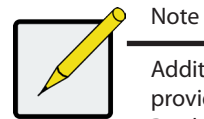## 1: UNPACKING

The VTrak D5000 Series box contains the following items:

- One of the following VTrak D5000 Series enclosures:

  - **VTrak D5600**   • **VTrak D5300**
  - **VTrak D5800**   • **VTrak D5320**

- This Quick Start Guide
- Two 1.5m (4.9 ft) Power cords
- DB9-to-RJ11 serial data cable
- Sliding rail assembly for rack mounting

Note

Additional hardware installation instructions are provided in the Product Manual. Please refer to the Product Manual for instructions on how to install hard disk drives into the drive carriers and insert the carriers into the enclosure; also for instructions on how to attach and remove the front bezel.
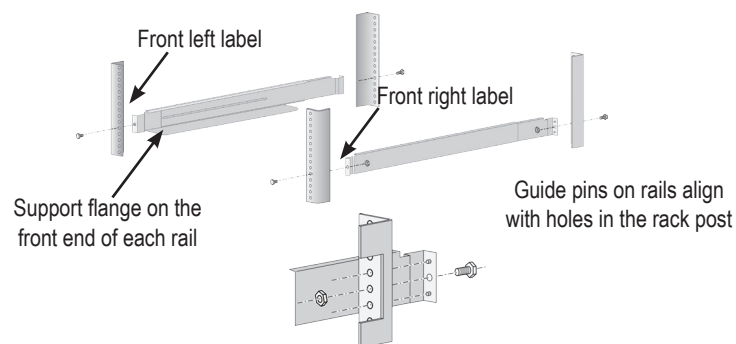
2: INSTALL IN RACK

Before installing the VTrak D5000 Series enclosure in the rack, first remove the drive carriers with the hard disks installed to reduce the weight of the enclosure.
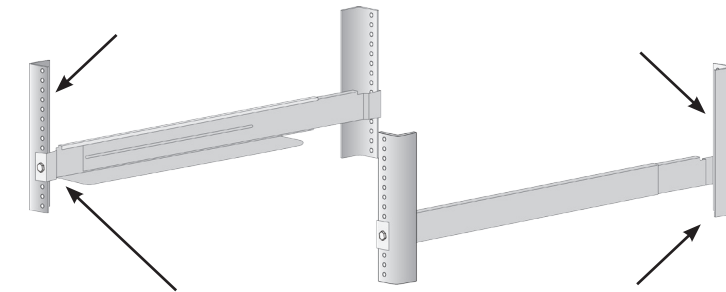
Caution

To lighten the enclosure, remove all hard drive carriers. Replace the drive carriers after the unit is mounted in your rack.

To install the VTrak D5000 Series subsystem into a rack with the supplied mounting rails:

1. Check the fit of the mounting rails in your rack system.
2. Adjust the length of the mounting rails as needed.
- The rear rail slides inside the front rail. The rail halves are riveted together and use no adjustment screws.
- The front-left and front-right mounting rail ends are labeled.
- Be sure the front rail support is on the bottom facing inward.
- All rail ends, front and rear, attach at the outside of the rack posts.

Front left label
Front right label
Support flange on the front end of each rail
Guide pins on rails align with holes in the rack post

---

- The guide pins at the rail ends align with the holes in the rack posts.
- Use the attaching screws and flange nuts from your rack system. Tighten the screws and nuts according to instructions for your rack system. Place the empty VTrak D5000 Series enclosure onto the rails.
- At least two persons are required to safely lift the subsystem.
- Lift the enclosure itself. Do not lift the subsystem by its handles.

Rail ends attach on the outside of the front and rear rack posts

Caution

Two persons are needed to safely place the unit onto the rails.
DO NOT lift the unit by the handles

Handles
Rails installed and tightened
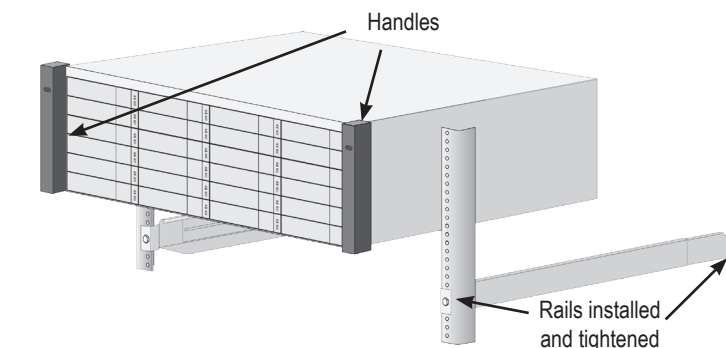
3. Secure the enclosure to the rack.
- The unit attaches to the rack posts using the included screws and flange nuts. One screw each side, in the upper hole only.
- Use the attaching screws and flange nuts that came with the enclosure

Screws and flange nuts attach the VTrak subsystem to the rack posts
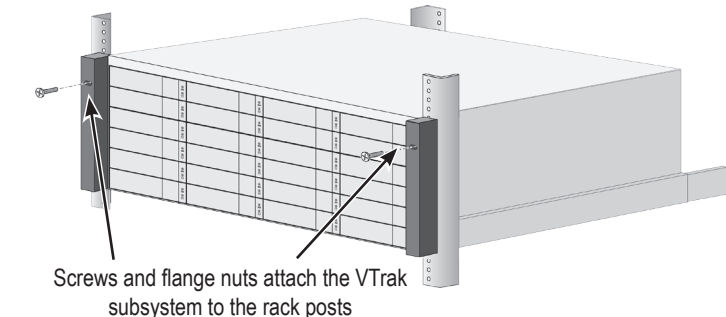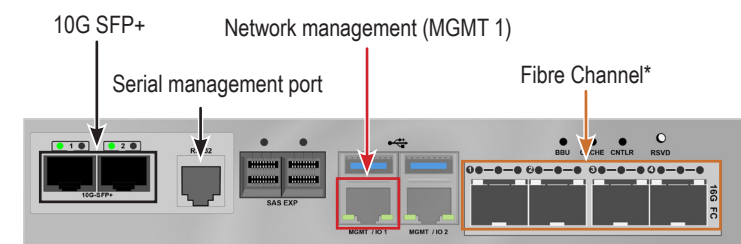

3: MANAGEMENT CONNECTIONS

This section describes how to establish a management connection to the VTrak D5000 Series subsystem. There are two methods to establish a management connection, Ethernet and Serial connection. For the initial setup, it is necessary to establish the Ethernet management connection via the RJ-45 network management port.

Please refer to the *Product Manual* for instructions on how to configure network settings for the Ethernet management ports.

The VTrak D5000 Series also features a Command Line Interface (CLI) for system management via a terminal emulation program (such as Microsoft HyperTerminal).

Please refer to the *Product Manual* for instructions on how to manage the system using the CLI.

VTrak D5000 Series controller Management and IO ports

10G SFP+
Network management (MGMT 1)
Serial management port
Fibre Channel*

* Fibre Channel might not be available in all markets.

MANAGEMENT PATH NETWORK CONNECTION

Each VTrak D5000 Series controller has two 1000BASE-T Ethernet ports. Port MGMT 1 (left most 1000BASE-T port) is used for system management.

To establish the management path network connection:

1. Attach one end of an Ethernet cable to the network connector or standard NIC in the Host PC. Attach the other end of the Ethernet cable to a port on a standard network switch.
2. Use another Ethernet cable to likewise connect port MGMT 1 on the remaining controller.

   If you have multiple VTrak D5000 Series subsystems, repeat steps 1 and 2 as needed.

   See the illustration "Management and Fiber Channel data connections" in the next column for a cabling example.
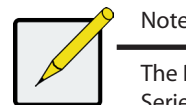
Note

The RJ-45 network management ports on a VTrak D5000 Series subsystem share the same Virtual IP address. The default Virtual IP address, 10.0.0.1, applies to the left most RJ-45 network port (MGMT 1) on both controllers. If you change the Virtual IP address, the change applies to both network management ports.
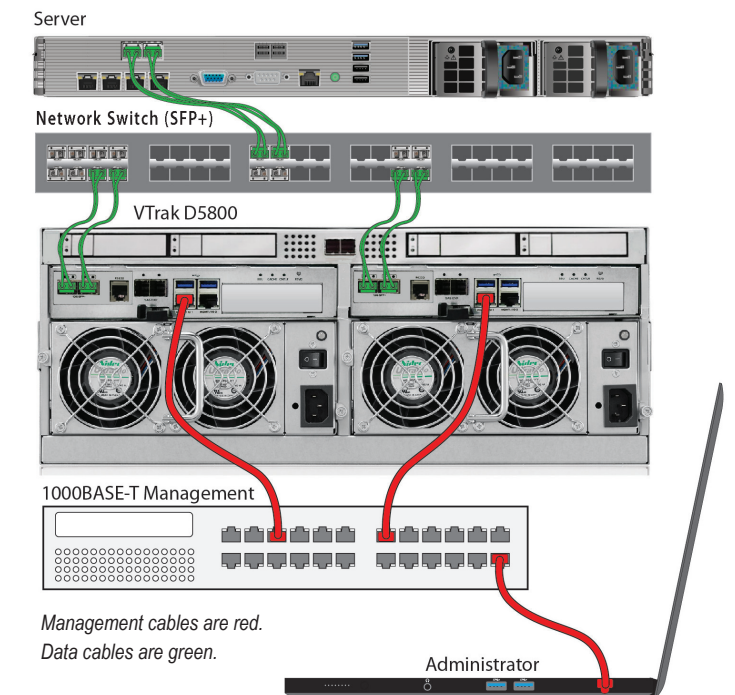

4: DATA NETWORK CONNECTIONS

FIBER OPTIC (SFP+) DATA PATH

The Fiber Optic data network for the VTrak D5000 controller requires the following items:

- An SFP+ connection in each host PC or server
- An SFP+ transceiver for every SFP+ port in the connection (subsystem, switch, HBA)
- An SFP+ switch (not required for direct attached connection)
- Fiber Optic cabling (LC/LC 62.5/125µm MMF)

Management and Fiber Optic data connections

Server
Network Switch (SFP+)
VTrak D5800
1000BASE-T Management

Management cables are red.
Data cables are green.
Administrator

SFP+ FIBER OPTIC CONNECTIONS

For the Fiber Optic storage network:

1. Connect Fibre Optic cables between the Fibre Optic ports on the server and the Fibre Optic ports on the SFP+ switch.
2. Connect Fiber Optic cables between the Fiber Optic port on the VTrak D5000 controller and a Fiber Optic port on a SFP+ switch.
   If you have multiple VTrak D5000 subsystems, host PCs or servers, repeat the steps as required.

For *Direct Attached* SFP+ Fiber Optic storage:

1. Connect Fiber Optic cable to the Fiber Optic port on the host PC or server.
2. Connect the other end of the Fiber Optic cables to the SFP+ Fiber Optic port on the VTrak D5000 controller.
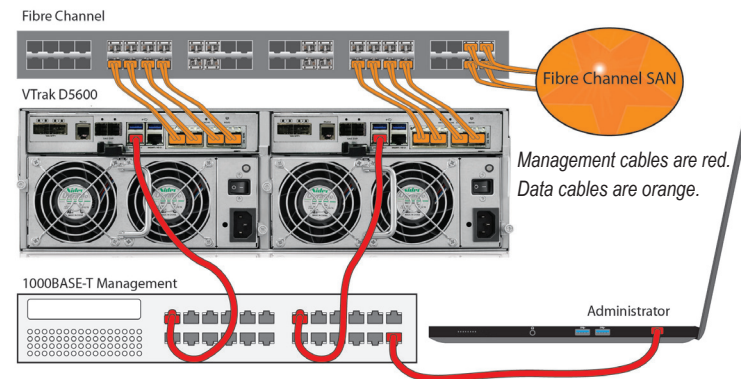
Fibre Channel SAN data path

The Fibre Channel data network for the VTrak D5000 controllers requires the following items:

- A Fibre Channel connection in each host PC or server
- An SFP transceiver for every SFP (Fibre Channel) port in the connection (subsystem, switch, HBA)
- A Fiber Channel switch (not required for direct attached connection)
- Fiber Optic cabling

> **Important**
>
> For a list of supported HBAs, switches, and SFP transceivers, download the latest compatibility list from PROMISE support: http://www.promise.com/support/.

Management and Fiber Channel SAN data connections

Management cables are red.
Data cables are orange.
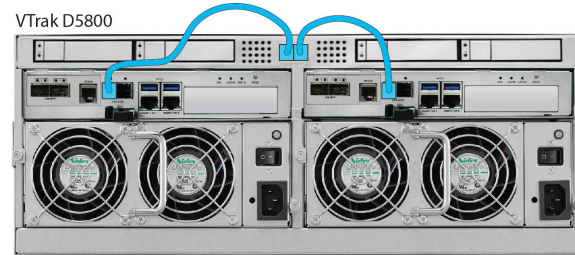
Fibre Channel SAN connections

For the Fibre Channel storage area network (SAN):

1. For servers equipped with Fibre Channel HBA cards, connect Fiber Optic cables between the Fibre Channel ports in both host PCs or servers and the ports on a Fibre Channel network switch.
2. Connect Fiber Optic cables between the Fibre Channel port on the VTrak D5000 controllers and a Fibre Channel port on a Fibre Channel switch or Fibre Channel capable switch (SFP). If you have multiple VTrak D5000 subsystems, host PCs or servers, repeat the steps as required.

> **Important Notice for VTrak D5800**
>
> In order to use the optional SSD data cache, it is necessary to install four SSD drives and connect the SSD data cache module to both controllers via SAS cable. This must be done BEFORE storage configuration.
> See example below for SAS cabling.
> Please see the Product Manual for detailed description.

*SAS connection to data cache module on VTrak D5800*

Fibre Channel DAS connections

For Fibre Channel direct attached storage (DAS):

1. For each attached server or host PC, connect Fiber Optic cable to the Fibre Channel port on the host PC or server.
2. Connect the other end of the Fiber Optic cable to a Fibre Channel port on one of the VTrak D5000 controllers.

Direct Attached Storage (DAS) Fibre Channel connection

Management path is red.
Data path is orange.
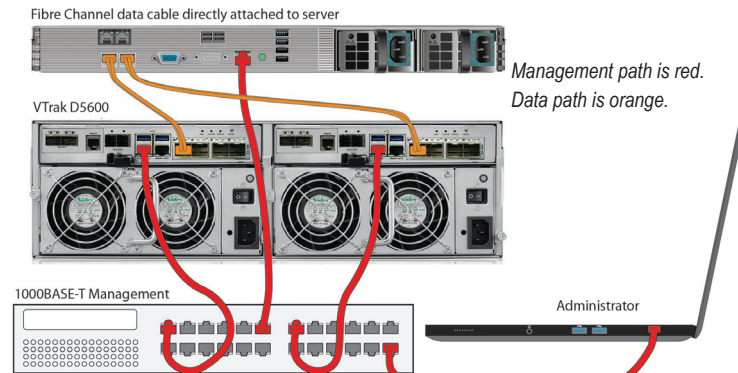
Fiber Channel DAS data path

The Fibre Channel data network for the VTrak D5000 controllers requires the following items:

- A Fibre Channel connection in each host PC or server
- An Fibre Channel transceiver for each connected port on the subsystem
- Fiber Optic cabling (LC/LC 62.5/125µm MMF)

5: Connecting the Power

VTrak D5000 Series enclosures are equipped with two power supplies for each unit. All VTrak models feature an ON/OFF switch on the power supply unit (PSU). Connect both power supplies to a suitable power source.
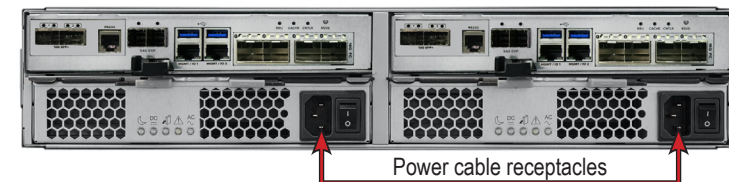
The 2U VTrak D5300/D5320 will power on when the power is connected and the switch on the power supply is switched on.

The 3U VTrak D5600 and 4U VTrak D5800 have a power button on the front. (See next section)

Power supplies on VTrak D5600 and VTrak D5800

Power cable receptacles
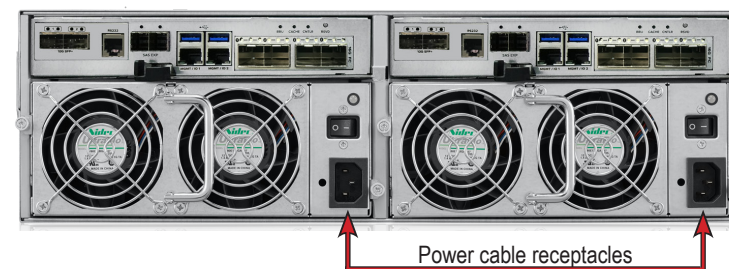
Power supplies on VTrak D5300 and VTrak D5320

Power cable receptacles

6: Power on

With the power supplies connected, the system can now be powered on. The power supply modules include the cooling fans that cool the enclosure. Both power supplies should be powered up when starting the system. Make sure the power switch on each power supply is in the *On* position. Note that this will power on the VTrak D5300 and VTrak D5320.

To power on the VTrak D5600 or VTrak D5800 subsystem, press the Power button on the front left bracket facing (see illustration below). Observe the LEDs on the right front bracket facing.
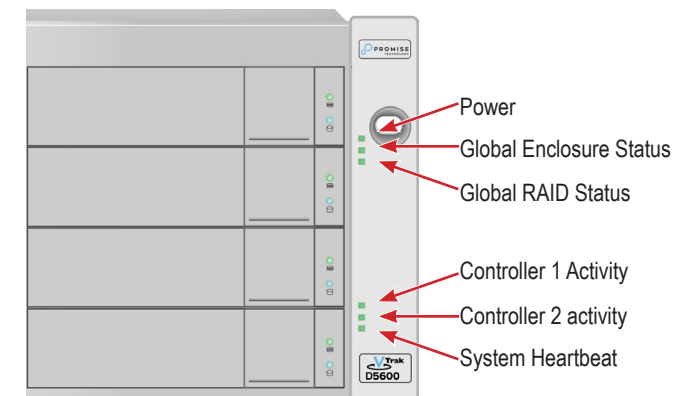
> **Important**
>
> If you have a SAN, DAS, or Cascade with JBOD Expansion, always power on the JBOD subsystems first.

Power button on front left of VTrak D5600/D5800

Power button
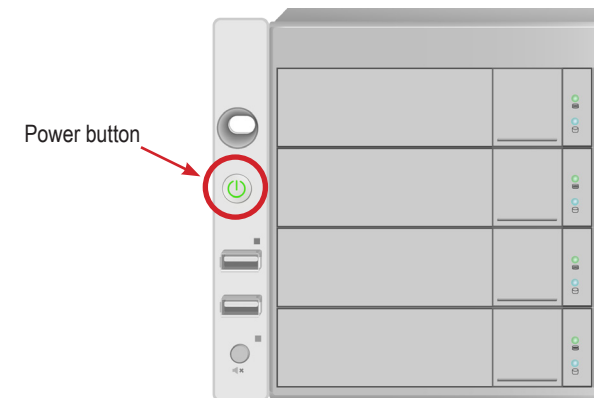
LED indicators on front right of enclosure

Power
Global Enclosure Status
Global RAID Status
Controller 1 Activity
Controller 2 activity
System Heartbeat

Front LED Behavior

When boot-up is finished and the subsystem is functioning normally:

- Power, FRU and Logical Drive LEDs display Green continuously
- Controller Activity LED flashes Green when there is controller activity.
- System Heartbeat LED blinks Green once per second for five seconds, then goes dark for ten secondes, then repeats the same pattern.

Also on the front panel, there are two LEDs on each drive carrier. These report the presence of power and a physical drive, and the current condition of the drive.

7: Setup

This final section of the Quick Start Guide describes how to access the Setup Wizard for basic storage configuration setup. The Setup Wizard is part of WebPAM PROe web-based management system. For manual configuration, or if you prefer to setup the system via a serial connection, please read the *Product Manual* for instructions.

Connect the computer used for system configuration to the switch used for the network management connection of the VTrak D5000 Series subsystem. Change the network settings on the administrator computer to allow for compatible IP settings with the default IP settings of the VTrak D5000 Series subsystem.

The default Virtual IP address of the VTrak D5000 Series subsystem is 10.0.0.1, so make sure the computer IP settings are in the 10.x.x.x subnet. You can use a compatible web browser and secure HTTP (https://) connection to access WebPAM PROe. Later you can change the IP settings of the VTrak D5000 Series device to suit the IP address scheme of your network.

> **Important**
>
> Later, if you choose to enable DHCP for management and data networks, have your Network Administrator dedicate an IP address for the Management port so that it does not change.

Logging in to WebPAM PROe

1. Launch your Browser.
2. In the Browser address field, type the default IP address of the VTrak D5000 subsystem, 10.0.0.1 using the secure HTTP syntax. The secure HTTP default IP address looks like **https://10.0.0.1**
3. Type the default user name: `administrator` in the **User Name** entry field and the default password: `password` in the **Password** entry field. Click on the **Login** button. The Dashboard menu appears.

Storage setup with the Wizard

Upon logging in as administrator, you can use the Setup Wizard for basic system settings and storage configuration. For the first time storage configuration, it is necessary to create at least one storage disk pool, or group of disks in a RAID configuration. Once you have at least one storage disk pool, you can then use the Setup Wizard to create volumes on the pool or setup NAS sharing. *Please see the Product Manual for information about NAS Share and Volume configuration.*

To use the Setup Wizard for basic configuration:

1. Click the **Administration** link in the left panel of the menu.
2. Click the **Setup Wizard** link in the left panel of the **Administration** menu.
3. Click the **Run Setup Wizard** button to launch Setup Wizard.

> **Note**
>
> Please read the *Product Manual* for more detailed instructions to use the **Setup Wizard** and for manual storage configuration or other settings configuration.