

WIN-63-0091-03



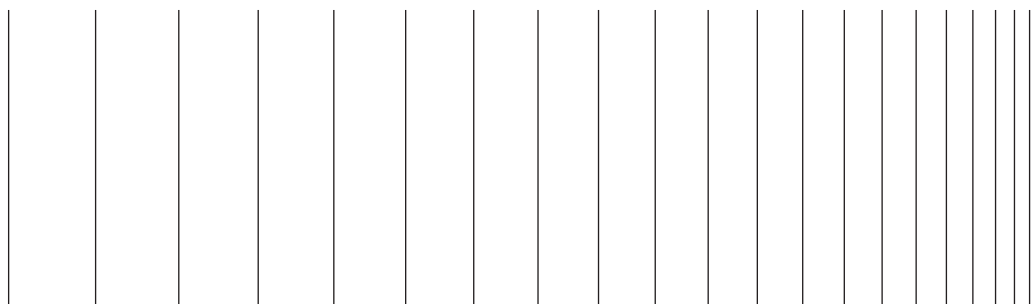
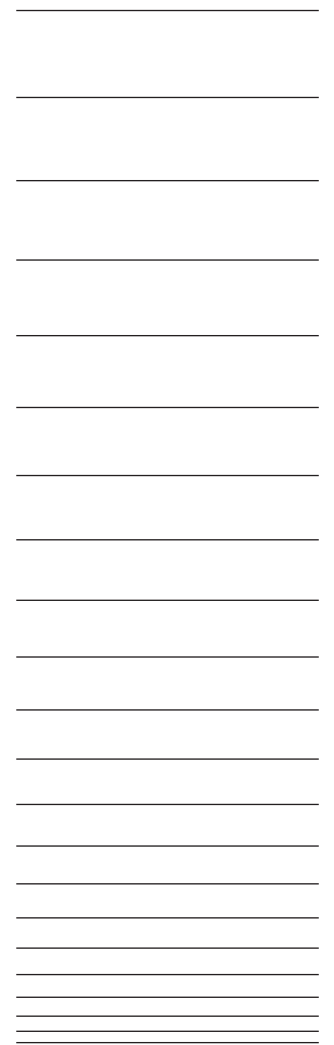
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**HITACHI**

HITACHI INDUSTRIAL COMPUTER

# **HF-W7500** Model 40

SETUP GUIDE



**USER'S  
MANUAL**



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## SAFETY INSTRUCTIONS

Carefully read and fully understand the safety precautions below before operating the equipment.

- Operate the equipment by following the instructions and procedures described in this manual.
- Pay attention especially to safety precautions displayed on the equipment or in this manual. Make sure you follow them. Otherwise, personal injury and property damage including damage to the equipment may result.
- A safety precaution is indicated by a heading as shown below. A heading is either a safety alert symbol; a word such as “DANGER”, “WARNING”, “CAUTION”, or “NOTICE”; or a combination of both.



This is a safety alert symbol. This symbol is used to signify potential hazards that may result in personal injury or death. Make sure you follow the safety message that follows this symbol in order to avoid possible injury or death.



**DANGER:** This symbol is used to indicate imminent hazards that will highly likely result in serious personal injury or death.



**WARNING:** This symbol is used to indicate potential hazards that may result in serious personal injury or death.



**CAUTION:** This symbol is used to indicate potential hazards that may result in minor or moderate personal injury.

**NOTICE:** This symbol is used to indicate hazards that may result in equipment or property damage but not personal injury.

The heading “NOTE” is used to indicate a cautionary note about handling and operation of the equipment.

- Do not attempt to perform any operation that is not described in this manual. If there is any problem with the equipment, call your maintenance personnel.
- Read this manual carefully and fully understand the directions and precautions written in this manual before operating the equipment.
- Keep this manual nearby so that you can reference the manual anytime you need it.
- Every effort has been made to specify the best precautions on the equipment and in the manual. Nevertheless, unexpected incidents may occur. When you use the equipment, you are asked not only to follow the instructions but also to use your own judgement on safety.



## SAFETY INSTRUCTIONS (Continued)

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### 1. COMMON SAFETY PRECAUTIONS

Carefully read and fully understand the following safety precautions.

#### 1.1 WARNING

- This equipment is not designed and manufactured to be used for a life-critical system that requires extreme safety. If there is a possibility that the equipment may be used for this purpose, contact one of our sales representatives.
- In case of smoke, a burning smell, or the like, turn off the power to the equipment, disconnect the power cable from the outlet, and contact your sales representative or maintenance personnel. Using the faulty equipment without repair may result in a fire or an electric shock.
- This equipment has built-in magnetic disk drives. Do not hit the equipment or give a shock or vibration to the equipment because that may cause the equipment to fail. Should you drop the equipment or damage its chassis, disconnect the power cable from the outlet and contact your maintenance personnel. Using the faulty equipment without repair may result in a fire or an electric shock. Do not give a shock to the equipment when unpacking or carrying the equipment.
- Do not modify this equipment because that may result in a fire or an electric shock. In no event will Hitachi be responsible for any consequences that results from the modification or alteration of the equipment.



## SAFETY INSTRUCTIONS (Continued)

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### 1.2 CAUTION

- If the equipment drops or is tipped over, personal injury may result. Pay full attention when transporting the equipment.
- Make sure you do not catch or hit your fingers to cause personal injury when unpacking or carrying the equipment.



## SAFETY INSTRUCTIONS (Continued)

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### 1.3 NOTICE

- This equipment alone cannot guarantee the system safety. In order to ensure sufficient safety of your system even when this equipment should fail, malfunction, or have program bugs, you must add systemic protections such as building external protective/safety circuits to facilitate safety measures to prevent personal injury and serious accidents.
- Use the basic software that we specify. Operation is not guaranteed if any other basic software is used.
- Do not use the equipment in the environment full of dust or with corrosive gas because that may cause the equipment to fail.
- Make sure sufficient clearance is provided for air intake and exhaust in front of and behind the equipment. Otherwise, the temperature inside the equipment may rise and that may cause a failure or short life span of the equipment. In addition, you need to ensure sufficient clearance for maintenance work.
- Performing emergency shutdown (that is, unplugging the power cable from the outlet or shutting off the circuit breaker without proper shutdown of the OS) may cause the OS or applications not to work properly or may cause the saved data to be corrupted. Never perform emergency shutdown unless you must stop the system immediately due to some kind of error.
- Keep in mind that if the power supply is cut, the system may not be able to recover automatically.
- If you insert or access a disk (CD or DVD), the system load may increase and running applications may be affected. Do not insert or access a disk during online operation (system operation).
- Once disk (CD or DVD) access is complete, eject the disk from the DVD drive.  
Leaving it in the DVD drive may result in failure.
- Leaving the disk tray open may result in failure.  
Make sure that the disk tray is closed when not in use.



## SAFETY INSTRUCTIONS (Continued)

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### 2. SAFETY WARNINGS IN THIS MANUAL

#### 2.1 Safety Warning Indicated as “NOTICE”

- Depending on the type of failure, important files may be lost when you use this equipment. Files can be lost by power failure and human mistakes during operation in addition to the failure of the equipment. Should such a situation occur, the files cannot be recovered. In order to prevent data loss, make it a routine to save your files and establish a systematic way of backing up files.

(See page i.)

- A recovery DVD contains an image file created for the hardware configuration at the factory shipment. If the hardware configuration has changed from the one at the factory, the OS may not start after restoration work. Remove all external storage devices to resume the hardware configuration at the factory shipment before you perform restoration work using a recovery DVD.

When a recovery DVD is used, all data in the system drive is deleted. Back up the data beforehand as required.

(See page 3-2.)



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## PREFACE

This manual describes the setup procedure of the OS installed in the HITACHI INDUSTRIAL COMPUTER HF-W7500 Model 40, namely the following pre-installed OS.

- Windows® 7 Professional
- Windows Server® 2008 R2 Standard
- Windows Server® 2012 R2 Standard

### <Organization of this manual>

This manual is organized as follows:

- CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME
- CHAPTER 2 CONFIGURING BASIC SETTINGS AFTER OS SETUP
- CHAPTER 3 RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD
- CHAPTER 4 PRECAUTION
- APPENDIX A SETUP PROCEDURE WHEN USING Windows XP Mode (FOR Windows® 7 ONLY)
- APPENDIX B SETUP PROCEDURE WHEN BUILDING A VIRTUAL ENVIRONMENT (FOR Windows Server® 2008 R2)
- APPENDIX C SETUP PROCEDURE WHEN BUILDING A VIRTUAL ENVIRONMENT (FOR Windows Server® 2012 R2)

### <Use of terms in this manual>

In this manual, the following definition of terms is used:

- Install: An act of incorporating software into a hard disk on a computer.
- Setup: An act of configuring the environment of a computer for the purpose of using software on the computer.
- Virtual machine: A virtual hardware environment provided by Virtual PC or Hyper-V®.
- Host OS: An operating system used as a platform for running a virtual machine.
- Guest OS: An operating system that runs on a virtual machine.

### **NOTICE**

Depending on the type of failure, important files may be lost when you use this equipment. Files can be lost by power failure and human mistakes during operation in addition to the failure of the equipment. Should such a situation occur, the files cannot be recovered. In order to prevent data loss, make it a routine to save your files and establish a systematic way of backing up files.

<Note for storage capacity calculations>

- Memory capacities and requirements, file sizes and storage requirements, etc. must be calculated according to the formula  $2^n$ . The following examples show the results of such calculations by  $2^n$  (to the right of the equals signs).

1 KB (kilobyte) = 1,024 bytes

1 MB (megabyte) = 1,048,576 bytes

1 GB (gigabyte) = 1,073,741,824 bytes

1 TB (terabyte) = 1,099,511,627,776 bytes

- As for disk capacities, they must be calculated using the formula  $10^n$ . Listed below are the results of calculating the above example capacities using  $10^n$  in place of  $2^n$ .

1 KB (kilobyte) = 1,000 bytes

1 MB (megabyte) =  $1,000^2$  bytes

1 GB (gigabyte) =  $1,000^3$  bytes

1 TB (terabyte) =  $1,000^4$  bytes

<Trademarks>

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- All other product names (software and hardware) not from Hitachi described in this manual are the registered trademarks, the trademarks, or the products of their respective owners.

<Note for replacing terms for Windows Server® 2012 R2>

This manual describes user actions in Windows®. The terms, "log on" and "log off", in Windows® 7 and Windows Server® 2008 R2 have been renamed "sign in" and "sign out" respectively in Windows Server® 2012 R2. If the OS you use is Windows Server® 2012 R2, replace the former terms in this manual with the latter terms as necessary.

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## CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

This chapter describes the following setup procedure.

- The setup procedure when you turn on the power for the first time after you purchase an HF-W.

Pre-installed OS	Description
Windows® 7 Professional	Set up the equipment according to “1.1 Setting Up Windows® 7”.
Windows Server® 2008 R2 Standard	Set up the equipment according to “1.2 Setting Up Windows Server® 2008 R2”.
Windows Server® 2012 R2 Standard	Set up the equipment according to “1.3 Setting Up Windows Server® 2012 R2”.

## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

### 1.1 Setting Up Windows® 7

This section describes the setup procedure of the pre-installed Windows® 7 Professional.

- Basic settings of Windows® 7 Professional are configured.
- The setup of the RAS feature is automatically done.
- The procedure takes about 20 minutes.

#### 1.1.1 Preparing the setup

The following items are necessary for the setup work. Before you start the setup work, decide or check those items beforehand.

Item	Description
License certificate	Make sure that the license certificate is attached to the body of the product.
Display language	Display language of Windows® 7 Professional This equipment offers a Windows® Multilingual User Interface (MUI), and you can set the display language of Windows® itself to one of the following languages: <ul style="list-style-type: none"><li>• English</li><li>• Portuguese</li><li>• Thai</li><li>• Korean</li><li>• Chinese (Traditional)</li><li>• Chinese (Traditional (ROC))</li><li>• Chinese (Simplified)</li></ul> You cannot change the settings later. In order to change the display language after setup is complete, use a recovery DVD to restore the contents of the system drive back to the factory-shipped condition, and then restart OS setup. For information about how to use a recovery DVD to restore the contents of the system drive back to the factory-shipped condition, see “CHAPTER 3 RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD”.
Country or region	Country or region of your location You can later change it in Control Panel.
Time and currency format	The format used for displaying time and currency. You can later change it in Control Panel.
Keyboard or input method	The layout of the keyboard You can later change it in Control Panel.
User name	The user name of an administrator account of the computer. You can later change it in Control Panel.
Password	The password for the user name. You can later change it in Control Panel.
Computer name	The name used for identifying the computer on the network. <ul style="list-style-type: none"><li>• This name is used for identify the computer on the network. Select a unique name on the network.</li></ul> You can later change it in Control Panel.

## 1.1.2 Setup procedure of Windows® 7 Professional

Follow the procedure below to set up Windows® 7 Professional:

## 1. Turn on the power to this equipment.

Windows starts and prepares for the setup.

Then, a message "Setup is installing devices. Please wait..." is displayed to indicate that device drivers are being installed.

- This process may take a couple of minutes. Just wait until this process is complete.

Then the Windows restarts. Wait for a while, then the **Set Up** window for Windows® 7 Professional appears.

## 2. A window is displayed to select a display language.

Select a display language and then click **Next**. For example, if you want to select the English language, select **My language is English** from the list.

(It should be noted that the language used in the window is changed to the specified display language immediately after you select the language.)

The correspondence between the display language and the notation in the list is as in the table below. (In the same order as in the list)

Display language	Notation in the list
English	My language is English
Portuguese	O meu idioma é português (Portugal)
Thai	ภาษาของฉันคือไทย
Korean	내 언어: 한국어
Chinese (Traditional)	我的語言是中文 (繁體)
Chinese (Traditional (ROC))	我的語言是中文 (繁體) (中華民國)
Chinese (Simplified)	我的语言是中文 (简体)

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**NOTE**


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- After this point, Windows® 7 Professional uses the language specified here as the language used on the screen. In this manual and other manuals of this product, explanations are based on the assumption that English is used on the screen. If you use a language other than English as the display language, translate expressions in the explanations to the display language as required.
  - In Windows® 7 Professional, you cannot change the display language after OS setup is complete. In order to change the display language after setup is complete, use a recovery DVD to restore the contents of the system drive back to the factory-shipped condition and then restart OS setup. For information about how to use the recovery DVD to restore the contents of the system drive back to the factory-shipped condition, see "CHAPTER 3 RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD".
-



## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

3. A setup screen for the country or region, the time and currency format, and the keyboard or input method settings appears.

- If the English language was selected at step 2, just leave the settings as they are and click **Next**.
- If you selected a language other than English, configure the country or region, the time and currency format, and the keyboard or input method settings as required and click **Next**.

The time and currency format setting must be configured based on the display language you selected at step 2 as the following table shows.

Display language	Time and currency format
English	English (United States)
Portuguese	Português (Portugal)
Thai	ไทย ( ประเทศไทย )
Korean	한국어(대한민국)
Chinese (Traditional)	中文 (繁體, 香港特別行政區)
Chinese (Traditional (ROC))	中文 (繁體, 台灣)
Chinese (Simplified)	中文 (简体, 中国)

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### NOTE

The time and currency format setting can be changed after OS setup is complete. Select **Control Panel > Clock, Language, and Region** and then click **Region and Language**. The **Regional and Language Option** window opens. Configure the time and currency format setting on the **Formats** tab.

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4. The user name input window is displayed.

- Enter the user name and the computer name and click **Next**.

---

### NOTE

The computer name is automatically generated by appending “-PC” to the end of the user name. Note that if you select the Thai language at step 2, this automatically generated computer name cannot be used as is. Delete the characters that have been automatically added to the end of the user name, and then edit the computer name. You can use the following characters in the computer name: alphabetic characters (“a” through “z” and “A” through “Z”), numeric characters (0 through 9), and the hyphen-minus (“-”).

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## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

5. The password input window is displayed.
  - Enter a password in the **Type a password** box and in the **Retype your password** box.
  - Enter a password hint in the **Type a password hint** box.
  - Click **Next**.
6. The **Please read the license terms** window is displayed.
  - Check the displayed contents and select the **I accept the license terms** check box.
  - Click **Next**.
7. The **Help protect your computer and improve Windows automatically** window is displayed.
  - Click **Ask me later**.
8. The **Review your time and date settings** window is displayed.
  - Configure the time zone, the date and the time.

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### NOTE

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Regardless of the display language selected at step 2, “(UTC-08:00) Pacific Standard Time (US & Canada)” is selected as the time zone by default. Set the time zone according to the actual location where this equipment is used.

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- Click **Next**.  
Depending on the configuration at step 3, the equipment may restart at this point automatically.
9. A message “Setup program is configuring memory dump file. Please wait...” will be displayed eventually to indicate that an area is currently being reserved for a memory dump file.
    - This process may take a couple of minutes. Just wait until this process is complete.
  10. The **Windows Security** window is displayed.
    - Select **Always trust software from “Hitachi, Ltd.”**.
    - Click **Install**.
  11. The setup is complete, and then you are automatically logged on to the Windows.
  12. After you are logged on, a message is displayed to prompt you to restart the equipment.
    - Click **Restart Now** to restart.

This completes Windows® 7 Professional setup. From this point on, follow the instruction in “CHAPTER 2 CONFIGURING BASIC SETTINGS AFTER OS SETUP” to configure the basic settings of the OS.

## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

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### NOTE

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- A message “Configuring Windows features \*\*% complete Do not turn off your computer.” may be displayed when the OS shuts down (or reboots) shortly after you complete the setup. This message is displayed when the display language resources that you did not choose during the setup are deleted. This process may take a couple of minutes. Just wait until this process is complete. When the process is complete, the power will be turned off (or the OS will restart) automatically.
  - In order to allow more reliable fault analysis, this equipment is configured to collect a complete memory dump when a system error (blue screen) occurs. This setting becomes effective after the system restarts at step 12.
-

# 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

## 1.2 Setting Up Windows Server® 2008 R2

This section describes the setup procedures of the pre-installed Windows Server® 2008 R2 Standard.

- Basic settings of Windows Server® 2008 R2 Standard are configured.
- The setup of the RAS feature is automatically done.
- The procedure takes about 20 minutes.

### 1.2.1 Preparing the setup

The following items are necessary for the setup work. Before you start the setup work, decide or check those items beforehand.

Item	Description
License certificate	Make sure that the license certificate is attached to the body of the product.
Display language	Display language of Windows Server® 2008 R2 Standard This equipment offers a Windows® Multilingual User Interface (MUI), and you can set the display language of Windows® itself to one of the following languages: <ul style="list-style-type: none"><li>• English</li><li>• Portuguese</li><li>• Thai</li><li>• Korean</li><li>• Chinese (Traditional)</li><li>• Chinese (Traditional (ROC))</li><li>• Chinese (Simplified)</li></ul> You can later change it in Control Panel.
Country or region	Country or region of your location You can later change it in Control Panel.
Time and currency format	The format used for displaying time and currency. You can later change it in Control Panel.
Keyboard or input method	The layout of the keyboard You can later change it in Control Panel.
Administrator password	Administrator password You can later change it in Control Panel.

# 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

## 1.2.2 Setup procedure of Windows Server® 2008 R2 Standard

Follow the procedure below to set up Windows Server® 2008 R2 Standard.

### 1. Turn on the power to this equipment.

Windows starts and prepares for the setup.

Then, a message "Setup is installing devices. Please wait..." is displayed to indicate that device drivers are being installed.

- This process may take a couple of minutes. Just wait until this process is complete.

Then the Windows restarts. Wait for a while, then the **Set Up** window for Windows Server® 2008 R2 Standard appears.

### 2. A window is displayed to select a display language.

Select a display language and then click **Next**. For example, if you want to select the English language, select **My language is English** from the list.

(It should be noted that the language used in the window is changed to the specified display language immediately after you select the language.)

The correspondence between the display language and the notation in the list is as in the table below. (In the same order as in the list)

Display language	Notation in the list
English	My language is English
Portuguese	O meu idioma é português (Portugal)
Thai	ภาษาของฉันคือไทย
Korean	내 언어: 한국어
Chinese (Traditional)	我的語言是中文 (繁體)
Chinese (Traditional (ROC))	我的語言是中文 (繁體) (中華民國)
Chinese (Simplified)	我的语言是中文 (简体)

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### NOTE

- After this point, Windows Server® 2008 R2 Standard uses the language specified here as the language used on the screen. In this manual and other manuals of this product, explanations are based on the assumption that English is used on the screen. If you use a language other than English as the display language, translate expressions in the explanations to the display language as required.
  - A display language can be changed after OS setup is complete. For information about how to set up a display language, see "2.2.2 Setting up the display language".
-

## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

3. A setup screen for the country or region, the time and currency format, and the keyboard or input method settings appears.
  - If the English language has been selected in step 2, just leave the settings as they are and click **Next**.
  - If you has selected a language other than English, configure the country or region, the time and currency format, and the keyboard or input method settings as required and click **Next**.

The time and currency format setting must be configured based on the display language you selected in step 2 as the following table shows.

Display language	Time and currency format
English	English (United States)
Portuguese	Português (Portugal)
Thai	ไทย ( ประเทศไทย )
Korean	한국어(대한민국)
Chinese (Traditional)	中文 (繁體, 香港特別行政區)
Chinese (Traditional (ROC))	中文 (繁體, 台灣)
Chinese (Simplified)	中文 (简体, 中国)

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### NOTE

The time and currency format setting can be changed after OS setup is complete. Select **Control Panel > Clock, Language, and Region** and then click **Region and Language**. The **Regional and Language Option** window appears. Configure the time and currency format setting on the **Formats** tab.

---

4. The **Please read the license terms** window is displayed.
  - Check the displayed contents and select the **I accept the license terms** check box.
  - Click **Start**.
5. A message “Setup program is configuring memory dump file. Please wait...” will be displayed eventually to indicate that an area is currently being reserved for a memory dump file.
  - This process may take a couple of minutes. Just wait until this process is complete.
6. The **Windows Security** window is displayed.
  - Select **Always trust software from “Hitachi, Ltd.”**.
  - Click **Install**.
7. A screen is displayed to prompt you to change the Administrator password.
  - Click **OK**.

## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

8. The password input window is displayed.

In the **New password** box and the **Confirm password** box, enter the password, and then press **Enter** or click [→].

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### NOTE

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When you set up an Administrator password, make sure that the password meets the following conditions:

- The password must consist of at least six characters.
- At least three out of the following four types of characters must be used: ASCII uppercase alphabetic characters, ASCII lowercase alphabetic characters, ASCII numeric characters, and ASCII symbol characters.
- Any three or more consecutive characters used in the user account name or user name must not be used.

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9. A screen is displayed to indicate that your password has been successfully changed.

Click **OK**.

10. The setup is complete, and then you are automatically logged on to the Windows.

11. After you are logged on, a message is displayed to prompt you to restart the equipment. And then the **Initial Configuration Tasks** window appears.

- If you do not want to show this window at the next startup, select the **Do not show this window at logon** check box.
- Click the **Close** button [×] on the right upper corner of the **Initial Configuration Tasks** window to close the window.
- Click **Restart Now** to restart.

This completes Windows Server® 2008 R2 Standard setup. From this point on, follow the instruction in “CHAPTER 2 CONFIGURING BASIC SETTINGS AFTER OS SETUP” to configure the basic settings of the OS.

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### NOTE

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In order to allow more reliable fault analysis, this equipment is configured to collect a complete memory dump when a system error (blue screen) occurs. This setting becomes effective after the system restarts at step 11.

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### 1.3 Setting Up Windows Server® 2012 R2

This section describes the setup procedures of the pre-installed Windows Server® 2012 R2 Standard.

- Basic settings of Windows Server® 2012 R2 Standard are configured.
- The setup of the RAS feature is automatically done.
- The procedure takes about 20 minutes.

#### 1.3.1 Preparing the setup

The following items are necessary for the setup work. Before you start the setup work, decide or check those items beforehand.

Item	Description
License certificate	Make sure that the license certificate is attached to the body of the product.
Display language	Display language of Windows Server® 2012 R2 Standard This equipment offers a Windows® Multilingual User Interface (MUI), and you can set the display language of Windows® itself to one of the following languages: <ul style="list-style-type: none"> <li>• English</li> <li>• Portuguese</li> <li>• Thai</li> <li>• Korean</li> <li>• Chinese (Simplified)</li> </ul> You can later change it in Control Panel.
Country or region	Country or region of your location You can later change it in Control Panel.
Time and currency format	The format used for displaying time and currency. You can later change it in Control Panel.
Keyboard or input method	The layout of the keyboard You can later change it in Control Panel.
Administrator password	Administrator password You can later change it in Control Panel.



## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

### 1.3.2 Setup procedure of Windows Server® 2012 R2 Standard

Follow the procedure below to set up Windows Server® 2012 R2 Standard.

1. Turn on the power to this equipment.

Windows starts and prepares for the setup.

Then, a message "Setup is installing devices. Please wait..." is displayed to indicate that device drivers are being installed.

- This process may take a couple of minutes. Just wait until this process is complete.

2. Then the Windows restarts. Wait for a while, then a setup window for display language, country or region, app language, and keyboard layout is displayed.

First, select a display language (Language to install). For example, if you want to select the English language, click **English** in the list.

(Note) The language used in the window is changed to the specified display language immediately after you select the language.

The correspondence between the display language and the notation in the list is as in the table below. (In the same order as in the list)

Display language	Notation in the list
English	English
Portuguese	português (Portugal)
Thai	ไทย
Korean	한국어
Chinese (Simplified)	中文 (简体)

---

#### NOTE

- After this point, Windows Server® 2012 R2 Standard uses the language specified here as the language used on the screen. In this manual and other manuals of this product, explanations are based on the assumption that English is used on the screen. If you use a language other than English as the display language, translate expressions in the explanations to the display language as required.
  - A display language can be changed after OS setup is complete. For information about how to set up a display language, see "2.3.2 Setting up the display language".
-

## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

Second, configure a country or region, app language, and a keyboard layout.

- If the English language was selected, just leave the settings as they are and click **Next**.
- If you selected a language other than English, configure country or region, app language, and keyboard layout as required, and click **Next**.

The app language (Time and currency format) must be configured as the following table shows based on the display language you selected.

Display language	App language
English	English (United States)
Portuguese	Português (Portugal)
Thai	ไทย ( ประเทศไทย )
Korean	한국어(대한민국)
Chinese (Simplified)	中文 (简体, 中国)

---

### NOTE

The app language (Time and currency format) setting can be changed after the OS setup is complete. Select **Control Panel > Clock, Language, and Region** and then click **Region**. The **Regional** window appears. Configure the Time and currency format setting on the **Formats** tab.

---

3. The license terms are displayed.
  - Check the terms, and then click **I accept**.
4. A screen is displayed to prompt you to enter the Administrator password.  
In the **Password** box and the **Reenter password** box, enter the password, and then click **Finish**.

---

### NOTE

When you set up an Administrator password, make sure that the password meets the following conditions:

- The password must consist of at least six characters.
  - At least three out of the following four types of characters must be used: ASCII uppercase alphabetic characters, ASCII lowercase alphabetic characters, ASCII numeric characters, and ASCII symbol characters.
  - Any three or more consecutive characters used in the user account name or user name must not be used.
-

## 1. SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME

5. A message "Setup program is configuring memory dump file. Please wait..." will be displayed eventually to indicate that an area is currently being reserved for a memory dump file.
  - This process may take a couple of minutes. Just wait until this process is complete.
6. When the setup process is complete, the sign-in screen appears.
  - Press **Ctrl+Alt+Delete**.
7. A screen is displayed to prompt you to enter the Administrator password.
  - Enter the password, and then press **Enter** or click [→]
  - You are signed in, and the server manager starts.
8. Restart the system. This action validates the RAS feature.

This completes Windows Server® 2012 R2 Standard setup. From this point on, follow the instruction in "CHAPTER 2 CONFIGURING BASIC SETTINGS AFTER OS SETUP" to configure the basic settings of the OS.

---

### NOTE

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In order to allow more reliable fault analysis, this equipment is configured to collect a complete memory dump when a system error (blue screen) occurs. This setting becomes effective after the system restarts at step 8.

---

## CHAPTER 2 CONFIGURING BASIC SETTINGS AFTER OS SETUP

This chapter describes the following setup procedure:

- Setup procedure of basic settings after OS setup

Perform this setup procedure as required after OS setup.

Pre-installed OS	Description
Windows® 7 Professional	Set up those settings according to “2.1 Setting Up Basic Settings of Windows® 7”.
Windows Server® 2008 R2 Standard	Set up those settings according to “2.2 Setting Up Basic Settings of Windows Server® 2008 R2”.
Windows Server® 2012 R2 Standard	Set up those settings according to “2.3 Setting Up Basic Settings of Windows Server® 2012 R2”.

## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

### 2.1 Setting Up Basic Settings of Windows® 7

This section describes the setup procedures of basic settings for the pre-installed Windows® 7 Professional.

Perform these procedures as required after you follow the instruction in “CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME” to set up the OS.

#### 2.1.1 Overview of the setup procedures of basic settings

Setting up the screen



Refer to “3.9 Setting Up the Screen” in the HF-W7500 Model 40 INSTRUCTION MANUAL (manual number WIN-62-0065).

Setting up automatic updating



For details, see “2.1.2 Setting up automatic updating”.

- The procedure takes about 5 minutes.

Set up the network environment



For details, see “2.1.3 Setting up the network environment”.

- The procedure takes about 10 minutes.

Formatting hard disks



For details, see “2.1.4 Formatting a free area on a hard disk”.

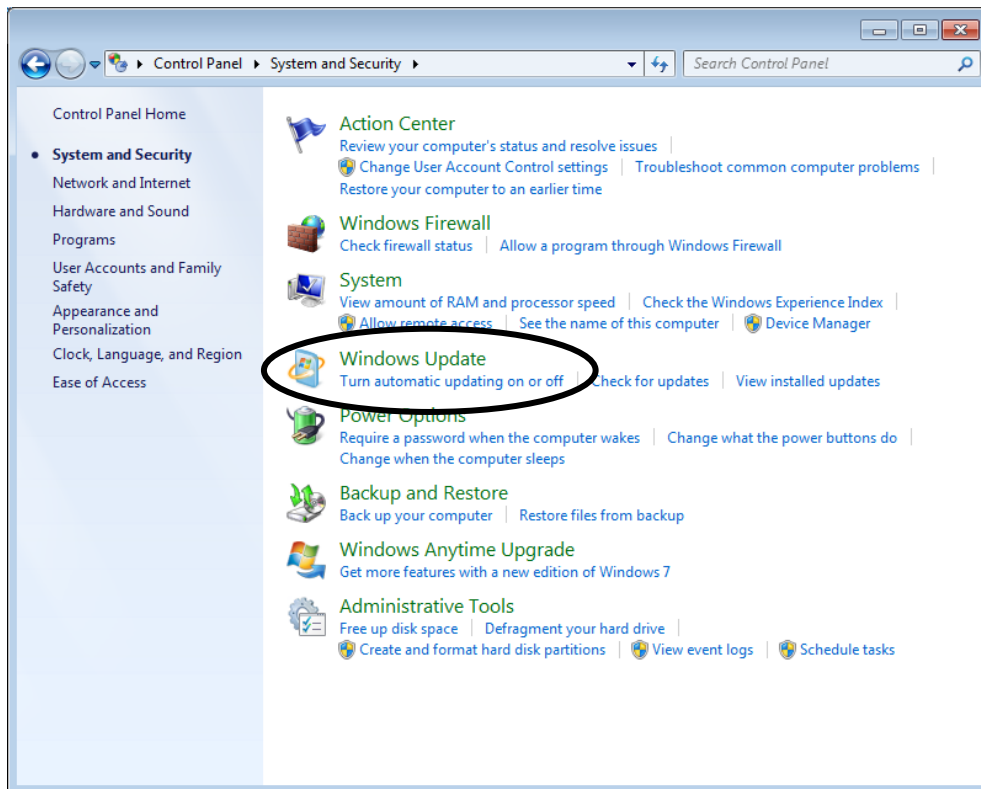
- The time required for formatting depends on the size of the partition you want to format.

### 2.1.2 Setting up automatic updating

Windows® 7 has an automatic updating function for bug fixes. This function automatically downloads and installs bug fix updates released on the Microsoft Website. It should be noted that currently running programs can be affected when this function is executed. The modules updated by this function can also affect currently running programs. Because of all this, this function must be turned “off”.

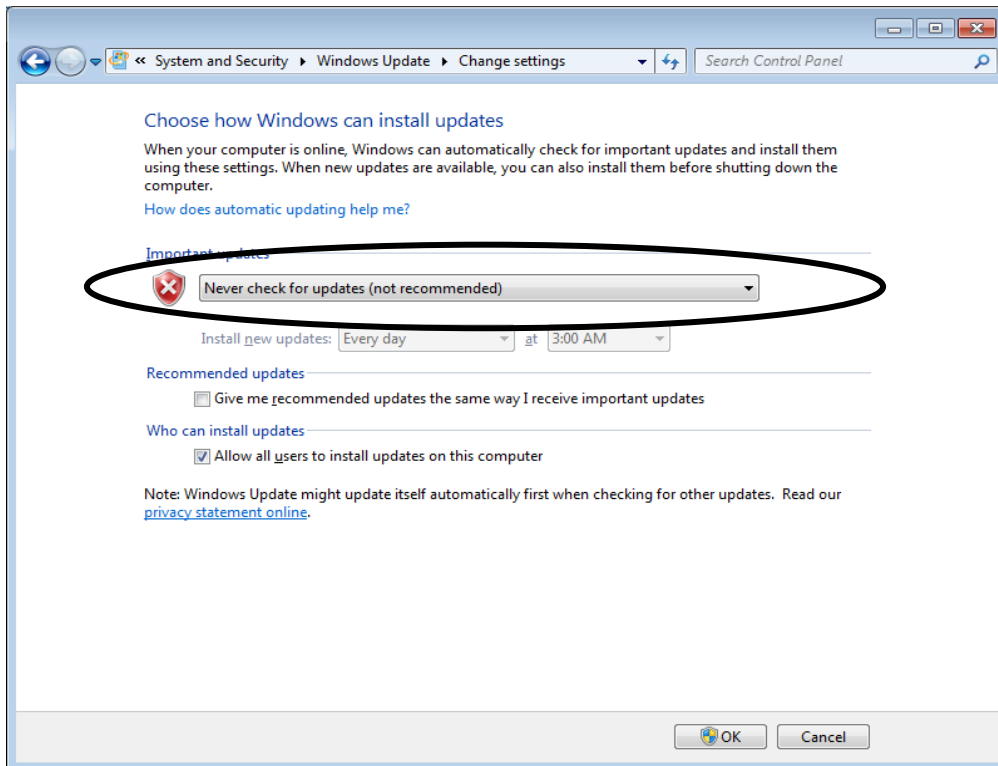
The following procedure shows how to turn off automatic updating.

1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.
2. Click **Start** and then click **Control Panel**.
3. The **Control Panel** window opens. Click **System and Security**.
4. Then click **Turn automatic updating on or off** under **Windows Update**.



## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

5. The **Choose how Windows can install updates** window is displayed. Select **Never check for updates (not recommended)** and click **OK**.



6. Click the **Close** button [×] at the upper right corner of the **System and Security** window.

### 2.1.3 Setting up the network environment

In the local area network settings, DHCP is used (that is, “Obtain an IP address automatically” is selected) by default. If you do not use DHCP and want to specify an IP address, follow the procedure below:

Note that the following procedure is for the case that Internet Protocol Version 4 (TCP/IPv4) is used. If you use Internet Protocol Version 6 (TCP/IPv6), select **Internet Protocol Version 6 (TCP/IPv6)** at step 8.

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start** and then click **Control Panel**.
3. Click **View network status and tasks** under **Network and Internet**.
4. The **Network and Sharing Center** window is displayed. Click **Change adapter settings** in the left pane.
5. The **Network Connections** window is displayed.
6. Double-click the **Local Area Connection** icon.
7. If you see the **User Account Control** window, click **Yes**.

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#### NOTE

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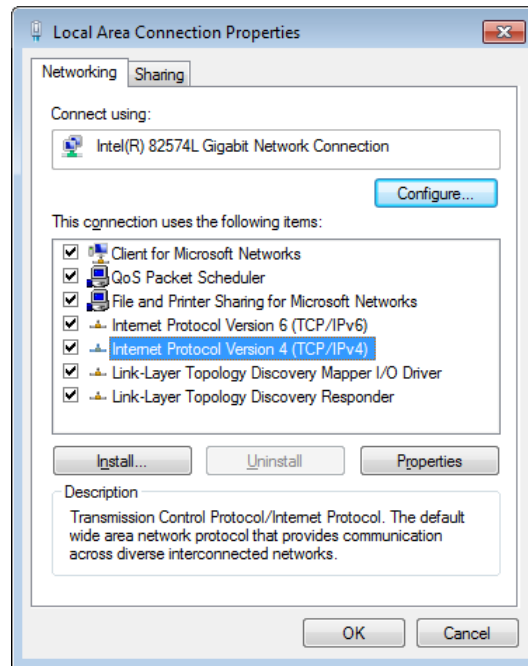
If there are multiple **Local Area Connection** icons, use the following procedure to identify which Ethernet adapter a specific icon pertains to.

- Right-click the **Local Area Connection** icon to show a pop-up menu. Click **Properties**.
  - Click **Configure**. In the window that appears, click the **Link Speed** tab.
  - Click **Identify Adapter**. In the **Identify Adapter** window, click **Start**.
  - Then the LED on the Ethernet adapter corresponding to the selected **Local Area Connection** icon flashes.
-

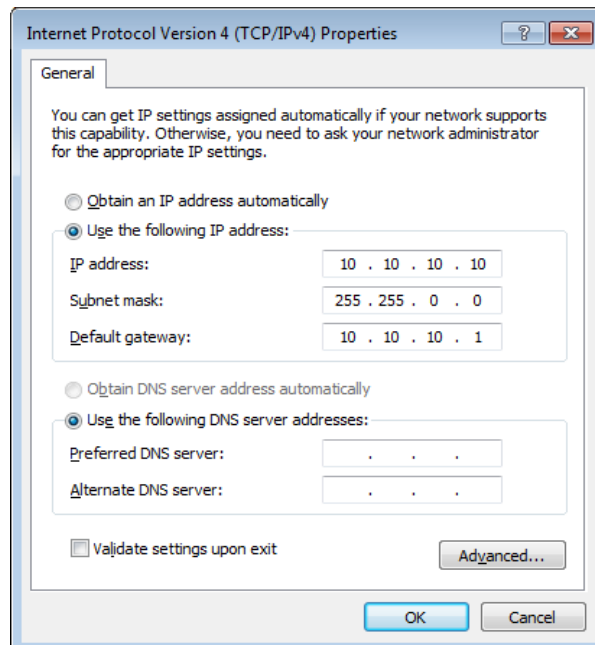


## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

8. The **Local Area Connection Property** window is displayed.
  - Select **Internet Protocol Version 4 (TCP/IPv4)**, and then click **Properties**.



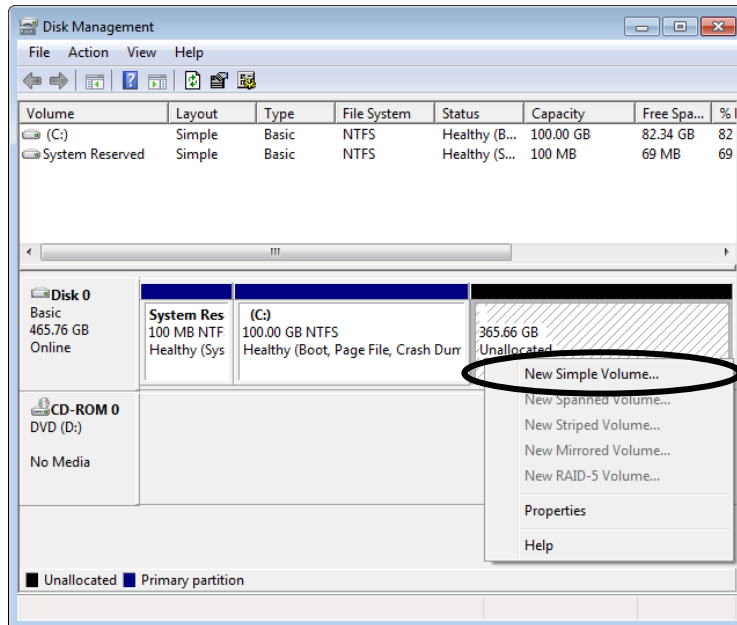
9. The **Internet Protocol Version 4 (TCP/IPv4) Properties** window is displayed.
  - Select **Use the following IP address** and type the IP address, the subnet mask, and the default gateway.
  - Click **OK**.



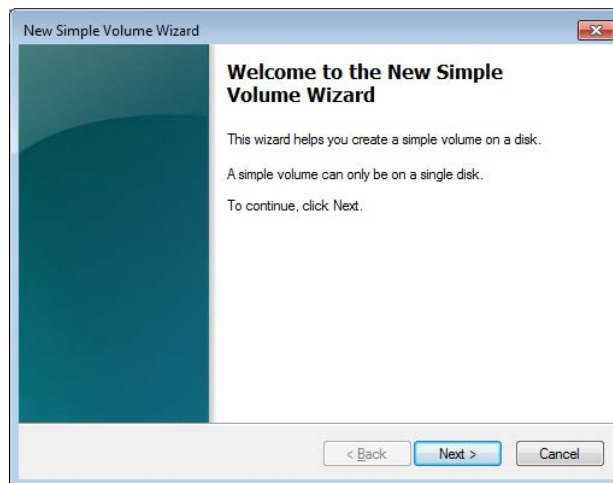
10. Close all opened windows.
  - In the **Local Area Connection Property** window, click the **Close** button.
  - In the **Network Connections** window, click the **Close** button [×] at the upper right corner.

2.1.4 Formatting a free area on a hard disk

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start** and then click **Control Panel**.
3. Click **System and Security**. Under **Administrative Tools**, click **Create and format hard disk partitions**.
4. If you see the **User Account Control** window, click **Yes**.
5. The **Disk Management** window opens. Right-click a space indicated as “Unallocated” to display a menu. On the menu, click **New Simple Volume**.

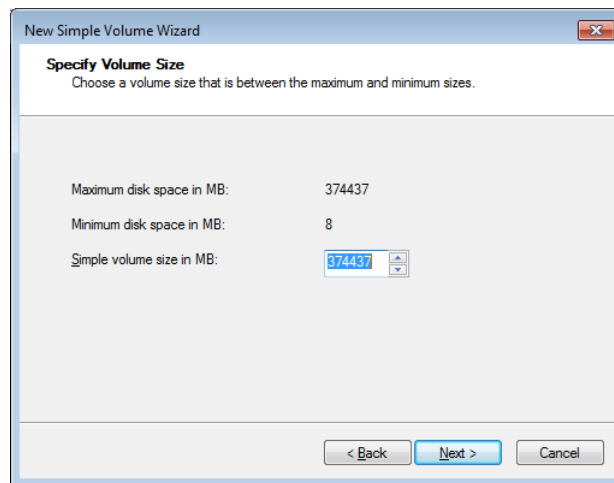


6. The New Simple Volume Wizard starts. Click **Next**.

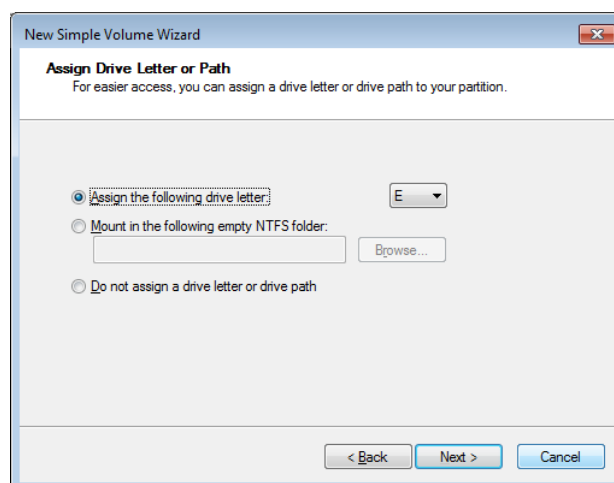


## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

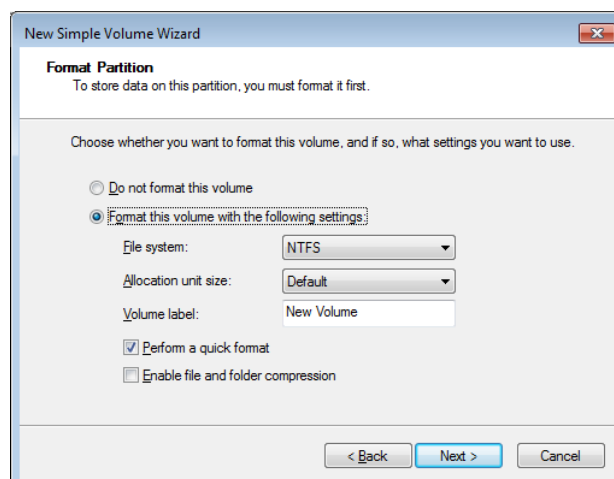
7. The **Specify Drive Size** window is displayed. Enter a volume size you like, and click **Next**.



8. The **Assign Drive Letter or Path** window is displayed. Select **Assign the following drive letter**, and select a drive letter to be assigned. (If you do not need to change a drive letter, leave it as is.) Click **Next**.

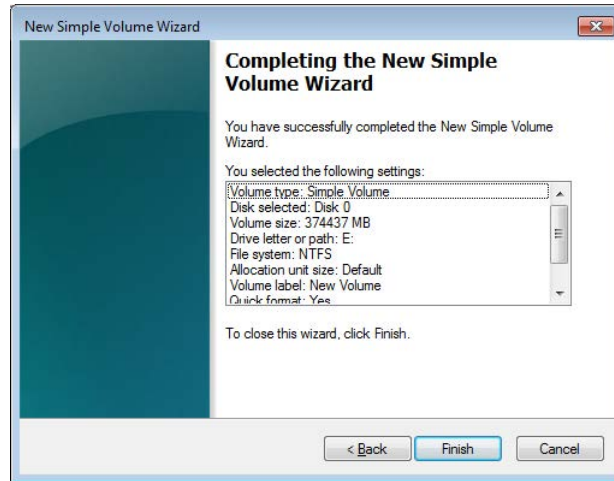


9. A window to select the format of the partition is displayed. Select **Format the volume with the following settings**, and in the **File system** list, select **NTFS**. Click **Next**.

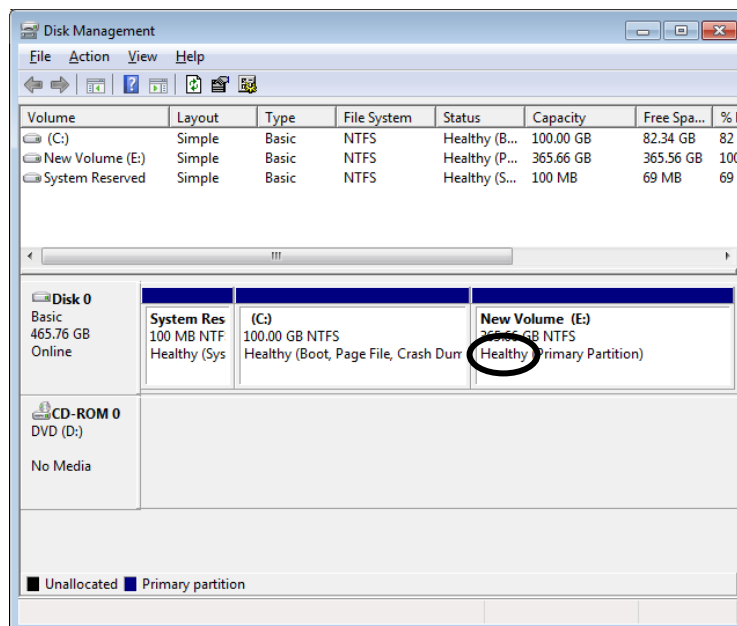


10. The **Completing the New Simple Volume Wizard** window is displayed. Click **Finish**.

- Formatting the disk starts.



11. When formatting the partition is complete, the created partition is indicated as “Healthy”.



12. In the **Disk Management** window, click the **Close** button [×] at the upper right corner to close the window.

- If the **AutoPlay** window appears, click the **Close** button [×] at the upper right corner to close the window.

## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

### 2.2 Setting Up Basic Settings of Windows Server® 2008 R2

This section describes the setup procedures of basic settings for the pre-installed Windows Server® 2008 R2 Standard.

Perform these procedures as required after you follow the instruction in “CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME” to set up the OS.

#### 2.2.1 Overview of the setup procedures of basic settings

Setting up the screen



Refer to “3.9 Setting Up the Screen” in the HF-W7500 Model 40 INSTRUCTION MANUAL (manual number WIN-62-0065).

Setting up automatic updating



The setup procedure is the same as for Windows® 7.  
For details, see “2.1.2 Setting up automatic updating”.  
• The procedure takes about 5 minutes.

Set up the network environment



The setup procedure is the same as for Windows® 7.  
For details, see “2.1.3 Setting up the network environment”.  
• The procedure takes about 10 minutes.

Formatting hard disks



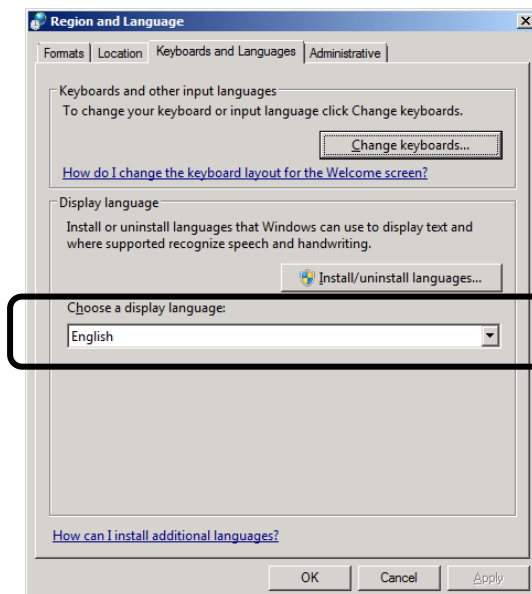
The setup procedure is the same as for Windows® 7.  
For details, see “2.1.4 Formatting a free area on a hard disk”.  
• The time required for formatting depends on the size of the partition you want to format.

### 2.2.2 Setting up the display language

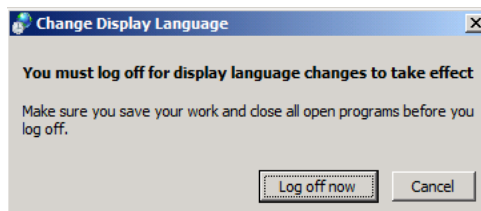
In Windows Server® 2008 R2 Standard, you can change the display language from the one you selected at setup. When you change the display language settings, follow the procedure below.

For information about the list of display languages you can select from, see “1.2.1 Preparing the setup”.

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start > Control Panel**.
3. Under **Clock, Language, and Region**, click **Change display language**.
4. The **Region and Language** property window appears. In the drop-down list, select a display language, and click **OK**.



5. A message is displayed to prompt you to log off. Click **Log off now** to log off.



This completes the procedures for changing the display language settings. After you log back on, configure the following settings in the **Region and Language** property window.

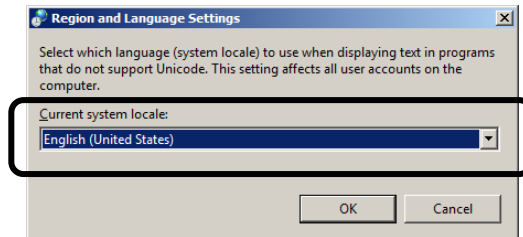
- |                         |                                      |
|-------------------------|--------------------------------------|
| <b>Format</b>           | : <b>Formats</b> tab                 |
| <b>Current location</b> | : <b>Location</b> tab                |
| <b>Change keyboards</b> | : <b>Keyboards and Languages</b> tab |

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NOTE

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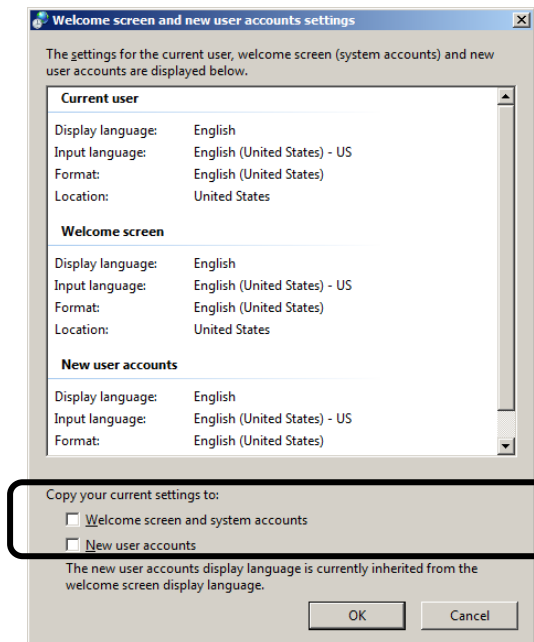
- Even after you change the display language settings, if an application does not support Unicode, the application does not change the language used for displaying text. If you want to change the display language for applications that do not support Unicode on the **Administrative** tab in the **Region and Language** property window, click **Change system locale**, and change the **Current system locale**.



- The display language and other settings you configured in the **Region and Language** property window are only applicable for the current user account. If you want to apply those settings also to system accounts or new user accounts created in the future, on the **Administrative** tab, click **Copy settings**, and select the respective check boxes as below.

If applying to system accounts:      Select the **Welcome screen and system accounts** check box

If applying to new user accounts:      Select the **New user accounts** check box







## 2.3 Setting Up Basic Settings of Windows Server® 2012 R2

This section describes the setup procedures of basic settings for the pre-installed Windows Server® 2012 R2 Standard.

Perform these procedures as required after you follow the instruction in “CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME” to set up the OS.

### 2.3.1 Overview of the setup procedures of basic settings

Setting up the screen		Refer to “3.9 Setting Up the Screen” in the HF-W7500 Model 40 INSTRUCTION MANUAL (manual number WIN-62-0065).
Setting up automatic updating		The setup procedure is the same as for Windows® 7. For details, see “2.1.2 Setting up automatic updating”. • The procedure takes about 5 minutes.
Set up the network environment		The setup procedure is the same as for Windows® 7. For details, see “2.1.3 Setting up the network environment”. • The procedure takes about 10 minutes. • "Local Area Connection" in the setup procedure must be replaced with "Ethernet". • In Windows Server® 2012 R2, you cannot use the [Identify Adapter] button to identify which Ethernet adapter port a specific icon pertains to. To do so, physically connect a network cable to each Ethernet adapter port and set the port to the linked state.
Formatting hard disks		The setup procedure is the same as for Windows® 7. For details, see “2.1.4 Formatting a free area on a hard disk”. • The time required for formatting depends on the size of the partition you want to format.



## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

### 2.3.2 Setting up the display language

In Windows Server® 2012 R2 Standard, you can change the display language from the one you selected at setup. When you change the display language settings, follow the procedure below.

For information about the list of display languages you can select from, see “1.3.1 Preparing the setup”.

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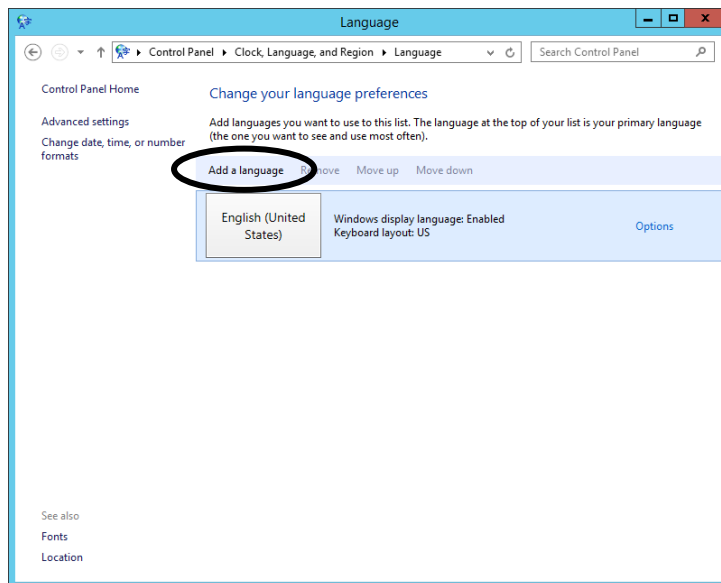
#### NOTE

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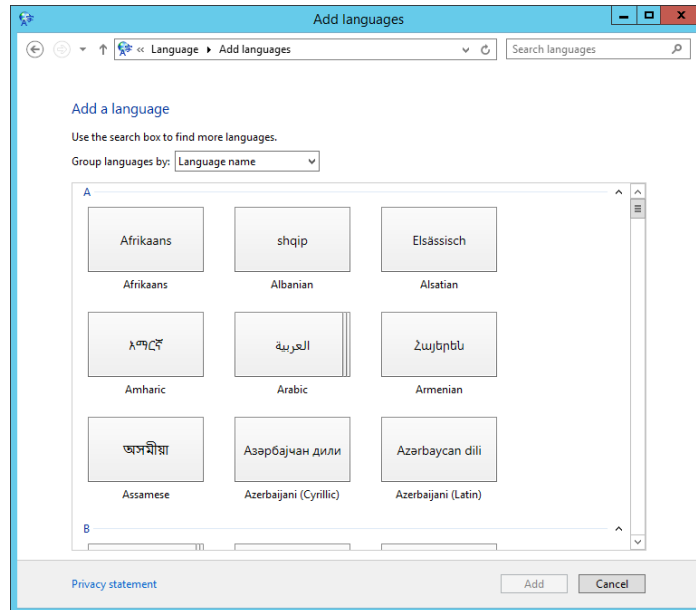
Due to the requirements of the OS, the display language resources which are not selected will be deleted after the elapse of a certain period of time from the OS setup is completed. If you plan to use another display language, create a user account for each display language and select the display language.

---

1. If you are not signed in to the computer as an administrator, sign in to the computer as an administrator.
2. Right-click **Start**. Then a menu appears. On the menu, click **Control Panel**.
3. Under **Clock, Language, and Region**, click **Add a language**.
4. The **Change your language preferences** pane appears. Click **Add a language**.



5. The **Add languages** window appears. Select a display language, and click **Add**.

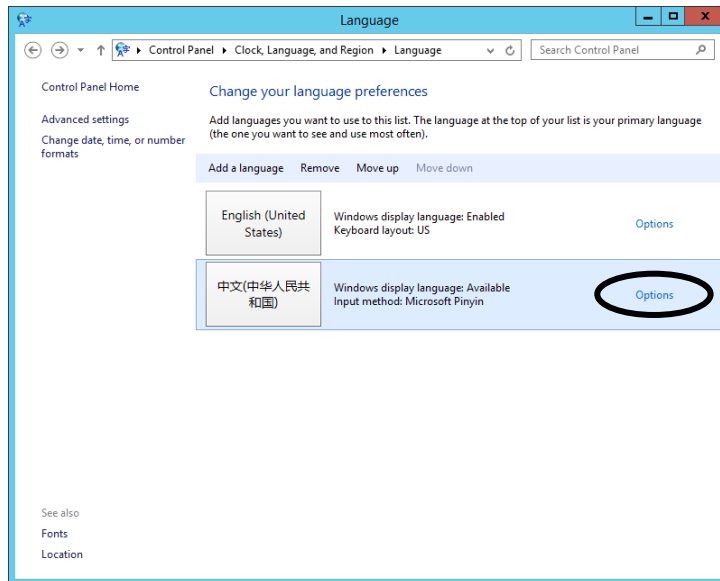


On this computer, the following display languages can be selected.

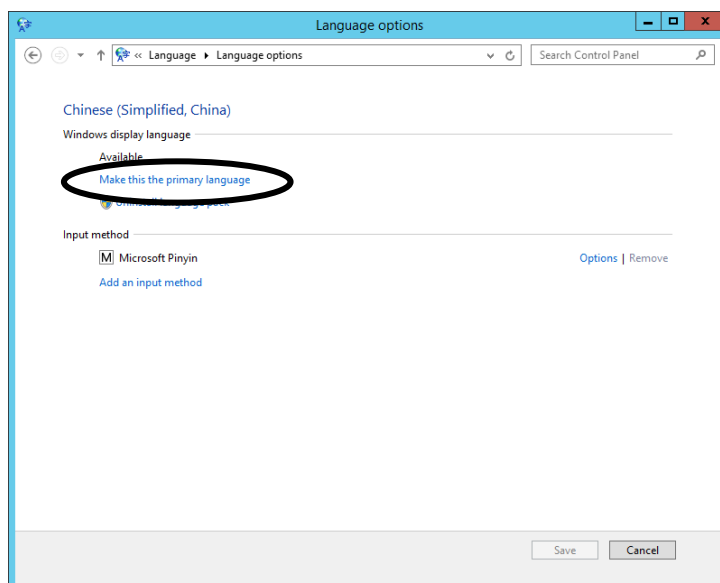
Display language	Selection procedure
English	Select <b>English</b> , click <b>Open</b> , and then select <b>English(United States)</b> .
Chinese (Simplified)	Select <b>Chinese(Simplified)</b> , click <b>Open</b> , and then select <b>Chinese(Simplified, China)</b> .
Korean	Select <b>Korean</b> .
Thai	Select <b>Thai</b> .
Portuguese	Select <b>Portuguese</b> , click <b>Open</b> , and then select <b>Portuguese(Portugal)</b> .

## 2. CONFIGURING BASIC SETTINGS AFTER OS SETUP

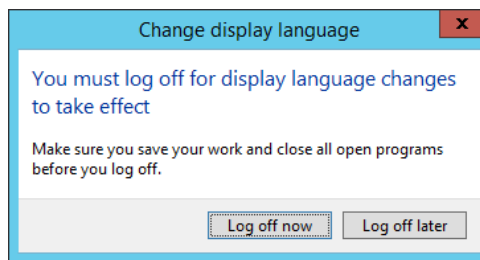
- The selected display language is added to the **Change your language preferences** pane. Click **Options**.



- The **Language options** property window appears. Click **Make this the primary language**.



8. A message is displayed to prompt you to log off (sign out). Click **Log off now** to sign out.



This completes the procedure for changing the display language setting. After you log back on, configure the following settings in the **Region** property window.

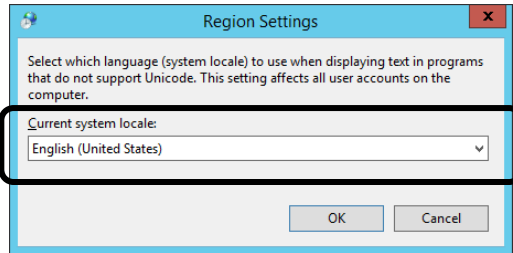
**Format** : **Formats** tab  
**Home location** : **Location** tab

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NOTE

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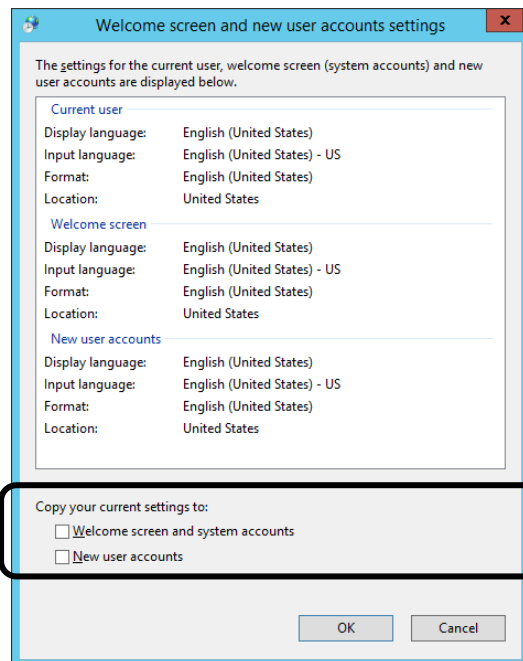
- Even after you change the display language settings, if an application does not support Unicode, the application does not change the language used for displaying text. If you want to change the display language for applications that do not support Unicode on the **Administrative** tab in the **Region** property window, click **Change system locale**, and change the **Current system locale**.



- The display language and other settings you configured in the **Region** property window are only applicable for the current user account. If you want to apply those settings also to system accounts or new user accounts created in the future, on the **Administrative** tab, click **Copy settings**, and select the respective check boxes as below.

If applying to system accounts:      Select the **Welcome screen and system accounts** check box

If applying to new user accounts:      Select the **New user accounts** check box



## CHAPTER 3 RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

This chapter describes the following procedure:

- The procedure to restore the system drive back to the factory-shipped conditions when you discontinue the system you have built.

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### NOTE

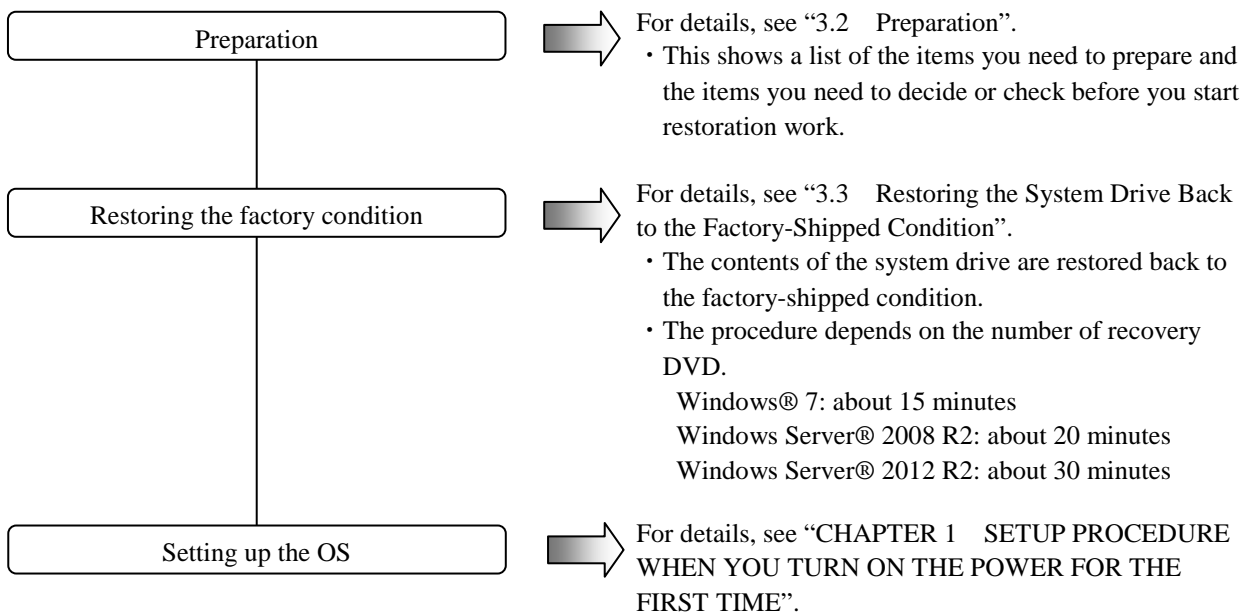
In order to perform the procedure described in this chapter, you need a recovery DVD. A recovery DVD comes inside the package of an HF-W only if you purchase an HF-W that is specifically stated to include a recovery DVD.

---

### 3.1 Overview of Restoration Procedure

This section describes the overview of the procedure to restore the system drive back to the factory-shipped condition when you discontinue the system you have built. After you restore the contents of the system drive back to the factory condition, follow the procedure described in “CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME” to set up the OS.

The following is a rough flow chart of the procedure.




---

### NOTE

If you perform restoration work under the following condition using recovery DVDs, the drive letter for the DVD drive may not be the one in the factory settings.

- For an A model: A drive is mounted on Drive bay 2 or Drive bay 3.
- For a D model: A drive is mounted on Drive bay 3.

If this situation happens, change the drive letter for the DVD drive after the setup is complete, if necessary.

---

### 3. RESTORING THE FACTORY-SHIPPED CONDITION USING A RECOVERY DVD

#### **NOTICE**

A recovery DVD contains an image file created for the hardware configuration at the factory shipment. If the hardware configuration has changed from the one at the factory, the OS may not start after restoration work. Remove all external storage devices to resume the hardware configuration at the factory shipment before you perform restoration work using a recovery DVD.

When a recovery DVD is used, all data in the system drive is deleted. Back up the data beforehand as required.

#### **3.2 Preparation**

Before you start restoration work using recovery DVDs, have the following recovery DVDs ready.

Recovery DVD for HF-W	HITACHI <u>HJ-7540*****</u> Product Recovery DVD (The underlined part is the model number of the HF-W7500 Model 40 you purchased.)
-----------------------	---

### 3.3 Restoring the System Drive Back to the Factory-Shipped Condition

#### 3.3.1 Procedure for restoring the system drive back to the factory-shipped condition

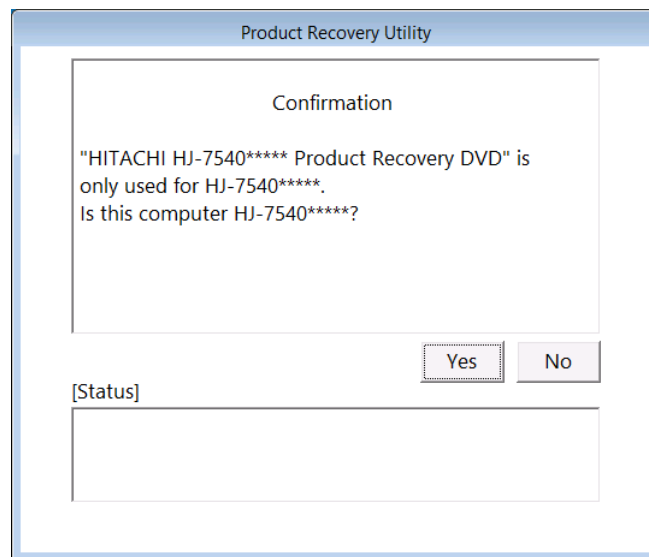
Follow the procedure below to restore the system drive of an HF-W7500 Model 40 back to the factory-shipped condition using a recovery DVD.

In this restoration procedure, we assume that the number of recovery DVDs is two for explanatory purposes.

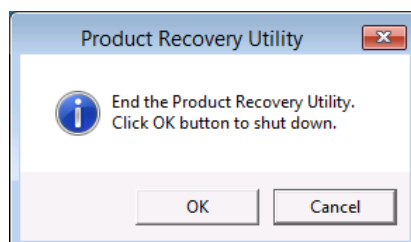
(Note) If the number of recovery DVDs is actually three, repeat steps 9 and 10.

And, use the recovery DVDs in the following order: 1/3, 2/3, and 3/E.

1. Turn on the power to the computer, and insert a recovery DVD “HITACHI HJ-7540\*\*\*\*\* Product Recovery DVD (disc number: 1/2)” to the DVD drive. (The underlined part is the model number of the HF-W7500 Model 40 you purchased, and therefore the part indicated as \*s is different depending on the model. In the following description of the procedure, replace the “HJ-7540\*\*\*\*\*” with the actual model number of the HF-W7500 Model 40 you purchased.
2. When you boot from the recovery DVD, the following confirmation message is displayed.
  - (Note) If you cannot boot from the recovery DVD, turn off the computer, and then turn it back on.
    - If this computer is an HF-W7500 Model 40, click **Yes**.
    - If this computer is not an HF-W7500 Model 40, click **No**.



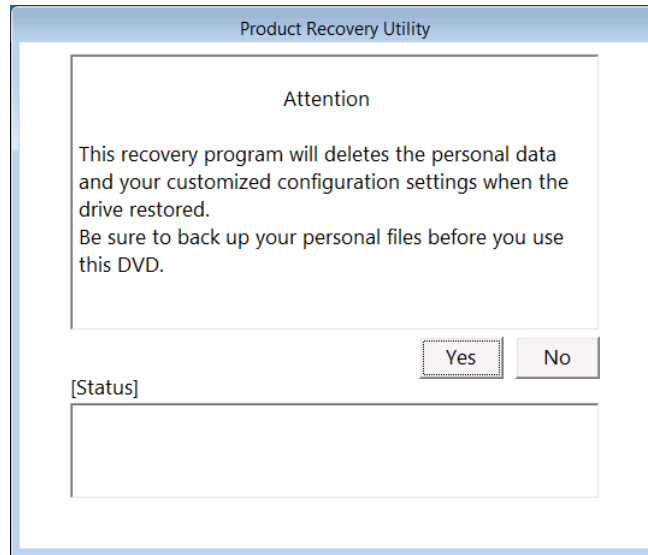
When you click **No**, the following message is displayed. Click **OK**. The recovery DVD is automatically ejected, and then the computer is automatically shut down. If you want to go back to the confirmation message window, click **Cancel**.





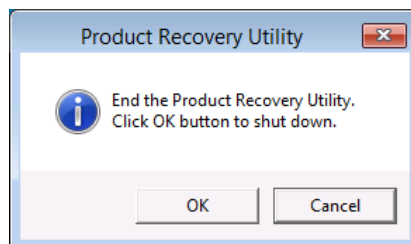
### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

3. When you click **Yes** on the confirmation message window, the confirmation window for the following attention message is displayed.
- If you are OK with the attention message, click **Yes**.
  - If you are not OK with the message, click **No**.



When you click **No**, the following message box is displayed. Click **OK**. The recovery DVD is automatically ejected, and then the computer is automatically shut down.

If you want to go back to the confirmation window for the attention message, click **Cancel**.



### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

4. When you click **Yes** on the confirmation window for the attention message, the selection window for the drive restore option is displayed.

- If you want to restore the system drive back to the factory-shipped condition, select the restore option, and then click **Next**.

- **Entire drive:**

Select this option if you want to restore the whole system drive back to the factory-shipped condition or configure a new drive to the factory-shipped condition after you replace the system drive.

If you select this option and click **Next**, proceed to step 5.

- **Only the system and boot partition:**

Select this option if the system drive has partitions other than the boot partition (the partition on which Windows is installed) for data storage or other purposes and you want to restore the system drive back to the factory-shipped condition while keeping these partitions. If you select this option, only the boot partition is restored back to the factory-shipped condition.

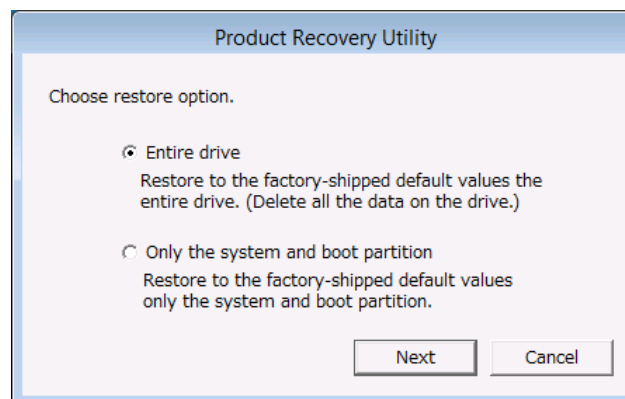
If you select this option and click **Next**, proceed to step 7.

You cannot select this option in the following cases.

- The system drive has no boot partitions.
- The system drive has more than one boot partition.
- The size of the boot partition is less than the minimum boot partition size defined for this computer.

(For an HF-W7500 Model 40, the minimum size is 80 GB.)

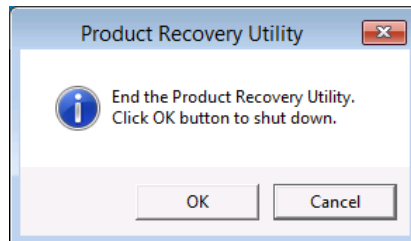
- If you want to cancel restoring the system drive back to the factory-shipped condition, click **Cancel**.



### 3. RESTORING THE FACTORY-SHIPPED CONDITION USING A RECOVERY DVD

When you click **Cancel**, the following message is displayed. Click **OK**. The recovery DVD is automatically ejected, and then the computer is automatically shut down.

If you want to go back to the selection window for the drive restore option, click **Cancel**.

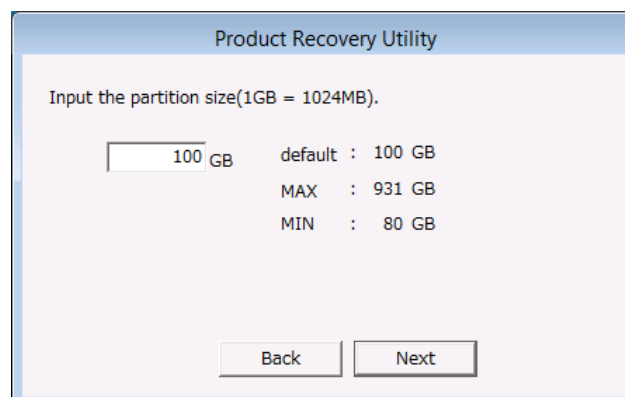


<When you select **Entire drive** in the selection window for the drive restore option>

5. If you select **Entire drive** in the selection window for the drive restore option, the **Input the partition size** window is displayed.

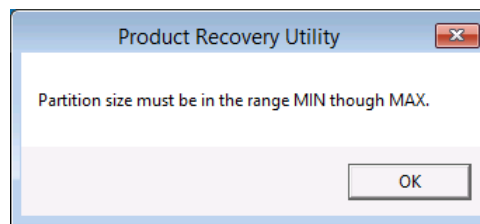
- The window shows the factory (default) setting for the partition size and the minimum (MIN) and maximum (MAX) of the range of partition size values that can be entered. Enter the partition size in GB (1 GB = 1,073,741,824 bytes), and click **Next**.
- If you want to go back to the selection window for the drive restore option, click **Back**.

(Note) If the size of the main memory is 32 GB, the partition size you enter must be at least the factory-shipment value (default). If you enter the partition size less than the factory-shipment value (default), you may not be able to allocate a sufficient area for a memory dump during the setup of the OS.

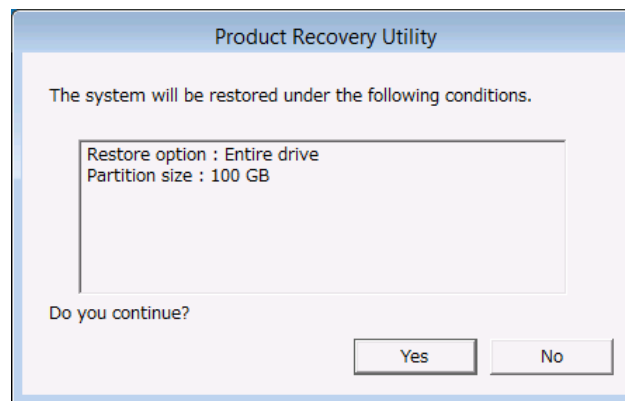


### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

If the entered value is out of range when you click **Next**, the following message is displayed. Click **OK** and reenter the partition size.



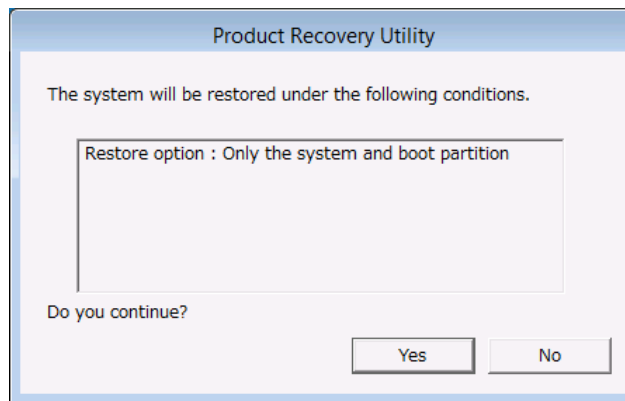
6. When you enter the partition size in the **Input the partition size** window and click **Next**, the confirmation window for the settings of the drive restoration.
- If you are OK with the displayed partition size to be restored, click **Yes**. Proceed to step 8.
  - If you are not OK with the displayed partition size to be restored, click **No**. The selection window for the drive restore option returns.



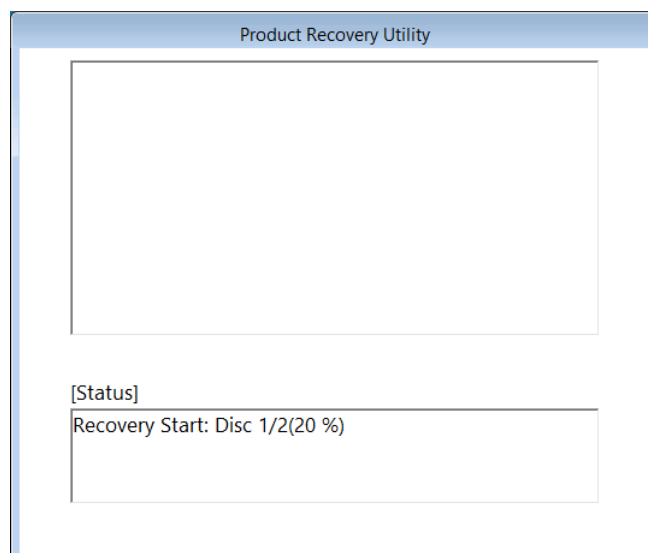
### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

<When you select **Only the system and boot partition** in the selection window for the drive restore option>

7. If you select **Only the system and boot partition** in the selection window for the drive restore option, the confirmation window for the settings of the drive restoration is displayed.
  - If you are OK with restoring only the boot partition, click **Yes**. Proceed to step 8.
  - If you are not OK with restoring only the boot partition, click **No**. The selection window for the drive restore option returns.

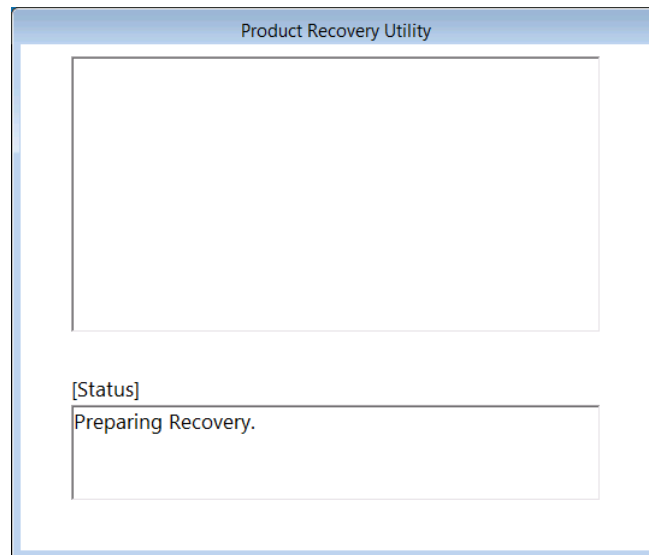


8. When you click **Yes** in the confirmation window for the settings of the drive restoration, a restoration process for the drive starts. The progress is displayed in the **[Status]** box.

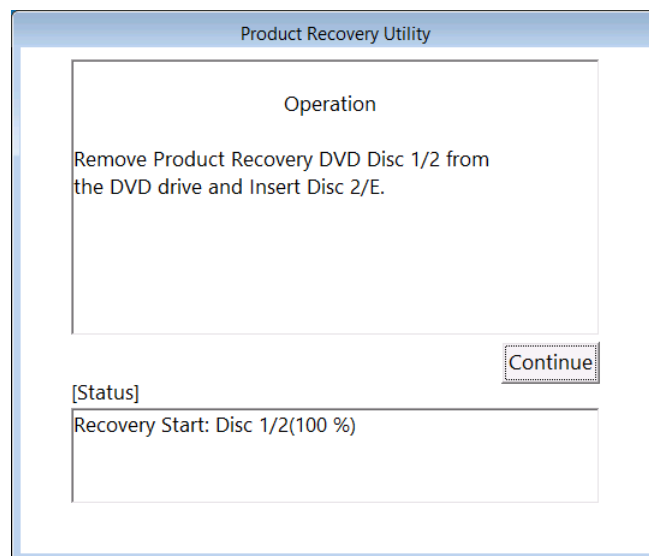


### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

(Note) If you select **Only the system and boot partition** in the selection window for the drive restore option, the boot partition is formatted before the restoration process. Formatting the partition may take up to a couple of minutes. (The time required for formatting depends on the size of the boot partition.) During the format process, “Preparing Recovery.” is displayed in the **[Status]** box.

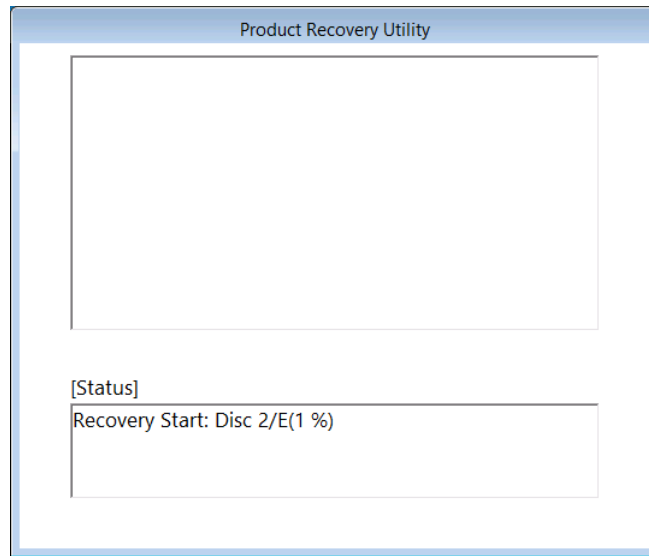


9. When the restoration process back to the factory-shipped condition performed by the first recovery DVD (disc number: 1/2), the following message is displayed, and the recovery DVD is automatically ejected. Remove the first recovery DVD from the DVD drive, and insert the second recovery DVD (disc number: 2/E).

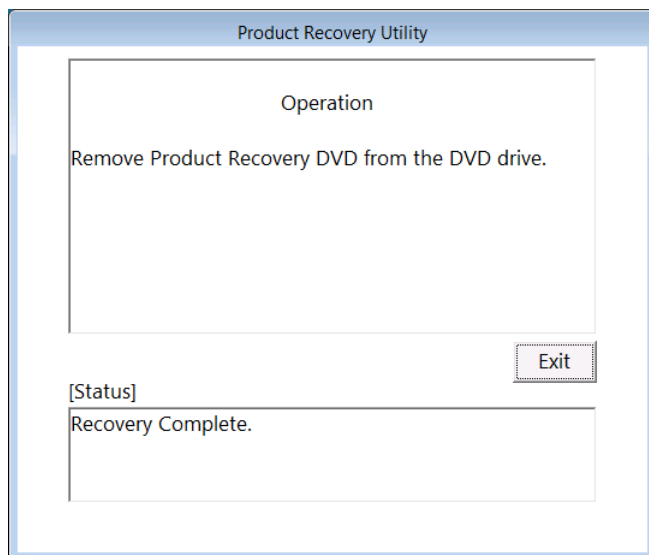


### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

10. When you click **Continue**, the restoration process back to the factory-shipped condition resumes. The progress is displayed in the **[Status]** box.



11. When the restoration process back to the factory-shipped condition performed by the second recovery DVD is complete, “Recovery Complete.” is displayed in the **[Status]** box, and the recovery DVD is automatically ejected. Remove the recovery DVD from the DVD drive, and then click **Exit**. The computer will be shut down.



The system drive of the HF-W7500 Model 40 is now successfully restored to the factory condition by using a recovery DVD. After you finish the procedure above, follow the instruction in “CHAPTER 1 SETUP PROCEDURE WHEN YOU TURN ON THE POWER FOR THE FIRST TIME” to set up the OS.

### 3. RESTORING THE FACTORY-SHIPED CONDITION USING A RECOVERY DVD

#### 3.3.2 Errors generated during a restoration process and their corrective actions

When an error occurs during a restoration process, record the error message and the error code displayed on the window, and take actions as shown in the following table. If you take the actions accordingly but cannot let the recovery process go through or if the No. 8 error message is displayed, contact our sales representative.

No.	Error message	Action
1	Retry time out. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Check the integrity of the system drive. (Read/write tests and so on)</li> </ul>
2	Image file is not found. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Retry a recovery process.</li> <li>• Check the integrity of the recovery DVD. (Read tests and so on)</li> <li>• Check if the DVD drive works properly. (Read tests and so on)</li> </ul>
3	Drive failed or not connected. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Check if the system drive is connected correctly.</li> </ul>
4	Failed to access the drive. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Check the integrity of the system drive. (Read/write tests and so on)</li> </ul>
5	Failed to assign drive letter. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Check that any devices unnecessary for a recovery process are connected. If connected, remove them.</li> </ul>
6	Failed to read from Product Recovery DVD. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Check if the DVD drive is connected correctly.</li> <li>• Check the integrity of the recovery DVD. (Read tests and so on)</li> <li>• Check if the DVD drive works properly. (Read tests and so on)</li> </ul>
7	Recovery failed. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Retry a recovery process.</li> </ul>
8	Recovery invalid. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Contact our sales representative.</li> </ul>
9	Drive capacity is not enough. Please refer to the SETUP GUIDE.	<ul style="list-style-type: none"> <li>• Check the size of the system drive.</li> </ul>



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## CHAPTER 4 PRECAUTION

### 4.1 Event Log Entries during Setup

This equipment may record the following events in the event log during the OS setup, but those events do not affect the operation of the system.

- In the case of Windows® 7

Source	Event ID	Type
Service Control Manager	7022 or 7023	Error
Search	1008	Warning
elqexpress or elrepress	27	Warning

- In the case of Windows Server® 2008 R2

Source	Event ID	Type
Service Control Manager	7022 or 7023	Error
Winlogon	6004	Warning
elqexpress or elrepress	27	Warning

- In the case of Windows Server® 2012 R2

Source	Event ID	Type
Service Control Manager	7023	Error
volmgr	46	Error
eliexpress	27	Warning
Windows Remote Management	10149	Warning
Security-SPP	1058	Warning

#### 4. PRECAUTION

##### 4.2 Event Log Entries While the OS is Running

This equipment may record the following events in the event log while the OS is running, but those events do not affect the operation of the system.

- In the case of Windows® 7

Source	Event ID	Type
WMI	10	Error
User Profiles Service	1530	Warning
Search	3036	Warning
Time-Service	134 or 36	Warning
elqexpress or elrepress	27	Warning

- In the case of Windows Server® 2008 R2

Source	Event ID	Type
WMI	10	Error
User Profiles Service	1530	Warning
Time-Service	134 or 36	Warning
elqexpress or elrepress	27	Warning

- In the case of Windows Server® 2012 R2

Source	Event ID	Type
DistributedCOM	10010	Error
WMI	63	Warning
Time-Service	134	Warning
Kernel-PnP	219	Warning
winlogon	6004	Warning
eliexpress	27	Warning

In addition, the following event may be recorded in the event log when a USB device is connected or disconnected or when the system starts for the first time after a storage device is added, even though the USB device or the storage device works without any problems. Those events are recorded due to the specifications of the OS and do not affect the operation of the system.

Source	Event ID	Type
Disk	11 or 153	Error

### 4.3 Display Errors Generated After a Command Prompt Opens Too Many Times

In Windows® 7 and Windows Server® 2008 R2, if you ran the command prompt hundreds of times without restarting the OS, the desktop cannot be displayed properly. This is because each time the command prompt is started, Windows Explorer (process name: explorer.exe) consumes graphics device interface resources.

If you frequently starts the command prompt (for example, if you repeatedly run a batch file), restart the OS regularly. If this symptom does occur, restart the OS.

### 4.4 Scheduled Functions by Default

In Windows®, various functions are scheduled by default and executed periodically in the background. Among those functions, Windows Defender (anti-spyware feature) and the disk defragmenter (or optimize drives) may increase the system load significantly when they run and may affect the operation of the applications for business use.

#### (1) Windows Defender (for Windows® 7 only)

We recommend changing the scheduled times for those two functions in order not to conflict with the schedule of the applications for business use.

The initial schedules for those two functions are as follows:

- Frequency: Daily
- Start time: 2:00

#### (2) Disk Defragmenter (for Windows® 7 and Windows Server® 2008 R2)

On this computer, scheduled defragmentation by Disk Defragmenter is turned off. If you want to defragment disks using Disk Defragmenter, you can do that by using either one of the methods below.

- (a) Turn on scheduled defragmentation by Disk Defragmenter.
- (b) Run Disk Defragmenter manually.

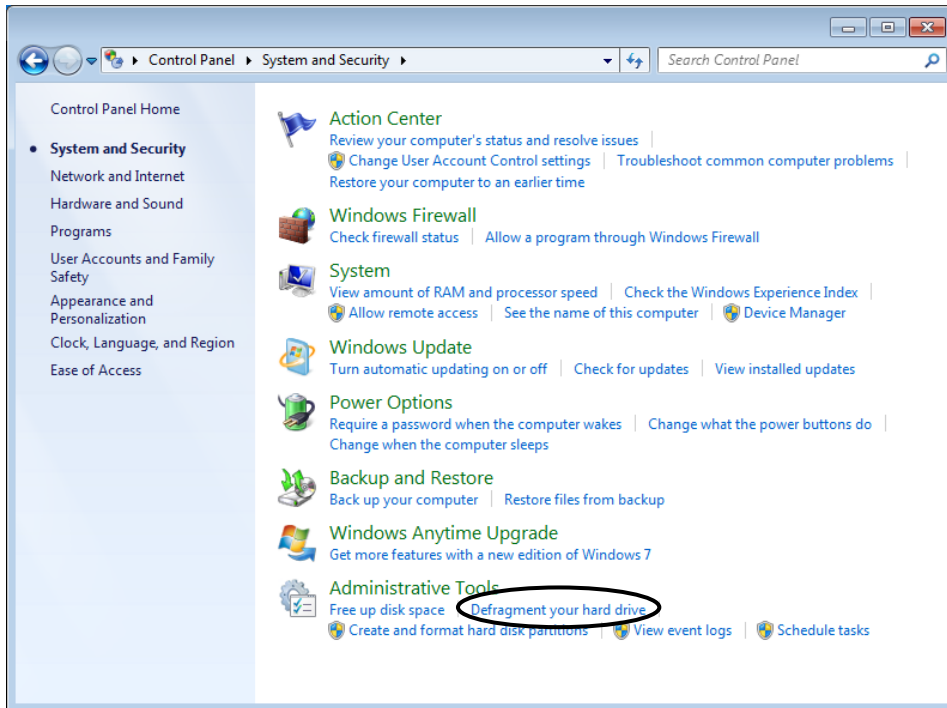
The procedure of each method is described below. (The screen images shown are the ones for Windows® 7 but are basically the same for Windows Server® 2008 R2.) For information about optimize drives (for Windows Server® 2012 R2), see item (3).

#### (a) Turn on scheduled defragmentation by Disk Defragmenter.

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start > Control Panel**.
3. The **Control Panel** window appears. Click **System and Security**.

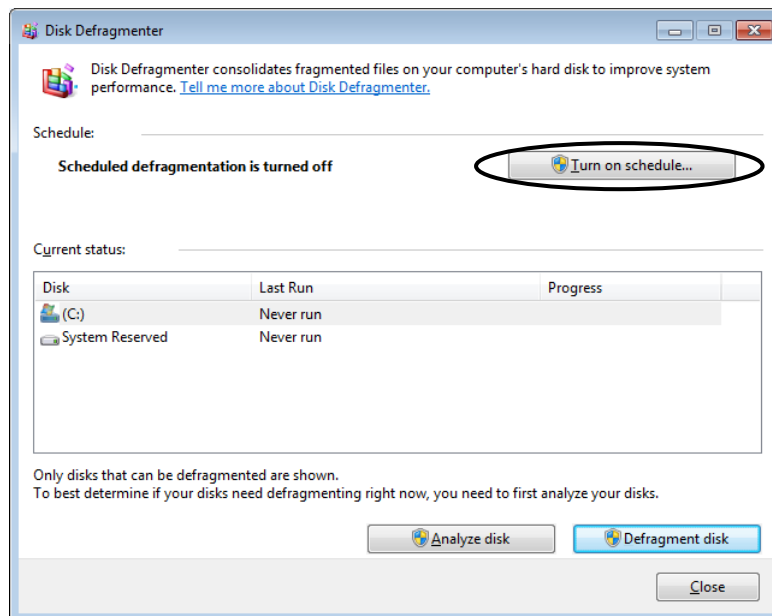
#### 4. PRECAUTION

4. Under **Administrative Tools**, click **Defragment your hard drive**.

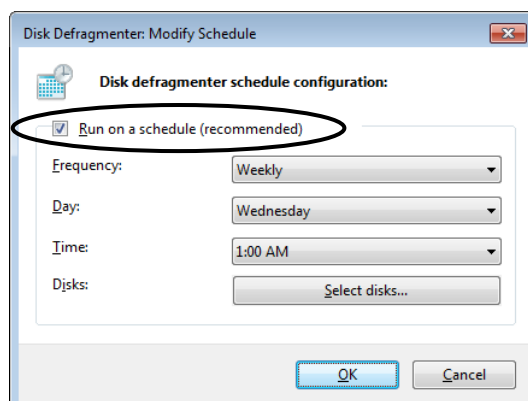


5. The **Disk Defragmenter** window appears.

- Under **Schedule**, click **Turn on schedule**.



6. The **Disk Defragmenter: Modify Schedule** window appears. Select the **Run on a schedule (recommended)** check box.



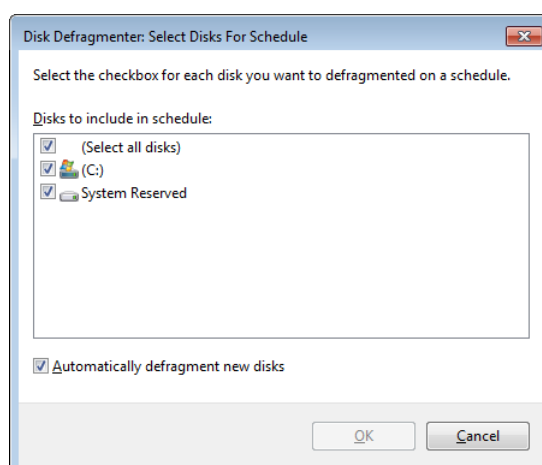
7. As required, configure the frequency, day of the week, and start time of defragmentation. We recommend the scheduled times of defragmentation you configure do not conflict with the schedule of the applications for business use. The initial schedule of defragmentation is as follows.

- Frequency: Weekly
- Day of the week: Wednesday
- Start time: 1:00

8. Click **Select disks**.

9. The **Disk Defragmenter: Select Disks For Schedule** window appears. As required, select the drives you want to defragment.

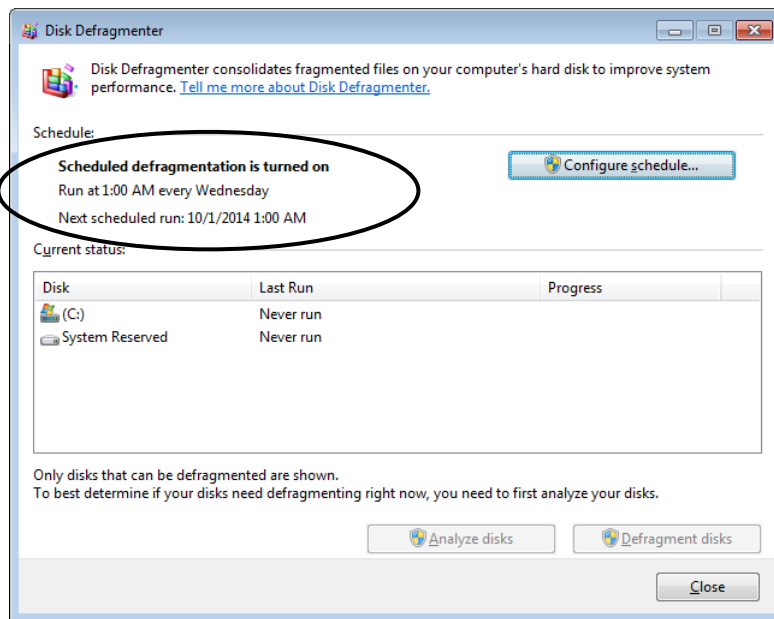
- Click **OK**.



10. The **Disk Defragmenter: Modify Schedule** window appears. Click **OK**.

#### 4. PRECAUTION

11. The configured schedules are displayed under **Schedule**. Check the contents, and click **Close** to close the window.

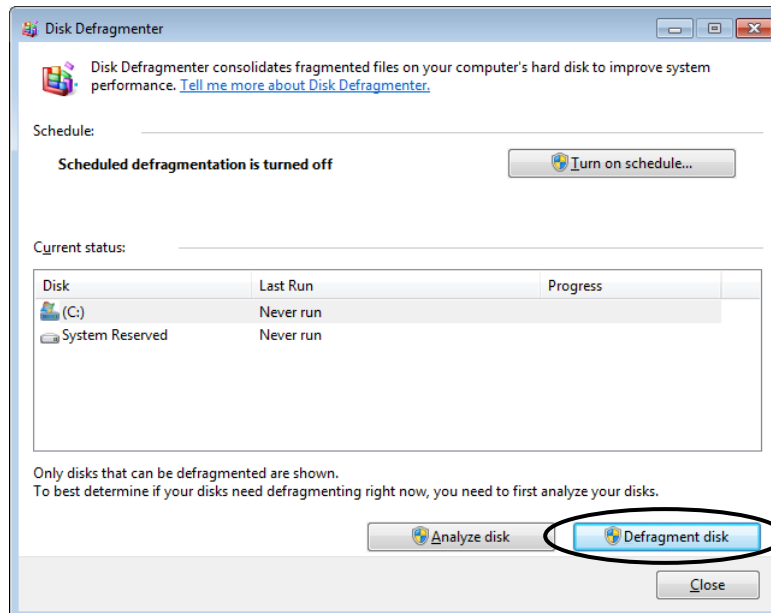


(b) Run Disk Defragmenter manually.

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start > Control Panel**.
3. The **Control Panel** window appears. Click **System and Security**.
4. Under **Administrative Tools**, click **Defragment your hard drive**.

5. The **Disk Defragmenter** window appears.

- Under **Current status**, select the drive you want to defragment, and click **Defragment disk**.



- When the defragmentation process is complete, the date and time of the defragmentation is displayed in the **Last Run** column.

6. Click **Close** to close the window.



## 4. PRECAUTION

### (3) Optimize Drives (for Windows Server® 2012 R2)

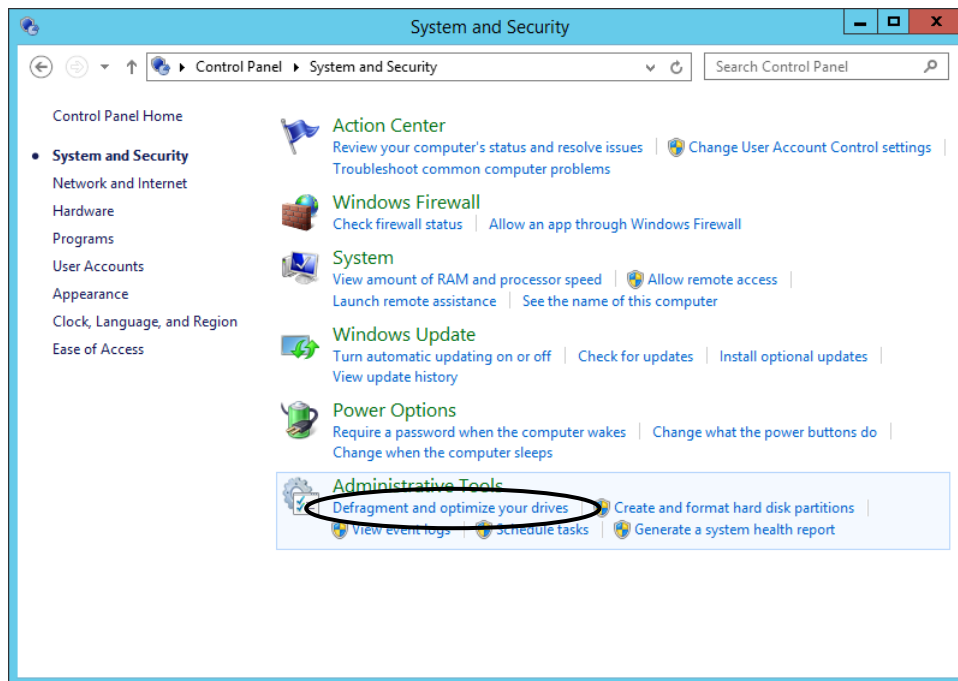
On this computer, scheduled drive optimization is turned off. If you want to optimize drives, you can do that by using either one of the methods below.

- (a) Turn on scheduled drive optimization.
- (b) Optimize drives manually.

The procedure of each method is described below.

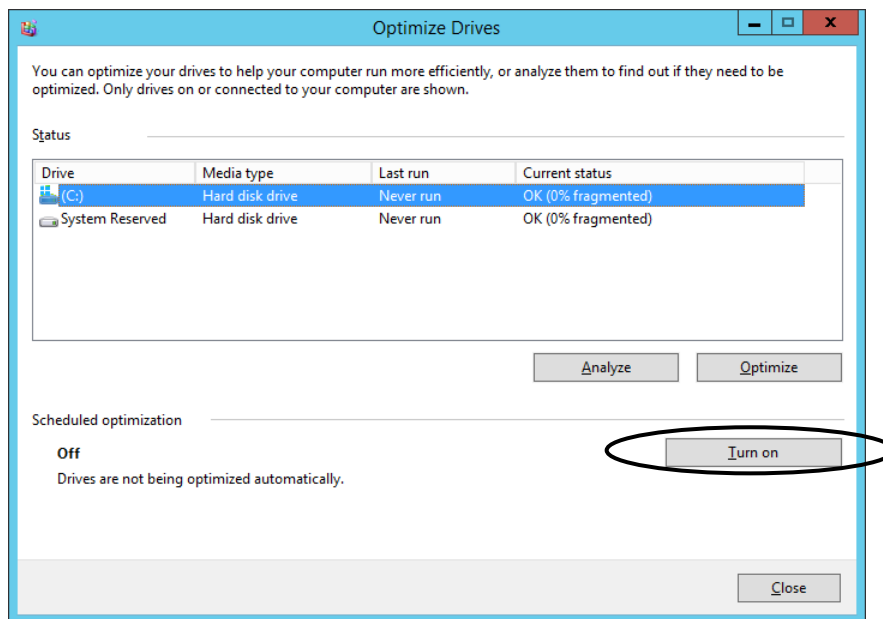
#### (a) Turn on the scheduled defragmentation.

1. If you are not signed in to the computer as an administrator, sign in to the computer as an administrator.
2. Right-click **Start**. Then a menu appears. On the menu, click **Control Panel**.
3. The **Control Panel** window appears. Click **System and Security**.
4. Under **Administrative Tools**, click **Defragment and optimize your drives**.

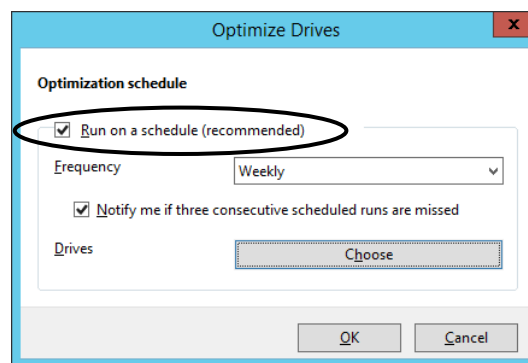


5. The **Optimize Drives** window appears.

- Under **Scheduled optimization**, click **Turn on**.



6. The **Optimization schedule** pane appears. Select the **Run on a schedule (recommended)** check box.



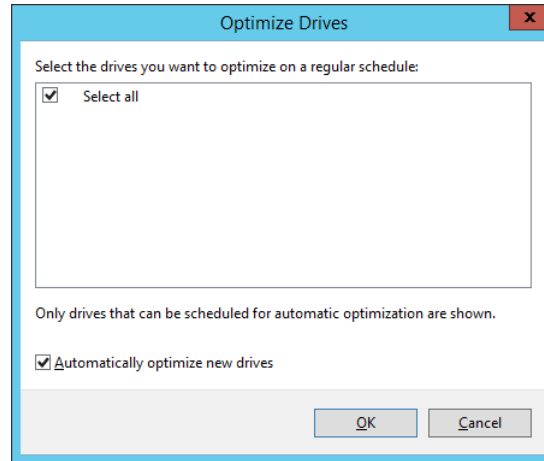
7. Select the frequency of scheduled drive optimization based on your needs. The initial schedule of defragmentation is as follows.

- Frequency: Weekly

8. Click **Choose**.

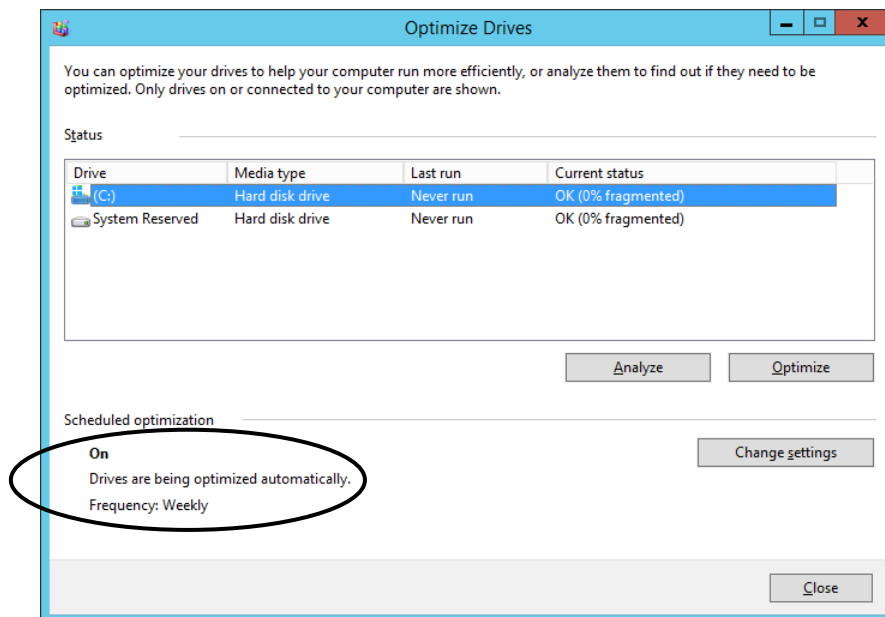
#### 4. PRECAUTION

- The **Select the drives you want to optimize on a regular schedule** pane appears. Select the drives you want to optimize based on your needs.
  - Click **OK**.



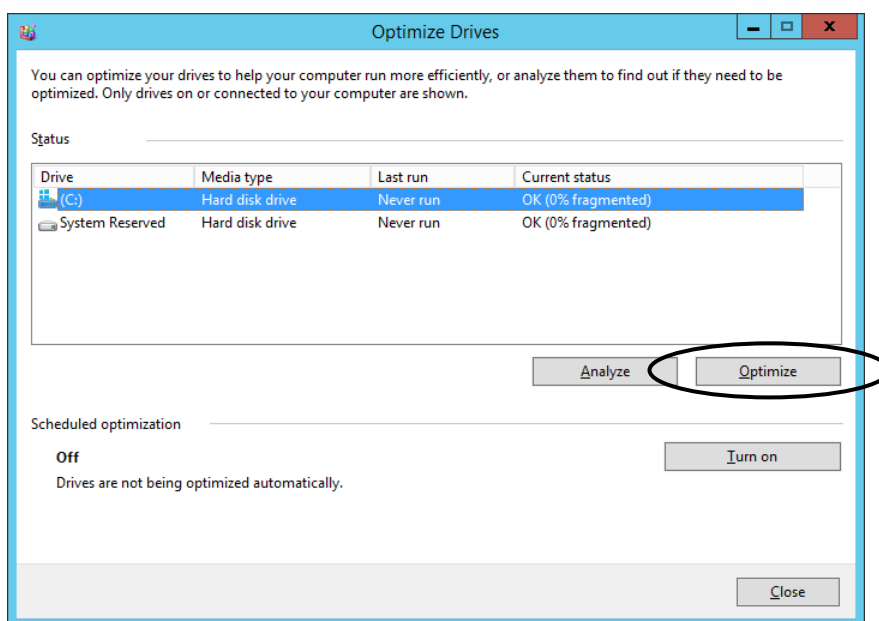
- The **Optimization schedule** pane appears. Click **OK**.

- The configured schedules are displayed under **Scheduled optimization**. Check the contents, and click **Close** to close the window.



## (b) Optimize drives manually.

1. If you are not signed in to the computer as an administrator, sign in to the computer as an administrator.
2. Right-click **Start**. Then a menu appears. On the menu, click **Control Panel**.
3. The **Control Panel** window appears. Click **System and Security**.
4. Under **Administrative Tools**, click **Defragment and optimize your drives**.
5. The **Optimize Drives** window appears.
  - Under **Status**, select the drive you want to optimize, and click **Optimize**.



- When the defragmentation process is complete, the date and time of the defragmentation is displayed in the **Last run** column.

6. Click **Close** to close the window.

## 4.5 Security Enhancements

### (1) Allowing passing through Windows Firewall

Windows Firewall is enabled by default. This may sometimes prevent a program from working because the network connections from the program are blocked. If this situation happens, you can select from the following three options to allow those network connections to pass through Windows Firewall:

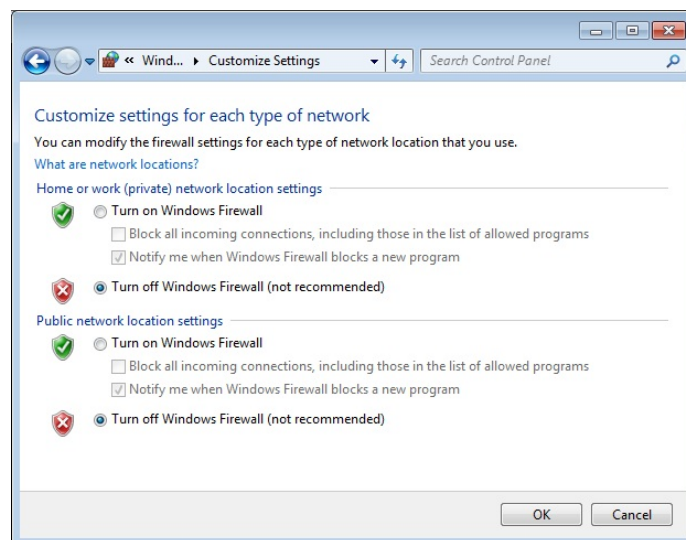
- (a) Disabling Windows Firewall.
- (b) Registering the program as an exception.
- (c) Registering a port used by the program as an exception.

The setup procedure of each option is described below. (The screen images shown are the ones for Windows® 7 but are basically the same for Windows Server® 2008 R2 and Windows Server® 2012 R2.)

#### (a) Disabling Windows Firewall.

To disable Windows Firewall, follow the procedure below. After this procedure, network connections from all programs are not blocked anymore.

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start** and then click **Control Panel**.
3. The **Control Panel** window is displayed. Click **System and Security**.
4. The **System and Security** window is displayed.
  - Click **Windows Firewall**.
5. The **Windows Firewall** window is displayed.
  - Click **Turn Windows Firewall on or off**.
6. The **Customize Settings** window is displayed.
  - Select **Turn off Windows Firewall (not recommended)**.
  - Click **OK**.



7. Close the **Windows Firewall** window.

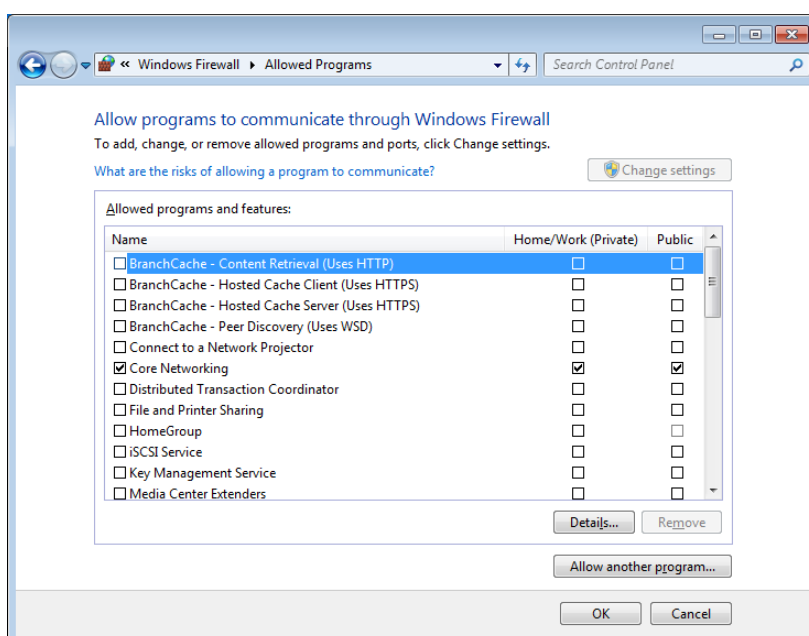
## (b) Registering the program as an exception.

To register the program as an exception for Windows Firewall, follow the procedure below. After this procedure, network connections from the program registered as an exception are not blocked anymore.

(For Windows Server® 2012 R2, "program" in the procedure must be replaced with "app".)

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start** and then click **Control Panel**.
3. The **Control Panel** window is displayed. Click **System and Security**.
4. The **System and Security** window is displayed.
  - Click **Windows Firewall**.
5. The **Windows Firewall** window is displayed.
  - Click **Allow a program or feature through Windows Firewall**.
6. The **Allowed Programs** window is displayed.
  - Click **Allow another program**.

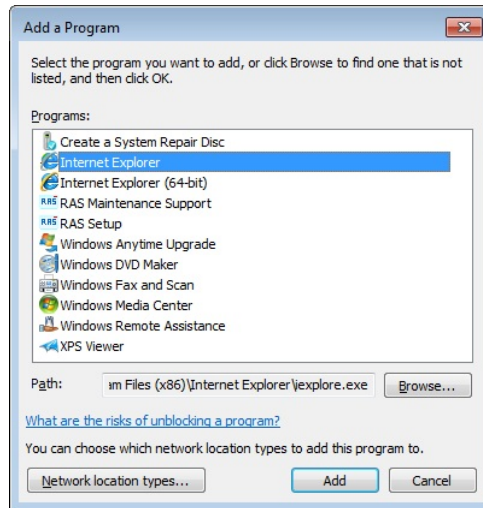
\* If the **Allow another program** button is disabled, click **Change settings**. That will enable the **Allow another program** button.



#### 4. PRECAUTION

7. The **Add a Program** window is displayed.

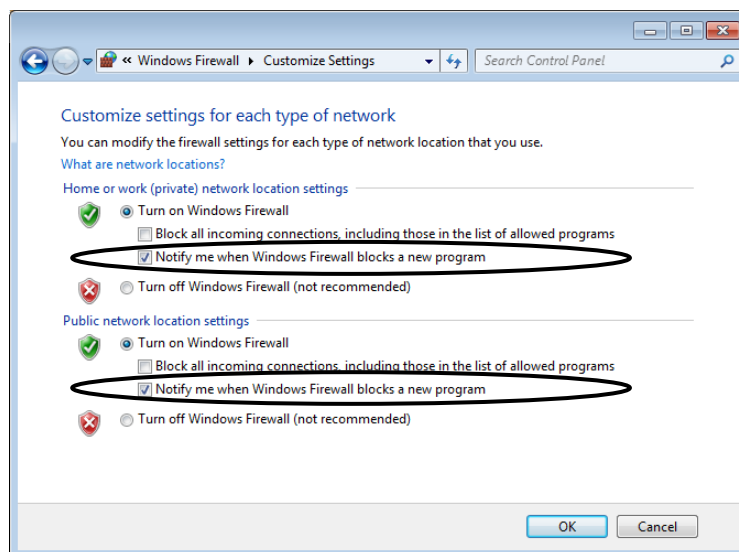
- Select a program you want to unblock. If you want to select a program not in the list, click **Browse** to select a file.
- Click **Add**.



8. Confirm that the selected program is registered in the **Allowed programs and features** list in the **Allowed Programs** window. And then click **OK**.

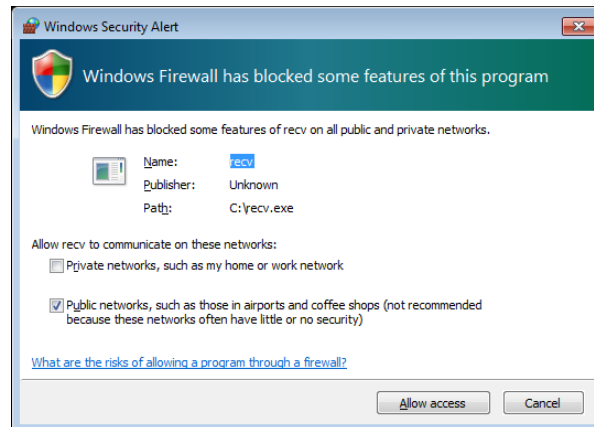
9. Close the **Windows Firewall** window.

Alternatively, you can register a program as an exception when the following dialog box is displayed upon an incoming connection to the program if you selected the **Notify me when Windows Firewall blocks a new program** check boxes in the Windows Firewall settings.



1. When the network connection of the launched application is blocked, the following dialog box is displayed.

- Click **Allow access**.



2. Then this program is registered as an exception.



#### 4. PRECAUTION

(c) Registering a port used by the program as an exception.

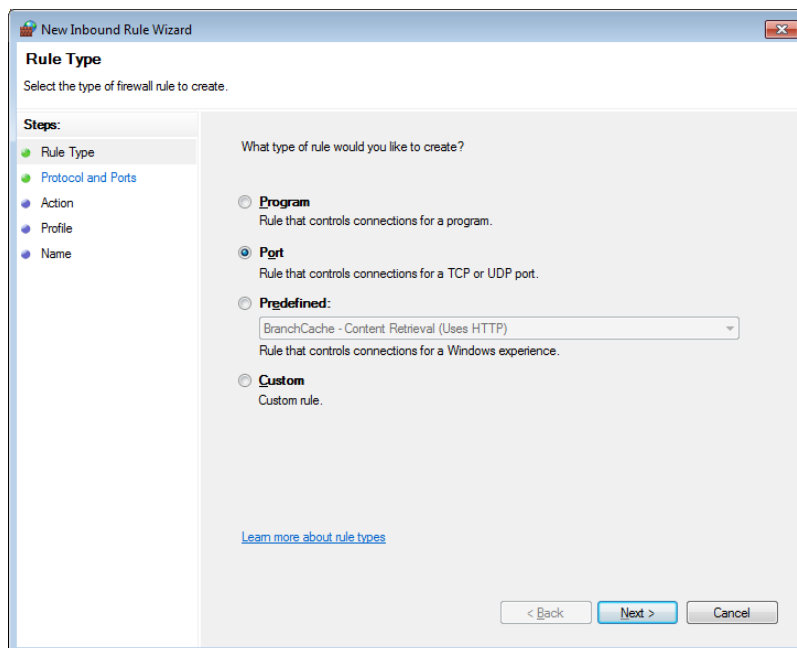
To register a port used by the program as an exception, follow the procedure below.

After this procedure, network connections through the port registered as an exception are not blocked anymore.

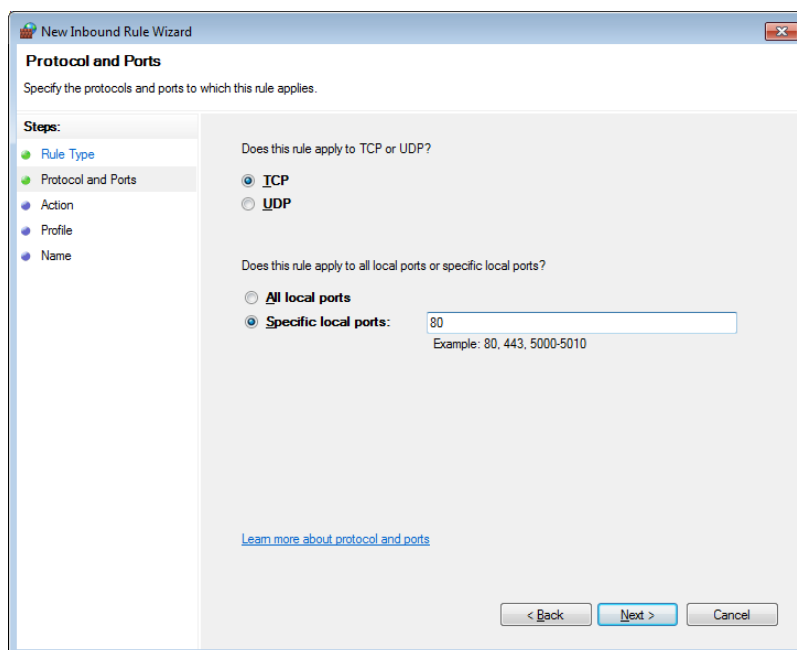
1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start** and then click **Control Panel**.
3. The **Control Panel** window opens. Click **System and Security**.
4. The **System and Security** window opens.
  - Click **Windows Firewall**.
5. The **Windows Firewall** window opens.  
Click **Advanced settings**.
6. The **Windows Firewall with Advanced Security** window is displayed.
  - Click **Inbound Rules** or **Outbound Rules**.
  - In the **Actions** pane, click **New Rule**.

\* Select either **Inbound Rules** or **Outbound Rules** based on how the port is used.  
From this point on, we assume that **Inbound Rules** is selected.

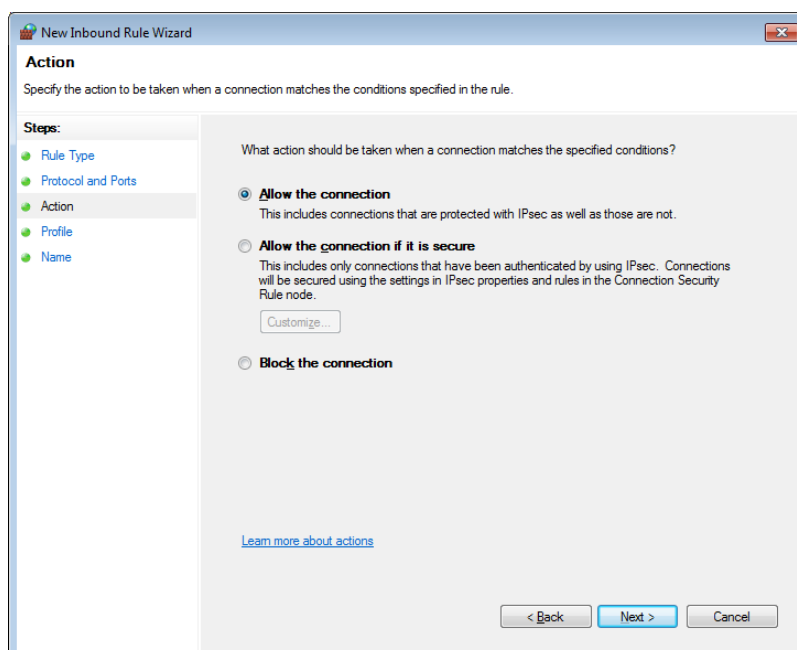
7. The **New Rule** window of the **New Inbound Rule Wizard** is displayed.
  - Choose **Port** and click **Next**.



8. The **Protocols and Ports** window of the **New Inbound Rule Wizard** is displayed.
- Select a protocol type.
  - Select either **All local ports** or **Specific local ports**.
  - If you select **Specific local ports**, enter a port number.
  - Click **Next**.



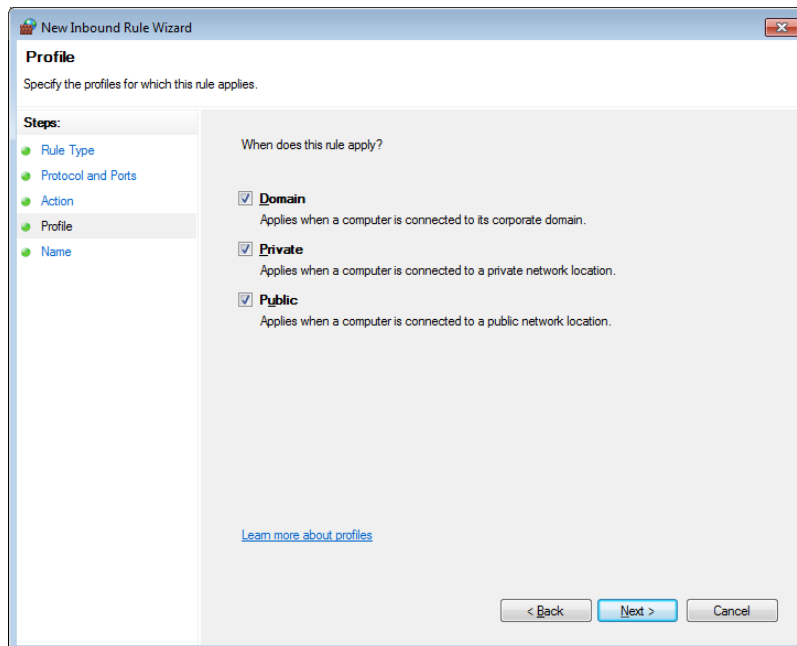
9. The **Action** window of the **New Inbound Rule Wizard** is displayed.
- Select **Allow the connection**.
  - Click **Next**.



#### 4. PRECAUTION

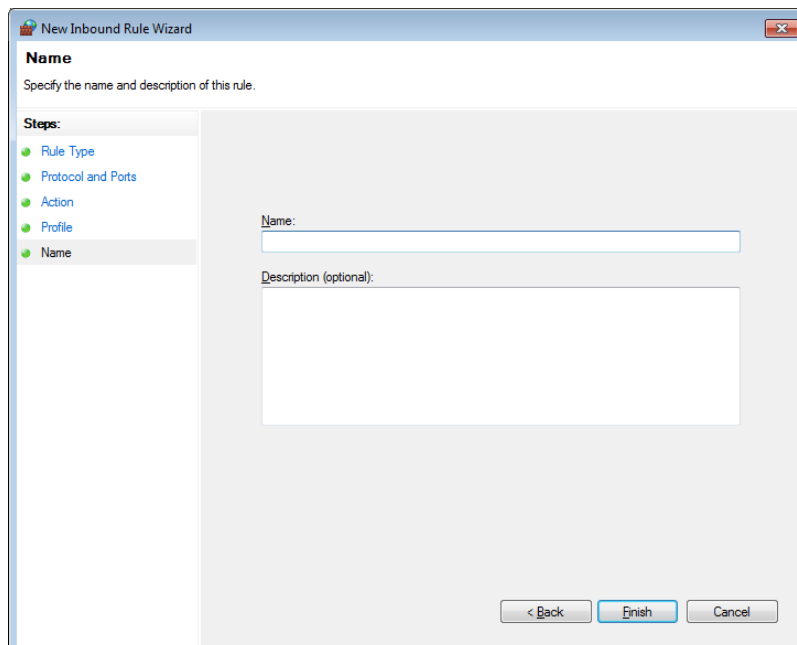
10. The **Profile** window of the **New Inbound Rule Wizard** is displayed.

- Specify the profiles to which the rule applies.
- Click **Next**.



11. The **Name** window of the **New Inbound Rule Wizard** is displayed.

- In the **Name** box, type the name of the port.
- Click **Finish**.



12. Confirm that the just created rule is registered in the **Inbound Rule** list in the **Windows Firewall with Advanced Security** window. And then close the window.

13. Close the **Windows Firewall** window.

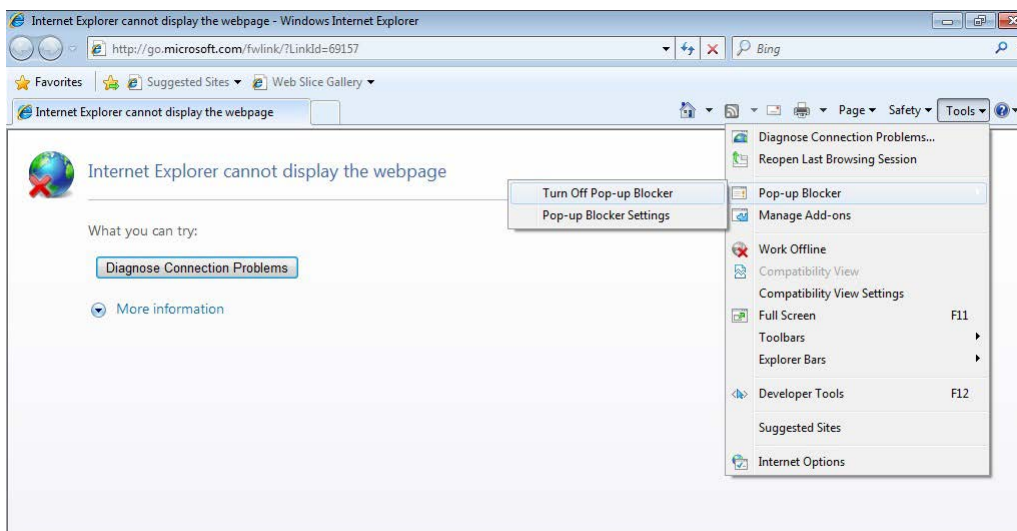
## (2) Disabling pop-ups from Internet Explorer®

Internet Explorer® is capable of unblocking its pop-up windows.

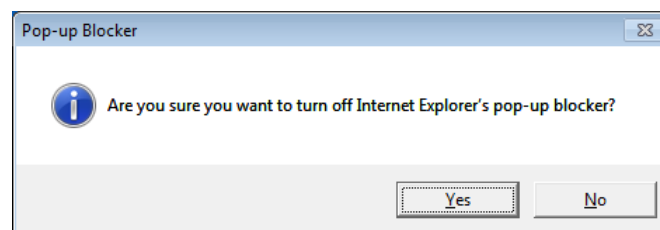
If you enable this feature and a web application you use is using pop-up windows, the application may not work properly because pop-ups from the application are blocked. To disable the pop-up blocker function, follow the procedure below.

1. Start Internet Explorer®.
2. On the menu bar or command bar, click **Tool > Pop-up Blocker > Turn Off Pop-up Blocker**.

\* If the menu bar or command bar is not displayed, right-click the title bar of the window to show the right-click menu. On the menu, click **Menu bar** or **Command bar**.



3. If the **Pop-up Blocker** window appears, click **Yes**.



## 4. PRECAUTION

### 4.6 STOP Error (0x7e) While Using File Sharing

A STOP error (0x7e) may occur while file sharing over a network is used if the file server uses Windows® 7 or Windows Server® 2008 R2. When you use file sharing, visit the following URL of Microsoft for the details and corrective actions.

Operating system intermittently crashes with a “0x0000007E” Stop error message on a computer that is running Windows 7 or Windows Server 2008 R2

<http://support.microsoft.com/kb/2528614>

### 4.7 Factory-Shipped Network Settings

#### (1) Turning off Scalable Networking Pack (SNP)

The purpose of SNP is to reduce the processor load by delegating TCP-related processing to the network adapter. SNP is made of the following three features.

- TCP Chimney Offload
- Receive Side Scaling (RSS)
- Network Direct Memory Access (NetDMA)

Unfortunately, if the system in Windows® 7 is used with SNP turned on, processing the network may become unstable, or the network performance may be reduced when you use the network in specific ways. This is why SNP is disabled in this computer. Note that NetDMA is not supported by Windows Server® 2012 R2.

#### (2) Turning off checksum offload

The purpose of checksum offload is to reduce the processor load by delegating TCP and IP checksum calculation to the network adapter.

Unfortunately, it has been reported that network communication hangs up in some cases due to checksum processing in the network adapter if the system in Windows® 7 is used with checksum offload turned on. This is why checksum offload is disabled in this computer (\*).

\* Both the OS and the network adapter have the setting for turning on and off checksum offload. But on this computer, the checksum offload is disabled in the OS setting. Note that the checksum offload on/off setting of the OS has precedence over that of the network adapter. As a result, even if checksum offload is enabled in the network adapter setting, checksum offload is actually disabled if checksum offload is disabled in the OS setting.

Do the following if you want to turn on checksum offload.

- (a) Enable checksum offload.
- (b) Disable checksum offload. (Use this procedure when you want to disable checksum offload after you enabled it.)

Each procedure is described below.

(a) Enable checksum offload.

1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start**. In the **Search programs and files** box at the lower left corner, type the following, and then press **Enter**.  
(In Windows Server® 2012 R2, right-click **Start**. Then a menu appears. On the menu, click **Run**. In the **Open** box, type the following, and then click **OK**.)  
C:\HITACHI\Settings\CSOffload\EnableOffload.reg  
(Alternatively, double-click the EnableOffload.reg file under  
C:\HITACHI\Settings\CSOffload.)
3. If you see the **User Account Control** window, click **Yes**.
4. A warning message for changing registry information is displayed. Click **Yes**.
5. A message is displayed to indicate that registry information is added successfully.  
Click **OK**.
6. Restart the system.

(b) Disable checksum offload.

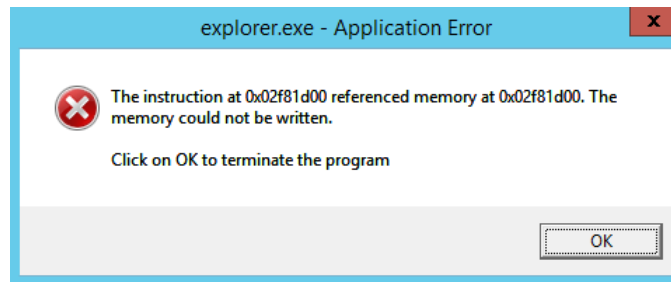
1. If you are not logged on to the computer as an administrator, log on to the computer as an administrator.
2. Click **Start**. In the **Search programs and files** box at the lower left corner, type the following, and then press **Enter**.  
(In Windows Server® 2012 R2, right-click **Start**. Then a menu appears. On the menu, click **Run**. In the **Open** box, type the following, and then click **OK**.)  
C:\HITACHI\Settings\CSOffload\DisableOffload.reg  
(Alternatively, double-click the DisableOffload.reg file under  
C:\HITACHI\Settings\CSOffload.)
3. If you see the **User Account Control** window, click **Yes**.
4. A warning message for changing registry information is displayed. Click **Yes**.
5. A message is displayed to indicate that registry information is added successfully.  
Click **OK**.
6. Restart the system.

## 4. PRECAUTION

### 4.8 Note on the Application Error Displayed at Shutdown

In Windows Server® 2012 R2, if you select **Shut down** (or **Restart**) in the right-click menu on the Start button, the following **explorer.exe - Application Error** dialog box may be displayed. When you want to shut down the server, use either one of the methods below.


- (1) Shut down from the Start screen.
- (2) Shut down from a charm.

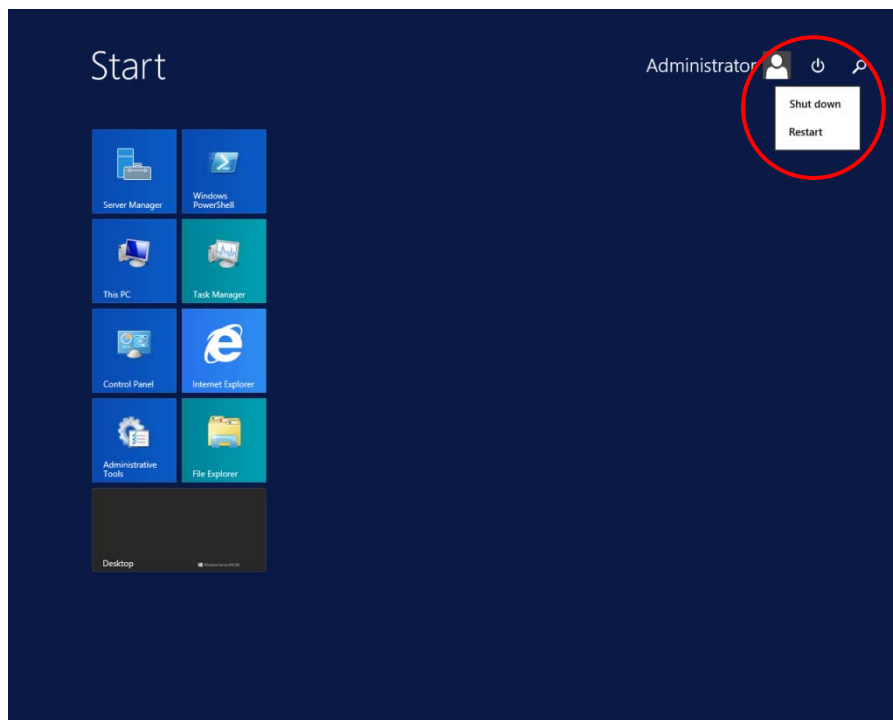


Reference URL: <http://support.microsoft.com/kb/2929203/>

Title: Application error in Explorer.exe when you shut down or restart Windows

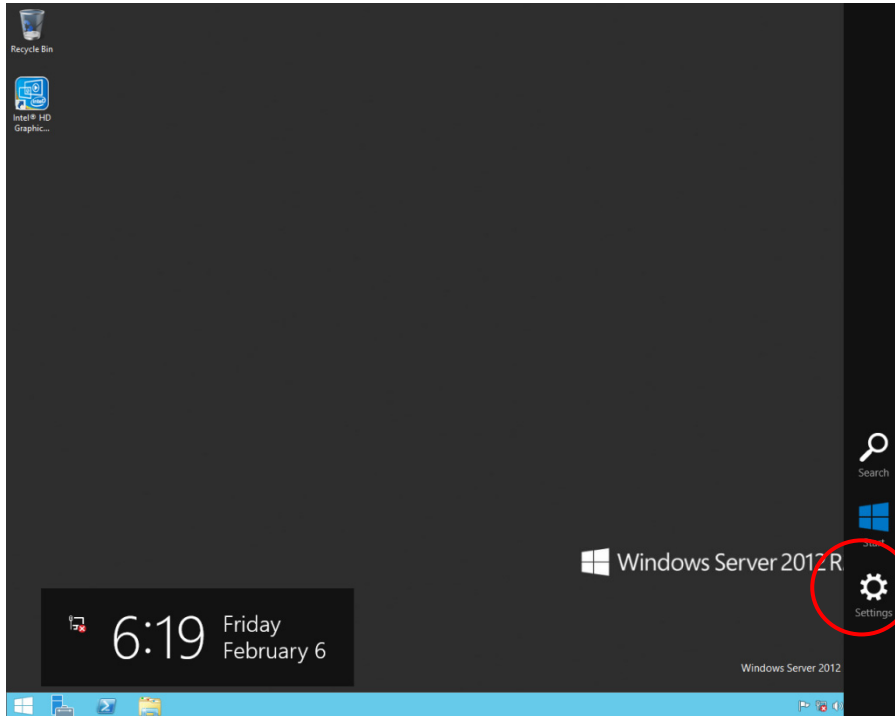
- (1) Shut down from the Start screen.

1. Click **Start**. The Start screen appears.
2. Click the  button near the upper-right corner of the Start screen, and click **Shut down** (or **Restart**).

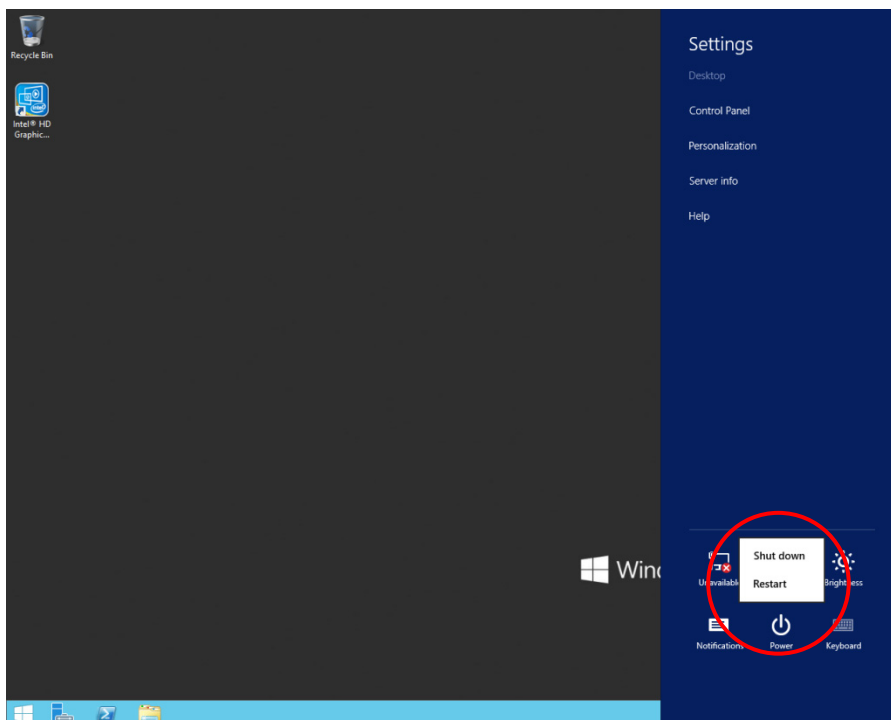


(2) Shut down from a charm.

1. Move the mouse pointer to the upper-right corner or lower-right corner of the desktop to display charms.
2. Click **Settings** to show the **Settings** charm.



3. In the **Settings** charm, click the  button. Then click **Shut down** (or **Restart**).





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## APPENDIX A SETUP PROCEDURE WHEN USING Windows XP Mode (FOR Windows® 7 ONLY)

This appendix describes the setup procedure when Windows XP Mode is used. Follow this setup procedure only if you use Windows XP Mode and after you read the following notes carefully.

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### NOTE

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- Built-in Windows® 7 models of this product come with Windows XP Mode (virtual environment with lichened Windows® XP installed).  
Windows XP Mode is a feature intended for running Windows® XP applications that cannot run in Windows® 7. This feature must be used as a last resort to maintain compatibility for applications. Use this feature only if you cannot resolve the compatibility issue of an application in any other ways.
- It is not guaranteed that all Windows® XP applications can run in Windows XP Mode.
- When using Windows XP Mode, install the main memory card that satisfies the following sizes:  
If the OS is a 32-bit version: 2 GB or more  
If the OS is a 64-bit version: 3 GB or more
- Windows® 7 comes with the Multilingual User Interface (MUI) for the host OS, but Windows XP Mode can only provide an English version of Windows® XP.

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< If Windows XP Mode is not used >

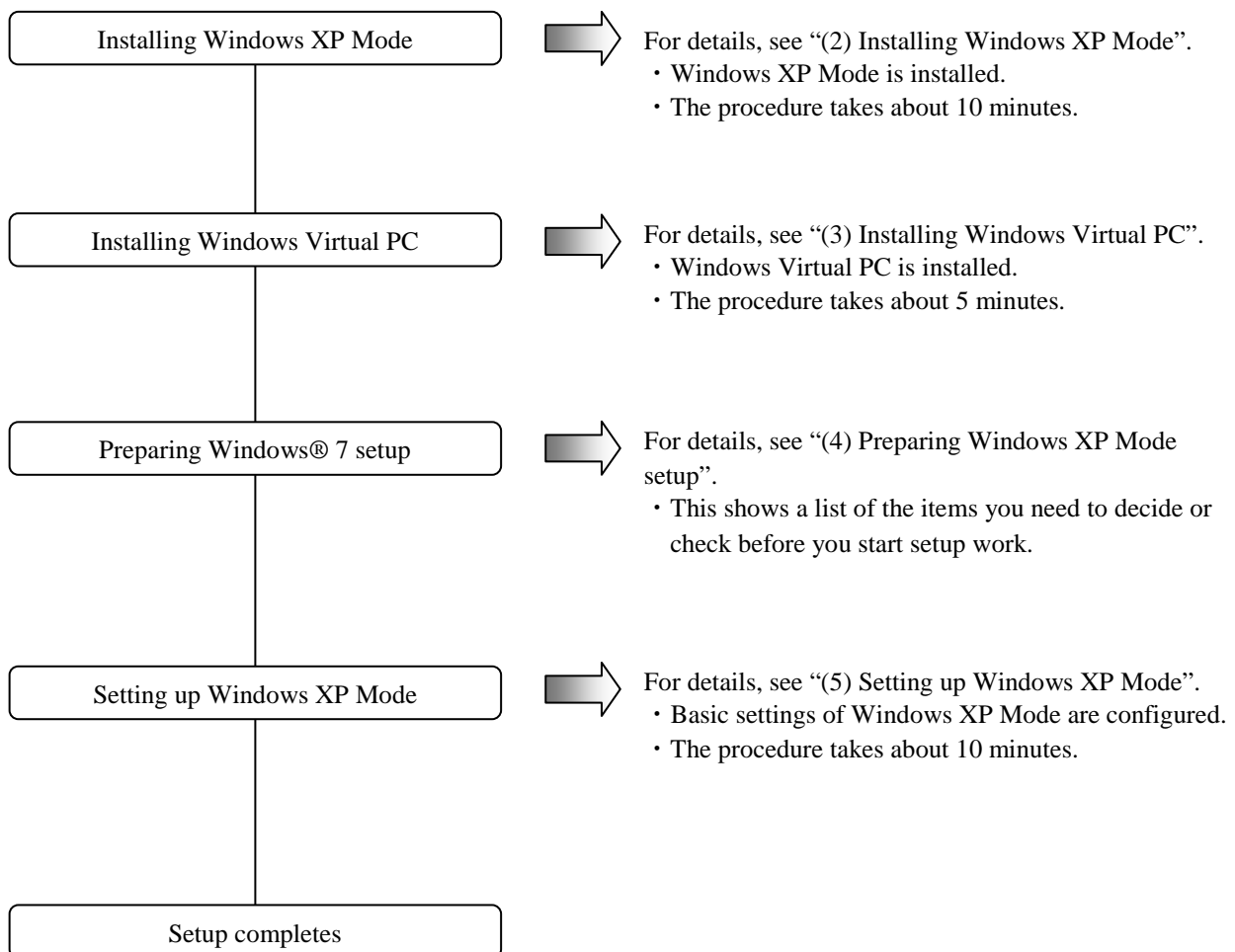
The files used for setting up Windows XP Mode include a virtual hard disk file for the guest OS and therefore occupy about 700 MB of disk space. If Windows XP Mode is not used, we recommend that you follow the procedure below to delete the directory storing those files.

1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.
2. Start the command prompt.
  - Click **Start** and point to **All Programs**.
  - Click **Accessories**.
  - Right-click **Command Prompt** to show a menu. On the menu, click **Run as administrator**.  
(If the administrator account you used for log on is a built-in administrator account, simply click **Command Prompt**.)
  - If you see the **User Account Control** window, click **Yes**.
3. At the command prompt, type the following and press **Enter**.  
`rmdir /s C:\HITACHI\XP_Mode`
4. A confirmation message for the deleting directory is output. Type **y** and then press **Enter**.

(1) Overview of the setup procedure

From this on, the setup procedure of Windows XP Mode (guest OS: Microsoft® Windows® XP Professional) is explained.

The following is a rough flow chart of the setup.



For information about how to delete Windows XP Mode and Windows Virtual PC from the computer, see “(6) Uninstalling Windows XP Mode and Windows Virtual PC”.

---

**NOTE**

- Windows XP Mode requires Windows Virtual PC to be installed in order to run Microsoft® Windows® XP Professional SP3 on the virtual machine.
  - End users are responsible for installing Windows XP Mode and Windows Virtual PC. Alternatively, the personnel in charge of constructing the system can do the installation work in behalf of the end users.
-

(2) Installing Windows XP Mode

Follow the procedure below to install Windows XP Mode:

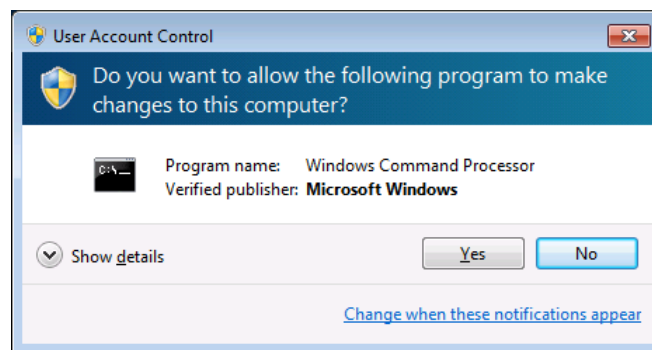
1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.

2. Start the command prompt to start an installation program.

- Click **Start** and point to **All Programs**.
- Click **Accessories**.
- Right-click **Command Prompt** to show a menu. On the menu, click **Run as administrator**.

(If the administrator account you used for log on is a built-in administrator account, simply click **Command Prompt**.)

- If you see the **User Account Control** window, click **Yes**.



3. At the command prompt, type the following and press **Enter**.

```
cd C:\HITACHI\XP_Mode
```

4. And then type the following and press **Enter**. Installation starts.

```
WXPMMode_install.bat
```

5. When the installation finishes, the following message is displayed to indicate the installation is complete.

```
Installation completed.
```

This completes the installation procedure. Close the command prompt.

### (3) Installing Windows Virtual PC

Follow the procedure below to install Windows Virtual PC.

1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.

2. Start a setup program.

- Click **Start**. In the **Search programs and files** box at the lower left corner on the Start menu, type the following, and then press **Enter**.

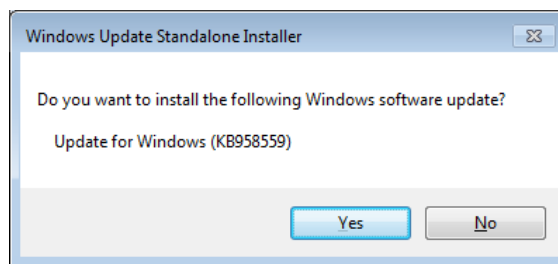
C:\HITACHI\XP\_Mode\Virtual-PC

- The Windows Explorer window is displayed. Double-click a setup program under the directory. Note that a setup program is different depending on whether the OS is a 32-bit or 64-bit version.

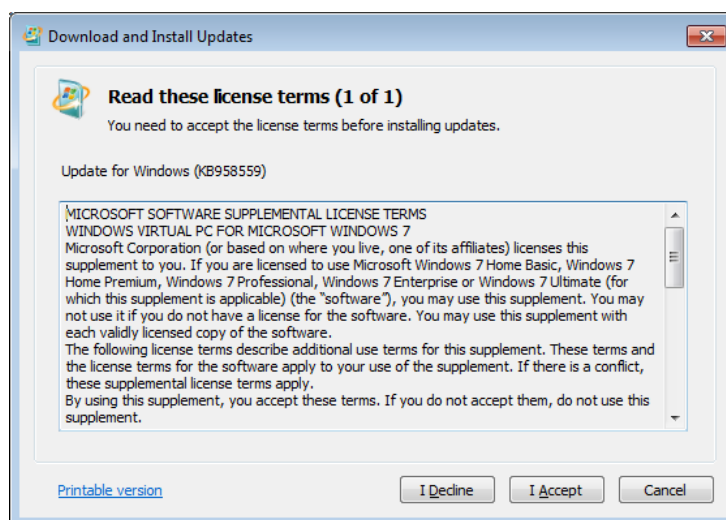
If the OS is a 32-bit version: Windows6.1-KB958559-x86.msu

If the OS is a 64-bit version: Windows6.1-KB958559-x64.msu

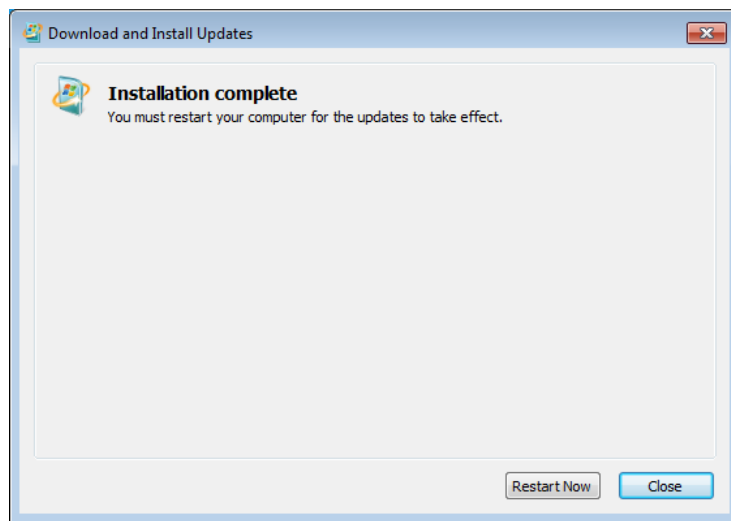
3. The **Windows Update Standalone Installer** window opens. Click **Yes**.



4. The **Download and Install Updates** window opens. Read the license terms carefully, and then click **I Accept**. Installation starts.



5. After the installation is complete, a window is displayed to prompt you to restart the system. Click **Restart Now** to restart. Restart begins.



(4) Preparing Windows XP Mode setup

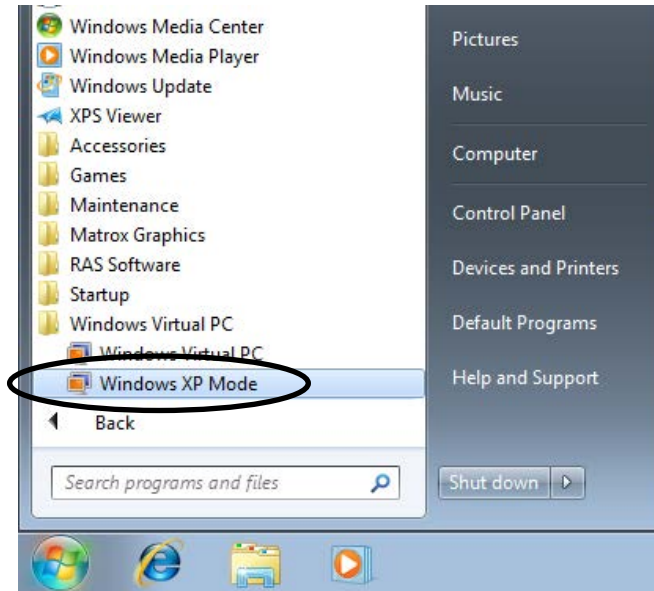
The following items are necessary for the setup work for Windows XP Mode. Before you start the setup work, decide or check those items beforehand.

Item	Description
Password for XPMUser	A password for XPMUser (administrator account of the computer) You can change the setting after the setup.

(5) Setting up Windows XP Mode

Follow the procedure below to set up Windows XP Mode.

1. Click **Start** and point to **All Programs**.
2. Click **Windows Virtual PC > Windows XP Mode**.

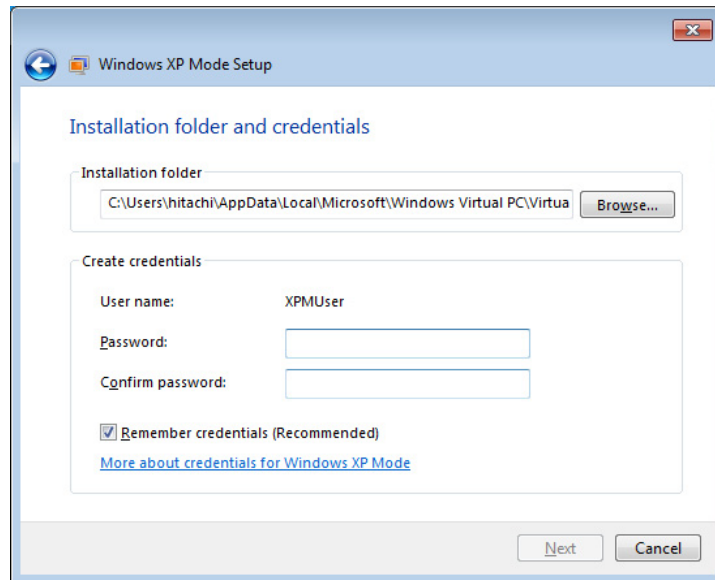


3. The Windows XP Mode License Agreement is displayed.

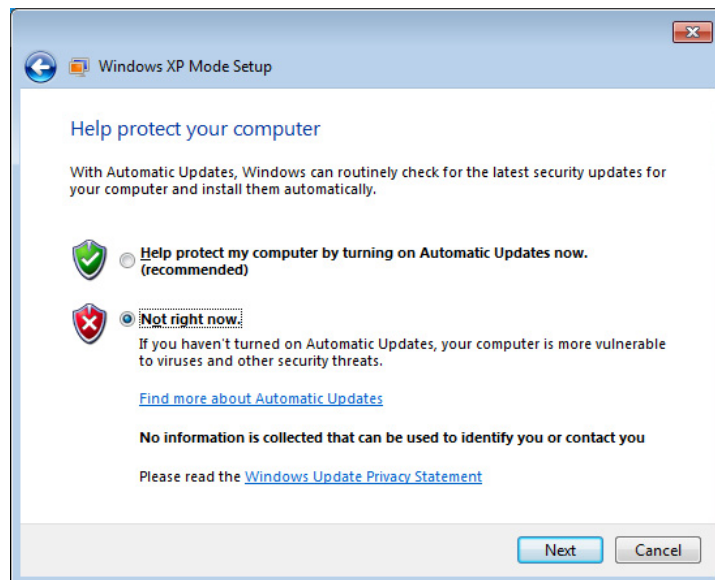
- Read the license agreement carefully and select the **I accept the license terms** check box. Click **Next**.



4. The **Installation folder and credentials** window opens.
  - In the **Password** and **Confirm password** boxes, type a password for XPMUser.
  - Click **Next**.



5. A window for configuring Automatic Updates is displayed.
  - Select **Not right now** and click **Next**.





6. A window is displayed to indicate setup will share the drives.

- Click **Start Setup**.



7. A window is displayed to show the Windows XP Mode setup is progressing.



When the setup is complete, the virtual machine is started and you are automatically logged on as an XPMUser.

The following event may be recorded in the event log after the first logon. The operation of the system will not be affected.

Source: Service Control Manager

Event ID: 7005

Type: Error

---

**NOTE**

---

When Windows XP Mode is started for the first time after the setup, you may find the time zone of Windows XP Mode is not the same as the time zone of Windows® 7. If this happens, you need to manually change the time zone of Windows XP Mode so that they are the same.

---

(6) Uninstalling Windows XP Mode and Windows Virtual PC

When you delete Windows XP Mode and Windows Virtual PC from the computer, follow the procedure described in this section to uninstall those two.

---

**NOTE**

---

If any application programs are running, exit all application programs before you start uninstallation.

---

(a) Uninstalling Windows XP Mode

Follow the procedure below to uninstall Windows XP Mode.

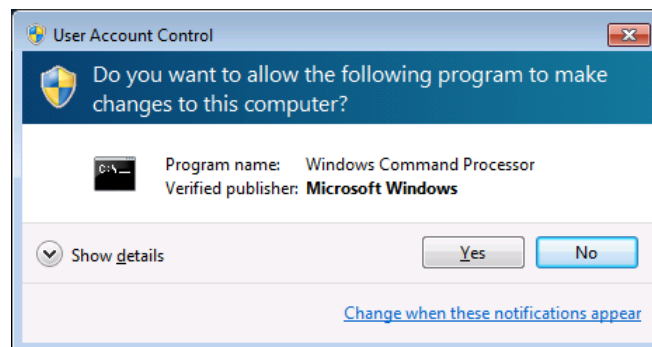
1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.

2. Start Command Prompt to launch an uninstallation program.

- Click **Start** and point to **All Programs**.
- Click **Accessories**.
- Right-click **Command Prompt** to show a menu. On the menu, click **Run as administrator**.

(If the administrator account you used for log on is a built-in administrator account, simply click **Command Prompt**.)

- If you see the **User Account Control** window, click **Yes**.



3. At the command prompt, type the following and press **Enter**.

```
cd "C:\HITACHI\XP_Mode\Windows XP Mode"
```

4. And then type the following and press **Enter**.

```
WXPMo_de_uninst.bat
```

5. At the beginning of the uninstallation, the “Do you want to uninstall Windows XP Mode? (y/n)” message is displayed.

If you want to uninstall, press **y** and press **Enter**.

If you do not want to uninstall, press **n**, and press **Enter**. The unsinstallaion will be aborted.

6. When the uninstallation finishes, the following message is displayed to indicate the uninstallation is complete:

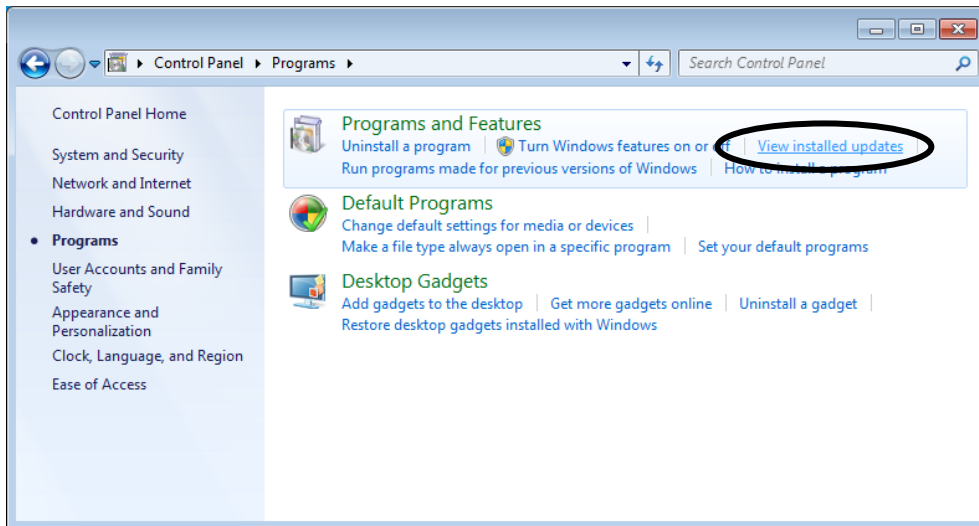
Uninstallation completed.

This completes the uninstallation procedure for Windows XP Mode. Close the command prompt, and then uninstall Windows Virtual PC.

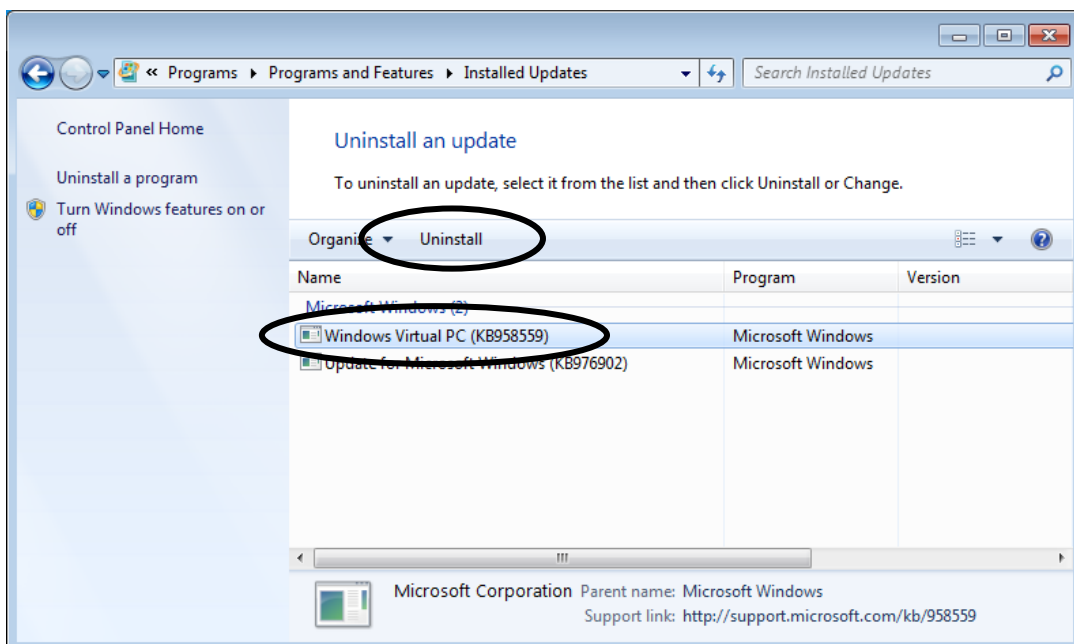
(b) Uninstalling Windows Virtual PC

Follow the procedure below to uninstall Windows Virtual PC.

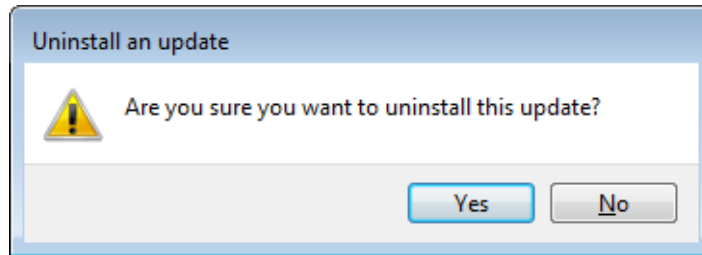
1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.
2. Click **Start** and then click **Control Panel**.
3. Click **Programs**.
4. Under **Programs and Features**, click **View installed updates**.



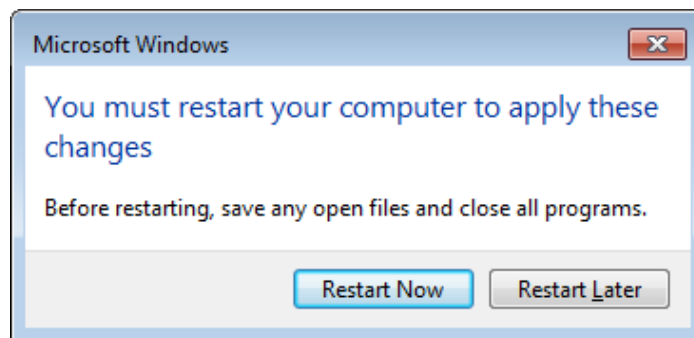
5. The **Installed Updates** window opens. From the list, select **Windows Virtual PC (KB958559)** and then click **Uninstall**.



6. The **Uninstall an update** window is displayed. Click **Yes**.



7. After the installation is complete, a window is displayed to prompt you to restart the system. Click **Restart Now** to restart.

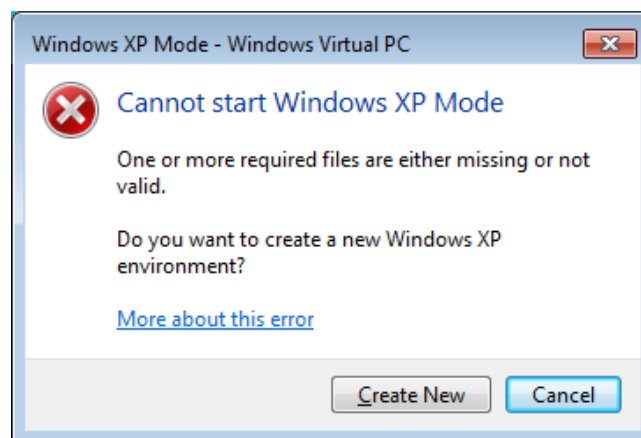


This completes the uninstallation procedure for Windows Virtual PC.

---

**NOTE**

When you want to reinstall Windows XP Mode, follow “(2) Installing Windows XP Mode” and “(5) Setting up Windows XP Mode” in APPENDIX A. You may see the following dialog box during Windows XP Mode setup. In this case, click **Create New** to continue the setup process.



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## APPENDIX B SETUP PROCEDURE WHEN BUILDING A VIRTUAL ENVIRONMENT (FOR Windows Server® 2008 R2)

Windows Server® 2008 R2 provides one free guest OS license, and this product offers a virtual environment on which Windows Server® 2008 R2 is installed as the guest OS.

This appendix describes the setup procedures of a virtual environment. Follow this setup procedure only if you build a virtual environment and after you read the following notes carefully.

---

### NOTE

---

When you use a guest OS (Windows Server® 2008 R2 Standard) installed on a virtual machine, the guest OS must be activated. Details about the activation process of the guest OS and the privacy policy of Microsoft are displayed when the virtual environment is started for the first time.

---

<If you are not using a virtual environment>

The files used for setting up a virtual environment include a virtual hard disk file for the guest OS and therefore occupy about 3GB of disk space. If a virtual environment is not used, we recommend that you follow the procedures below to delete the directory storing these files.

1. If you are not logged on to the computer as an administrator account, log on to the computer as an administrator account.
2. Start a command prompt.
  - Click **Start**, and then point to **All Program**.
  - Click **Accessories**.
  - Right-click **Command Prompt** to show a menu. On the menu, click **Run as administrator**.  
(If the administrator account you used for logon is a built-in administrator account, simply click **Command Prompt**.)
  - If you see the **User Account Control** window, click **Yes**.
3. At the command prompt, type the following, and then press **Enter**.

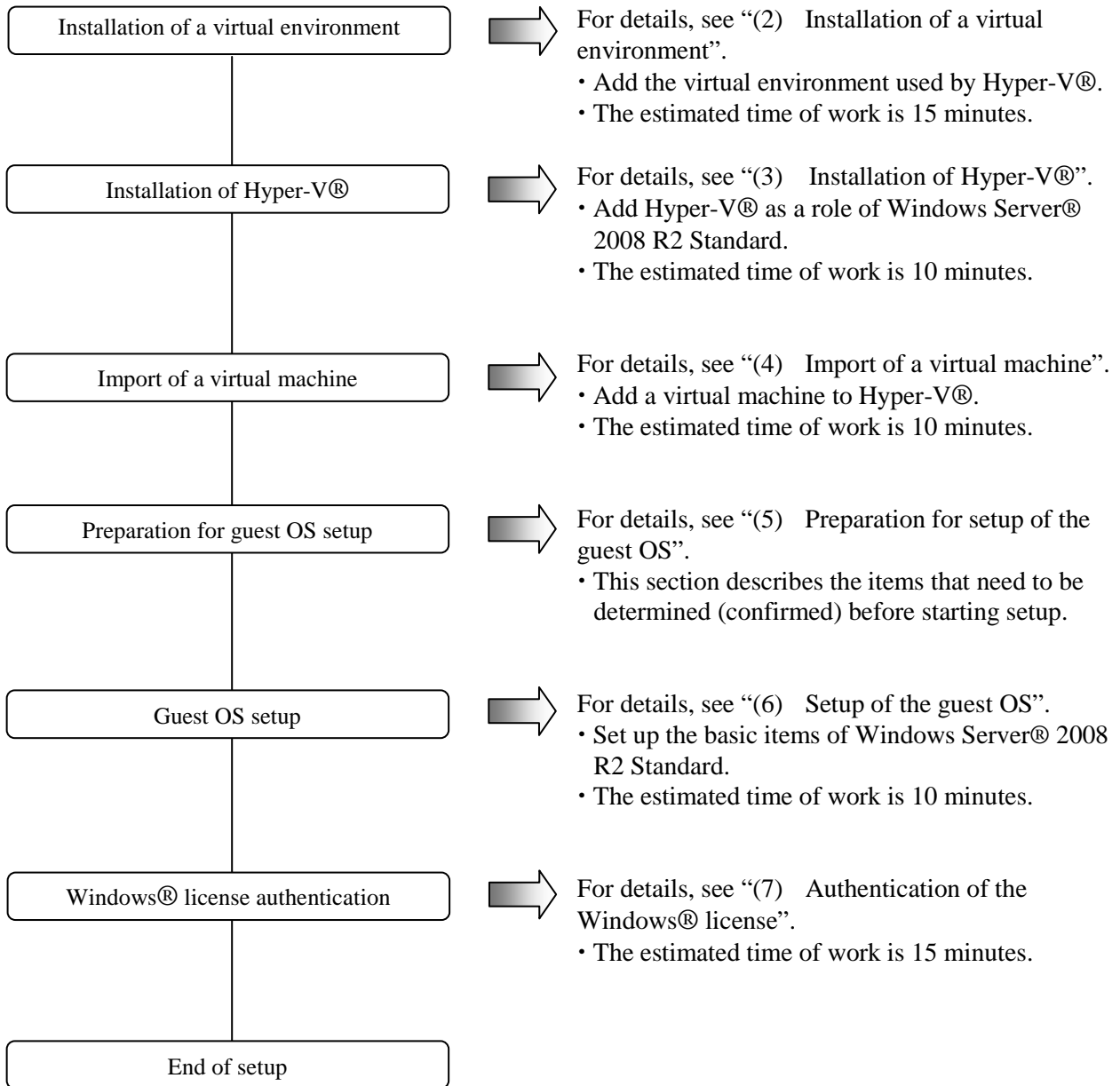
```
rmdir /s C:\HITACHI\Hyper-V_Image
```
4. A confirmation message for the deleting directory is output. Type **y** and then press **Enter**.



(1) Overview of the setup procedure

This section describes the procedure for setting up a pre-installed virtual machine (guest OS: Microsoft® Windows Server® 2008 R2 Standard ).

The following flow outlines the setup.



## (2) Installation of a virtual environment

Perform the following procedure to install a virtual environment.

---

**NOTE**

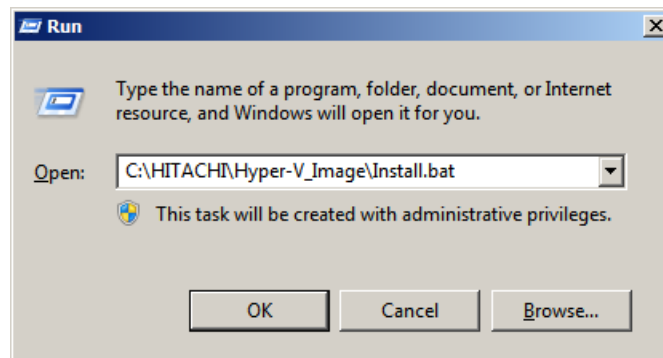
---

Install the virtual environment in “C:\Virtual Machine\WS08R2”.

If you have already used Hyper-V® to create and use the files under “C:\Virtual Machine\WS08R2” as a virtual machine, this installation procedure overwrites those files. Make a backup as necessary.

---

1. If you have not logged on with the administrator account of the computer, log on with the administrator account.
2. Start the setup program.
  - Click **Start** button and then click **Run**.
  - In the **Open** box, enter the following name. Click **OK** button.  
C:\HITACHI\Hyper-V\_Image\Install.bat

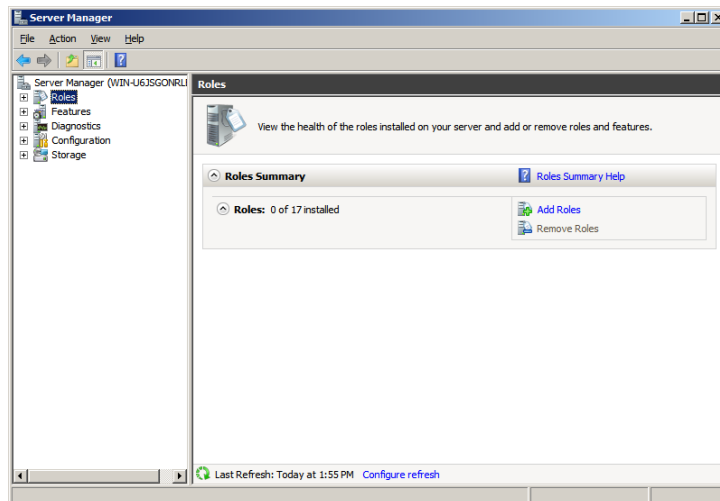


3. When the installation confirmation dialog appears, click OK button.
4. When installation is completed, a completion message appears. Press any key.  
The window closes and installation is completed.

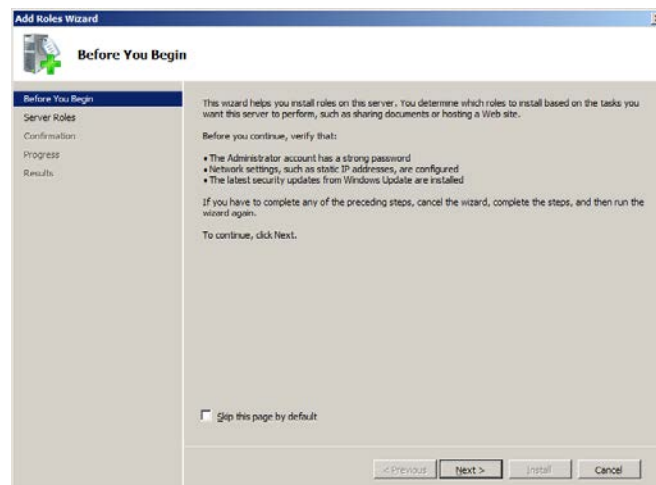
(3) Installation of Hyper-V®

Perform the following procedure to install Hyper-V®.

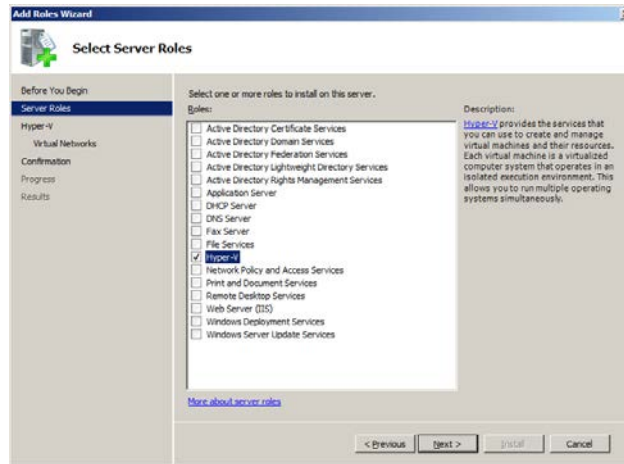
1. Click **Start** button. Click **Administrative Tools** and then **Server Manager**.
2. Click **Roles**. In the displayed pane, click **Add Roles**.



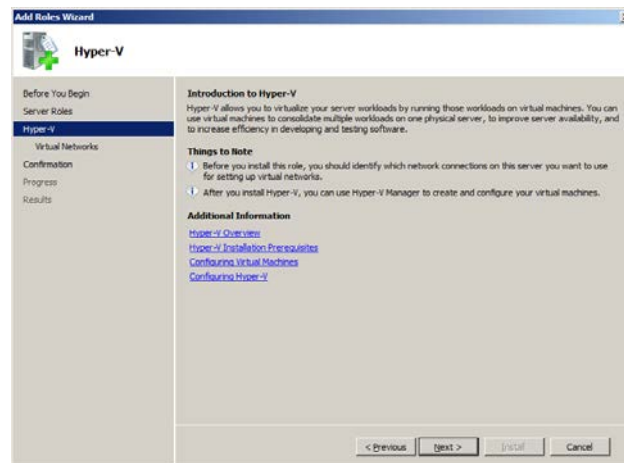
3. The **Add Roles Wizard** opens and the **Before You Begin** window appears. Click **Next** button.



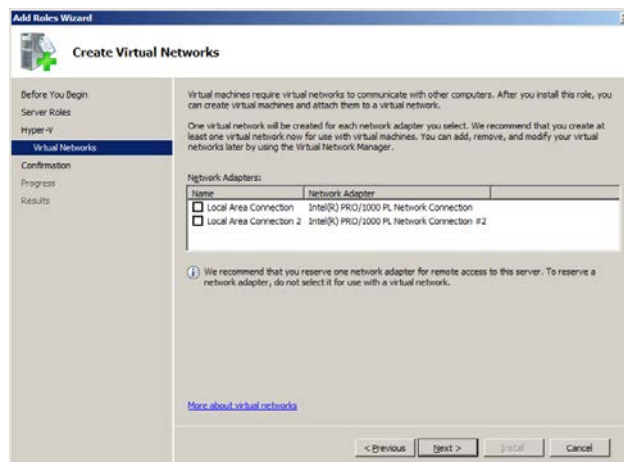
4. The **Select Server Roles** window appears. Select the **Hyper-V** check box and click **Next** button.



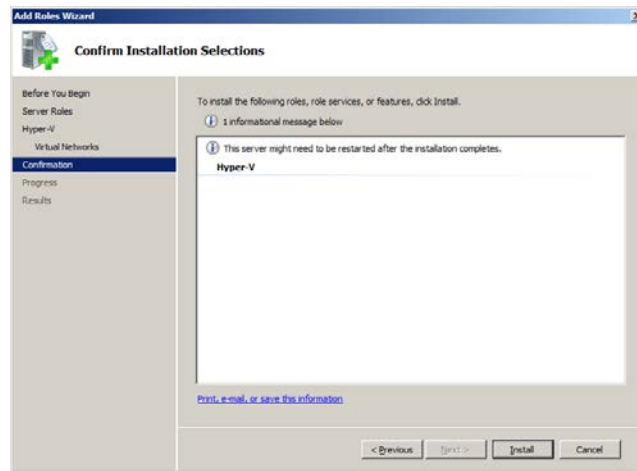
5. When the **Hyper-V** window appears, click **Next** button.



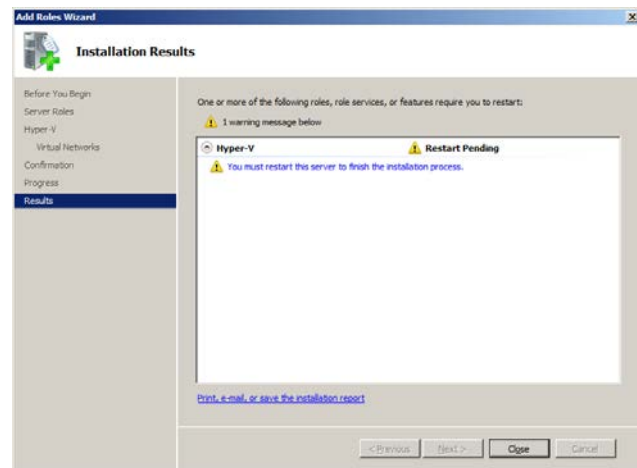
6. The **Create Virtual Networks** window appears. If you want the virtual machine to communicate with other computers, select the check box for the network adapter to be used for the virtual network. Then click **Next** button.



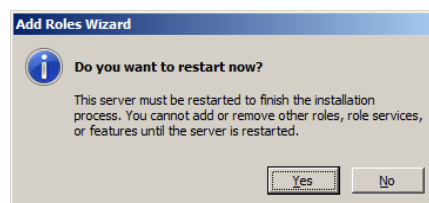
7. When the **Confirm Installation Selections** window appears, click **Install** button.  
(Hyper-V® begins to be installed.)



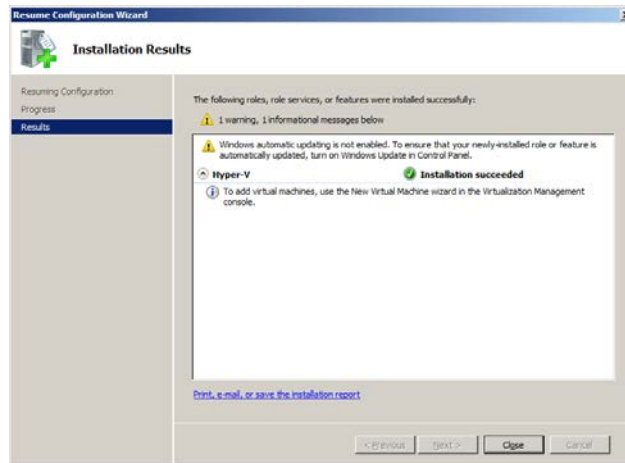
8. When the **Installation Results** window appears, click **Close** button.



9. A message appears prompting you to restart the computer. Click **Yes** button and restart the computer. (Restart is performed several times until installation is completed.)



10. After restart, the **Installation Results** window appears. Click **Close** button.



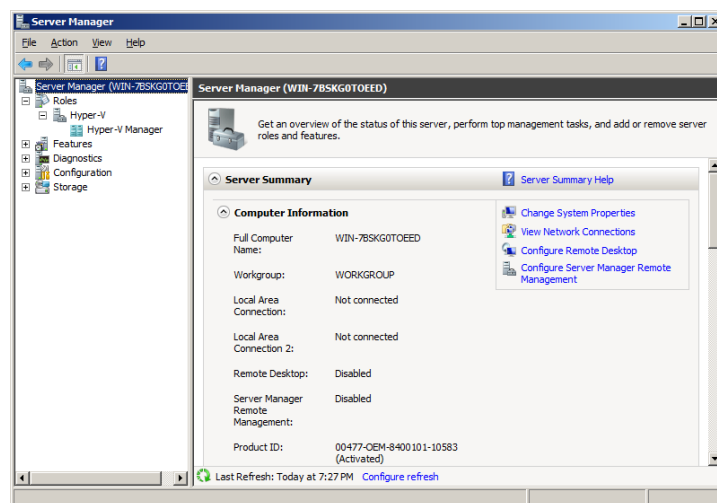
---

#### NOTE

It may take a couple of minutes for the **Installation Results** window to appear. Just wait without using input devices such as a keyboard and a mouse.

---

11. When installation is completed, **Hyper-V Manager** is added under **Server Manager**.



12. Click [×] in the upper right corner of the **Server Manager** window to close the window.

(4) Import of a virtual machine

Perform the following procedure to import a virtual machine.

---

**NOTE**

---

When you discard an existing virtual environment and configure a new virtual environment, delete the existing virtual machine from Hyper-V Manager and then import the new virtual machine.

When you delete a virtual machine, make sure you delete the virtual hard disk file.

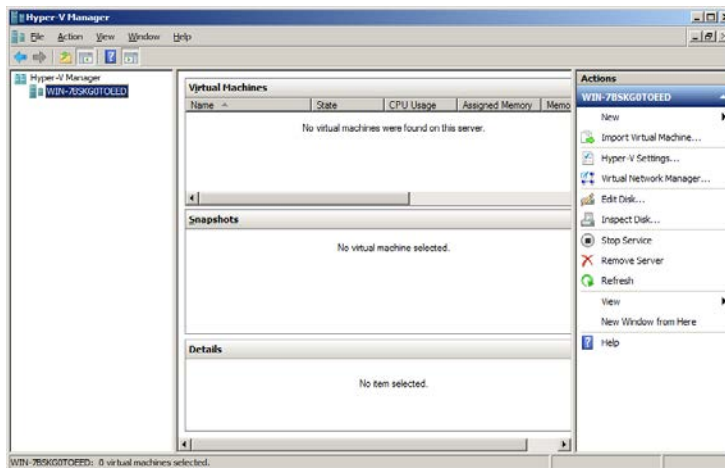
The virtual hard disk file is the following by default:

“C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\HITACHI\_VM\_WS08R2.vhd”

---

1. Click **Start** button. Click **Administrative Tools** and then **Hyper-V Manager**.

2. In the **Actions** pane, click **Import Virtual Machine**.

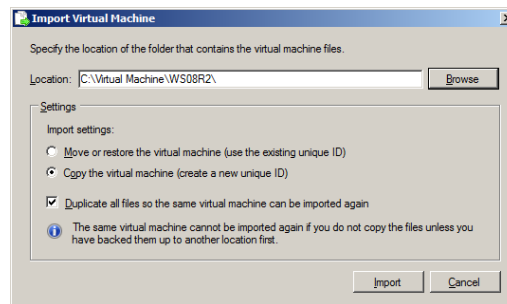


3. The **Import Virtual Machine** dialog appears. In the **Location** box and the **Settings** section, change the settings as follows. Then click **Import** button.

Location: C:\Virtual Machine\WS08R2\

Settings: Click the **Copy the virtual machine (create a new unique ID)** radio button.

Select the **Duplicate all files so the same virtual machine can be imported again** check box.




---

## NOTE

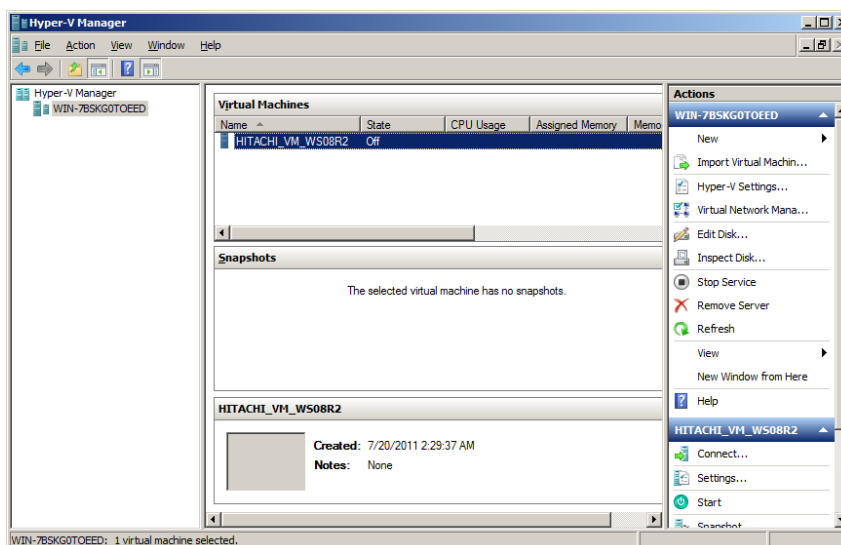
---

If you import the virtual machine without selecting the **Duplicate all files so the same virtual machine can be imported again** check box, the files in the folder specified in the **Location** box are directly used.

If the files in “C:\Virtual Machine\WS08R2” are not backed up, the virtual machine cannot be restored to the initial status. We recommend that you select the **Duplicate all files so the same virtual machine can be imported again** check box when you import the virtual machine.

---

4. When import is completed, virtual machine HITACHI\_VM\_WS08R2 is added under **Hyper-V Manager**.





---

NOTE

---

All the settings of the imported virtual machine are default settings. Change the settings of the virtual machine to suit your environment.

---

5. Click [×] in the upper right corner of the **Hyper-V Manager** window to close the window.

## (5) Preparation for setup of the guest OS

The following table describes the items that are required during setup of the guest OS.

Determine (or confirm) the items before you start setup.

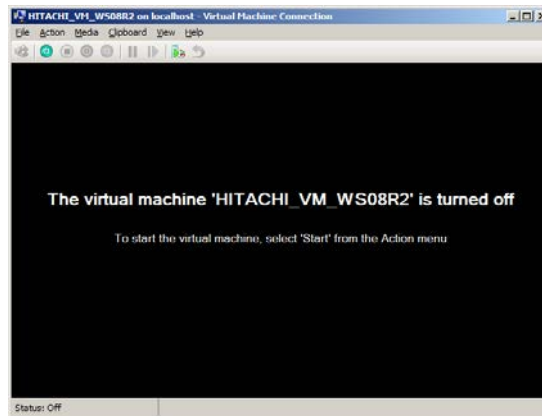
Item	Description
License certificate	Make sure that the license certificate is attached to the body of the HF-W computer. Check the product key (Virtual Key) written in the license certificate.
Administrator password	Administrator password You can change the password after you set it.

(6) Setup of the guest OS

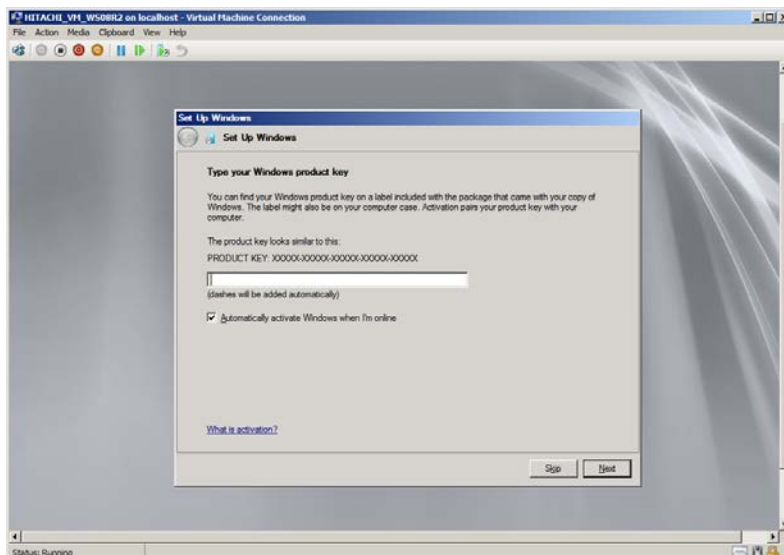
Set up Microsoft® Windows Server® 2008 R2 Standard.

Perform the following procedure to start the virtual machine and set up the basic environment.

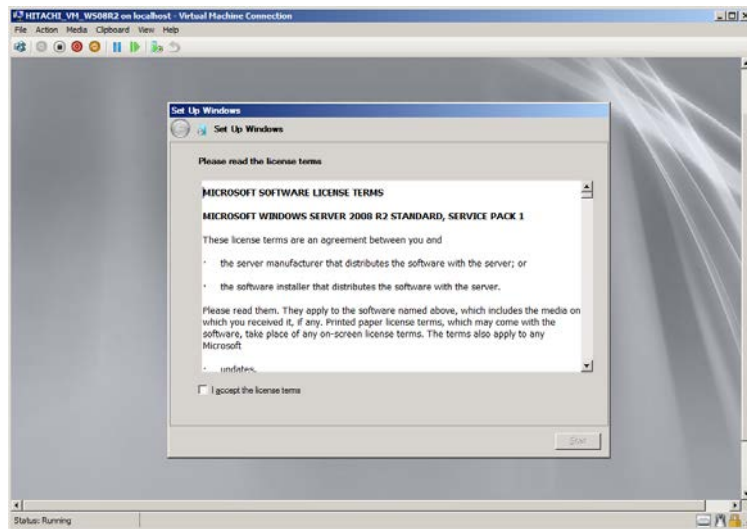
1. Click **Start** button. Click **Administrative Tools** and then **Hyper-V Manager**.
2. Right-click virtual machine HITACHI\_VM\_WS08R2 to display a pop-up menu. In the pop-up menu, click **Connect**.
3. The **Virtual Machine Connection** window appears. In the **Action** menu, click **Start**. Setup of Windows Server® 2008 R2 Standard automatically starts.



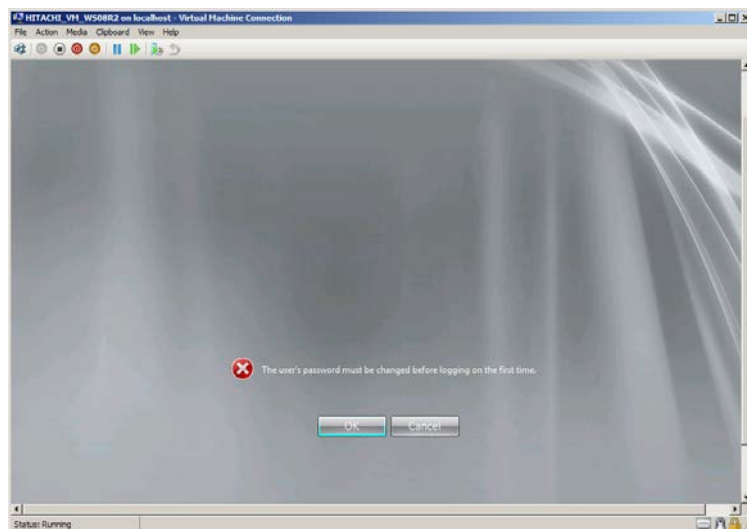
4. The product key entry window appears. Enter the product key written in your license certificate and click **Next** button.



5. The license agreement window appears. Read the terms carefully, select the **I accept the license terms** check box, and click **Start** button.



6. When a message appears asking you to change the administrator password, click **OK** button.



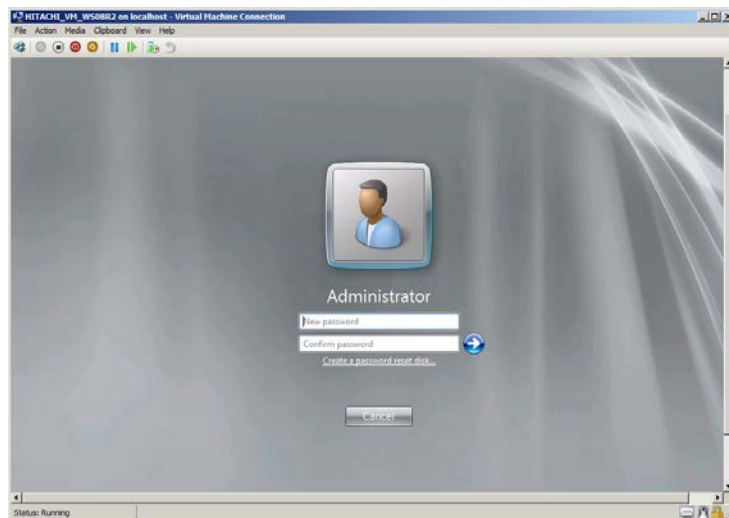
7. The password entry window appears. Enter the password in the **New Password** and **Confirm password** fields. Press the **Enter** key or click [→].

---

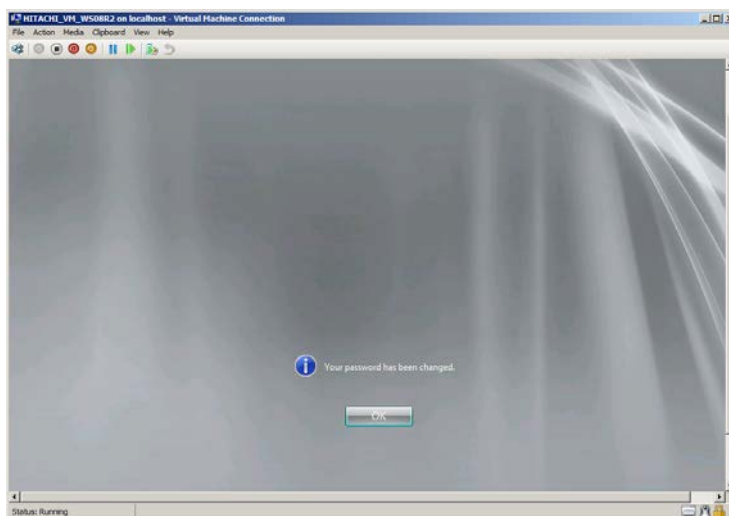
**NOTE**

When you set an administrator password, the following rules must be satisfied.

- The password must consist of at least six characters.
  - At least three out of the following four types of characters must be used: ASCII uppercase alphabetic characters, ASCII lowercase alphabetic characters, ASCII numeric characters, and ASCII symbol characters.
  - Any three or more consecutive characters used in the user account name or user name must not be used.
- 



8. The password change completion window appears. Click **OK** button. After that, you are automatically logged on.



9. After logon, the initial configuration task window appears. Click [×] in the upper right corner to close the window and proceed to the next page to continue setup.

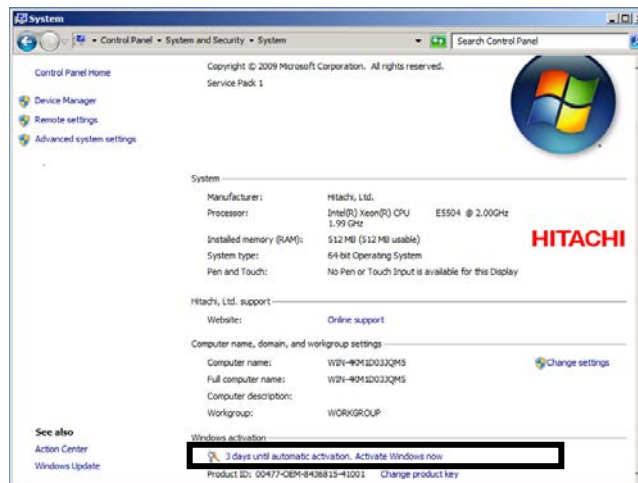
If you do not want to display this window at next startup, select the **Do not show this window at logon** check box and click [×] in the upper right corner to close the window.

(7) Authentication of Windows® license

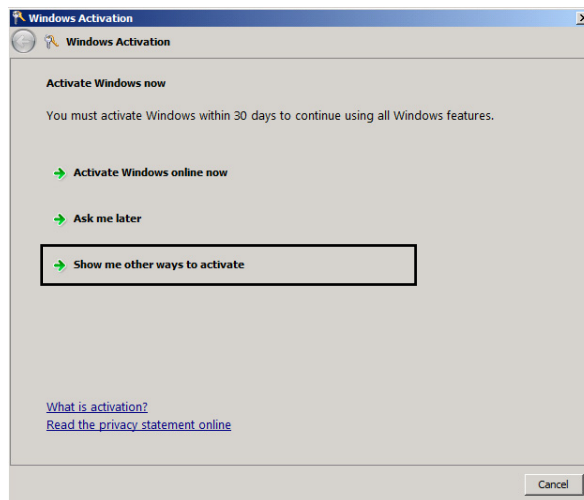
The guest OS (Windows Server® 2008 R2 Standard) installed on the virtual machine has a technology that prevents illegal copy called product activation. Before the user can use Windows Server® 2008 R2 Standard, the user must obtain license authentication from Microsoft. License authentication can be provided over the phone or the Internet. Perform either procedure.

(a) License authentication over the phone

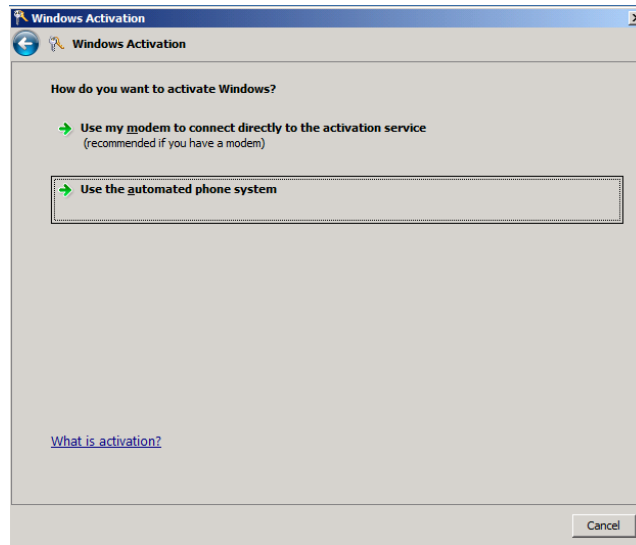
1. If you have not logged on with the administrator account of the computer, log on with the administrator account.
2. Click **Start** and then **Control Panel**.
3. Click **System and Security** and then **System**.
4. In the **Windows activation** section, click **3 days until automatic activation. Activate Windows now.** (The underlined statement changes depending on the status of license.)



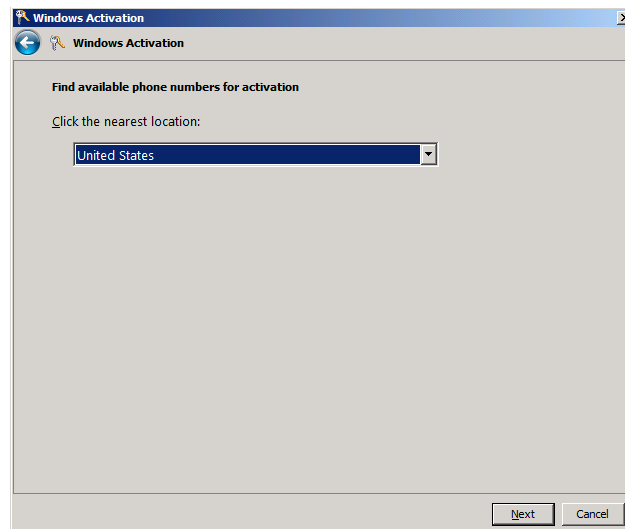
5. Click **Show me other ways to activate.**



6. Click **Use the automated phone system.**

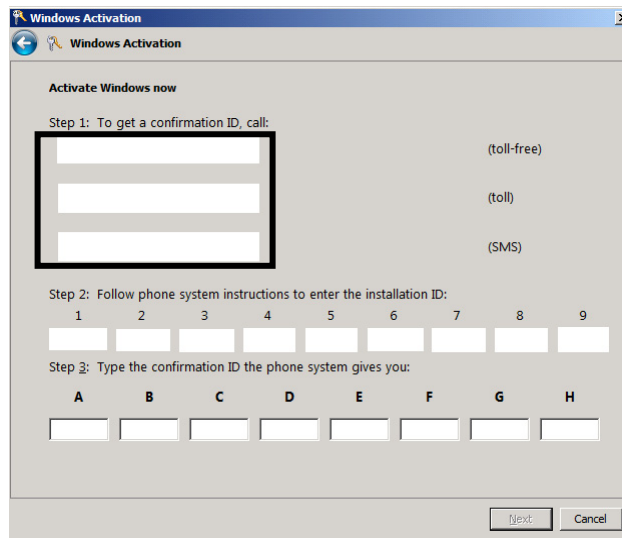


7. In the **Click the nearest location** pull-down menu, select the nearest location. Click **Next** button.



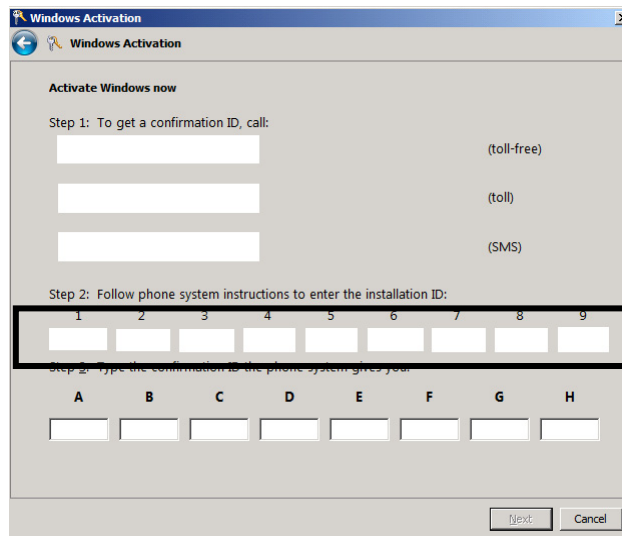


8. **Step 1** lists the phone numbers for the license authentication desk. Phone one of the numbers.

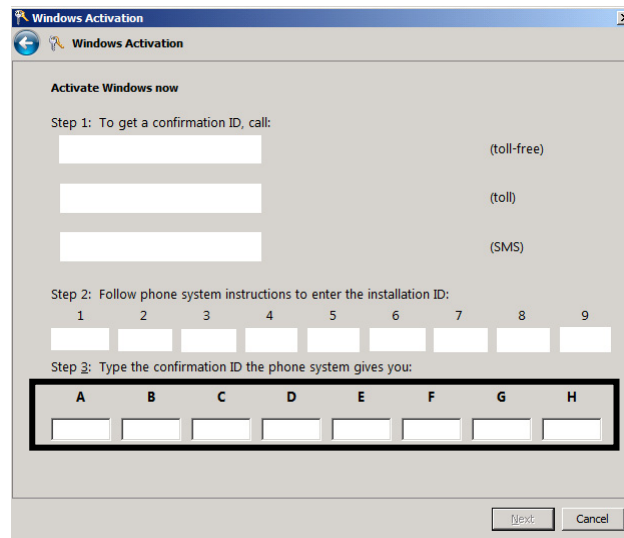


9. Follow the voice instructions and enter the installation ID displayed in **Step 2** on the dial pad of your phone.

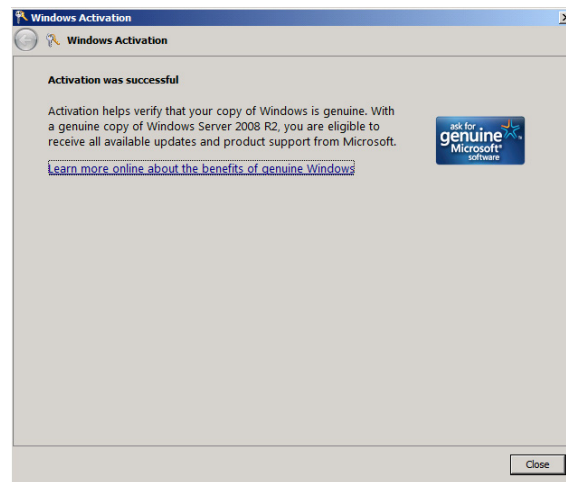
When the authentication is completed, you hear the confirmation ID on the phone. Write down the number.



10. Enter the confirmation ID you wrote down in the previous step (9.) to **Step 3**. Then click **Next**.



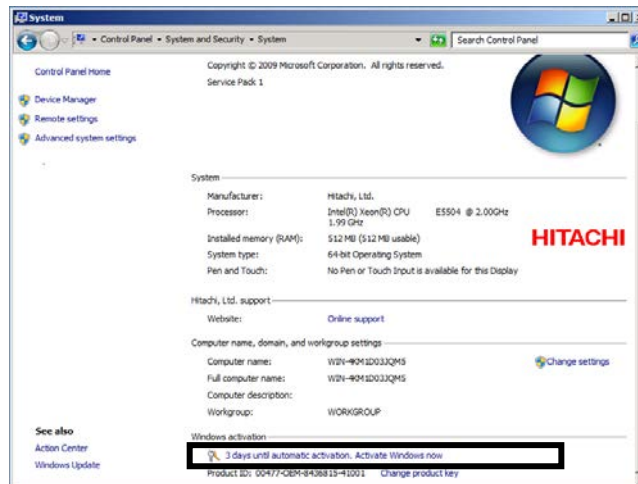
11. When a message appears telling you license authentication is successful, click **Close** button to close the window.



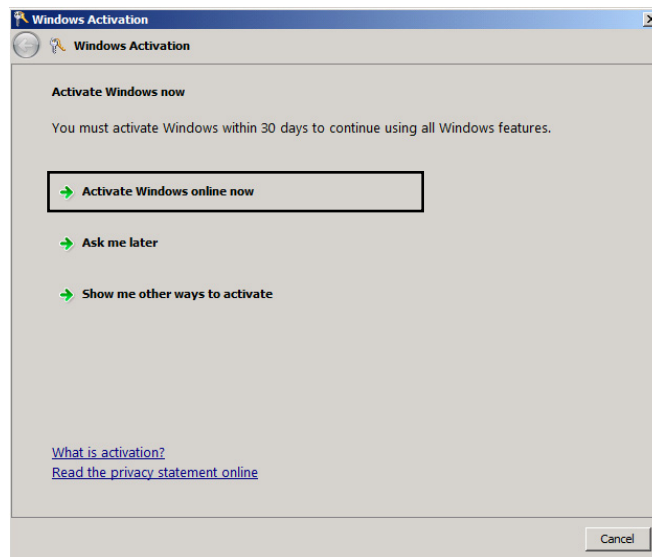
This completes license authentication over the phone.

(b) License authentication over the Internet

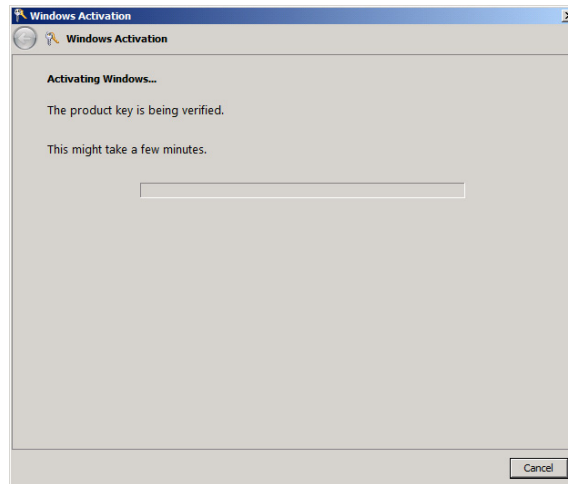
1. If you have not logged on with the administrator account of the computer, log on with the administrator account.
2. Click Start and then Control Panel.
3. Click System and Security and then System.
4. In the **Windows activation** section, click **3 days until automatic activation. Activate Windows now.** (The underlined statement changes depending on the status of license.)



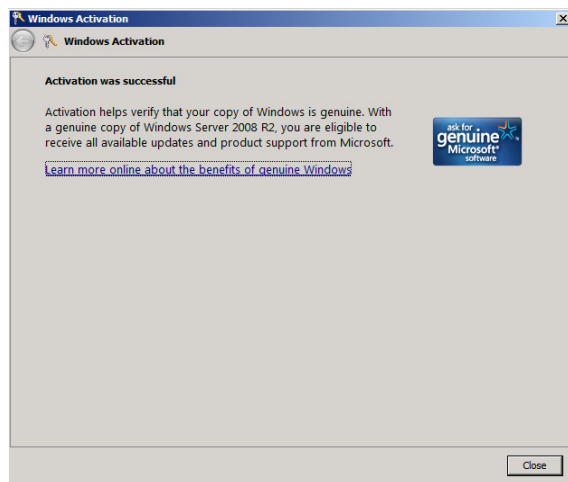
5. Click **Activate Windows online now.**



6. A message, “The product key is being verified.” appears. License authentication begins.



7. When a message appears telling you license authentication is successful, click **Close** button to close the window.



This completes license authentication over the Internet.

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## APPENDIX C SETUP PROCEDURE WHEN BUILDING A VIRTUAL ENVIRONMENT (FOR Windows Server® 2012 R2)

Windows Server® 2012 R2 provides one free guest OS license, and this product offers a virtual environment on which Windows Server® 2012 R2 is installed as the guest OS.

This appendix describes the setup procedures of a virtual environment. Follow this setup procedure only if you build a virtual environment and after you read the following notes carefully.

---

### NOTE

---

When you use a guest OS (Windows Server® 2012 R2 Standard) installed on a virtual machine, the guest OS must be activated. Details about the activation process of the guest OS and the privacy policy of Microsoft are displayed when the virtual environment is started for the first time.

---

<If you are not using a virtual environment>

The files used for setting up a virtual environment include a virtual hard disk file for the guest OS and therefore occupy about 4GB of disk space. If a virtual environment is not used, we recommend that you follow the procedures below to delete the directory storing these files.

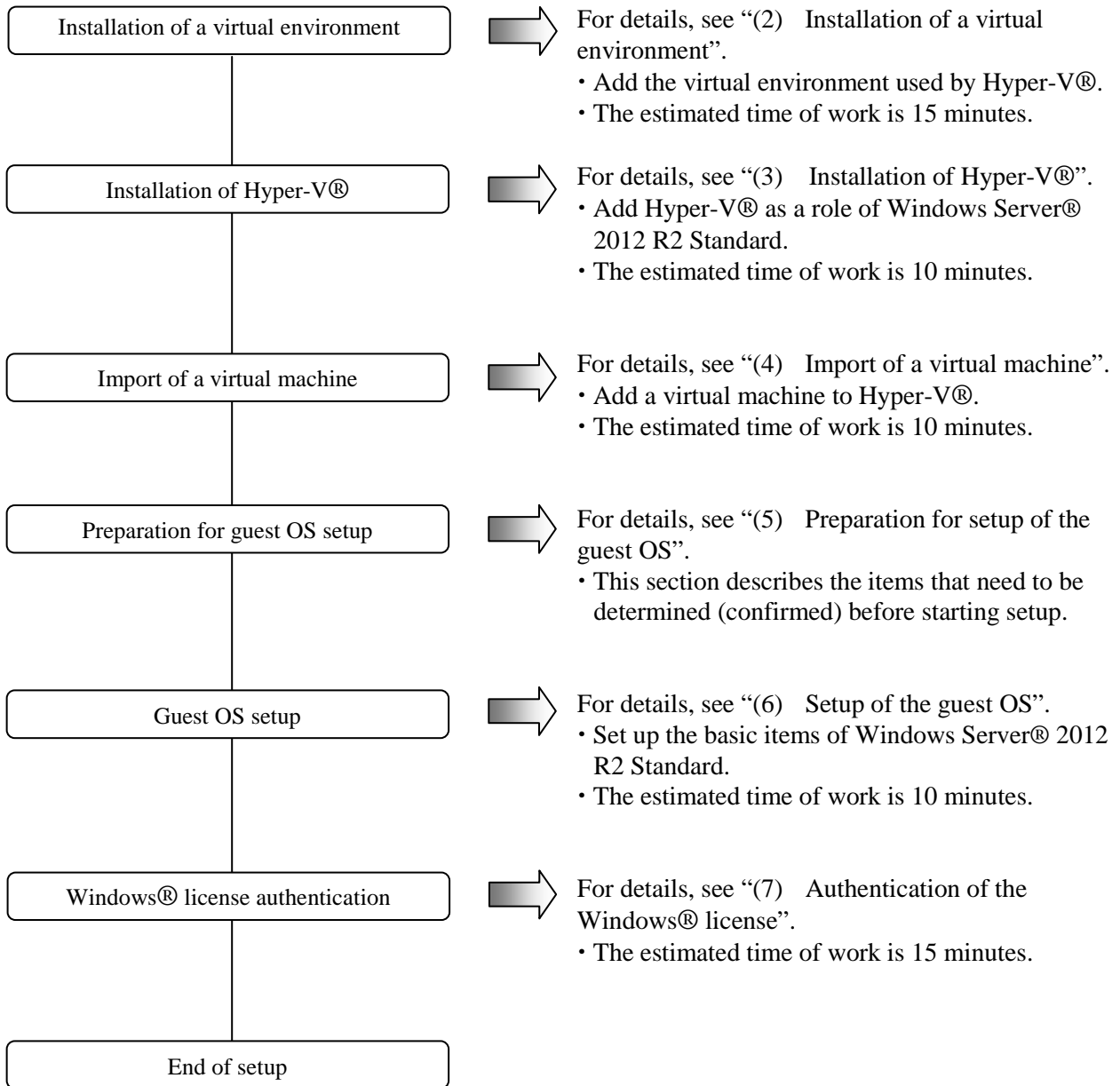
1. If you are not signed in to the computer using an administrator account, sign in to the computer using an administrator account.
2. Start a command prompt.
  - Right-click **Start**. Then a menu appears. On the menu, click **Command Prompt (Admin)**.  
(If the administrator account you used for logon is a built-in administrator account, simply click **Command Prompt**.)
  - If you see the **User Account Control** window, click **Yes**.
3. At the command prompt, type the following, and then press **Enter**.  

```
rmdir /s C:\HITACHI\Hyper-V_Image
```
4. A confirmation message for the deleting directory is output. Type **y** and then press **Enter**.

(1) Overview of the setup procedure

This section describes the procedure for setting up a pre-installed virtual machine (guest OS: Microsoft® Windows Server® 2012 R2 Standard ).

The following flow outlines the setup.



## (2) Installation of a virtual environment

Perform the following procedure to install a virtual environment.

---

**NOTE**

---

Install the virtual environment in “C:\Virtual Machine\WS08R2”.

If you have already used Hyper-V® to create and use the files under “C:\Virtual Machine\WS12R2” as a virtual machine, this installation procedure overwrites those files. Make a backup as necessary.

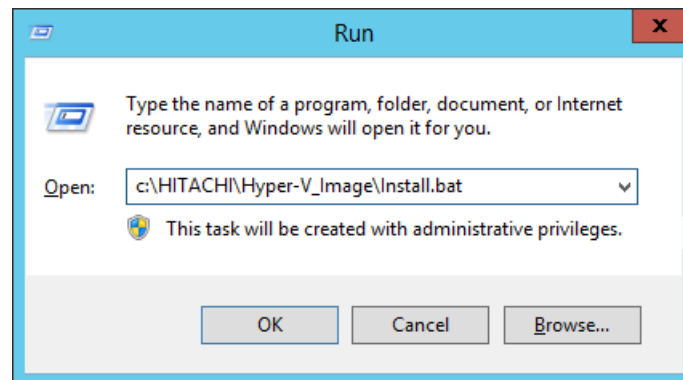
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1. If you are not signed in to the computer using an administrator account, sign in to the computer using an administrator account.

2. Start the setup program.

- Right-click **Start**. Then a menu appears. On the menu, click **Run**.
- In the **Open** box, enter the following name. Click **OK**.

C:\HITACHI\Hyper-V\_Image\Install.bat



3. When the installation confirmation dialog appears, click **OK**.

4. When installation is completed, a completion message appears. Press any key.

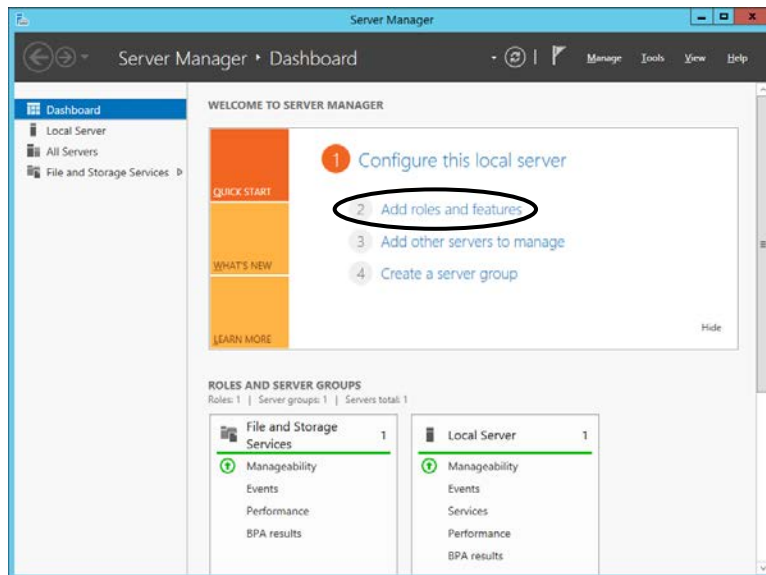
The window closes and installation is completed.



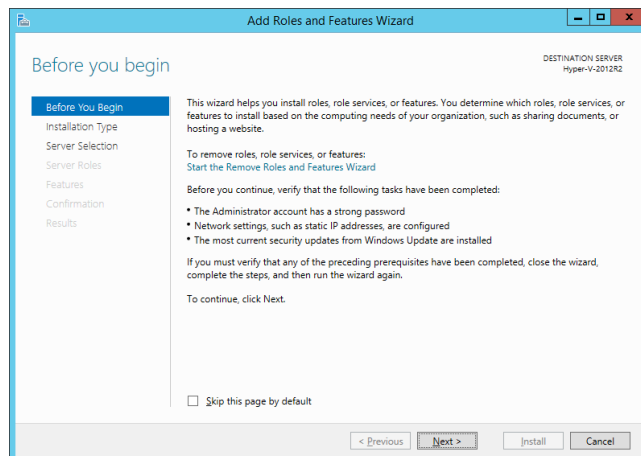
(3) Installation of Hyper-V®

Perform the following procedure to install Hyper-V®.

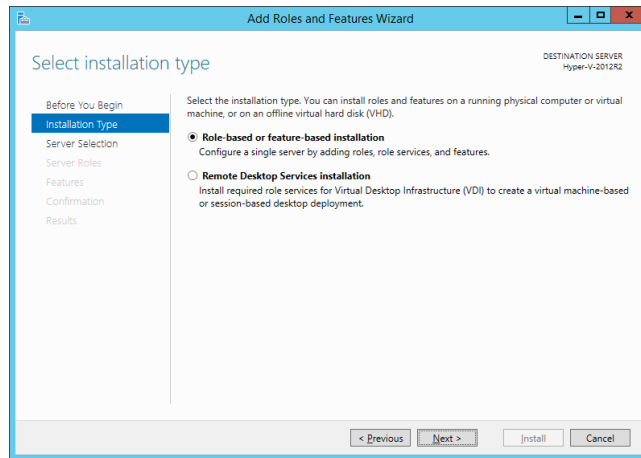
1. Click **Start**. On the Start screen, click **Server Manager**.
2. In the **Server Manager** window, under **WELCOME TO SERVER MANAGER**, click **Add roles and features**.



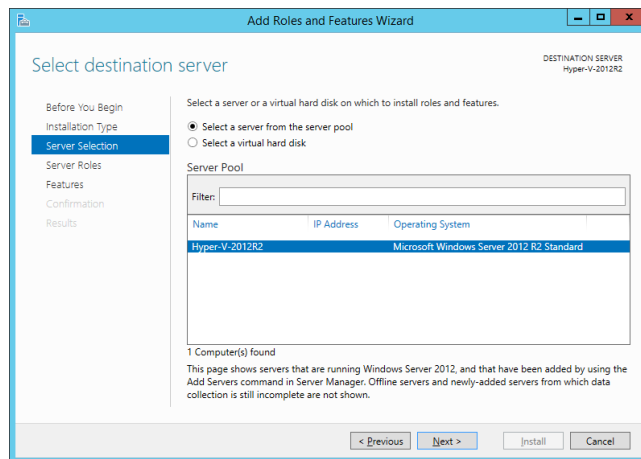
3. The **Before you begin** pane is displayed in the **Add Roles and Features Wizard** window. Click **Next**.



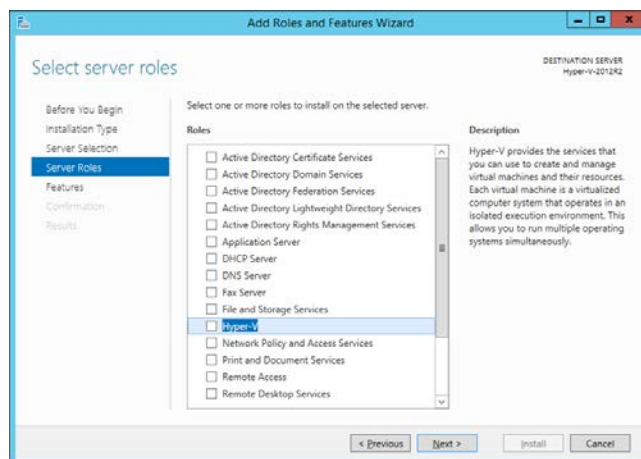
4. The **Select installation type** pane is displayed. Confirm that **Role-based or feature-based installation** is selected. Click **Next**.



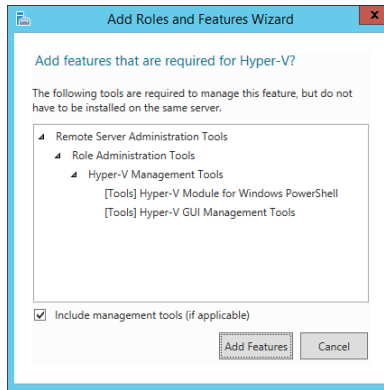
5. The **Select destination server** pane is displayed. Confirm that **Select a server from the server pool** is selected. Click **Next**.



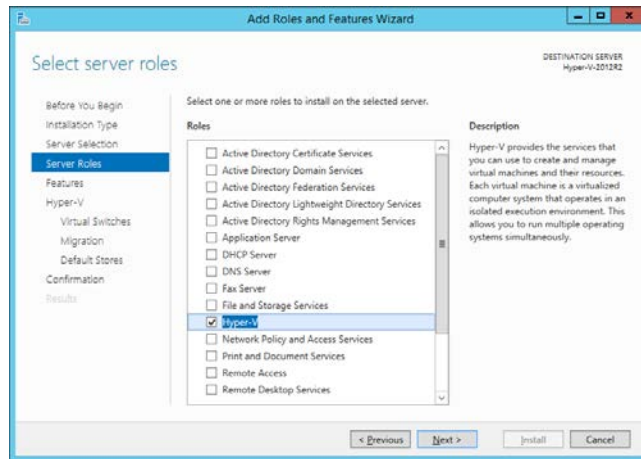
6. The **Select server roles** pane is displayed. Select the **Hyper-V** check box.



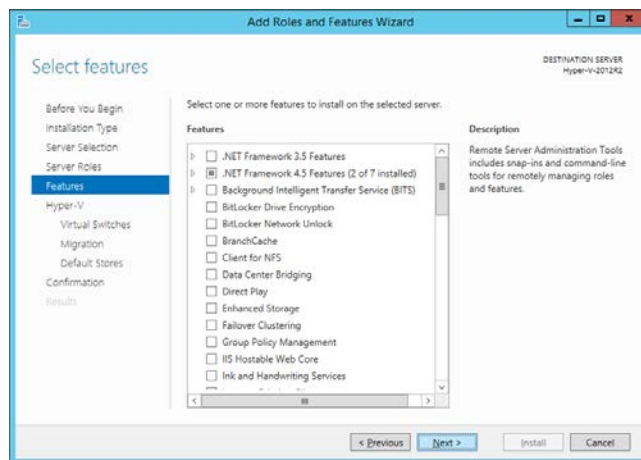
7. The **Add features that are required for Hyper-V** pane is displayed. Click **Add Features**.



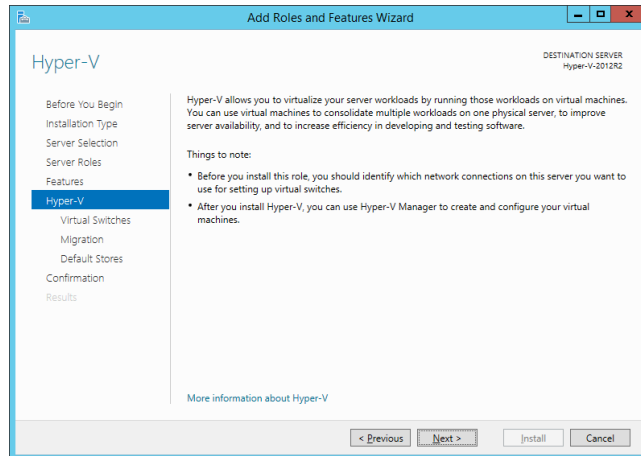
8. The **Select server roles** pane returns. Click **Next**.



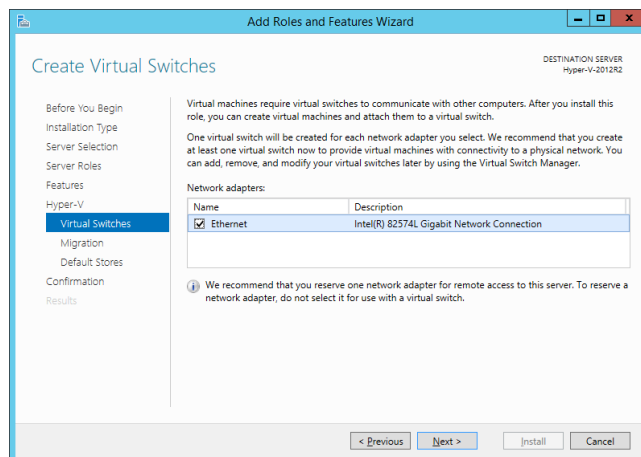
9. The **Select features** pane is displayed. Click **Next**.



10. The **Hyper-V** pane is displayed. Click **Next**.



11. The **Create Virtual Switches** pane is displayed. If you want the virtual machine to communicate with other computers, select the check boxes for the network adapters used for virtual switches. Click **Next**.

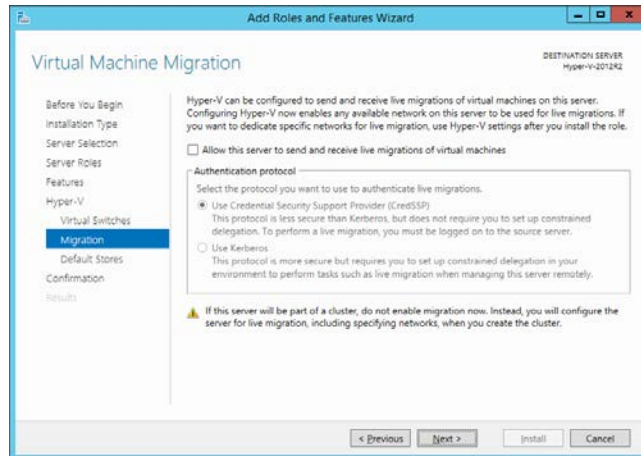



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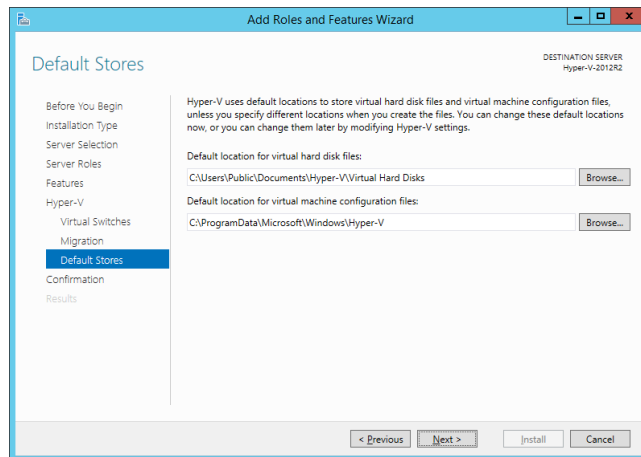
#### NOTE

- A network adapter is not displayed if a network is not connected to the network adapter.
  - You can create virtual switches later using the Virtual Switch Manager.
-

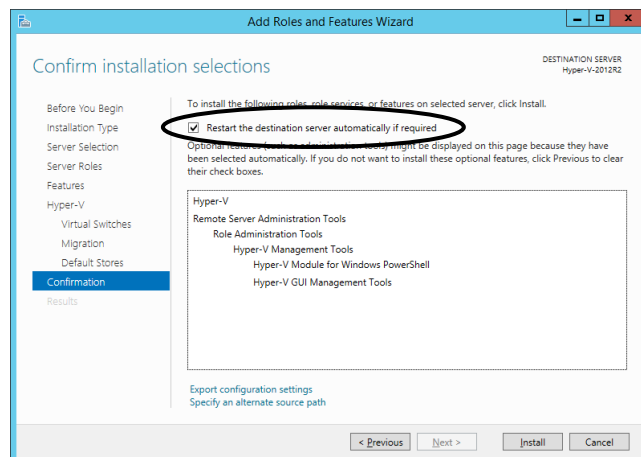
12. The **Virtual Machine Migration** pane is displayed. Click **Next**.



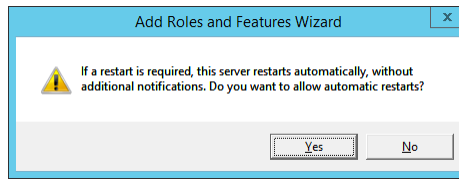
13. The **Default Stores** pane is displayed. Click **Next**.



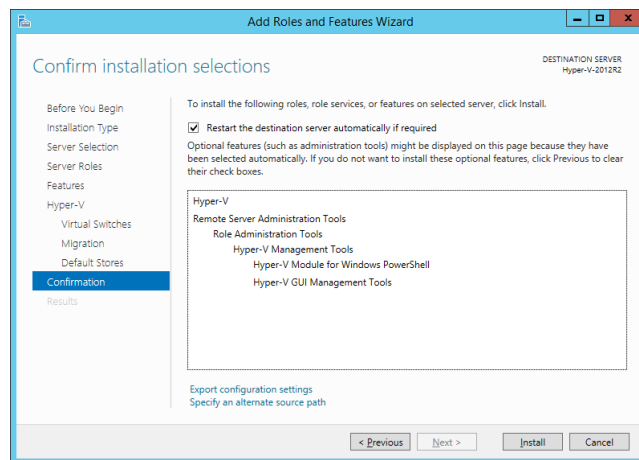
14. The **Confirm installation options** pane is displayed. Select the **Restart the destination server automatically if required** check box.



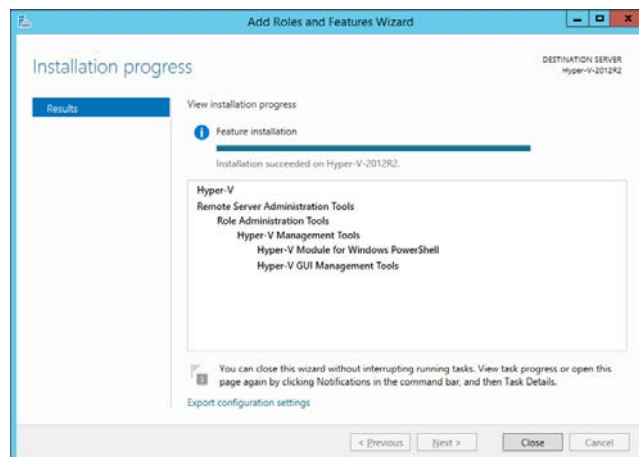
15. A message dialog box is displayed to confirm whether to restart the server automatically if required. Click **Yes**.



16. The **Confirm installation selections** pane returns. Click **Install**. The installation process starts. If required, the server restarts.



17. Sign in after the server restarts. The **Installation progress** pane is displayed. Confirm that the installation is complete successfully. Click **Close**.



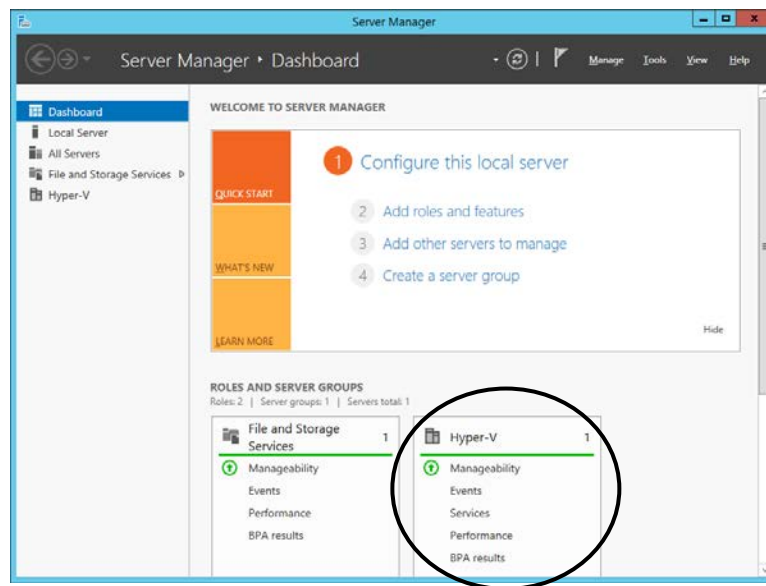

---

**NOTE**

It may take a couple of minutes for the **Installation progress** pane to appear. Just wait without using input devices such as a keyboard and a mouse.

---

18. When the installation is complete, the Hyper-V Manager is added in the **Server Manager** window.



19. Click the close [×] button near the upper-right corner of the **Server Manager** window to close the window.

## (4) Import of a virtual machine

Perform the following procedure to import a virtual machine.

---

**NOTE**

---

When you discard an existing virtual environment and configure a new virtual environment, delete the existing virtual machine from Hyper-V Manager and then import the new virtual machine.

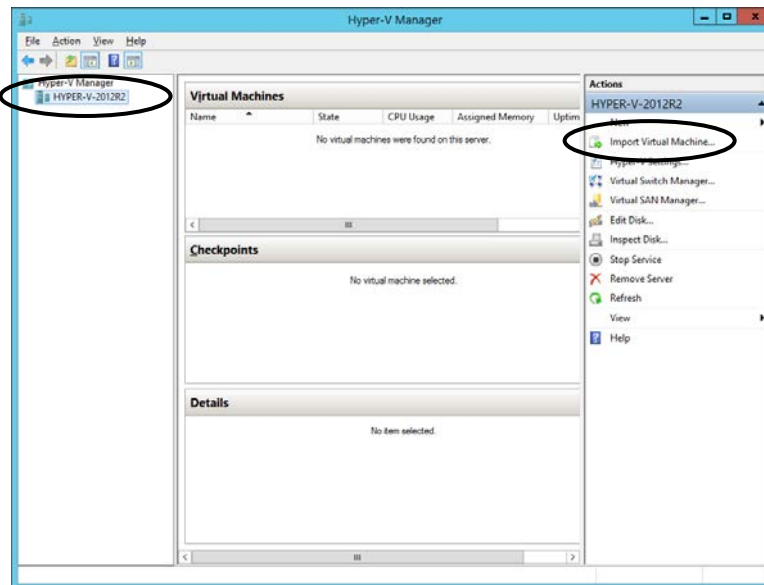
When you delete a virtual machine, make sure you delete the virtual hard disk file.

The virtual hard disk file is the following by default:

“C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\HITACHI\_VM\_WS12R2.vhd”

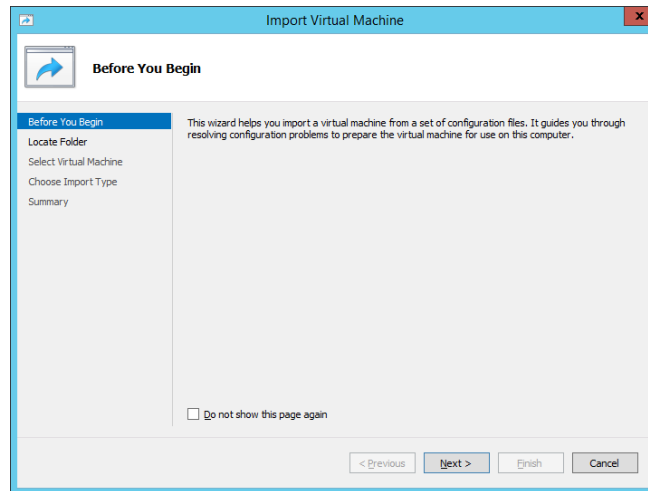
---

1. Click **Start**. On the **Start** screen, click **Server Manager**.
2. In the **Server Manager** window, click **Tools > Hyper-V Manager** to launch the Hyper-V Manager.
3. In the pane to the left, click the virtual server where Hyper-V® has been installed. On the menu in the **Actions** pane, click **Import Virtual Machine**.



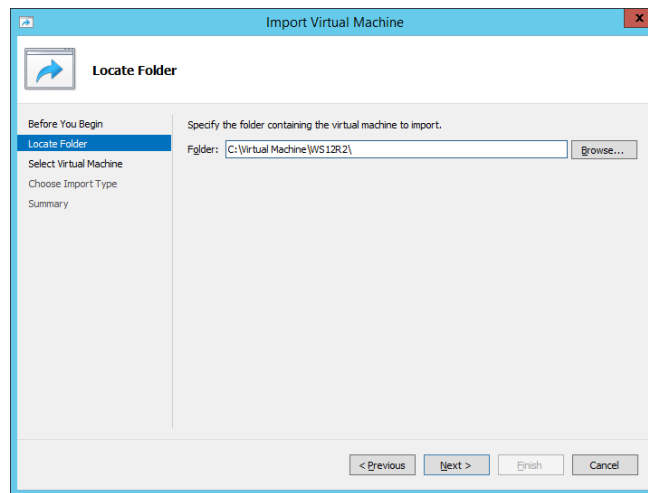


4. The **Before You Begin** pane is displayed in the **Import Virtual Machine** window. Click **Next**.

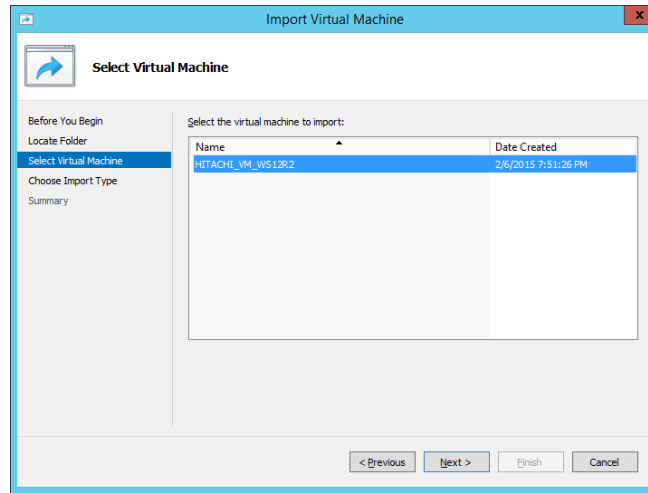


5. The **Locate Folder** pane is displayed. Specify the following under **Specify the folder containing the virtual machine to import**. Click **Next**.

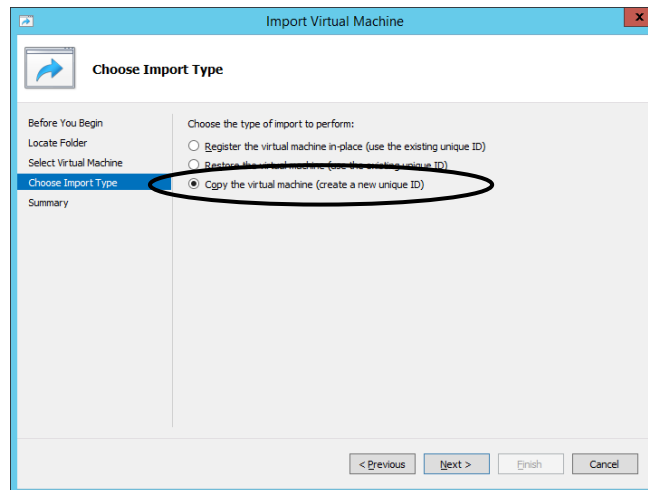
Folder: "C:\Virtual Machine\WS12R2\"



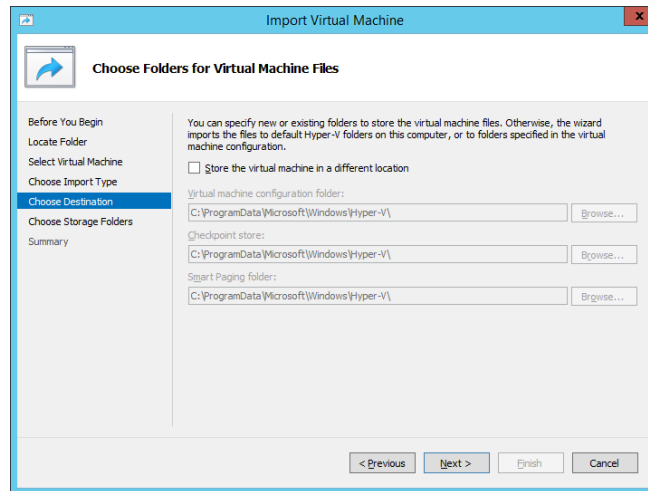
6. The **Select Virtual Machine** pane is displayed. Click **Next**.



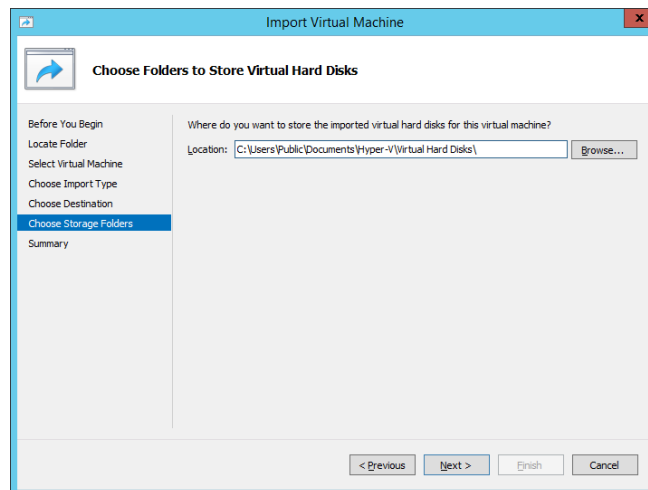
7. The **Choose Import Type** pane is displayed. Select the **Copy the virtual machine (create a new unique ID)** radio button. Click **Next**.



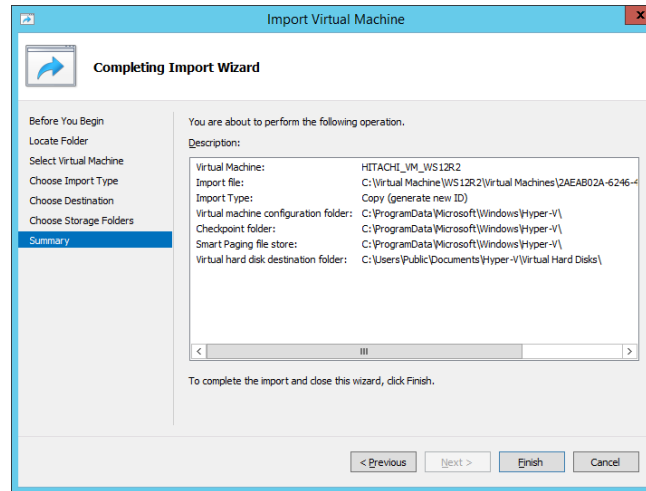
8. The **Choose Folders for Virtual Machine Files** pane is displayed. Specify folders, and then click **Next**.



9. The **Choose Folders to Store Virtual Hard Disks** pane is displayed. Specify a folder, and then click **Next**.



10. The **Completing Import Wizard** pane is displayed. Click **Finish**.



11. When the import process is complete, a virtual machine, “HITACHI\_VM\_WS12R2” , is added to the Hyper-V Manager. Click the close [ × ] button near the upper-right corner in the **Hyper-V Manager** window to close the window.

---

#### NOTE

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All the settings of the imported virtual machine are default settings. Change the settings of the virtual machine to suit your environment.

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## (5) Preparation for setup of the guest OS

The following table describes the items that are required during setup of the guest OS. Determine (or confirm) the items before you start setup.

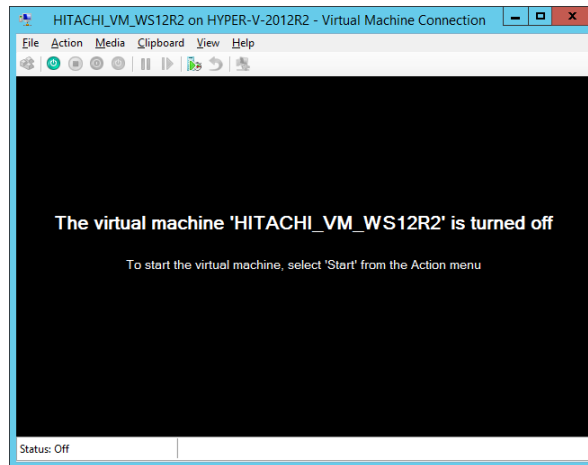
Item	Description
License certificate	Make sure that the license certificate is attached to the body of the HF-W computer. Check the product key written in the license certificate.
Administrator password	Administrator password You can change the password after you set it.

(6) Setup of the guest OS

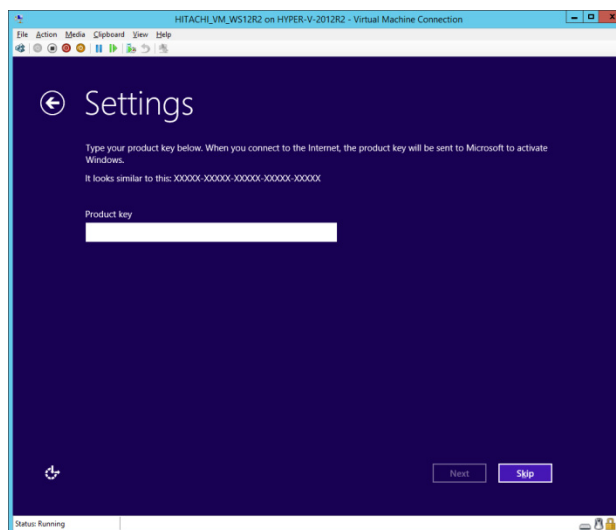
Set up Microsoft® Windows Server® 2012 R2 Standard.

Perform the following procedure to start the virtual machine and set up the basic environment.

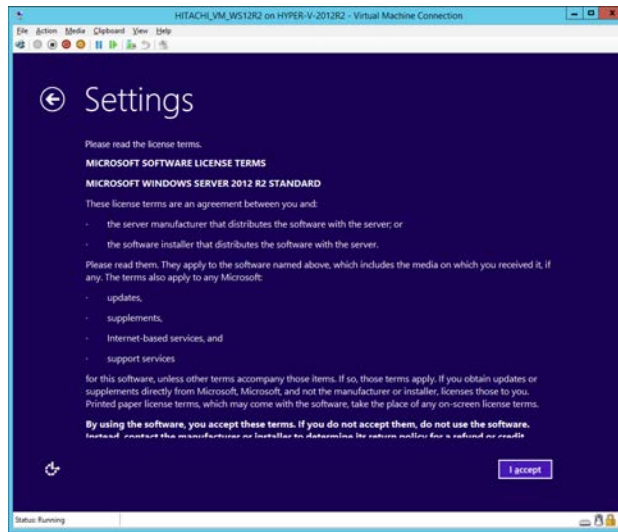
1. Click **Start**. On the Start screen, click **Server Manager**.
2. In the **Server Manager** window, click **Tools > Hyper-V Manager** to launch the Hyper-V Manager.
3. Right-click the virtual machine, “HITACHI\_VM\_WS12R2” . A menu appears. On the menu, click **Connect**.
4. The **Virtual Machine Connection** window is displayed. On the **Action** menu, click **Start**. The setup of Windows Server® 2012 R2 Standard automatically starts.



5. A screen is displayed to prompt you to enter a product key. Enter the product key printed on the Certificate of Authenticity, and click **Next**.



6. The MICROSOFT SOFTWARE LICENSE TERMS screen is displayed. Read the terms carefully, and then click **I accept**.



7. A screen is displayed to prompt you to enter an Administrator password. Enter the password in both the **Password** and **Reenter password** boxes. Then, click **Finish**.

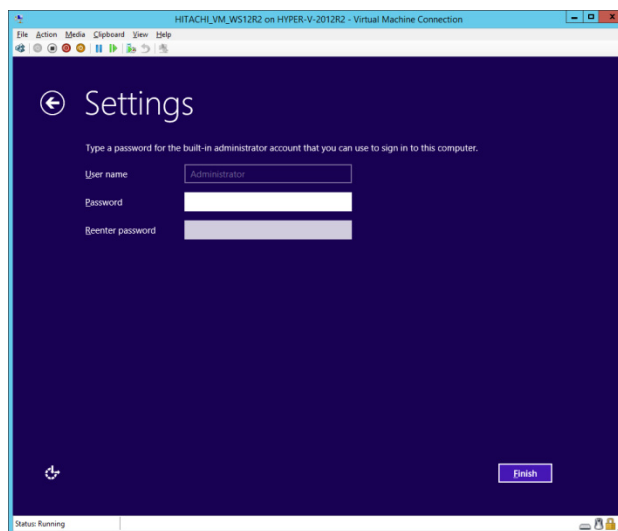
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**NOTE**

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When you set an administrator password, the following rules must be satisfied.

- The password must consist of at least six characters.
  - At least three out of the following four types of characters must be used: ASCII uppercase alphabetic characters, ASCII lowercase alphabetic characters, ASCII numeric characters, and ASCII symbol characters.
  - Any three or more consecutive characters used in the user account name or user name must not be used.
- 

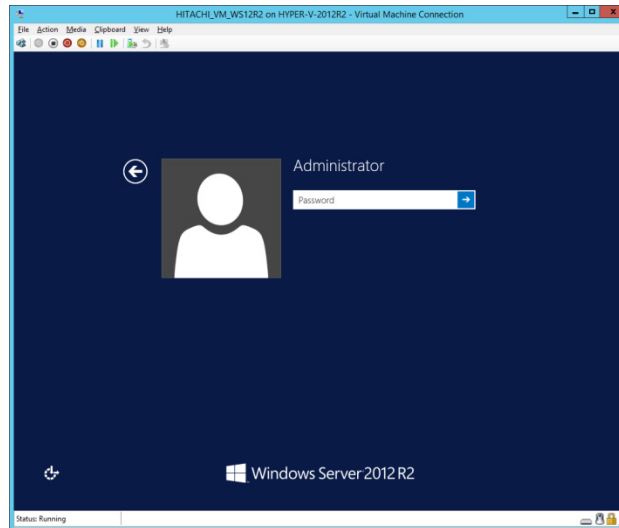


8. The sign-in screen appears. Press **Ctrl+Alt+End**.

(Note) "Press Ctrl+Alt+Delete to sign in." is displayed, but press **Ctrl+Alt+End**.

9. A screen is displayed to prompt you to enter a password. Enter the password for Password.

Press **Enter** or click [→] to sign in to Windows®.



This completes the setup.



(7) Authentication of Windows® license

The guest OS (Windows Server® 2012 R2 Standard) installed on the virtual machine has a technology that prevents illegal copy called product activation. Before the user can use Windows Server® 2012 R2 Standard, the user must obtain license authentication from Microsoft. Do the following to authenticate the license (activate the Windows).

1. If you are not signed in to the computer using an administrator account, sign in to the computer using an administrator account.
2. Right-click **Start**. Then a menu appears. On the menu, click **System**.
3. Click **Activate Windows** near the lower-right corner in the window.
  - The **Windows Activation** window appears.
  - Follow the instruction in the window to activate the Windows.