

Windows Server® 2008 Hyper-V™,
Hyper-V™ Server 2008, and
Windows Server® 2008 Server Core
Installation Notes

**Installing Dell™ UPS Management Software
on a Hypervisor-Based Server Environment**

Notes



NOTE: A NOTE indicates important information that helps you make better use of your software.

Information in this document is subject to change without notice.

© 2009–2010 Dell Inc. All rights reserved.

Reproduction in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: *Dell* and the *DELL* logo are trademarks of Dell Inc.; *Hyper-Vis* is a trademark, and *Microsoft*, *Windows*, and *Windows Server* are registered trademarks of Microsoft Corporation.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

Table of Contents

1	Introduction	
2	Software Installation on Windows Server 2008 with Hyper-V	
	Installing the Software	5
	Configuring UPS Shutdown	6
	Configuring Guest Operating System Shutdown on the Client-Side	7
3	Software Installation on Hyper-V Server 2008	
	Installing the Software	9
	Configuring UPS Shutdown on a Local Agent	14
	Configuring UPS Shutdown from a Remote Machine	15
	Uninstalling the Software	16
	Configuring Guest Operating System Shutdown on the Client-Side	18
4	Software Installation on Windows Server 2008 Server Core	
	Preparing Server Core for Software Installation	20
	Installing the Software	22
	Configuring UPS Shutdown on a Local Agent	25
	Configuring the UPS from a Remote Machine	26
	Uninstalling the Software	27

Introduction

These installation notes provide instructions for installing Dell™ UPS Management Software on the following hypervisor-based server environments:

- Microsoft® Windows® Server 2008 Standard x64 Edition (includes Hyper-V™)
- Microsoft Windows Server 2008 (includes Hyper-V)
- Microsoft Hyper-V Server 2008
- Microsoft Hyper-V Server 2008 R2
- Microsoft Windows Server 2008 Server Core
- Microsoft Windows Server 2008 R2 Server Core



Software Installation on Windows Server 2008 with Hyper-V

This chapter provides the procedures for installing the Dell UPS Management Software on a computer that is running Microsoft Windows Server 2008 with Hyper-V.

This chapter also includes instructions for starting the Dell UPS Management Software and modifying settings in the Windows Server 2008 Hyper-V environment.

Installing the Software

To install and start the software on Hyper-V:

- 1 Download the software from the Dell Web site (support.dell.com) or from the CD (F618R A04 or higher) provided with the UPS.
- 2 Locate the setup.exe installation file on your machine.
- 3 Double-click the setup.exe icon  to start the installation program.
- 4 Refer to the installation and configuration manual for the Dell UPS Management Software, which provides instructions to complete the installation in a graphical user interface (GUI) environment.
- 5 Start the Monitor. Right click the Dell UPS Management Software Tray Icon  and select **Start Monitor** (see Figure 1). The Dell UPS Management Software user interface window opens.

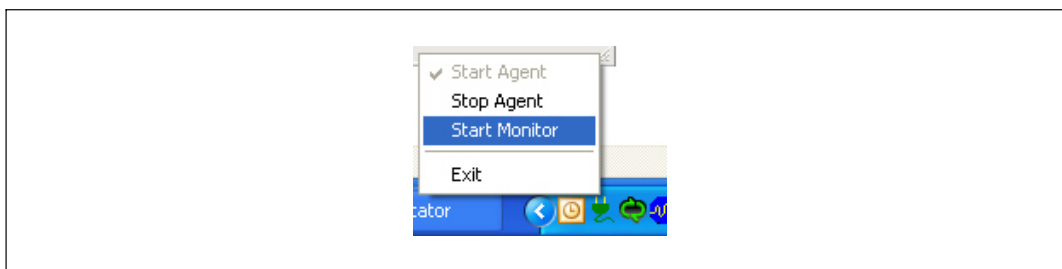


Figure 1. Start Monitor

Configuring UPS Shutdown

To select the UPS and set the shutdown parameters:

- 1 Select **Auto Search UPS** from the **System** menu to search for the UPS.
- 2 Select the desired UPS from the list of available UPSs.
- 3 Select **Shutdown Parameters** from the **UPS** menu to view or change the shutdown settings (see Figure 2).

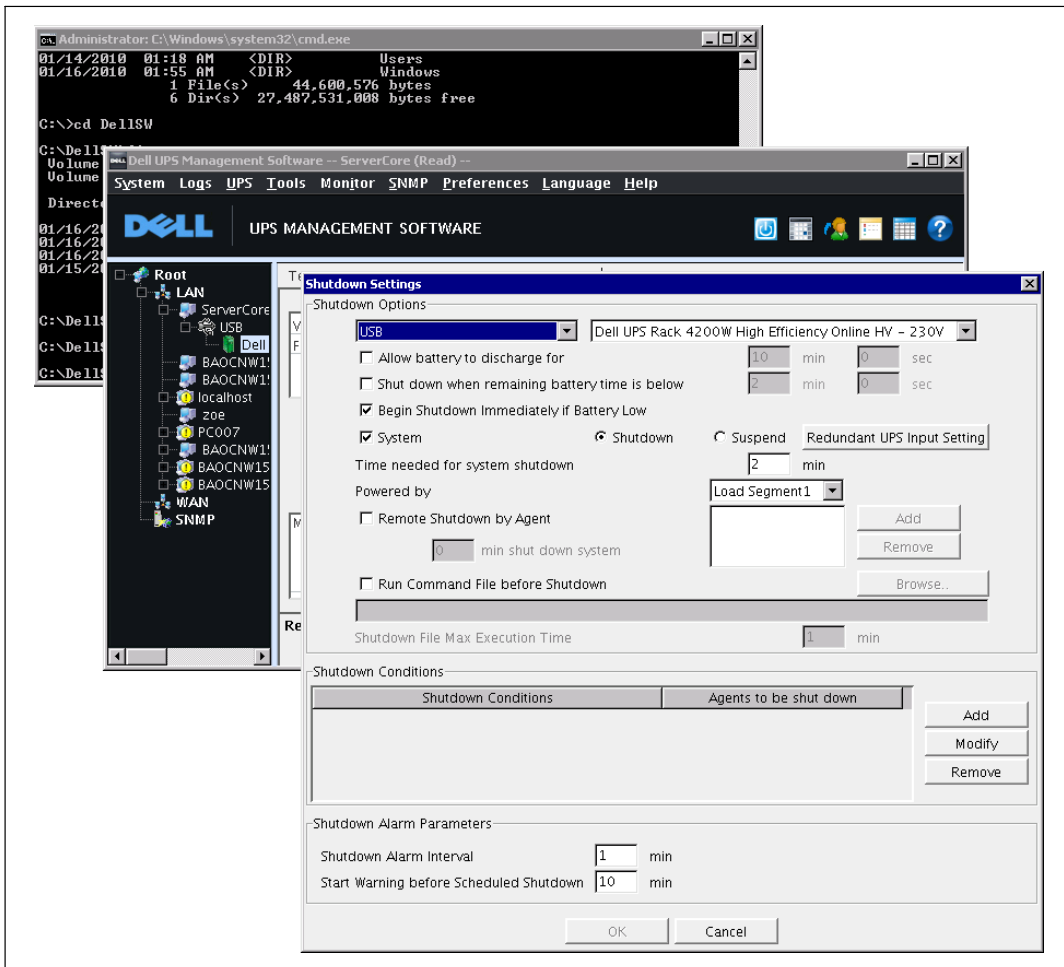


Figure 2. Shutdown Settings Window

Configuring Guest Operating System Shutdown on the Client-Side

To configure the guest operating system shutdown:

- 1 Start the Hyper-V Manager.
- 2 Select one of the guest operating systems from the Virtual Machines list. Figure 3 shows an example with Windows Server 2003 and Windows Server 2008 installed as guest operating systems.
- 3 Select **Setting** from the Actions pane on the right.

The server settings window opens.

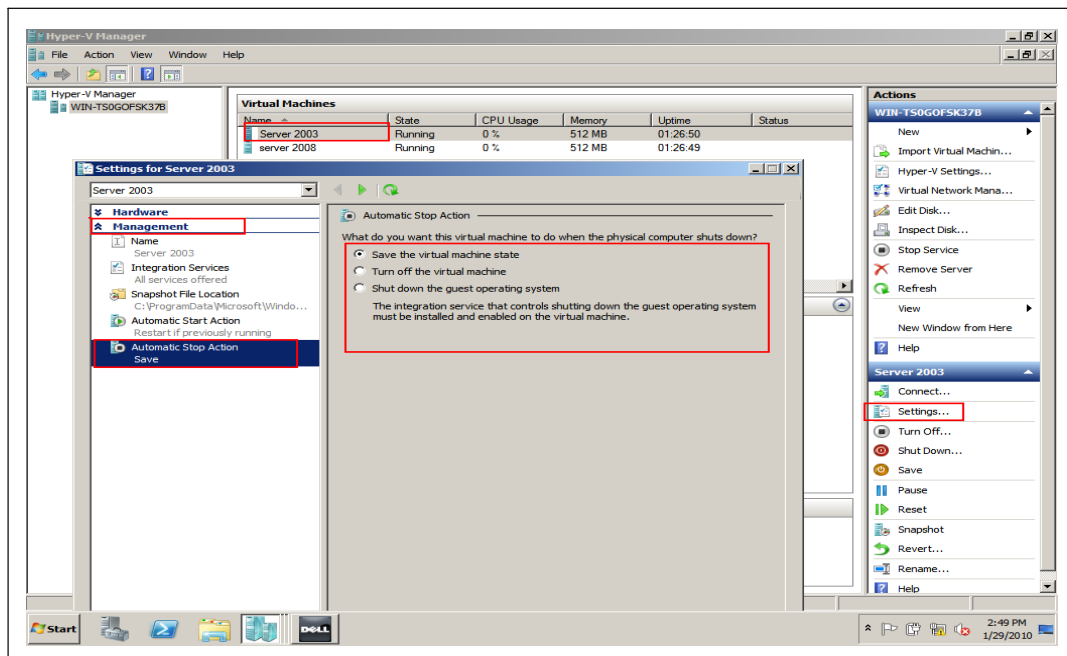


Figure 3. Server Settings Window

- 4 Select **Automatic Stop Action Save** from the Management list to display shutdown options (see Figure 3).

Select one of three ways to protect the guest operating system from an uncontrolled host machine shutdown:

- **Save the virtual machine state.** Select this option to retain the guest operating system state before the host computer shuts down.
- **Turn off the virtual machine.** Select this option to immediately turn off the virtual machine.
- **Shut down the guest operating system.** Select this option to shut down the guest operating system safely before host host machine shuts down.



NOTE: The option, Shut down the guest operating system, requires that Integration Services be installed and enabled on the virtual machine. Integration Services controls the guest operating system shut down.

To install Integration Services:

- 1 Select **Insert Integration Services Setup Disk** from the **Action** menu.
- 2 Click **Next** to complete the installation.

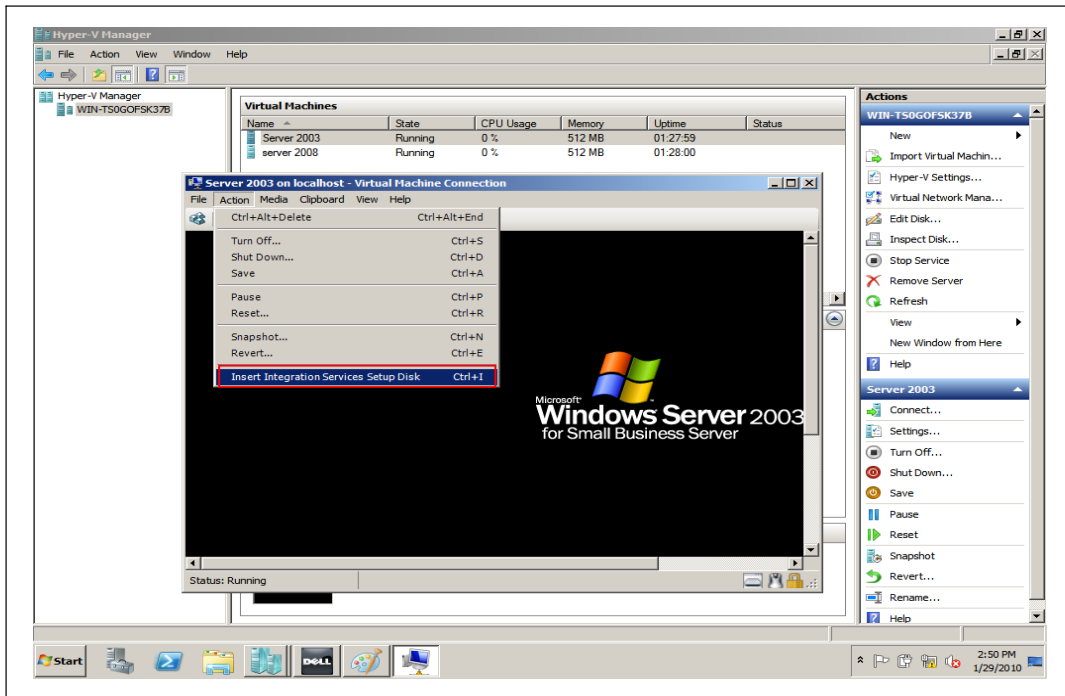


Figure 4. Installing Integration Services


Software Installation on Hyper-V Server 2008

This chapter provides the procedures for installing the Dell UPS Management Software on a computer that is running Microsoft Hyper-V Server 2008.

Instructions are also provided for starting the software and modifying settings in the Hyper-V Server 2008 environment.

Installing the Software

To install the software on the Hyper-V Server:

 **NOTE:** You can start the installation from the CD (F618R A04 or higher) provided with the UPS, or you can download the software from the Dell Web site (support.dell.com).

- 1 To install the software from the CD, continue to Step 2. To install the software from the Console window proceed to Step 5.
- 2 Run `setup.exe` from the CD drive: \Windows directory.
The installation interface window opens (see Figure 5).
- 3 Click **next** to complete the installation.
- 4 Proceed to Step 7.

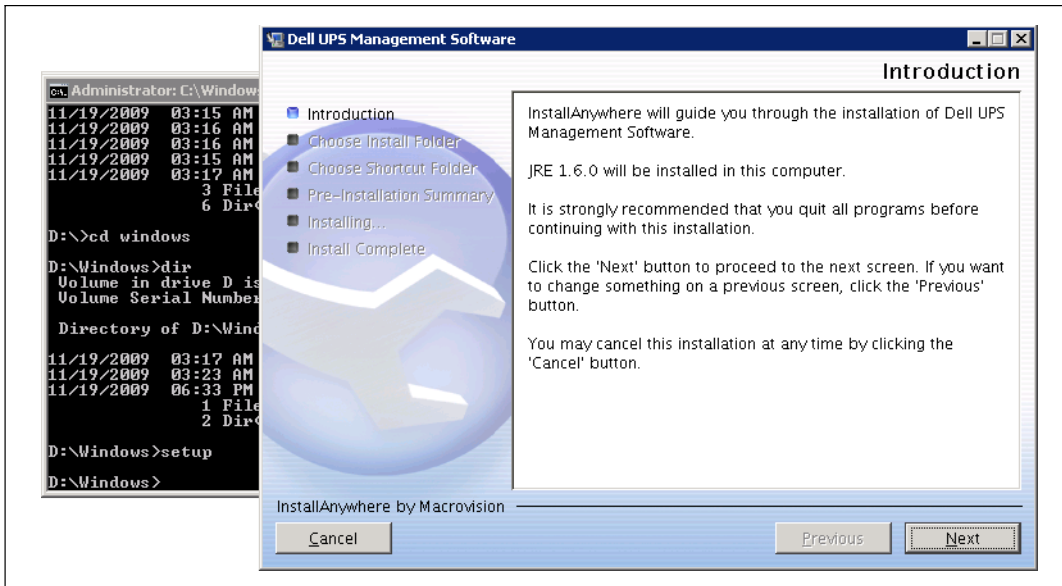


Figure 5. Installation Interface Window

- 5 To start the installation from the Console window:
 - Download the setup.exe file to your machine from the Dell Web site (support.dell.com) or copy it from the CD.
 - Go to the the path where the install file exists.
- 6 Choose standard or silent installation as follows:
 - For standard installation, enter the command:


```
setup
```

The installation interface window opens (see Figure 5).

Click **next** to complete the installation.
 - For silent installation, enter the command:


```
setup -i silent.
```

The software begins a silent install with no display messages or windows. Allow a few moments for installation to complete.

7 Confirm that the installation is successful:

- Enter the installation path. The default path is:
c:\Program file (X86)\Dell\UPSManagementSoftware
- Enter the command:
type UPSEVENT.CSV

The response confirms that the Agent is running (see Figure 6).



```
C:\Program Files (x86)\Dell\UPSManagementSoftware>type UPSEVENT.CSV
15 01/16/2010 03:32:33 [Agent Start][.-1,1[-1]
```

Figure 6. Agent Started Confirmation

8 To confirm that the software is running normally, enter the following command:

```
tasklist
```

The task manager displays (see highlighted items in Figure 7).

```
C:\>tasklist
```

Image Name	PID	Session Name	Session#	Mem Usage
System Idle Process	0	Services	0	24 K
System	4	Services	0	300 K
smss.exe	224	Services	0	1,032 K
csrss.exe	304	Services	0	3,700 K
csrss.exe	356	RDP-Tcp#0	1	5,772 K
wininit.exe	364	Services	0	4,160 K
winlogon.exe	392	RDP-Tcp#0	1	4,856 K
services.exe	452	Services	0	7,012 K
lsass.exe	460	Services	0	10,996 K
lsm.exe	468	Services	0	5,872 K
svchost.exe	568	Services	0	8,872 K
svchost.exe	640	Services	0	6,564 K
svchost.exe	728	Services	0	10,688 K
svchost.exe	764	Services	0	27,640 K
svchost.exe	812	Services	0	8,956 K
svchost.exe	876	Services	0	15,696 K
svchost.exe	952	Services	0	11,700 K
svchost.exe	268	Services	0	2,540 K
Monitor.exe	712	Services	0	3,432 K
javaw.exe	1048	Services	0	25,240 K
svchost.exe	1176	Services	0	8,652 K
svchost.exe	1288	Services	0	4,608 K
taskhost.exe	1476	RDP-Tcp#0	1	5,412 K
cmd.exe	1604	RDP-Tcp#0	1	2,856 K
conhost.exe	1612	RDP-Tcp#0	1	4,048 K
UPSMS.exe	1680	RDP-Tcp#0	1	3,120 K
javaw.exe	1688	RDP-Tcp#0	1	18,096 K
RMI.exe	1788	Services	0	3,440 K
javaw.exe	1812	Services	0	37,432 K
msdtc.exe	1056	Services	0	7,124 K
csrss.exe	448	Console	3	3,552 K
winlogon.exe	1204	Console	3	3,800 K
rdpclip.exe	1236	RDP-Tcp#0	1	4,772 K
LogonUI.exe	1652	Console	3	13,300 K
svchost.exe	508	Services	0	5,040 K
tasklist.exe	1616	RDP-Tcp#0	1	4,992 K
WmiPrvSE.exe	1244	Services	0	5,716 K

Figure 7. Task Manager

9 To start the software:

- Go to the installation path. The default path is:
c:\Program file (X86)\Dell\UPSManagementSoftware

• Enter the command:

```
Manager
```

The Dell UPS Management Software main window opens (see Figure 8).

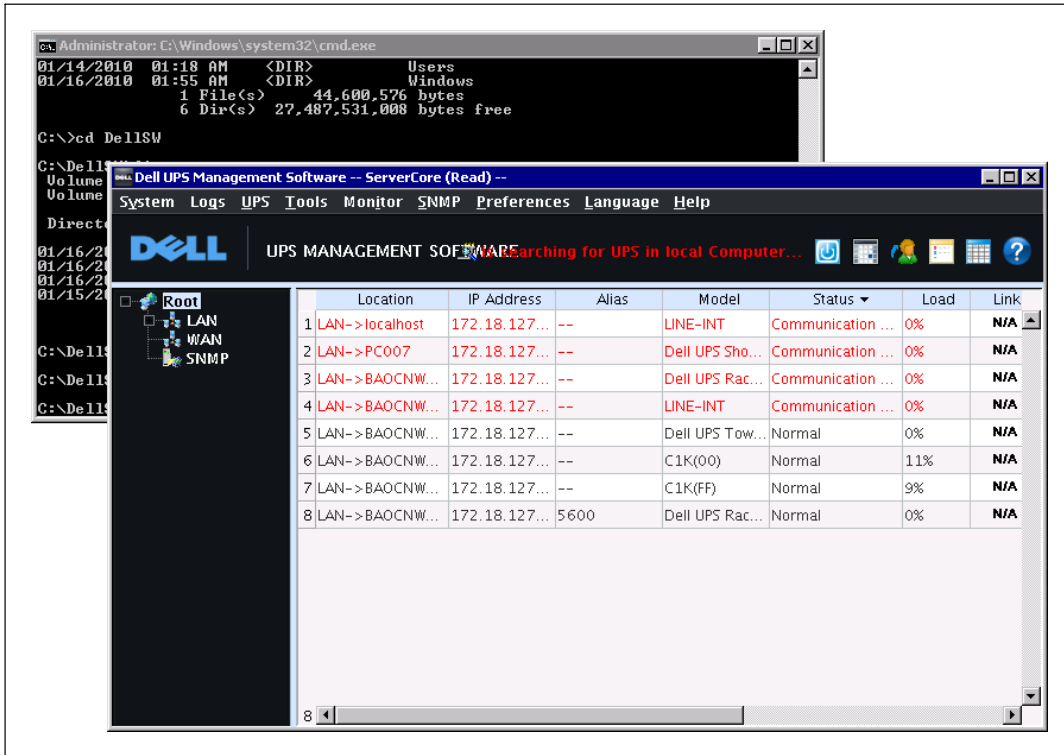


Figure 8. Dell UPS Management Software Window

Configuring UPS Shutdown on a Local Agent

To select the UPS and set the shutdown parameters:

- 1 Select **Auto Search UPS** from the **System** menu to search for the UPS.
- 2 Select the desired UPS from the list of available UPSs.
- 3 Select **Shutdown Parameter** from the **UPS** menu to view or change the shutdown settings (see Figure 9).

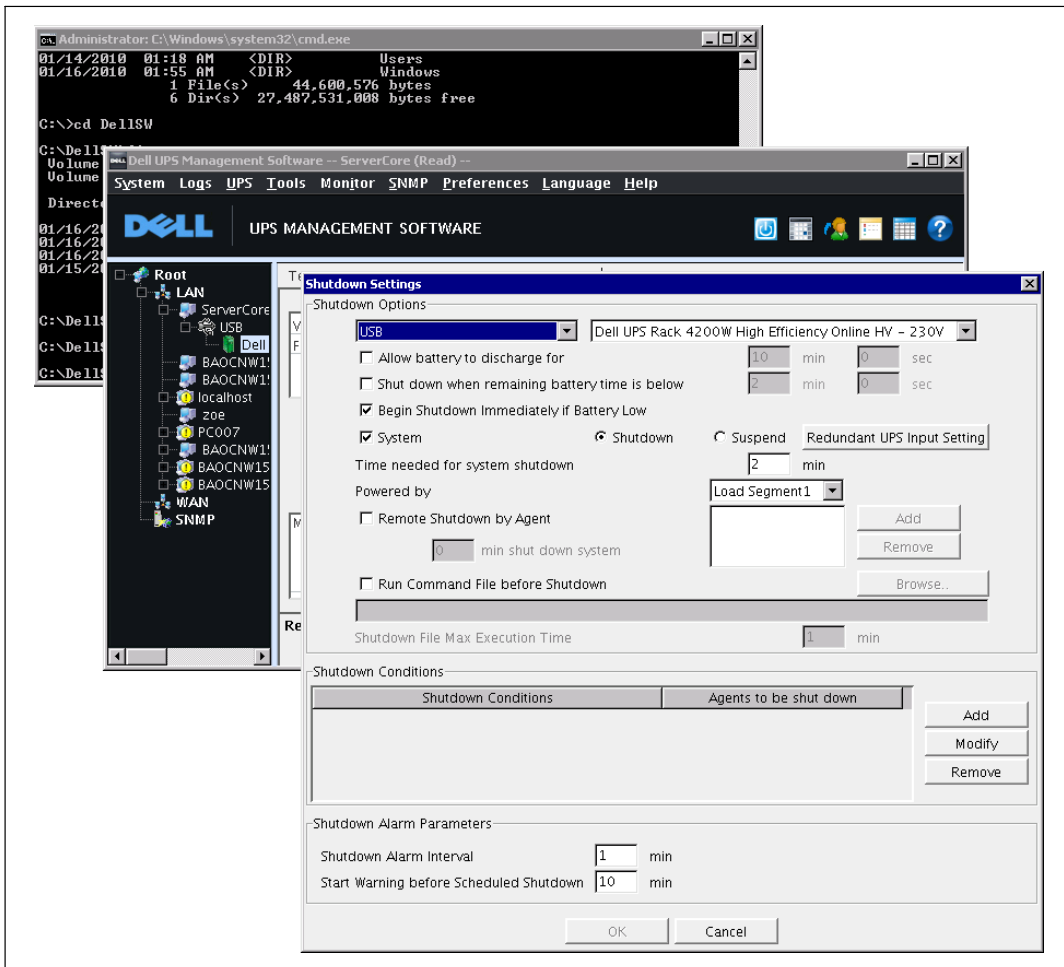


Figure 9. Shutdown Settings Window

Configuring UPS Shutdown from a Remote Machine

After the installation, you can verify and modify the shutdown settings of the Agent through a remote PC with a graphical user interface (GUI). Open the Shutdown Settings window (see Figure 10) to view settings.

NOTE: If the Agent is running normally, but does not appear in the the remote computer local area network (LAN), disable the firewall, using the netsh firewall set opmode disable command.

In this example, the settings **Begin Shutdown Immediately if Battery Low**, **System** and **Shutdown** are enabled, which means the server is protected by the software. If the AC fails, or if the battery is low, the system shuts down.

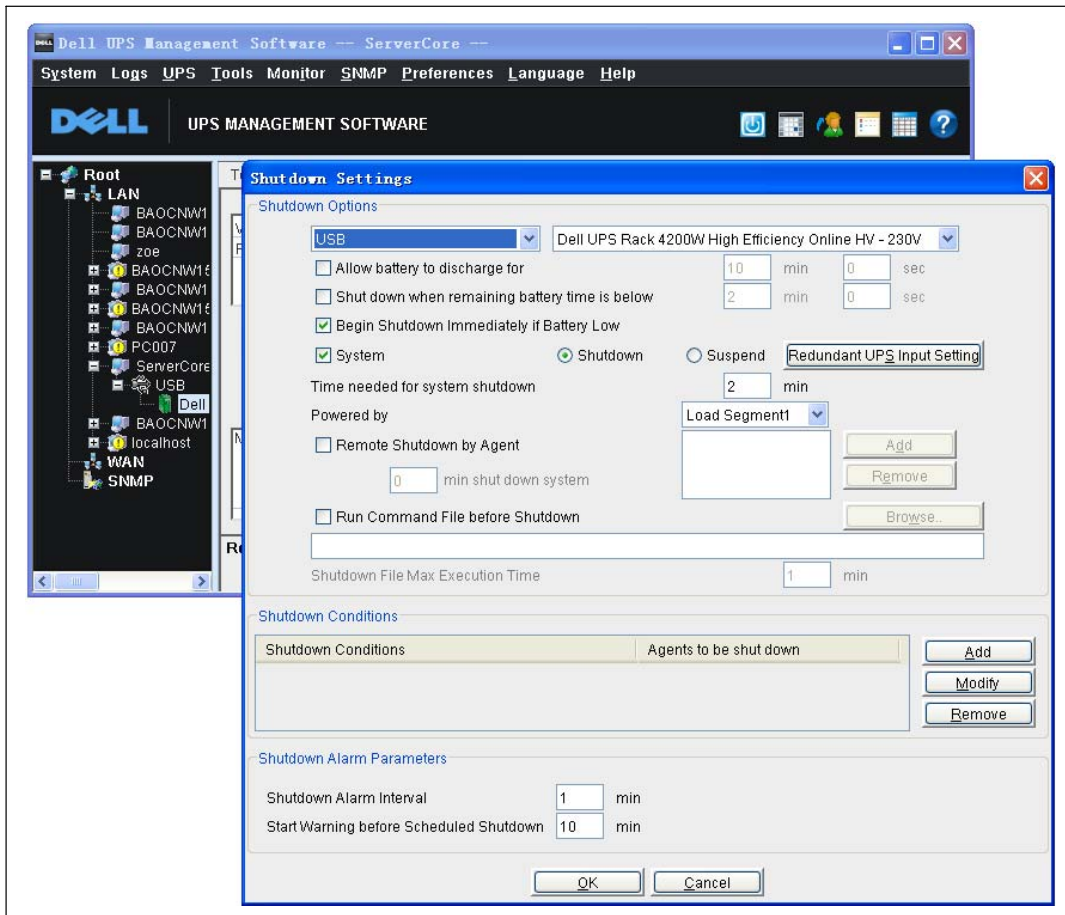


Figure 10. Shutdown Settings Window

Uninstalling the Software

To uninstall the software from the Hyper-V Server:

- 1 Go to the installation path. The default path is:
c:\Program file (X86)\Dell\UPSManagementSoftware
- 2 Enter the command:
ExitAll
- 3 Enter the following command to display the task list:
tasklist
- 4 If the javaw.exe process is running, enter the following command to stop it:
tskill PID
- 5 Go to the next path:
c:\Program file (X86)\Dell\UPSManagementSoftware\UninstallerData
- 6 The command to uninstall the software depends the command used to install the software. Enter the appropriate command (see Table 1).

Table 1. Uninstall Software

If ...	then...	and...
The software was installed with the setup command (standard installation)	enter Uninstall [the Uninstall Dell UPS Management Software window opens (see Figure 11)]	follow the prompts to remove the software.
The software was installed with the setup -i silent command (silent installation)	enter Uninstall -i silent (the software uninstalls with no display messages or windows)	—

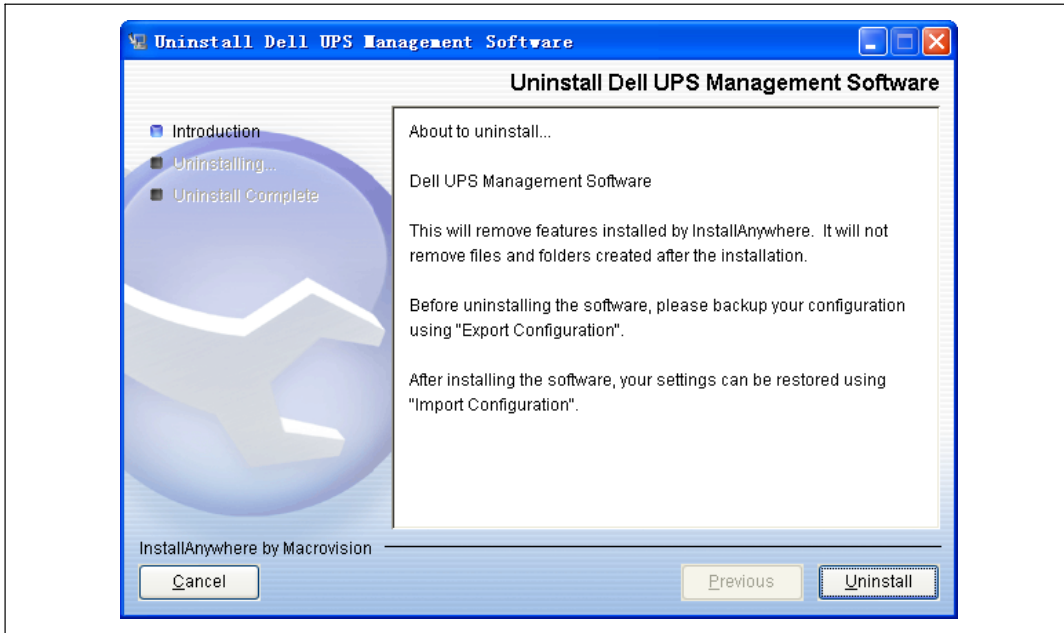


Figure 11. Uninstall Dell UPS Management Software Window

Configuring Guest Operating System Shutdown on the Client-Side

To configure the guest operating system shutdown:

- 1 Start the Hyper-V Manager on the client side.
- 2 Select one of the guest operating systems from the Virtual Machines list. Figure 12 shows an example with Windows Server 2003 and Windows Server 2008 installed as guest operating systems.
- 3 Select **Settings** from the Actions pane on the right.

The server settings window opens.

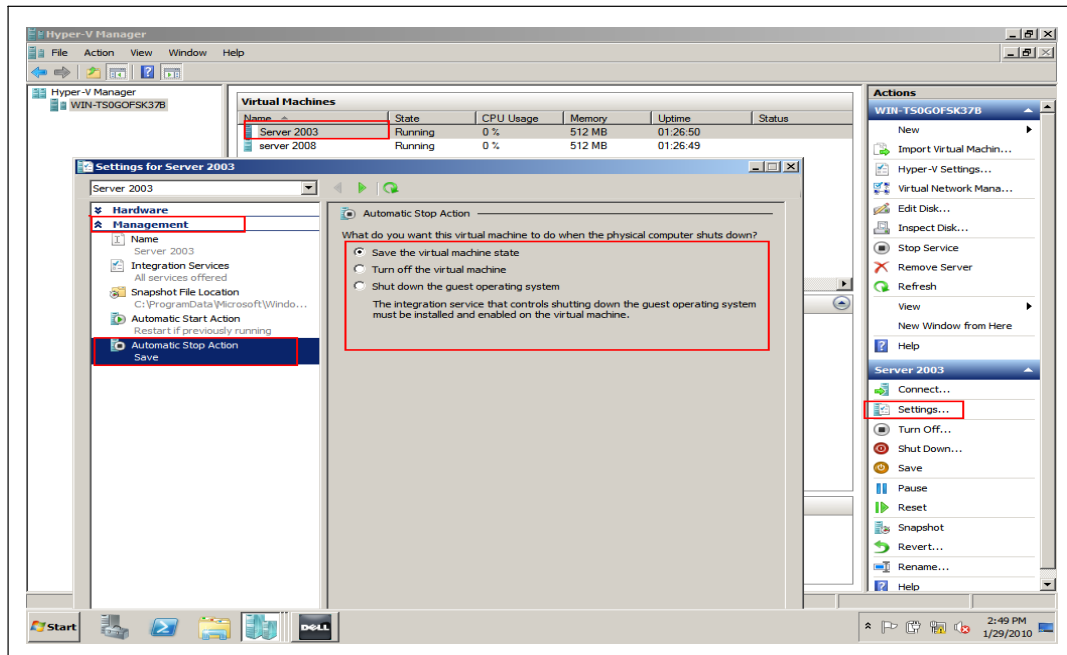



Figure 12. Server Settings Window

- 4 Select **Automatic Stop Action Save** from the Management list.
- 5 Select one of three ways to protect the guest operating system from an unexpected host machine shutdown:
 - **Save the virtual machine state.** Select this option to retain the guest operating system state before the host computer shuts down.
 - **Turn off the virtual machine.** Select this option to immediately turn off the virtual machine.
 - **Shut down the guest operating system.** Select this option to shut down the guest operating system safely before host host machine shuts down.

 **NOTE:** The option, Shut down the guest operating system, requires that Integration Services be installed and enabled on the virtual machine. Integration Services controls the guest operating system shut down.

To install Integration Services:

- 1 Select **Insert Integration Services Setup Disk** from the **Action** menu.
- 2 Click **Next** to complete the installation.

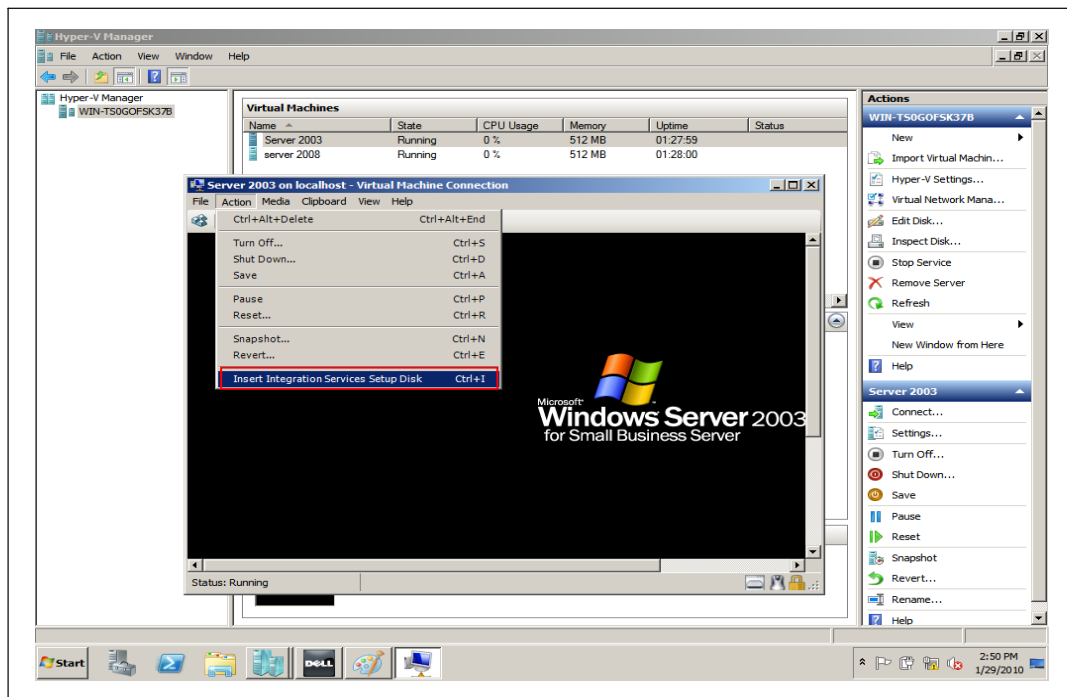



Figure 13. Installing Integration Services

Software Installation on Windows Server 2008 Server Core

This chapter provides the procedures for installing the Dell UPS Management Software on Windows Server 2008 Server Core.

 **NOTE:** Server Core is a minimal server installation option for computers running on the Windows Server 2008 operating system.

This chapter also includes instructions for starting the Dell UPS Management Software and modifying settings in the Server Core environment.

Preparing Server Core for Software Installation

Before installing the software on Server Core, modify the network and port settings.

To modify settings:

- 1 Shutdown the firewall, using the command:
`netsh firewall set opmode disable`
- 2 Enable the remote desktop function:
 - Open the Registry Editor (see Figure 14), using the command:
`Regedit`

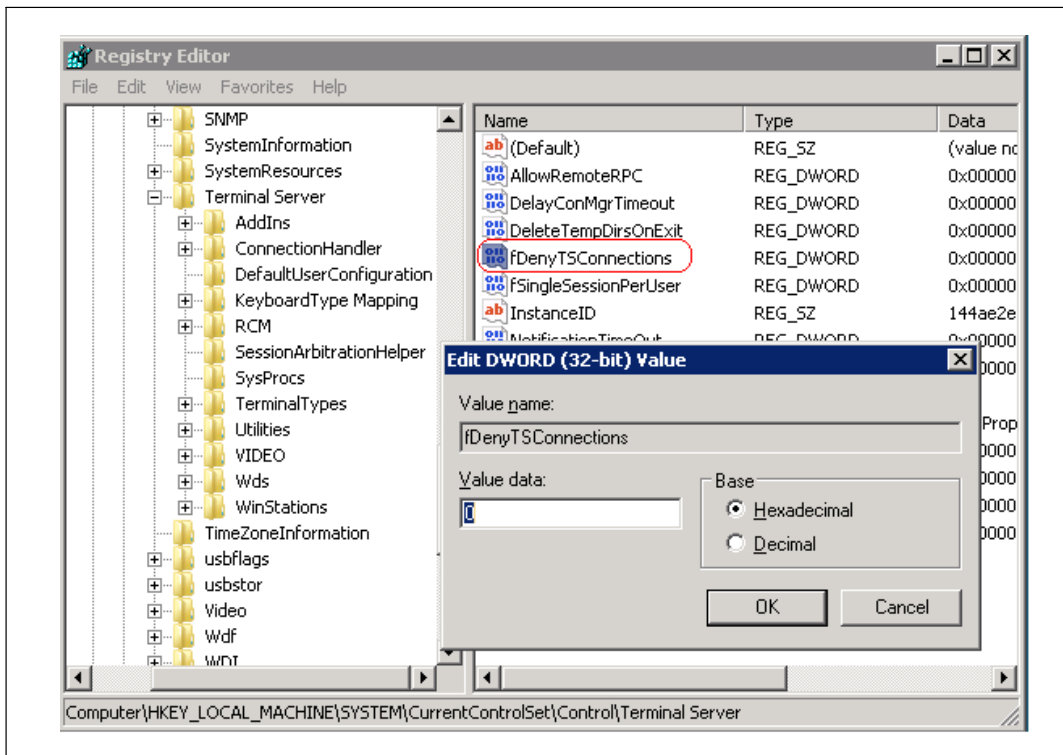



Figure 14. Registry Editor

- Edit `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Terminal Server\fDenyTSConnections = 0`.
- Open the port, using the command:

```
Netsh firewall set portopening tcp 3389
```

Installing the Software

To install the software on Server Core:

 **NOTE:** You can start the installation from the CD (F618R A04 or higher) provided with the UPS, or you can download the software from the Dell Web site (support.dell.com).

- 1 To install the software from the CD, continue to Step 2. To install the software from the Console window proceed to Step 5.
- 2 Run `setup.exe` from the CD drive: \Windows directory.
The installation interface window opens (see Figure 15).
- 3 Click **next** to complete the installation.
- 4 Proceed to Step 7.

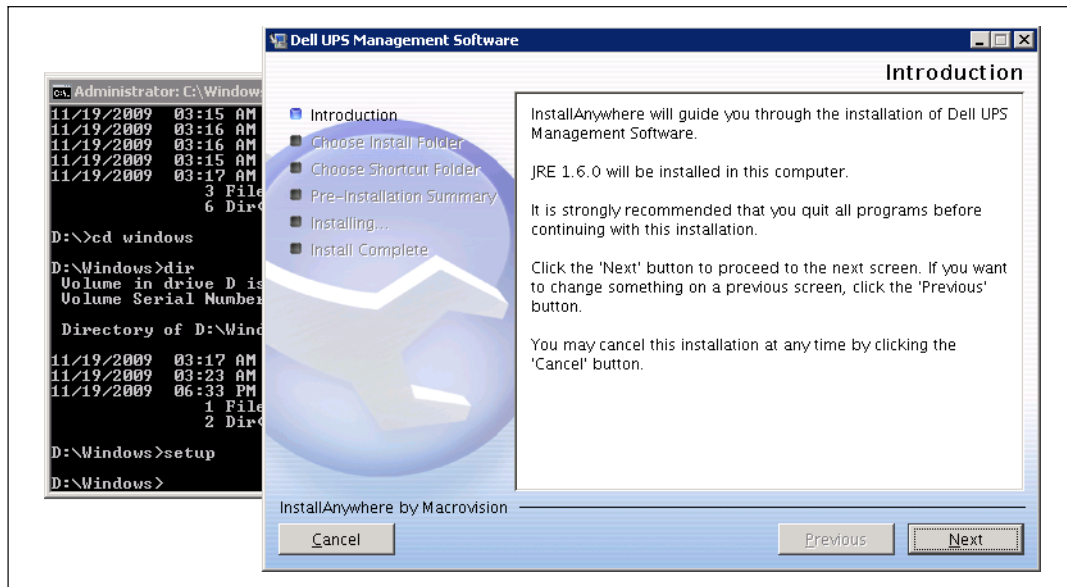


Figure 15. Installation Interface Window

- 5 To start the installation from the Console window:
 - Download the `setup.exe` file to your machine from the Dell Web site (support.dell.com) or copy it from the CD.
 - Go the path where the installation file exists.

6 Choose standard or silent installation as follows:

- For standard installation, enter the command:

setup

The installation interface window opens (see Figure 15).

Click **next** to complete the installation.

- For silent installation, enter the command:

setup -i silent

The software begins a silent install with no display messages or windows. Allow a few moments for installation to complete.

7 Confirm that the installation is successful:

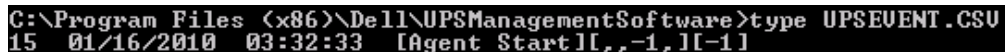
- Enter the installation path. The default path is:

c:\Program file (X86)\Dell\UPSManagementSoftware

- Enter the command:

type UPSEVENT.CSV

The response confirms that the Agent is running (see Figure 16).



```
C:\Program Files (x86)\Dell\UPSManagementSoftware>type UPSEVENT.CSV
15 01/16/2010 03:32:33 [Agent Start][.,.-1,][[-1]
```

Figure 16. Agent Started Confirmation

8 To start the Dell UPS Management Software:

- Go to the installation path. The default path is:

c:\Program file (X86)\Dell\UPSManagementSoftware

- Enter the command:

Manager

The Dell UPS Management Software main window opens.

- 9 To confirm that the software is running normally, enter the command:

`tasklist`

The task manager displays (see highlighted items in Figure 17).

```
C:\>tasklist
Image Name                PID Session Name        Session#    Mem Usage
-----
System Idle Process        0 Services             0           24 K
System                    4 Services             0          300 K
smss.exe                   224 Services             0         1,032 K
csrss.exe                  304 Services             0         3,700 K
csrss.exe                  356 RDP-Tcp#0            1         5,772 K
wininit.exe                364 Services             0         4,160 K
winlogon.exe               392 RDP-Tcp#0            1         4,856 K
services.exe              452 Services             0         7,012 K
lsass.exe                  460 Services             0        10,996 K
lsm.exe                    468 Services             0         5,872 K
svchost.exe                568 Services             0         8,872 K
svchost.exe                640 Services             0         6,564 K
svchost.exe                728 Services             0        10,688 K
svchost.exe                764 Services             0        27,640 K
svchost.exe                812 Services             0         8,956 K
svchost.exe                876 Services             0        15,696 K
svchost.exe                952 Services             0        11,700 K
svchost.exe                268 Services             0         2,540 K
Monitor.exe               712 Services             0         3,432 K
javaw.exe                 1048 Services            0        25,240 K
svchost.exe               1176 Services             0         8,652 K
svchost.exe               1288 Services             0         4,608 K
taskhost.exe             1476 RDP-Tcp#0            1         5,412 K
cmd.exe                   1604 RDP-Tcp#0            1         2,856 K
conhost.exe               1612 RDP-Tcp#0            1         4,048 K
UPSMS.exe                 1680 RDP-Tcp#0            1         3,120 K
javaw.exe                 1688 RDP-Tcp#0            1        18,096 K
RMI.exe                   1788 Services             0         3,440 K
javaw.exe                 1812 Services             0        37,432 K
msdtc.exe                 1056 Services             0         7,124 K
csrss.exe                  448 Console               3         3,552 K
winlogon.exe              1204 Console               3         3,800 K
rdpclip.exe               1236 RDP-Tcp#0            1         4,772 K
LogonUI.exe               1652 Console               3        13,300 K
svchost.exe                508 Services             0         5,040 K
tasklist.exe              1616 RDP-Tcp#0            1         4,992 K
WmiPrvSE.exe              1244 Services             0         5,716 K
```

Figure 17. Task Manager

Configuring UPS Shutdown on a Local Agent

To select the UPS and set the shutdown parameters:

- 1 Select **Auto Search UPS** from the **System** menu to search for the UPS.
- 2 Select the desired UPS from the list.
- 3 Select **Shutdown Parameter** from the **UPS** menu to view or change the shutdown settings (see Figure 18).

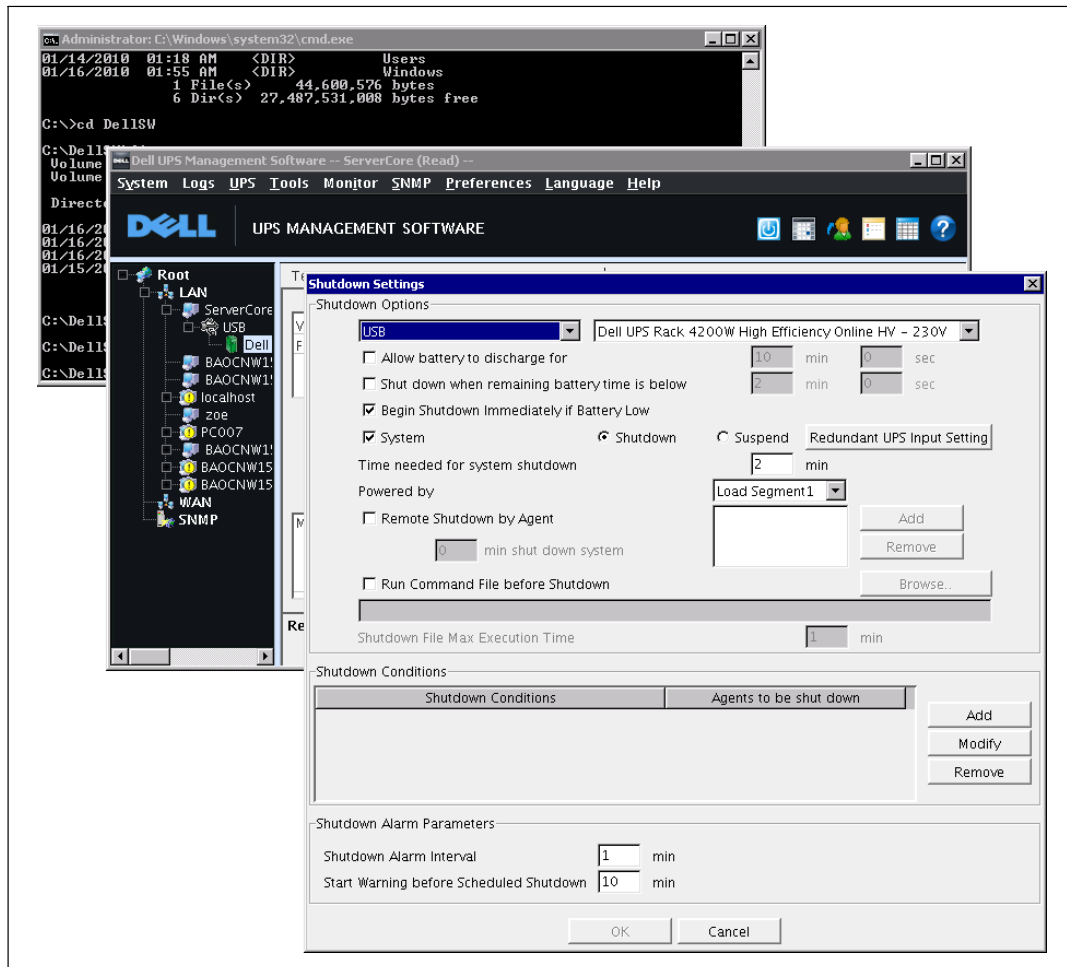


Figure 18. Shutdown Settings Window

Configuring the UPS from a Remote Machine

After the installation, you can verify and modify the shutdown settings of the Agent through a remote PC with a graphical user interface (GUI). Open the Shutdown Settings window (see Figure 19) to view settings.

NOTE: If the Agent is running normally, but does not appear in the the remote computer local area network (LAN), disable the firewall, using the netsh firewall set opmode disable command.

In this example, the settings **Begin Shutdown Immediately if Battery Low**, **System** and **Shutdown** are enabled, which means the server is protected by the software. If the AC fails, or if the battery is low, the system shuts down.

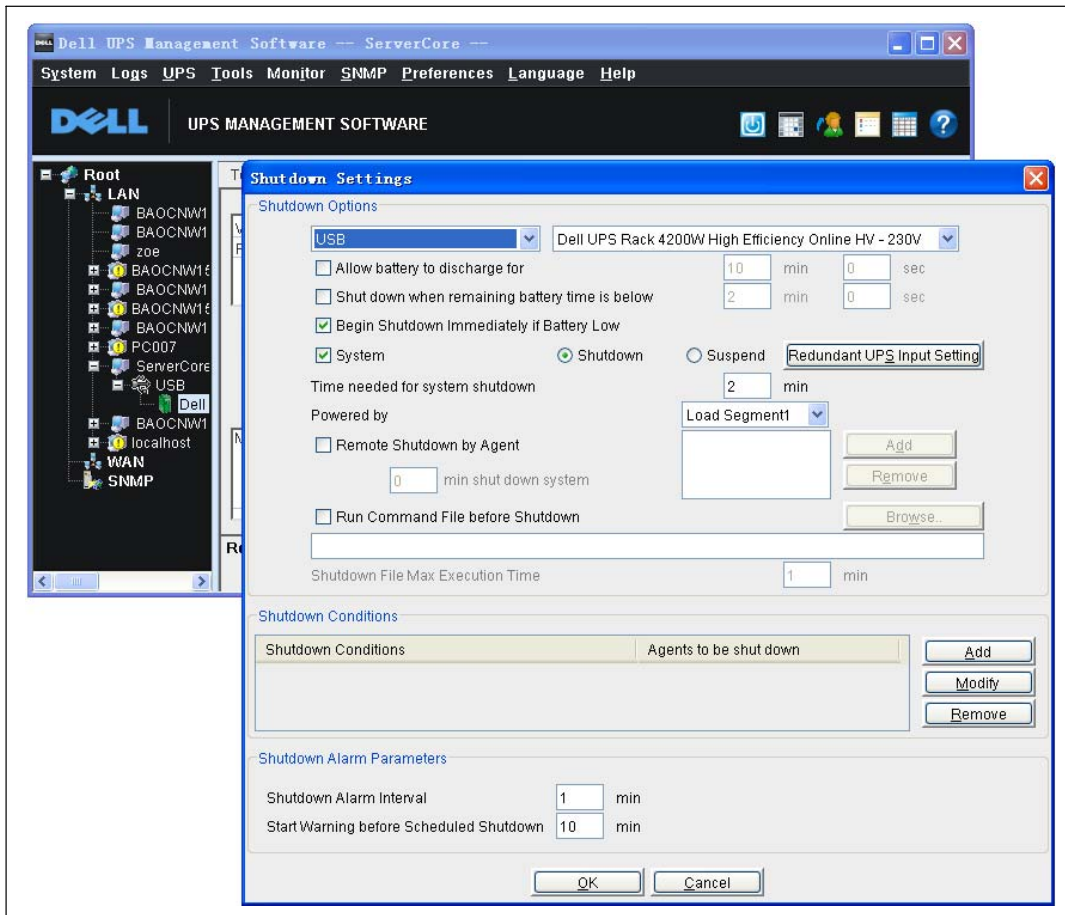


Figure 19. Shutdown Settings Window

Uninstalling the Software

To uninstall the Dell UPS Management Software from the Server Core:

- 1 Go to the installation path. The default path is:
c:\Program file (X86)\Dell\UPSManagementSoftware
- 2 Enter the command:
ExitAll
- 3 Enter the following command to display the task list:
tasklist
- 4 If the javaw.exe process is running, enter the following command to stop it:
tskill PID
- 5 Go to the next path c:\Program file (X86)\Dell\UPSManagementSoftware\UninstallerData.
- 6 The command to uninstall the software depends the command used to install the software. Enter the appropriate command (see Table 2).

Table 2. Uninstall Software

If ...	then...	and...
The software was installed with the setup command (standard installation)	enter Uninstall [the Uninstall Dell UPS Management Software window opens (see Figure 20)]	follow the prompts to remove the software.
The software was installed with the setup -i silent command (silent installation)	enter Uninstall -i silent (the software uninstalls with no display messages or windows)	—

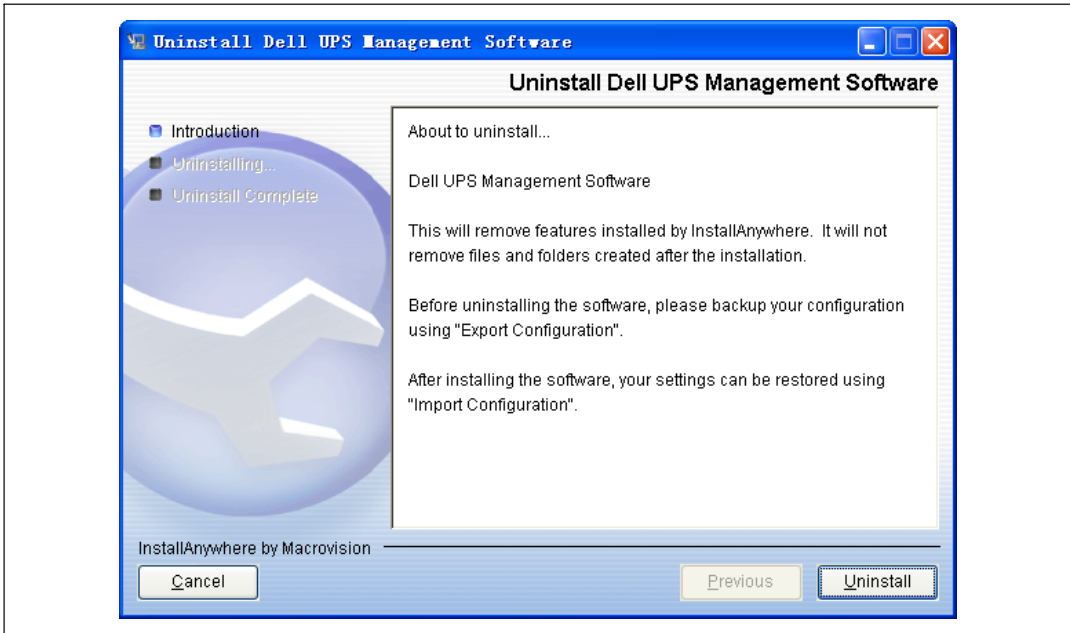


Figure 20. Uninstall Dell UPS Management Software Window