

Performing a Command-Line Installation of VMware vCenter Update Manager

Update Manager 4.x

This technical note describes how to install VMware® vCenter Update Manager by using the Windows command-line interface.

The process involves downloading the Update Manager installer, gathering the data required to perform the installation, and using the command parameters and samples in this technical note to devise a command for installing the Update Manager server according to your specifications.

You can also install the following products from the command line:

- The Update Manager Client plug-in
- vCenter Server
- vSphere Client

IMPORTANT The command-line installation method is not officially supported. However, if the installation succeeds, the installed products are supported.

Command examples include the typical installation accepting all defaults, typical installation with non-defaults, with and without the bundled database. The examples describe typical command structures. They do not represent all possible configurations.

[Table 2](#) lists the available commands and parameters.

Update Manager Installation Requirements

Update Manager has specific system and database requirements. For information about all Update Manager installation requirements, see the *VMware vSphere Compatibility Matrixes*.

To install the Update Manager server, you need an existing installation of vCenter Server.

Update Manager Installation Data Requirements

[Table 1](#) lists the information that you might need to provide during the installation. The kind of information you need depends upon your specific installation. For example, if you have an existing database, you must provide database information. Note the values entered in case you must reinstall Update Manager and want to use the same values.

Table 1. Data Required for the Update Manager Server Installation

Data	Default	Comments
vCenter Server IP address or host name and HTTP port	Localhost IP address Port 80	Connection details for an existing installation of vCenter Server, on a local or remote machine. Update Manager requires this information to connect to vCenter Server at startup.
vCenter Server authentication details	None	User name and password for an existing vCenter Server installation.
Update Manager installation location	Depends on your operating system	The operating system options are: <ul style="list-style-type: none"> ■ Windows 32-bit: %SystemDrive%\Program Files\VMware\Infrastructure\VirtualCenter Server\ ■ Windows 64-bit: %SystemDrive%\Program Files (x86)\VMware\Infrastructure\
Update Manager patch repository location	%SystemDrive%\Documents and Settings\All Users\Application Data\VMware\VMware Update Manager\Data\	The location where the Update Manager server stores downloaded patches and extensions, as well as imported host upgrade files. You can specify an alternative patch store directory.
Update Manager IP address	Localhost IP address or host name	The IP address of the machine on which you are installing Update Manager. The IP address must be accessible to vCenter Server and ESX/ESXi hosts.
Update Manager SOAP port	8084	The SOAP port on which the Update Manager Client connects to the Update Manager server.
Update Manager Web port	9084	The port on which ESX/ESXi hosts connect to the Update Manager server for host patch downloads.
Update Manager SSL port	9087	The port on which the Update Manager Client connects to the Update Manager server when uploading host upgrade files.
Proxy connection and authentication settings	Depends on the default browser configuration	If your Internet connection uses a proxy, provide the host name of the proxy server and the proxy port. If your proxy requires authentication, provide user name and password.
Data source name (DSN)	None	Required to use an existing database. The DSN must be 32-bit. If you are using the bundled database, you do not need to specify this information.
Database user name	None	Required to use an existing database. Required if the DSN is not using Windows authentication.
Database password	None	Required to use an existing database. Required if the DSN is not using Windows authentication.

Update Manager Installer Command Parameters

Table 2 lists the parameters that you might need to provide when you install the Update Manager server. Which information you need depends upon your specific installation. For example, you must provide database parameters if you have an existing database.

Table 2. Update Manager Server Installation Command Parameters

Parameter	Default	Conditions
VC_SERVER_IP=<vc_ip_address>	localhost IP address	The IP address or host name of an existing vCenter Server installation.
VC_SERVER_PORT=<port_number>	80	The HTTP port to which Update Manager connects to vCenter Server.
VC_SERVER_ADMIN_USER=\"administrator\"	\"\"	A vCenter Server user account with administrative privileges.

Table 2. Update Manager Server Installation Command Parameters (Continued)

Parameter	Default	Conditions
VC_SERVER_ADMIN_PASSWORD="vc_password"	""	The password for the vCenter Server administration account.
VCI_DB_SERVER_TYPE=[Bundled Custom]	"Custom"	<p>Configures Update Manager to use an existing database instance.</p> <p>When using <code>Bundled</code>, you must also include <code>VCI_FORMAT_DB=1</code> in the installation command.</p> <p>When using <code>Custom</code>, you must also include <code>DB_DSN="name"</code>, <code>DB_PASSWORD="password"</code>, and <code>DB_USERNAME="username"</code>.</p> <ul style="list-style-type: none"> ■ The bundled database is suitable for deployments of up to 5 hosts and 50 virtual machines. ■ If you are using an existing (custom) database, and: <ul style="list-style-type: none"> ■ If your database is a local SQL Server database using Windows NT authentication, do not specify the user name and password. ■ If you specify a remote SQL Server database, specify the user name and password.
DB_DSN="name"	VMware Update Manager	<p>Customizes the DSN.</p> <p>Required only if <code>VCI_DB_SERVER_TYPE=Custom</code>.</p>
DB_USERNAME="db_username"	""	<p>Sets the DSN account name.</p> <p>Required only if <code>VCI_DB_SERVER_TYPE=Custom</code>.</p> <p>If you want to use Windows authentication for local SQL Server, specify an account that is an administrator on the local machine. As a best practice, type the account name as <code><domain_name>\<user_name></code>.</p> <ul style="list-style-type: none"> ■ If your database is a local SQL Server database using Windows NT authentication, do not specify the user name and password. ■ If you specify a remote SQL Server database, specify the user name and password
DB_PASSWORD="db_password"	""	<p>Sets the DSN account password.</p> <p>Required only if <code>VCI_DB_SERVER_TYPE=Custom</code>.</p> <ul style="list-style-type: none"> ■ If your database is a local SQL Server database using Windows NT authentication, do not specify the user name and password. ■ If you specify a remote SQL Server database, specify the user name and password.
VCI_FORMAT_DB=1	None	<p>Creates a database schema. All existing data is lost if the database already exists.</p> <p>Required only if <code>VCI_DB_SERVER_TYPE=Bundled</code>, but can be used with <code>VCI_DB_SERVER_TYPE=Custom</code> as a means to overwrite existing database.</p> <p>CAUTION Using <code>VCI_FORMAT_DB=1</code> results in loss of data. Do not use it if you want to preserve the existing data and the database schema.</p>
VCI_DB_UPGRADE=[1]	None	<p>Specifies that a database upgrade is required.</p> <p>You must use <code>VCI_DB_UPGRADE=1</code> together with <code>VUM_DB_BACKUP=1</code> to take a backup of your database when you upgrade the database.</p>

Table 2. Update Manager Server Installation Command Parameters (Continued)

Parameter	Default	Conditions
VUM_DB_BACKUP=[1]		Specifies that a database backup is taken.
VMUM_SERVER_SELECT=<ip_address>	Localhost IP address or host name	IP address of the Update Manager machine.
VMUM_DATA_DIR="\<install_dir>\"	Default directory	Specifies an alternative patch store directory.
INSTALLDIR="\<install_dir>\"	Default directory	Specifies an alternative installation directory
SOAP_PORT=<port>	8084	Customizes Update Manager server SOAP port.
WEB_PORT=<port>	9084	Customizes Update Manager Web port.
SSL_PORT=<port>	9087	Customizes Update Manager SSL port.
USE_PROXY=[1 0]	0	Customizes Update Manager to use a proxy server if set to 1.
PROXY_SERVER="\<proxy_address>\"	Depends on the default browser configuration	Sets the proxy server address.
PROXY_PORT=<port>	3128	Sets the proxy server port.
PROXY_USERNAME="\<username>\"	None	Proxy user name if credentials are required to use proxy.
PROXY_PASSWORD="\<password>\"	None	Proxy password if credentials are required to use proxy.

Microsoft Windows Installer

The Update Manager installation commands are based on Microsoft Windows Installer (MSI) technology.

- Some actions during installation require interactive response to prompts. Only passive installation using the `msiexec` command option `/qr` is supported. The fully silent option (`/qn`) is not supported.
- All parameters that appear between `/v" . . . "` must use a backslash (`\`) to escape the quotation marks, for example, `COMPANY_NAME="\VMware, Inc.\"`. If a quote is not escaped, the `/v" . . . "` option is terminated.
- For information about MSI command-line options, see Microsoft Developer Network at [http://msdn.microsoft.com/en-us/library/cc185688\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/cc185688(VS.85).aspx).

An installation from a local disk, using `MSIEXEC` command options, has the syntax

```
<installer.exe_file> /q /s /w /L<language_code> /v" /qr <parameters>"
```

`<installer.exe_file>` is the location of the extracted files. For example, if `C:\temp\UpdateManager\SetupFiles` is the location of the extracted files.

The Update Manager installer executable is

```
C:\temp\UpdateManager\SetupFiles\bin\VMware-UpdateManager.exe
```

`<parameters>` are the optional parameters listed in [Table 2](#).

`<language_code>` is the language to be used during the installation. the language code used in the examples is English, L1033. Use the language appropriate to your situation.

Perform a Command-Line Installation

This section describes preparing for the installation of Update Manager.

Using a Virtual Machine for Installation

You can install the Update Manager server in a Microsoft Windows virtual machine, which runs on an ESX/ESXi host. Deploying the Update Manager system in the virtual machine has several advantages.

- Rather than dedicating a separate server to the Update Manager system, you can place it in a virtual machine running on the same ESX/ESXi host where your other virtual machines run.
- You can provide high availability for the Update Manager system by using VMware High Availability (HA).
- You can migrate the virtual machine containing the Update Manager system from one host to another, enabling maintenance and other activities.
- You can create snapshots of the Update Manager virtual machine and use them for backups, archiving, and so on.

Preparing for Installation

Before you perform the Update Manager installation, prepare your system appropriately for your specific situation. Perform as many of the preparation tasks as applicable.

Installing on a Virtual Machine

To install Update Manager, you must be either a local Administrator or a domain user that is part of the Administrators group.

To prepare a system for installing Update Manager

- 1 On any machine that has network access to the ESX/ESXi host, install the vSphere Client.
- 2 Using the vSphere Client, access an ESX/ESXi host directly to create the virtual machine for hosting vCenter Server.
- 3 On the virtual machine, install a supported Windows operating system.

You can now install the Update Manager server in the virtual machine.

Installing over a Network

If you are installing over a network, setup the installer on a local machine.

To prepare for installing over a network

- 1 Save the installer on a network drive and run the installer from a local machine.
- 2 Specify the Universal Naming Convention (UNC) address in the format `\\servername\path`.

Installing with an Existing Database

If you are installing on a system with an existing database, prepare for database access.

To prepare for installing with an existing database

- 1 Ensure that the machine belongs to the domain.
- 2 Log in to the machine as a domain user that belongs to the local administrator group.
- 3 If the database is located on the same machine, create the DSN with integrated OS authentication mode.
- 4 Verify that the DSN user is the same as the local administrator for the Update Manager service account.

Update Manager does not support Windows authentication with the database if the database is located on a different machine because of local system account issues. Make sure that if the Update Manager database is located on a remote machine, the database and the system DSN use SQL Server authentication.

Installing the Update Manager Server or the Update Manager Client

To install the Update Manager server through the command-line

- 1 Download the installer for vSphere and the additional modules.
The Update Manager installation package is part of the vSphere distributable package. The installer filename is `VMware-UpdateManager.exe`.
- 2 Open the Windows command prompt of the virtual machine or server on which you are going to install Update Manager.
- 3 Change the directory, to the location of the installation executables.
- 4 Review the command line installation options and select the appropriate methods.
- 5 From the command line of the server or virtual machine where Update Manager is to be installed, run the appropriate command string.

- The command syntax from a network location is:

```
<installer.exe_file> <parameters>
```

- The command syntax from a local disk is:

```
<installer.exe_file> /q /s /w /L<language_code> /v" /qr <parameters>"
```

Adhere to the following list of syntax and installation considerations when performing your installation:

- You must include double quotation marks for values that contain spaces. Otherwise, the installation fails. Using null, as in `<parameter>=`, for `\""` is not allowed. For values other than null, double quotation marks are not required (for example, `VCI_FORMAT_DB =1` and `VCI_FORMAT_DB = "1"` are identical).
- Command options are case-sensitive (for example, use `Bundled`, not `bundled` or `BUNDLED`).
- Though the directions in the document are for command installation, the process might not be completely silent. You must respond to any prompts that appear.
- When you enter responses to prompts, or values to parameters, the content of the response or parameter is accepted without validation. Ensure that the values entered as responses to prompts or values for parameters are correct, or Update Manager will not start up after installation.

Update Manager Installation Examples

The examples cover different scenarios for installation of Update Manager.

Typical Install

Use the default settings to install the Update Manager server to the default location with the bundled database.

Example 1. Typical Install

```
VMware-UpdateManager.exe /L1033 /v" /qr
VMUM_SERVER_SELECT=<ip_address>
VC_SERVER_IP=<vc_ip_address>
VC_SERVER_ADMIN_USER=\"<administrator>\"
VC_SERVER_ADMIN_PASSWORD=\"<vc_password>\"
VCI_DB_SERVER_TYPE=Bundled
VCI_FORMAT_DB=1
```

If a database is already installed, the `VCI_FORMAT_DB=1` command parameter specifies replacing the existing database. When you use `VCI_DB_SERVER_TYPE=Bundled`, ensure that you also specify `VCI_FORMAT_DB=1` as described in the condition for `VCI_DB_SERVER_TYPE` in [Table 2](#).

Custom Install

Specify settings for multiple Update Manager installation parameters.

Example 2. Custom Install

```
VMware-UpdateManager.exe /L1033 /v" /qr
WARNING_LEVEL=0
VMUM_SERVER_SELECT=<ip_address>
VC_SERVER_IP=<vc_ip_address>
VC_SERVER_PORT=80
VC_SERVER_ADMIN_USER=\"<administrator>\"
VC_SERVER_ADMIN_PASSWORD=\"<vc_password>\"
VCI_DB_SERVER_TYPE=Bundled
VCI_FORMAT_DB=1
USE_PROXY=1
PROXY_SERVER=\"myproxy.mydomain.com\"
PROXY_PORT=3000
SOAP_PORT=8084
WEB_PORT=9084
SSL_PORT=9087
```

Install over a Network

Over a network, use the default settings to install Update Manager to the default location with the bundled database

Example 3. Typical Install from a Network

```
\\<shared_address>\<path_to_installer>\VMware-UpdateManager.exe /L1033 /v" /qr
VMUM_SERVER_SELECT=<ip_address>
VC_SERVER_IP=<vc_ip_address>
VC_SERVER_ADMIN_USER=\"<administrator>\"
VC_SERVER_ADMIN_PASSWORD=\"<vc_password>\"
VCI_DB_SERVER_TYPE=Bundled
VCI_FORMAT_DB=1
```

When VCI_DB_SERVER_TYPE is set to Bundled, so VCI_FORMAT_DB=1 must be specified as per the [Table 2](#) condition for VCI_DB_SERVER_TYPE.

Install with an Existing Database

When you install the Update Manager server on either 32-bit or 64-bit Windows with an existing database, you must use a 32-bit DSN.

Update Manager does not support Windows authentication of the database when the database is located on a different machine.

Example 4. Typical Install with an Existing Database

```
VMware-UpdateManager.exe /L1033 /v" /qr
WARNING_LEVEL=0
VMUM_SERVER_SELECT=<ip_address>
VC_SERVER_IP=<vc_ip_address>
VC_SERVER_PORT=80
VC_SERVER_ADMIN_USER=\"<administrator>\"
VC_SERVER_ADMIN_PASSWORD=\"<vc_password>\"
VCI_DB_SERVER_TYPE=Custom
DB_DSN=\"<32bit_dsn>\"
DB_USERNAME=\"<username>\"
DB_PASSWORD=\"<password>\"
```

Update Manager Client Installation Example

You can install the Update Manager Client from the command line. To install the Update Manager Client, you need an existing installation of vSphere Client.

Installing over an existing installation overwrites the original installation without prompting for confirmation.

Example 5. Typical Update Manager Client Install

```
VMware-UMClient.exe /q /s /w /L1033 /v" /qr"
```

Example 6. Update Manager Client Install with a Log File

```
VMware-UMClient.exe /q /s /w /L1033 /v" /qr  
/L*v \ "%TEMP%\vim-umc-msi.log\ ""
```

Example 7. Update Manager Client Reinstall

```
VMware-UMClient.exe /q /s /w /L1033 /v" /qr  
/L*v \ "%TEMP%\vim-umc-msi.log\ ""
```

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Item: EN-000418-00
