

Symantec NetBackup™ Backup, Archive, and Restore Getting Started Guide

Release 7.7



Symantec NetBackup™ Backup, Archive, and Restore Getting Started Guide

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Introduction

This chapter includes the following topics:

- About Backup, Archive, and Restore
- About installation and configuration
- About online Help

About Backup, Archive, and Restore

This guide provides basic information about backup and restore procedures for new users of NetBackup.

Backup, Archive, and Restore is your interface to the NetBackup client software on your computer. NetBackup lets you back up, archive, and restore files, folders or directories, and volumes or partitions that reside on your computer.

The computer that needs the backup or restore is the client. The computer that manages the backup and retrieval of the data is the server.

The Backup, Archive, and Restore interface must be configured to work with your system. The NetBackup administrator may do that during the installation process.

About backups

A backup copies the selected items to the destination drive and leaves the original files on the source drive.

When you start a backup operation, the client software on your computer sends the data to be backed up to the NetBackup server. The server then writes the data to a storage device.

About archives

An archive copies the selected items to the destination drive and then deletes the items from the source drive, after they are backed up successfully.

When you start an archive operation, the client software on your computer sends the data to be backed up to the NetBackup server. The server then writes the data to a storage device and the original files are deleted from the source drive.

About restores

A restore retrieves the selected items from the backup images on the server and restores the selected items to your computer.

When you start a restore operation, the client software on your computer requests the data from the NetBackup server. The server then sends the data to the client so it can be restored. The backup images remain on the server.

About policies

The NetBackup administrator configures the policies that define the rules that NetBackup follows when it backs up clients.

The policies include schedules for automatic, unattended backups of the NetBackup clients (server-directed backups).

Policies also define when you can back up files manually (user-directed backups).

For example, the time range in which you can perform user-directed backups (your user window) is from 8:00 A.M. to 6:00 P.M.. You cannot back up or archive at any other time although, you can restore files at any time.

About backup images

NetBackup stores all of the items that are backed up by a single job in a backup image. When you restore files, you select the items to restore from a backup image or from multiple backup images.

Backup images can expire after a certain amount of time (configured by the NetBackup administrator). If a backup image expires, you cannot see or restore its files.

About installation and configuration

The NetBackup administrator normally installs and configures Backup, Archive, and Restore. Installation and configuration include the following:

- Install and configure the NetBackup client software and the Backup, Archive, and Restore interface on the computers that are backed up in your computer environment.
- Configure the client software to work with the NetBackup servers in your environment.

If user-directed operations are allowed in your NetBackup environment, you should not have to configure Backup, Archive, and Restore.

If changes to the configuration are needed, contact your NetBackup administrator.

About online Help

This guide provides the basic procedures for backup, archive, and restore tasks. More information is available in the online Help.

Open the online Help from the **Help** menu or click on a Help icon in a dialog box.

The following table describes some of the available information in the online Help:

Back up and archive topics	<ul style="list-style-type: none">■ Back up and archive types■ User-directed backups■ Server-directed backups■ Full backup■ Cumulative incremental backup■ Differential incremental backup■ True image backup
Restore topics	<ul style="list-style-type: none">■ Restore destinations■ Restore options■ Restoring from specific dates■ Restoring from true image backups■ Redirecting restores to different clients (administrators only)
Other topics	<ul style="list-style-type: none">■ Procedures to locate the items that you want to restore■ Procedures to specify other backup servers (if allowed in your environment)■ An interface reference that describes the windows, menus, and dialog boxes

Getting Started

This chapter includes the following topics:

- About setting up UNIX systems
- About starting Backup, Archive, and Restore
- Backup, Archive, and Restore icons

About setting up UNIX systems

Before you start to use Backup, Archive, and Restore, make sure that your UNIX environment is set up properly.

On UNIX, Linux, and Macintosh OS X systems, Backup, Archive, and Restore is a Java-based, graphical user interface.

The following sections describe how to set up your UNIX environment for Backup, Archive, and Restore:

See “About setting up your UNIX window manager” on page 13.

See “Setting up for Common Desktop Environment (CDE)” on page 14.

See “Setting up for Motif” on page 14.

About setting up your UNIX window manager

Set your window manager so that windows become active only when you click inside the windows.

Do not enable auto focus, which causes windows to become active if you move the mouse pointer over them. The NetBackup Java interface does not run properly with auto focus enabled.

Other interfaces for UNIX

NetBackup provides additional interfaces for UNIX systems.

You can perform user-directed operations with the following interfaces. However, Symantec recommends that you use the Backup, Archive, and Restore interface for user-directed operations.

Menu User Interface (MUI) You can use this interface on any terminal that can connect to a client system. The `bp` command starts the menu interface program.

For information about how to use the MUI, refer to the *bp man page* and the Help in the interface.

Command-line interface (CLI) Commands let you perform backup, archive, restore operations from a shell prompt.

For command information, see NetBackup Commands Reference Guide.

Setting up for Common Desktop Environment (CDE)

For NetBackup Java applications, a CDE window manager is preferred.

Use the following procedure to set up a CDE window manager.

To configure a CDE for Backup, Archive, and Restore

- 1 On the front panel in the **CDE** window, click the **Style Manager** icon.
- 2 On the **Style Manager** toolbar, click the **Window** icon.
- 3 In the **Style Manager - Window** dialog box, click on **Click In Window To Make Active**.
- 4 Click **OK**.
- 5 When a prompt appears to **Restart the Workspace Manager**, click **OK**.

Setting up for Motif

To use the Motif window manager, follow this procedure:

To set up for Motif

- ◆ Set the `Mwm*keyboardFocusPolicy X` resource as follows:

```
Mwm*keyboardFocusPolicy:explicit
```

About starting Backup, Archive, and Restore

You can start and run Backup, Archive, and Restore in the following ways:

On a UNIX NetBackup client	See “Starting Backup, Archive, and Restore on UNIX” on page 15.
On a UNIX NetBackup client from a Windows computer	See “Running a NetBackup-Java interface on Windows” on page 16.
On a Windows NetBackup client	See “Starting Backup, Archive, and Restore on Windows” on page 16.

For a description of the Backup, Archive, and Restore interface and directions about how to use it, see the online Help.

Starting Backup, Archive, and Restore on UNIX

You can use Backup, Archive, and Restore to log into a NetBackup client on a UNIX system where you have a user account. From Backup, Archive, and Restore you can perform back ups, archives, and restores on that client.

Note: For information about `jbpSA` command options, see the `jbpSA` man page.

To start Backup, Archive, and Restore on UNIX

- 1 Log into the computer where you intend to run Backup, Archive, and Restore.
- 2 To start Backup, Archive, and Restore, enter the following command:

```
/usr/opensv/netbackup/bin/jbpSA &
```

- 3 In the **Login** dialog box, enter the name of the client where you want to perform the backup, archive, or restore.

You must have a valid user account on that client and have access to that client.

- 4 Enter your user name.
- 5 Enter your password.
- 6 Click **Login**.

Running a NetBackup-Java interface on Windows

If the Java Windows Administration Console is installed on a Microsoft Windows system, you can run the Java Backup, Archive, and Restore interface on it. This interface lets you log into a NetBackup UNIX or Linux client to perform user-directed operations on that client.

You must use the Java Windows Administration Console to log on to a UNIX or a Linux system. You cannot use it to log on to a Windows system.

To start the Java Windows Administration Console

- 1 Click **Start > Programs > Symantec NetBackup > NetBackup - Java Version 7.0**.
- 2 Enter the UNIX client name where you want to perform the backup, archive, or restore.

You must have a valid user account on that client and have access to that client.
- 3 Enter your user name and your password.
- 4 Click **Login**.

Starting Backup, Archive, and Restore on Windows

Use the following procedure to start the Backup, Archive, and Restore interface on a Windows system.

To start Backup, Archive, and Restore on Windows systems

- 1 Click **Start > Programs > Symantec NetBackup > Backup, Archive, and Restore**.
- 2 If NetBackup Access Management is used to control access to your NetBackup environment, you may need to enter a user name, password, and domain information.

Backup, Archive, and Restore icons

Table 2-1 shows the NetBackup icons you may see on the Microsoft Windows desktop.

Table 2-1 Backup, Archive, and Restore icons on the Windows desktop






Icon	Description
	Represents Backup, Archive, and Restore. It is used in the Windows Start menu and in Windows Explorer.
	Indicates that the NetBackup Client Job Tracker is running but no backups or restores are in progress. Used in the system tray.
	Indicates that the NetBackup Client Job Tracker is running, and at least one restore operation is in progress. Used in the system tray. When the yellow arrow is blinking, you can open the NetBackup Client Job Tracker for an estimate of the restore operation.
	Indicates that the NetBackup Client Job Tracker is running, and at least one backup operation is in progress. Used in the system tray. When the yellow arrow is blinking, you can open the NetBackup Client Job Tracker for an estimate of the backup operation.
	Indicates that the NetBackup Client Job Tracker is running, with at least one backup and one restore in process. Used in the system tray with the yellow arrows blinking.

Table 2-2 describes the toolbar icons that appear on Windows.

Table 2-2 Backup, Archive, and Restore toolbar icons on Windows







Icon	Description
	Opens a Backup window so you can mark the items you want to back up.
	Opens a Restore window so you can mark the items you want to restore.
	Opens the View Status dialog box so you monitor the progress of user operations.
	Refreshes or updates the backup images in the NetBackup History pane, in a Restore window. This feature is available only when a Restore window is open and it is the active window.
	Opens the Troubleshooter.
	Opens the Backup, Archive, and Restore online Help.

Table 2-3 describes the icons that may appear throughout the interface.

Table 2-3 Backup, Archive, and Restore icons
















Icon	Description
	The Backup, Archive, and Restore icon.
	The backup icon.
	The restore icon.
	Represents a floppy drive on Windows.
	Represents a CD-ROM or DVD-ROM drive on Windows
	Represents a networked drive on Windows.
	Represents a client PC on Windows.
	Represents a closed directory (folder) that may or may not contain other items.
	Represents an opened directory (folder) that may or may not contain other items.
	Represents a file or directory (folder) with all of its contents, that is marked for backup or restore.
	Represents a directory (folder) with some of its contents that is marked for backup or restore.
	Represents a file or a directory (folder) that is not marked for backup or restore.
	Represents an item with all of its contents that are marked for backup or restore, but the item itself cannot be marked.
	Represents an item with some of its contents that is marked for backup or restore, but the item itself cannot be marked.
	Represents an item that cannot be marked for backup or restore but contains other items that can be marked for backup or restore.

Table 2-3 Backup, Archive, and Restore icons (continued)





























Icon	Description
	Represents a directory (folder) in which some of the contents were backed up.
	Represents a Java file in the Java GUI on UNIX and Linux.
	Represents a Java class file in the Java GUI on UNIX and Linux.
	Represents a program file in the Java GUI on UNIX and Linux.
	Represents an HTML file in the Java GUI on UNIX and Linux.
	Represents a UNIX link in the Java GUI on UNIX and Linux.
	Represents a read-only file in the Java GUI on UNIX and Linux.
	Represents a text file in the Java GUI on UNIX and Linux.
	Represents a file. In Microsoft Windows, other icons may be used to represent the various file types.
	Represents a bitmap, gif, or icon file in the Java GUI on UNIX and Linux.
	Represents a backup or restore in progress in the Java GUI on UNIX and Linux.
	Represents a successful backup or restore in the Java GUI on UNIX and Linux.
	Represents a failed backup or restore in the Java GUI on UNIX and Linux.
	Represents the Windows Volume Shadow Copy components on Windows.
	Represents the Windows system service on Windows.
	Represents the Windows system state on Windows.
	Represents the Windows Volume Shadow Copy user data on Windows.

Table 2-3 Backup, Archive, and Restore icons (*continued*)

Icon	Description
	Represents the Windows Volume Shadow Copy data on Windows.
	Represents a Windows Volume Shadow Copy writer on Windows.
	Represents a Windows Volume Shadow Copy container on Windows.
	Represents a Windows Volume Shadow Copy component on Windows.
	Represents the entire Windows registry on Windows. The registry opens to two base keys: HKEY_LOCAL_MACHINE and HKEY_USERS.
	Represents a registry key on Windows.
	Represents the Windows boot files on Windows.
	Represents the Windows COM database on Windows.
	Represents the entire network on Windows.
	Represents a specific network on Windows.
	Represents a domain within a network on Windows.

Backing up or archiving

This chapter includes the following topics:

- Backing up or archiving files and directories

Backing up or archiving files and directories

A backup copies items to another drive or a storage device. The original files remain on the source drive.

An archive also copies items to another drive or a storage device. When the backup is finished and successful, the original files are deleted from the source drive.

You can back up or archive the following items:

- UNIX and Linux
 - Files
 - Directories
 - Partitions
- Windows
 - Files
 - Folders
 - Volumes
 - Registry keys
 - System State components
 - System Service components
 - EFI System partition (IA64 systems only)
 - Shadow Copy components

Note: On IA64 systems, Shadow Copy backups include System State components and the EFI System partition automatically. If you back up System State components only, you must also select the EFI System partition for a successful backup.

Use the following procedure to perform a user-directed (manual) backup or archive operation.

For more information about how to use the Backup, Archive and Restore interface, see the online Help.

To back up or archive with Backup, Archive, and Restore

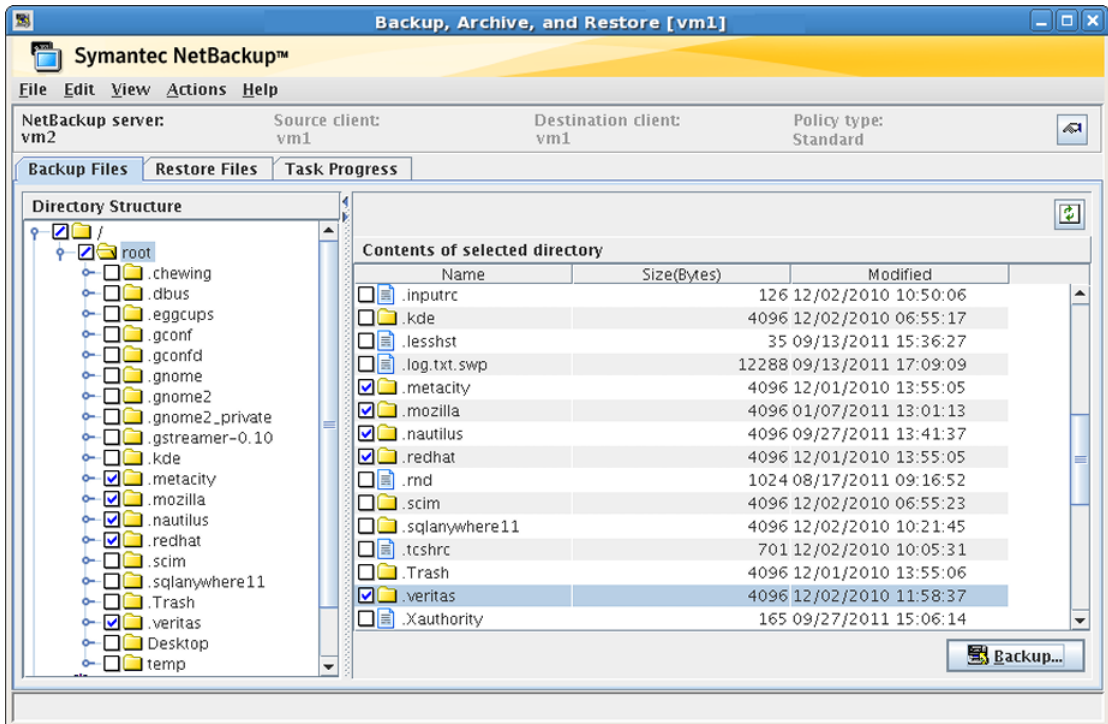
- 1 Start the backup as follows, for the appropriate platform:

UNIX and Linux Click the **Backup Files** tab.

The space under the menu bar displays the following information about how NetBackup is currently set up for the operation:

- NetBackup server
- Source client
- Destination client
- Policy type

The following is an example of the **Backup Files** tab:



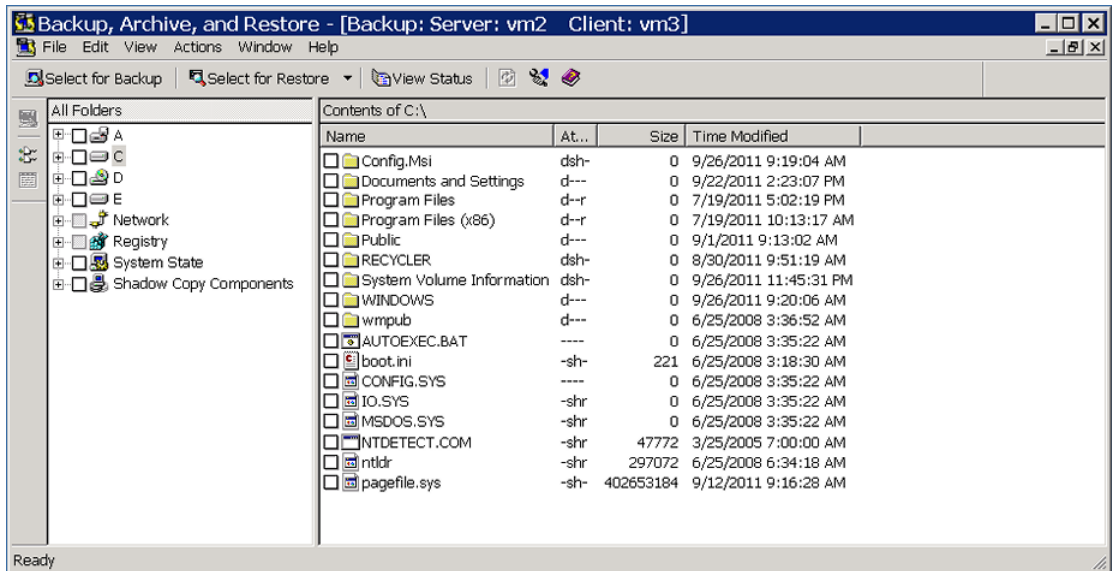
Windows

To open a **Backup** window, click **File > Select Files and Folders to Backup** or click the **Select for Backup** icon.

The window title bar displays the following information about how NetBackup is currently set up for the operation:

- Server
- Client

The following is an example of the backup window:



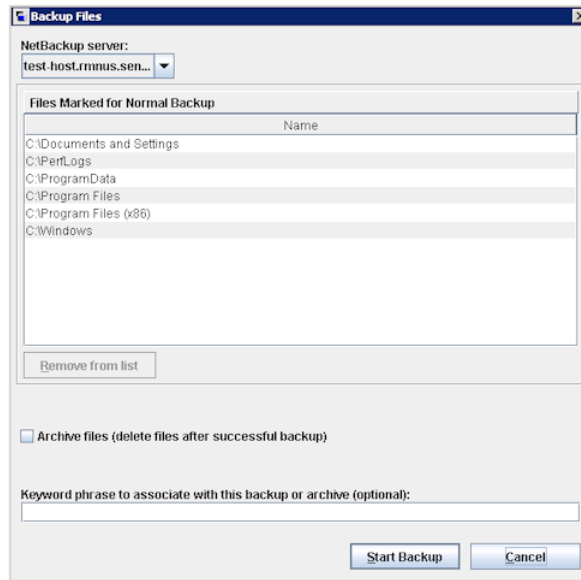
- 2 To select the items that you want to back up, in any pane, click the check box to the left of the item.

A check mark next to individual items indicates that those items are selected. A check mark next to a directory (folder) indicates that all items in the directory are selected. A diagonal slash mark next to a directory indicates that only some items within it are selected.

3 To set up how to back up the selected items, do the following:

UNIX and Linux Click **Backup**.

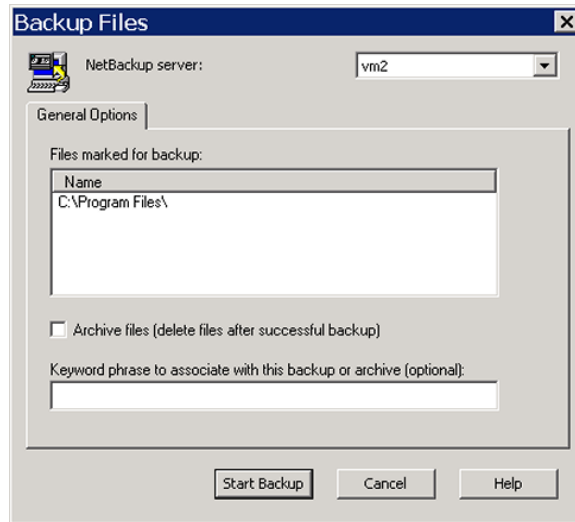
The following is an example of the **Backup Files** dialog box:



Windows

Click **Actions > Backup**.

The following is an example of the **Backup Files** dialog box:



4 In the **Backup Files** dialog box, select or specify any of the following options:

NetBackup server

To change the NetBackup server that performs the backup operation, select a different server from the drop-down list.

Normally, you do not need to specify a different master server. If you have the option to send your backups to more than one master server, be sure that you specify the correct one.

Remove from list (UNIX only)

The **Files Marked for Normal Backup** list shows all of the items that you marked for backup. If you want to remove any item, click on the item and then click this option.

Archive files (delete files after successful backup)

To delete the items automatically from the source drive after they back up successfully, select this option.

Keyword phrase to associate with this backup or archive (optional)

To associate a keyword phrase to the backup, enter that information here. When you restore these files later, you can search by this keyword phrase for the backed up items.

5 Click **Start Backup**.

6 To view the backup progress, do the following

Windows systems: In the **View Status** dialog box that appears, click **Yes**.

UNIX systems: In the **Task Progress** tab that appears, click **Yes**.

Note: The backup job progress logs are stored in the default log files. The path for the default log file of a job is displayed in the **Results of the Task Selection Above** pane in the **Task Progress** tab.

The backup may take a few minutes to complete. After you start a backup operation, you can close Backup, Archive, and Restore and perform other tasks. NetBackup continues the operation in the background.

Restoring

This chapter includes the following topics:

- Restoring files and directories

Restoring files and directories

This topic describes how to restore backed up items, as follows:

- From normal or archived backups.
- Individual items from array-based snapshots.

For normal or archived backups, the procedure includes the following tasks:

- Find the items you want to restore.
- Select the destination where you want the items restored.
- Select the appropriate restore options.
- Change the job priority for the restore (optional).

For other restore types, see the online Help.

To restore files and folders

- 1 Start the restore, as follows:

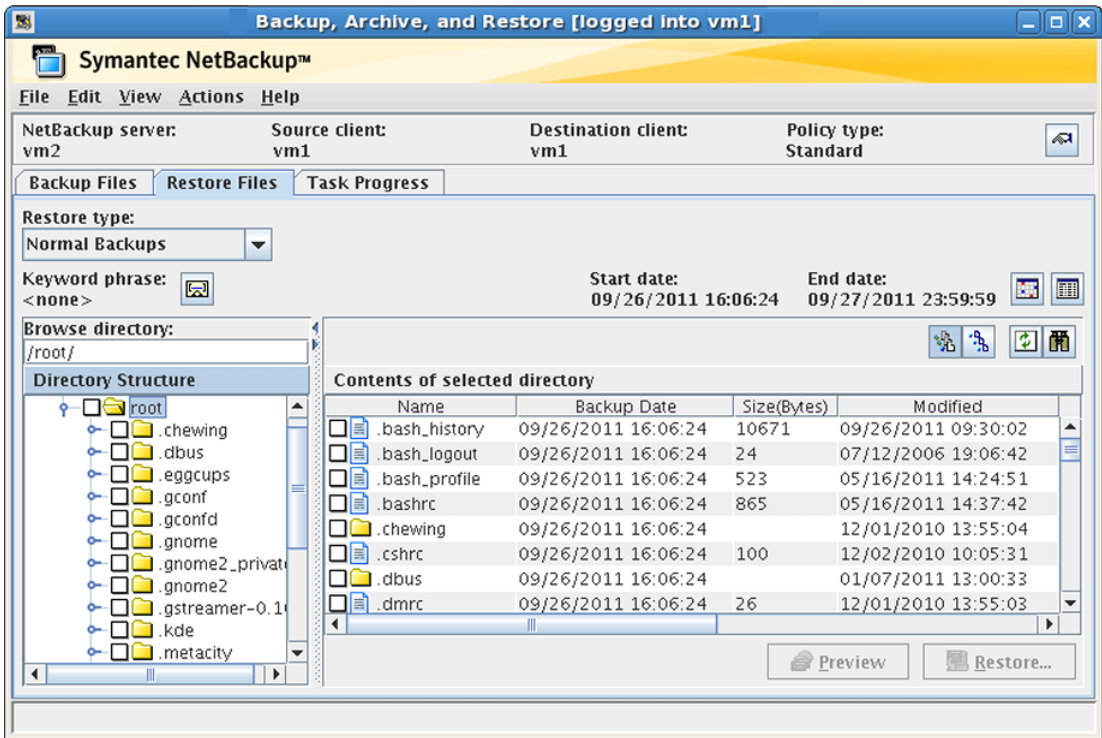
UNIX and Linux

- Click the **Restore Files** tab.

The space under the menu bar displays the following information about how NetBackup is currently set up for the operation:

- NetBackup server
- Source client
- Destination
- Policy type
- In the **Restore type** drop-down list, select either **Normal Backups** (default) or **Archived Backups**.
- Click **View > Refresh**.

The following is an example of the **Restore Files** tab:



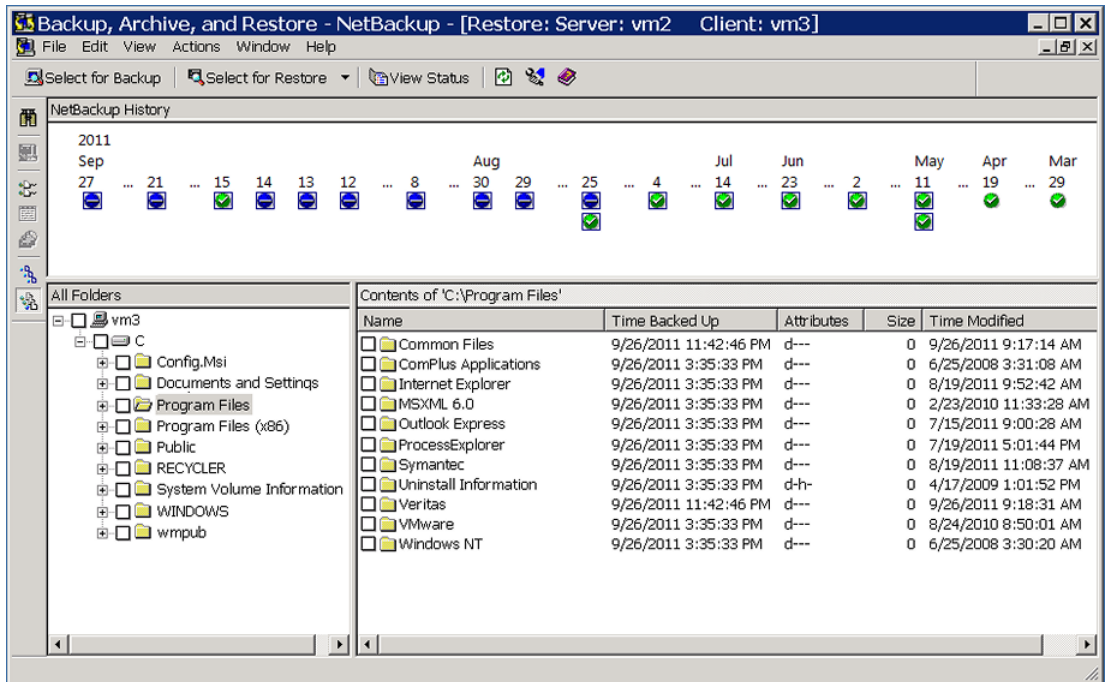
Windows

- Click **File > Select Files and Folders to Restore** and select either **from Normal Backup** or **from Archived Backup**. There may be a delay while NetBackup retrieves the backup images and builds the list of files that you can restore.

The window title bar displays the following information about how NetBackup is currently set up for the operation:

- Server
- Source Client
- Destination Client

The following is an example of the restore window



- 2 To select the items that you want to restore, in any pane, click the check box to the left of the item.

A check mark next to individual items indicates that those items are selected. A check mark next to a directory (folder) indicates that all items in the directory are selected. A diagonal slash mark next to a directory indicates that only some items within it are selected.

3 To preview a list of the removable media (such as tape) that NetBackup needs to perform the restore, do the following:

- On Windows systems, click **Actions > Preview Media**.
- On UNIX systems, click **Preview**.

If the items that you want to restore are in backup images that reside on disk storage units, no media is listed in the preview.

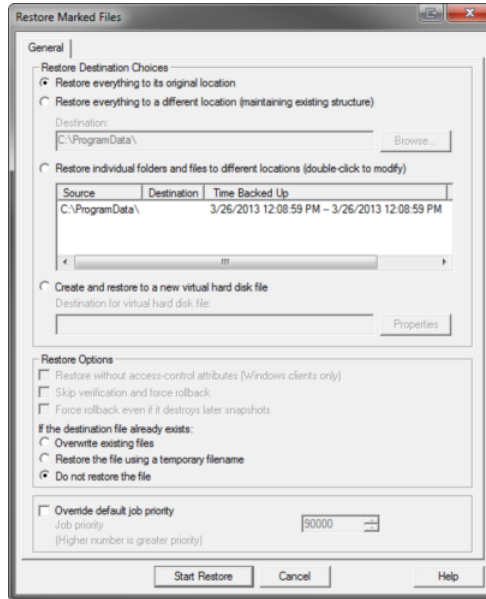
Click **OK** to close the dialog box

4 To set up how to restore the selected items, do the following:

- On UNIX systems, click **Restore**.

The following is an example of the **Restore Marked Files** dialog box:

- On Windows systems, click **Actions > Start Restore of Marked Files**. The following is an example of the **Restore Marked Files** dialog box:



- 5 In the **Restore Marked Files** dialog box, select from the following options to meet the requirements for the restore:

Destination Select one of the following destination options:

- **Restore everything to its original location (default)**
- **Restore everything to a different location (maintaining existing structure)**
- **Restore individual directories (folders) and files to different locations**
- **Create and restore to a new virtual hard disk file (Windows systems only)**

For details about each option, see the online Help.

Restore Options

On UNIX systems, select from the following restore options:

- Overwrite existing files.
- Restore directories without crossing mount points.
- Restore without access control attributes (Windows clients only).
- Rename hard links.
- Rename soft links.

On Windows systems, select from the following restore options:

- Restore without access control attributes (Windows clients only).
- Overwrite existing files.
- Restore the file using a temporary file name.
- Do not restore the file (default).

For details about each option, see the online Help.

Job Priority

You can change the priority of this restore by clicking the **Override default priority** check box, and then set a priority number.

The default is 90000. The available range is 0 to 99999. Higher numbers are higher priority.

For details about this feature, see the online Help.

6 Click **Start Restore**.

7 To view the restore progress, do the following:

- On Windows systems, in the **View Status** dialog box that appears, click **Yes**.
- On UNIX systems, in the **Task Progress** tab that appears, click **Yes**.

Note: The backup job progress logs are stored in the default log files. The path for the default log file of a job is displayed in the **Results of the Task Selection Above** pane in the **Task Progress** tab.

The restore may take a few minutes to complete. After you start a restore operation, you can close Backup, Archive, and Restore and perform other tasks. NetBackup continues the operation in the background.