Windows 2003

HP StorageWorks EVA Hardware Providers quick start guide

EVA 4000
EVA 6000
EVA 8000

product version: 3.0

first edition (May 2005)

part number: T1634-96051

This guide provides a summary of how to install and administer HP HWP for use with HP EVA disk arrays and Windows Server 2003.

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HP StorageWorks Hardware Providers for Windows 2003: Quick Start Guide
product version: 3.0

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Quick start procedures

This guide summarizes hardware and software configuration and installation for the HP StorageWorks EVA Hardware Providers (HWP) for Windows 2003. For detailed configuration and installation procedures as well as a technical overview and troubleshooting information, refer to the *HP StorageWorks EVA Hardware Providers Administration Guide for Windows 2003*. Follow all configuration and installation instructions carefully.

IMPORTANT NOTE: The right combination of software versions is crucial to configuring a working system. Refer to the README files accompanying the HP HWP installation files for information about compatible software versions and system configurations.

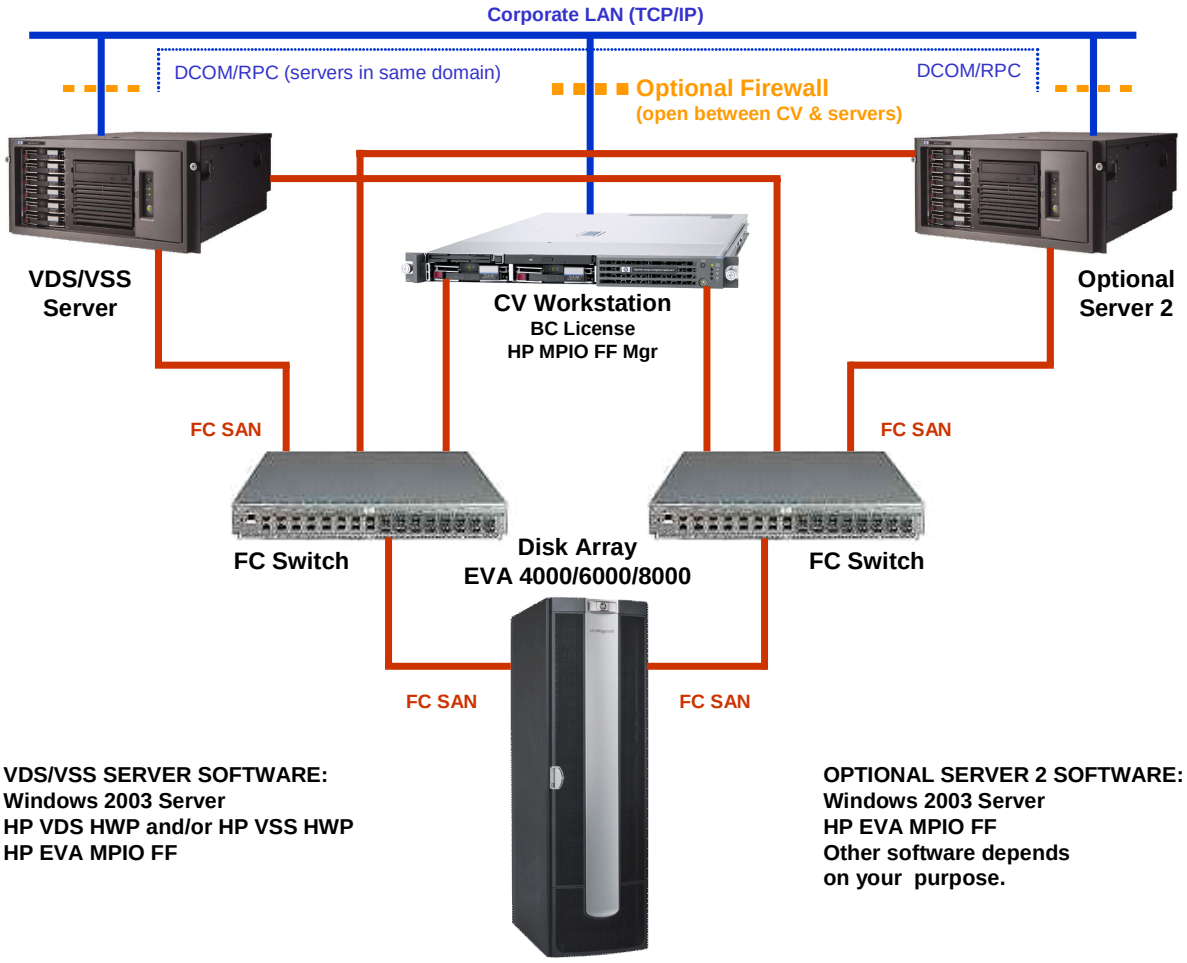
For HP Hardware Providers documentation and software downloads, see the following web location:

www.hp.com/go/storageworks/vds-vss

Required components

The following illustration summarizes the hardware and software in a fully configured system. A second server is not needed for VDS and is optional for VSS, but it may be useful if you want to manage VSS data copies without burdening the primary server.

Note that any firewall must be open between the HWP server(s) and the Command View server. Anything that slows down access to the CV workstation will cause VSS timeout failures.



Required hardware components

- **HP StorageWorks Disk Array**: EVA disk array 4000/6000/8000 with a Windows Server for running Command View EVA.
- **Windows VDS/VSS Server** with Windows Server 2003 OS for connecting to the array. This primary server manages your primary data and contains applications (such as Exchange or SQL), VSS/VDS, and HP HWP.
- **Windows Server 2 (optional)**—Another server ***may*** be connected to the array if you want to manage the VSS copies on the array volumes without burdening the VDS/VSS server. Depending on your purpose for this server, you may need to install the HP HWP and your application software.
- **Fibre Channel Host Bus Adapters (HBAs)** in each server for connecting to the disk array via a Fibre Channel SAN.
- **Fiber cables and fabric switch(es)** to connect the hosts to the array.
- **Ethernet Network Interface Cards** or available network interface port in each server for connecting to Ethernet LAN.
  Important: The Windows Network Connections control panel Advanced Settings must be set to list first the network that provides communication between the FRS servers and the CV workstation.

Required software components

The following software is required to run HP HWP.

IMPORTANT NOTE: The right combination of software versions is crucial to configuring a working system. Refer to the README files accompanying the HP HWP installation files for information about compatible software versions and system configurations. Follow all configuration and installation instructions carefully.

EVA 4000/6000/8000 Disk array with CV workstation:

- Command View EVA
- Business Copy EVA license (for VSS only; not required for VDS)
- HP MPIO Full-Featured Failover Manager (if multipathing is required)

VDS/VSS Server

- Windows Server 2003 Enterprise edition with SP1
- HP MPIO Full-Featured Failover (if multipathing is required)
- HP VDS HWP (for array management)
- HP VSS HWP (for shadow copying)

Secondary Server (optional)

- Windows Server 2003 Enterprise edition with SP1
- HP MPIO Full-Featured Failover (if multipathing is required)
- Other software as required depending on server purpose

Important configuration notes

The following notes will help ensure a successful configuration:

- Using multiple servers is optional. However, if you use multiple servers, they must be in the same Ethernet domain so that the DCOM communication process can communicate between servers.
- Administrator privileges are required for all devices and software. If you do not have administrator privileges, the software and hardware will not communicate properly.
- The firewall must be open between the CV workstation and the VDS/VSS servers.

Important performance notes

The following issues can affect the performance of HP HWP:

- Excessive traffic on the Ethernet LAN. If this becomes a problem, you may want to use a private Ethernet LAN between the CV workstation and the VDS/VSS server(s) and connect it to the corporate LAN through a firewall.
- Viruses that slow down network traffic. Be sure you regularly run a virus checker.
- A firewall that excessively slows traffic between the CV workstation and the servers hosting VDS/VSS. Any firewall must be open between these systems.

Configuration procedures

Physically configure the servers and software as described below and in the manuals for those products. See the overview diagram on page 4. Your HP representative may perform some installation and configuration tasks.

Configuration summary

You will perform the following tasks during configuration:

Windows CV workstation:

- Install HP MPIO FF Failover Manager (if multipathing is required).
- Use Command View EVA to activate the BC license.

VDS/VSS servers:

- Install Windows Enterprise OS with SP1, FC HBAs, drivers and software.
- Install HP MPIO Full-Featured Failover (if multipathing is desired).
- Connect to the array's FC SAN.
- Connect to the corporate Ethernet LAN (A firewall is optional but recommended. The firewall must be open between servers.)

Disk array (Command View EVA):

- (VSS only) Create a snapclone disk group (or use the existing production disk group).
- (VSS only) Create other disk groups as required by your application. (Exchange requires a data disk group and a log disk group.)

Installation summary

Install the HWP software on the VDS/VSS server(s) as follows:

- Run the HWP installation executable(s):
  hp StorageWorks VDS hardware provider for EVA.msi
  and/or
  hp StorageWorks VSS hardware provider for EVA.msi.
- Follow the InstallShield Wizard instructions to install the EVA HWP:

  Accept the license terms.

  Install the HP HWPs in the default or custom folder location.

  Enter the CV workstation IP address and log into Command View EVA.

  Connect to the disk array.

  Select the disk group you created for VSS copies.

  Click **Finish** to complete installation.

Verify installation

To verify the hpEVA Hardware Providers installed correctly:

- Check the **Add/Remove Programs** control panel to see that the hpEVA VDS and VSS Hardware Providers are listed.
- At the command line type **vssadm list providers** and verify that the hpEVA VDS and VSS Hardware Providers are listed.
- Test the VSS HWP by using Microsoft **vshadow** to make a shadow copy.

Uninstall Hardware Providers:

If you need to uninstall HWP, you can use either of two methods:

- Use Windows **Control Panel** > **Add/Remove Programs**.
- Run the HWP executable again. If HWP is already installed, the wizard uninstalls it.