

# Symantec NetBackup™ LiveUpdate Guide

Release 7.7



# Symantec NetBackup™ LiveUpdate Guide

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Europe, Middle-East, and Africa [semea@symantec.com](mailto:semea@symantec.com)

North America and Latin America [supportsolutions@symantec.com](mailto:supportsolutions@symantec.com)

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# Introduction

This chapter includes the following topics:

- [About NetBackup LiveUpdate](#)
- [NetBackup LiveUpdate process overview](#)

## About NetBackup LiveUpdate

NetBackup LiveUpdate provides a cross-platform, policy-driven method to distribute NetBackup Release Updates and hot fix downloads to NetBackup hosts.

With NetBackup 7.1 and later, NetBackup LiveUpdate supports upgrades to major releases and minor releases for NetBackup clients. A separate DVD is included with your 7.7 NetBackup media kit for you to copy the LiveUpdate client packages to your NetBackup LiveUpdate server.

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**Note:** NetBackup LiveUpdate does not support upgrades to major releases and minor releases for NetBackup servers.

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The LiveUpdate process is managed manually to help you control which computers are updated and when the updates occur.

The following describes how updates are downloaded and installed:

- First, you must manually copy the necessary files to your designated NetBackup LiveUpdate server.  
For NetBackup Release Update packages, download the necessary files from the appropriate Symantec support site. Update packages consist of several compressed files. You must download the full set.  
For major or minor releases starting with NetBackup version 7.1, copy the contents from the DVD that is included in your media kit.

- Next, create a LiveUpdate policy and run it on your NetBackup master server. The policy starts a LiveUpdate session with each client in the policy. For release updates and hot fixes, you can include NetBackup servers in a LiveUpdate policy. For upgrades to major or to minor releases, only clients should be included in a LiveUpdate policy.
- When you run the LiveUpdate policy, the LiveUpdate agent on each client checks with the LiveUpdate server for any available updates. The agent then launches the NetBackup update installation scripts that install the updates silently.

NetBackup LiveUpdate uses the same agent as Symantec LiveUpdate. The difference is the server where the available product updates reside.

The following describes these differences:

NetBackup LiveUpdate	<ul style="list-style-type: none"><li>■ You set up and configure a LiveUpdate server in your backup environment for distribution of NetBackup release update files.</li><li>■ You download the updates manually to this server from the NetBackup support site.</li></ul>
Symantec LiveUpdate	<p>The LiveUpdate agent is preconfigured to contact the Symantec website where updates for Symantec products other than NetBackup are available.</p> <p>For more information about Symantec LiveUpdate, go to <a href="http://www.symantec.com">http://www.symantec.com</a>.</p>

When you install or upgrade to NetBackup 7.7, the following LiveUpdate agent is installed automatically:

Windows systems	Windows LiveUpdate Agent version 3.3.0.92
UNIX systems	Java LiveUpdate Agent version 3.6.25
	See “ <a href="#">About Java JRE support</a> ” on page 9.

Before you can use NetBackup LiveUpdate, you must set up and configure your NetBackup LiveUpdate server. This server can be either a web server or a shared disk. The only requirement is that it must be accessible by all of the NetBackup hosts that you want to update.

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**Note:** Currently, to use a Windows shared disk you must set up the share as a null share. For more details, refer to the following tech note at <http://www.symantec.com/docs/TECH55675>.

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This server is used to download and store NetBackup release update files. The server is also used to store the client packages that are included with major and minor releases. From this server, the files are distributed and installed on the computers in your NetBackup environment.

The following describes the NetBackup LiveUpdate installation capabilities:

- |                             |  |
|-----------------------------|--|
| Remote installation         | <ul style="list-style-type: none"><li>■ Downloaded release updates and hot fixes can be installed remotely to NetBackup servers and clients.</li><li>■ Client packages in major and minor releases can be copied to the NetBackup LiveUpdate server and installed remotely to NetBackup clients.</li></ul>           |
| Cross-platform installation | <ul style="list-style-type: none"><li>■ Windows and UNIX hosts can be updated from a single LiveUpdate policy.</li><li>■ The policy can be created and run from either a Windows or a UNIX host.</li></ul>   |
| Clustered systems           | <ul style="list-style-type: none"><li>■ Release updates and hot fixes can be downloaded and installed on Windows and UNIX clustered systems.</li><li>■ Client packages in major and minor releases can be copied to the NetBackup LiveUpdate server and installed on clients in Windows and UNIX clusters.</li></ul> |

Using LiveUpdate for update installation does not require local administrator privileges on NetBackup installations, except on Windows clustered systems. You must, however, have privileges to run NetBackup policies from the NetBackup master server.

NetBackup LiveUpdate is an additional method to distribute updates quickly and more conveniently. The current program for customers to obtain updates remains in place.

See [“About Java JRE support”](#) on page 9.

See [“About discontinued support for UNIX 32-bit systems”](#) on page 11.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

See [“About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients”](#) on page 37.

## About Java JRE support

The Java LiveUpdate (JLU) agent requires that a minimum version of Java JRE 1.4.2 be installed. NetBackup delivers a Java JRE that meets or exceeds this minimum requirement for most UNIX platforms.

NetBackup does not deliver Java JRE for the following UNIX platforms:

- FreeBSD
- Linux IBMpSeries
- Macintosh

For these platforms, the NetBackup installation script attempts to detect an acceptable version of Java JRE. If an acceptable version is detected, the appropriate links are created. If an unacceptable version is detected, the script notifies you.

If the script does not detect Java JRE or an acceptable version of it, you must install Java JRE manually before you install NetBackup. After you have installed Java JRE 1.4.2 or later, you can install the NetBackup client software.

Some NetBackup LiveUpdate versions are not supported for use with some Linux IBMpSeries and IBMzSeries systems. The following table describes which NetBackup LiveUpdate versions can be used on these systems.

**Table 1-1** Supported versions of NetBackup LiveUpdate for IBMpSeries and IBMzSeries systems

System	Supported in NetBackup 6.5 and 7.0	Supported in NetBackup 7.0.1	Supported in NetBackup 7.x
IBMzSeries RedHat	No	Yes (see Note 1)	Yes (see Note 1)
IBMzSeries SUSE	No	Yes (see Note 1)	Yes (see Note 1)
IBMpSeries RedHat	Yes (see Note 2)	Yes (see Note 2)	Yes (see Note 2)
IBMpSeries SUSE	Yes	Yes	Yes

■ Note 1

Starting with NetBackup version 7.0.1, Java JRE is delivered with NetBackup for IBMzSeries systems. Under certain conditions, the following error and failure may occur when you upgrade these NetBackup clients to versions 7.0.1 or later:

```
Oct 13, 2010 1:00:37 AM Trying to load jar file from /tmp/
1286949636653/cryptix-jce-provider.jar
Oct 13, 2010 1:00:37 AM IdsEncodingFailed
Oct 13, 2010 1:00:37 AM JLUException
Nested Exception is:
[ java.security.InvalidKeyException ] Illegal key size or
default parameters
```

To correct this problem, you must first install "unlimited strength jurisdiction policy files" into your NetBackup Java JRE. NetBackup does not deliver Java JRE with these files. They must be downloaded from the IBM website and installed manually in your NetBackup Java JRE location. Next, perform the NetBackup client upgrade procedure again. This upgrade also reinstalls the NetBackup LiveUpdate agent.

- Note 2  
Before you can use NetBackup LiveUpdate on IBMpSeries RedHat version 4, you must first install IBM JRE version 1.6.

See "Guidelines for setting up a NetBackup LiveUpdate server" on page 14.

See "About discontinued support for UNIX 32-bit systems" on page 11.

See "About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients" on page 37.

## About discontinued support for UNIX 32-bit systems

Starting with NetBackup 7.0, Macintosh and FreeBSD are the only systems supported by 32-bit binaries. All other 32-bit UNIX support is discontinued.

If you have any unsupported 32-bit UNIX systems that use NetBackup version 6.x, you cannot upgrade these systems to NetBackup version 7.x. The unsupported systems must be replaced with 64-bit systems to use NetBackup 7.x and the associated NetBackup LiveUpdate version.

For complete information, see the following documents:

- *NetBackup Release Notes* (for versions 7.0 or 7.1)  
<http://www.symantec.com/docs/DOC5332>
- *NetBackup Installation Guide for UNIX* (for versions 7.0 or 7.1)  
<http://www.symantec.com/docs/DOC5332>

See "Updating servers by using NetBackup LiveUpdate" on page 27.

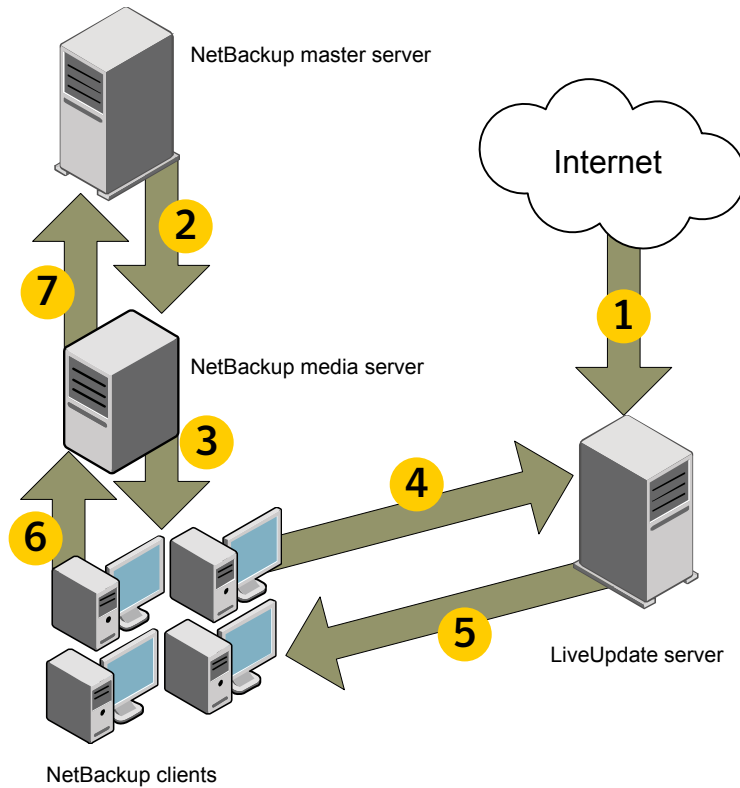
See "Guidelines for setting up a NetBackup LiveUpdate server" on page 14.

See "About NetBackup LiveUpdate" on page 7.

## NetBackup LiveUpdate process overview

The NetBackup LiveUpdate process works as shown:

**Figure 1-1** LiveUpdate overview



1. NetBackup maintenance updates are manually downloaded from the NetBackup support site to the NetBackup LiveUpdate server.
2. From the NetBackup master server, the NetBackup LiveUpdate policy is initiated.
3. The media server launches the LiveUpdate session on the client.
4. The LiveUpdate agent on the NetBackup client checks on the NetBackup LiveUpdate server to see if any new updates are available.
5. Any new updates are downloaded to the NetBackup client, and LiveUpdate launches the NetBackup patch installation scripts to install the patches in the Silent Mode.
6. The status of the LiveUpdate session is reported back to the media server.
7. The status of the LiveUpdate job is updated in the NetBackup Activity Monitor.

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**Note:** All NetBackup communications (from master to media to client, for example) uses the standard NetBackup ports that are used for backups and restores.

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More information about the LiveUpdate process is available.

<http://www.symantec.com/docs/TECH57671>

# Setting up a LiveUpdate server

This chapter includes the following topics:

- [Guidelines for setting up a NetBackup LiveUpdate server](#)
- [Copying NetBackup LiveUpdate formatted packages to your LiveUpdate server](#)

## Guidelines for setting up a NetBackup LiveUpdate server

A NetBackup LiveUpdate server does not require installation of any special software. The NetBackup software is also not required on the NetBackup LiveUpdate server.

The following describes the guidelines and requirements for setting up a NetBackup LiveUpdate server:

Server platform

A NetBackup LiveUpdate server can be any Windows or UNIX host.

Server configuration	<p>A LiveUpdate server must be set up in one of the following ways:</p> <ul style="list-style-type: none"> <li>■ As an HTTP or an HTTPS server. HTTPS servers must use a signed certificate by a certificate authority.</li> <li>■ As a shared disk or a partition that is accessible by all NetBackup LiveUpdate hosts (server or client) that you want to update.</li> </ul> <p><b>Note:</b> Currently, using a Windows shared disk requires the share to be set up as a null share. For more details, refer to the following tech note at <a href="http://www.symantec.com/docs/TECH55675">http://www.symantec.com/docs/TECH55675</a>.</p> <p><b>Note:</b> Some web server software allows the administrator to limit the file types the web server can serve. The LiveUpdate server must serve both <code>zip</code> and <code>flg</code> file types correctly for LiveUpdate policies to finish successfully. Failure to serve these file types causes LiveUpdate jobs to fail.</p>
Environments with an existing LiveUpdate server	<p>If you have a local dedicated LiveUpdate server for other Symantec products like Symantec Endpoint Security or Symantec AntiVirus, be aware of potential conflicts.</p> <p>To avoid conflicts, take one of the following actions:</p> <ul style="list-style-type: none"> <li>■ Download NetBackup Release Updates to a different directory on your local Symantec LiveUpdate server.</li> <li>■ Designate a different computer as your NetBackup LiveUpdate server.</li> </ul>

See “[About LiveUpdate policies](#)” on page 18.

See “[About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients](#)” on page 37.

See “[Copying NetBackup LiveUpdate formatted packages to your LiveUpdate server](#)” on page 15.

See “[Updating servers by using NetBackup LiveUpdate](#)” on page 27.

## Copying NetBackup LiveUpdate formatted packages to your LiveUpdate server

Before you can run a LiveUpdate policy successfully, you must copy the NetBackup LiveUpdate formatted packages to your NetBackup LiveUpdate server. You can obtain the packages by using one of the following methods:

**Copying NetBackup LiveUpdate formatted packages to your LiveUpdate server**

Download from Support website (release updates and hot fixes)	NetBackup LiveUpdate release update packages are different from the typical NetBackup release update packages. The LiveUpdate agent can only download and install the packages that are signed and formatted specifically for LiveUpdate. NetBackup LiveUpdate package names start with <code>NBLU</code> and they consist of several compressed files. The files are only available for manual download from the customer support site.
Copy files from DVD (major and minor releases)	Copy the contents of the NetBackup LiveUpdate formatted clients DVD to the desired location on your NetBackup LiveUpdate server.

Use the following procedures to copy NetBackup LiveUpdate formatted packages to your NetBackup LiveUpdate server.

**To download NetBackup release updates or hot fixes to your NetBackup LiveUpdate server**

- 1 On your NetBackup LiveUpdate server, log on as the administrator.
- 2 Open your Internet browser and enter the following address:  
<http://www.symantec.com/business/support/index?page=home>
- 3 Enter the following in the **Knowledge Base Search** box:
  - In the **Enter keywords or phrase** box enter **liveupdate download links**.
  - In the **Add a product for best results** box, enter **NetBackup Enterprise Server**.
- 4 Click the magnifying glass to run the search.
- 5 In the search results, click the hyperlink that corresponds to the correct version of NetBackup for your environment.
- 6 On the page of download links, scroll down until you reach the **LiveUpdate** section of the tech note.
- 7 Follow the appropriate links to download the LiveUpdate packages for the required platform.  
  
To update any UNIX hosts, you must download all UNIX release update files.  
To update Windows hosts, download the appropriate release update files for your hardware versions.
- 8 Decompress the files into a directory on your LiveUpdate server.



**To copy NetBackup LiveUpdate formatted packages from a NetBackup DVD**

- 1 Insert the DVD with the NetBackup LiveUpdate formatted packages into a drive on your NetBackup LiveUpdate server.
- 2 Copy all files on the DVD to the desired location on your NetBackup LiveUpdate server.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

See [“About NetBackup LiveUpdate”](#) on page 7.

See [“Updating clients by using NetBackup LiveUpdate”](#) on page 30.

# Updating servers and clients

This chapter includes the following topics:

- [About LiveUpdate policies](#)
- [Creating a LiveUpdate policy](#)
- [Importing clients into LiveUpdate policies](#)
- [About updating servers](#)
- [Stopping NetBackup processes and services before upgrading locally](#)
- [Updating servers by using NetBackup LiveUpdate](#)
- [Updating clients by using NetBackup LiveUpdate](#)
- [About LiveUpdate logs](#)
- [Disabling LiveUpdate on NetBackup hosts](#)

## About LiveUpdate policies

A LiveUpdate policy lets you control which NetBackup servers and clients are updated. You must manually activate the policy, which lets you control when the updates occur.

When you install NetBackup versions 7.x and later, the LiveUpdate agent is installed automatically. No additional configuration information is required at the time of installation. In NetBackup 7.x and later, you use the LiveUpdate policy to specify which LiveUpdate server the hosts in the policy use.

For example, you installed LiveUpdate on the master server and two other hosts. All three of these servers were configured as LiveUpdate servers. When you create the LiveUpdate policy, you must specify the **LiveUpdate Server Location**. You specify any of the three LiveUpdate server names as the **LiveUpdate Server Location**. Then you add all the host names of the hosts you want updated by the LiveUpdate policy. When the policy is run, the specified **LiveUpdate Server Location** is assigned to all the hosts in the policy.

Alternatively, you can configure the **LiveUpdate Server Location** at each individual host. You must use this configuration method before you run a LiveUpdate policy on that host.

Use the following guidelines when you create LiveUpdate policies:

#### Compatibility

- LiveUpdate policies cannot include any clients that use NetBackup versions earlier than 6.5. LiveUpdate is only supported in NetBackup versions 6.5 and later.
- Symantec recommends that you create separate LiveUpdate policies for NetBackup servers and NetBackup clients.
- Always run the servers policy before you run the clients policy. Clients cannot run a later version of NetBackup than the servers.

#### Servers that run LiveUpdate policies

Since NetBackup services and daemons are shut down during release update installation, do not add the following servers to a LiveUpdate policy:

- The NetBackup master server that runs the LiveUpdate policy
- Any media server that is involved with running the LiveUpdate policy

These servers must be updated through the command-line interface.

See [“Updating servers by using NetBackup LiveUpdate”](#) on page 27.

### Clustered systems

All nodes in a cluster must be updated, so make sure to include all actual host names (not virtual names) in a LiveUpdate policy. The best practice is to have a separate policy for each clustered server. Then include all node host names in the policy for that cluster

In addition, the **Limit jobs per policy** attribute of the LiveUpdate policy should be set to at least the number of nodes in the cluster. This setting helps ensure that all the nodes are updated at the same time, which lowers the chance of failover in between updating the nodes. If a failover occurred before all nodes were updated, the NetBackup database and the binaries on the active node could be mismatched.

LiveUpdate policies are not a type of backup policy but are a type of NetBackup generic policy. From the **NetBackup Administration Console**, LiveUpdate policies do not appear in the **Policies** tab. To view and manage LiveUpdate policies, you must select **File > LiveUpdate** or click the LiveUpdate icon.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

See [“About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients”](#) on page 37.

See [“Creating a LiveUpdate policy”](#) on page 20.

See [“About updating servers”](#) on page 24.

## Creating a LiveUpdate policy

Use the following procedure to create a LiveUpdate policy.

### To create a NetBackup LiveUpdate policy

- 1 Log on to the master server where you want to create the policy.  
This server must already be updated to the latest desired level.  
See [“Updating servers by using NetBackup LiveUpdate”](#) on page 27.
- 2 Launch the **NetBackup Administration Console**.
- 3 Select **File > LiveUpdate**, or click the LiveUpdate icon.
- 4 In the **LiveUpdate Policy** window, click **New**.
- 5 Enter the name you want for the policy, then click **OK**.
- 6 On the **Attributes** tab of the new **LiveUpdate Policy** window, configure the following items:

- LiveUpdate Server Location** ■ Enter the complete path of the LiveUpdate server location where the updates reside.

The following examples show the format that you must use to enter the server location:

**http://yourWebServer.com/LUServer/**

**file:/net/yourFileServer/LUServer/**

**file:\\yourFileServer\LUServer\**

**Force all clients in this policy to use the same LiveUpdate server location**

By default, this option is checked. Symantec recommends that you create LiveUpdate policies to include all hosts that use the same **LiveUpdate Server Location**, and leave this option checked.

If, however, your NetBackup environment includes more than one LiveUpdate server, you may want to disable this option.

If you want hosts in a single policy to use a different **LiveUpdate Server Location**, disable this option.

If this option is disabled, the following occurs:

- Previously configured hosts  
Any hosts in the policy that are already configured continue to use the same LiveUpdate Server Location as before.
- Hosts not previously configured  
Any hosts in the policy that are not yet configured use the **LiveUpdate Server Location** that is specified in this policy.

**Note:** Even if you disable this option, you must still specify a **LiveUpdate Server Location**.

For more information on local LiveUpdate server configuration, see Appendix A.

**NetBackup Server**

Enter the name of the NetBackup server.

Symantec recommends that you select this master server.

The server name that you specify here must also reside in the following locations of all the hosts that you want to update:

- `bp.conf` file (UNIX hosts)
- `windows registry` (Windows hosts)

For details about adding host names to the `bp.conf` file or the `windows registry` file, see the *Symantec NetBackup Installation Guide*.

<http://www.symantec.com/docs/DOC5332>

**Note:** If a firewall prevents communication between the master server and the clients, the policy must specify a media server that can communicate with the clients. The server that you specify cannot be included in this policy.

**Limit jobs per policy**

Set this option to the number of LiveUpdate jobs that you want to run simultaneously, when you run the policy.

7 Click on the **Clients** tab, then click **New**.

8 Enter the name of the first client and press **Enter**.

Repeat this step until all client names are entered.

You must enter only the names of client computers that have NetBackup 6.5 or later, with the NetBackup LiveUpdate agent installed and configured.

9 After all client names are entered, click **OK**.

If your **LiveUpdate Server Location** is configured as a file share, you can still include both Windows and UNIX clients in your LiveUpdate policy. NetBackup then attempts to map the specified location to the appropriate path name syntax on the target platform.

See “About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients” on page 37.

See “About LiveUpdate policies ” on page 18.

See “About updating servers” on page 24.

See “Guidelines for setting up a NetBackup LiveUpdate server” on page 14.

# Importing clients into LiveUpdate policies

You can import clients into a LiveUpdate policy by using one of the following methods:

- Import clients from one or more NetBackup backup policies
- Import clients from a text file

The following procedure describes how to import clients from one or more NetBackup backup policies.

## To import clients from NetBackup backup policies

- 1 In the **Select policy to show clients** pane, click the box next to the policy name that contains the clients that you want to import.
- 2 In the **Client Name** pane, select the client names that you want to import.
- 3 Click the > or the >> icon to move those client names to the **Selected Clients** pane.
- 4 Click **OK**.

The following procedure describes how to import clients from a text file.

### To import clients from a text file

- 1 Create a new text file.
- 2 Enter the required client information.

Each client entry must appear on its own line.

Each line must include the client hardware, the client operating system (OS), and the client name. A minimum single space (or tab) is required between each entry.

The following example shows how correct client entries should appear in a text file:

Windows-x86	Windows2003	ClientA1
Windows-x64	Windows2003	ClientA2
Solaris	Solaris10	ClientB1
Solaris	Solaris_x86_10_64	ClientB2

---

**Note:** You can also redirect the output of `bpplclients` to a file that can be used to import clients. The command `/usr/openv/netbackup/bin/admincmd/bpplclients > clients.txt` provides a client list in the correct format.

---

- 3 After all clients are added, save and close the file.
- 4 When you select to import clients from a text file, you are prompted to browse to the text file location to open it.

If any clients appear as **Incomplete** or **Invalid**, the entries for those clients are not correct. Those clients cannot be imported until the entries in the text file are corrected.

## About updating servers

After you have created LiveUpdate policies and downloaded release updates to your NetBackup LiveUpdate server, you are ready to update your NetBackup environment.

Review the following guidelines before you begin any updates.

- For Windows clients, NetBackup client services must be running on those servers that are listed in the LiveUpdate policy that you plan to update.



- NetBackup servers and clients must be updated in a specific order. Master servers must always be at the same or a later version as media servers or clients. Clients that use a later version of NetBackup than servers can cause problems and prevent backups or restores.

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**Note:** NetBackup LiveUpdate cannot update servers to a major or a minor release version of NetBackup. If you try to use NetBackup LiveUpdate to update a server to a major or a minor release, the upgrade fails. Windows systems display an error message. On UNIX systems, the attempt appears to be successful even though the updates were not applied.

---

The following describes the order that updates should take place:

#### Master servers

Always update master servers first.

Master servers that run LiveUpdate policies cannot be updated with those policies. These servers must be updated with one of the following methods:

- Use the `nbliveup` command locally on each server that you want to update.

Before you perform a local update, you must stop the NetBackup client services on that server.

See [“Stopping NetBackup processes and services before upgrading locally”](#) on page 26.

- Run a LiveUpdate policy from a different NetBackup master server.

For example, to update master server A from a policy on master server B you must perform the following steps:

- Create a LiveUpdate policy on master server B.
- Add master server A as a client to the policy on master server B.
- Add master server B to the `registry entry` file (Windows) or the `bp.conf` file (UNIX) on master server A.
- Run the policy on master server B.

See [“Updating servers by using NetBackup LiveUpdate”](#) on page 27.

Media servers	<p>After all master servers are updated, media servers can be updated.</p> <p>However, the media servers that are involved with the master servers that run LiveUpdate policies cannot be updated with those policies. These servers must be updated locally or with a LiveUpdate policy on a master server that does not involve the media server to be updated.</p> <p>To update media servers, use the same methods that are used for master server updates.</p> <p>See <a href="#">“Updating servers by using NetBackup LiveUpdate”</a> on page 27.</p>
Clients	<p>After master servers and media servers are updated, you can update clients.</p> <p>See <a href="#">“Updating clients by using NetBackup LiveUpdate”</a> on page 30.</p>

A known issue exists when the `nbliveup` command is used on AMD64 systems. Use the `nbliveup` command on these systems with one of the following methods:

Method A—Local update	<p>You must log on to the computer as the console user either locally or through a remote desktop session, by using the following command:</p> <pre>mstsc -v:your.machine.name.com /F -console</pre> <p>For complete details, go to the following link: <a href="http://support.microsoft.com/kb/278845">http://support.microsoft.com/kb/278845</a></p>
Method B—Remote update	<p>Initiate the LiveUpdate session from a different NetBackup master server.</p>

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

See [“About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients”](#) on page 37.

## Stopping NetBackup processes and services before upgrading locally

If you need to update a server or client locally, NetBackup services cannot be active.

Before you perform a local update, use the following procedure to stop all NetBackup client services:

**To stop NetBackup client services before you install updates locally**

- 1 Make sure that there are no NetBackup jobs in process or queued to run on any NetBackup servers and clients.
- 2 Deactivate all backup policies on all NetBackup master servers.
- 3 Deactivate all storage lifecycle policies with the following commands:

UNIX systems: `/usr/opensv/netbackup/bin/admincmd/  
nbstlutil inactive -lifecycle policy_name`

Windows systems: `install_path\NetBackup\bin\admincmd\nbstlutil  
inactive -lifecycle policy name`

- 4 Deactivate all disk staging storage units.
- 5 Deactivate all media servers.
- 6 Log on as a database user on the NetBackup hosts that run third-party database software and shut down all database instances.
- 7 Proceed with the upgrade.

See [“About updating servers”](#) on page 24.

See [“Updating servers by using NetBackup LiveUpdate”](#) on page 27.

See [“Updating clients by using NetBackup LiveUpdate”](#) on page 30.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

## Updating servers by using NetBackup LiveUpdate

Use the following guidelines when updating NetBackup with NetBackup LiveUpdate policies or the `nbliveup` command:

- **LiveUpdate policies**  
For Windows servers, NetBackup client services must be running on those servers that are listed in the LiveUpdate policy that you plan to use.
- **nbliveup command**  
For local upgrades, NetBackup client processes and services must be stopped before servers can be updated.  
See [“Stopping NetBackup processes and services before upgrading locally”](#) on page 26.

---

**Note:** NetBackup LiveUpdate cannot update servers to a major or a minor release version of NetBackup. If you try to use NetBackup LiveUpdate to update a server to a major or a minor release, the upgrade fails. Windows systems display an error message. On UNIX systems, the attempt appears to be successful even though the updates were not applied.

---

Use the following procedure to update servers. Start with the master servers and then update any media servers.

### To update servers by using NetBackup LiveUpdate

- 1 Make sure that there is no backup or restore job activity on the master server where you run the LiveUpdate policy.
- 2 Update master servers with one of the following methods:
  - `nbliveup` command (for local updates)

Windows systems: `NetBackup\bin\nbliveup.exe  
liveupdateServerProtocolOverride  
<LiveUpdate_Server_Location>`

UNIX systems: `/usr/opensv/netbackup/bin/nbliveup -v  
-d liveupdateServerProtocolOverride  
<LiveUpdate_Server_Location>`

**Note:** Do not run multiple instances of this command at a time. Before you run the command again, wait until the exit status message appears to verify that the previous instance has completed.

When you use the `nbliveup` command, enter the complete path of the LiveUpdate server location where the updates reside.

The following examples show the format that you must use to enter the server location:

```
http://yourWebServer.com/LUServer/  
file:/net/yourFileServer/LUServer/  
file:\\yourFileServer\LUServer\
```

- LiveUpdate policy

- To run the LiveUpdate policy:
- From a different server, launch the **NetBackup Administration Console**.
  - Click **File > LiveUpdate**.
  - In the **LiveUpdate Policy** window, select the LiveUpdate policy that includes the master server that you want to update.
  - Click **Run LiveUpdate Policy**.
  - Check the **Activity Monitor** to verify that all LiveUpdate jobs complete.

- **Clustered servers**

Use the `nbliveup` command as follows:

On Windows systems:

For best practices, update the inactive nodes first and then update the active node.

- On each inactive node in the cluster, run the following command:  

```
NetBackup\bin\nbliveup.exe
liveupdateServerProtocolOverride
<LiveUpdate_Server_Location>
```
- On the active node, run the following command:  

```
NetBackup\bin\nbliveup.exe
liveupdateServerProtocolOverride
<LiveUpdate_Server_Location>
```

On UNIX systems:

- On the active node, run the following command:  

```
/usr/opensv/netbackup/bin/bpclusterutil  
-freeze
```
- On each node in the cluster, run the following command:  

```
/usr/opensv/netbackup/bin/nbliveup  
-v -d  
liveupdateServerProtocolOverride  
<LiveUpdate_Server_Location>
```

**Note:** Do not run multiple instances of this command at a time. Before you run the command again, wait until the exit status message appears to verify that the previous instance has completed.
- On the active node, run the following command:  

```
/usr/opensv/netbackup/bin/bpclusterutil  
-unfreeze
```

- 3 If you have media servers, repeat the steps in this procedure to update those servers.

---

**Note:** After you run a LiveUpdate policy on Windows systems to upgrade to NetBackup 7.7, the activity monitor may report an exit status 77 error. This error code may indicate that the installation that the LiveUpdate policy executed was unsuccessful. If this error code appears, examine the installation log file on the remote system where the installation error occurred. The log file is located at % ALLUSERSPROFILE% \Symantec\NetBackup\InstallLogs. Search the log for any strings that include `Return Value 3` or for any log messages that appear in yellow or red text. You can also verify that the upgrade was successful from the **NetBackup Administration Console** by checking the **Host Properties** on the server that reported the error.

---

See [“Updating clients by using NetBackup LiveUpdate”](#) on page 30.

See [“About updating servers”](#) on page 24.

See [“Creating a LiveUpdate policy”](#) on page 20.

## Updating clients by using NetBackup LiveUpdate

NetBackup client services must be running on the UNIX and the Windows clients that are listed in the LiveUpdate policy that you plan to use.

Use the following procedure to update clients.

#### To update clients

- 1 Make sure that the Windows clients that you plan to update all have the NetBackup client services running. Windows clients cannot be updated using a LiveUpdate policy if the NetBackup client services are down.
  - 2 From the master server, launch the **NetBackup Administration Console**.
  - 3 Click **File > LiveUpdate**.
  - 4 In the **LiveUpdate Policy** window, select the LiveUpdate policy that includes the clients you want to update.
  - 5 Click **Run LiveUpdate Policy**.
  - 6 Check the **Activity Monitor** to verify that all LiveUpdate jobs complete.
- See [“Updating servers by using NetBackup LiveUpdate”](#) on page 27.
- See [“About LiveUpdate policies”](#) on page 18.
- See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

## About LiveUpdate logs

This section describes how to enable and use LiveUpdate logging on Windows and UNIX NetBackup systems.

The following describes the NetBackup LiveUpdate log directories:

<code>nbliveup</code>	<code>nbliveup</code> is the NetBackup client program that gets contacted by the NetBackup master server that runs the LiveUpdate policy. The program is responsible for the configuration and initialization of the LiveUpdate agent on each NetBackup server or client to be updated.
<code>liveupdate</code>	This log contains information about the LiveUpdate agent. For convenience, the log is copied from the system location and into the NetBackup logging directory.
<code>patch</code>	This log contains information about the NetBackup Release Update Installer. For convenience, the log is copied into the NetBackup logging directory.

On all NetBackup servers and clients, the `nbliveup` log directory is created when you install NetBackup LiveUpdate.

To enable the `liveupdate` and the `patch` logging features, you must first run the appropriate command or create the appropriate directories. These features must be enabled before you run any LiveUpdate policies.

The following describes the different methods you can use to enable these features:

- |  |  |
|--|--|
| Run the following command on servers and clients:        | <ul style="list-style-type: none"><li>■ On Windows servers and clients:<br/>NetBackup\logs\mklogdir</li><li>■ On UNIX servers only:<br/>/usr/opensv/netbackup/logs/mklogdir</li></ul>  |
| Create the following directories on servers and clients: | <ul style="list-style-type: none"><li>■ On Windows servers and clients:<br/>NetBackup\logs\liveupdate<br/>NetBackup\logs\patch</li><li>■ On UNIX servers and clients:<br/>/usr/opensv/netbackup/logs/liveupdate<br/>/usr/opensv/netbackup/logs/patch</li></ul> |

If you do not create these directories, you can only view the additional LiveUpdate logs from their original locations as follows:

- |                |  |
|----------------|--|
| liveupdate log | <ul style="list-style-type: none"><li>■ On Windows servers and clients:<br/>&lt;LIVEUPDATE_INSTALL_DIR&gt;\Symantec\<br/>LiveUpdate\Log.LiveUpdate<br/>Where LIVEUPDATE_INSTALL_DIR is typically found in the Program Files directory.</li><li>■ On UNIX servers and clients:<br/>/&lt;SYMC_BASE_DIR&gt;/LiveUpdate/liveupdt.log<br/>Where SYMC_BASE_DIR is defined in<br/>/etc/Symantec.conf.</li></ul> |
| patch log      | <ul style="list-style-type: none"><li>■ On Windows servers and clients:<br/>NetBackup\Patch\History.Log</li><li>■ On UNIX servers and clients:<br/>/usr/opensv/pack/pack.history</li></ul>   |

See [“Retrieving logs remotely”](#) on page 33.

See [“Disabling LiveUpdate on NetBackup hosts”](#) on page 33.

See [“About LiveUpdate policies”](#) on page 18.

See [“Stopping NetBackup processes and services before upgrading locally”](#) on page 26.



## Retrieving logs remotely

You can retrieve LiveUpdate logs remotely from a master server by using the `bpgetdebuglog` command.

The `remote_program` argument in the command refers to the `liveupdate`, `nbliveup`, or the `patch` directories.

For complete details about the `bpgetdebuglog` command arguments, see the *NetBackup Commands Reference Guide*.

<http://www.symantec.com/docs/DOC5332>

To retrieve logs remotely:

- For Windows systems, enter the following command:

```
install_path\NetBackup\bin\admincmd\bpgetdebuglog remote_machine  
remote_program mmddy
```

- For UNIX systems, enter the following command:

```
/usr/opensv/netbackup/bin/admincmd/bpgetdebuglog remote_machine  
remote_program mmddy
```

See “About LiveUpdate logs” on page 31.

See “Guidelines for setting up a NetBackup LiveUpdate server” on page 14.

See “Stopping NetBackup processes and services before upgrading locally” on page 26.

## Disabling LiveUpdate on NetBackup hosts

LiveUpdate is installed automatically with each NetBackup client and server installation. NetBackup is also registered automatically with the LiveUpdate agent at the time of installation.

If you want to disable LiveUpdate so that NetBackup updates are not applied to a specific host, use one of the following methods:

- Remove the host from the LiveUpdate policy.  
See “Creating a LiveUpdate policy” on page 20.
- Delete the LiveUpdate policy.
- Unregister the specific host so that LiveUpdate no longer attempts to update NetBackup. To unregister the host, enter the appropriate command on the host:

For UNIX systems: `/usr/opensv/netbackup/bin/nblu_registration -r`

This command removes all NetBackup entries from the following LiveUpdate inventory file:

`/etc/Product.Catalog.JavaLiveUpdate`

For Windows systems: `LU_Registration.exe -InstallType Unregister -Product NBU`

If you have installed the Java console for Windows, run the following command:

`LU_Registration.exe -InstallType Unregister -Product NBU-Java`

To enable LiveUpdate on a host after it has been disabled, enter the appropriate command on the host:

For UNIX systems: `/usr/opensv/netbackup/bin/nblu_registration`

For Windows systems: `LU_Registration.exe -InstallType Register -Product NBU`

If you have installed the Java console for Windows, run the following command:

`LU_Registration.exe -InstallType Register -Product NBU-Java`

See [“About LiveUpdate logs”](#) on page 31.

See [“Stopping NetBackup processes and services before upgrading locally”](#) on page 26.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

# Reference

This appendix includes the following topics:

- [Configuring hosts locally](#)
- [About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients](#)

## Configuring hosts locally

When you create a LiveUpdate policy, Symantec recommends that you enable the feature **Force all clients in this policy to use the same LiveUpdate server location**.

However, if you want the clients in a single LiveUpdate policy to use different LiveUpdate servers, you must disable this option in the policy. You must also ensure that each listed client in the LiveUpdate policy is locally configured to receive updates from a valid LiveUpdate server.

---

**Note:** All 6.5.x servers and clients that were updated using LiveUpdate are already locally configured. If the existing configuration is still valid, no additional steps are required.

---

LiveUpdate server configuration is stored in a local file on each host that runs a LiveUpdate agent.

Windows

```
<INSTALL_DRIVE>\Program  
Files\NetBackup\LiveUpdateHost.hst
```

This file cannot be read or edited in a text editor.

UNIX

`/usr/opensv/netbackup/nblu.conf`

The `hosts/0/` line in this file identifies the server location.  
For example:

`/hosts/0/url=http://yourwebserver/LUServer/7.0.1`

Use the following procedures to locally configure a Windows or a UNIX host.

### To locally configure a Windows host

- ◆ Use the command-line interface to edit the following line:

```
<IDrive>\Program Files\NetBackup\Bin\LU_Registration.exe  
-OperationType CreateHostFile -Server <LU_Server_Location>
```

Make sure that the syntax matches one of the following examples:

- `<IDrive>\Program Files\NetBackup\Bin\LU_Registration.exe  
-OperationType CreateHostFile -Server  
http://<webserver>/<LiveUpdatePackageDirectory>/`
- `<IDrive>\Program Files\NetBackup\Bin\LU_Registration.exe  
-OperationType CreateHostFile -Server  
\\<fileshare>\<LiveUpdatePackageDirectory>\`
- This example illustrates if you have mapped the `L:` drive to the network share that contains LiveUpdate packages:  
`<IDrive>\Program Files\NetBackup\Bin\LU_Registration.exe  
-OperationType CreateHostFile -Server  
L:\<LiveUpdatePackageDirectory>\`

For file shares, enter the directory path in the same format as you would to execute a “copy” command from the Windows **Run** dialog box.

**To locally configure a UNIX host**

- 1 Use a text editor to modify `/usr/opensv/netbackup/nblu.conf` as shown in the following examples:

```
http:          hosts/0/url=http://<webserver>/<LiveUpdatePackageDirectory>/
https:        hosts/0/url=https://<webserver>/<LiveUpdatePackageDirectory>/
File shares:  hosts/0/access=/net/<fileshare>/<LiveUpdatePackageDirectory>/
```

- 2 The `nblu.conf` file is created the first time that you run `nbliveup`. If `nblu.conf` does not yet exist on the system, you must create it by using the following command:

```
cp /usr/opensv/netbackup/nblu.conf.template
   /usr/opensv/netbackup/nblu.conf
```

See [“About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients”](#) on page 37.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.

See [“Creating a LiveUpdate policy”](#) on page 20.

See [“About LiveUpdate policies ”](#) on page 18.

## About LiveUpdate file share servers and LiveUpdate policies with Windows and UNIX clients

If your LiveUpdate Server Location is configured as a file share, you can still include both Windows and UNIX clients in your LiveUpdate policy. NetBackup then attempts to map the specified location to the appropriate path name syntax on the target platform.

The following examples describe how this process works:

**Example 1: Windows path name**

In a LiveUpdate policy, you specify a Windows path name for the **LiveUpdate Server Location**. For example:

```
file:\\fileserver\LUServer\
```

If LiveUpdate packages have been downloaded correctly from the NetBackup support site, this example works as is for Windows clients in the policy.

For UNIX clients in the policy, `nbliveup` converts that path as follows:

```
/net/fileserver/LUServer
```

Notice that `/net/` replaces `file:` and all backslashes are converted to forward slashes.

**Example 2: UNIX path name**

In a LiveUpdate policy, you specify a UNIX path name for the **LiveUpdate Server Location**. For example:

```
/net/fileserver/LUServer/7.0.4
```

If LiveUpdate packages have been downloaded correctly from the NetBackup support site, this example works as is for UNIX clients in the policy.

For Windows clients in the policy, `nbliveup` converts that path as follows:

```
\\fileserver\LUServer\7.0.4
```

Notice that `/net/` is removed and all forward slashes are converted to backslashes. An extra backslash is also added to the beginning of the path.

If this conversion does not work, Symantec recommends that you create separate LiveUpdate policies for your Windows and UNIX clients.

See [“About updating servers”](#) on page 24.

See [“About discontinued support for UNIX 32-bit systems”](#) on page 11.

See [“Copying NetBackup LiveUpdate formatted packages to your LiveUpdate server”](#) on page 15.

See [“Guidelines for setting up a NetBackup LiveUpdate server”](#) on page 14.