



Tivoli Storage Manager 6.1

Backup-archive client installation and new features

Tivoli. software



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This module provides a step-by-step example of a Tivoli Storage Manager 6.1 backup-archive client installation and initial configuration. Also included in this module are examples of new backup-archive client enhancements for this release.

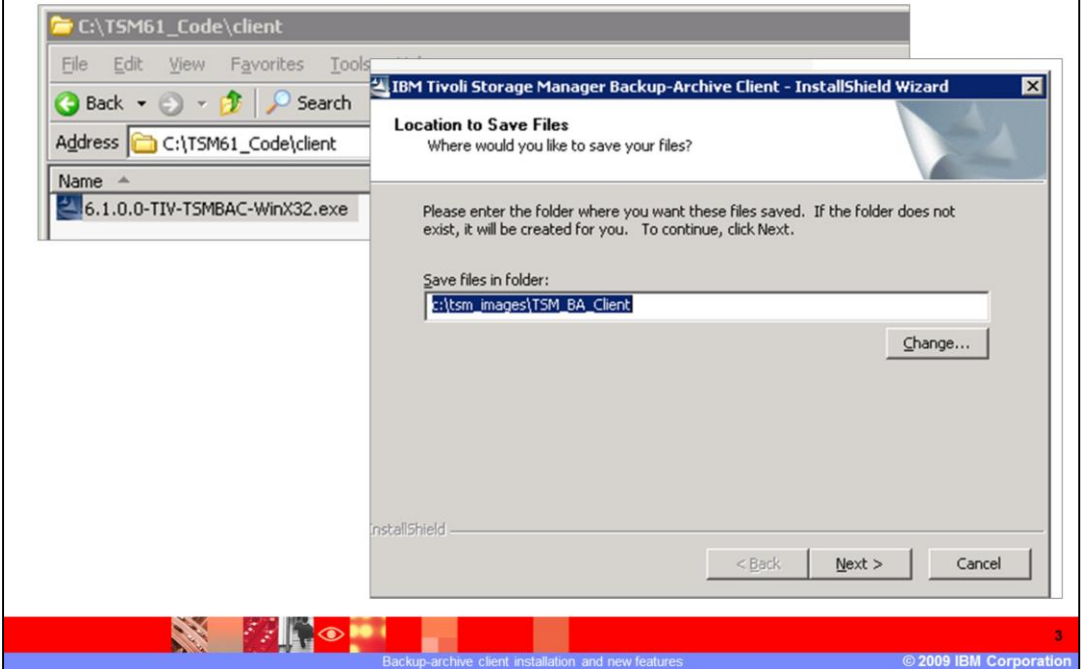
Objectives

- After completing this module, you should be able to perform the following tasks:
 - ▶ Install and configure the Tivoli Storage Manager 6.1 backup-archive client
 - ▶ Describe the new features of the Tivoli Storage Manager 6.1 backup-archive client

After completing this module, you should be able to accomplish the following tasks:

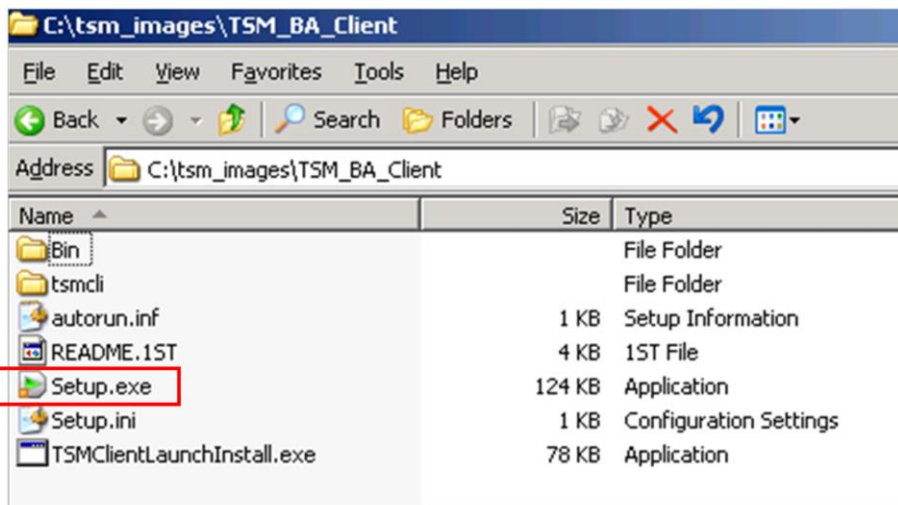
- Install and configure the Tivoli Storage Manager 6.1 backup-archive client
- Describe the new features for the Tivoli Storage Manager 6.1 backup-archive client

Install the backup-archive client



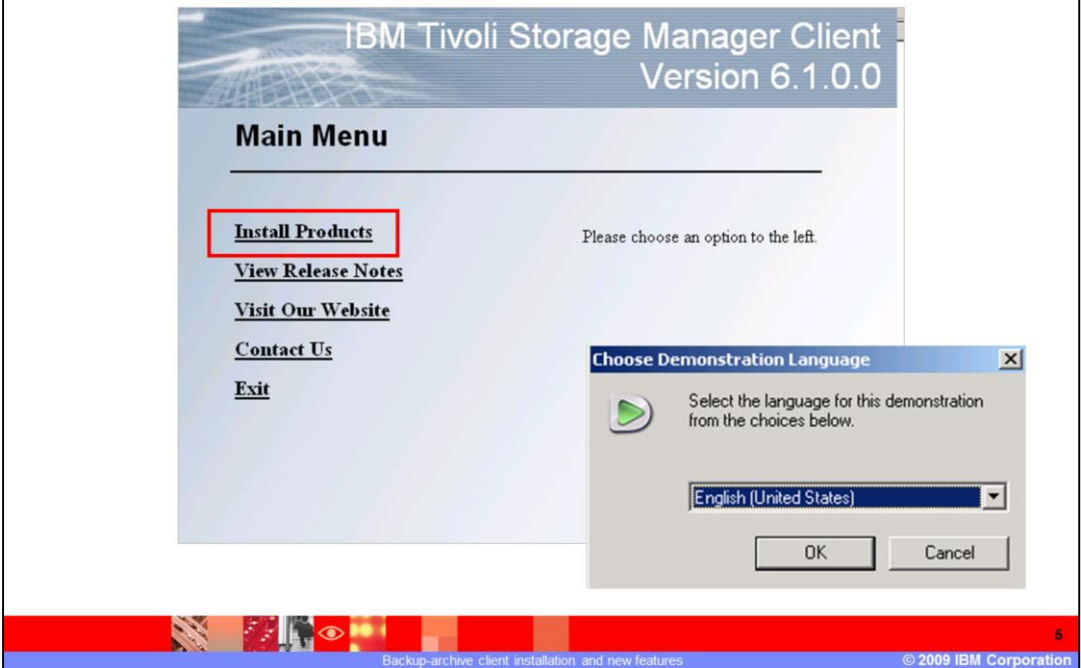
In this example, the installation is on a Windows® 2003 client. Click the **.exe** file in the code package for the IBM Tivoli Storage Manager 6.1 backup-archive client. Accept the default location for the saved files or click **Change** and select a different location.

Launch the setup file



After the setup files are extracted, go to the folder you designated as the location for the extracted files. Click **Setup.exe** to begin the installation.

Main menu



In the main menu, you can select the products, view the release notes, or connect to the Web site. Click **Install Products**. Accept the default demonstration language or select another language from the menu.

Select Tivoli Storage Manager backup-archive client



Click **TSM Backup-archive Client**.

Choose the setup language



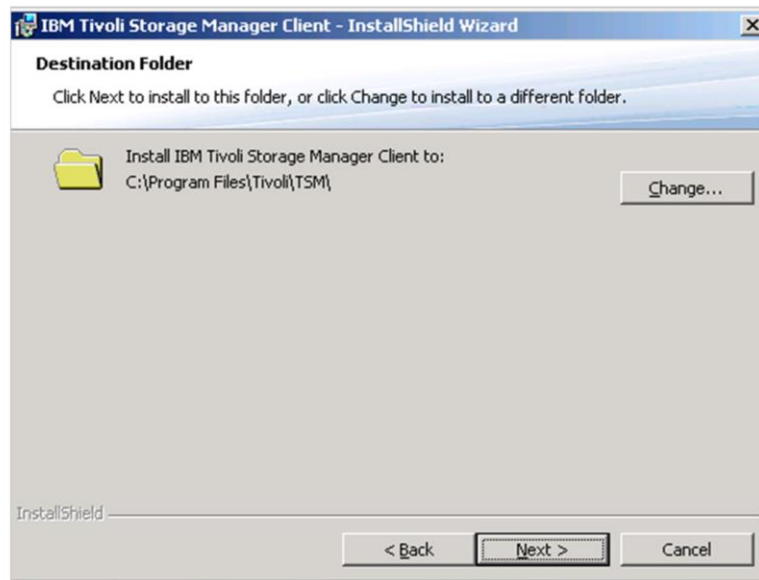
In the Choose Setup Language menu, select the language for the installation and click **OK**.

Begin the installation



Click **Next** to continue.

Select the destination folder

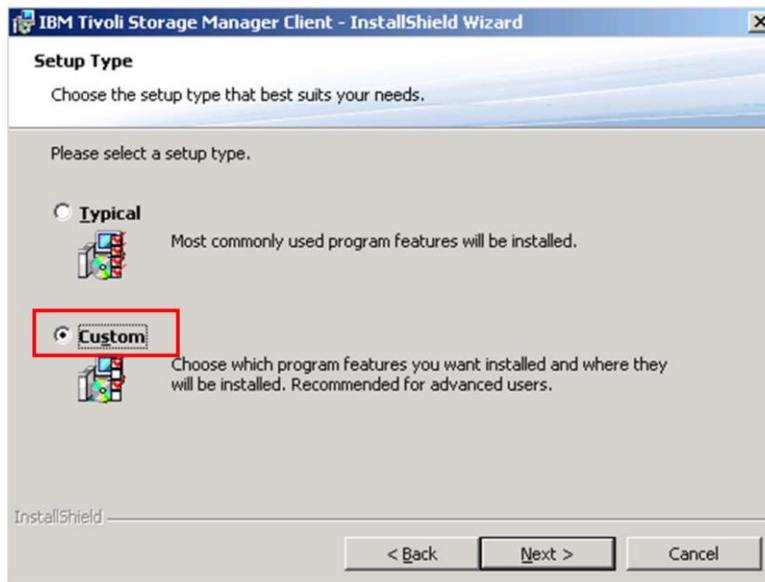


The default folder is displayed on the Destination Folder page. The default folder for Windows is **C:\Program Files\Tivoli\TSM**. To select a different folder, click **Change** and enter the path and folder name. Click **Next**.

For UNIX®, except AIX®, the Tivoli Storage Manager files are installed in the **/opt/tivoli/tsm/client/ba/bin** or **/bin64** directory.

For AIX, the files are installed in the **/usr/tivoli/tsm/client/ba/bin** directory.

Select the custom installation type

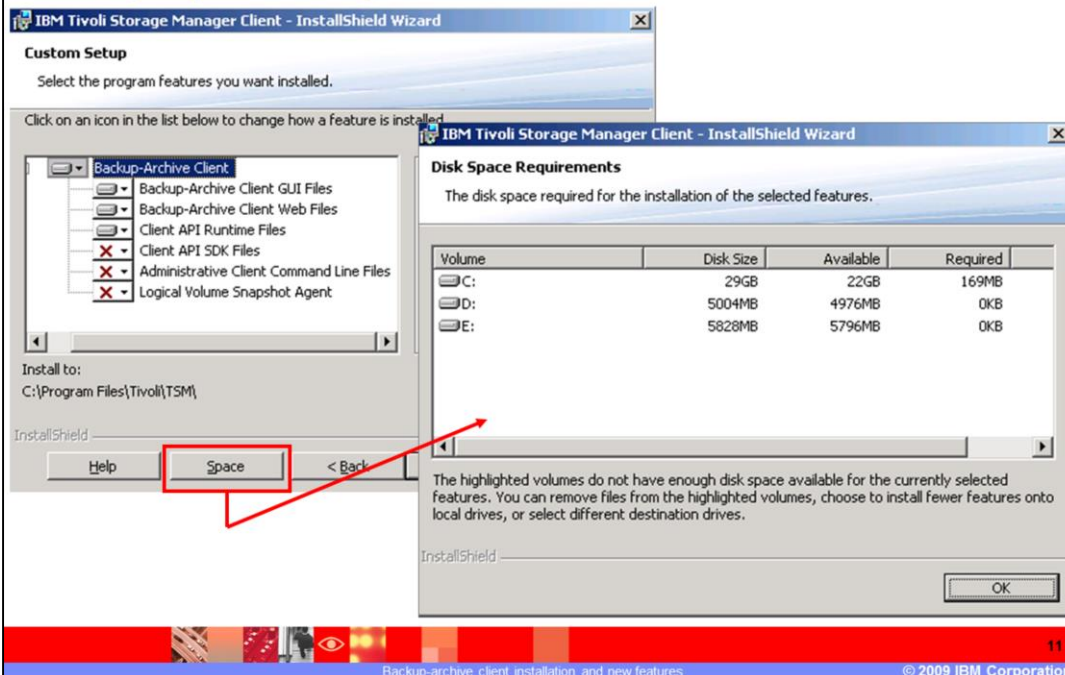


The two types of setup are Typical and Custom.

- A Typical setup includes the backup-archive client, the API runtime files, and the Web client.
- A Custom setup includes the backup-archive client, the API runtime files, the Web client, and optional features.

Click **Custom**, and then click **Next**.

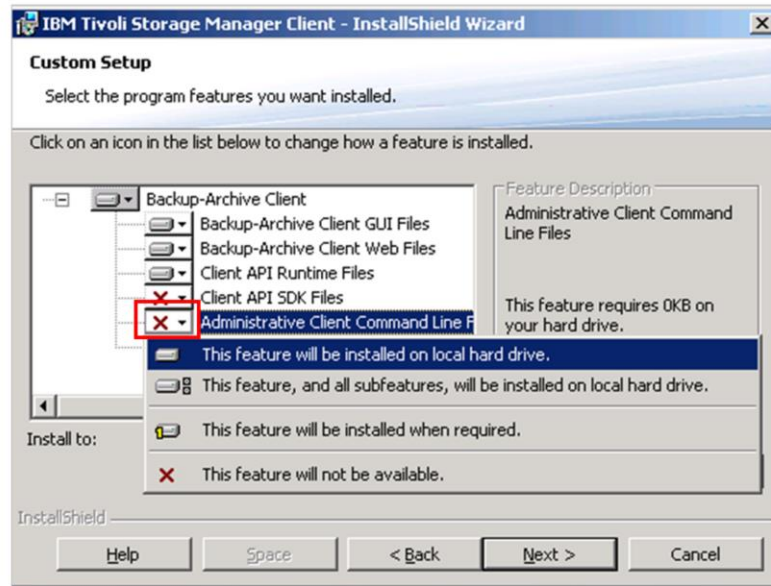
Verify space requirements



To verify the available disk space, click the **Space** button at the bottom of the page. The next page shows the disk sizes, space available, and space required. Click **OK** to return to the Custom Setup page.

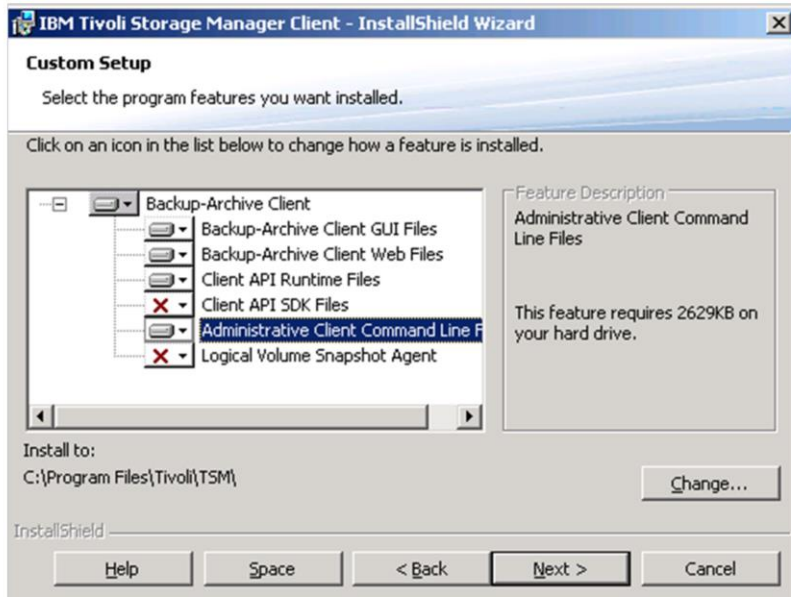
The optional features available with the custom setup are Client API SDK Files, Administrative Client Command Line Files, and Logical Volume Snapshot Agent.

Add the Administrative Client Command Line feature



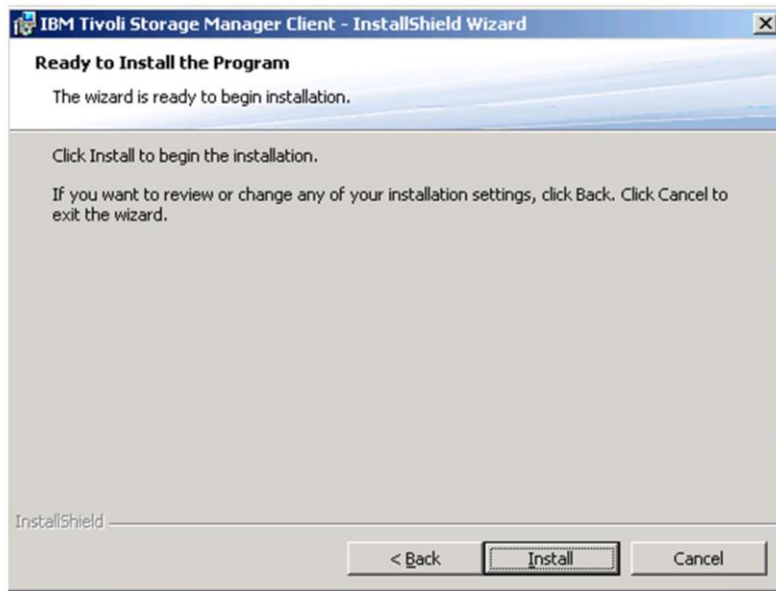
Click the pull-down menu beside **Administrative Client Command Line Files**. Select **This feature will be installed on local hard drive**.

Verify custom setup options



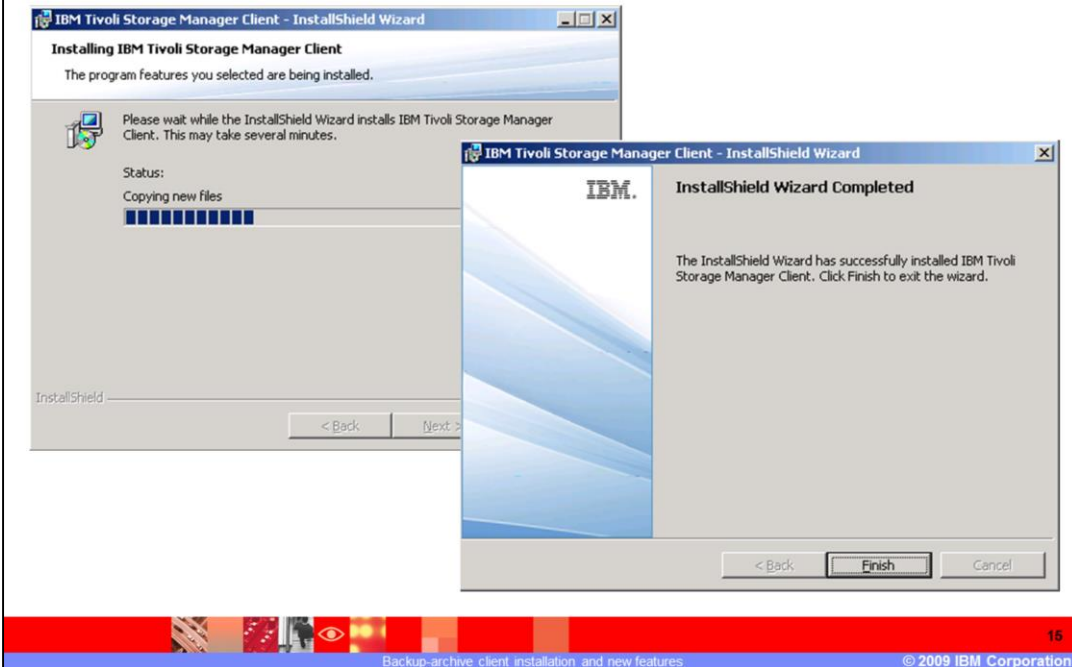
Click **Next** to continue.

Begin the installation



Click **Install** to begin the installation.

Finish the installation



The status is displayed during the installation. When the installation is complete, the InstallShield Wizard Completed page is displayed. Click **Finish**.

Exit the installation

IBM Tivoli Storage Manager Client
Version 6.1.0.0

Install Products

TSM Backup-archive Client

TSM Language Packs

Return to Main Menu

IBM Tivoli Storage Manager Client
Version 6.1.0.0

Main Menu

Please choose an option to the left.

Install Products

View Release Notes

Visit Our Website

Contact Us

Exit

Backup-archive client installation and new features

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On the Install Products menu, click **Return to Main Menu**.

On the Main Menu, click **Exit**.

Client options file

- To use the backup-archive client, configure the **dsm.opt** file in the **C:\Program Files\Tivoli\TSM\baclient** directory
- Use one of the following two methods to add the dsm.opt file to your client.
 - ▶ Copy the dsm.opt file from C:\Program Files\Tivoli\Tivoli Storage Manager\console\dsm.opt to C:\Program Files\Tivoli\TSM\baclient and add the nodename
 - ▶ Use the Tivoli Storage Manager Client Options File Configuration Wizard

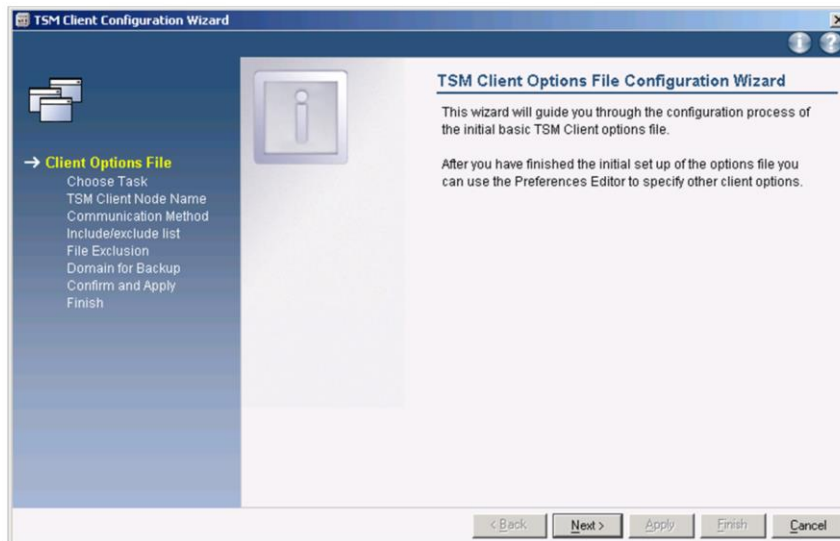
To use the backup-archive client, configure the dsm.opt file in the **C:\Program Files\Tivoli\TSM\baclient** directory.

Use one of the following two methods to add the dsm.opt file to your client.

- Copy the dsm.opt file from C:\Program Files\Tivoli\TSM\console\dsm.opt to C:\Program Files\Tivoli\TSM\baclient and add the nodename.
- Use the Tivoli Storage Manager Client Options File Configuration Wizard.

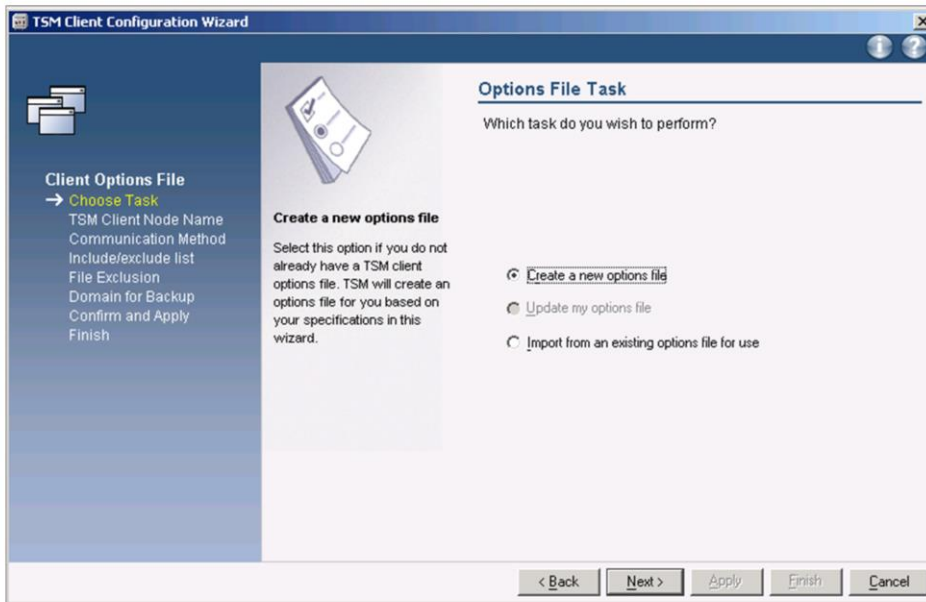
On UNIX clients, you have a dsm.opt file and a dsm.sys file for client options. For systems other than Solaris, copy the dsm.opt.smp file to your home directory as dsm.opt. The sample system options file, dsm.sys.smp, is now in the installation directory.

Tivoli Storage Manager client options file configuration wizard



Use the TSM Client Configuration Wizard to configure the client options file. After you finish the initial setup of the options file, you can use the Preferences Editor to specify other client options. Click **Next** to continue.

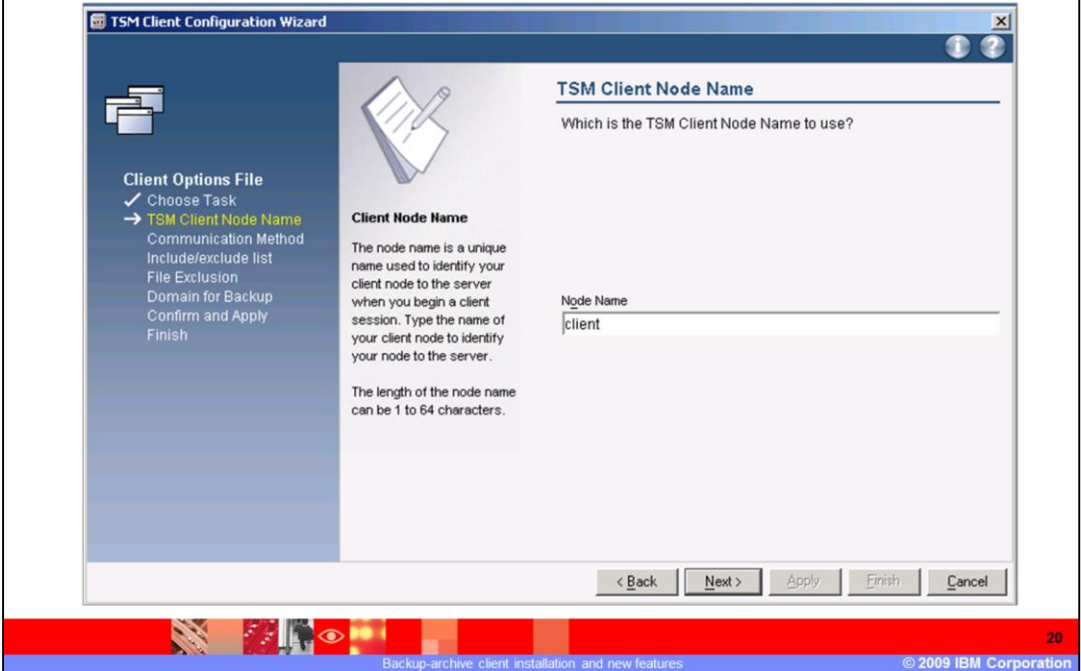
Options file task



Select the task you want to perform. You can create a new options file, update an existing options file, or import from an existing options file.

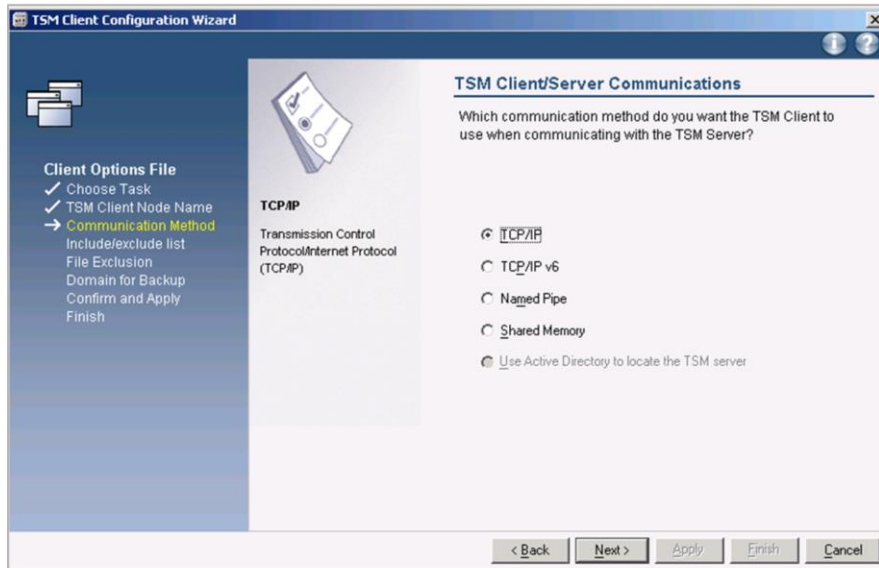
Select **Create a new options file** and click **Next**.

Tivoli Storage Manager client node name



The node name is a unique name used to identify your client node to the server when you begin a client session. The length of the node name can be 1 to 64 characters. The node name in this module is **client**. Click **Next** to continue.

Tivoli Storage Manager client and server communications

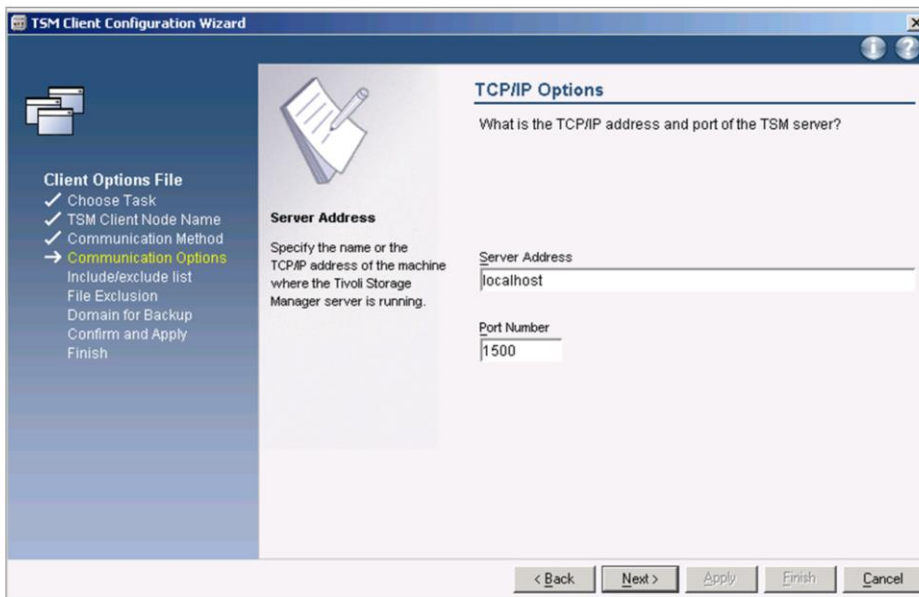


Select which communication method you want the Tivoli Storage Manager client to use when communicating with the Tivoli Storage Manager server. The options are TCP/IP, TCP/IPv6, Named Pipe, Shared Memory, and Use Active Directory®.

In this module TCP/IP is used.

Click **Next** to continue.

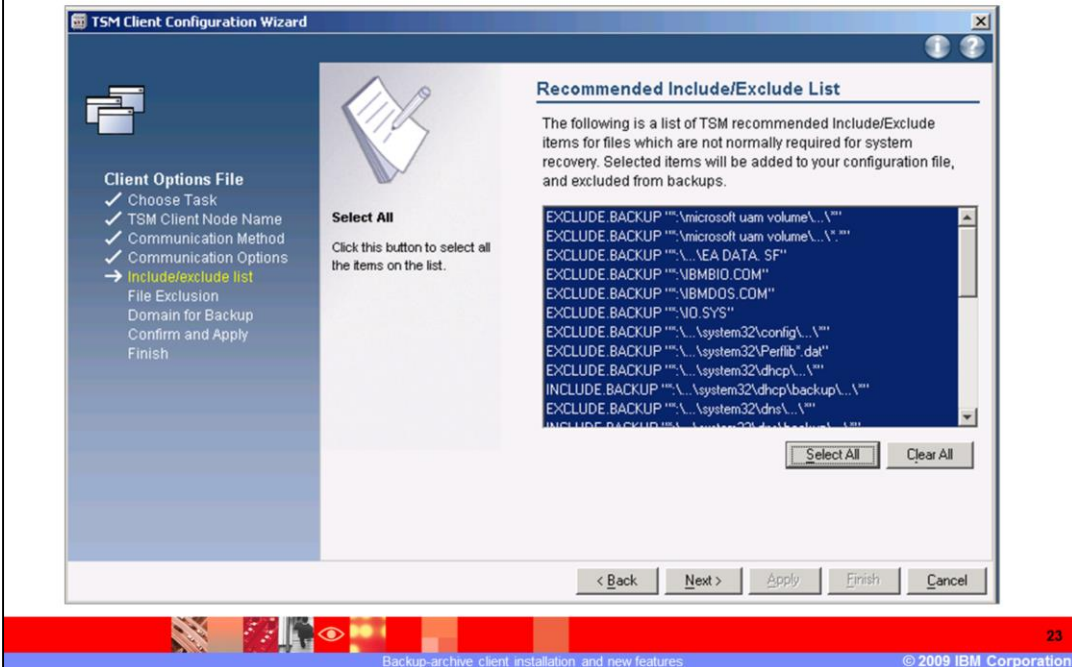
TCP/IP options



The screenshot shows the 'TSM Client Configuration Wizard' window. On the left, a navigation pane lists the following steps: 'Choose Task', 'TSM Client Node Name', 'Communication Method', 'Communication Options' (highlighted with a yellow arrow), 'Include/exclude list', 'File Exclusion', 'Domain for Backup', 'Confirm and Apply', and 'Finish'. The main area is titled 'TCP/IP Options' and contains the question 'What is the TCP/IP address and port of the TSM server?'. Below this, there is a 'Server Address' section with the instruction 'Specify the name or the TCP/IP address of the machine where the Tivoli Storage Manager server is running.' and a text input field containing 'localhost'. A 'Port Number' section has a text input field containing '1500'. At the bottom of the wizard, there are buttons for '< Back', 'Next >', 'Apply', 'Finish', and 'Cancel'.

Specify the name of the TCP/IP address of the machine where the Tivoli Storage Manager server is running. The TCP/IP port address communicates with a server. The range of values is 1 to 32767. The default value is 1500. Click **Next** to continue.

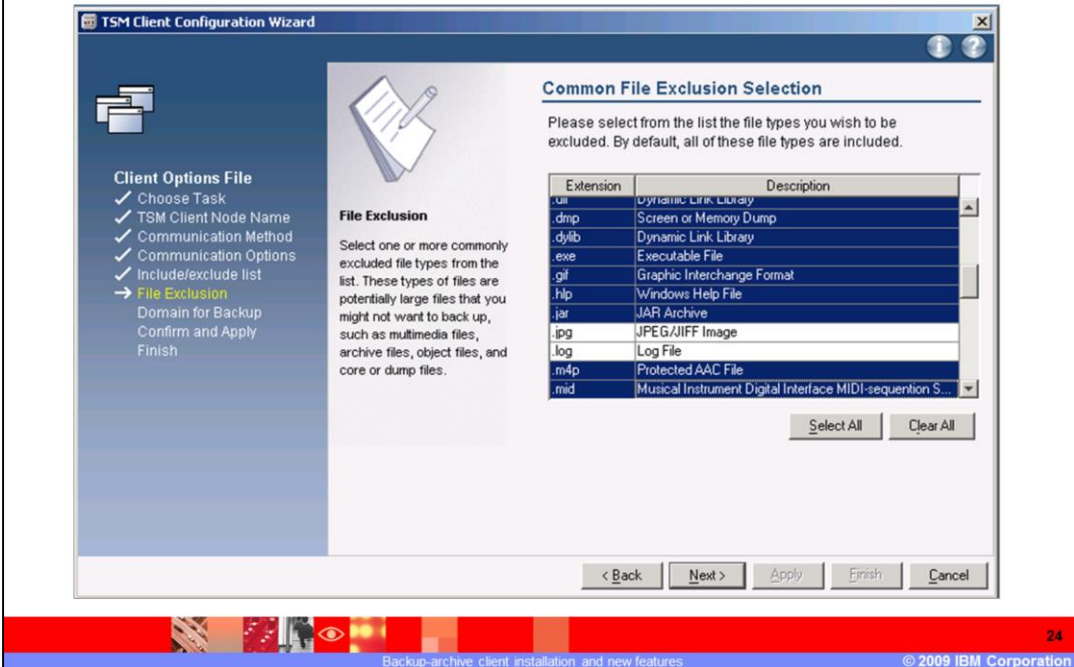
Include/exclude list



An include/exclude list is displayed. In this list are the Tivoli Storage Manager recommended include/exclude items that are typically required for system recovery. Selected items are added to your configuration file. Base your selection on the requirement for your enterprise.

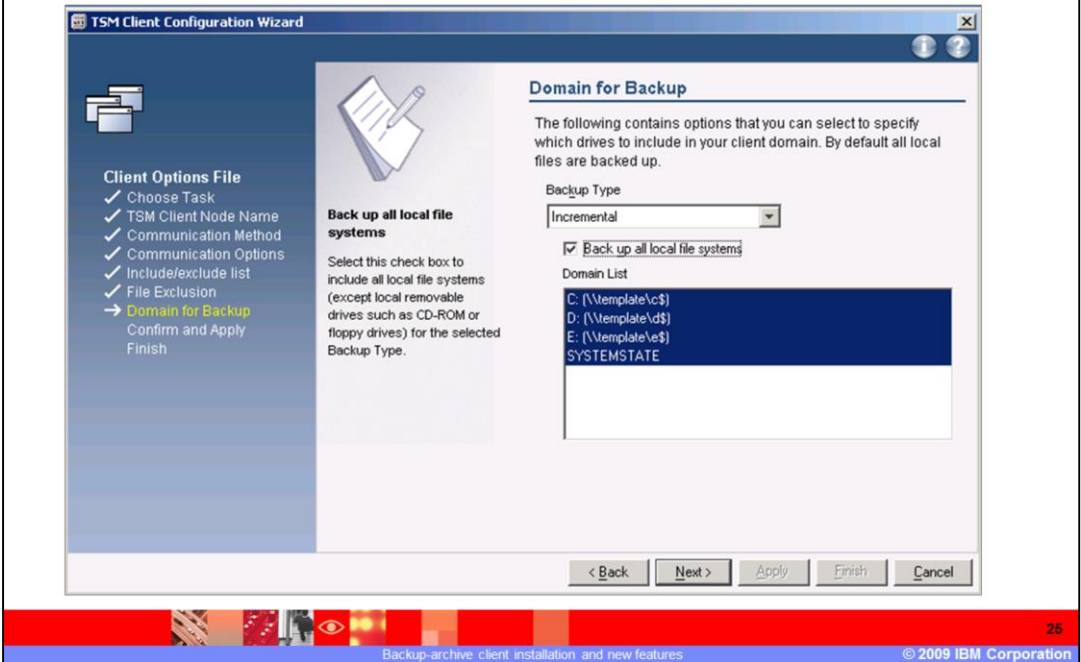
Click **Select All** or **Clear All**. You can use a command line or the Preferences Editor to add items to the include/exclude list at any time. Click **Next** to continue.

Common file exclusion selection



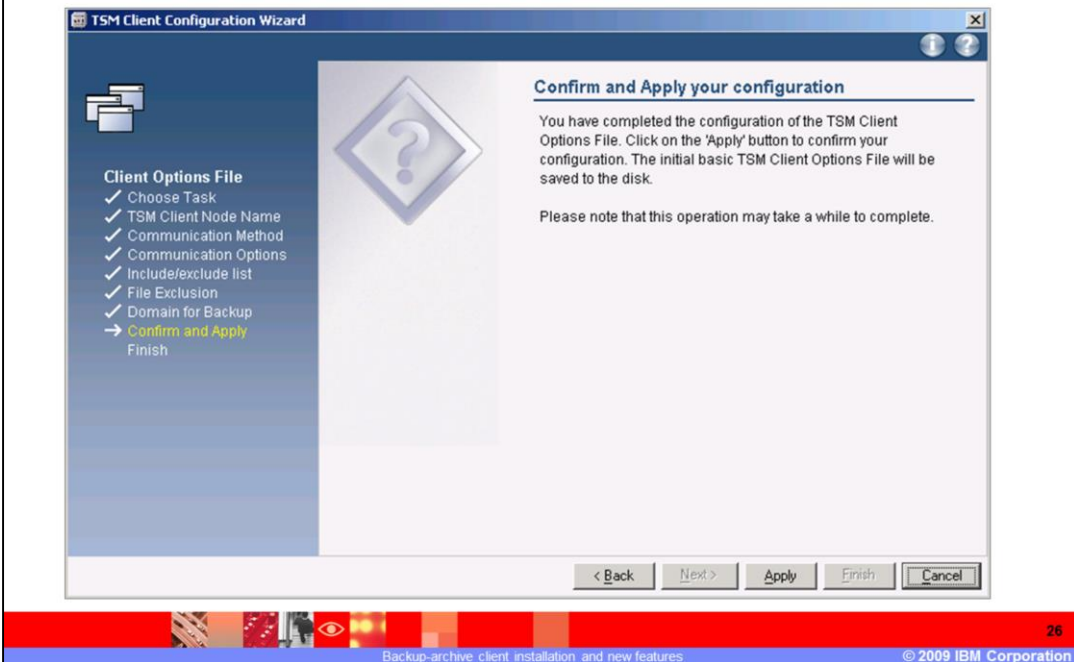
Select the file types you want to exclude from backup. By default, all of these file types are included in the backup. Base your selection on the requirement for your enterprise. Click **Next** to continue.

Domain for backup



Specify the drives to include in your client domain. By default all local files are backed up. Select the **Back up all local file systems** check box to include all local file system drives. Base your selection on the requirement for your enterprise. Click **Next** to continue.

Confirm and apply your configuration



After you complete the configuration of the Tivoli Storage Manager client options file, click the **Apply** button. Click **Finish** to complete the configuration.

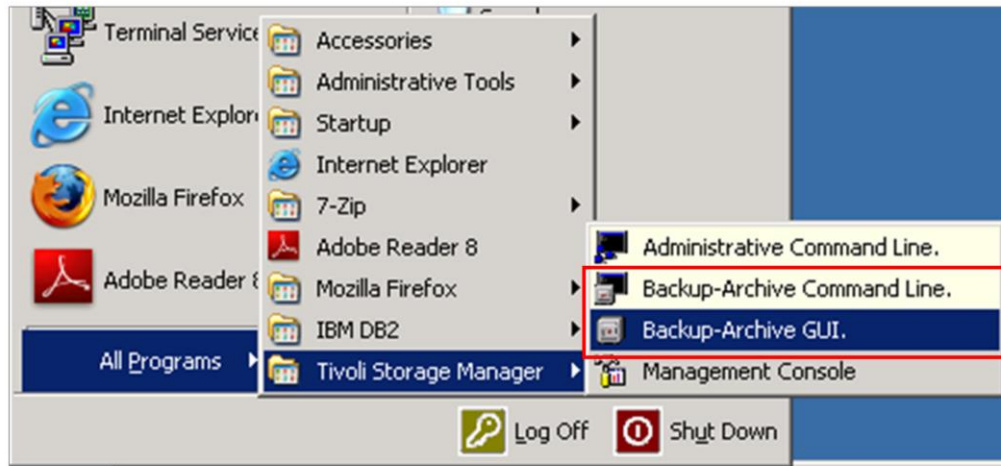
Example of dsm.opt file

```
dsm.opt - Notepad
File Edit Format View Help
NODENAME client
TCPSEVERADDRESS localhost
EXCLUDE.BACKUP "*:\microsoft uam volume\...\*"
EXCLUDE.BACKUP "*:\microsoft uam volume\...\*.*)"
EXCLUDE.BACKUP "*:\...\EA DATA. SF"
EXCLUDE.BACKUP "*:\IBMBIO.COM"
EXCLUDE.BACKUP "*:\IBMDOS.COM"
EXCLUDE.BACKUP "*:\IO.SYS"
EXCLUDE.BACKUP "*:\...\system32\config\...\*"
EXCLUDE.BACKUP "*:\...\system32\Perflib*.dat"
EXCLUDE.BACKUP "*:\...\system32\dhcp\...\*"
INCLUDE.BACKUP "*:\...\system32\dhcp\backup\...\*"
EXCLUDE.BACKUP "*:\...\system32\dns\...\*"
INCLUDE.BACKUP "*:\...\system32\dns\backup\...\*"
EXCLUDE.ARCHIVE "*:\microsoft uam volume\...\*"
EXCLUDE.ARCHIVE "*:\microsoft uam volume\...\*.*)"
EXCLUDE.ARCHIVE "*:\...\EA DATA. SF"
EXCLUDE.ARCHIVE "*:\IBMBIO.COM"
EXCLUDE.ARCHIVE "*:\IBMDOS.COM"
```

This is an example of a dsm.opt file.

After your initial configuration, you can edit your dsm.opt file as appropriate for your system. You can also use the Tivoli Storage Manager Preferences Editor. On the Tivoli Storage Manager graphical user interface, click **Edit > Preferences**.

Start backup-archive interface



You can use the backup-archive command line or the backup-archive GUI to backup, restore, archive, and retrieve your data.

To access the backup-archive interfaces, click **Start > Programs** (or All Programs, depending on your operating system).

Select **Tivoli Storage Manager** from the list of programs.

Select either the backup-archive command line or the backup-archive GUI.

Register a new node and log in

The screenshot shows two overlapping windows. The background window is titled "Register New Node" and contains the following fields:

- New node name: CLIENT
- Contact Information: Pat Ondback x2468
- Password (enter twice for verification): Two fields, both containing six asterisks (*****).

Buttons at the bottom of the "Register New Node" window are "Register", "Cancel", and "Help".

The foreground window is titled "TSM Login" and contains the following fields:

- User id: CLIENT
- Password: *****

Buttons at the bottom of the "TSM Login" window are "Login", "Cancel", and "Help".

At the bottom of the slide, there is a red banner with the text "Backup-archive client installation and new features" and "© 2009 IBM Corporation".

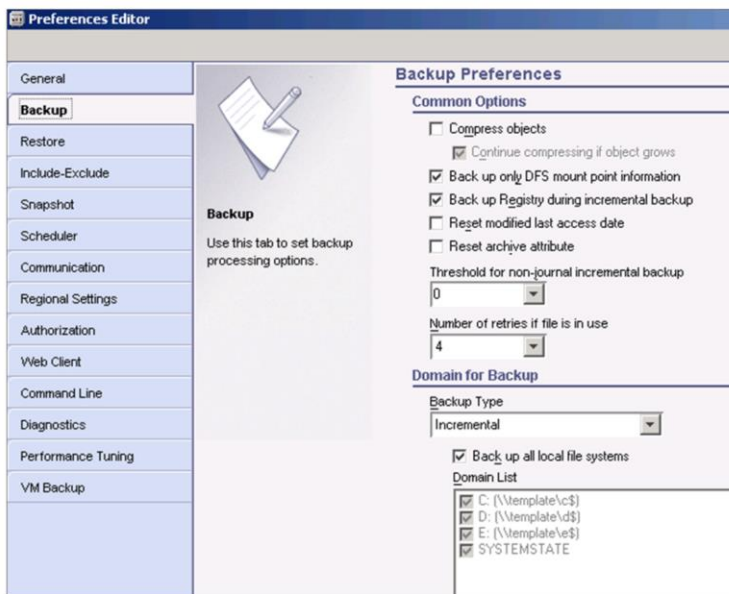
Before the Tivoli Storage Manager Server can be

The two types of registration are open registration and closed registration.

If the Tivoli Storage Manager administrator sets the registration to open, Tivoli Storage Manager prompts you for information the first time you start a session. Provide the information to register your workstation with the server identified in your client options file.

If your enterprise uses closed registration, a Tivoli Storage Manager administrator registers your workstation as a client node with the server. Your administrator provides your contact information, the node name, and the initial password.

Example of preferences editor



After you configure and register the client, you can modify the client options file with the Preferences Editor.

Open the backup-archive GUI. Click **Edit > Client Preferences**.

New client functions

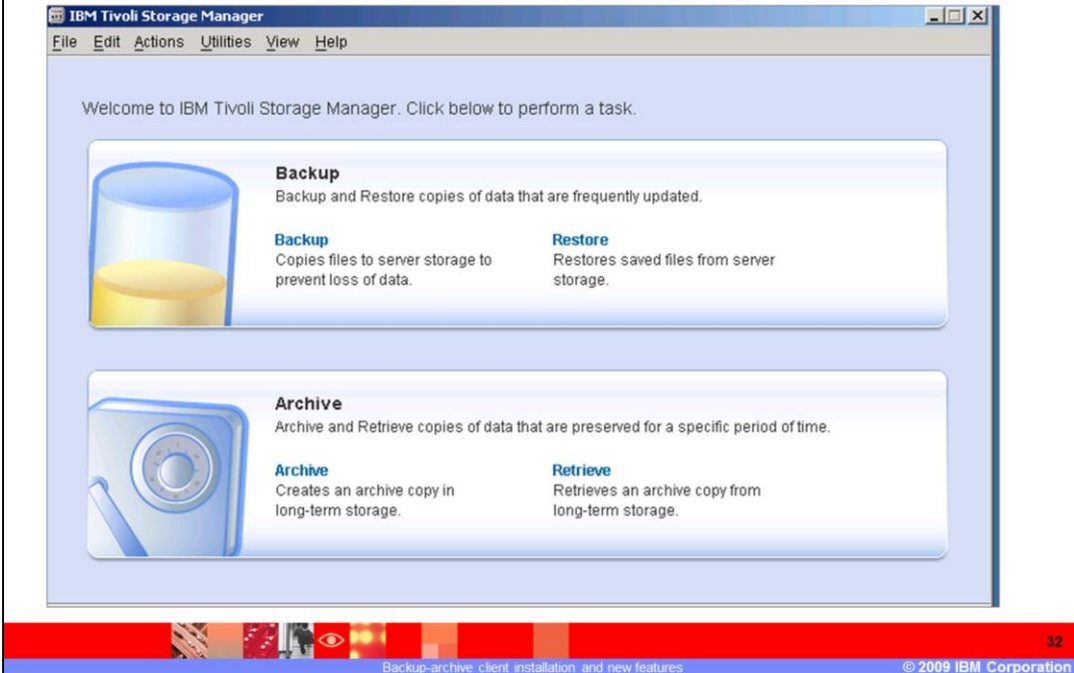
- VMware consolidated backup (VCB)
- Windows Active Directory backup
- Backup-archive graphical user interface
- Help commands

Some of the key new backup-archive client functions for IBM Tivoli Storage Manager 6.1 are VMware consolidated backup (VCB), Windows Active Directory backup, improved backup-archive graphical user interface ,or GUI, and improved Help commands.

You can copy full VMware virtual disk exports from snapshots to the backup proxy. The entire virtual machine is backed up as a single item, similar to a Tivoli Storage Manager image backup. The exports are broken into 2 GB file chunks, which are backed up at a file level.

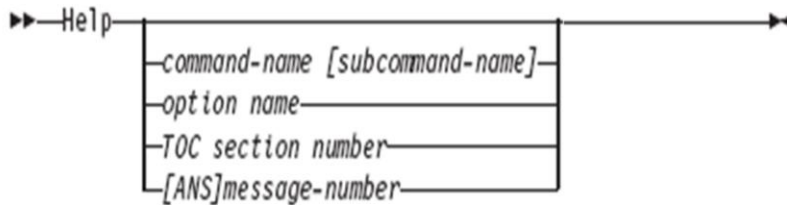
You can restore Individual Active Directory objects from Local Deleted Objects or from the Tivoli Storage Manager Server. You can use the Active Directory deleted object recovery and item-level restore to recover Active Directory objects. This feature, called tombstone reanimation, does not require a shutdown or reboot of the Active Directory server. You can also use Tivoli Storage Manager to back up and restore Windows Active Directory objects.

Backup-archive graphical user interface



The backup-archive graphical user interface has a new design. The backup and restore section is represented by a graphic of a disk. The archive and retrieve section has a graphic of a safe.

Help commands



You can use the command-line client help feature to locate information. Specify the command, option, table of contents section number, or message on which you want help information.

In the graphical user interface, you can select buttons on the message boxes to see details about the messages.

You can use the command-line client help feature to locate information. Specify the command name, option name, table of contents section number, or message number options in the command.

In the graphical user interface help message, you can select buttons on the message boxes to see details about the messages.

The following options are available.

- The **command-name [subcommand-name]** option specifies a command name and a subcommand name (or abbreviation). An example is backup image, or b i. Use a unique combination of letters for abbreviations. If you use non-unique abbreviations, your results include the entire first section matching those abbreviations in the help file.
- The **option name** specifies the name of an option, for example, *verbose* or *v*. This parameter is optional.
- The **TOC section number** option specifies a table of contents section number, for example, 2.46 or 3.65.1. This parameter is optional.
- The **[ANS]message-number** option specifies a message number with or without its prefix, for example, ans1036 or 1036. This parameter is optional.

Summary

You should now be able to perform the following tasks:

- ▶ Install and configure the Tivoli Storage Manager 6.1 backup-archive client
- ▶ Describe the new features of the Tivoli Storage Manager 6.1 backup-archive client



This concludes the training module for Tivoli Storage Manager 6.1 backup-archive client installation and new features.

You should now be able to install and configure the Tivoli Storage Manager 6.1 backup-archive client. You should also be able to describe the new features presented in this module.

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