

Trend Micro™

Deep Discovery™ Director

5.5 Patch 2

Internal Analytics Installation and Deployment Guide

Breakthrough Protection Against APTs and Targeted Attacks

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https://docs.trendmicro.com/en-us/enterprise/deep-discovery-director.aspx

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Preface

Preface

Welcome to the Trend Micro™ Deep Discovery™ Director (Internal Network Analytics Version) *Installation and Deployment Guide*. This guide contains information about the appliance and the requirements and procedures for deploying and installing Deep Discovery Director (Internal Network Analytics Version).

T

Documentation

The documentation set for Deep Discovery Director (Internal Network Analytics Version) includes the following:

TABLE 1. Product Documentation

DOCUMENT	DESCRIPTION
Administrator's Guide	The Administrator's Guide contains detailed instructions on how to configure and manage Deep Discovery Director (Internal Network Analytics Version), and explanations on Deep Discovery Director (Internal Network Analytics Version) concepts and features.
Syslog Content Mapping Guide	The Syslog Content Mapping Guide provides information about log management standards and syntaxes for implementing syslog events in Deep Discovery Director.
Automation API Guide	A PDF document that explains how to use Deep Discovery Director Automation APIs.
Quick Start Card	The Quick Start Card provides user-friendly instructions on connecting Deep Discovery Director (Internal Network Analytics Version) to your network and on performing the initial configuration.
Readme	The Readme contains late-breaking product information that is not found in the online or printed documentation. Topics include a description of new features, known issues, and product release history.
Online Help	Web-based documentation that is accessible from the Deep Discovery Director (Internal Network Analytics Version) management console.
	The Online Help contains explanations of Deep Discovery Director (Internal Network Analytics Version) components and features, as well as procedures needed to configure Deep Discovery Director (Internal Network Analytics Version).

DOCUMENT	DESCRIPTION
Support Portal	The Support Portal is an online database of problem-solving and troubleshooting information. It provides the latest information about known product issues. To access the Support Portal, go to the following website: https://success.trendmicro.com
Installation and Deployment Guide	The Installation and Deployment Guide contains information about requirements and procedures for planning deployment, installing Deep Discovery Director (Internal Network Analytics Version), and using the Preconfiguration Console to set initial configurations and perform system tasks.

View and download product documentation from the Trend Micro Online Help Center:

https://docs.trendmicro.com/en-us/home.aspx

Audience

The Deep Discovery Director (Internal Network Analytics Version) documentation is written for IT administrators and security analysts. The documentation assumes that the reader has an in-depth knowledge of networking and information security, including the following topics:

- Network topologies
- Database management
- Antivirus and content security protection

Document Conventions

The documentation uses the following conventions:

TABLE 2. Document Conventions

CONVENTION	DESCRIPTION
UPPER CASE	Acronyms, abbreviations, and names of certain commands and keys on the keyboard

CONVENTION	DESCRIPTION	
Bold	Menus and menu commands, command buttons, tabs, and options	
Italics	References to other documents	
Monospace	Sample command lines, program code, web URLs, file names, and program output	
Navigation > Path	The navigation path to reach a particular screen	
	For example, File > Save means, click File and then click Save on the interface	
Note	Configuration notes	
Tip	Recommendations or suggestions	
Important	Information regarding required or default configuration settings and product limitations	
WARNING!	Critical actions and configuration options	

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Chapter 1

About Your Hardware System

Package Contents

Examine the Deep Discovery Director (Internal Network Analytics Version) appliance package contents and hardware to correctly configure the appliance in your network.

The following illustration shows the items that are included in the Deep Discovery Director (Internal Network Analytics Version) appliance package.



FIGURE 1-1. Package Contents

TABLE 1-1. Package Contents

#	NAME	DESCRIPTION
1	Slide and rail sets (2)	Secure the appliance (fixed mount) or use to secure and allow the appliance to slide in and out of a four-post rack (sliding mount). Note The rail is assembled with the slide when the package is shipped. Remove the rail from the slide before mounting the appliance.

#	Name	DESCRIPTION
2	Trend Micro Installation DVD for Deep Discovery Director (Internal Network Analytics Version) (1) Deep Discovery Director (Internal Network Analytics Version) Quick Start Card	The Installation DVD contains installers and the PDF documentation set, including the following: • Trend Micro Deep Discovery Director (Internal Network Analytics Version) Administrator's Guide • Trend Micro Deep Discovery Director (Internal Network Analytics Version) Installation and Deployment Guide The Quick Start Card provides user-friendly instructions on connecting Deep Discovery Director (Internal Network Analytics Version) to your network and on performing the initial configuration.
3	Power cords (2)	Supply power to the appliance (length is 79 in/200 cm)
4	Trend Micro (1)	The appliance

The Deep Discovery Director - Network Analytics 9200 Appliance

Front Panel

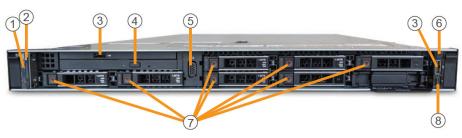


FIGURE 1-2. Front Panel

TABLE 1-2. Front Panel Features

#	FEATURE	DESCRIPTION
1	Status LED indicators	Displays system ID, status information, and system error messages
2	ID button/indicator	Not supported by Deep Discovery Director (Internal Network Analytics Version)
3	USB connector (2)	Connects USB devices (for example, keyboard or mouse) to the appliance
4	Optical drive	DVD drive
5	Video connector	Connects a VGA display to the appliance
6	Power-on button/indicator	Lights when the system power is on
		Controls the power supply output to the appliance
7	Hard drives (7)	2.5-inch, hot-swappable hard drive
8	iDRAC Direct port (Micro-AB USB)	Enables you to access the iDRAC Direct (Micro-AB) features

Back Panel



FIGURE 1-3. Back Panel

TABLE 1-3. Back Panel Features

#	FEATURE	DESCRIPTION	
9	RS-232 serial connector	Connects to the serial port of a computer with an RS-232 type connection to perform preconfiguration	
10	iDRAC port	Connects to a dedicated management port on the iDRAC card	
11	Management port	Connects to a management network for communication and interaction with other products and services	
12	ID button/indicator	Not supported by Deep Discovery Director (Internal Network Analytics Version)	
13	Video connector	Connects a VGA display to the appliance	
14	USB connectors (2)	Connects USB devices (for example, keyboard or mouse) to the appliance	
15	Eth1 port (used for port binding)	Integrated 10/100/1000 Mbps NIC connector	
16	Power supply connectors (2)	Two 550-watt hot-plug power supply units: • Main power supply • Backup power supply Note	
		"Hot-plug" refers to the ability to replace the power supply while the appliance is running. Deep Discovery Director (Internal Network Analytics Version) automatically and safely recognizes the change without operational interruption or risk.	
		Use the power cord included in the package.	

NIC Indicators

Deep Discovery Director (Internal Network Analytics Version) has 2 copper-based Ethernet NIC ports. All accept integrated 10/100/1000 Mbps connectors.

Each port has an indicator showing the current state of the port.

TABLE 1-4. NIC Indicator Key

Indicator	DESCRIPTION		
1	Connection status: Port connected/not connected to a valid network		
	Data activity status: Network data transmission/reception		
2	Data transmission speed		

TABLE 1-5. NIC Indicators

INDICATOR	Indicator Pattern	CONDITION	
1	Yellow	10 Mbps	
	Yellow	100 Mbps	
	Green	1000 Mbps	
	Orange flashing	Identity	
		Use the Identify Adapter button in Intel PROSet to control blinking. For more information, see Intel PROSet Help.	
2	Off	No NIC network connection	
	Green on	NIC connection to a valid network	
	Green flashing	Network data is being sent or received	

TABLE 1-6. NIC ports and Indicators

Port	PORT STYLE
Management port	1 2
Eth1 port (used for port binding)	1 2

Power Indicators

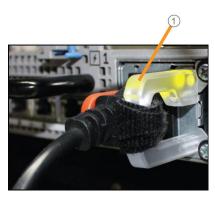


FIGURE 1-4. Power Supply Status Indicators

1: Power supply status indicator/handle

TABLE 1-7. Power Supply Status Indicators

INDICATOR PATTERN	Condition			
Not lit	Power is not connected			
Green	A valid power source is connected to the power supply and the power supply is operational			
Flashing green	When hot-adding a power supply, indicates the power supply is mismatched with the other power supply (in terms of efficiency, feature set, health status, and supported voltage)			
	Replace the power supply that has the flashing indicator with a power supply that matches the capacity of the other installed power supply.			
Flashing amber	Indicates a problem with the power supply			
	Important When correcting a power supply mismatch, replace only the power supply with the flashing indicator. Swapping the opposite power supply to make a matched pair can result in an error condition and an unexpected system shutdown.			
	To change from a high output configuration to a low output configuration or vice versa, first power down the system.			
	AC power supplies support both 220 V and 110 V input voltages. When two identical power supplies receive different input voltages, they may output different wattages and trigger a mismatch.			
	If two power supplies are used, they must be of the same type and have the same maximum output power.			

Setting Up the Hardware

Procedure

1. Mount the appliance in a standard 19-inch 4-post rack, or on a free-standing object, such as a sturdy desktop.



Note

When mounting the appliance, leave at least two inches of clearance on all sides for proper ventilation and cooling.

2. Connect the appliance to a power source.

Deep Discovery Director (Internal Network Analytics Version) has two power supply units. One unit acts as the main power supply and the other as a backup.

3. Connect the monitor to the VGA port at the back panel.

See Back Panel on page 1-4 for a diagram.

- 4. Connect the keyboard and mouse to the USB ports on the back panel.
- **5.** Connect the management port to your network.
- **6.** Power on the appliance.

The power button is found on the front panel of the appliance, behind the bezel. See *Front Panel on page 1-3* for a diagram.

A screen similar to the following appears:

```
FZ = System Setup
Lifecycle Controller Disabled
F11 = BIOS Boot Manager
F12 = PXE Boot
Two 2.00 GHz Six-core Processors, Bus Speed:7.20 GT/s, L2/L3 Cache:1.5 MB/15 MB
System running at 2.00 GHz
System Memory Size: 48.0 GB, System Memory Speed: 1333 MHz, Voltage: 1.35V

Dell Serial ATA AHCI BIOS Version 1.0.2
Copyright (c) 1988-2012 Dell Inc.
Port E: PLDS DVD-ROM DS-8D3SH

Initializing Intel(R) Boot Agent GE v1.3.76
PXE 2.1 Build 090 (WfM 2.0)
Press Ctrl+S to enter the Setup Menu.
```

FIGURE 1-5. Power-on self-test (POST)

Next steps

If applicable, perform initial preconfiguration using the Preconfiguration Console.

Hardware Product Specifications

TABLE 1-8. Hardware Product Specifications

FEATURE	Specifications			
Rack size	1U 19-inch standard rack			
Availability	RAID 5 configuration			
Storage size	7 x 1.92TB 2.5-inch Serial-Attached SCSI (SAS) SSD			
Connectivity	Management: 1 x 1 GB/100/10Base copper			
	• Eth1: 1 x 1 GB/100/10Base copper			
Dimensions (WxDxH)	434 mm (18.97 inches) x 714.62 mm (17.08 inches) x 42.8 mm (3.41 inches)			
Maximum weight	16.04 kg (35.36 lb)			
Operating temperature	10°C to 35°C at 10% to 80% relative humidity (RH)			

FEATURE	Specifications	
Power	550W, 100-240 VAC 50/60 HZ	



Chapter 2

Installation

System Requirements

Trend Micro provides a bare metal server with Deep Discovery Director (Internal Network Analytics Version) pre-installed.

Trend Micro provides Deep Discovery Director (Internal Network Analytics Version) packaged as an ISO file on an installation DVD.

Installing Deep Discovery Director (Internal Network Analytics Version) on a Hardware Appliance using a VGA Cable



WARNING!

Back up any pre-existing data on the target hard disk before installing Deep Discovery Director (Internal Network Analytics Version). The installation process formats and repartitions the hard disk and removes all existing data.

Procedure

- 1. Using a VGA cable, connect a monitor to the Deep Discovery Director (Internal Network Analytics Version) appliance VGA port.
- 2. Insert the Deep Discovery Director (Internal Network Analytics Version) DVD into the CD/DVD drive.
- 3. Power on the appliance.

The BIOS screen appears.

```
F2 = System Setup
F10 = Lifecycle Controller
F11 = Boot Manager
F12 = PXE Boot
Initializing Serial ATA devices...
```

FIGURE 2-1. BIOS Screen

4. Press F11 to access the Boot Manager.

The $\bf Boot\,Manager\,Main\,Menu$ screen appears.

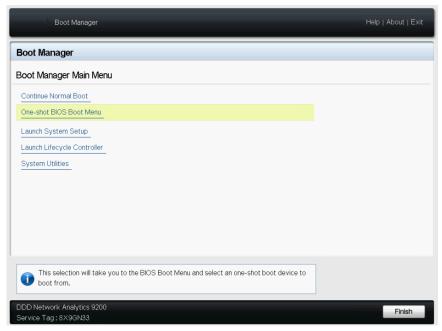


FIGURE 2-2. Boot Manager Main Menu Screen

5. Select One-shot BIOS Boot Menu.

The $\bf Boot\,Menu$ screen appears.

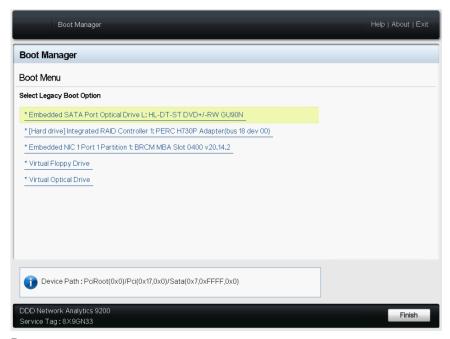


FIGURE 2-3. Boot Menu Screen

Select Embedded SATA port Optical Drive L:HL-DT-ST DVD+/-RW GU90N. The Deep Discovery Director Installation screen appears.

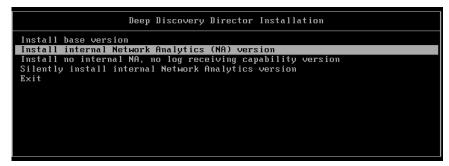


FIGURE 2-4. Deep Discovery Director Installation Screen

7. Select Install internal Network Analytics (NA) version.

The **Disk Selection** screen appears.



FIGURE 2-5. Disk Selection Screen

8. Click Continue.

The **Hardware Profile** screen appears.

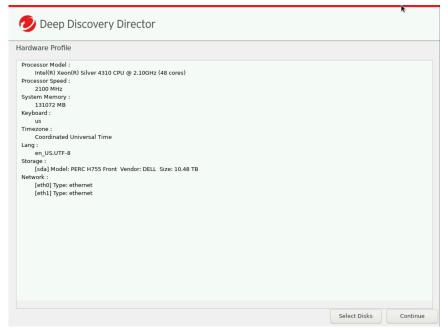


FIGURE 2-6. Hardware Profile Screen

9. Click Continue.

The installation starts.



FIGURE 2-7. Installation Screen

Installing Deep Discovery Director (Internal Network Analytics Version) on a Hardware Appliance using a Serial Cable



WARNING!

Back up any pre-existing data on the target hard disk before installing Deep Discovery Director (Internal Network Analytics Version). The installation process formats and repartitions the hard disk and removes all existing data.

Procedure

- 1. Using a serial cable, connect a laptop computer to the Deep Discovery Director (Internal Network Analytics Version) appliance serial port.
- **2.** Insert the Deep Discovery Director (Internal Network Analytics Version) DVD into the CD/DVD drive.
- **3.** Power on the appliance.

The BIOS screen appears.

```
F2 = System Setup
F10 = Lifecycle Controller
F11 = Boot Manager
F12 = PXE Boot
Initializing Serial ATA devices...
```

FIGURE 2-8. BIOS Screen

4. Press F11 to access the Boot Manager.

The **Boot Manager Main Menu** screen appears.



FIGURE 2-9. Boot Manager Main Menu Screen

5. Select One-shot BIOS Boot Menu.

The **Boot Menu** screen appears.

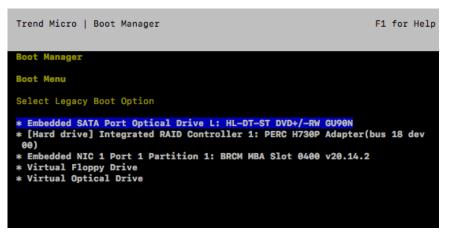


FIGURE 2-10. Boot Menu Screen

6. Select Embedded SATA port Optical Drive L:HL-DT-ST DVD+/-RW GU90N.

The Deep Discovery Director Installation screen appears.

```
Deep Discovery Director Installation

Install base version
Install internal Network Analytics (NA) version
Install no internal NA, no log receiving capability version
Silently install internal Network Analytics version
Exit
```

FIGURE 2-11. Deep Discovery Director Installation Screen

7. Select Silently install internal Network Analytics version.

The installation starts.



Note

If you select **Silently install internal Network Analytics version** and you are accessing the console using a VGA cable instead of a serial cable, then the installation progress messages do not appear on-screen.

FIGURE 2-12. Installation Screen

Virtual Appliance System Requirements

Trend Micro recommends the following minimum specifications when installing Deep Discovery Director (Internal Network Analytics Version) on a virtual appliance.



Important

The minimum specifications are for a fresh installation. If you are upgrading from Deep Discovery Director 5.3 or later, you can use your current configuration with Deep Discovery Director 5.5.

TABLE 2-1. System Requirements

REQUIREMENT	MINIMUM SPECIFICATIONS
Hardware	Network interface card: 1 with E1000 or VMXNET 3 adapter
	 Important Deep Discovery Director (Internal Network Analytics Version) does not support the VMXNET 2 (Enhanced) adapter type. For port binding, specify the same adapter type to
	use for all network interface cards.
	SCSI Controller: LSI Logic Parallel CPU: 1.8 GHz (at least 8 cores)
	Memory: 24 GB Hard disk: 300 GB
	If configuring for throughput of 10 Gbps or greater, ensure the hypervisor hardware also meets the following minimum requirements:
	CPU: 2.1 GHz or higher
	Memory: DDR4 with transfer rate of at least 2400 MT/s
	 Hard disk: SSD at least SAS 12 Gbps Read Intensive

REQUIREMENT	MINIMUM SPECIFICATIONS
	Note The minimum specifications are calculated using 30 days of detection log storage for 1 Deep Discovery appliance as basis.
	 The CPU, memory, and hard disk requirements increase with the expected throughput for Deep Discovery Director (Internal Network Analytics Version) and with the number of Deep Discovery appliances Deep Discovery Director (Internal Network Analytics Version) is expected to aggregate detection logs from. For details, see Recommend System Requirements on page 2-16.
Software	 Hypervisor: VMware vSphere ESXi 7.0 or Microsoft Hyper-V in Windows Server 2016, 2019, 2022, 2025 Guest operating system: Red Hat Enterprise Linux 7 (64-bit)
Ports	TCP 443 (Deep Discovery Director connection)UDP 123 (default NTP server connection)

REQUIREMENT	MINIMUM SPECIFICATIONS				
Certificate	Self-signed				
	PEM format				
	Certificate only or certificate and private key in the same file				
	 Certificate chain supported Encryption methods: Private key: RSA algorithm only Certificate: Digest size of 256 (SHA-256) or higher 				
	Generation command example (CentOS):				
	<pre># openssl genpkey -algorithm RSA -out key.pem -pkeyop t rsa_keygen_bits:2048</pre>				
	# openssl req -new -key key.pem -out csr.pem				
	<pre># openssl req -x509 -sha256 -days 365 -key key.pem -i n csr.pem -out certificate.pem</pre>				
	<pre># cat key.pem >> certificate.pem</pre>				

Recommend System Requirements

The CPU, memory, and hard disk requirements increase with the expected throughput for Deep Discovery Director (Internal Network Analytics Version) and with the number of Deep Discovery appliances Deep Discovery Director (Internal Network Analytics Version) is expected to aggregate detection logs from.



Important

The hard disk requirements below are calculated using 180 days of detection log storage as basis. The longer detection logs are to be stored, the more disk space is required.

If configuring for throughput of 10 Gbps or greater, ensure the hypervisor hardware also meets the following minimum requirements:

• CPU: 2.1 GHz or higher

• Memory: DDR4 with transfer rate of at least 2400 MT/s

• Hard disk: SSD at least SAS 12 Gbps Read Intensive

THROUGHPUT (GBPS)	VIRTUAL CPUS	VIRTUAL MEMORY (GB)	VIRTUAL DISK
1	8	28	800 GB
2	10	34	1.3 TB
3	12	40	1.8 TB
4	14	46	2.3 TB
10	26	82	5.3 TB
20	46	142	10.3 TB
30	66	202	15.3 TB
40	86	262	20.4 TB

Installing Deep Discovery Director (Internal Network Analytics Version) on a Virtual Appliance



Important

Deep Discovery Director (Internal Network Analytics Version) supports installation under legacy Basic Input/Output System (BIOS).

- Changing the setting after installation causes Deep Discovery Director (Internal Network Analytics Version) to be unable to boot.
- Deep Discovery Director (Internal Network Analytics Version) must be reinstalled to change the setting.

Procedure

- 1. Create a custom virtual machine with the following minimum specifications:
 - Virtual machine hardware version: 17
 - Guest operating system: Red Hat Enterprise Linux 7 (64-bit)
 - · CPU: 1 virtual socket with 8 cores
 - Memory: 24GB
 - Network interface card: 1 with E1000 or VMXNET 3 adapter



Important

- Deep Discovery Director (Internal Network Analytics Version) does not support the VMXNET 2 (Enhanced) adapter type.
- For port binding, specify the same adapter type to use for all network interface cards.
- SCSI Controller: LSI Logic Parallel
- · Hard disk: 300GB

- **2.** Open the virtual machine console, and then power on the virtual machine.
- **3.** Connect the CD/DVD device of the virtual machine to the Deep Discovery Director (Internal Network Analytics Version) ISO image file, and then boot the virtual machine from the CD/DVD drive.

The Deep Discovery Director (Internal Network Analytics Version) Installation screen appears.

```
Deep Discovery Director Installation

Install base version

Install internal Network Analytics (NA) version

Install no internal NA, no log receiving capability version

Silently install internal Network Analytics version

Exit
```

FIGURE 2-13. Deep Discovery Director Installation Screen

4. Select Install internal Network Analytics (NA) version.

The **Disk Selection** screen appears.

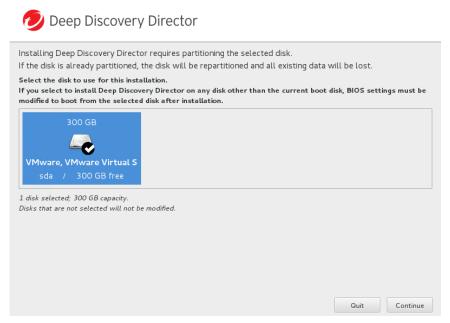


FIGURE 2-14. Disk Selection Screen

- 5. Click Continue.
 - The **Hardware Profile** screen appears.
- 6. Click Continue.

The installation starts.



FIGURE 2-15. Installation Screen



Chapter 3

Preconfiguration

Preconfiguration Console

The Deep Discovery Director (Internal Network Analytics Version) preconfiguration console is a terminal communications program used to configure the network and system settings that are required to access the Deep Discovery Director (Internal Network Analytics Version) management console.

The preconfiguration console also supports recovery operations if the management console is not available.

Use the preconfiguration console to do the following:

- · Configure IPv4 network settings
- · Ping a remote host to verify configuration
- · Manage user accounts
- · Manage SSH access
- · Perform diagnostic tests



Note

To enter data when using HyperTerminal, disable the scroll lock function on your keyboard.

Preconfiguration Console Access

The Deep Discovery Director (Internal Network Analytics Version) preconfiguration console is accessible from a hardware or virtual appliance.

Access the preconfiguration console as follows:

Accessing the Preconfiguration Console with a VGA Port on page 3-3



Tip

Trend Micro recommends accessing the preconfiguration console using a monitor with a VGA port.

• Accessing the Preconfiguration Console with a Serial Port on page 3-4

Accessing the Preconfiguration Console with a VGA Port

Procedure

- **1.** Using a VGA cable, connect the monitor VGA port to the appliance VGA port.
- **2.** When the **login as** prompt appears, type the user name and then press ENTER.

The following are the default credentials:

• User name: admin

· Password: admin



3. When the **Password** prompt appears, type the password and then press ENTER.

Accessing the Preconfiguration Console with a Serial Port

Procedure

- 1. Using an RS-232 serial cable, connect the serial port of the Deep Discovery Director (Internal Network Analytics Version) appliance to the serial port on a computer.
- **2.** On the computer, open a serial communication application (HyperTerminal).
- **3.** Type the following values if you are accessing the Preconfiguration Console for the first time:
 - Bits per second: 115200
 - Data bits: 8
 - · Parity: None
 - Stop bits: 1
 - Flow control: None



Note

To enter data when using HyperTerminal, disable the scroll lock function on your keyboard.

4. When the **login as** prompt appears, type the user name and then press ENTER.

The following are the default credentials:

- User name: admin
- · Password: admin



5. When the **Password** prompt appears, type the password and then press ENTER.

Preconfiguration Console Main Menu

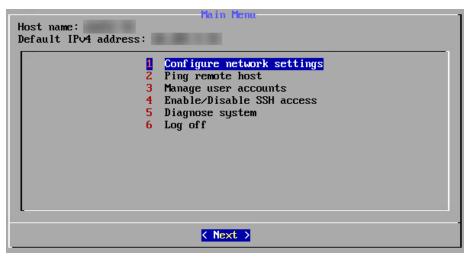


FIGURE 3-1. Preconfiguration Console Main Menu

The preconfiguration console main menu displays the following menu items:

TABLE 3-1. Main Menu Items

	·		
İTEM	DESCRIPTION		
1) Configure network settings	Modify the Deep Discovery Director (Internal Network Analytics Version) IPv4 network settings.		
2) Ping remote host	Ping a remote host to test network connectivity.		
3) Manage user accounts	Add user accounts, delete user accounts, and change the password for user accounts for the preconfiguration console.		
4) Enable/Disable SSH access	Enable or disable SSH access to Deep Discovery Director (Internal Network Analytics Version).		
5) Diagnose system	Perform diagnostic tests for the database and services, as well as view hardware information.		
6) Log off	Log off from the preconfiguration console.		

To access a menu item, type the number for the menu item and then press ENTER.

Configuring Network Settings

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

• User name: admin

· Password: admin

The Main Menu screen appears.

2. Select **Configure network settings** and then press **ENTER**.

The **Configure Network Settings** screen appears.

- **3.** Configure the following required settings:
 - · IPv4 address
 - Subnet mask
 - IPv4 gateway
 - DNS server 1



Note

Only IPv4 settings can be configured on the preconfiguration console. To configure IPv6 and port binding, use the **Network** screen on the management console.

4. Press **TAB** to navigate to **Save**, and then press **ENTER**.

The Main Menu screen appears after the settings are successfully saved.

Configuring SSH Access

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

• User name: admin

· Password: admin

The **Main Menu** screen appears.

2. Select Enable/Disable SSH access and then press ENTER.

The Enable/Disable SSH Access screen appears.

- **3.** Press **UP** or **DOWN** to move to an option and then press **ENTER** to select an option.
- **4.** Press **TAB** to navigate to **Next**, and then press **ENTER**.

The **Main Menu** screen appears after the settings are successfully saved.

Pinging a Remote Host

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

- User name: admin
- Password: admin

The Main Menu screen appears.

2. Select **Ping remote host** and then press **ENTER**.

The Ping Remote Host screen appears.

3. Type the IP address or FQDN of a remote host.

4. Press **TAB** to navigate to **Ping**, and then press **ENTER**.

The **Ping Response** screen appears.

Manage User Accounts

Use the Manage User Accounts screen to perform the following tasks:

- Add a user account for the preconfiguration console
- Delete a user account for the preconfiguration console
- Change a user account password for the preconfiguration console

Adding a User Account

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

- · User name: admin
- · Password: admin

The **Main Menu** screen appears.

2. Select Manage user accounts and then press ENTER.

The **Manage User Accounts** screen appears.

- 3. Select Add account.
- 4. Press **TAB** to navigate to **Next**, and then press **ENTER**.

The Add Account screen appears.

- **5.** Type a user name.
- **6.** Press **TAB** to navigate to **Save**, and then press **ENTER**.
- **7.** Type a **New password** and then type the password again in **Confirm password**.

8. Press **TAB** to navigate to **Save**, and then press **ENTER**.

The **Manage User Accounts** screen appears after the account has been added.

Deleting a User Account

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

• User name: admin

· Password: admin

The Main Menu screen appears.

2. Select **Manage user accounts** and then press **ENTER**.

The **Manage User Accounts** screen appears.

- 3. Select an account to delete.
- **4.** Press **TAB** to navigate to **Next**, and then press **ENTER**.
- 5. Select **Delete account**.
- **6.** Press **TAB** to navigate to **Next**, and then press **ENTER**.

The **Delete Account** screen appears.

7. Press **TAB** to navigate to **Yes**, and then press **ENTER**.

The **Manage User Accounts** screen appears after the account has been deleted.

Changing a User Account Password

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

• User name: admin

• Password: admin

The **Main Menu** screen appears.

2. Select Manage user accounts and then press ENTER.

The **Manage User Accounts** screen appears.

- **3.** Select an account to change the password.
- **4.** Press **TAB** to navigate to **Next**, and then press **ENTER**.
- **5.** Select **Change password**.

The **Change password** screen appears.

- **6.** Type a **New password** and then type the password again in **Confirm password**.
- **7.** Press **TAB** to navigate to **Save**, and then press **ENTER**.

The **Manage User Accounts** screen appears after the password has been changed.



Chapter 4

Diagnose System

Diagnose System Overview

Use the **Diagnose System** screen to perform the following tasks:

- · Diagnose the database
- · View the system hardware information
- Diagnose the system services

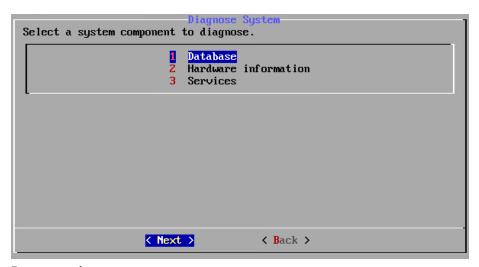


FIGURE 4-1. Diagnose System Screen

Diagnosing the Database

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

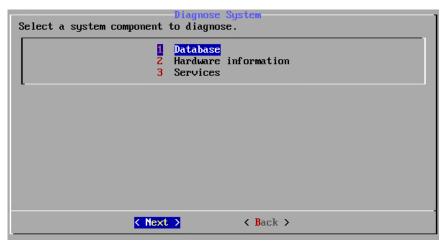
• User name: admin

· Password: admin

The Main Menu screen appears.

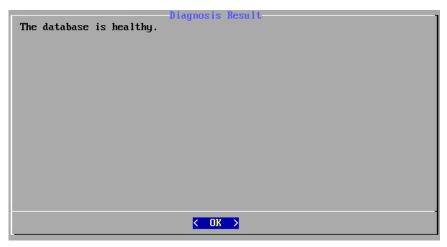
2. Select **Diagnose system** and then press **ENTER**.

The **Diagnose System** screen appears.



3. Select **Database** and then press **ENTER**.

The **Diagnostic Result** screen appears.



4. (Optional) If the database is not healthy, you can select **Yes** and then press **ENTER** to force recovery of the database.



WARNING!

Recovering the database deletes all data.

Viewing Hardware Information

Procedure

1. Log on to the preconfiguration console.

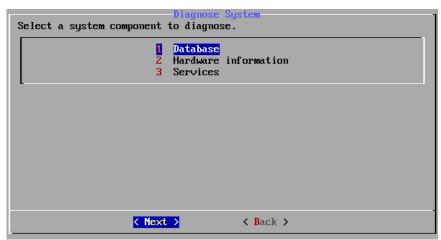
The following are the default credentials:

- · User name: admin
- · Password: admin

The Main Menu screen appears.

2. Select **Diagnose system** and then press **ENTER**.

The **Diagnose System** screen appears.



3. Select **Hardware Information** and then press **ENTER**.

The hardware information appears on the **Diagnostic Result screen**..

```
--System Information---
Manufacturer: VMware, Inc.
Product Name: VMware Virtual Platform
BIOS Vendor: Phoenix Technologies LTD
BIOS Version: 6.00
BIOS Date: 12/12/2018
Serial number: None
-----CPU Information-----
Number of CPU: 4
Model name: Intel(R) Xeon(R) CPU E5-2620 0 @ 2.00GHz
-----Memory Information-----
Number of Memory: 2
Total Memory: 32 GB
DIMM combination:
-Size: 16 GB, Speed: 0
-Size: 16 GB, Speed: 0
                           <u>।qqqqq</u>qqqqqqqqqqqqqqqqqqqq<mark>70%</mark>qqqq
                         < EXIT >
```

4. Press the up or down arrows to view more information on the **Diagnostic Result** screen.

Diagnosing Services

Procedure

1. Log on to the preconfiguration console.

The following are the default credentials:

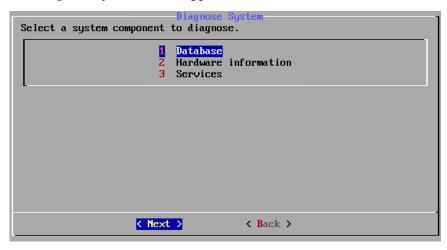
User name: admin

· Password: admin

The Main Menu screen appears.

2. Select **Diagnose system** and then press **ENTER**.

The **Diagnose System** screen appears.



3. Select **Services** and then press **ENTER**.

The **Diagnostic Result** screen appears.

```
[ OK ] agent
[ OK ] api
[ OK ] clickhouse
[ OK ] d3ma_elasticsearch
[ OK ] elasticsearch
[ OK ] euq
[ OK ] naop
[ OK ] nginx
[ OK ] nginx
[ OK ] pbagent
[ OK ] postgres
[ OK ] preport
[ OK ] resource
[ OK ] resurce
[ OK ] scheduler
```



Chapter 5

Technical support

Learn about the following topics:

- Troubleshooting resources on page 5-2
- Contacting Trend Micro on page 5-3
- Sending suspicious content to Trend Micro on page 5-4
- Other resources on page 5-5

Troubleshooting resources

Before contacting technical support, consider visiting the following Trend Micro online resources.

Using the support portal

The Trend Micro Support Portal is a 24x7 online resource that contains the most up-to-date information about both common and unusual problems.

Procedure

- 1. Go to https://success.trendmicro.com.
- Select from the available products or click the appropriate button to search for solutions.
- **3.** Use the **Search Support** box to search for available solutions.
- If no solution is found, click Contact Support and select the type of support needed.



Tip

To submit a support case online, visit the following URL:

https://success.trendmicro.com/en-US/contactus/

A Trend Micro support engineer investigates the case and responds in 24 hours or less.

Threat encyclopedia

Most malware today consists of blended threats, which combine two or more technologies, to bypass computer security protocols. Trend Micro combats this complex malware with products that create a custom defense strategy. The Threat Encyclopedia provides a comprehensive list of names and symptoms for various blended threats, including known malware, spam, malicious URLs, and known vulnerabilities.

Go to https://www.trendmicro.com/vinfo/us/threat-encyclopedia/#malware to learn more about:

- Malware and malicious mobile code currently active or "in the wild"
- Correlated threat information pages to form a complete web attack story
- Internet threat advisories about targeted attacks and security threats
- · Web attack and online trend information
- · Weekly malware reports

Contacting Trend Micro

In the United States, Trend Micro representatives are available by phone:

Address	Trend Micro, Incorporated			
	225 E. John Carpenter Freeway, Suite 1500			
	Irving, Texas 75062 U.S.A.			
Phone	Phone: +1 (817) 569-8900			
	Toll-free: (888) 762-8736			
Website	https://www.trendmicro.com			
	https://success.trendmicro.com/en-US/contactus/			

• Worldwide support offices:

https://www.trendmicro.com/us/about-us/contact/index.html

• Trend Micro product documentation:

https://docs.trendmicro.com

Speeding up the support call

To improve problem resolution, have the following information available:

- Steps to reproduce the problem
- Appliance or network information

- Computer brand, model, and any additional connected hardware or devices
- · Amount of memory and free hard disk space
- Operating system and service pack version
- Version of the installed agent
- Serial number or Activation Code
- · Detailed description of install environment
- · Exact text of any error message received

Sending suspicious content to Trend Micro

Several options are available for sending suspicious content to Trend Micro for further analysis.

Email Reputation Services

Query the reputation of a specific IP address and nominate a message transfer agent for inclusion in the global approved list:

https://servicecentral.trendmicro.com/en-us/ers/

Refer to the following Knowledge Base entry to send message samples to Trend Micro:

https://success.trendmicro.com/en-US/solution/KA-0001177

File Reputation Services

Gather system information and submit suspicious file content to Trend Micro:

https://success.trendmicro.com/en-US/solution/KA-0002449

Record the case number for tracking purposes.

Web Reputation Services

Query the safety rating and content type of a URL suspected of being a phishing site, or other so-called "disease vector" (the intentional source of Internet threats such as spyware and malware):

https://global.sitesafety.trendmicro.com/

If the assigned rating is incorrect, send a re-classification request to Trend Micro.

Other resources

In addition to solutions and support, there are many other helpful resources available online to stay up to date, learn about innovations, and be aware of the latest security trends.

Download center

From time to time, Trend Micro may release a patch for a reported known issue or an upgrade that applies to a specific product or service. To find out whether any patches are available, go to:

https://www.trendmicro.com/download/

If a patch has not been applied (patches are dated), open the Readme file to determine whether it is relevant to your environment. The Readme file also contains installation instructions.



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support resolve issues faster, 5-3



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