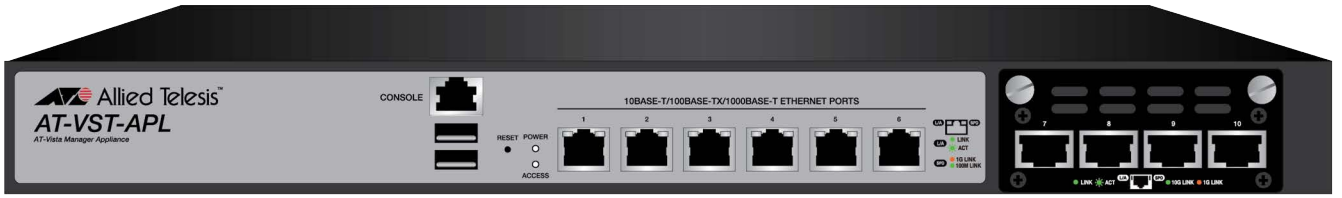
VST-APL Series

Vista Manager Appliance

- VST-APL-06
- VST-APL-10

4961



Installation Guide

613-002852 Rev. B

Electrical Safety and Emissions Standards

This section contains the following:

US Federal Communications Commission

Radiated Energy

Note
This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Note
Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Industry Canada

Radiated Energy

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Emissions, Immunity and Electrical Safety Standards

RFI Emissions FCC Part 15 Subpart B Class A, EN55032, EN55035, EN55024, CISPR 32 Class A, VCCI Class A, RCM

Warning
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. E84

Electrical Safety

- UL62368-1
- EN62368-1 (TUV T-Mark)
- IEC 60950-1
- IEC 62368-1
- CE
- EN60825-1:1994+a11
- IEC60825-1:1994+a11
- EN60825-2:1994
- IEC60825-2:1994
- EN60950:1992+A1+A2+A3
- IEC60950:1992+A1+A2+A3
- RoHS
- China RoHS

EMS

- IEC 61000-4-2:2008
- IEC 61000-4-3
- IEC 61000-4-4
- IEC 61000-4-5
- IEC 61000-4-6
- IEC 61000-4-8
- IEC 61000-4-11
- IEC 61000-3-2
- IEC 61000-3-3

EMS

- ETSI EN300 386
- ETSI EN300 132-2

Translated Safety Statements

Important: The ✍ indicates that translations of the safety statement are available in the PDF document ***Translated Safety Statements*** posted on the Allied Telesis website at ***alliedtelesis.com***.

Remarque: Les consignes de sécurité portant le symbole ✍ sont traduites dans plusieurs langues dans le document *Translated Safety Statements,* disponible à l'adresse ***alliedtelesis.com***.

Contents

Preface

This manual is the installation guide for the Vista Manager Appliance. This installation guide applies to the following models:

- AT-VST-APL-06
- AT-VST-APL-10

This preface contains the following sections:

Document Conventions

This document uses the following conventions:

Note
Notes provide additional information.

Caution
Cautions inform you that performing or omitting a specific action may result in equipment damage or loss of data.

Warning
Warnings inform you that performing or omitting a specific action may result in bodily injury.

Contacting Allied Telesis

If you need assistance with this product, visit Allied Telesis web site at **www.alliedtelesis.com/support**.

Chapter 1
Overview

This chapter contains the following sections:

Overview

The Vista Manager Appliance is a platform that runs multiple network management software. It comes with Allied Telesis network management applications installed so that you can activate all or some of the applications that serve your organization's network needs.

The applications that are pre-installed on the Vista Manager Appliance are:

- Vista Manager
- AWC
- AMF-SEC
- AMF-Master

Vista Manager Appliance Models

The Vista Manager Appliance includes the following models:

- AT-VST-APL-06
- AT-VST-APL-10

Figure 1 shows the AT-VST-APL-06 model and its components.

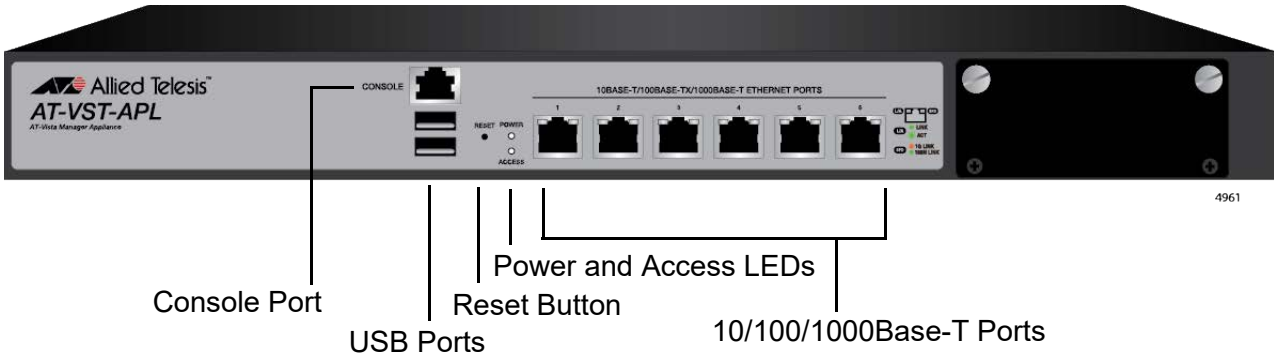


Figure 1. AT-VST-APL-06 Model and Components

Figure 2 shows the AT-VST-APL-10 model and its components.

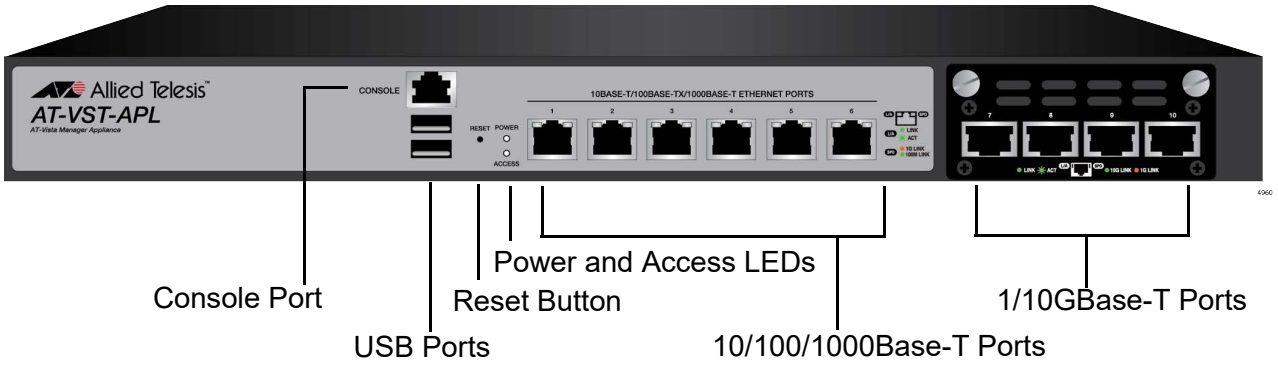


Figure 2. AT-VST-APL-10 Model and Components

Figure 3 shows the back panel of the Vista Manager Appliance.

Figure 3. Back Panel of the Vista Manager Appliance

10/100/1000 Mbps Twisted Pair Ports

Here are the basic features of the 10/100/1000 Mbps twisted pair ports:

- Six ports
- 10Base-T, 100Base-TX, and 1000Base-T compliant
- IEEE 802.3u Auto-Negotiation compliant
- Auto-MDI/MDIX
- 100 meters (328 feet) maximum operating distance
- IEEE 802.3x flow control in 10/100Base-TX full-duplex mode
- IEEE 802.3x backpressure in 10/100Base-TX half-duplex mode
- IEEE 802.3ab 1000Base-T
- RJ-45 connectors
- Port pinouts shown in Table 12 on page 45 and Table 13 on page 45

1/10Gbps Twisted Pair Ports

Here are the basic features of the 1/10Gbps twisted pair ports:

Note
The 1/10G ports are only for the AT-VST-APL-10 Vista Manager Appliance.

- 4 ports
- 10GBase-T compliant

USB 3.0 Ports

The USB ports are not accessible (used at a factory only).

Console Port

The console port is for diagnostic purposes only.

Reset Button

The reset button shuts down and restarts the system.

LEDs

Here are the LEDs:

- Link/activity and speed LEDs for the twisted pair ports
- Power LED
- Access LED

Installation Options

Here are the installation options for the Vista Manager Appliance:

- 19-inch equipment rack
- Table or desk

On/Off Switch

The switch on the back panel turns on and off the Vista Manager Appliance.

Management Interface

You can manage the Vista Manager Appliance using the Web GUI. The default IP address assigned to the Vista Manager Appliance is:

192.168.1.1

Supported Web Browsers

Here are the supported Web browsers to access the Web GuI:

- Google Chrome™
- Mozilla Firefox™
- Microsoft Edge or Internet Explorer™ 11 or later
- Apple Safari™

Cable Requirements

The minimum cable requirements are listed here:

- 10/100Mbps - Standard TIA/EIA 568-B-compliant Category 3 unshielded cabling.
- 1Gbps - Standard TIA/EIA 568-A-compliant Category 5 or TIA/EIA 568-B-compliant Enhanced Category 5 (Cat 5e) unshielded cabling.
- 10Gbps -Standard TIA/EIA 568-C-compliant Category 6a unshielded cabling.

LEDs

This section describes the functions of the LEDs.

LEDs for 10/100/1000Base Port

The 10Base-T/100Base-TX/1000Base-T twisted pair ports on the Vista Manager Appliance have two LEDs that display link/activity and speed information. The LEDs are shown in Figure 4.

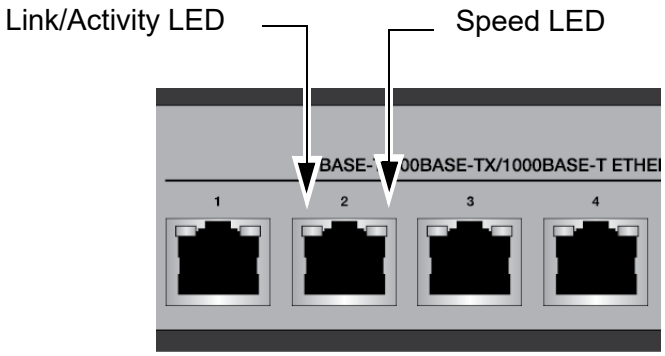


Figure 4. LEDs for the 10Base-T/100Base-TX/1000Base-T Ports

The LEDs are described in Table 1.

Table 1. LEDs on the 10Base-T/100Base-TX/1000Base-T Ports

LED	State	Description
Link/Activity LED	Solid Green	A port has established a link to a network device.
	Flashing Green	A port is transmitting or receiving data.
	Off	A port has not established a link with another network device.
Speed LED	Solid Amber	A port has established a link at 1000Mbps.
	Solid Green	A port has established a link at 100Mbps.
	Off	A port has established a link at 10Mbps or a link is down.

LEDs for 1/10GBase-T Port

The 1/10GBase-T twisted pair ports on the Vista Manager Appliance have two LEDs that display link/activity and speed information. The LEDs are shown in Figure 5.

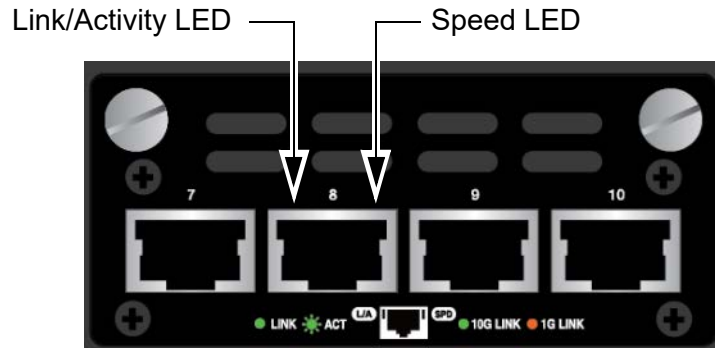


Figure 5. LEDs for the 1/10GBase-T Twisted Pair Ports

The LEDs are described in Table 2.

Table 2. LEDs on the 1/10GBase-T Ports

LED	State	Description
Link/Activity LED	Solid Green	A port has established a link to a network device.
	Flashing Green	A port is transmitting or receiving data.
	Off	A port has not established a link with another network device.
Speed LED	Solid Green	A port has established a link at 10Gbps.
	Solid Amber	A port has established a link at 1000Mbps.
	Off	A port has established a link at 100Mbps or a link is down.

Power LED

The Vista Manager Appliance has the power LED on the front panel.The power LED is shown in Figure 6.

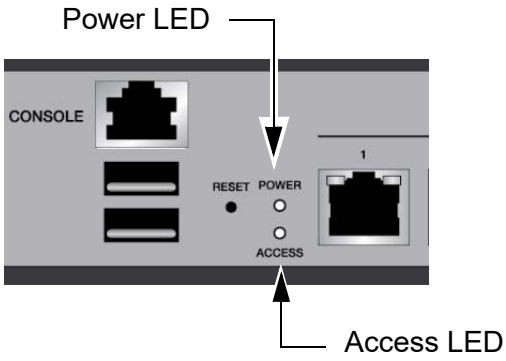


Figure 6. Power LED and Access LED

The power LED is described in Table 3.

Table 3. Power LED

LED	State	Description
Power	Solid Green	The system is on.
	Off	The system is off.

Access LED

The Vista Manager Appliance has the access LED on the front panel. See Figure 6.

The power LED is described in Table 4.

Table 4. Access LED

LED	State	Description
Access	Solid Blue	The Vista Manager Appliance is accessing the SSD (Solid State Drive).
	Off	The Vista Manager Appliance has no access to the SSD.

Power Supply

The Vista Manager Appliance comes with one AC power supply. The back panels have one AC connector. The power supply is not field-replaceable. Refer to “Technical Specifications” on page 43 for the input voltage range.

Note
The Vista Manager Appliance is switched on and off using the I/O switch in place on the back panel.

Chapter 2

Beginning the Installation

The chapter contains the following sections:

Reviewing Safety Precautions

Please review the following safety precautions before beginning the installation procedure.

Note
Safety statements that have the ✍ symbol are translated into multiple languages in the *Translated Safety Statements* document at **www.alliedtelesis.com/support**.

Warning
To prevent electric shock, do not remove the cover. No user-serviceable parts inside. This unit contains hazardous voltages and should only be opened by a trained and qualified technician. To avoid the possibility of electric shock, disconnect electric power to the product before connecting or disconnecting the LAN cables. ✍ E1

Warning
Do not work on equipment or cables during periods of lightning activity. ✍ E2

Warning
Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts. ✍ E4

Note
Pluggable Equipment. The socket outlet shall be installed near the equipment and shall be easily accessible. ✍ E5

Caution
Air vents must not be blocked and must have free access to the room ambient air for cooling. E6

Warning
Operating Temperatures. This product is designed for a maximum ambient temperature of 40 degrees C. E57

Note
All Countries: Install product in accordance with local and National Electrical Codes. E8

Warning
Only trained and qualified personnel are allowed to install or replace this equipment. E14

Caution
Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern. E21

Caution
Risk of explosion if battery is replaced by an incorrect type. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. E22

Warning
Mounting of the equipment in the rack should be such that a hazardous condition is not created due to uneven mechanical loading. E25

Note
Use dedicated power circuits or power conditioners to supply reliable electrical power to the device. E27

Caution
Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. E36

Caution
The unit does not contain serviceable components. Please return damaged units for servicing. E42

Warning
This equipment shall be installed in a Restricted Access location. E42

Warning
An operational unit can be hot. Exercise caution when handling with unprotected hands. E125

Warning
Only trained and qualified personnel are allowed to install or to replace this equipment. E14

Choosing a Site for the Unit

Observe these requirements when planning the installation of the Vista Manager Appliance:

- If you plan to install the unit in an equipment rack, check to be sure that the rack is safely secured so that it will not tip over. Devices in a rack should be installed starting at the bottom, with the heavier devices near the bottom of the rack.
- If you plan to install the unit on a table, check to be sure that the table is level and stable.
- The power outlet should be located near the unit and be easily accessible.
- The site should allow for easy access to the ports on the front of the unit, so that you can easily connect and disconnect cables, and view the port LEDs.
- The site should allow for adequate air flow around the unit. The air is through the cooling vents on the sides and the fans on the back panel. The AT-VST-APL-10 model has one more vent on the right side of the front panel.
- The site should not expose the unit to moisture or water.
- The site should be a dust-free environment.
- The site should be in a restricted access location, such as a server room.
- The site should include dedicated power circuits or power conditioners to supply reliable electrical power to the network devices.
- Do not install the unit in a wiring or utility box because it will overheat and fail from inadequate airflow.
- The site should not expose the twisted pair cabling to sources of electrical noise, such as radio transmitters, broadband amplifiers, power lines, electric motors, and fluorescent fixtures.

Warning
Devices should not be stacked on top of one another on a table or desktop because that could present a personal safety hazard if you need to move or replace devices. E76

Warning
This equipment shall be installed in a Restricted Access location. E42

Warning
An operational unit can be hot. Exercise caution when handling with unprotected hands. E125

Warning
Only trained and qualified personnel are allowed to install or to replace this equipment. E14

Unpacking the Vista Manager Appliance

The Vista Manager Appliance comes with the components listed in Figure 7. If any item is missing or damaged, contact your Allied Telesis sales representative for assistance.

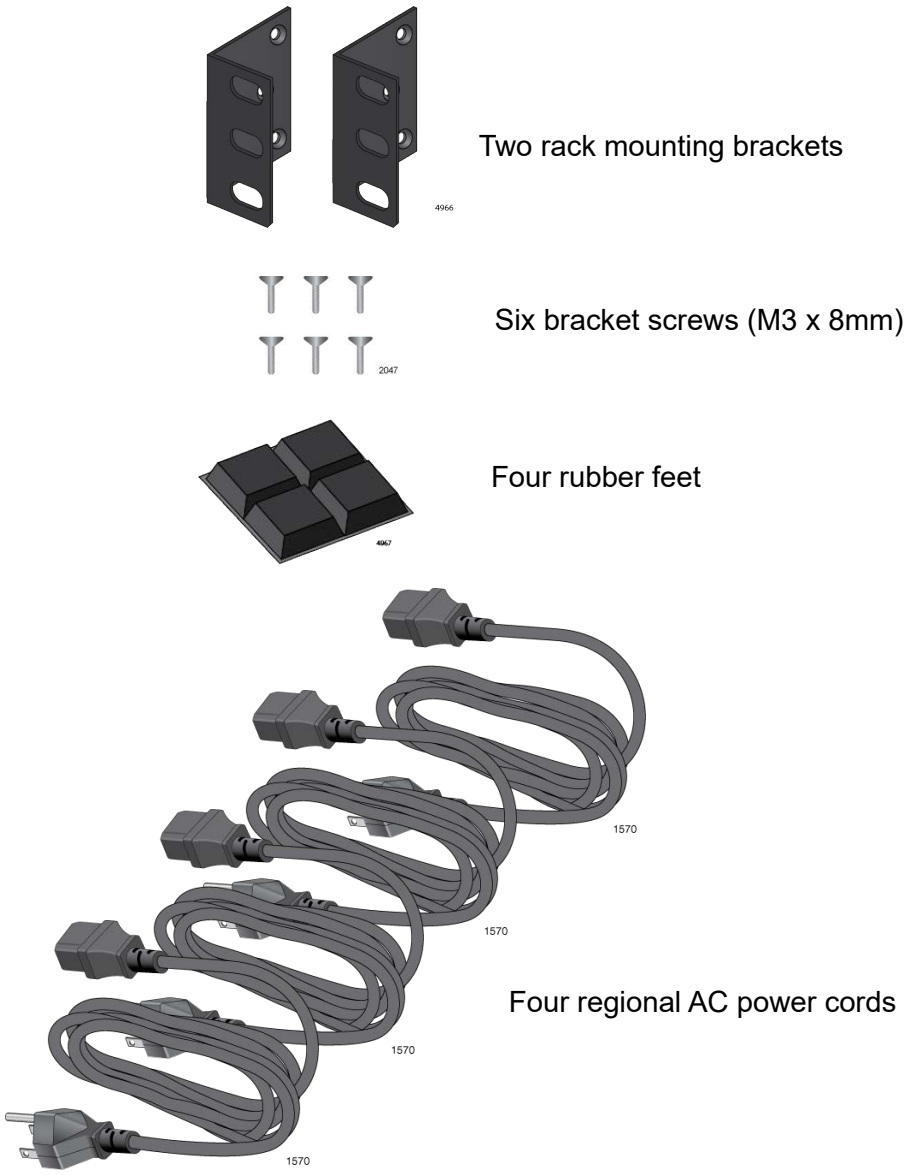


Figure 7. Components of the Vista Manager Appliance

Note
You should retain the original packaging material in the event you need to return the unit to Allied Telesis.

The Four regional power cords are included in the shipping box. See Figure 8 for different types. Use the power cord that is appropriate for your region and discard the other three power cords.

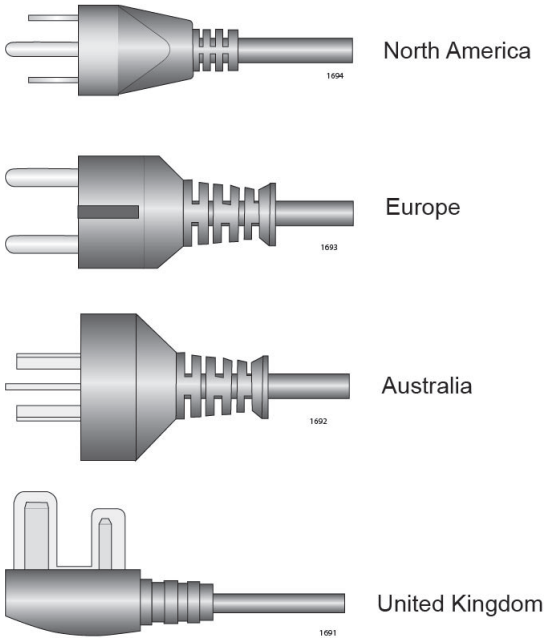


Figure 8. Four Regional Power Cords

Chapter 3

Installing the Vista Manager Appliance on a Table and in an Equipment Rack

The procedures in this chapter are:

Installing the Vista Manager Appliance on a Table

This section contains the procedure for installing the Vista Manager Appliance on a table or desk.

Warning
Devices should not be stacked on top of one another on a table or desktop because that could present a personal safety hazard if you need to move or replace devices. E76

To install the Vista Manager Appliance on a table, perform the following procedure:

1. Review “Choosing a Site for the Unit” on page 27 to verify the suitability of the site for the Vista Manager Appliance.
2. See “Reviewing Safety Precautions” on page 24.
3. Verify that the table is strong enough to support the weight of the Vista Manager Appliance.
4. Place the Vista Manager Appliance upside down on a table. See Figure 9.

Figure 9. Turning the Vista Manager Appliance Upside Down

5. Attach the four rubber feet to the bottom of the Vista Manager Appliance as shown in Figure 10.

Figure 10. Attaching the Rubber Feet

6. Turn the chassis over and place it on the table, leaving ample space around it for ventilation.
7. Go to Chapter 4, “Cabling the Ports and Powering On the Vista Manager Appliance” on page 35.

Installing the Vista Manager Appliance in an Equipment Rack

The Vista Manager Appliance can be installed in an equipment rack.

What to Prepare for Installation

You need the following items to install the chassis in an equipment rack:

- ❒ Two equipment rack brackets (included)
- ❒ Six bracket screws (included)
- ❒ Four standard equipment rack screws (not provided)
- ❒ Flat-head screwdriver (not provided)
- ❒ Cross-head screwdriver (not provided)

Installing the Chassis in an Equipment Rack

To install the Vista Manager Appliance in a 19-inch equipment rack, perform the following procedure:

Caution
The chassis may be heavy and awkward to lift. Allied Telesis recommends that you get assistance when mounting the chassis in an equipment rack. E28

1. Review “Choosing a Site for the Unit” on page 27 to verify the suitability of the site for theVista Manager Appliance.
2. See “Reviewing Safety Precautions” on page 24.
3. Verify that a table or desk that you use to attach the brackets to the Vista Manager Appliance is strong enough to support the weight of the chassis.
4. Place the Vista Manager Appliance on the table or desktop.
5. Attach the two rack mount brackets to the sides of the Vista Manager Appliance with the six bracket screws that come with the unit as shown in Figure 11 on page 34.

Figure 11. Attaching Brackets to the Vista Manager Appliance

6. While another person holds the Vista Manager Appliance in the equipment rack, secure it with standard equipment rack screws (not provided), as shown in Figure 12.

Figure 12. Mounting the Vista Manager Appliance in an Equipment Rack

7. Go to Chapter 4, “Cabling the Ports and Powering On the Vista Manager Appliance” on page 35.

Chapter 4

Cabling the Ports and Powering On the Vista Manager Appliance

This chapter contains the following procedures:

Cabling Twisted Pair Ports

Here are the guidelines to cabling Twisted pair ports:

- The cable specifications for the ports on the Vista Manager Appliance are shown in “Cable Requirements” on page 17.
- The connectors on the cables should fit snugly into the ports, and the tabs should lock the connectors into place.
- The default speed setting for the ports is Auto-Negotiation. This setting is appropriate for ports connected to network devices that also support Auto-Negotiation.
- The ports must be set to Auto-Negotiation, the default setting, to operate at 1000Mbps.
- The ports support half-and-duplex at 10Mbps or 100Mbps.
- The ports support only full-duplex at 1000Mbps.

Powering On the Vista Manager Appliance

Before powering on the Vista Manager Appliance, see “Power Specifications” on page 44 for the power specifications.

Note
If your network has a DHCP server, connect one of the ports on the Vista Manager Appliance to a network device, such as an Ethernet switch, before powering on the unit.

To power on the Vista Manager Appliance, perform the following procedure:

1. Verify that the power switch on the Vista Manager Appliance is off (at the O position).
2. Plug the power cord into the AC power connector on the back of the chassis, as shown in Figure 13.

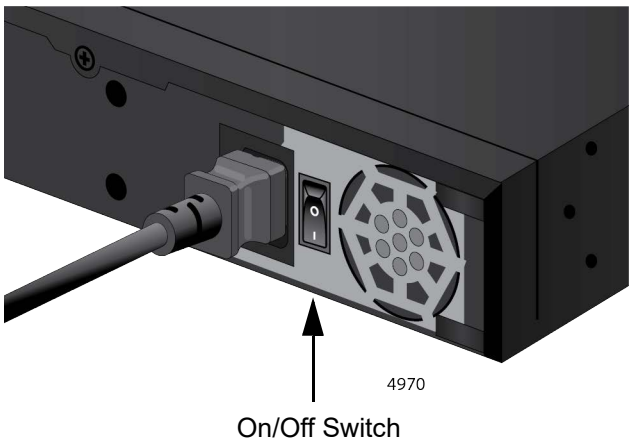


Figure 13. Plugging in the AC Power Cord

3. Connect the other end of the power cord to an appropriate power source.

Note
Pluggable Equipment. The socket outlet shall be installed near the equipment and shall be easily accessible. E5

4. Turn the Vista Manager Appliance on to the I position.
5. Verify the POWER LED is turned to green.

Starting the Initial Management Session

The Vista Manager Appliance comes with the management software and Web GUI installed.

First, connect the Vista Manager Appliance to a switch using an Ethernet cable. When you connect the Vista Manager Appliance to a switch for the first time, the Vista Manager Appliance queries the subnet on the LAN port for a DHCP server. If a DHCP server responds to its query, the Vista Manager Appliance obtains the IP address that the server assigns to it. If there is no DHCP server, the Vista Manager Appliance uses the default IP address:

192.168.1.1.

If your network does *not* have a DHCP server, you must change the IP address of your management PC to match the subnet of the default address of the Vista Manager Appliance. If your network is divided into virtual LANs (VLANs), be sure to connect the Vista Manager Appliance and your management PC to ports on a switch that are members of the same VLAN.

If your network has a DHCP server, use the IP address that the server assigns to the Vista Manager Appliance to start a management session.

To start the initial management session, perform one of the following:

- ❒ "Starting the Initial Management Session without a DHCP Server," next
- ❒ "Starting the Initial Management Session with a DHCP Server" on page 40

Starting the Initial Management Session without a DHCP Server

This procedure explains how to start the initial management session on the Vista Manager Appliance when the LAN port is connected to a switch on a network that does *not* have a DHCP server.

To start the management session, perform the following procedure:

1. Connect any twisted pair port on the Vista Manager Appliance to a switch using an Ethernet cable.

   If your network has VLANs, the Vista Manager Appliance must be connected to a port on the switch that belongs to the same VLAN as the port where your management PC is connected.

2. Change the IP address on your management PC to 192.168.1.*n*.

   The *n* is any number from 2 to 254.

3. Set the subnet mask on your management PC to 255.255.255.0.
4. Start the web browser on your management PC.
5. Enter the IP address 192.168.1.1 in the URL field of the Web browser.

   You are prompted for a username and password. See Figure 14.

Figure 14. Login Window

6. Enter “manager” for the username and “friend” for the password.

Note
The username and password are case-sensitive.

The Dashboard is displayed as shown in Figure 15.

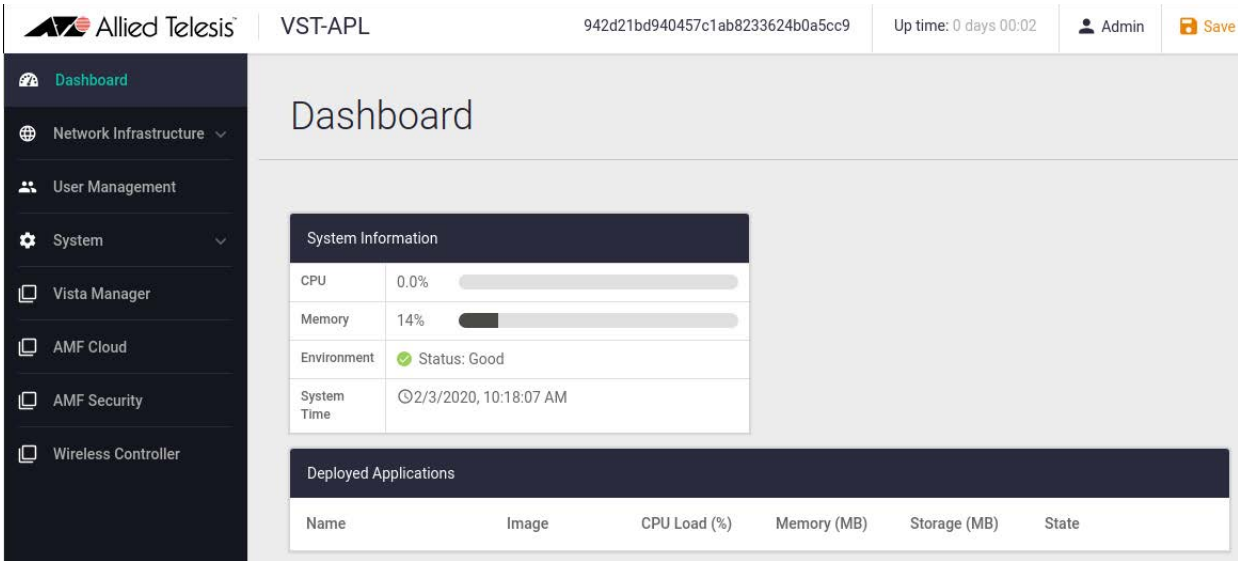


Figure 15. Login Window

Starting the Initial Management Session with a DHCP Server

This procedure explains how to start the initial management session on the Vista Manager Appliance when the LAN port is connected to a network that has a DHCP server.

> **Note**
> This procedure assumes that you have already configured the DHCP server to assign the Vista Manager Appliance all the necessary configuration information, such as IP address and default gateway, for your network.

To start the management session, perform the following procedure:

1. Connect any twisted pair port on the Vista Manager Appliance to a switch using an Ethernet cable.
2. Start the Web browser on your management PC.
3. Enter the IP address of the Vista Manager Appliance in the URL field of the browser.

   > **Note**
   > Use the IP address assigned to the Vista Manager Appliance by the DHCP server. If you do not know the address, refer to the DHCP server.

   The login window appears as shown in Figure 14 on page 39.
4. Enter “manager” for the username and “friend” for the password.

   > **Note**
   > The username and password are case-sensitive.

   The Dashboard is displayed as shown in Figure 15 on page 39.

Chapter 5
Troubleshooting

This chapter contains suggestions on how to troubleshoot the Vista Manager Appliance if a problem occurs.

> **Note**
> For further assistance, please contact Allied Telesis Technical Support at **www.alliedtelesis.com/support**.

Problem 1: The unit is *not* receiving power. All the port LEDs and fans are off.

Solutions: Try the following:

- ❒ Verify that the power cord is securely connected to the power source and AC connector on the back panel of the unit.
- ❒ Verify that the power outlet has power by connecting another device to it.
- ❒ Try connecting the unit to another power source.
- ❒ Try a different power cord.
- ❒ Verify that the voltage from the power source is within the required levels for your region. The power requirements for the unit are listed in “Physical Specifications” on page 43.

Problem 2: A twisted pair port is connected to a network device, but the port’s LINK/ACT LED is off.

Solutions: The port is unable to establish a link to a network device. Try the following:

- ❒ Verify that the port is connected to the correct twisted pair cable. This is to eliminate the possibility that the port is connected to the wrong network device.
- ❒ Verify that the network device connected to the twisted pair port is powered on and is operating properly.
- ❒ Try connecting another network device to the twisted pair port with a different cable. If the twisted pair port is able to establish a link, then the problem is with the cable or the other network device.
- ❒ Verify that the twisted pair cable does not exceed 100 meters (328 feet).

- ❒ Verify that you are using the appropriate category of twisted pair cable. The cable requirements are listed in “Cable Requirements” on page 17.

Note
A 1000Base connection may require five to ten seconds to establish a link.

Problem 3: Network performance between a twisted pair port on the Vista Manager Appliance and a network device is slow.

Solution: There might be a duplex mode mismatch between the port and the network device. This can occur when a twisted pair port using Auto-Negotiation is connected to a remote device that has a fixed speed of 10 or 100 Mbps and a fixed duplex mode of full-duplex. If this is the cause of the problem, adjust the duplex mode of the port on the network device or Vista Manager Appliance so that both ports are using the same duplex mode. You can use either the LEDs or management software on the Vista Manager Appliance to determine the duplex mode settings of the ports. The LEDs are described in Table 1 on page 18.

Appendix A
Technical Specifications

This appendix contains the following sections:

Physical Specifications

Dimensions (H x W x D)

Table 5. Product Dimensions

AT-VST-APL-06	4.4 cm x 44.0 cm x 30 cm (1.7 in. x 17.3 in. x 11.8 in.)
AT-VST-APL-10	

Weights

Table 6. Product Weights

AT-VST-APL-06	4.5 kg (9.9 lb.)
AT-VST-APL-10	4.9 kg (10.8 lb.)

Ventilation

Table 7. Ventilation Requirements

Recommended Minimum Ventilation on All Sides	10 cm (4.0 in)

Environmental Specifications

Table 8. Environmental Specifications

Operating Ambient Temperature	0° C to 40° C (32° F to 104° F)
Storage Temperature	-25° C to 70° C (-13° F to 158° F)
Operating Humidity	5% to 90% noncondensing
Storage Humidity	5% to 95% noncondensing
Maximum Operating Altitude	2,000 m (6,561.7 ft)

Power Specifications

Input Voltages

Table 9. Input Voltages

AT-VST-APL-06	100-240 VAC, maximum, 47/63 Hz
AT-VST-APL-10	

Maximum Power Consumption

Table 10. Maximum Power Consumption

AT-VST-APL-06	110 watts
AT-VST-APL-10	150 watts

Heat Dissipation (British Thermal Units/hour)

Table 11. Heat Dissipation

AT-VST-APL-06	375.4 BTU/h
AT-VST-APL-10	511.9 BTU/h

RJ-45 Twisted Pair Port Pinouts

Figure 16 illustrates the pin layout of the RJ-45 connectors and ports.

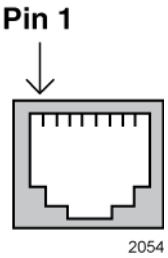


Figure 16. RJ-45 Socket Pin Layout (Front View)

Table 12 lists the pin signals for 10 and 100 Mbps.

Table 12. Pin Signals for 10 and 100 Mbps

Pin	MDI Signal	MDI-X Signal
1	TX+	RX+
2	TX-	RX-
3	RX+	TX+
4	Not used	Not used
5	Not used	Not used
6	RX-	TX-
7	Not used	Not used
8	Not used	Not used

The pin signals for a port operating at 1000 Mbps are shown in Table 13.

Table 13. Pin Signals for 1000 Mbps

Pinout	Pair
1	Pair 1 +
2	Pair 1 -
3	Pair 2 +
4	Pair 3 +

Table 13. Pin Signals for 1000 Mbps (Continued)

Pinout	Pair
5	Pair 3 -
6	Pair 2 -
7	Pair 4 +
8	Pair 4 -