MSI Installer

Installation Guide

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About This Product

The MSI Installer is a program for installing software distributed in ".msi" file format. Our company normally distributes its software in exe file format, but some of our software is distributed in msi file format instead. By using the MSI Installer, automatic distribution and automatic installation of software from a server to a client computer is possible in an Active Directory environment.

About This Document

This installation guide explains how to automatically distribute software to a client computer using the MSI file installer and Active Directory, and install this software automatically without the user needing to do anything. This document is meant for Active Directory administrators. For information on how to install other software, refer to that software's user guide.

Usage Environment

The following system environments are used for the explanations in this document.

- Server: Computers with "Microsoft Windows Server 2008 R2"
- Client Computer: Computers with "Microsoft Windows 7"

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Dialog boxes

The dialog boxes shown in this manual are those that appear in Windows 7 and Windows Server 2008 R2.



Detail

The dialog boxes that appear in this document may differ from those that appear on your PC, depending on the installed devices, specified settings, and PC that you are using.

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1 Overview

1.1 About the MSI Installer

By linking the MSI file installer and Active Directory server, software can be automatically distributed from the server to a client computer and installed. Because installation/uninstallation is done automatically when the client computer is started up, no installation/uninstallation operations are required.

By configuring the distribution settings for multiple programs, the total amount of administration time needed to install the software can be reduced.

MSI files can also be installed directly using a client computer.

1.2 Required System Environment

Server

OS	Windows Server 2008 Standard Windows Server 2008 Enterprise Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows Server 2012 Standard Windows Server 2012 R2 Standard
Software	The MSI file of the distributed software
System Environment	A server on which Active Directory is installed

Client Computer

OS	Windows Vista Business Windows Vista Enterprise Windows Vista Ultimate Windows 7 Professional Windows 7 Enterprise Windows 8.1 Pro Windows 8.1 Enterprise Windows 10 Enterprise Windows 10 Enterprise Windows 10 Education
Software	Microsoft Visual C++ 2005 SP1 (x64)*1
System Environment	A computer managed with Active Directory ^{*2}

^{*1} Required for distributing some MSI files.

^{*2} The client computer must be on an Active Directory server domain.

Refer to the Readme file for the latest information about the operating environment.

2 Workflow

This section will explain the workflow up to software installation.

Operations are broadly categorized into server procedures and client computer procedures.



*VC Runtime must be installed in order to distribute some MSI files. When distributing and installing VC Runtime, follow the procedure in Preparing VC Runtime Distribution. Refer to "Preparing VC Runtime Distribution" on page 3-26 for details on software that requires VC Runtime.

3 Preparing the Server

This section will explain how to prepare the server.

The MSI file of the distributed software must be placed and configured.

3.1 Creating a Distribution Point

In order to install the software, the MSI file must be distributed to the client computer.

The file is distributed over a network, so a shared network folder that can be accessed from the client computer must be created on the server.

This shared network folder is called a "distribution point".

Procedure

- 1 Create a folder with whatever name you like.
 - In this example, the folder is called "MSI" and is created on the C drive.
 - Do not use double-byte characters in the folder name.



2 Right-click the folder and select [Properties].



3 Under the [Sharing] tab, click [Share].

📙 MSI Properties	×
Genera Sharing Security Previous Versions Cust	omize
General Sharing Security Previous Versions Cust Network File and Folder Sharing MSI Shared MSI Shared Shared Network Path: VH+vads/msi Share Share Advanced Sharing Set custom permissions, create multiple shares, and a advanced sharing options. @ Adjvanced Sharing	set other
OK Cancel	Apply

- 4 Add the following groups to the list of people to share with, and click [Share].
 - Domain Computers
 - Domain Controllers
 - Domain Users

Add and change the groups as necessary for your usage environment.

🧾 Fil	e Sharing			×
\bigcirc	38 File Sharing			
	Choose people on your network to share with			
	Type a name and then click Add, or click the arrow to find someon	e.		
			▼ <u>A</u> dd	
	Name	Permiss	ion Level	
	Representation Provided America Americ	Read 🔻		
	A Domain Controllers	Read 🔻		
	🍇 Domain Users	Read 🔻		
	🤱 en	Owner	-	
	j Par kaujar tarukla sharing			
	I'm naving trouble snaring			
			😌 S <u>h</u> are	Cancel

How to View an MSI File

This section will explain MSI filenames.

Make sure that the file you obtain matches the bit version and the language of the OS on the client computer.

File type	Description
32-bit MSI file	BoxOperator_Setup_en_x86.msi Software Language CPU type
	Note 32-bit MSI files have x86 on the end.



List of Languages

Text	Language	Text	Language	Text	Language
de	German	fr	French	ko	Korean
en	English	it	Italian	zh-CN	Simplified Chinese
es	Spanish	ja	Japanese	zh-TW	Traditional Chinese

3.2 Preparing Software Distribution

This section will explain how to place distributed MSI files, as well as create and configure group policy objects that determine the distribution rules.

3.2.1 Placing an MSI File

This section will explain how to place the MSI file of the distributed software.

Procedure

- 1 Place the MSI file of the distributed software in all of the shared folder distribution points.
 - Create a new folder distribution point into which the MSI file can be placed.
 - If MSI files of multiple languages are being placed in the distribution point, the software of the language used in the OS on the client computer will be installed. If the OS language on the client computer does not exist in the placed MSI file, the English version of the software will be installed.
 - If both 32-bit and 64-bit client computers are used, place both the 32-bit and the 64-bit MSI files in the distribution point. Either the 32bit or the 64-bit version of the software will be installed, depending on the bit version of the OS on the client computer.
 - The 64-bit version of VC Runtime is required for distributing some MSI files. Make sure that the MSI file is placed when also distributing VC Runtime. All related files must be placed when placing files with VC Runtime, not only the MSI file. For information on how to obtain VC Runtime, refer to "Preparing VC Runtime Distribution" on page 3-26.



3.2.2 Creating a Group Policy Object

This section will explain how to create a template in which a policy for the account and group is defined.

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Note

When distributing VC Runtime, create a new group policy object for VC Runtime separate from the software.

If a client computer is shared by multiple users, MSI files will be distributed to the computer instead of the users.

Procedure

1 Launch the Server Manager.



- 2 In the tree, expand [Features] [Group Policy Management] [Forest] -[Domains] - [ads.local (or the default domain)], in that order.
 - The "ads.local" domain is used as the example in this explanation.



3 Right-click [ads.local] and select [New Organizational Unit].



- 4 Enter the name, and click [OK].
 - In this example, an organizational unit (OU) with the name "MSI" is created.

New Organizational Unit			×
<u>N</u> ame:	MSI		
		ОК	Cancel

5 Right-click the created organizational unit (OU) and select [Create a GPO in this domain, and Link it here].

騙 Server Manager				
File Action View Help				
🗢 🔿 🔰 🛅 📋	0			
Server Manager (HV-ADS) Server Manager (HV-ADS) Constraints Cons	ment ult Domain Policy in Controllers Create a GPO in Unk an Existing (Block Inheritance Group Policy Moc New Organizatio Delete Rename Refresh Properties Help	ads.loc ads.lc Linked 2 this doma 3 PO deling Wiz nal Unit	al cal I Group Policy Objects Ink Order A Gi 1 ain, and Link it here tard	Group P >O Default
				_

- 6 Enter the name, and click [OK].
 - In this example, a group policy object (GPO) with the name "MSI" is created.

New GPO	×
Name:	
MSI	
Source Starter GPO:	
(none)	•
	OK Cancel

7 Check to make sure the group policy object (GPO) was created in [Group Policy Objects].



- 8 Create an Active Directory user for the group policy object (GPO) in the organizational unit (OU) or transfer an existing user to the OU.
 - In Box Operator, you must create an applicable Active Directory Computer or transfer an existing computer beforehand.
 - Right-click [ads.local (or the default domain)] and select [Active Directory User and Computers].



MSI Installer

9 Right-click the organizational unit (OU) and select [New] - [User].



10 Enter the information of the user for the distribution, and click [Next].

Ne	ew Object - User		×
-	🧏 Create in	: ads Jocal/MSI	
	<u>F</u> irst name:	MSI Initials:	
	Last name:	User	
	Full n <u>a</u> me:	MSI User	
	User logon name:		
	MSI_User	@ads.local 💌	
	User logon name (pre	e- <u>W</u> indows 2000):	
	ADS\	MSI_User	
-		< Back Next > Can	cel

11 Enter the password, and click [Next].



12 Click [Finish].

New Object - User	×
Create in: ads.local/MSI	
When you click Finish, the following object will be created:	
Full name: MSI User	<u></u>
User logon name: MSI_User@ads.local	
	7
< <u>B</u> ack	Cancel

 The software will be distributed to the created users, so add users as necessary.



3.2.3 Configuring a Group Policy Object

This section will explain how to configure MSI file distribution rules.

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Note

Administrator privileges for the client computer must be given to the Active Directory user in order to properly distribute some MSI files. If the administrator privileges were not given to the Active Directory user, add them. Refer to "Adding Administrator Privileges" on page 4-3 for information on how to add the administrator privileges.



Note

When upgrading a previous version of the software that has already been distributed, refer to "Configuring a Group Policy Object (Upgrade)" on page 3-19.

Procedure

1 Launch the Server Manager.

Fron New Deb			
III 2			
ver Manager (HV-ADS)	Server Manager (HV-ADS)		
3 Woles 3 J Festures 3 Configuration 3 Storage	Get an overview of the stat	us of this server, perform top management tasks, and add or re	emove server roles and features.
	Server Summary		Server Summary Help
	Computer Information		🙀 Change System Properties
	Full Computer Name:	hv-ads.ads.local	👰 Wew Network Connections
	Domain:	ads.local	Configure Remote Desktop
	Local Area Connection 2:	IPv4 address assigned by DHCP, IPv6 enabled	Management
	Remote Desktop:	Enabled	
	Server Manager Remote Management:	Deabled	
	Product ID:		
	Do not show me this console a	at logon	
	Security Information		Go to Windows Firewall
	Windows Firewall:	Domain: On	Configure Updates
	Windows Updates:	Install updates automatically using Windows Update	*† Check for New Roles
	Last checked for updates:	6/24/2011 9:26 AM	Configure IE ESC
	Last installed updates:	6/24/2011 5:16 PM	
	IE Enhanced Security Configuration (ESC):	Off for Administrators On for Users	
	 Roles Summary 		Roles Summary Help
	Roles: 3 of 17 installed		🖆 Go to Roles

2 In the tree, expand [Features] - [Group Policy Management] - [Forest] -[Domains] - [ads.local (or the default domain)] - [Group Policy Objects], in that order.



3 Under [Group Policy Objects], right-click [MSI (or the default group policy object)], and select [Edit].



4 In the tree in the Group Policy Management Editor, expand [User Configuration] - [Policies] - [Software Settings] - [Software installation], in that order.

ī				
	📕 Group Policy Management Editor			
	<u>File Action View H</u> elp			
	🗢 🔿 🙋 📅 🖾 🧟 🛃	Þ		
	MSI [HV-ADS.ADS.LOCAL] Policy	1	Name	Version
	🖃 👰 Computer Configuration	I		
	🕀 🚞 Policies	I		The
	🕀 🚞 Preferences	I		
	🖃 🕵 User Configuration	I		
	🖃 🧮 Policies	I		
	🖃 🧮 Software Settings	I		
	Software installation	I		
	Windows Settings	I		
	🕀 🚞 Administrative Templates: Po	c		
	🕀 🧮 Preferences	I		
10		- 110		

5 Right-click [Software installation] and select [New] - [Package].



- 6 Select the MSI file placed in the shared folder distribution point, and click [Open].
 - Designate the path to the MSI file using a network path (\\<Name of server>\<Name of shared folder>\<Name of MSI file>). Files cannot be obtained on a client computer with a local path.



7 Select [Assigned] and click [OK].



8 Right-click the created package and select [Properties].



- 9 Select the [Deployment] tab and check [Install this application at logon].
 - If it is a VC Runtime MSI file, do not check [Install this application at logon].

TWAIN V4 Properties ? 🗙				
General Deployment Upgrades Categories Modifications Security				
Deployment type				
C Published				
 Assigned 				
Deployment options				
Auto-install this application by file extension activation				
Uninstall this application when it falls out of the scope of management				
Do not display this package in the Add/Remove Programs control				
Install this application at logon				
Installation user interface options				
O Basic				
• Maximum				
Advanced				
OK Cancel Apply				

10 Click [Advanced].

- **11** Check [Make this 32-bit X86 application available to Win64 machines] if appropriate for the MSI file, and click [OK].
 - It does not need to be checked if both 32-bit and 64-bit MSI files are separately arranged, but does need to be checked if it is a shared MSI file for both 32-bit and 64-bit.
 - It does not need to be checked if it is a VC Runtime 64-bit MSI file.

Advanced Deploy	ment Options 🛛 🗙					
Advanced deploy	Advanced deployment options:					
Make this 32	bit X86 application available to Win64 machines.					
☐ Include <u>O</u> LE	Include QLE class and product information.					
Advanced diagno	stic information:					
Product code:	{A37EDCEE-8A40-4004-8E8F-1EBEF958F2FA}					
Deployment Cou	nt: 0					
Script name:	\\ads.local\SysVol\ads.local\Policies \{7C5BE075-9872-4997-BFE4-B5075A342EE6} \User\Applications \{F98EF298-78C2-4A0D-B841-66C39EEED3C9}.aas					
OK Cancel						

12 Repeat steps 5 to 11 for all distributed software.

3.2.4 Configuring a Group Policy Object (Upgrade)

This section will explain how to distribute a new version of the software in order to upgrade a previous version of the software. As a precondition, the distribution settings must already be configured for the previous version of the software.



Note

If the software was installed using a setup file in exe file format, Active Directory cannot be used to distribute software in order to upgrade a previous version of the software.

The software can be upgraded only if the previous version of the software was distributed in MSI file format.

1 In the tree in the Group Policy Management Editor, expand [User Configuration] - [Policies] - [Software Settings] - [Software installation], in that order.



2 Right-click [Software installation] and select [New] - [Package].



3 Select the upgrade MSI file placed in the shared folder distribution point, and click [Open].

🗐 Open 🛛 🗙					
Netwo	rk • hv-ads • MSI • RTD_v4.1		 Search RTD_v4 	.1	- 2
Organize 👻 New folder	r			III • 🗖	0
🚖 Favorites	Name ^	Date modified	Туре	Size	
🧮 Desktop	i₩ TWAIN Setup de	7/28/2010 6:25 PM	Windows Installer P	14,809 KB	
🐌 Downloads	1 TWAIN_Setup_en	7/28/2010 6:25 PM	Windows Installer P	14,828 KB	
🔛 Recent Places	TWAIN_Setup_es	7/28/2010 6:25 PM	Windows Installer P	14,805 KB	
🦰 Libratian	1 TWAIN_Setup_fr	7/28/2010 6:25 PM	Windows Installer P	14,808 KB	
Documents	TWAIN_Setup_it	7/28/2010 6:25 PM	Windows Installer P	14,806 KB	
J Music	🕞 TWAIN_Setup_ja	7/28/2010 6:25 PM	Windows Installer P	14,801 KB	
E Pictures	TWAIN_Setup_ko	7/28/2010 6:25 PM	Windows Installer P	14,795 KB	
😸 Videos	🔂 TWAIN_Setup_zh-CN	7/28/2010 6:25 PM	Windows Installer P	14,758 KB	
📜 Computer	聞 TWAIN_Setup_zh-TW	7/28/2010 6:25 PM	Windows Installer P	14,783 KB	
Su Network					
Fil	le name: TWAIN_Setup_en		Windows Insta	ller packages (*.	•
			<u>O</u> pen	Cancel	

4 Select [Advanced] and click [OK].

Deploy Software X
Select deployment method:
C <u>P</u> ublished
O <u>A</u> ssigned
• Advanced
Select this option to configure the Published or Assigned options, and to apply modifications to a package.
OK Cancel

- 5 Select the [Deployment] tab, select [Assigned], and check [Install this application at logon].
 - For the settings in [Advanced], use the same settings as when installing the package as a new package.

AIN V	1.1 Properties		
eneral	Deployment Upgrades Categories Modifications Security		
- Depl	pyment type		
0	2ublished		
۲	Assigned		
Depl	pyment options		
V	Auto-install this application by file extension activation		
Uninstall this application when it falls out of the scope of management			
	Do not display this package in the Add/Remove Programs control		
₽	Install this application at logon		
Insta	ation user interface ontions		
0	Basic		
e	- Maximum		
Ad <u>v</u> a	nced		

6 Select the [Upgrades] tab and check [Required upgrade for existing packages].

TWAIN V4.1 Propertie	:5			? ×
General Deployment	Upgrades	Categories	Modifications	Security
Packages that this pa	ackage will up	grade:		
(<u>Add</u>)	Bemove			
Required upgrade	e for existing p	ackages		
Packages in the cum	ent GPO that	will upgrade t	his package:	
		ок	Cancel	Apply

7 Click [Add].

- 8 In the "Package to upgrade" list, select the previous version of the package.
 - If the distribution settings have been configured for multiple previous versions of the package, add all of the existing previous versions of the package, not just the most recent previous package.

Add Upgrade Package
Choose a package from Current Group Policy Object (GPO) Agpecific GPO: Browse Browse
Package to ypgrade
\bigcirc Uninstall the existing package, then install the upgrade package \bigcirc Package can upgrade over the existing package
Cancel

9 Select [Package can upgrade over the existing package] and click [OK].

Add Upgrade Package
Choose a package from © Qurrent Group Policy Object (GPO) © A specific GPO: Browse
Package to upgrade
TWAIN V4.0
C Uninstall the existing package, then install the upgrade package C Package can upgrade over the existing package
Cancel

10 Confirm that the upgrade target package has been added to the "Packages that this package will upgrade" list, and click [OK].

TWAIN V4.1 Properties	? ×
General Deployment Upgrades Categories Modifications Security	
Packages that this package will upgrade:	-
Add Bernove	_
Pagkages in the current GPO that will upgrade this package:	
OK Cancel Apply	

11 Confirm that the software upgrade package has been set.





3.2.5 Checking the Group Policy Object Settings

This section will explain how to check the settings of the distributed software.

Procedure

1 Launch the Server Manager.



2 In the tree, expand [Features] - [Group Policy Management] - [Forest] -[Domains] - [<The default domain>] - [Group Policy Objects], in that order, and select the group policy object you wish to check.

	Server Manager		
	<u>File Action View H</u> elp		
	🗢 🔿 🔰 🖬 🗄 🛍 🔀 💽	1	
Γ	Server Manager (HV-ADS)		MSI
	 Roles Features Group Policy Management A Forest: ads.local Domains ads.local B ads.local Default Domain Policy MSI Coup Policy Objects Default Domain Controllers Default Domain Control 	trollers Policy y	MSI Scope Details Settings Delegation Links Display links in this location: The following sites, domains, and OUs a Location A MSI MSI
	🕒 🛄 🛄 🔛		

- **3** Select the [Settings] tab.
 - You can check the settings from here.
 - If the bars are closed, expand them as necessary.



3.3 Preparing VC Runtime Distribution

VC Runtime must be installed in order to distribute some MSI files. VC Runtime automatically distributes and installs MSI files, like other software. This section will explain how to obtain VC Runtime and extract MSI files.

Software required for VC Runtime:

- 64-bit Box Operator (versions earlier than version 3.2.08000)
- 64-bit Direct Print (all versions)

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Note

For 64-bit Box Operator version 3.2.08000 and later, the procedure in "Preparing VC Runtime Distribution" is not necessary.

3.3.1 Obtaining VC Runtime

If installing VC Runtime, you must obtain the Microsoft Visual C++ 2005 SP1 redistributable package (x64) from the Microsoft website beforehand.

Source: Microsoft Download Center

http://www.microsoft.com/download/en/default.aspx



Note

If the above URL no longer works, search for the package from the home page of the "Microsoft Download Center".

Procedure

- 1 Create a folder with whatever name you like directly on the C drive, and download "vcredist_x64.exe" into it.
 - In this example, a folder with the name "VC" is created.
 - Do not use double-byte characters in the folder name.



3.3.2 Extracting and Placing an MSI File

The downloaded VC Runtime file is in exe format, so it cannot be used as-is. You must retrieve the MSI file from the exe file.

Procedure

1 Launch the Command Prompt on the server. Type in "C:\VC\vcredist_x64.exe /c" and press Enter.

🕰 Command Prompt	_ 🗆 🗡
Microsoft Windows [Version 6.1.7601] Copyright (c) 2009 Microsoft Corporation. All rights reserved.	_
C:\Users\en} <mark>C:\UC\vcredist_x64.exe /c_</mark>	

2 The License Agreement will be displayed. Click [Yes].

MICROSOF	T SOFTWARE LICEN	SE TERMS	
MICROSOF	T VISUAL C++ 2005 F	UNTIME LIBRARIE	5
These licen	se terms are an agreem	tent between Microso	ptt Corporation
them They	apply to the software r	named above which	includes the
media on w	nich you received it, if a	any. The terms also a	apply to any
Microsoft			
• updates,	***		
* Internet-b	ased services, and		
* support se	rvices		
for this soft	vare, unless other terms	s accompany those it	ems. If so,
those terms	apply.	these terms. If you d	a not accept
by using the	, solumate, you accept	chese tenns. Il you u	o not accept

- 3 Designate the location where the file will be expanded and click [OK].
 - Designate the VC folder.

Microsoft Visual C++ 2005 SP1 Redistributable I	Pack 🔳 🔲 🗙			
Please type the location where you want to place the extracted files.				
C:\VC	Browse			
ОК	Cancel			

The file named "VCREDI~2.EXE" will be expanded in the designated folder.



4 Launch the Command Prompt. Type in "C:\VC\VCREDI~2.EXE /c" and press Enter.

📾 Command Prompt	
Microsoft Windows [Version 6.1.7601] Copyright (c) 2009 Microsoft Corporation. All rights reserved.	
C:\Users\en <mark>>C:\UC\UCREDI~2.EXE /c_</mark>	

- 5 The User Account Control dialog box will be displayed. Click [OK].
 - It may not be displayed, depending on the server environment.
- 6 Designate the location where the expanded file will be saved and click [OK].
 - Designate the "VC" folder.



- 7 The designated save location will open.
 - The files in the red frame are the files related to the VC Runtime MSI file.



3.3.3 Creating and Configuring a Group Policy Object

Refer to "Preparing Software Distribution" on page 3-5 for information on how to create and configure a group policy object through VC Runtime distribution.

4 Preparing a Client Computer

The software is installed automatically when the user logs into the client computer, according to the configured group policy object.

No user operations are required during the installation, but it may take some time until the logon finishes.



Note

The client computer must be on an Active Directory domain for the automatic installation to work. Refer to the Active Directory manual for information on how to join a domain.

In addition, administrator privileges for the client computer must be added to the Active Directory user for some software. Refer to "Adding Administrator Privileges" on page 4-3 for information on how to add the administrator privileges.

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Note

Some software requires the system to be restarted during the initial login, after which the installation will finish during the second login.



Note

After the software has been distributed, it will not install when you are logged in. You must restart the client computer and log in again.



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Note

To install My Print Manager Port or My Print Notifier on a client computer, carry out the following preparations in advance.

- If the client computer is running Windows Vista, Windows 7 or Windows 8.1, select [Control Panel] - [Programs and Features] - [Turn Windows features on or off], then select the [Microsoft .NET Framework 3.*.*] check box ("*.*" is different depending on operating systems).



Reminder

Installation-related messages are not normally displayed during the installation. However, messages may be displayed if the group policy settings are changed on the server. Refer to "Displaying Group Policy Messages" on page 5-11 for details.

4.1 Adding Administrator Privileges

This section will explain how to add administrator privileges for the client computer to an Active Directory user.

Software that requires administrator privileges: 32-bit/64-bit Box Operator versions earlier than version 3.2.08000

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Note

For 32-bit/64-bit Box Operator version 3.2.08000 and later, the procedure in "Adding Administrator Privileges" is not necessary.

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Note

The client computer must be on an Active Directory domain before you add administrator privileges.

Procedure

- 1 Log on to the client computer using a local user account that has administrator privileges.
 - Do not log on using an Active Directory user account. Be sure to log on to the client computer using a local user account that has administrator privileges.
- 2 Click [Start] [Control Panel] [Administrative Tools] [Computer Management].



3 In the tree, expand [System Tools] - [Local Users and Groups] - [Groups] in that order.



4 Click [Administrators] to open the Administrators Privileges dialog box.

-			
ſ	🌆 Computer Management		
	<u>File Action View H</u> elp		
	🗢 🔿 🙍 🖬 🍳 😖 👔 🗊		
	E Computer Management (Local)	Name	D
	▲ [™] System Tools	Administrators	А
	Contract Scheduler	A Backup Operators	В
	Event Viewer	Eryptographic Operators	N
	B Shared Folders	A Distributed COM Users	N
	Local Users and Groups	🜆 Event Log Readers	N
	Groups	🕭 Guests	G
		🜆 IIS_IUSRS	В
	Device Manager	A Network Configuration Operators	N
	A 🚝 Storage	🕭 Performance Log Users	N
	🔄 🔄 Disk Management	🕭 Performance Monitor Users	N
	Services and Applications	🕭 Power Users	P
I		🚯 Romoto Dackton Usars	N.

5 Click [Add].



- 6 In the "Enter the object names to select" box, enter the name of the Active Directory user to add the administrator privileges to, and click [Check Names].
 - The "aduser01" Active Directory user is used as the example in this explanation.

Select Users, Computers, Service Accounts, or Groups	s ? 🔀
Select this object type:	
Users, Service Accounts, or Groups	Object Types
From this location:	
ads.local	Locations
Enter the object names to select (examples):	
aduser01	Check Names
<u>A</u> dvanced	OK Cancel

Δ

7 In the network password dialog box, enter the Active Directory user name and password, and click [OK].

Windows Security
Enter Network Password Enter the name and password of an account with permissions for ads.local.
aduser01 Domain: ADS
OK Cancel

8 Confirm the Active Directory user name in the "Enter the object names to select" box, and click [OK].

Select Users, Computers, Service Accounts, or Groups	? 💌
Select this object type:	
Users, Service Accounts, or Groups	Object Types
From this location:	
ads.local	Locations
Enter the object names to select (<u>examples</u>):	
ads\aduser01 (aduser01@ads.local)	Check Names
Advanced OK	Cancel

9 Confirm that the Active Directory user has been added to the Administrators Properties dialog box, and click [OK].

Administrators Pro	operties 🔹 😨
General	
Admin	strators
Description:	Administrators have complete and unrestricted access to the computer/domain
Members:	
Administrato	r r01 (aduser01@ads.local)
ADS\Doma	in Admins
A <u>d</u> d	Changes to a user's group membership are not effective until the next time the user logs on.
	OK Cancel Apply Help

Δ

5 Other Operations

This section will explain how to uninstall software, manually update group policies, and output event logs.

5.1 Uninstalling Software

Software installed on a client computer is uninstalled on the server.

Procedure

1 Launch the Server Manager.

erver Manager (HV-ADS)	Server Manager (HV-ADS)		
Features Diagnostics Configuration	Get an overview of the sta	tus of this server, perform top management tasks, and add or n	enove server roles and features.
-	Server Summary		Server Summary Help
	 Computer Information 		🚱 Change System Properties
	Full Computer Name:	hv-ads.ads.local	😤 View Network Connections
	Domain:	ads.local	Configure Remote Desktop
	Local Area Connection 2:	IPv4 address assigned by DHCP, IPv6 enabled	Management
	Remote Desktop:	Enabled	
	Server Manager Remote	Disabled	
	Proceedings of the second		
	Product TD:		
	Product ID:	at logon	
	Product ID: © Do not show me this console © Security Information	at logon	🗑 Go to Windows Pinewall
	Product ID: Do not show me this console Security Information Windows Prevail:	at logon Domain: On	🔐 Go to Windows Pinewall
	Product 3D : Product 3D : Pr	at legen Doman: On Tritall updates automatically using Windows Update	Go to Windows Pressal Configure Updates Check for New Roles By Direct Configure Without
	Product ID: Product ID: Programmer in the console Provide the consoleration Windows Fremail: Windows Lipdates: Last checked for updates:	at logon Domain: On Install updates automatically using Windows Update 6/24/2021 19:26:2444	Go to Windows Pressal Configure Updates Credu for New Roles No. Security Configuration Wilcord Configure IE SEC
	Product ID: Security Information Windows Frenails Windows California Last checked for yr updress: Last rehability california	at logon Domain: On Install update automatically using Windows Lipdate 4(24202119:26:2444 4(242021:15:16) PM	Co to Windows Pressal Configure Updates Configure Updates Configure Updates An Security Configuration Wilcard Configure III ESC
	Product ID : For not show an effect console Workson Freewalls Workson Freewalls Workson Exploring Lett declarf for replaces: Lett invaliding diplaces: Et Enhanced Security Et Enhanced Security Et Enhanced Security	at lagon Danaire. On Incell leaders automatically using Windows typidate 4(24/2011) 5:20.844 4(24/2011) 5:20.849 Of Muchamistraturas Of Muchamistraturas	Configure Lindices Presental Configure Lindices For Orack for New Roles in Security Configure 30 Waard Configure 10 Etcc
	Product 2D C so not how not this conside Security Information Workers (Information Workers (Information Unit in a strain of the source) Last included for products Last included for products Last included products C fibre Seminary C fibre Seminary	at lagon Danairi. On Incel luciotes automaticaly uang Windows typidate 4(24/2011 15:20.844 6(24/2011 15:10.94) Of for Adaministrators On for Users	Configure Electronic Presented Configure Electronic Configure Electroni
	Product 20: Product 20: Product Anton we have conside Product Product State Under State State Under State State Under State State Under State State Under State State State State Product Product Produc	et lagen Dansen: On Install updates activentative upp Hindows Updates 6/24/2011/5/3/ API 6/24/2011/5/3/ API 6/24/2011/5/3/ API 6/24/2011/5/3/ API 6/24/2011/5/	Control Transformer Control on States Control on States Control on States Ana Scanto Control on States Control on El El C

2 In the tree, expand [Features] - [Group Policy Management] - [Forest] - [Domains] - [ads.local (or the default domain)] - [Group Policy Objects], in that order.



3 Under [Group Policy Objects], right-click [MSI (or the default group policy object)], and select [Edit].



4 In the tree in the Group Policy Management Editor, expand [User Configuration] - [Policies] - [Software Settings] - [Software installation], in that order.



5 Right-click the software package you wish to uninstall, and select [All Tasks] - [Remove].



6 Select [Immediately uninstall the software from users and computers] and click [OK].



- The package will be removed from the list, and the software will be uninstalled from the client computer the next time you log on.
- No user operations are required during the uninstallation, but it may take some time until the logon finishes.



5.2 Manually Updating Group Policies

This section will explain how to manually update group policies on a client computer using the Command Prompt.

Group policies on a client computer are normally updated regularly (default: every 90 minutes). A group policy alteration is randomly applied to the client computer between 0 and 30 minutes after the update.

Manual updates are done on the client computer.

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Y		

Note

The server will be overloaded if all client computers are updated at the same time. As a general rule, apply the group policy alteration at an update interval set in the Active Directory.

Procedure

- 1 Launch the Command Prompt on the client computer.
- 2 Enter "gpupdate /force" and press Enter.

Command Prompt
Microsoft Windows [Version 6.1.7601] Copyright (c) 2009 Microsoft Corporation.
C:\Users\en}gpupdate /force_

A message indicating that the update has finished will be displayed.



5.3 Outputting Event Logs

An event log can be output to the client computer when software is installed or uninstalled.

This log can be used to determine the cause of any problem that occurred during the installation/uninstallation.

5.3.1 Enabling Log Output

This section will explain how to configure the server to output event logs.

Procedure

1 Launch the Server Manager.

Server Hanager (HF ADS) Get an overview of the status of this server, perform top management tasks, and add or remove server roles and features.				
Computer Information		🚱 Change System Properties		
Full Computer Name:	hv-ads.ads.local	Rev Network Connections		
Domain:	ads.local	Configure Remote Desktop		
Local Area Connection 2:	IPv4 address assigned by DHCP, IPv6 enabled	Management		
Remote Desktop:	Enabled			
Server Manager Remote Management:	Disabled			
Product ID:				
P Qo not show me this console a	it logon			
Security Information		😭 Go to Windows Pirewall		
Windows Firewall:	Domain: On	Configure Updates		
Windows Updates:	Install updates automatically using Windows Update	*# Check for New Roles		
Last checked for updates:	6/24/2011 9:26 AM	Tonfgure IE ESC		
Last installed updates:	6/24/2011 5:16 PM			
IE Enhanced Security Configuration (ESC):	Off for Administrators On for Users			
Roles Summary		Roles Summary Help		
Roles: 3 of 17 installed		Go to Roles		
Active Directory Domain Serv	ices	Add Roles		
	Computer Information Computer			

2 In the tree, expand [Features] - [Group Policy Management] - [Forest] -[Domains] - [MSI (or the default group policy object)] - [Group Policy Objects], in that order.



3 Under [Group Policy Objects], right-click [MSI (or the default group policy object)], and select [Edit].



4 In the tree, expand [Computer Configuration] - [Policies] -[Administrative Templates] - [Windows Components] - [Windows Installer], in that order, and select [Logging].



5 Right-click [Logging] and select [Edit].

🗐 Group Policy Management Editor			
File Action View Help			
🗢 🔿 🖄 📰 🗟 🖬 🕅	7		
Internet Explorer Internet Information Services	🧮 Windows Installer		
Location and Sensors	Logging	Setting	State Not configured
Network Access Protection	Edit policy setting	Enable user to use media source while elevated Enable user to use media source while elevated Enable user to patch elevated products	Not configured Not configured
Online Assistance Parental Controls	At least Windows 2000	Always install with elevated privileges	Not configured Not configured
Presentation Settings Remote Desktop Services	Description: Specifies the types of events that Windows Installer records in its transaction log for each installation. The log, Mailos, uppeared the the temp directory of the system volume. When you enable this setting, you can specify the types of events you want Windows Installer to record. To indicate that an event type is recorded, type the	E Remove browse dialog box for new source Prohibit Flyweight Patching	Not configured Not configured
RSS Feeds		E Disable logging via package settings Disable Windows Installer	Not configured Not configured
Server for NIS Shutdown Options		E Prohibit patching Prohibit rolback Allow advice to install from Remote Decktop Services esseing	Not configured Not configured
Sound Recorder		E Enable user control over installs	Not configured
Task Scheduler	can type the letters in any order and list as many or as few event types as you want.	Edit Prohibit non-administrators Prohibit removal of updates Filter On Filter On Filter On Filter On	Not configured Not configured
Windows Color System	To disable logging, delete all of the letters from the box.	E Prohibit User Installs Fefere upgrade component E Prohibit User Installs Fefere upgrade component I Terfor	Not configured Not configured
Windows Defender Windows Error Reporting	If you disable this setting or do not configure it, Windows Installer logs the	E Disable IE security prompt	Not configured Not configured
Windows Explorer Windows Installer Windows Logon Options	default event types, represented by the letters "iweap."	E Cache transforms in secure location on workstation	Not configured
Windows Mall Windows Media Center Windows Media Digital Rights			
Mindowe Media Diaver	Extended Standard	4	<u> </u>
Edit Administrative Templates policy setting	l		

6 After selecting [Enabled] in [Options:] [Logging], enter "iwearucmpvo" and click [OK].



5.3.2 Checking an Event Log

This section will explain how to check an output log. Event logs are generated on the client computer.

Procedure

- 1 Event log files are generated in "C:\Windows\Temp" on the client computer.
 - The filenames of the log files are random numbers, so you must identify them using the time and date of the update, as well as the contents.

	a w Brint Newfolder			Rea - FIL	
organize 👻 🔄 Oper	n ♥ Print New loider			8== ¥ 🛄	-
🔆 Favorites	Name	Date modified	Туре	Size	
Nesktop	Ipksetup-20110728-174519-0.log	7/28/2011 5:45 PM	Text Document	16 KB	
Downloads	pksetup-20110818-084938-0.log	8/18/2011 8:49 AM	Text Document	16 KB	
🔆 Recent Places	MpCmdRun.log	3/3/2011 5:16 PM	Text Document	5 KB	
	MpSigStub.log	3/3/2011 4:10 PM	Text Document	4 KB	
🔚 Libraries	MSI9d1bb.LOG	4/6/2011 4:21 PM	Text Document	16 KB	J
Documents	MSI9d1bd.LOG	3/4/2011 8:35 AM	Text Document	352 KB	
Music	MSI9d1be.LOG	3/31/2011 9:25 AM	Text Document	16 KB	
Pictures	MSI9d1c0.LOG	3/3/2011 4:10 PM	Text Document	4 KB	
Videos	MSI9d1c2.LOG	3/4/2011 8:35 AM	Text Document	96 KB	
	MSI50a48.LOG	3/17/2011 3:31 PM	Text Document	1 KB	
	TS_2CBD.tmp	3/4/2011 8:35 AM	TMP File	96 KB	
The computer	TS_3AB9.tmp	3/4/2011 8:35 AM	TMP File	112 KB	
In Network	TS_3E35.tmp	3/4/2011 8:35 AM	TMP File	624 KB	
- Herrone	TS_23C1.tmp	3/4/2011 8:35 AM	TMP File	176 KB	
	TS_29BF.tmp	3/4/2011 8:35 AM	TMP File	352 KB	
	TS_50F4.tmp	3/4/2011 8:35 AM	TMP File	176 KB	
	TS_447F.tmp	3/4/2011 8:35 AM	TMP File	96 KB	
	TS_2876.tmp	3/4/2011 8:35 AM	TMP File	192 KB	
	TS_3152.tmp	3/4/2011 8:35 AM	TMP File	400 KB	
	TS_B3F0.tmp	3/3/2011 5:48 PM	TMP File	208 KB	

5.4 Displaying Group Policy Messages

When a group policy for the installation of software and so on is applicable to a client computer, a message containing the details can be displayed on the client computer.

By displaying the group policy message, the user can understand why it is taking time to log in.

The applicable group policy messages are displayed when the client computer is started up and shut down, and when the user logs in and logs off.

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Note

These messages will not be displayed if [Remove Boot/Shutdown /Logon/Logoff status messages] is enabled for the group policy.

5.4.1 Enabling Messages

This section will explain how to configure the server to display messages.

Procedure

1 Launch the Server Manager.

over Manager (HV-60/5)	Septer Manager (ID/ ADS)				
Configuration Configuration Configuration Configuration	Get an overview of the status of this server, perform top management	Server instagger (IVE-AUG) Get an overview of the status of this server, perform too management tasks, and add or remove server roles and features.			
	Server Summary	Server Summary Help			
	Computer Information Full Computer Name: hv-ads.ads.local Domain: ads.local	 Receive System Properties View Network Connections Configure Remote Desktop Configure Server Manager Remote 			
	Local Area Connection 2: IPv4 address assigned by DHCP, IPv4 Remote Desistop: Brabled Server Monacer Remote Disabled	6 enabled Management			
	Management: Product ID: IF Qo not show me this console at logon				
	Scarwy Judionation Window Freedil Window Freedil Window Freedil Const: Cin Window Explore: DataBuilders units of the dataBuilders units of the dataBuilders Last checked for updates: 6/24/2011 5/36 MM Last instellief updates: 6/24/2011 5/36 MM Kinistense finances Off the dataBuilders	Configure 12 ESC			
	Configuration (SC): On for Users Roles Summary	Roles Summary Help			
	Roles: 3 of 17 installed Active Directory Domain Services	Go to Roles			

2 In the tree, expand [Features] - [Group Policy Management] - [Forest] -[Domains] - [MSI (or the default group policy object)] - [Group Policy Objects], in that order.



3 Under [Group Policy Objects], right-click [MSI (or the default group policy object)], and select [Edit].



4 In the tree, expand [Computer Configuration] - [Policies] -[Administrative Templates] - [System], in that order, and select [Verbose vs normal status messages].

Group Policy Management Editor			_0×
Elle Action View Help			
💠 🔿 🔁 📷 🗟 🖬 🝸			
MSI [HV-ADS.ADS.LOCAL] Policy	System		
Computer Configuration			
Policies	Verbose vs normal status	Setting	State
Software Settings	messages	Recovery	
H Windows Settings	-	Remote Assistance	
Administrative Templates: Policy defin	Edit poicy setting	Remote Procedure Call	
E Control Panel	Requirements:	Removable Storage Access	
Printers	At least Windows 2000	Scripts	
System	Description	Server Manager	
🗑 🧮 Windows Components	Directs the system to display highly	Shutdown Options	
All Settings	detailed status messages.	System Restore	
Preferences	If you pashle this setting, the system	Troubleshooting and Diagnostics	
🖃 💰 User Configuration	displays status messages that reflect	Trusted Platform Module Services	
🗉 🧮 Policies	each step in the process of starting,	Contraction of the second seco	
🖲 🧮 Preferences	shutting down, logging on, or logging off	Windows File Protection	
	the system.	Windows HotStart	
	This setting is designed for sophisticated	Windows Time Service	
	users that require this information.	E Download missing COM components	Not configured
	Note: This setting is ignored if the "Remove Boot / Shutdown / Logon / Logoff status messages" setting is	E Allow Distributed Link Tracking clients to use domain resources	Not configured
		Do not automatically encrypt files moved to encrypted folders	Not configured
		E Do not turn off system power after a Windows system shutdown	Not configured
	enabled.	E Enable Persistent Time Stamp	Not configured
		E Activate Shutdown Event Tracker System State Data feature	Not configured
		E Display Shutdown Event Tracker	Not configured
		E Do not display Manage Your Server page at logon	Not configured
		E Turn off Data Execution Prevention for HTML Help Executible	Not configured
		E Restrict potentially unsafe HTML Help functions to specified folders	Not configured
		E Restrict these programs from being launched from Help	Not configured
		Demone Beet / Chutdown / Legen / Legoff status messages	Not configured
		Verbose vs normal status messages	Not configured
		Specify Windows Service Pack installation file location	Not configured
		E Specify Windows installation file location	Not configured
		۱	
<u>▲ </u>	Extended Standard		
15 setting(s)			

5 Right-click [Verbose vs normal status messages] and select [Edit].

	_10	J
		ī
		l
Setting	State	Ĥ
Recovery		
Remote Assistance		
Remote Procedure Call		
Removable Storage Access		
Scripts		
Server Manager		
Shutdown Options		
System Restore		
Troubleshooting and Diagnostics		
Trusted Platform Module Services		
User Profiles		
Windows File Protection		
Windows HotStart		
Windows Time Service		
Download missing COM components	Not configured	
Allow Distributed Link Tracking clients to use domain resources	Not configured	
Do not automatically encrypt files moved to encrypted folders	Not configured	
Do not turn off system power after a Windows system shutdown	Not configured	
Enable Persistent Time Stamp	Not configured	
Activate Shutdown Event Tracker System State Data feature	Not configured	
Display Shutdown Event Tracker	Not configured	
Do not display Manage Your Server page at logon	Not configured	
Turn off Data Execution Prevention for HTML Help Executible	Not configured	
Restrict potentially unsafe HTML Help functions to specified folders	Not configured	
Restrict these programs from being launched from Help	Not configured	
Remove Boot / Shatdown / Logon / Logoff status messages	Not configured	
Verbose vs normal status messages	Not configured	
Specify Windows Service Pack installation file loc	t configured	
Specify Windows installation file location	pt configured	
Filter Options		,
Re-Apply Fiter	_	Ĩ
All Tasks	•	

6 Select [Enabled] and click [OK].

🔙 Verbose vs norma	l status message				_ 🗆 🗙
Verbose vs norma	l status messages	Prev	vious Setting	<u>N</u> ext Setting	
Not <u>C</u> onfigured <u>Enabled</u>	Comment:				×
Disabled	Supported on:	At least Windows 2000			A V
Options:		Help:			
		Directs the syste If you enable thi reflect each step on, or logging o' This setting is de information. Note: This settin Logon / Logoff s	m to display hig s setting, the sys in the process of ff the system. signed for soph g is ignored if th tatus messages	ihly detailed status m stem displays status of starting, shutting d histicated users that re he "Remove Boot / Sh " setting is enabled.	essages. nessages that iown, logging equire this uutdown /
			0	K Cancel	Apply