The Application Analytics engine is added to Management Center.

## Changing Application Analytics Engine Settings

Use these steps if you need to change your Application Analytics engine settings following your initial engine configuration.

### Changing Basic Network Configuration

To change basic network configuration settings such as hostname and engine IP address, enter the following command at the engine CLI:

```
/usr/postinstall/dnetconfig
```

This starts the network configuration script and allows you to make the required changes. You must reboot the engine for the new settings to take effect.

### Changing SNMP Configuration

To change SNMP configuration settings such as SNMP Trap Community String, SNMP User, SNMP Authentication, and SNMP Privacy credentials, enter the following command at the engine CLI:

```
/usr/postinstall/snmpconfig
```

This starts the SNMP configuration script and allows you to make the required changes.

## Changing Date and Time Settings

To enable or disable using NTP to configure the engine date and time, or to manually set the date and time on the engine, enter the following command at the engine CLI:

```
/usr/postinstall/dateconfig
```

This starts the date and time configuration script and allows you to change the settings.

## Changing the Management Center Server IP Address

To change the IP address of the Management Center server, enter the following command at the engine CLI:

```
/opt/appid/configMgmtIP <ipaddress>
```

Enter the following command to start using the new Management Center server:

```
service appidserver restart
```

## Changing the Web Service Credentials

The Web Service credentials provide access to the Application Analytics Engine Administration web page and the web services interface for the Application Analytics engine. Engines are shipped with a preconfigured default password.

If you have changed the credentials in the **Analytics** tab and then install a new engine using the default password, you will not be able to monitor or enforce to the new engine until you change the password on the engine using this command. The credentials you enter on the engine must match the credentials specified in **Analytics > Configuration**.

To change Web Service credentials:

- 1 Enter the following command at the login prompt in the **Console** tab:  

```
/opt/appid/configWebCredentials <username> <password>
```
- 2 Restart the engine:  

```
service appidserver restart
```

## Upgrading Application Analytics Engine Software

Upgrades to the Application Analytics engine software will be made available from the Network Management Suite (NMS) Download web page.

- 1 On a system with an internet connection, go to the Extreme Management Center Downloads web page to download the Engine Image 64-bit upgrade file to your system: <http://extranet.extremenetworks.com/downloads/pages/NMS.aspx>
- 2 Enter your email address and password.  
You are on the Extreme Management Center page.
- 3 Click **Application Analytics** in the right panel.
- 4 Click on the **Software** tab and select a version of Extreme Management Center. Scroll down to see the engine images.
- 5 Download the following Application Analytics engine file from the Application Analytics section:

```
Application Analytics Engine Upgrade (BIN)
```



- 6 Use FTP, SCP, or a shared mount point, to copy the upgrade file to the Application Analytics engine.
- 7 SSH to the engine.
- 8 Cd to the directory where you downloaded the upgrade file.

For example, enter the following to change to the /Users/jsmith directory: `cd /Users/jsmith`

- 9 Change the permissions on the upgrade file by entering the following command:

```
chmod 755 purview_appliance_upgrade_to_**version**.bin
```

- 10 Run the install program by entering the following command:

```
./purview_appliance_upgrade_to_**version**.bin
```

The upgrade begins automatically.

The Application Analytics engine restarts automatically when the upgrade is complete. Because your Application Analytics engine settings were migrated, you are not required to perform any configuration on the engine following the upgrade.

# A Reinstalling Engine Software

In the event a software reinstall becomes necessary, use this procedure. Be aware that this procedure reformats the hard drive and reinstalls all the engine software, the operating system, and all related Linux packages.

Connect a monitor and a USB keyboard to the Application Analytics engine prior to performing these steps.

- 1 On a Windows platform system, go to the Extreme Management Center web page to download the Engine Image 64-bit file to your system: <http://extranet.extremenetworks.com/downloads/pages/NMS.aspx>

After entering your email address and password, you are on the Extreme Management Center page. Click on the **Software** tab and select a version of Extreme Management Center. Scroll down to the Application Analytics Image 64-bit (ZIP) file and extract the file to a directory on your system.

- 2 Insert the USB flash drive that came with the PV-A-305 engine into the USB port on your system and note the drive letter it is assigned.
- 3 Format the USB flash drive.
- 4 Open a command prompt window and cd to the directory where you extracted the file.  
For example, enter the following to change to the /Users/jsmith directory: `cd /Users/jsmith`
- 5 Type `make_disk.bat drive letter:`.



#### Note

Because the reinstall procedure reformats the drive, be sure you have specified the correct drive letter.

- 6 Press **[Enter]**.  
The files are copied to the USB flash drive. When the copy is complete you see the message:  
`Successfully installed into <drive letter>: Press any key to continue.`
- 7 Remove the USB flash drive from your system.
- 8 Insert the USB flash drive into a USB port on the engine (see [Figure 1](#) on page 9).
- 9 Press the power button on the PV-A-305 engine.
- 10 Verify the USB flash drive is available as a boot option:
  - a Press **F2** to open the BIOS Setup Menu when prompted, as shown in the figure below.
  - b Press the right arrow button to select the **Boot Options** tab.
  - c Select **Internal EFI Shell** as **Boot Option #1** in the boot menu.
  - d Select **[Enabled]** in the **USB Boot Priority** field.
  - e Press **F10** to save the changes.  
A confirmation window displays.
  - f Select **Yes** and press **[Enter]**.The engine restarts.
- 11 Type **F6** to open the Boot Menu when prompted, as shown in the figure below.
- 12 Select **Install <version number>** from the menu.  
The installation begins automatically and once complete, the engine shuts off.

- 13 Remove the USB flash drive.
- 14 Turn on the engine.
- 15 Proceed to [Configuration](#) on page 14, and follow the instructions for configuring the engine.

# Glossary

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