

# Vess R3600 Quick Start Guide

Vess R3600i Vess R3604fi Vess R3600ti Vess R3600xi

### 1: UNPACKING

The Vess R3600 box contains one of the following enclosures:

- Vess R3600i
- Vess R3600ti
- Vess R3604fi
- Vess R3600xi

#### Plus the following items:

- · This Quick Start Guide
- DB9-to-RJ11 serial data cable
- Two 1.5m (4.9 ft) Power cords •
- 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.

### 2: INSTALL IN RACK

Before installing the Vess R3600 enclosure in the rack, first remove the drive carriers with the hard disks installed to reduce the weight of the enclosure.

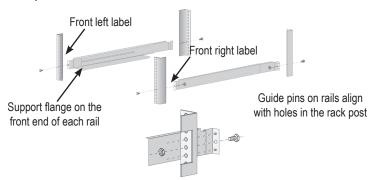


#### Caution

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

To install the Vess R3600 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.



# • 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 Vess R3600 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.
- 3. Secure the enclosure to the rack.

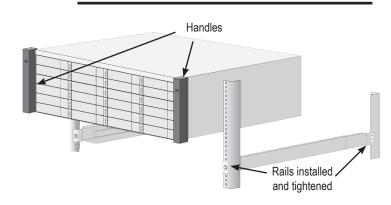


Rail ends attach on the outside of the front and rear rack posts

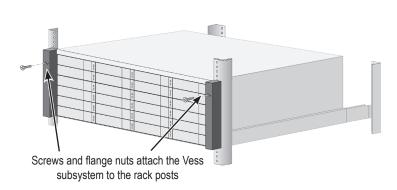
#### Caution

Two persons are needed to safely place the unit onto the rails.

DO NOT lift the unit by the handles



- 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



### 3: Management Connections

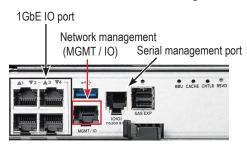
This section describes how to establish a management connection to the Vess R3600 subsystem. There are two methods to establish a management connection, Ethernet and Serial connection. For the initial setup, it is necessary to establish the management connection via the RJ-45 network management port labeled MGMT/IO.

Please refer to the *Product Manual* for instructions on how to configure network settings for the MGMT/IO port.

The Vess R3600 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.

#### Vess R3600 controller Management and 1GbE IO ports



#### Management Path Network Connection

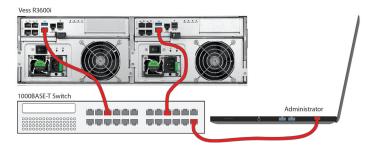
Each Vess R3600 controller has one 1000BASE-T Ethernet port. Port MGMT / IO is used for system management (default IP address = 10.0.0.1)

To establish the management path network connection:

- Attach one end of an Ethernet cable to a standard network switch or standard NIC in the Host PC, then attach the other end of the Ethernet cable to R3600 controller's network management port (MGMT/IO). See the illustration below using Vess R3600i.
- 2. Use another Ethernet cable to likewise connect port MGMT/IO on the remaining controller.

If you have multiple Vess R3600 subsystems, repeat steps 1 and 2 as needed.

#### Vess R3600i management path connections





#### Note

In the example above, the same 1000BASE-T switch can be used for the iSCSI SAN network. That is, the 1GbE IO ports can use the same switch used for management.

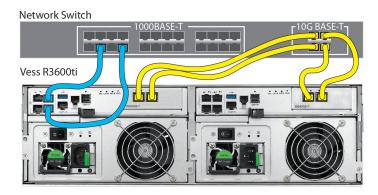
## **4: DATA NETWORK CONNECTIONS**

### ISCSI OPTIONS

The Vess R3600 Series includes various options for iSCSI networks. All Vess R3600 controllers, including the Vess R3604fi, include four 1000BASE-T ports. The iSCSI data options for each of the available controllers are as follows:

- · Vess R3600i and Vess R3604fi: four 1000BASE-T ports
- · Vess R3600ti: four 1000BASE-T plus two 10G BASE-T ports
- Vess R3600xi: four 1000BASE-T plus two 10G SFP+ ports

#### Vess R3600ti iSCSI connections (10G and 1G)



#### **10G BASE-T ISCSI SAN** CONNECTIONS

For the 10G BASE-T iSCSI storage network:

Connect suitable network cables (Cat-6 or Cat-7 Ethernet cable) between the one or both 10G ports on one or both controllers to the 10G network switch used for the iSCSI SAN.

If you have multiple Vess R3600ti subsystems, repeat the cabling setup procedure as required.

#### **1000 BASE-T ISCSI SAN** CONNECTIONS

All Vess R3600 models include four 1GbE IO ports. For the 1000BASE-T iSCSI storage network:

Connect suitable network cables (Cat-5e or Cat-6 Ethernet cable) between the one or both 1GbE IO ports on one or both controllers to the 1000BASE-T network switch used for the iSCSI SAN. If you have multiple Vess R3600 subsystems, repeat the cabling setup procedure as required.

Version 1.0 PN: G6102VR36000000



**Important** 

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

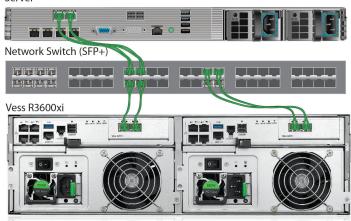
#### SFP+ FIBER OPTIC ISCSI

The Fiber Optic data network for the Vess R3600xi 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)

#### Vess R3600xi SFP+ iSCSI data connections

Server



#### **SFP+** FIBER **O**PTIC 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 Vess R3600xi controller and a Fiber Optic port on a SFP+ switch.

If you have multiple Vess R3600xi 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 Vess R3600xi controller.



Note

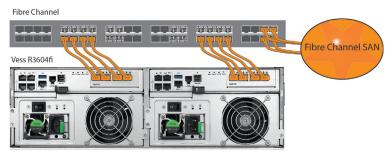
Please read the Product Manual for more detailed instructions to use the **Setup Wizard** and for manual storage configuration or other settings configuration.

### FIBRE CHANNEL SAN DATA PATH

The Vess R3604fi features 16Gb Fibre Channel. The Fibre Channel data network 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), 16Gb SFP transceivers are recommended for best performance.
- A Fiber Channel switch (not required for direct attached connection)
- · Fiber Optic cabling

#### Vess R3604fi Fiber Channel SAN data connections



#### FIBRE CHANNEL SAN CONNECTIONS

For the 16Gb Fibre Channel storage area network (SAN):

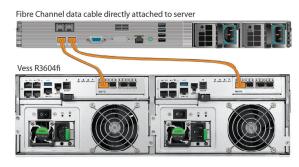
- 1. For servers equipped with Fibre Channel HBA cards, connect Fiber Optic cables between the Fibre Channel ports in both host PCs or servers and the ports on a Fibre Channel network switch.
- 2. Connect Fiber Optic cables between the Fibre Channel port on the Vess R3604fi controllers and a Fibre Channel port on a Fibre Channel switch or Fibre Channel capable switch (SFP). If you have multiple Vess R3604fi subsystems, host PCs or servers, repeat the steps as required.

#### FIBRE CHANNEL DAS CONNECTIONS

For 16Gb 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; 16Gb SFP transceivers are recommended for best performance.
- 2. Connect the other end of the Fiber Optic cable to a 16Gb Fibre Channel port on one of the Vess R3600 controllers.

#### Vess R3604fi DAS connection



#### FIBER CHANNEL DAS DATA PATH

The 16Gb Fibre Channel data connection for the Vess R3604fi 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
- Fiber Optic cabling (LC/LC 62.5/125µm MMF)

### **5: CONNECTING THE POWER**

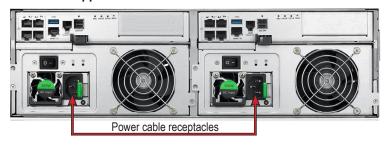
Vess R3600 enclosures are equipped with two power supplies for each unit. All Vess models feature an ON/OFF switch on the power supply unit (PSU). Connect both power supplies to a suitable power source.



**Important** 

If you have a SAN, DAS, or Cascade with JBOD Expansion, always power on the JBOD subsystems first.

#### Power supplies on Vess R3600



### **6:** Power on

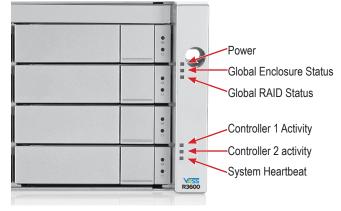
With the power supplies connected, the system can now be powered on. The power supply modules include the cooling fans that cool the enclosure. Both power supplies should be powered up when starting the system. Make sure the power switch on each power supply is in the On position.

To power on the Vess R3600 subsystem, press the Power button on the front left bracket facing (see illustration below). Observe the LEDs on the right front bracket facing.

#### Power button on front left of Vess R3600



#### LED indicators on front right of enclosure



#### FRONT LED BEHAVIOR

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

- · Power, FRU and Logical Drive LEDs display Blue continuously
- · Controller Activity LED flashes Blue when there is controller activity.
- System Heartbeat LED is blinking Blue once per two seconds for dual controller enclosure; blinking every four seconds for single controller enclosure.

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 Vess R3600 subsystem. Change the network settings on the administrator computer to allow for compatible IP settings with the default IP settings of the Vess R3600 subsystem.

The default Virtual IP address of the Vess R3600 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 Vess R3600 device to suit the IP address scheme of your network.



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 Vess R3600 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**
- 3. Click the Run Setup Wizard button to launch Setup Wizard