IBM Tivoli Storage Manager FastBack for Workstations
6.1.2.0

Client Installation and User's Guide

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Edition notice

This edition applies to version 6, release 1, modification 2 of Tivoli Storage Manager FastBack for Workstations and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Preface

This publication helps you install and use Tivoli® Storage Manager FastBack for Workstations.

Who should read this publication

This publication is intended for users of Tivoli Storage Manager FastBack for Workstations clients.

Accessing publications online

IBM® posts publications for this and other products, as they become available and when they are updated, to the product information center.

See the FastBack for Workstations section of the Tivoli Storage Manager FastBack products information center at http://publib.boulder.ibm.com/infocenter/tsmfbinf/v6/index.jsp.

Note: If you print PDF documents on other than letter-sized paper, set the option in the **File → Print** window that allows Adobe Reader to print letter-sized pages on your local paper.

Ordering publications

You can order or download PDF files and HTML versions of some IBM publications online.

To order or download IBM publications online go to the following Web site: IBM Publications Center at http://www.elink.ibmlink.ibm.com/publications/servlet/pbi.wss. The publications are available in PDF or HTML formats, or both.

The Web site also provides information for ordering publications from countries other than the United States. In the United States, you can also order publications by calling: 800-879-2755.

Support information

You can find support information for IBM products from a number of different sources.
- "Searching knowledge bases" on page vi
- "Finding product fixes" on page vi

Getting technical training

Information about Tivoli technical training courses is available online.

Go to Tivoli software training & certification at http://www.ibm.com/software/tivoli/education/.

Searching knowledge bases

If you have a problem with your IBM software, begin by searching the available knowledge bases to determine whether the resolution to your problem is already documented.

Search the internet

If you cannot find an answer to your question in the information center, search the Internet for the latest, most complete information that might help you resolve your problem.

To search multiple Internet resources for your product, go to the support web site for the product: Tivoli Storage Manager FastBack for Workstations support Web site at http://www.ibm.com/software/tivoli/support/storage-mgr-fastback-workstation/ and search support for the product. From this section, you can search a variety of resources including:

* IBM technotes
* IBM downloads
* IBM Redbooks®
* Forums and newsgroups

Using IBM Support Assistant

At no additional cost, you can install on any workstation the IBM Support Assistant, a stand-alone application. You can then enhance the application by installing product-specific plug-in modules for the IBM products that you use.

The IBM Support Assistant helps you gather support information when you need to open a problem management record (PMR), which you can then use to track the problem. The product-specific plug-in modules provide you with the following resources:

* Support links
* Education links
* Ability to submit problem management reports

For more information, see the IBM Support Assistant Web site at http://www.ibm.com/software/support/isa/.

Finding product fixes

This topic describes where and how to find a fix for your problem.

About this task

A product fix might be available to resolve your problem. You can determine what fixes are available for your IBM software product by checking the product support Web site:

Procedure

1. Go to the IBM Software Support Web site at http://www.ibm.com/software/support/.
2. Select the Tivoli brand. This opens a product-specific support site.
3. Under **Support for all Tivoli products** you will find a list of fixes, fix packs, and other service updates for your product.
4. Click the name of a fix to read the description and optionally download the fix.

What to do next

To receive weekly e-mail notifications about fixes and other news about IBM products, follow these steps:

1. From the support page for any IBM product, click **My support** in the upper-right corner of the page.
2. If you have already registered, skip to the next step. If you have not registered, click register in the upper-right corner of the support page to establish your user ID and password.
3. Sign in to **My support**.
4. On the My support page, click **Edit profiles** in the left navigation pane, and scroll to **Select Mail Preferences**. Select a product family and check the appropriate boxes for the type of information you want.
5. Click **Submit**.
6. For e-mail notification for other products, repeat steps 4 and 5.

Getting e-mail notification of product fixes

You can get notifications about fixes and other news about IBM products.

About this task

To receive weekly e-mail notifications about fixes and other news about IBM products, follow these steps:

Procedure

1. From the support page for any IBM product, click **My support** in the upper-right corner of the page.
2. If you have already registered, skip to the next step. If you have not registered, click **Register** in the upper-right corner of the support page to establish your user ID and password.
3. Sign in to **My support**.
4. On the My support page, click **Edit profiles** in the left navigation pane, and scroll to **Select Mail Preferences**. Select a product family and check the appropriate boxes for the type of information you want.
5. Click **Submit**.
6. For e-mail notification for other products, repeat steps 4 and 5.

Contacting IBM Software Support

You can contact IBM Software Support if you have an active IBM software maintenance contract and if you are authorized to submit problems to IBM.

About this task

Before you contact IBM Software Support, follow these steps:

Procedure

1. Set up a software maintenance contract.
2. Determine the business impact of your problem.
3. Describe your problem and gather background information.

What to do next

Then see "Submit the problem to IBM Software Support" on page ix for information on contacting IBM Software Support.

Setting up a software maintenance contract

Set up a software maintenance contract. The type of contract that you need depends on the type of product you have.

Procedure

- For IBM distributed software products (including, but not limited to, Tivoli, Lotus®, and Rational® products, as well as IBM DB2® and IBM WebSphere® products that run on Microsoft Windows or UNIX operating systems), enroll in IBM Passport Advantage® in one of the following ways:
  - **Online:** Go to the Passport Advantage Web page at http://www.ibm.com/software/lotus/passportadvantage/, click **How to enroll**, and follow the instructions.
  - **By Phone:** For the phone number to call in your country, go to the IBM Software Support Handbook Web page at http://techsupport.services.ibm.com/guides/contacts.html and click **Contacts**.
- For server software products, you can purchase a software maintenance agreement by working directly with an IBM sales representative or an IBM Business Partner. For more information about support for server software products, go to the IBM Technical support advantage Web page at http://www.ibm.com/servers/eserver/techsupport.html.

What to do next

If you are not sure what type of software maintenance contract you need, call 1-800-IBMSERV (1-800-426-7378) in the United States. For a list of telephone numbers of people who provide support for your location, go to the Software Support Handbook page at http://techsupport.services.ibm.com/guides/contacts.html.

Determine the business impact

When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem you are reporting.

Severity 1	**Critical** business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.
Severity 2	**Significant** business impact: The program is usable but is severely limited.
Severity 3	**Some** business impact: The program is usable with less significant features (not critical to operations) unavailable.
Severity 4	**Minimal** business impact: The problem causes little impact on operations, or a reasonable circumvention to the problem has been implemented.

Describe the problem and gather background information

When explaining a problem to IBM, it is helpful to be as specific as possible. Include all relevant background information so that IBM Software Support specialists can help you solve the problem efficiently.

To save time, know the answers to these questions:

* What software versions were you running when the problem occurred?
* Do you have logs, traces, and messages that are related to the problem symptoms? IBM Software Support is likely to ask for this information.
* Can the problem be recreated? If so, what steps led to the failure?
* Have any changes been made to the system? For example, hardware, operating system, networking software, and so on.
* Are you currently using a workaround for this problem? If so, be prepared to explain it when you report the problem.

Submit the problem to IBM Software Support

You can submit the problem to IBM Software Support online or by phone.

Online

> Go to the IBM Software Support Web site at http://www.ibm.com/ software/support/probsub.html. Enter your information into the appropriate problem submission tool.

By phone

> For the phone number to call in your country, go to the contacts page of the IBM Software Support Handbook at http:// techsupport.services.ibm.com/guides/contacts.html

If the problem that you submit is for a software defect or for missing or inaccurate documentation, IBM Software Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. If a workaround is possible, IBM Software Support provides one for you to implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the Tivoli Storage Manager FastBack for Workstations support Web site at http://www.ibm.com/software/tivoli/support/storage-mgr-fastback-workstation/, so that users who experience the same problem can benefit from the same resolutions.

Chapter 1. Product Overview

This chapter provides an introduction to the Tivoli Storage Manager FastBack for Workstations client and briefly describes enhancements for this version of the product.

New for the client in version 6.1.2

Tivoli Storage Manager FastBack for Workstations is updated for version 6.1.2.

The Tivoli Storage Manager FastBack for Workstations client is updated with the following enhancements:

Set throttle speed and network rules

Manage bandwidth usage and define throttle speed for each network with the new Network Rules dialog. Each rule is retained so that a manual rule update is no longer required every time Tivoli Storage Manager FastBack for Workstations accesses a new or different network.

See "Specifying throttle settings and network rules for Tivoli Storage Manager FastBack for Workstations" on page 51 for detailed information.

Additional status provided in the system tray icon

The Tivoli Storage Manager FastBack for Workstations system tray icon (visible in your desktop system tray) now displays disconnected, paused, and error status.

See "Status panel of Tivoli Storage Manager FastBack for Workstations" on page 76 for detailed information.

Support for Microsoft Windows 7

Tivoli Storage Manager FastBack for Workstations provides continuous file protection for Microsoft Windows 7 systems.

See "Program data folder" on page 47 for detailed information.

Tivoli Storage Manager FastBack for Workstations client: Introduction

The Tivoli Storage Manager FastBack for Workstations client provides a flexible, easy to use file protection system. Your most important files can be continuously protected. Your less important files can be protected at scheduled intervals to save time and storage space. E-mail files can also be protected. And you can prevent any changes (including deletions) to files in folders that you designate as vaults.

Continuously protected files are backed up to a local drive, so that backup copies are created even when network conditions prevent storing backup copies on remote storage locations. Continuously protected files can also be stored on remote storage locations, when network connections allow. If a remote location is not available when you change a continuously protected file, the Tivoli Storage Manager FastBack for Workstations client makes a backup copy on that device as soon as the device becomes available. Scheduled backup copies are created on the interval that you configure (hourly, weekly, daily, or monthly). If the remote device for scheduled backups is not available at the time of the backup, theTivoli Storage Manager FastBack for Workstations client makes backup copies on the remote location as soon as that device becomes available.

Every time you change a file, a backup copy is created. This allows you to choose which version of a protected file you want to restore. You configure how many backup copies to save.

The diagram below provides an overview of how the Tivoli Storage Manager FastBack for Workstations client protects your data.
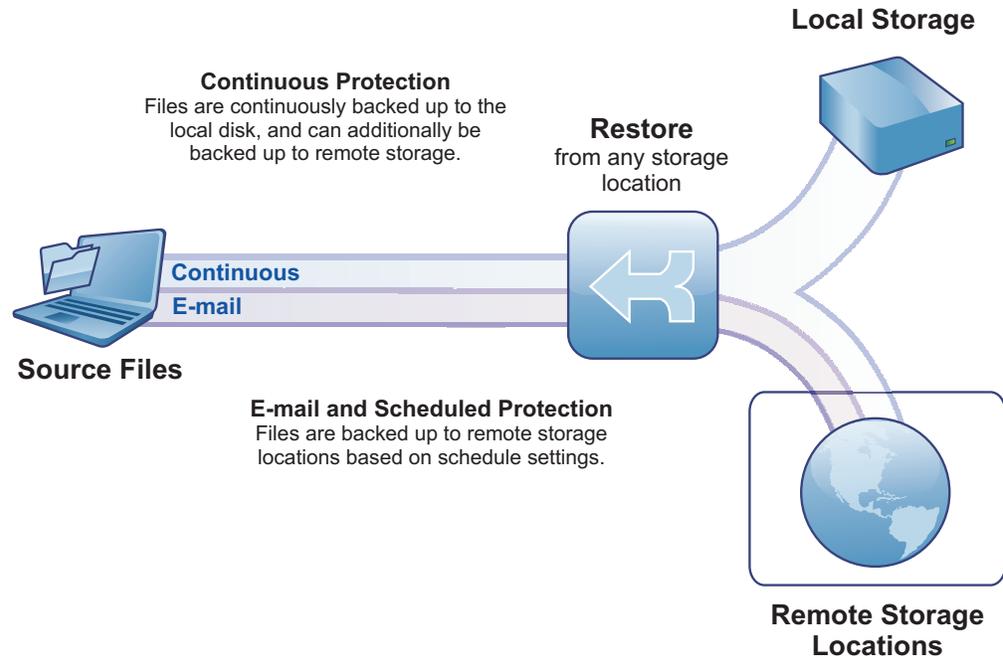
After installation of a Tivoli Storage Manager FastBack for Workstations client, the client immediately provides continuous protection for a pre-configured list of files. You can see the backup copies in the `\RealTimeBackup\` folder in the root of your primary drive, and in the list of files that you can restore with the Restore Wizard of the client. The default space allocated for your backup copies is 500 MB.

You can configure other lists of files to protect, other storage areas, scheduled protection, and other protection options, using the client or the central administration console.

Tivoli Storage Manager FastBack for Workstations can store backup copies on a Tivoli Storage Manager server, but there is no requirement to use Tivoli Storage Manager. Tivoli Storage Manager FastBack for Workstations is a stand-alone product and has no dependencies on Tivoli Storage Manager or Tivoli Storage Manager FastBack.

Types of protection

The Tivoli Storage Manager FastBack for Workstations client offers three types of protection for your files: continuous protection, scheduled protection, and vaulting.

Continuous protection means that every time a file is saved, a backup copy is created. Hence, the backup copy exactly matches the original file as you last saved it. If you choose to save more than one version of a backup copy, the previous backup copies match the previous versions of your file.

Files that are protected by schedule are copied to the remote storage area on a regular schedule. They are not backed up every time you save them, as are

continuously protected files. Hence, scheduled protection yields fewer backup copies. If a file is lost between the time it is saved and the time it is backed up, you are able to restore only a previous version of the file.

Email files are protected on a schedule.

If the storage area is unavailable when a protected file is saved, the client notes that the file has changed. When the storage area becomes available, the client makes a backup copy of the most recent version of the file.

Table 1. Comparison of the three types of protection

	Continuous Protection	Scheduled Protection (includes email)	Vaulting
Recommended for what files	Recommended for your most important files. Not recommended for large dynamic files like email files.	Recommended for large, dynamic files like email.	Recommended for files that you do not want to be changed nor deleted.
How protected	Backup copies are created on storage areas.	Backup copies are created on a storage area.	Vaulted files and folders cannot be modified nor deleted.
Frequency of backups	File is backed up whenever it is saved.	File is backed up only at the scheduled time, and only if it has been saved since the previous schedule.	No backups
Backup copy storage area	Local or remote	Remote only	Not applicable
Files protected	Files selected in the **Folders and Files** and **Applications** boxes in the **Files to Protect** panel in the Settings Notebook of the client. Files selected in the **Protected Folders and Files** field in the **Files to Protect** panel in the **Groups Configuration** notebook of the central administration console.	Files selected in the **E-mail Protection** panel and by the **Scheduled Backup Settings** link in the **Advanced** panel in the Settings Notebook of the client. Files selected in the **E-mail Protection** panel of the **Groups Configuration** notebook of the central administration console.	Files selected in the **Vault** box in the **Files to Protect** panel of the Settings Notebook of the client. Files selected in the **Vault** box in the **Protected Folders and Files** panel in the **Groups Configuration** notebook of the central administration console.

For more information about scheduled backup, see "Considerations for scheduled backups" on page 50.

Administration folders

Clients pull configuration information, commands, and software updates from administration folders. The central administration console manages clients by sharing information with clients in administration folders.

Managing clients

When the client and the central administration console access the same administration folder, they exchange information in the administration folder. The client sends reports to the folder. The central administration console collects the reports and presents the information to the administrator. The central administration console pushes software updates, configuration information, and command scripts to the administration folder, and the client periodically pulls the updates, configuration, and command scripts.

If the central administration console and a client are not configured to access the same administration folder, the central administration console cannot manage that client.

By default, the central administration console service uses a local system account to log on. A local system account can access administration folders on the central administration console server, but cannot access administration folders on shared drives on other computers. If the clients use administration folders on computers other than the central administration console server, run the central administration console service in an account that has access to the remote administration folders.

Determining administration folders for clients

Clients whose configuration files are created with the central administration console access the administration folder that you identify in the central administration console. The central administration console periodically scans the administration folder for reports from new clients. When the client is installed, the client accesses this administration folder, and the central administration console discovers the client. After the client is discovered, the central administration console locks the value of the administration folder.

If a Tivoli Storage Manager FastBack for Workstations client has not been discovered by the central administration console, you have some ability to specify the administration folder with the client. In this case, the administration folder defaults to the \RealTimeBackup\ subfolder of the remote storage area. When such a client is discovered by the central administration console, the central administration console sets and locks the value of the administration folder.

If a remote storage area is not configured, or if the client uses remote storage on a Tivoli Storage Manager server, there is no default administration folder.

Tivoli Continuous Data Protection for Files Standard Edition clients have a **Central Administration Settings** panel that allows a user to explicitly configure the administration folder location. If the **Central Administration Folder** field is configured, that value overrides the default administration folder location. This allows a client that is configured with no remote storage, or one that is configured with remote storage on a Tivoli Storage Manager, to be discovered and managed by the central administration console. However, a user can change the administration folder setting to a location that is not known to the central administration console. If this happens, the central administration console cannot manage the Tivoli Continuous Data Protection for Files client.

Tivoli Continuous Data Protection for Files Starter Edition clients do not have a **Central Administration Settings** panel that allows a user to explicitly configure the administration folder location. If a Starter Edition client uses Tivoli Storage Manager server remote storage, there is no administration folder. You can

configure an administration folder for such a client only by using the fpa config-set command. If you use the fpa config-set command to specify a folder that has been identified to the central administration console and is accessible to the client, the central administration console discovers the client.

The fpa config-set command sets the administration folder for any client, even one that has been discovered by the central administration console. Invoke the command from a Command Prompt window at the Tivoli Continuous Data Protection for Files install directory, like this:

```
fpa config-set GlobalManagementArea="\\MyServer\\MyShare\MyAdminFolder"
```

Replace \\MyServer\\MyShare\MyAdminFolder with the CIFS (Common Internet File System) URL of a folder that is accessible to the client and the central administration console.

Administration folder subfolders

The administration folder contains two levels of administrative subfolders.

Computer-specific subfolders
> These folders apply to only one computer. The central administration console communicates with clients through the computer-specific subfolders. In the computer-specific subfolder, there are two subfolders:

> **The Reports folder**
>> The client stores status reports in the Reports folder. You can view the reports in the central administration console. The full path of the reports folder is *administration_folder_location*\ *computer_name*\BackupAdmin\Reports\.

> **The Downloads folder**

>> When you put product upgrades or configuration files in this folder, the client automatically adopts the product upgrades or configuration. The full path is *administration_folder_location*\ *computer_name*\BackupAdmin\Downloads\.

Group administrative subfolders
> These folders apply to all computers that share this administration folder. In each group administrative subfolder, there is a Downloads subfolder. When you put product upgrades or configuration files in the group administrative Downloads subfolder, all clients that share this group administrative folder automatically adopt the product upgrades or configuration.
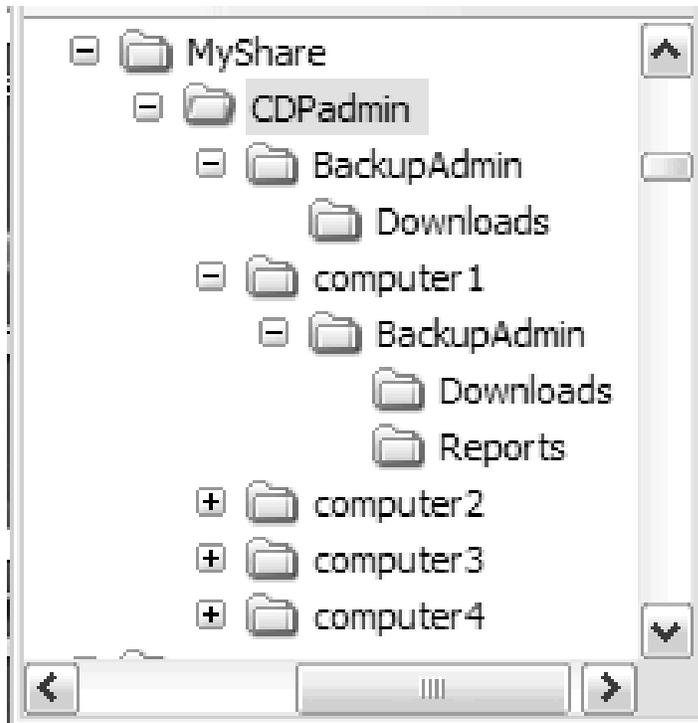
Chapter 2. Installing the Tivoli Storage Manager FastBack for Workstations client

This chapter contains information for installing and initially configuring the Tivoli Storage Manager FastBack for Workstations client.

Basic installation of the Tivoli Storage Manager FastBack for Workstations client

Basic installation of the client includes a wizard-guided configuration, and is suitable for installation on a single local computer. You can also upgrade and uninstall on a single computer.

For installing the client to a remote computer, installing without user interaction, or installing to many computers, see "Advanced installation of the Tivoli Storage Manager FastBack for Workstations client" on page 21.

System requirements

TheTivoli Storage Manager FastBack for Workstations client requires a Windows workstation with minimum levels of hardware and software.

For current software and hardware requirements, see FastBack for Workstations Hardware and Software Requirements.

Installing the Tivoli Storage Manager FastBack for Workstations client

You can install the Tivoli Storage Manager FastBack for Workstations client on a single computer and follow a wizard to configure your protection settings.

Before you begin

This section describes interactive client installation on a single computer and configuration using a wizard. To do a silent client installation (without user interaction) and to push Tivoli Storage Manager FastBack for Workstations clients to other computers, see "Advanced installation of the Tivoli Storage Manager FastBack for Workstations client" on page 21.

If you are upgrading from a previous version of the client, see "Considerations for upgrading a client" on page 23.
- You must have administrator authority to install the client.
- Your computer must have the necessary hardware and software. See "System requirements."
- If you are reinstalling or upgrading from a previous version of the client, close all other applications (especially e-mail programs) before you install. You must reboot immediately after the installation is complete.

About this task

Follow the steps below to interactively install the client on a single computer.

Procedure

1. Double-click on the Tivoli Storage Manager FastBack for Workstations client installer icon. The installer displays the language selection dialog. The default is English.
2. Choose your preferred language and click **OK**. The Tivoli Storage Manager FastBack for Workstations information window displays the build number.
3. Click **Next**. The **License Agreement** window displays.
4. Read the License Agreement, then select the radio button if you accept the terms of the agreement. Click **Next**. The **Destination Folder** window displays.
5. Accept the default install location, or click **Change** to specify another location. Click **Next**. The **Ready to Install the Program** window displays.
6. Confirm that the information is correct and click **Next**.

   The installation window displays a progress bar indicating that the necessary files are being installed on your computer. You will also see a command prompt window open as the installer runs several scripts.

   The Installation Complete window displays.
7. If you are installing on Windows Vista, and there is an existing Tivoli Storage Manager FastBack for Workstations client, you will see the Files in Use window. Click **OK**. You will also see a warning that the setup was unable to automatically close all requested applications. Click **OK**.
8. If this is your first installation of the Tivoli Storage Manager FastBack for Workstations client on this computer, a configuration wizard will help you choose your protection settings. See "Initial Configuration Wizard of Tivoli Storage Manager FastBack for Workstations."
9. Click **Finish**. The installer indicates that you must reboot in the following situations:
   - You are reinstalling or upgrading Tivoli Storage Manager FastBack for Workstations.
   - A product that uses the Tivoli Storage Manager API is installed and running. Tivoli Storage Manager Backup-Archive client is such a product.

What to do next

If you upgrade over a previous version of Tivoli Storage Manager FastBack for Workstations, you must restart the computer for the new settings to become active and for your protection to continue.

After installation (and restart, if required), the client immediately starts protecting your files.

If you want to change your protection settings, see "Settings Notebook of Tivoli Storage Manager FastBack for Workstations" on page 27.

Configuring clients with the configuration wizard

Use the client configuration wizard to configure the client at the first installation.

Initial Configuration Wizard of Tivoli Storage Manager FastBack for Workstations:

The first time you install, a wizard will help you choose your protection settings.

Use the control buttons at the bottom of each wizard page to navigate to all pages. When you have chosen all settings, click the **Finish** button.

If you cancel the wizard before finishing, any changes you made in the wizard will be cancelled. Tivoli Storage Manager FastBack for Workstations will protect your files according to the configuration settings that were defined for installation. You can view and change your settings at a later time with the Settings Notebook.

The wizard has 6 screens:
- "**Welcome** panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations"
- "**What is Critical** panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations"
- "**E-mail Protection** panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations" on page 14
- "**Remote Storage** panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations" on page 15
- "**Initial Backup** panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations" on page 19
- "**Summary** panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations" on page 20

Welcome *panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

The **Welcome** panel lists the steps to initially set your protection settings.

Click the **Next** button to advance to the next page of the wizard. Click the **Cancel** button to exit the wizard without changing the initial protection settings.

What is Critical *panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

Use the **What is Critical** panel to specify the files and folders that you want to protect. The specified files and folders and applications will be continuously protected, which means Tivoli Storage Manager FastBack for Workstations will create backup copies on a storage area as soon as the files are changed.
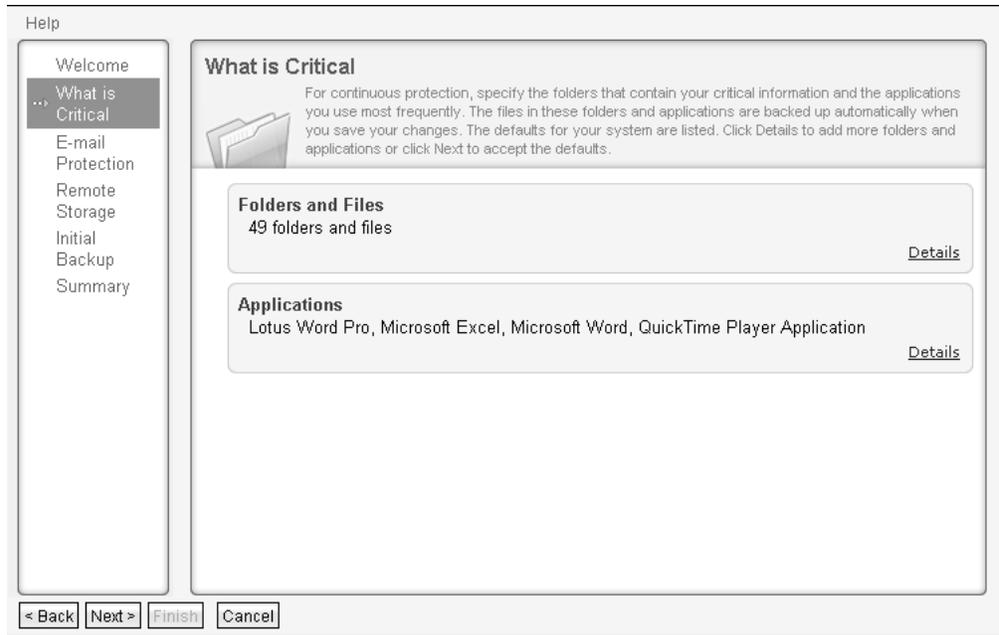
When Tivoli Storage Manager FastBack for Workstations is installed, it is pre-configured with a list of files and folders to continuously protect. Use this panel to confirm that the initial protection settings are correct for your needs, or change the settings as appropriate.

The protected files are listed by **Folders and Files** and by **Applications** These lists are not exclusive of one another, but offer two views of what is protected.

If you prefer viewing the file paths, names, and extensions that are protected, use the **Folders and Files** box. This option allows you to use a file tree to specify what to protect.

If you prefer viewing the applications that are protected, use the **Applications** box. This option allows you to specify applications from a list. Files that are created by the listed applications are protected. The file extensions associated with the application will automatically be added to the **Folders and Files** list.

Note: Email applications are specified in the **E-mail Protection** panel. Because these files are often very large, their protection settings are configured separately.

Folders and Files *box (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

This box gives a summary of the folders and files that are continuously protected. The number of items protected refers to the items in the list of folders and files. A single list item can specify more than one file. Click the **Details** link to view all items in the list and modify the list. The **Folders and Files Settings** dialog will display.

Folders and Files Settings *dialog (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

Specify folders and files to protect by adding or removing items from the list.

List of protected folders and files
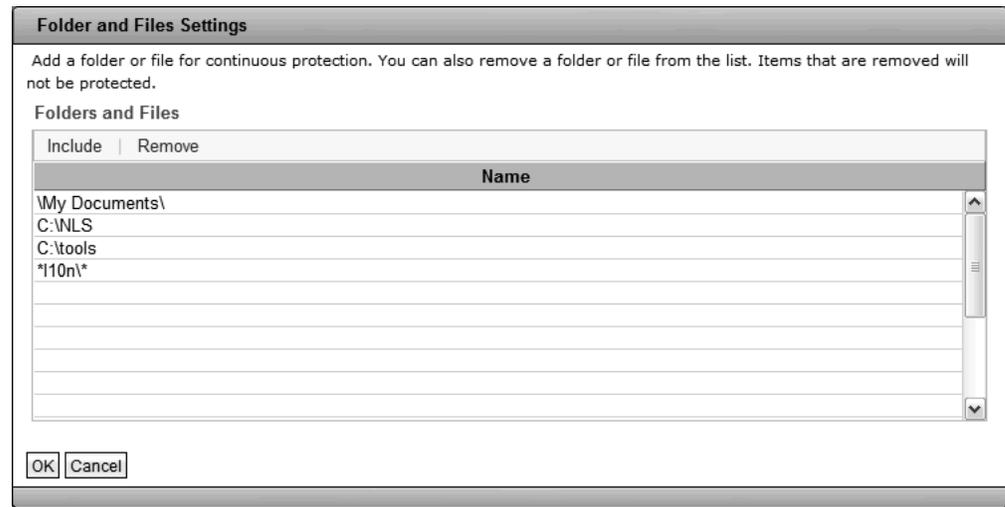
The top of the list box has two menu buttons. Click the buttons to include or remove items from the list.

Include
Click **Include** to add files and folders that you want to protect. The **Select folders** dialog will open.

Remove
Select one or more list items, then click **Remove** to remove those items.

Each row in the list has one column:

Name Patterns in the **Name** column specify one or more files or folders. See "Wildcards in file specifications" on page 12 to determine what files and folders will match a **Name** pattern with blanks or asterisks. When a folder is protected, all of its files and sub-folders are protected.

Select folders *dialog of Tivoli Storage Manager FastBack for Workstations:*

The **Select folders** dialog allows you to specify files and folders. You can browse to choose a folder, or type the name of a file or folder in the **Folder name** text field. If you browse and choose a file or folder, you can modify its path in the **Folder name** text field.

Note: Only your internal drives can be protected. Any external storage devices are considered remote storage devices.

Wildcards in file specifications:

You can use wildcards to specify the files to protect.

You can enter the complete path of a file that you want to protect. For example, `C:\Documents and Settings\Administrator\My Documents\Soccer\2005AYSO\Parent Info U8B.doc`. The complete path unambiguously matches a single file. But to specify all files this way requires many file paths. Use asterisks and blanks as wildcards to specify several files.

An asterisk matches any number of characters in a file path. If there are no asterisks, then Tivoli Storage Manager FastBack for Workstations matches any file whose fully expanded path name has that exact pattern anywhere in the path or filename. The pattern is not case-sensitive.

If there are no asterisks in the pattern, then blank spaces before and after the pattern are interpreted as asterisks. Hence, `\myDocs\` and `*\myDocs\*` yield the same matches. If there are asterisks in the pattern, then blank spaces before or after the pattern match no characters. Hence, `\myDir\`, `*\myDir\`, and `\myDir\*` could yield three different matches, as in the table of examples pictured.

As an example, assume a pattern `fish`. This pattern matches: `C:\dir\fish.doc` and `C:\fish\anyfile.doc` and `c:\Dirfishfood\something`.

If the pattern has slashes around it (`\fish\`), it matches any object with `\fish\` somewhere in the path. This pattern matches `C:\fish\anyfile.doc` but not `C:\dir\fish.doc` and not `c:\Dirfishfood\something`

Table 2. File and folder pattern matches

This pattern ...	... matches these folders and files on your computer:
\myDir\ or \mYdiR\ or *\myDir* or *\mydir*	c:\myDir\ c:\myDir\Contacts\ c:\myDir\Contacts\contacts.txt c:\Projects\myDir\ c:\Projects\myDir\myThings\ c:\Projects\myDir\myThings\things.doc c:\Projects\myDir\myThings\myPhoto.jpg d:\Notes\myDir\
*\myDir\	c:\myDir\ c:\Projects\myDir\ d:\Notes\myDir\
\myDir*	
d:*\mydir*	d:\Notes\myDir\
\my best	c:\Books\My Best.doc c:\Photos.jpg\My Best Photo\ c:\Photos.jpg\My Best Photo\Best.jpg f:\Projects\My Best Project\ f:\Projects\My Best Project\Dream.xls
.jpg	c:\Photos.jpg\ c:\Photos.jpg\myHouse.bmp c:\Photos.jpg\My Best Photo\Best.jpg c:\Projects\myDir\myThings\myPhoto.jpg
*.jpg	c:\Photos.jpg\ c:\Photos.jpg\My Best Photo\Best.jpg c:\Projects\myDir\myThings\myPhoto.jpg
E:\ E:*	All files and folders on the E: drive.

Applications *box (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

This box gives a short list of the applications that are protected.
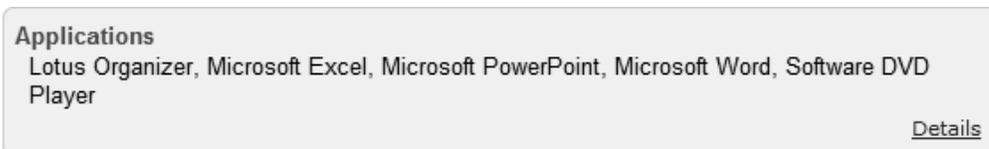
To see the complete list of the applications that are protected, click **Details**. The **Application Settings** dialog will display.

Critical Settings *dialog of Tivoli Storage Manager FastBack for Workstations:*

Specify a list of critical applications to protect.
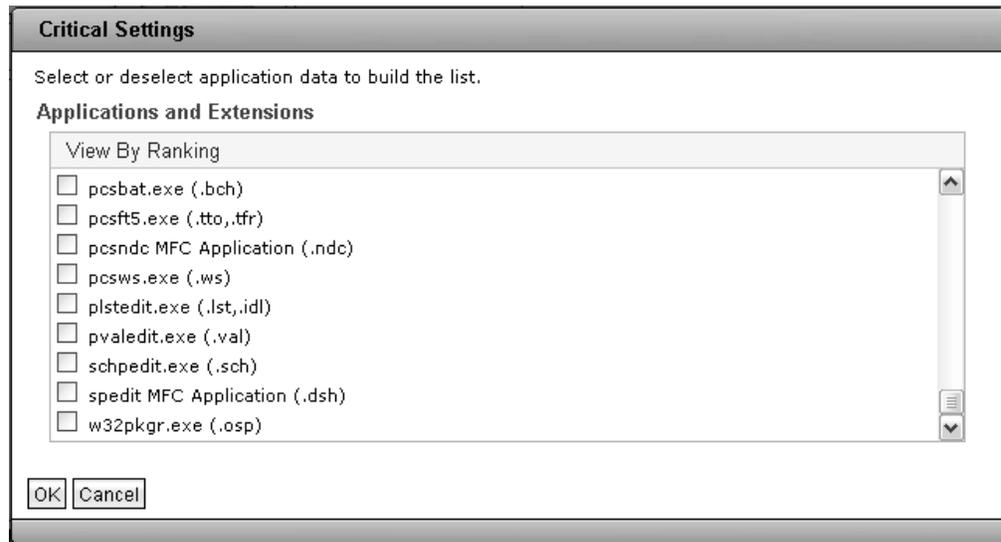
Critical Settings

Select or deselect application data to build the list.

Applications and Extensions

View By Ranking

☐ pcsbat.exe (.bch)
☐ pcsft5.exe (.tto,.tfr)
☐ pcsndc MFC Application (.ndc)
☐ pcsws.exe (.ws)
☐ plstedit.exe (.lst,.idl)
☐ pvaledit.exe (.val)
☐ schpedit.exe (.sch)
☐ spedit MFC Application (.dsh)
☐ w32pkgr.exe (.osp)

OK Cancel

The **Applications and Extensions** box presents a list of applications and their associated file extensions. Applications that are checked will be continuously protected. You can check and uncheck applications to suit your protection needs.

The list of applications has two views. Each view orders the applications in a different way. Click the menu item at the top of the box to change the view.

View by Ranking
> The applications that have the greatest quantity of files on your computer are presented at the top of the list. The applications that have the least quantity of files on your computer are presented at the bottom of the list.

View Alphabetically
> The applications are presented in alphabetical order.

If you check a box, all file extensions associated with that application will be added to the list of protected files.

If you uncheck a box, all files with that extension will be removed from the list of protected files. Note that removing file extensions from the list of protected files does not mean adding those files to the list of files that are explicitly excluded from protection.

Click **OK** in any of the views to update the list of protected files. Click **Cancel** to leave the dialog without changing the list of protected files.

You can add files to be protected in the **Critical Settings** dialog, but these applications will be protected only if the files are not explicitly excluded. See "Including and excluding files from protection" on page 33 for more information.

E-mail Protection *panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

Select the e-mail applications that you want to protect. Select a schedule for protecting the e-mail applications.

Because email files typically are very large, they are not backed up continuously, but only on the schedule that you select.

Email files are backed up only to remote storage. If the remote storage is not available at the scheduled backup time, Tivoli Storage Manager FastBack for Workstations will back up the email files when the remote storage area becomes available.

E-mail Application list

Select one of the popular email applications in the list.

If your application is not listed, select **Other**.

E-mail Application Data Folder text field

If you choose your email application from the **E-mail Application** list, the default file type for that application will appear in this box, and you will not be able to update the file specification. You can update this field only if you select **Other** in the **E-mail Application** list.

How often to protect your e-mail list

You can schedule email protection at one of several intervals:
- **Never**: Email will not be protected.
- **Hourly**: Email files will be backed up every hour, just after the hour.
- **Daily**: If you choose this interval, also select the time for the backup.
- **Weekly**: If you choose this interval, also select the day and time for the backup.
- **Monthly**: If you choose this interval, also select the day of the month and time for the backup.

Remote Storage *panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

Specify the remote storage for the backups of your protected files.

Welcome
What is
Critical
E-mail
Protection
**Remote
Storage**
Initial
Backup
Summary

Remote Storage

Your files can be backed up to a remote location such as a file server. Specify the type of remote storage, the location for storing your backups, and the amount of space available for backups. If the remote location cannot be reached, the system will wait until a connection can be established.

Back up to:
External Device

Location:
D:\CDPstorage\   [Browse]

Maximum space for backups:
4   GB

[< Back] [Next >] [Finish] [Cancel]

Storing files in a remote storage area will protect the files in case local copies are lost. Backups of continuously protected files, and files protected on a schedule, are stored in the same remote area. Tivoli Storage Manager FastBack for Workstations is very tolerant of intermittently available networks. If remote storage area is temporarily unavailable, Tivoli Storage Manager FastBack for Workstations will queue backup copies until the remote storage becomes available.

Back up to: *list and* **Location:** *text field:*

Specify the remote storage device for your backup copies.

Specify the type of storage in the **Back up to:** list, and the location of your storage device in the **Location:** field. What you select from the **Back up to:** list affects what you enter in the **Location:** field.

External Device or File Server storage location

You can specify a file server or removable disk to store the backup copies. The remote device can be another computer (such as a NAS or file server), or a remote disk, or a removable disk.

In the **Location:** field, if you choose a remote server, it is recommended that you use Universal Naming Convention (UNC) specification for the file server instead of drive letters. Drive letters can change after rebooting and often do not reconnect automatically.

If you choose a USB external device, you can select the driver letter. However, removable external device drive letters can change. Recommendations and detailed procedure for configuring USB drives as remote storage is in technical note 1245761 at the Tivoli Storage Manager FastBack for Workstations collection of technical notes: http://www-1.ibm.com/support/search.wss?rs=2339&tc=SS3PE6 &rank=8&dc=DB520+D800+D900+DA900+DA800&dtm

Click the **Browse** button to view a **Browse for folder** dialog box. Use this dialog box to navigate to the location for your remote storage area. If this dialog becomes hidden behind other windows, click the task bar to bring it to the front.

Tivoli Storage Manager FastBack for Workstations creates backup copies in a subfolder named \RealTimeBackup*computer name*. For example, if a computer name is Computer1, and the remote storage location is configured with the value \\remote\share, backup copies are stored in \\remote\share\RealTimeBackup\Computer1\.

If you log in to your computer with a user name and password that is valid also on your remote storage location, Tivoli Storage Manager FastBack for Workstations authenticates transparently into that network location. If you do not log in to your computer with a user name and password that is valid also on your remote storage location, you must log in to the network interactively using another account with regular privileges. You can log in interactively by using the Net Use command.

Some versions of Windows have a concept of simplified file sharing, which allows one computer to easily connect to another computer over the network. The resulting connection allows only limited file system capabilities, and inhibits the creation of backup copies. Some information such as access control lists or file streams can be lost. It is recommended to disable simplified file sharing on the remote storage area.

WebDAV Server storage location

Some Internet Service Providers (ISPs) provide Web-based Distributed Authoring and Versioning, or WebDAV. The WebDAV protocol provides the functionality to create, change, and move documents on a remote server. The WebDAV protocol is useful for authoring the documents which a Web server serves, but can also be used for general Web-based file storage. If your ISP provides WebDAV functionality, Tivoli Storage Manager FastBack for Workstations can store backups on a Web-based server.

In the **Location:** field. Enter your WebDAV server location using the following format: https://MyISP.com/MyAcct.

When using WebDAV, Tivoli Storage Manager FastBack for Workstations only supports the Basic Authentication method described in the HTTP 1.0 RFC. Because this authentication method sends the password as clear text over the network, it is also recommended that the Web server be configured to use secure sockets.

Tivoli Storage Manager storage location

Tivoli Storage Manager FastBack for Workstations can store backup copies on a Tivoli Storage Manager server. You do not need to install the Tivoli Storage Manager backup-archive client. If you install the Tivoli Storage Manager backup-archive client, it functions independently from Tivoli Storage Manager FastBack for Workstations.

In the **Location:** field, specify the Tivoli Storage Manager server location, using the following format: tsm://Host.com. You can also use an IP address for the server address.

Tivoli Storage Manager FastBack for Workstations supports Tivoli Storage Manager server version 5.5 or later.

Configure your Tivoli Storage Manager server before trying to connect from Tivoli Storage Manager FastBack for Workstations. Register your computer as a Tivoli Storage Manager node. Tivoli Storage Manager FastBack for Workstations will prompt for the password assigned at registration to connect to the Tivoli Storage Manager server. For more information about registering a Tivoli Storage Manager node for your computer, see *IBM Tivoli Storage Manager for Windows Administrator's Guide*.

If you specify a Tivoli Storage Manager server as the backup target, do not check any of the Advanced Settings on this page. If you want to use encryption or compression, you must specify these options in the dsm.opt file in the Tivoli Storage Manager FastBack for Workstations subfolder of the "Program data folder" on page 47. Subfile backup is not supported when Tivoli Storage Manager server is the backup target.

As an alternative to backing up directly to a Tivoli Storage Manager server, consider backing up in two stages. First, use Tivoli Storage Manager FastBack for Workstations to create remote backups on a file server. Second, schedule a Tivoli Storage Manager backup-archive client on that file server to back up the files to a Tivoli Storage Manager server. In this scenario, the only restriction is that if you use Tivoli Storage Manager FastBack for Workstations encryption, then you cannot use Tivoli Storage Manager compression.

In order to manage storage space, the Tivoli Storage Manager administrator must grant authority to the Tivoli Storage Manager client node to delete backup copies. For steps to assign authority to delete backup copies, see the topic in the problem determination section: " Tivoli Storage Manager client node lacks authority to delete backup copies" on page 90.

To avoid problems when using the Tivoli Storage Manager server, see the topic in the problem determination section: "Files are not backed up to Tivoli Storage Manager server" on page 90.

You can restore backup copies from the Tivoli Storage Manager server only with the Tivoli Storage Manager FastBack for Workstations GUI. You cannot use the Tivoli Storage Manager Backup-Archive client to restore backup copies created by Tivoli Storage Manager FastBack for Workstations.

When storing data on a Tivoli Storage Manager server, the following features must be turned off:
- Encrypt backups
- Compress backups
- Use sub-file copy

If encryption or compression is required for your data, then use the Tivoli Storage Manager compression or encryption features. Detailed information is available in the Usage recommendation for encryption, compression, and subfile backup document.

Maximum space for backups: *field:*

Specify how much space to use for all backup copies on remote storage.

The default size for the remote storage area is 40 GB. If you increase the number of backup versions to keep, consider increasing your storage area size. If you are unsure of how much space to allocate, you can monitor your space usage on the Status panel and adjust the version and space settings accordingly.

When the storage space becomes full, Tivoli Storage Manager FastBack for Workstations deletes older backup copy versions of files that have several backup copy versions. After deleting the versioned backup copies, if more space is needed for new backup copies, Tivoli Storage Manager FastBack for Workstations deletes the last remaining backup copies of enough files to make room for the newest backup copy.

If you try to remotely back up a file which is larger than the space you have allocated for your remote storage area, Tivoli Storage Manager FastBack for Workstations will purge all older versions of your files, and then may fail to back up the file. Make sure that the maximum space for your remote storage areas is greater than the maximum file size for remote backup in the **Advanced** page of the Settings Notebook. For example, if you decrease your maximum space for backups to 1 GB, you must decrease the maximum file size for remote backup from the default of 1 GB.

Initial Backup *panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

Use the **Initial Backup** panel to choose if you want to back up all your files when you finish the wizard.
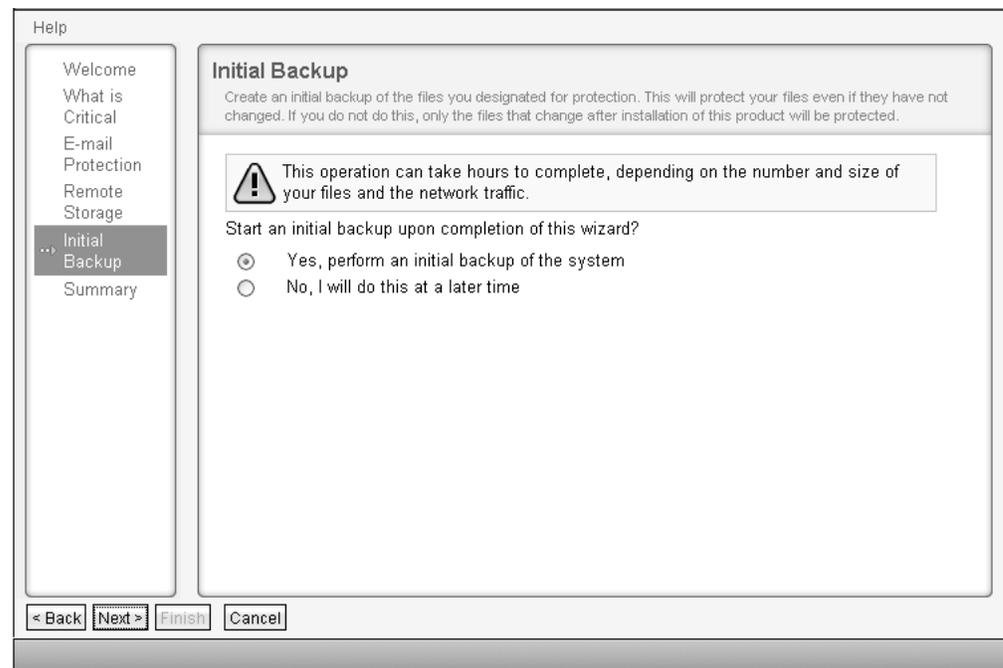
When you first install the Tivoli Storage Manager FastBack for Workstations client, you can immediately back up all files that you configured for protection. Without the initial backup, only files that change will be protected. The initial backup will protect all of the existing files that you designated for protection.

The initial backup will scan all of your local drives, looking for files that you designated for protection. All files that meet your specifications will be backed up

to local or remote or both storage areas. This process can take a long time and can slow down your computer. Start this initial backup when you will not be using your computer for other applications.

If you choose not to back up by the installation wizard, you can force a complete backup at a later time. At that time, use the **Files to Protect** panel of the Settings Notebook.

Summary *panel (Initial Configuration Wizard) of Tivoli Storage Manager FastBack for Workstations:*

Use the **Summary** panel to view a summary of your configuration choices, and decide if you want to apply your configuration choices to Tivoli Storage Manager FastBack for Workstations.

The **Summary** panel displays the configuration you specified in the previous panels of the wizard.

Choose **Back** to return to a previous panel to modify your configuration choices.

Choose **Finish** to apply your configuration choices.Tivoli Storage Manager FastBack for Workstations will continue to run in the background and protect your files using the configuration choices you made.

Choose **Cancel** to exit the wizard without applying your configuration choices. Tivoli Storage Manager FastBack for Workstations will continue to run in the background and protect your files using the pre-configured settings.

Uninstalling the Tivoli Storage Manager FastBack for Workstations client

Uninstall the Tivoli Storage Manager FastBack for Workstations client with the following steps.

Before you begin

You must close the Tivoli Storage Manager FastBack for Workstations client GUI (graphical user interface) before uninstalling.

Procedure
1. From the Windows **Start** menu, choose **Control Panel**.
2. Choose **Add or Remove Programs**. A list becomes populated with currently installed programs.
3. Scroll down and choose the product. The **Remove** button displays.
4. Click the **Remove** button. A dialog displays to confirm that you want to remove the product.
5. Click **Yes**. Several windows display, indicating the activities to uninstall the product.
6. If you are uninstalling on Windows Vista, you will see the Files in Use window. Click **OK**. You will also see a warning that the setup was unable to automatically close all requested applications. Click **OK**.
7. A window confirming successful removal displays, and asks if you want to reboot now. Click **Yes** to reboot your system to remove file system filters.
8. Click **Finish** to exit the uninstall wizard.

Advanced installation of the Tivoli Storage Manager FastBack for Workstations client

The "Basic installation of the Tivoli Storage Manager FastBack for Workstations client" on page 7 describes an installation that requires user interaction, and installs the Tivoli Storage Manager FastBack for Workstations client on a single machine. There are more options for installing, upgrading, and re-configuring the client.

There are several ways to install or upgrade the client without user interaction.

Silent installation on a local computer
You can install the client on your local computer silently. This means that you will not see the installer wizard, nor the initial configuration wizard.

Silent product upgrades and configuration updates on a local or remote computer
You can upgrade the product level and change protection settings on a local or remote computer silently. When you put a new client installer file or a new configuration file in the administration folder, the client pulls the information. The client adopts the new product level from the installer file or the new protection settings from the configuration file.

Silent installation pushed to a remote computer
Using silent installation, an administrator can push the client to remote computers.

Once the client is installed, it will pull product upgrades and configuration information from the administration folder.

Silent local upgrade
You can upgrade the product level on your local computer by putting the upgraded installer in the administration folder. The client pulls the new code. After a reboot, the product protects your files at the new level.

Silent installation pushed to another computer
An administrator can push the client to other computers.

Install the Tivoli Storage Manager FastBack for Workstations client silently on a single local computer

You can install the Tivoli Storage Manager FastBack for Workstations client on your local computer silently. In a silent installation, you do not interact with the installation wizard. If you provide a configuration file, you do not interact with the client initial configuration wizard.

Silent installation on a computer requires you to do the following:
- Invoke the installer with appropriate parameters.
- Optionally, you can provide a configuration file for the client. You can generate a configuration file with the central administration console. If you do not provide a configuration file, the initial configuration wizard will start after installation.

Silent installation command for the Tivoli Storage Manager FastBack for Workstations client

Invoke the installer for a silent installation of the Tivoli Storage Manager FastBack for Workstations client.

The client installer is an executable file with a name like `x.x.x.x-TIV-FB4WKSTNS-x86_windows.exe`. The installer name must include FB4WKSTNS and must be file type `.exe`.

Invoke the installation with the installer file name followed by parameters.

Parameters

All parameters are optional. There must be a blank space before each parameter.

/S This parameter is passed to the installer executable and indicates silent installation. Without this parameter, you will install interactively via the installation wizard and (if necessary) the initial configuration wizard.

/v This parameter allows you to pass options supported by the Windows Installer to the MSI package. No space is allowed between /v and the options list. The options list must be enclosed in quotes if there are blank spaces in the options list. The following options are allowed:

/qn Everything except setup.exe is silent.

/l*v log file path
Specify a file to log the installation activities.

INSTALLDIR=folder

The default new installation folder is `c:\Program Files\Tivoli\TSM\FastBack_for_Workstations`.If you want to install to another folder, use this option and specify the folder. For example, you could specify `C:\applications\fbws`.

Restriction: You cannot specify the root folder of a drive. For example, you cannot specify `C:\`.

REBOOT=ReallySuppress
Suppress system reboot after installation. This option is recommended when you are pushing installation to a remote computer, because rebooting after installation could be disruptive to users on the remote system. This option is not recommended for a local installation when a previous version of the client exists.

Example: Install silently with default options

To install silently with default settings, including reboot after installation (this is recommended if the client was previously installed), use this syntax:

`Tivoli_FB4WKSTNS_6.1.2.0_x86_windows.exe /S /v"/qn "`

Note that no blank space is permitted between the **/v** parameter and the double-quote delimiter of the options list.

Example: Install silently with specific options

To install silently to non-default folder (`c:\newdir`); and to log the installation activities to `c:\temp\msi.log`; and to suppress a reboot after installation, use this syntax:

```
Tivoli_FB4WKSTNS_6.1.2.0_x86_windows.exe
/S /v" /qn INSTALLDIR=c:\newdir /l*v c:\temp\msi.log REBOOT=ReallySuppress "
```

Upgrade the Tivoli Storage Manager FastBack for Workstations client silently: pull upgrades and configurations

Once you have installed the Tivoli Storage Manager FastBack for Workstations client, you can upgrade to a new product version by putting an installer executable file or a configuration file in the administration folder. The client pulls the software update or new configuration.

Upgrade the product level

To upgrade the product, put a new client installer in the downloads folder. (For information on the downloads folder, see "Administration folders" on page 3). The client will pull the new product code and notify you to reboot the computer.

The client checks for new installer and configuration files every 10 – 20 minutes. If the date of an installer file is more recent than the file used for the current product level, the client will adopt the new product level. When the client detects a new installer file, a message will open from the system tray indicating that a new version of the software is being installed. When the installation is complete, a message will open from the system tray indicating that the new software has been loaded, and you must reboot to resume data protection. Between the time that the client pulls the upgrade and until the computer is rebooted, the client stops protecting your files. After the reboot, the client continues protecting your files. Your protection settings are the same as in the previous version of the product.

Note: Until you reboot, client will not back up any files. You will not lose any existing backup copies, but any changes you make will not be protected. If there is a long delay between install and reboot, consider forcing a backup of all protected files to protect any files that were changed during that time.

Change protection settings

To change the protection settings, put a new configuration file in the downloads folder. You can generate a configuration file with the central administration console. If the modification date of a configuration file is more recent than the file used for the current configuration, Tivoli Storage Manager FastBack for Workstations will adopt the new configuration.

Considerations for upgrading a client

You can upgrade the client from previous releases as well as from a previous build of the current release.

The new client installer file name must contain the string FB4WKSTNS and end with .exe. For example, a typical name is `x.x.x.x-TIV-FB4WKSTNS-x86_windows.exe`.

The date of the new installer file must be more recent than the date of the installer file that was used for the current product level.

After upgrading to a new product version, you must restart your computer.

Cleaning up after uninstallation

If you uninstall the client, you must clean your data files before installing the client again. When the client is uninstalled, some files are not removed by the installer. The old files can cause problems for a new installation of the client.

After uninstalling the client, and before installing it again, remove files in the following areas:

local storage area
> The local storage area is the `RealTimeBackup` folder on a local drive. Rename this folder if you want to save the backup copies.

remote storage area for the computer
> The remote storage area is in the `RealTimeBackup\`*computer_name* folder of the remote device that you configured for the previous installation. Rename this folder if you want to save the backup copies.

installation folder

> The default installation folder is `c:\Program Files\Tivoli\TSM\` `FastBack_for_Workstations`. If you upgraded from Tivoli Continuous Data Protection for Files, the default installation folder is `C:\Program Files\Tivoli\CDP_for_Files`.

The program data folder
> The program data folder varies according to operating system and previously installed versions.

Upgrade from Continuous Data Protection for Files

If you upgrade from Tivoli Continuous Data Protection for Files, your Tivoli Continuous Data Protection for Files client must be at level 3.1 or later.

Tivoli Continuous Data Protection for Files versions older than 3.1.5.9 accept client installer files with a name like `TivoliCDP_CDPForFiles_3.1.8.0_windows.exe`. The installer name must include CDP and must be file type `.exe`. Tivoli Continuous Data Protection for Files version 3.1.5.9 and later accepts client installer files with CDP or FB4WKSTNS in the file name. Tivoli Storage Manager FastBack for Workstations client installer files have a name like `Tivoli_FB4WKSTNS_6.1.2.0_x86_windows.exe`. The installer file name for a Tivoli Storage Manager FastBack for Workstations client must contain FB4WKSTNS. Hence, if you want a Tivoli Continuous Data Protection for Files client at less than version 3.1.5.9 to pull an upgrade to Tivoli Storage Manager FastBack for Workstations, you have two options.
- You can rename the Tivoli Storage Manager FastBack for Workstations installer file to include CDP in the file name.
- You can first upgrade the Tivoli Continuous Data Protection for Files client to version 3.1.5.9 or later. Then the client can pull an installer file with CDP or FB4WKSTNS in the file name.

Deploying the client to other computers

There are several ways to deploy the initial installation of the Tivoli Storage Manager FastBack for Workstations client to other computers.
- Use Microsoft Systems Management Server to install the Tivoli Storage Manager FastBack for Workstations.msi package. Refer to Microsoft Systems Management Server documentation.
- Use IBM Tivoli Provisioning Manager Express®. Refer to IBM Tivoli Provisioning Manager Express documentation.
- Place the installer on a file server and ask end users to invoke the installer.

When the Tivoli Storage Manager FastBack for Workstations client is initially installed, the installer can get configuration data from the file `\System32\fpa.txt` in

the Windows installation folder. (See "Windows installation folder"). If this file does not exist, the installer installs Tivoli Storage Manager FastBack for Workstations with the default configuration settings.

Windows installation folder

The Tivoli Storage Manager FastBack for Workstations client references the Windows installation folder during installation. During the installation, the client can get configuration information from a file named `fpa.txt` in the `\System32\` subfolder in the Windows installation folder.

The Windows installation directory is also known by the environment variable %WINDIR%, and as shared drive ADMIN$. Typically, the Windows installation directory is `C:\Windows`.

Chapter 3. Changing Protection Settings

When you initially install the Tivoli Storage Manager FastBack for Workstations client, the Initial Configuration Wizard guides you to set your protection settings. After installation, you can change your protection settings with the Settings Notebook.

Settings Notebook of Tivoli Storage Manager FastBack for Workstations

After the initial installation and configuration, you can change your protection settings with the Settings Notebook.

Open the Settings Notebook by clicking **Settings** from the menu of the Tivoli Storage Manager FastBack for Workstations Status panel.

Use the tabs in the left frame to navigate to any panel whose settings you want to change. Click the **OK** button to apply your new settings and return to the Tivoli Storage Manager FastBack for Workstations Status panel. Click the **Apply** button to apply your new settings and stay in the Settings Notebook. Click the **Cancel** button to exit the Settings Notebook without applying your changes.

The Settings Notebook has 5 panels:

- Use the "**General** panel of client Settings Notebook" on page 28 for these settings:
  - Which drive to use for your local storage area
  - How many versions of protected files to keep on local storage area

- The maximum size of your local storage area
  - Whether you want to store backup copies on local storage area, remote storage area, neither, or both
- Use the "**Files to Protect** panel of client Settings Notebook" on page 30 for these settings:
  - Which folders and files to continuously protect
  - Which folders to vault
  - Force a backup of all protected files when you change which files are continuously protected
- Use the "**E-mail Protection** panel of client Settings Notebook" on page 41 for your e-mail protection settings, including the schedule to protect your e-mail and all files that are backed up on a schedule.
- Use the "**Remote Storage** panel of client Settings Notebook" on page 43 for these settings:
  - Your remote storage area
  - How many versions of protected files to keep on remote storage area
  - The maximum size of your remote storage area
  - Whether to encrypt, compress, or use sub-file copy for backup copies stored on remote storage area
- Use the "**Advanced** panel of client Settings Notebook" on page 48 for these settings:
  - Whether to allow program messages to pop up
  - Performance settings, including the following:
    - Maximum size of file to protect on local storage area
    - Maximum size of file to protect on remote storage area
  - The Advanced panel contains a link to set your scheduled backups. Follow the link to do these tasks:
    - Choose which files to back up on a schedule
    - Start a backup of your scheduled files immediately
  - The Advanced panel also contains a link to manage the throttle settings. Follow the link to do these tasks:
    - Manage the network rules settings
    - Manage bandwidth usage
    - Define throttle speed

General panel of client Settings Notebook

Use the **General** panel to choose the local storage area for the backup copies of your continuously protected files. Choose the storage location and space, and how many versions of protected files you want to keep.

Back up to: drop down list

Choose the location where your local backup copies will be stored. Local backup copies will be stored in a folder on one of your local drives. The default configuration is the non-removable local drive which has the most free space.

Note: Select a non-removable drive. Only non-removable drives can be used as the storage location for local backup copies.

Tivoli Storage Manager FastBack for Workstations will create backup copies in a subfolder named \RealTimeBackup\. For example, if the local storage area is configured as the C:\ drive, backup copies will be stored in C:\RealTimeBackup\.

Note: The drive selected in the **Back up to:** area specifies the location where the backup copies are stored. The **Back up to:** location does not specify the files and folders to protect.

How many versions to keep: field

Tivoli Storage Manager FastBack for Workstations can save more than 1 backup version of each file. When you restore a file, you can choose which version of the file you want to restore. When the configured number of versions is reached, older versions of a file are deleted. Keeping more versions requires more storage space, but allows you more choices when restoring a file.

Maximum space for backups: field

Specify how much space to use for all backup copies on local storage. When the storage area becomes full, older versions of files are deleted until the storage area is at about 80 percent of the configured maximum. If, after deleting all versioned backup copies, local storage space is still insufficient, Tivoli Storage Manager FastBack for Workstations will delete the oldest non-versioned files.

Note: No warning message displays when the maximum space is reached.

The default space for local backups is 500 MB.

During a forced backup of all protected files, Tivoli Storage Manager FastBack for Workstations can use more space than you configured for local storage. (A forced backup of all files occurs during the initial backup when you install Tivoli Storage Manager FastBack for Workstations, and when you check the **Back up with new settings** box in the Settings Notebook). The excessive space condition is only temporary. After the forced backup of all files is complete, the first time you change a protected file, Tivoli Storage Manager FastBack for Workstations purges files from the local storage area, if necessary, to meet the space you configured.

Note: If you try to back up a file which is larger than the space you have allocated for your storage area, Tivoli Storage Manager FastBack for Workstations will purge all older versions of your files, and then will fail to back up the file. Make sure that the maximum space for your storage areas is greater than the file size limit in the **Advanced** panel of the Settings Notebook.

Continuous protection level: drop down list

Tivoli Storage Manager FastBack for Workstations offers two levels of protection for your files: continuous protection and scheduled protection. See "Types of protection" on page 2 for a discussion of these two types of protection.

Use this box to select which storage areas to use for continuously protected files.

None   Files will not be protected.

Local storage only
> Tivoli Storage Manager FastBack for Workstations will create backup copies only on the local storage area.

Remote storage only
> Tivoli Storage Manager FastBack for Workstations will create backup copies only on the remote storage area.

Local and remote storage
> Tivoli Storage Manager FastBack for Workstations will create backup copies on both the local and remote storage areas. This provides the most protection for your files, and is the default choice.

Files to Protect panel of client Settings Notebook

Select the files and folders that you want to continuously protect, and the files and folders you want to vault.

You can specify the files to protect by using **Folders and Files** and **Applications**. You can also specify those folders that you want to vault. Vaulted folders cannot be modified nor deleted.

Folders and Files box (Settings Notebook) of Tivoli Storage Manager FastBack for Workstations

This box gives a summary of the folders and files that are continuously protected. The number of items protected refers to the items in the list of folders and files. A single list item can specify more than one file. Click the **Details** link to view all items in the list and modify the list. The **Folders and Files Settings** dialog will display.

Folders and Files Settings dialog for continuous protection by Tivoli Storage Manager FastBack for Workstations:

Specify which folders and files to continuously protect by selecting those to include and those to exclude.

List of Folders and Files to Include and Exclude

Folder and Files Settings

In the menu bar, click Include to add folders and files for continuous protection. Click Exclude to exclude folder and files from continuous protection and scheduled protection. Click Remove to remove folders and files from the list. Folders and files are continuously protected only if they are listed as Type = Include and only if they are not listed as Type = Exclude.

Folders and Files

Include | Exclude | Remove

Name	Type
\My Documents\	Include
*.doc	Include
*.xls	Include
*.ppt	Include
*.123	Include
RealTimeBackup	Exclude
\Program Files	Exclude
\System32\	Exclude
~	Exclude

OK Cancel

The top of the list box has three menu buttons. Click the buttons to add and remove items from the list.

Include
> Click **Include** to add files and folders that you want to continuously protect. The **Select folders** dialog will open.

Exclude
> Click **Exclude** to add files and folders that you want to exclude from continuous and scheduled protection. The **Select folders** dialog will open.

Remove
> Select a list item, then click **Remove** to remove that list item.

Each row in the list has two columns:

Name Patterns in the **Name** column specify one or more files or folders. See "Wildcards in file specifications" on page 12 to determine what files and folders will match a **Name** pattern with blanks or asterisks. When a folder is protected, all of its files and sub-folders are protected.

Type Values in the **Type** column indicate if the files and folders should be included or excluded from protection. Files and folders of type **Exclude** will be explicitly excluded from continuous and scheduled protection. Files of type **Include** will be protected. **Exclude** has precedence over **Include**, so any file or folder that matches an **Exclude** pattern will not be protected, even if the same file or folder matches an **Include** pattern. (See "Including and excluding files from protection" on page 33).

Note: This **Folders and Files Settings** list looks similar to the list displayed in the Initial Configuration Wizard. However, the Initial Configuration Wizard only allows file additions (all of type **Include**). The Initial Configuration Wizard is intended to get Tivoli Storage Manager FastBack for Workstations started quickly and easily. Any **Exclude** patterns exclude files from protection as soon as Tivoli Storage Manager FastBack for Workstations is installed, but they are hidden from view during installation. Although the installed **Exclude** patterns are recommended for most users, the **Exclude** patterns are exposed in the Settings Notebook to allow advanced users more robust configuration options.

Protected drives:

All files that meet the include and exclude specifications, and that appear to Tivoli Storage Manager FastBack for Workstations as internal drives, are protected.

In some cases, an external USB drive looks like an internal drive, and Tivoli Storage Manager FastBack for Workstations tries to protect the files on that drive. If you do not want to protect that drive, add the drive letter to the exclusion list so that all files on the USB drive are excluded from protection. For example, if your E: drive is a USB drive, add E:\ to the list of excluded items.

Including and excluding files from protection:

Protected files are specified by including files and by explicitly excluding files.

Continuous and scheduled protection (not vaulted)

Tivoli Storage Manager FastBack for Workstations keeps a list of files that are included for protection, and a list of files that are explicitly excluded from protection. The list of included files is separated into those files that are included for continuous protection, and those files that are included for scheduled protection. If a file is excluded, it is excluded from both continuous and scheduled protection.

A file is on the include list for continuous protection if it is defined as type **Include** in the **Folders and Files** box, or if it is defined in the **Applications** box. Both of these boxes are in the **Files to Protect** panel in the Settings Notebook of the client.

A file is on the include list for scheduled protection if it is defined in the **E-mail Protection** panel or the **Scheduled Backup Settings** link in the **Advanced** panel in the Settings Notebook of the client.

A file is on the exclude list if it is defined as type **Exclude** in the **Folders and Files** box in the **Files to Protect** panel in the Settings Notebook of the client.

It is possible that a file can be on both the include list and the exclude list.

If a file (or folder) is on the exclude list, it is not protected by continuous protection or by scheduled protection. Even if the file (or folder) is also on an include list, it is not protected.

If a file is on an include list and not on the exclude list, it is protected.

If a file is not on an include list, it is not protected.

The table summarizes the interaction of inclusion and exclusion. The two left columns indicate if a file is included or excluded, and the right column indicates if the inclusion and exclusion yield protection for the file.

Table 3. Inclusion and exclusion. File protection by Include list and Exclude list.

	File is not specified in Include list.	**File is specified in Include list.**
File is specified in Exclude list.	File is not protected.	File is not protected.

Table 3. Inclusion and exclusion (continued). File protection by Include list and Exclude list.

	File is not specified in Include list.	File is specified in Include list.
File is not specified in Exclude list.	File is not protected.	File is protected.

If you have leading or trailing blank spaces in your file specifications, or if you use wildcards in your file specifications, the specifications in your files list can match more than one folder or file. See "Wildcards in file specifications" on page 12 for an explanation of how specifications match file and folder names.

For example, consider a small variation to an excluded specification: \temp\. If you use instead \temp (without the closing folder delimiter), there is a very different effect. This small change has a potentially large impact. All files which have \temple, \temptation\, \temperature\, \template\, and other variations of \temp*, would be excluded from protection.

Consider another example. You choose to exclude *.gif so you can avoid backing up files saved by your browser when you open different Web sites. This specification also excludes all .gif files in \My Pictures\ folder.

Vaulted folders

Vaulted folders, and the files in them, are not affected by the lists of files that are included for continuous or scheduled protection. However, excluded files and folders are not vaulted. All files that you define in the **Vault settings** dialog in the **Files to protect** panel of the Settings Notebook of the client are vaulted, unless they are excluded items.

Select folders dialog of Tivoli Storage Manager FastBack for Workstations:

The **Select folders** dialog allows you to specify files and folders. You can browse to choose a folder, or type the name of a file or folder in the **Folder name** text field. If you browse and choose a file or folder, you can modify its path in the **Folder name** text field.

Note: Only your internal drives can be protected. Any external storage devices are considered remote storage devices.

Wildcards in file specifications:

You can use wildcards to specify the files to protect.

You can enter the complete path of a file that you want to protect. For example, `C:\Documents and Settings\Administrator\My Documents\Soccer\2005AYSO\Parent Info U8B.doc`. The complete path unambiguously matches a single file. But to specify all files this way requires many file paths. Use asterisks and blanks as wildcards to specify several files.

An asterisk matches any number of characters in a file path. If there are no asterisks, then Tivoli Storage Manager FastBack for Workstations matches any file whose fully expanded path name has that exact pattern anywhere in the path or filename. The pattern is not case-sensitive.

If there are no asterisks in the pattern, then blank spaces before and after the pattern are interpreted as asterisks. Hence, `\myDocs\` and `*\myDocs\*` yield the same matches. If there are asterisks in the pattern, then blank spaces before or after the pattern match no characters. Hence, `\myDir\`, `*\myDir\`, and `\myDir\*` could yield three different matches, as in the table of examples pictured.

As an example, assume a pattern `fish`. This pattern matches: `C:\dir\fish.doc` and `C:\fish\anyfile.doc` and `c:\Dirfishfood\something`.

If the pattern has slashes around it (`\fish\`), it matches any object with `\fish\` somewhere in the path. This pattern matches `C:\fish\anyfile.doc` but not `C:\dir\fish.doc` and not `c:\Dirfishfood\something`

Table 4. File and folder pattern matches

This pattern ...	... matches these folders and files on your computer:
\myDir\ or \mYdiR\ or *\myDir* or *\mydir*	c:\myDir\ c:\myDir\Contacts\ c:\myDir\Contacts\contacts.txt c:\Projects\myDir\ c:\Projects\myDir\myThings\ c:\Projects\myDir\myThings\things.doc c:\Projects\myDir\myThings\myPhoto.jpg d:\Notes\myDir\
*\myDir\	c:\myDir\ c:\Projects\myDir\ d:\Notes\myDir\
\myDir*	
d:*\mydir*	d:\Notes\myDir\
\my best	c:\Books\My Best.doc c:\Photos.jpg\My Best Photo\ c:\Photos.jpg\My Best Photo\Best.jpg f:\Projects\My Best Project\ f:\Projects\My Best Project\Dream.xls
.jpg	c:\Photos.jpg\ c:\Photos.jpg\myHouse.bmp c:\Photos.jpg\My Best Photo\Best.jpg c:\Projects\myDir\myThings\myPhoto.jpg
*.jpg	c:\Photos.jpg\ c:\Photos.jpg\My Best Photo\Best.jpg c:\Projects\myDir\myThings\myPhoto.jpg
E:\ E:*	All files and folders on the E: drive.

Applications box (Settings Notebook) of Tivoli Storage Manager FastBack for Workstations

This box gives a short list of the applications that are protected.

To see the complete list of the applications that are protected, click **Details**. The **Application Settings** dialog will display.

Application Settings dialog of Tivoli Storage Manager FastBack for Workstations:

Specify a list of applications to protect.
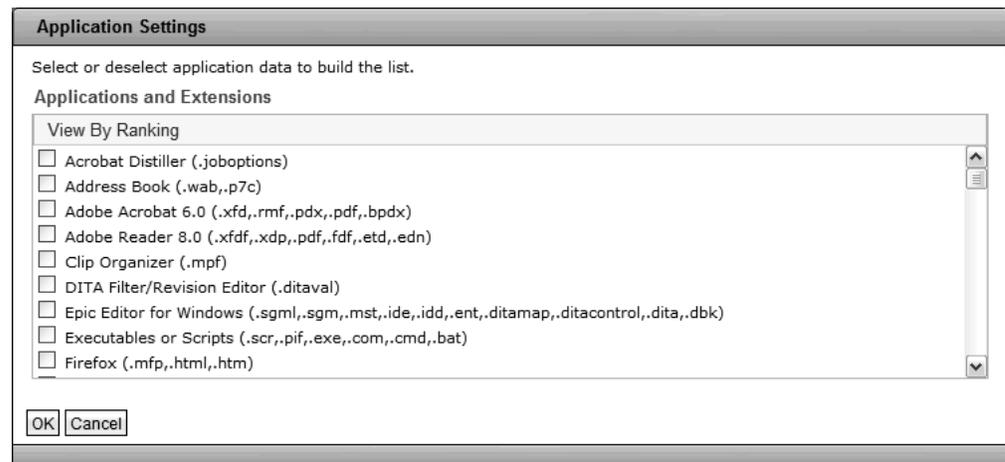
Application Settings

Select or deselect application data to build the list.

Applications and Extensions

View By Ranking

☐ Acrobat Distiller (.joboptions)
☐ Address Book (.wab,.p7c)
☐ Adobe Acrobat 6.0 (.xfd,.rmf,.pdx,.pdf,.bpdx)
☐ Adobe Reader 8.0 (.xfdf,.xdp,.pdf,.fdf,.etd,.edn)
☐ Clip Organizer (.mpf)
☐ DITA Filter/Revision Editor (.ditaval)
☐ Epic Editor for Windows (.sgml,.sgm,.mst,.ide,.idd,.ent,.ditamap,.ditacontrol,.dita,.dbk)
☐ Executables or Scripts (.scr,.pif,.exe,.com,.cmd,.bat)
☐ Firefox (.mfp,.html,.htm)

OK   Cancel

The **Applications and Extensions** box presents a list of applications and their associated file extensions. When an application is checked, all files with the associated extensions will be protected. For example, when Adobe Acrobat is checked, all files with extension .xfd,.rmf,.pdx,.pdf, and .bpdx will be protected. You can check and uncheck applications to suit your protection needs.

The list of applications has two views. Each view orders the applications in a different way. Click the menu item at the top of the box to change the view.

View by Ranking
    The applications that have the greatest quantity of files on your computer are presented at the top of the list. The applications that have the least quantity of files on your computer are presented at the bottom of the list.

View Alphabetically
    The applications are presented in alphabetical order.

If you check a box, all file extensions associated with that application will be added to the list of protected files.

If you uncheck a box, all files with that extension will be removed from the list of protected files. Note that removing file extensions from the list of protected files does not mean adding those files to the list of files that are explicitly excluded from protection.

Click **OK** in any of the views to update the list of protected files. Click **Cancel** to leave the dialog without changing the list of protected files.

You can add files to be protected in the **Application Settings** dialog, but these applications will be protected only if the files are not explicitly excluded. (See "Including and excluding files from protection" on page 33).

Vault box of Tivoli Storage Manager FastBack for Workstations

Displays a summary of vaulted folders.

```
Vault
  C:\build\msgpub540

                                                              Details
```
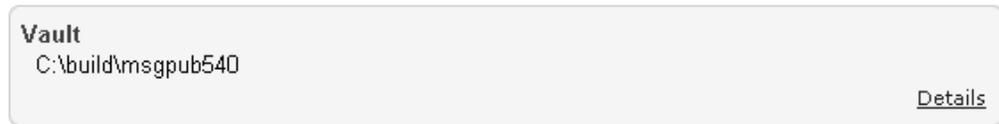
To change the folders that are protected, click **Details**.

Vault Settings dialog of Tivoli Storage Manager FastBack for Workstations:

Specify a list of folders. All files in that folder and all subfolders will be protected from being changed or deleted.

```
Vault Settings

Select a folder and click Vault Folder to protect it against modification or deletion. Select a vaulted folder and click Unvault
Folder to turn off the protection.

Folders and Files

  Vault  |  Unvault

                                        Name
  C:\Documents and Settings\Administrator\My Documents\Soccer\2005AYSO
  C:\Documents and Settings\Administrator\My Documents\Soccer\2006FallAYSO
  C:\Documents and Settings\Administrator\My Documents\GreatPhotos2004
  C:\Documents and Settings\Administrator\My Documents\GreatPhotos2005




  OK  Cancel
```
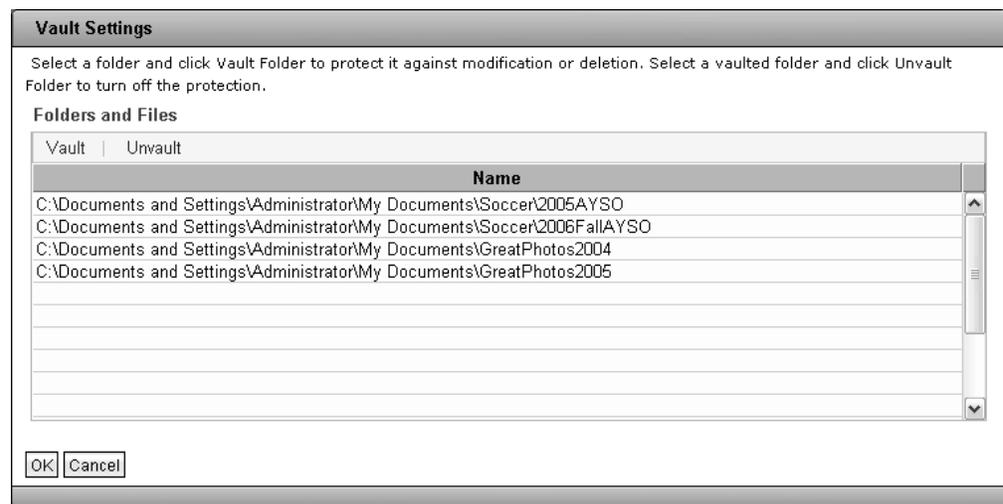
Vaulted folders cannot be modified nor deleted. Files can be added to the folder, but the files in the folder cannot be changed nor deleted.

The **Folders and Files** box lists the files that are protected by vault.

Click **Vault** to open a browser to choose files to protect.

Click **Unvault** to remove vault protection from the selected folder, and all its files and sub-folders.

The **Include** items from other dialogs does not affect the list of vaulted folders. However, items in the **Exclude** list will not be vaulted. All folders in the **Vault settings** dialog will be vaulted, unless they are excluded.

Click the **OK** button to add your changes to the pending settings updates.

Note: The configured settings will not be applied until you click the Settings Notebook **OK** or **Apply** button

Click the **Cancel** button to exit the dialog without applying changes.

Vault duration:

You can specify the duration of vaulting by using special folder names. Files in these folders are vaulted for a specific period of time and after that time the files are not vaulted.

To specify duration of vaulting, create a folder named \KeepSafe\ in any vaulted area. In the \KeepSafe\ folder, create folders that indicate the vaulting period. For example, C:\MyImportantDir\KeepSafe\Retain 3 years\. Any file created in that folder are prevented from alteration or deletion for three years. After the expiration time, the file is no longer vaulted. There are three ways to indicate the vaulting period. Each way requires that you use a keyword in the folder name.

1. **\KeepSafe\RetainForever**

   Files in this folder are vaulted forever. Such material can never be moved to another folder with shorter vaulting duration. Material can be moved within the folder tree and to other folders of the same duration.

2. **\KeepSafe\Retain Duration**

   Specify exact vaulting periods using English terminology. Duration is specified by a combination of the following time units:

   Years

   Days

   Hours

   Minutes

   Seconds

   Use 1 or more time units. Each time unit you use must be preceded by a number up to five digits long. You can include spaces or underlines or dashes and mix case in the folder name. The following are valid examples:

   \Retain23days4hours\
   \Retain 3years\
   \Retain_3years\
   \Retain-23DAYS_4minutes\
   \Retain 1000 days\

3. **\KeepSafe\RetainUntil Date**

   Specify a date after which the vaulting expires. The date must include year, month, and day in the following format: yyyymmddhhmmss. The hours, minutes, and seconds are optional. The default time is 00:00:00. The following are valid examples:

   \RetainUntil20191231235959\
   \RetainUntil 20200101\
   \RetainUntil20200101\
   \RetainUntil_20200101\

Note:

You cannot create a \Retain... folder within a vaulted \Retain... folder.

You cannot move material that is in one vaulted \Retain... folder to a vaulted \Retain... folder that has an earlier expiration date.

Back up with new settings check box of Tivoli Storage Manager FastBack for Workstations

Scan all drives and back up all files that are configured for protection.

If you changed the specifications for **Folders and Files** or **Applications** to include files that were not previously protected, it is highly recommended that you back up those files now. Check the box to scan and protect all files when you click the Settings Notebook **OK** or **Apply** button.

During a forced backup of all protected files, Tivoli Storage Manager FastBack for Workstations can use more space than you configured for local storage. (A forced backup of all files occurs during the initial backup when you install Tivoli Storage Manager FastBack for Workstations, and when you check the **Back up with new settings** box in the Settings Notebook). The excessive space condition is only temporary. After the forced backup of all files is complete, the first time you change a protected file, Tivoli Storage Manager FastBack for Workstations purges files from the local storage area, if necessary, to meet the space you configured.

A backup is not necessary to activate vault protection. If you changed **Vault** settings, the folders become vaulted when you click the Settings Notebook **OK** or **Apply** button.

Do not check this box if you are creating a configuration file for a push installation. If you use this configuration setting in a push install, the backup copies will be created in the system context. When you later run Tivoli Storage Manager FastBack for Workstations in the user context, you can have problems restoring these files.

When to back up all files:

At certain times, you need to back up all files. Without this backup, some files are not protected.

When you first install the Tivoli Storage Manager FastBack for Workstations client, you can immediately back up all files that you configured for protection. Without the initial backup, only files that change will be protected. The initial backup will protect all of the existing files that you designated for protection.

One exception is when you push an installation of Tivoli Storage Manager FastBack for Workstations to a remote computer and do not reboot. If you force a backup on a pushed installation without rebooting, Tivoli Storage Manager FastBack for Workstations attempts to back up files in the system context. These backups can fail, and when a logged-on user later attempts to restore these files the restore can fail.

After the initial backup, the typical rate of file changes does not require that you again back up all files at once. If you change the protection settings to include files that were not previously protected, the files need to be backed up. Until you change these files, and without a forced backup, Tivoli Storage Manager FastBack for Workstations does not back up these files. To protect these files, you must force a backup of all files.

If you do not change your configuration but suddenly make a large change to the files that are configured for protection, you must also force a backup of all files. You must also force a backup if you add a new drive whose files are configured for protection.

A forced backup causes Tivoli Storage Manager FastBack for Workstations to scan all local drives looking for files that you designated for protection. This means that every file in every directory will be investigated, and all files that meet the include,

exclude, and size criteria will be copied to the local or remote or both storage areas. The creation of backup copies could take several hours. It also takes significant processing resources. Plan the backup at a time when you do not need computing resources for other activities.

After this scan and backup is complete, Tivoli Storage Manager FastBack for Workstations will continue to operate in the background without any significant impact on your regular computing activities.

Changing the **Vault** settings does not require a forced backup.

With a client, you can force a backup of your continuously protected files in two places:
- The Initial Configuration Wizard, when you initially configure the Tivoli Storage Manager FastBack for Workstations client
- The **Files to Protect** panel in the Settings Notebook of the client, any time after initial configuration.

You can force an initial backup of a newly-installed client by setting this option when you identify an administration folder with the central administration console, create a configuration file, and then deploy a client with the created configuration file.

You can force a complete backup at any time by sending to the client a script that includes the command to back up all files.

E-mail Protection panel of client Settings Notebook

Select the email applications that you want to protect. Select a schedule for protecting the email applications.

Because email files typically are very large, they are not backed up continuously, but only on the schedule that you select.

Email files are backed up only to remote storage. If the remote storage is not available at the scheduled backup time, Tivoli Storage Manager FastBack for Workstations will back up the email files when the remote storage area becomes available.

E-mail Application list

Select one of the popular email applications in the list.

If your application is not listed, select **Other**.

E-mail Application Data Folder text field

If you choose your email application from the **E-mail Application** list, the default file type for that application will appear in this box, and you will not be able to update the file specification. You can update this field only if you select **Other** in the **E-mail Application** list.

How often to protect your e-mail list

You can schedule email protection at one of several intervals:
- **Never**: Email will not be protected.
- **Hourly**: Email files will be backed up every hour, just after the hour.
- **Daily**: If you choose this interval, also select the time for the backup.
- **Weekly**: If you choose this interval, also select the day and time for the backup.
- **Monthly**: If you choose this interval, also select the day of the month and time for the backup.

Scheduled Backup Settings link

Click the **Scheduled Backup Settings** link to open the **Folders and Files Settings** dialog for scheduled backup.

Remote Storage panel of client Settings Notebook

Specify the remote storage for the backups of your protected files.

Storing files in a remote storage area will protect the files in case local copies are lost. Backups of continuously protected files, and files protected on a schedule, are stored in the same remote area. Tivoli Storage Manager FastBack for Workstations is very tolerant of intermittently available networks. If remote storage area is temporarily unavailable, Tivoli Storage Manager FastBack for Workstations will queue backup copies until the remote storage becomes available.

Back up to: list and Location: text field

Specify the remote storage device for your backup copies.

Specify the type of storage in the **Back up to:** list, and the location of your storage device in the **Location:** field. What you select from the **Back up to:** list affects what you enter in the **Location:** field.

External Device or File Server storage location

You can specify a file server or removable disk to store the backup copies. The remote device can be another computer (such as a NAS or file server), or a remote disk, or a removable disk.

In the **Location:** field, if you choose a remote server, it is recommended that you use Universal Naming Convention (UNC) specification for the file server instead of drive letters. Drive letters can change after rebooting and often do not reconnect automatically.

If you choose a USB external device, you can select the driver letter. However, removable external device drive letters can change. Recommendations and detailed procedure for configuring USB drives as remote storage is in technical note 1245761 at the Tivoli Storage Manager FastBack for Workstations collection of

technical notes: http://www-1.ibm.com/support/search.wss?rs=2339&tc=SS3PE6
&rank=8&dc=DB520+D800+D900+DA900+DA800&dtm

Click the **Browse** button to view a **Browse for folder** dialog box. Use this dialog
box to navigate to the location for your remote storage area. If this dialog becomes
hidden behind other windows, click the task bar to bring it to the front.

Tivoli Storage Manager FastBack for Workstations creates backup copies in a
subfolder named \RealTimeBackup*computer name*. For example, if a computer
name is Computer1, and the remote storage location is configured with the value
\\remote\share, backup copies are stored in \\remote\share\RealTimeBackup\
Computer1\.

If you log in to your computer with a user name and password that is valid also
on your remote storage location, Tivoli Storage Manager FastBack for Workstations
authenticates transparently into that network location. If you do not log in to your
computer with a user name and password that is valid also on your remote
storage location, you must log in to the network interactively using another
account with regular privileges. You can log in interactively by using the Net Use
command.

Some versions of Windows have a concept of simplified file sharing, which allows
one computer to easily connect to another computer over the network. The
resulting connection allows only limited file system capabilities, and inhibits the
creation of backup copies. Some information such as access control lists or file
streams can be lost. It is recommended to disable simplified file sharing on the
remote storage area.

WebDAV Server storage location

Some Internet Service Providers (ISPs) provide Web-based Distributed Authoring
and Versioning, or WebDAV. The WebDAV protocol provides the functionality to
create, change, and move documents on a remote server. The WebDAV protocol is
useful for authoring the documents which a Web server serves, but can also be
used for general Web-based file storage. If your ISP provides WebDAV
functionality, Tivoli Storage Manager FastBack for Workstations can store backups
on a Web-based server.

In the **Location:** field. Enter your WebDAV server location using the following
format: https://MyISP.com/MyAcct.

When using WebDAV, Tivoli Storage Manager FastBack for Workstations only
supports the Basic Authentication method described in the HTTP 1.0 RFC. Because
this authentication method sends the password as clear text over the network, it is
also recommended that the Web server be configured to use secure sockets.

Tivoli Storage Manager storage location

Tivoli Storage Manager FastBack for Workstations can store backup copies on a
Tivoli Storage Manager server. You do not need to install the Tivoli Storage
Manager backup-archive client. If you install the Tivoli Storage Manager
backup-archive client, it functions independently from Tivoli Storage Manager
FastBack for Workstations.

In the **Location:** field, specify the Tivoli Storage Manager server location, using the following format: tsm://Host.com. You can also use an IP address for the server address.

Tivoli Storage Manager FastBack for Workstations supports Tivoli Storage Manager server version 5.5 or later.

Configure your Tivoli Storage Manager server before trying to connect from Tivoli Storage Manager FastBack for Workstations. Register your computer as a Tivoli Storage Manager node. Tivoli Storage Manager FastBack for Workstations will prompt for the password assigned at registration to connect to the Tivoli Storage Manager server. For more information about registering a Tivoli Storage Manager node for your computer, see *IBM Tivoli Storage Manager for Windows Administrator's Guide*.

If you specify a Tivoli Storage Manager server as the backup target, do not check any of the Advanced Settings on this page. If you want to use encryption or compression, you must specify these options in the dsm.opt file in the Tivoli Storage Manager FastBack for Workstations subfolder of the "Program data folder" on page 47. Subfile backup is not supported when Tivoli Storage Manager server is the backup target.

As an alternative to backing up directly to a Tivoli Storage Manager server, consider backing up in two stages. First, use Tivoli Storage Manager FastBack for Workstations to create remote backups on a file server. Second, schedule a Tivoli Storage Manager backup-archive client on that file server to back up the files to a Tivoli Storage Manager server. In this scenario, the only restriction is that if you use Tivoli Storage Manager FastBack for Workstations encryption, then you cannot use Tivoli Storage Manager compression.

In order to manage storage space, the Tivoli Storage Manager administrator must grant authority to the Tivoli Storage Manager client node to delete backup copies. For steps to assign authority to delete backup copies, see the topic in the problem determination section: " Tivoli Storage Manager client node lacks authority to delete backup copies" on page 90.

To avoid problems when using the Tivoli Storage Manager server, see the topic in the problem determination section: "Files are not backed up to Tivoli Storage Manager server" on page 90.

You can restore backup copies from the Tivoli Storage Manager server only with the Tivoli Storage Manager FastBack for Workstations GUI. You cannot use the Tivoli Storage Manager Backup-Archive client to restore backup copies created by Tivoli Storage Manager FastBack for Workstations.

When storing data on a Tivoli Storage Manager server, the following features must be turned off:
* Encrypt backups
* Compress backups
* Use sub-file copy

If encryption or compression is required for your data, then use the Tivoli Storage Manager compression or encryption features. Detailed information is available in the Usage recommendation for encryption, compression, and subfile backup document.

How many versions to keep: field

Specify how many backup versions of a file to keep on remote storage.

Tivoli Storage Manager FastBack for Workstations can store more than one backup version of each file. When you restore a file, you can choose which version of the file you want to restore. When the configured number of versions is reached, older versions of a file are deleted. Keeping more versions requires more storage space, but allows you more choices when restoring a file.

Maximum space for backups: field

Specify how much space to use for all backup copies on remote storage.

The default size for the remote storage area is 40 GB. If you increase the number of backup versions to keep, consider increasing your storage area size. If you are unsure of how much space to allocate, you can monitor your space usage on the Status panel and adjust the version and space settings accordingly.

When the storage space becomes full, Tivoli Storage Manager FastBack for Workstations deletes older backup copy versions of files that have several backup copy versions. After deleting the versioned backup copies, if more space is needed for new backup copies, Tivoli Storage Manager FastBack for Workstations deletes the last remaining backup copies of enough files to make room for the newest backup copy.

If you try to remotely back up a file which is larger than the space you have allocated for your remote storage area, Tivoli Storage Manager FastBack for Workstations will purge all older versions of your files, and then may fail to back up the file. Make sure that the maximum space for your remote storage areas is greater than the maximum file size for remote backup in the **Advanced** page of the Settings Notebook. For example, if you decrease your maximum space for backups to 1 GB, you must decrease the maximum file size for remote backup from the default of 1 GB.

Encrypt backups radio button

Set encryption for remote backup copies.

The encryption feature provides extra security on your remote location. The encryptions feature can be useful if multiple people have access to the remote server location, and you need to ensure that each user's data is protected from other users, or anyone else who has access to the remote server.

When you click the button labeled **Encrypt backups**, Tivoli Storage Manager FastBack for Workstations will present a dialog so you can create a password for the encrypted files. This password is required to view or access any files which are backed up by Tivoli Storage Manager FastBack for Workstations. The encrypted password is kept in the "Program data folder" on page 47. If the files in the program data folder are lost, you will be prompted to enter a new password.

Once encryption has been enabled, the password is stored. If you disable encryption, then enable again, you are not prompted for a new password.

Tivoli Storage Manager FastBack for Workstations does not support prompted encryption. Hence, if you specify Tivoli Storage Manager server as your remote storage area, you must configure non-prompted encryption in the Tivoli Storage Manager `dsm.opt` options file. In the `dsm.opt` file, use the statement: `encryptkey generate`. See *Tivoli Storage Manager for Windows Backup-Archive Client Installation*

and User's Guide for information about setting encryption options in Tivoli Storage Manager `dsm.opt` file. Tivoli Storage Manager FastBack for Workstations supports AES128 encryption but does not support AES56 encryption.

The dsm.opt file is in the "Program data folder."

Files stored on the local storage area are not encrypted. Files that are compressed can not be encrypted, and the user interface does not allow you to configure both encryption and compression. Files that use sub-file copy can be encrypted.

Tivoli Storage Manager FastBack for Workstations can not protect backup copies that it has encrypted. This means that Tivoli Storage Manager FastBack for Workstations cannot create encrypted backup copies, and then make backup copies (encrypted or not) of those backup copies.

If you configure Tivoli Storage Manager FastBack for Workstations to encrypt the backup copies to a file server, you must not use Tivoli Storage Manager FastBack for Workstations to protect the encrypted backup copies on that file server. You can use Tivoli Storage Manager or another backup solution to protect the encrypted backup copies on that file server.

You do not have to choose either encryption or compression. By clicking the buttons, you can clear both buttons, and select neither encryption or compression.

Program data folder: The program data folder varies according to the operating system and installation of the Tivoli Storage Manager FastBack for Workstations client. This list indicates the program data folder for each operating system and product version:

Microsoft Windows XP, upgrade from Continuous Data Protection for Files 3.1
> `C:\Documents and Settings\All Users\Application Data\Tivoli\ CDP_for_Files\`

Microsoft Windows Vista, upgrade from Continuous Data Protection for Files 3.1 `C:\ProgramData\Tivoli\CDP_for_Files\`

Microsoft Windows XP new installation of FastBack for Workstations version 6.1 `C:\Documents and Settings\All Users\Application Data\Tivoli\TSM\ FastBack_for_Workstations.`

> **Note:** `\Application Data\` is a hidden folder, and to see it you must modify your view preferences in **Explorer** to show hidden files and folders.

Microsoft Windows Vista, new installation of FastBack for Workstations version 6.1 `C:\ProgramData\Tivoli\TSM\FastBack_for_Workstations.`

> **Note:** `\ProgramData\` is a hidden folder, and to see it you must modify your view preferences in **Explorer** to show hidden files and folders.

Microsoft Windows 7, new installation of version 6.1
> `C:\ProgramData\Tivoli\TSM\FastBack_for_Workstations.`

> **Note:** `\ProgramData\` is a hidden folder, and to see it you must modify your view preferences in **Explorer** to show hidden files and folders.

Compress backups radio button
Set compression for remote backup copies.

Use compression to save space on your remote storage location. The compression feature is not compatible with the encryption feature. You can use compression or encryption, but not both simultaneously. Files backed up using the compression function must be restored using Tivoli Storage Manager FastBack for Workstations.

If you enable both compression and sub-file copy, sub-file copy has precedence. This means that a file which has a size larger than the minimum for sub-file copy is not compressed, since it is subject to sub-file copy activity. Only files smaller than the minimum size for sub-file copy are compressed.

You do not have to choose either encryption or compression. By clicking the buttons, you can clear both buttons, and select neither encryption or compression.

Use sub-file copy radio button

Set sub-file copy for remote backup copies.

Initially, an entire file is copied to the storage areas. When sub-file copy is turned on, and when the file changes, only the changed information is copied to the storage area. The sub-file copies are saved as separate files on the remote storage.

Sub-file copy can significantly reduce the amount of network traffic. However, sub-file copy consumes more processing resource on your computer. The default setting is to use sub-file copy for files larger than 50 MB. If you need to conserve more network resources, you can reduce the size setting so sub-file copy is not used on even smaller files.

To use sub-file copy to remote storage, you must have a backup copy of your files on local storage. In the **General** panel of the Settings Notebook, set the **Continuous protection level** field to Local and remote storage. Then you can set the sub-file backup option.

Check the button to turn on sub-file copy. In the **Use sub-file copy for files larger than:** field, specify the file size threshold for using sub-file copy. For files larger than this size, only the changed information is copied to the storage area.

Advanced panel of client Settings Notebook

The **Advanced** panel allows you to control popup messages and tune performance.

Allow program messages to pop up

For certain types of activities or notifications, Tivoli Storage Manager FastBack for Workstations opens messages from the icon in the system tray. To prevent the messages from opening, select **disabled**.

Note: If messaging is disabled, important program messages regarding the failure of Tivoli Storage Manager FastBack for Workstations operations is suppressed, which could lead to potential loss of data.

Performance Settings

Do not locally back up files larger than
> Use this field to specify the size of files that are backed up to your local storage area. If you try to back up a file which is larger than the space you have allocated for your storage area, Tivoli Storage Manager FastBack for Workstations will purge all older versions of your files, and then will fail

to back up the file. Make sure that the file size limit in this field, and the size limit for files backed up to remote storage, is less than the maximum space for your storage areas.

Do not remotely back up files larger than
Use this field to specify the size of files that are backed up to your remote storage area.

Scheduled Backup Settings
Open the Folder and Files Settings by clicking the Scheduled Backup Settings link. You can use this window to create, modify and remove scheduled backups.

Throttle Settings
Open the Network Rules Settings by clicking the Throttle Settings link. You can use this window to create, modify and remove network rules.

Folders and Files Settings dialog for scheduled backups by Tivoli Storage Manager FastBack for Workstations

Specify folders and files to back up on the same schedule as e-mail files are backed up.
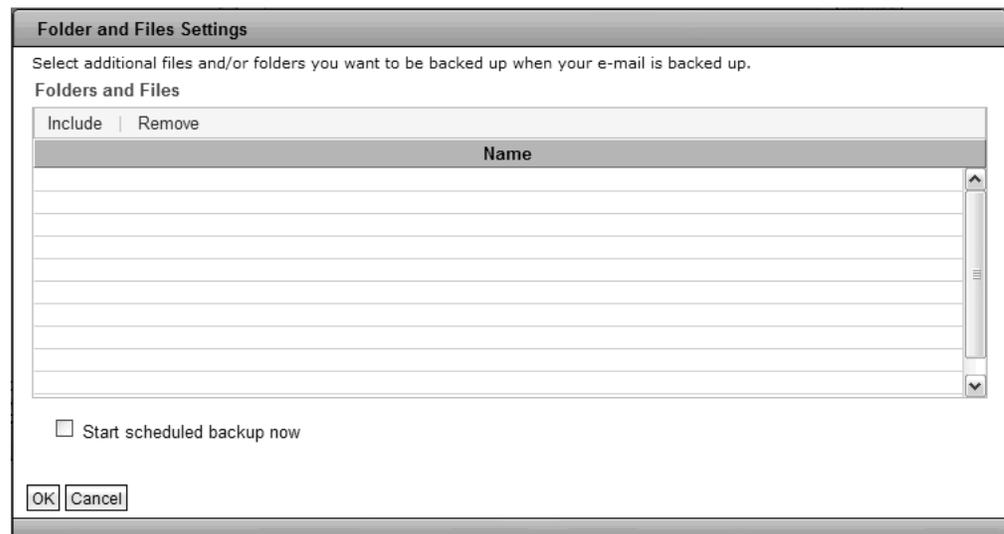
When considering what files to protect on a schedule, see "Types of protection" on page 2 and "Considerations for scheduled backups" on page 50.

List of Folders and Files to Include

The top of the list box has two menu action items. Use the menu items to add and remove items from the list.

Include
Click **Include** to add files and folders that you want to protect. The **Select folders** dialog will open.

Remove
Select a list item, then click **Remove** to remove that list item.

Each row in the list has one column.

Name Patterns in the **Name** column specify one or more files or folders. See

"Wildcards in file specifications" on page 12 to determine what files and folders will match a **Name** pattern with blanks or asterisks. When a folder is protected, all of its files and sub-folders are protected.

Start scheduled backup now check box

The folders and files that you specify will be backed up on the same schedule as your e-mail backups. If you want to force a backup now, check the **Start scheduled backup now** box and click the **OK** button.

Considerations for scheduled backups:

Protect appropriate files on a schedule, and prepare the files for backup.

Files that are appropriate to protect on a schedule

Large or frequently saved files can consume considerable computing or network resources when they are backed up. You can schedule periodic backups of these files when the burden on computing or network resources are least inconvenient.

Some files are not often closed and saved, but must be backed up periodically. Files protected by schedule are backed up even if they are open, but you can try to schedule the backup for a time when the files are closed.

Scheduled backup can yield fewer backup versions than continuously protected files. Fewer backup versions use less storage space, but offer fewer opportunities when you want to restore a file.

When does a scheduled backup occur

The files that you select for scheduled protection are backed up at the scheduled time, if they change during the scheduled interval. If a file changed several times during the schedule, only the last version of the file is backed up at the scheduled time.

If the remote storage area is not available at the scheduled backup time, the files that have changed at that time are noted and are backed up when the remote storage becomes available. If a noted file changes after the scheduled backup time, and before the remote storage becomes available, only the last version of the file is backed up.

If the computer is powered off or Tivoli Storage Manager FastBack for Workstations is not running at the schedule time, the scheduled backup runs when the computer is powered on and Tivoli Storage Manager FastBack for Workstations is running.

If you shut down a computer or stop the Tivoli Storage Manager FastBack for Workstations client when a scheduled backup is running, the backup resumes when the client is running again and the remote storage is available.

If you forced a backup of scheduled files during the 30 minutes prior to the scheduled time, the scheduled backup does not occur.

**Closing applications before a scheduled backup**

Tivoli Storage Manager FastBack for Workstations backs up all files that have changed during the schedule interval, including files that are still open at the time of backup. The backup copies of files that are backed up while open can be corrupted. So it is suggested that you close applications before a scheduled backup. Tivoli Storage Manager FastBack for Workstations offers an opportunity to close applications before a scheduled backup.

At the beginning of a scheduled backup, Tivoli Storage Manager FastBack for Workstations attempts to close all files that are listed in a text file called `closeapps.txt` in the installation directory. Each line in the file must be a program name, with name and extension, but no folder path. Tivoli Storage Manager FastBack for Workstations sends a close command to each instance of every program named in the `closeapps.txt` file. Note that Tivoli Storage Manager FastBack for Workstations does not send a start command to any of those programs when the scheduled backup is finished.

Specifying throttle settings and network rules for Tivoli Storage Manager FastBack for Workstations

Modify or create policy rules that manage bandwidth usage in the networks you have specified.

Use the **Network Rules** dialog to manage bandwidth usage for each network. When a network is accessed, Tivoli Storage Manager FastBack for Workstations uses the first rule in the list that matches the network. As a result, the throttle setting does not require a manual update every time Tivoli Storage Manager FastBack for Workstations accesses a different network. When a new network is detected, a default network rule is created. This default rule is added to the bottom of the network rule list.
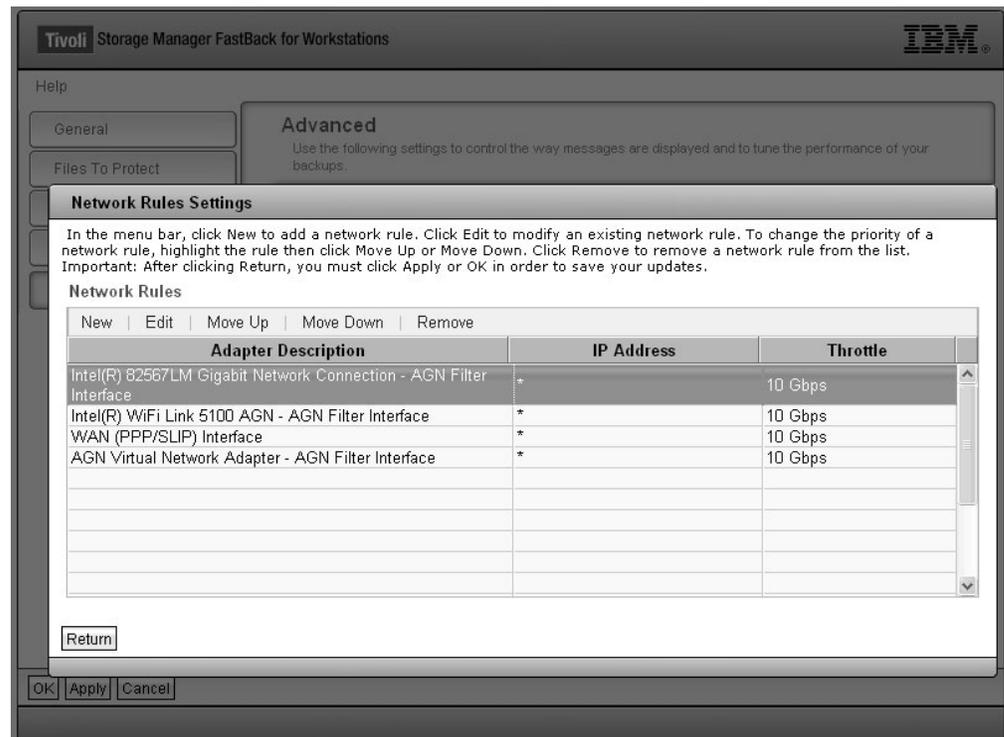
Working with Network Rules

Use the Network Rules window to add new network rules, edit existing network rules, and change the order of network rules listed in the window.

New   Click **New** to create a new network rule using the **New Network Rules** dialog.

Edit   Select a list item, then click **Edit** to modify the value for an adapter, IP address, or throttle setting.

Move Up
> Select a list item and click **Move Up** to increase the priority of this rule. When searching for rules to apply to a network, Tivoli Storage Manager FastBack for Workstations searches the list in order from highest to lowest.

Move Down
> Select a list item and click **Move Down** to decrease the priority of this rule. When searching for rules to apply to a network, Tivoli Storage Manager FastBack for Workstations searches the list in order from highest to lowest.

Remove
> Select a list item, then click **Remove** to remove that network rule from the list.

Create a Network Rule

In the New Network dialog, the following fields are available:

Adapter
> Use the dropdown menu to select the Adapter you need. When you select an adapter from list, the other fields in this dialog will be auto-filled..

Description
> A description of the selected adapter displays. This field cannot be updated.

DNS Suffix
> The Domain Name System information is displayed.

IP Address
> The IP address associated with the selected adapter displays. To change this value, enter another IP address. You can use an asterisk (*). For example:
>
> `192.168.*`

IPv6 Address
> If your system supports IPv6 an IPv6 field is displayed with the IP address auto displayed.

Throttle
> Type in the throttle level you want to set, in the Throttle field and select the size (Kbps, Mbps or Gbps) from the dropdown menu.
>
> Click OK to create the new network rule, or Cancel to cancel the operation.

When you have successfully created a new network rule, it is added to the top of the network rule list.

Changing protection settings for the Tivoli Storage Manager FastBack for Workstations client

You can change which files and applications are protected, and how they are protected.

These tasks assume that you have installed the Tivoli Storage Manager FastBack for Workstations client. If you are configuring the client during product installation, see "Initial Configuration Wizard of Tivoli Storage Manager FastBack for Workstations" on page 8.

These tasks also assume that you start from the Tivoli Storage Manager FastBack for Workstations Status panel.

The Status panel displays when you click twice the Tivoli Storage Manager FastBack for Workstations client icon in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

Specifying which files and applications are protected by Tivoli Storage Manager FastBack for Workstations

You can specify which files are continuously protected, which files are protected on a schedule, and which files are vaulted. For an explanation of the different kinds of protection, see "Types of protection" on page 2.

Specifying which files and applications are continuously protected by Tivoli Storage Manager FastBack for Workstations

You can specify which files are protected continuously. You will be able to restore the latest version of these files. You will be able to restore different versions of these files.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Files to Protect** tab on the left side of the notebook. The **Files to Protect** page displays. The page has 3 summary boxes: **Folders and Files**, **Applications**, and **Vault**.
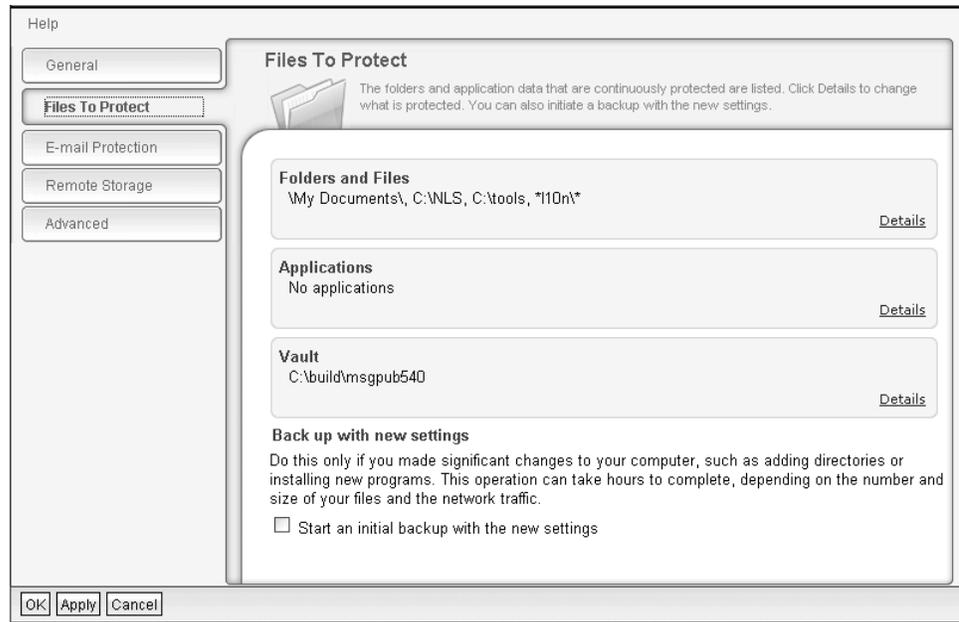
4. In the **Applications** box, click the **details** link. The **Applications Settings** dialog displays, and the **Files to Protect** page becomes inactive.

5. Check the applications whose files you want to protect. Uncheck those applications whose files you do not want to protect.

6. Click the **OK** button. The **Applications Settings** dialog exits, and the **Files to Protect** page again becomes active.

7. If you want to add or exclude files and folders by specifying file paths, in the **Folders and Files** box, click the **details** link. The **Folder and Files Settings** dialog displays, and the **Files to Protect** page becomes inactive. For an explanation of how to include and exclude files in this dialog, see "**Folders and Files Settings** dialog for continuous protection by Tivoli Storage Manager FastBack for Workstations" on page 31

8. If you added applications or file specifications, you should now force a backup to ensure that all the new files are immediately protected. See "When to back up all files" on page 40 for an explanation. Check the **Back up with new settings** check box.

9. Click the **OK** button. The Settings Notebook exits and your new settings are applied.

Results

If you forced a backup, your system performance will become slower during the extensive scan of your protected drives.

Specifying which files and applications are protected on a schedule by Tivoli Storage Manager FastBack for Workstations

You can Specify which files are protected on a schedule. You will be able to restore the last version of the file that you saved before the scheduled backup. You will not be able to restore versions of the file that were saved between scheduled backups.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Advanced** tab on the left side of the notebook. The **Advanced** page displays.
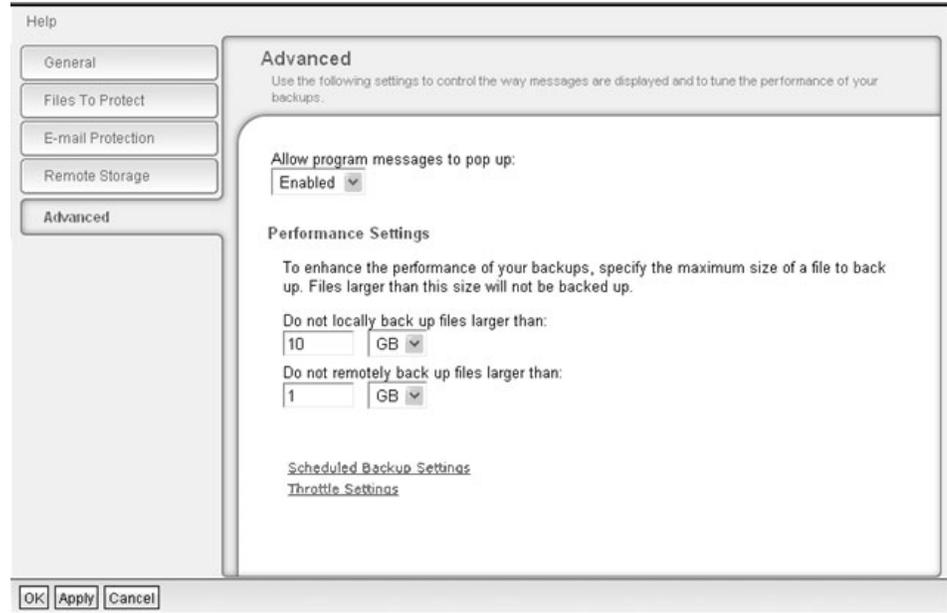
4. Click the **Scheduled Backup Settings** link. The **Folders and Files Settings** dialog for scheduled backups displays, and the **Advanced** page becomes inactive.
5. Click the **Include** menu item. The **Select Folders** dialog displays, and the **Folders and Files Settings** dialog becomes inactive.
6. Choose a folder in the folders tree, or specify a folder in the **Folder name (wildcards allowed)** field. You can specify individual files or folders. With wildcards, you can specify all files and folders that match your pattern. See "Wildcards in file specifications" on page 12 for details.
7. Click the **OK** button. The **Select Folders** dialog exits, and the **Folders and Files Settings** dialog for scheduled backups again becomes active. The file or folder that you specified is added to the list.
8. Repeat the above 3 steps to specify more folders to protect.
9. In the **Folders and Files Settings** dialog, select the files and folders that you no longer want protected on a schedule, and click the **Remove** menu item. The files and folders are removed from the list.
10. Click the **OK** button. The **Folders and Files Settings** dialog exits, and the **Advanced** page in the Settings Notebook again becomes active.
11. Click the **OK** button. The Settings Notebook exits and your new settings are applied.

Considerations for scheduled backups:

Protect appropriate files on a schedule, and prepare the files for backup.

Files that are appropriate to protect on a schedule

Large or frequently saved files can consume considerable computing or network resources when they are backed up. You can schedule periodic backups of these files when the burden on computing or network resources are least inconvenient.

Some files are not often closed and saved, but must be backed up periodically. Files protected by schedule are backed up even if they are open, but you can try to schedule the backup for a time when the files are closed.

Scheduled backup can yield fewer backup versions than continuously protected files. Fewer backup versions use less storage space, but offer fewer opportunities when you want to restore a file.

When does a scheduled backup occur

The files that you select for scheduled protection are backed up at the scheduled time, if they change during the scheduled interval. If a file changed several times during the schedule, only the last version of the file is backed up at the scheduled time.

If the remote storage area is not available at the scheduled backup time, the files that have changed at that time are noted and are backed up when the remote storage becomes available. If a noted file changes after the scheduled backup time, and before the remote storage becomes available, only the last version of the file is backed up.

If the computer is powered off or Tivoli Storage Manager FastBack for Workstations is not running at the schedule time, the scheduled backup runs when the computer is powered on and Tivoli Storage Manager FastBack for Workstations is running.

If you shut down a computer or stop the Tivoli Storage Manager FastBack for Workstations client when a scheduled backup is running, the backup resumes when the client is running again and the remote storage is available.

If you forced a backup of scheduled files during the 30 minutes prior to the scheduled time, the scheduled backup does not occur.

Closing applications before a scheduled backup

Tivoli Storage Manager FastBack for Workstations backs up all files that have changed during the schedule interval, including files that are still open at the time of backup. The backup copies of files that are backed up while open can be corrupted. So it is suggested that you close applications before a scheduled backup. Tivoli Storage Manager FastBack for Workstations offers an opportunity to close applications before a scheduled backup.

At the beginning of a scheduled backup, Tivoli Storage Manager FastBack for Workstations attempts to close all files that are listed in a text file called `closeapps.txt` in the installation directory. Each line in the file must be a program name, with name and extension, but no folder path. Tivoli Storage Manager FastBack for Workstations sends a close command to each instance of every program named in the `closeapps.txt` file. Note that Tivoli Storage Manager FastBack for Workstations does not send a start command to any of those programs when the scheduled backup is finished.

Specifying which email applications are protected by Tivoli Storage Manager FastBack for Workstations

Email applications have their own page in the Settings Notebook.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **E-mail Protection** tab on the left side of the notebook. The **E-mail Protection** page displays.

4. Choose your email application from the **E-mail Application** drop down list. If your application is not listed in the drop down list, choose **Other**. If you chose **Other**, the **E-mail Application Data Folder (wildcards allowed)** field will become active.
5. If you chose **Other**, enter a file specification in the **E-mail Application Data Folder (wildcards allowed)** field. You can type the specification or browse for the folder.
6. Click the **OK** button. The Settings Notebook exits and your new settings are applied.

Specifying which files and applications are vaulted by Tivoli Storage Manager FastBack for Workstations

Procedure

1. Click the **Settings** menu item. The Settings Notebook displays.
2. In the Settings Notebook, click the **Files to Protect** tab on the left side of the notebook. The **Files to Protect** page displays. The page has 3 summary boxes: **Folders and Files**, **Applications**, and **Vault**.
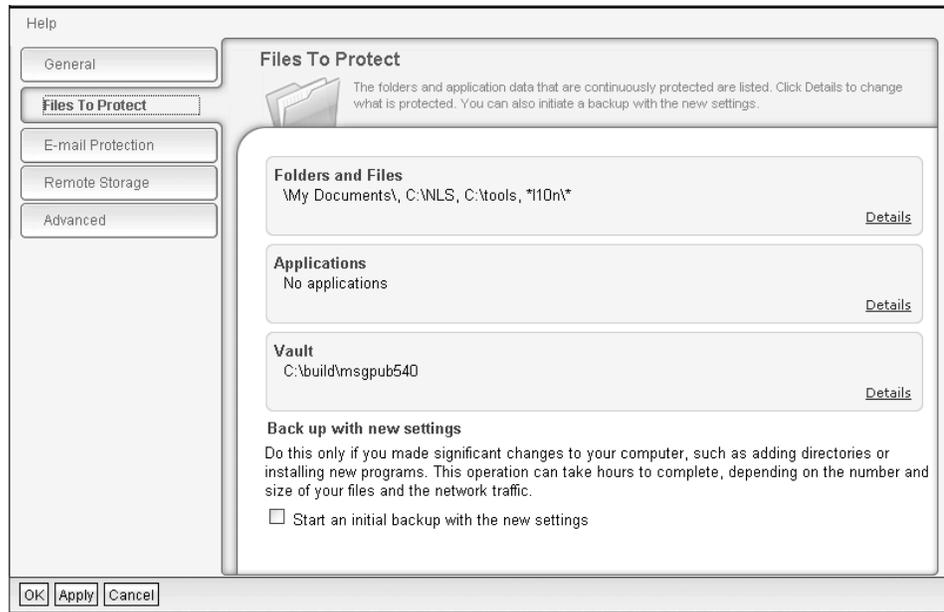
3. In the **Vault** box, click the **details** link. The **Vault Settings** dialog displays, and the **Files to Protect** page becomes inactive.

4. Click the **Vault** menu item. The **Select Folders** dialog displays, and the **Vault Settings** dialog becomes inactive.

5. Choose a folder in the folders tree, or specify a folder in the **Folder name (wildcards allowed)** field. You cannot specify individual files. With wildcards, you can specify all folders that match your pattern. See "Wildcards in file specifications" on page 12 for details.

6. Click the **OK** button. The **Select Folders** dialog exits, and the **Vault Settings** dialog again becomes active. The folder that you specified is added to the list.

7. Repeat the above 3 steps to specify more folders to vault.

8. In the **Vault Settings** dialog, select the folders that you no longer want vaulted, and click the **Unvault** menu item. The folders that you specified are removed from the list.

9. Click the **OK** button. The **Vault Settings** dialog exits, and the **Files to Protect** page in the Settings Notebook again becomes active.

10. Click the **OK** button. The Settings Notebook exits, and your folders become vaulted.

Specifying the period for scheduled protection by Tivoli Storage Manager FastBack for Workstations

All files that are protected on a schedule are protected on the schedule that is configured in the **E-mail Protection** page in the Settings Notebook. When you change the schedule for e-mail files, you change the schedule for all files that are protected on a schedule.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.

2. Click the **Settings** menu item. The Settings Notebook displays.

3. In the Settings Notebook, click the **E-mail Protection** tab on the left side of the notebook. The **E-mail Protection** page displays.
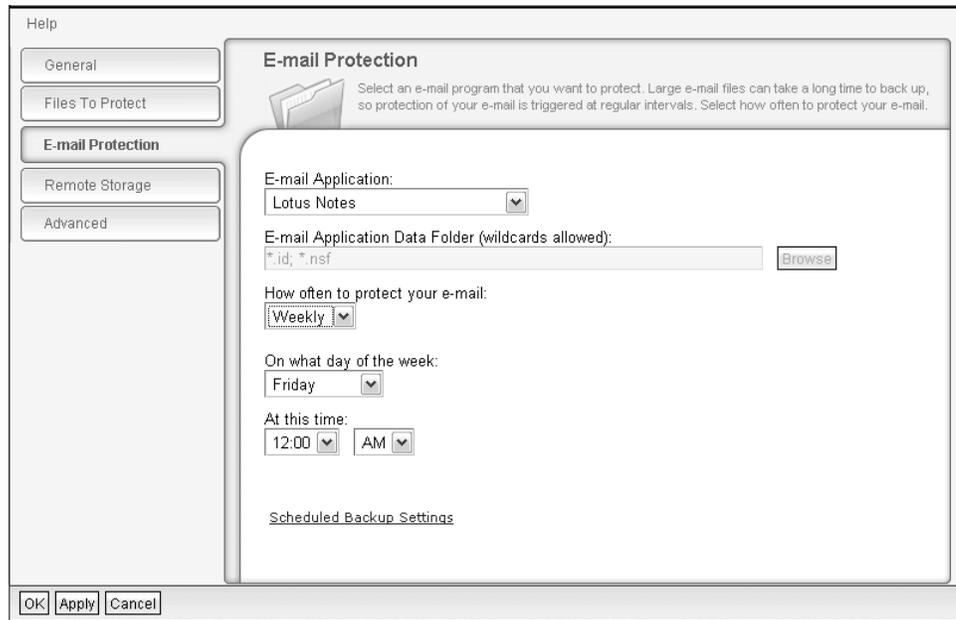
4. Choose the schedule period in the **How often to protect your e-mail:** drop down list. Depending on the schedule period that you chose, day or time fields will display

5. If applicable for the scheduled period, choose the day and time to perform the backup.

6. Click the **OK** button. The Settings Notebook exits and your new settings are applied.

Specifying storage for backup copies by Tivoli Storage Manager FastBack for Workstations

You can specify local storage areas, remote storage, and on which storage areas to store backup copies.

Specifying the local storage area for backup copies by Tivoli Storage Manager FastBack for Workstations

You can specify on which local drive to store backup copies. You can specify how many versions to keep, and the maximum space for backup copies. Specify also whether to use local storage, remote storage, both, or neither.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.

2. Click the **Settings** menu item. The **General** page the Settings Notebook displays.
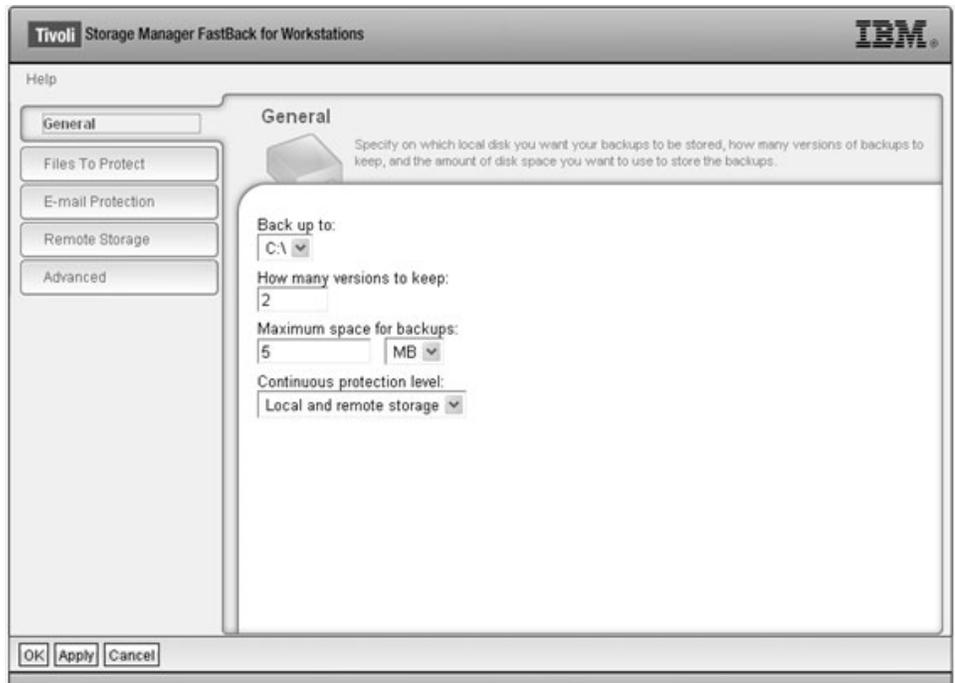
3. Choose the location, number of versions, and space for local backup copies. For explanations of the fields on this page, see "**General** panel of client Settings Notebook" on page 28.

4. Click the **OK** button. The Settings Notebook exits and your new settings are applied.

Specifying the remote storage area for backup copies by Tivoli Storage Manager FastBack for Workstations

You can specify where backup copies are stored on your remote and external devices. You can specify how many versions to keep, and the maximum space for backup copies.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Remote Storage** tab on the left side of the notebook. The **Remote Storage** page displays.
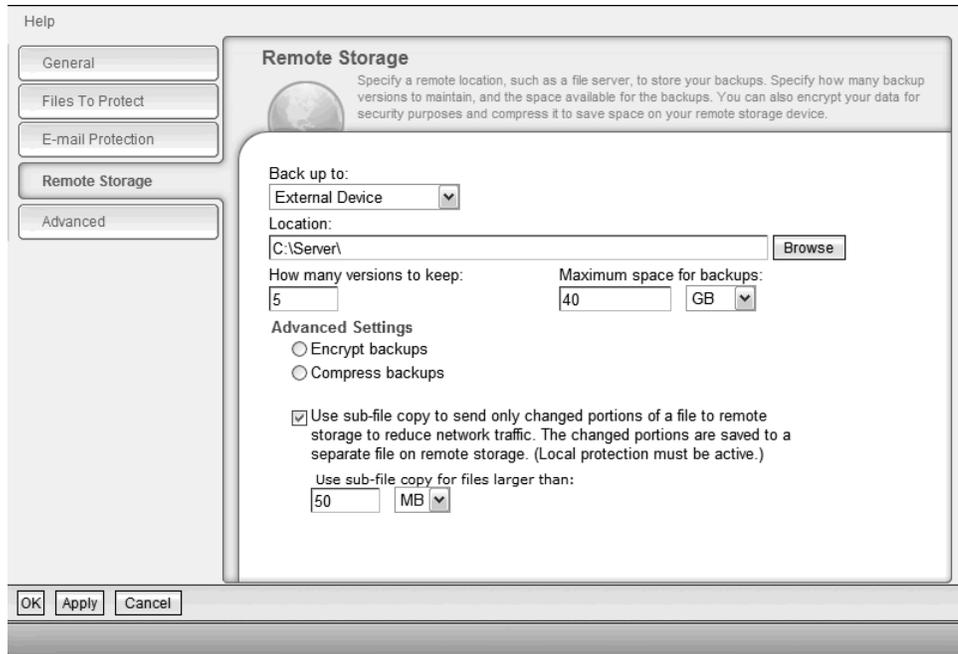
4. Choose appropriate values for the remote storage area fields. For explanations of the fields on this page, see "**Remote Storage** panel of client Settings Notebook" on page 43.

5. Click the **OK** button. The Settings Notebook exits and your new settings are applied.

Forcing a backup by Tivoli Storage Manager FastBack for Workstations

When you change your configuration so that a new set of files is protected, either by continuous protection or scheduled protection, it is recommended that you back up all protected files. Failing to back up all protected files will yield protection only for those files that you change.

You can force a backup of all protected files; force a scheduled backup before the scheduled period elapses; and stop a forced backup.

These tasks assume that you start from the Tivoli Storage Manager FastBack for Workstations Status panel.

The Status panel displays when you click twice the Tivoli Storage Manager

FastBack for Workstations client icon in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

Backing up all files that are protected by Tivoli Storage Manager FastBack for Workstations

When you change your configuration to extend continuous or scheduled protection to more files, it is recommended that you back up all protected files. Failing to back up all protected files will yield protection only for those files that you change.

About this task

For an explanation of when to back up all files, see "When to back up all files" on page 40.

Follow these instructions to force a backup of all files that are continuously protected and all files that are protected on a schedule.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Files to Protect** tab on the left side of the notebook. The **Files to Protect** page displays.

4. Check the **Back up with new settings** check box.
5. Click the **OK** button. The Settings Notebook exits and Tivoli Storage Manager FastBack for Workstations begins to scan your protected drives and back up all files that you designated for continuous or scheduled protection. Your system performance will become slower during the extensive scan of your protected drives.

Forcing a scheduled backup by Tivoli Storage Manager FastBack for Workstations

You can force a scheduled backup before the schedule period expires. As a result, you do not need to wait for the schedule period to expire. All files that have changed since the last scheduled backup will be backed up.

About this task

If you want to back up files that are protected on a schedule, prior to the scheduled time, you can force a backup of all files that have changed since the last scheduled backup. If you force a backup of scheduled files during the 30 minutes prior to the scheduled time, the scheduled backup does not occur. If the remote storage area is not available when your force a scheduled backup, the changed files are noted, and the most recent version of the noted files is backed up when remote storage becomes available.

Note: You will not back up all files that are designated for scheduled protection, but only those files that have changed since the last scheduled backup.

To force a scheduled backup, start at the Status panel.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Advanced** tab on the left side of the notebook. The **Advanced** page displays.

4. Click the **Scheduled Backup Settings** link. The **Folders and Files Settings** dialog for scheduled backups displays, and the **Advanced** page becomes inactive.
5. Check the **Start scheduled backup now** check box.
6. Click the **OK** button. The **Folders and Files Settings** dialog exits, and the **Advanced** page in the Settings Notebook again becomes active.
7. Click the **OK** button. The Settings Notebook exits and Tivoli Storage Manager FastBack for Workstations begins to back up all files that have changed since the last scheduled backup.

Stopping backup activity by Tivoli Storage Manager FastBack for Workstations

You can stop backup activity.

About this task

The steps for stopping any kind of backup activity or restore activity are very similar. See "Stopping backup or restore activity by Tivoli Storage Manager FastBack for Workstations" on page 69.

Chapter 4. Starting and stopping protection activity of the Tivoli Storage Manager FastBack for Workstations client

Start and stop the client and client backup activity. Run the client as a service.

Starting the client GUI

Start the client GUI (graphical user interface) to work with the Tivoli Storage Manager FastBack for Workstations client. From the Status panel of the GUI, you can modify data protection settings, restore files, and monitor protection activity.

The Status panel displays when you click twice the Tivoli Storage Manager

FastBack for Workstations client icon in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

Forcing a backup by Tivoli Storage Manager FastBack for Workstations

When you change your configuration so that a new set of files is protected, either by continuous protection or scheduled protection, it is recommended that you back up all protected files. Failing to back up all protected files will yield protection only for those files that you change.

You can force a backup of all protected files; force a scheduled backup before the scheduled period elapses; and stop a forced backup.

These tasks assume that you start from the Tivoli Storage Manager FastBack for Workstations Status panel.

The Status panel displays when you click twice the Tivoli Storage Manager

FastBack for Workstations client icon in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

When to back up all files

At certain times, you need to back up all files. Without this backup, some files are not protected.

When you first install the Tivoli Storage Manager FastBack for Workstations client, you can immediately back up all files that you configured for protection. Without the initial backup, only files that change will be protected. The initial backup will protect all of the existing files that you designated for protection.

One exception is when you push an installation of Tivoli Storage Manager FastBack for Workstations to a remote computer and do not reboot. If you force a backup on a pushed installation without rebooting, Tivoli Storage Manager FastBack for Workstations attempts to back up files in the system context. These backups can fail, and when a logged-on user later attempts to restore these files the restore can fail.

After the initial backup, the typical rate of file changes does not require that you again back up all files at once. If you change the protection settings to include files that were not previously protected, the files need to be backed up. Until you change these files, and without a forced backup, Tivoli Storage Manager FastBack for Workstations does not back up these files. To protect these files, you must force a backup of all files.

If you do not change your configuration but suddenly make a large change to the files that are configured for protection, you must also force a backup of all files. You must also force a backup if you add a new drive whose files are configured for protection.

A forced backup causes Tivoli Storage Manager FastBack for Workstations to scan all local drives looking for files that you designated for protection. This means that every file in every directory will be investigated, and all files that meet the include, exclude, and size criteria will be copied to the local or remote or both storage areas. The creation of backup copies could take several hours. It also takes significant processing resources. Plan the backup at a time when you do not need computing resources for other activities.

After this scan and backup is complete, Tivoli Storage Manager FastBack for Workstations will continue to operate in the background without any significant impact on your regular computing activities.

Changing the **Vault** settings does not require a forced backup.

With a client, you can force a backup of your continuously protected files in two places:
• The Initial Configuration Wizard, when you initially configure the Tivoli Storage Manager FastBack for Workstations client
• The **Files to Protect** panel in the Settings Notebook of the client, any time after initial configuration.

You can force an initial backup of a newly-installed client by setting this option when you identify an administration folder with the central administration console, create a configuration file, and then deploy a client with the created configuration file.

You can force a complete backup at any time by sending to the client a script that includes the command to back up all files.

Backing up all files that are protected by Tivoli Storage Manager FastBack for Workstations

When you change your configuration to extend continuous or scheduled protection to more files, it is recommended that you back up all protected files. Failing to back up all protected files will yield protection only for those files that you change.

About this task

For an explanation of when to back up all files, see "When to back up all files" on page 40.

Follow these instructions to force a backup of all files that are continuously protected and all files that are protected on a schedule.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Files to Protect** tab on the left side of the notebook. The **Files to Protect** page displays.

4. Check the **Back up with new settings** check box.
5. Click the **OK** button. The Settings Notebook exits and Tivoli Storage Manager FastBack for Workstations begins to scan your protected drives and back up all files that you designated for continuous or scheduled protection. Your system performance will become slower during the extensive scan of your protected drives.

Forcing a scheduled backup by Tivoli Storage Manager FastBack for Workstations

You can force a scheduled backup before the schedule period expires. As a result, you do not need to wait for the schedule period to expire. All files that have changed since the last scheduled backup will be backed up.

About this task

If you want to back up files that are protected on a schedule, prior to the scheduled time, you can force a backup of all files that have changed since the last scheduled backup. If you force a backup of scheduled files during the 30 minutes prior to the scheduled time, the scheduled backup does not occur. If the remote

storage area is not available when your force a scheduled backup, the changed files are noted, and the most recent version of the noted files is backed up when remote storage becomes available.

Note: You will not back up all files that are designated for scheduled protection, but only those files that have changed since the last scheduled backup.

To force a scheduled backup, start at the Status panel.

Procedure
1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Click the **Settings** menu item. The Settings Notebook displays.
3. In the Settings Notebook, click the **Advanced** tab on the left side of the notebook. The **Advanced** page displays.

4. Click the **Scheduled Backup Settings** link. The **Folders and Files Settings** dialog for scheduled backups displays, and the **Advanced** page becomes inactive.
5. Check the **Start scheduled backup now** check box.
6. Click the **OK** button. The **Folders and Files Settings** dialog exits, and the **Advanced** page in the Settings Notebook again becomes active.
7. Click the **OK** button. The Settings Notebook exits and Tivoli Storage Manager FastBack for Workstations begins to back up all files that have changed since the last scheduled backup.

Stopping backup activity by Tivoli Storage Manager FastBack for Workstations

You can stop backup activity.

About this task

The steps for stopping any kind of backup activity or restore activity are very similar. See "Stopping backup or restore activity by Tivoli Storage Manager FastBack for Workstations" on page 69.

Stopping backup or restore activity by Tivoli Storage Manager FastBack for Workstations

You can stop any backup or restore activity.

This task assumes that you start from the Tivoli Storage Manager FastBack for Workstations Status panel.

The Status panel displays when you click twice the Tivoli Storage Manager

FastBack for Workstations client icon ![icon] in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

1. The bar at the bottom of the Status panel displays a brief text message of the status of backup and restore activities. Let your cursor hover over the text. A summary of activities will pop up from the bar. The summary lists 5 activities. For each activity, there is a link to a detailed status dialog, and a brief text that indicates the status of the activity.
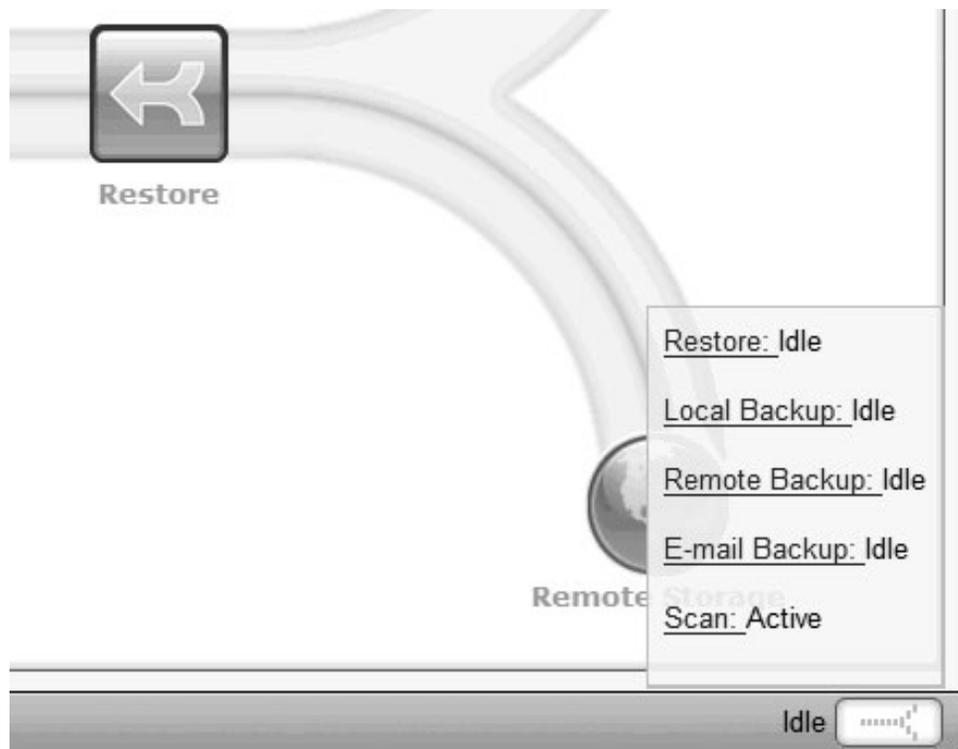
2. Click the link for the activity you want to stop. The detailed status dialog for that activity displays, and the Status panel becomes inactive.

```
Scan Status                                                    [X]

Your computer is being scanned for files that you designated for protection. The folder currently being
examined is shown. After each file is scanned, it will be backed up to create a baseline for protection.
Click Stop if you want to stop the scan; no backup will commence.



Evaluating folder:C:\build\CDP\ship3\l10n\it\help\IDDhelp_OUT



[Stop] [Close]
```
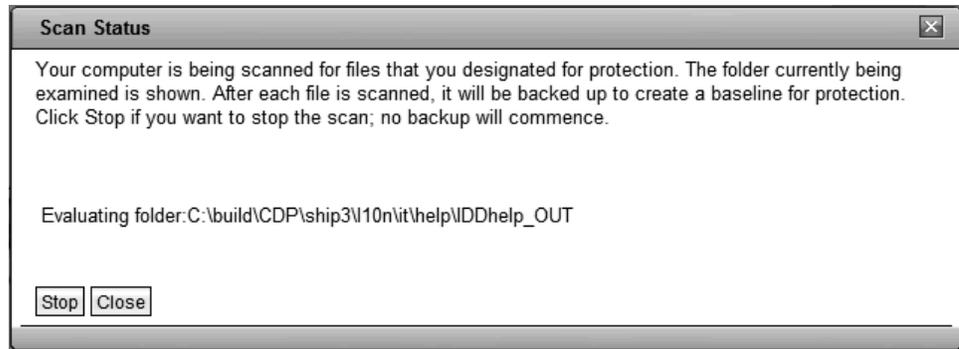
3. Click the **Stop** button. Click the **Close** button. The detailed status dialog exits, and the Status panel becomes active again. Within a short time, the activity will stop.

Restarting the Tivoli Storage Manager FastBack for Workstations client process

The `FilePathSrv.exe` client process is started automatically every time the computer starts. If the `FilePathSrv.exe` client process does not start automatically or stops running, your files are not protected.

To determine if the `FilePathSrv.exe` process is running, look for the FilePathSrv.exe process in Task Manager. If you cannot see this process, the process is not running.

To restart the process on a Command Prompt window, do the following:
1. Open a Command Prompt window.
2. Navigate to the Tivoli Storage Manager FastBack for Workstations installation folder. (The default installation folder is `c:\Program Files\Tivoli\TSM\ FastBack_for_Workstations..`
3. Type the following: `filepathsrv -d`

Confirm that the process is running by checking the System Event log or Task Manager. In the System Event log, there should be an entry which states: `HTML listener started successfully and listening on port 9003`. This is event # 6049. In Task Manager, you should see FilePathSrv.exe process.

You can also restart the process from the **Start** menu. Choose **Start > All Programs > Startup > FB4WKSTNSSrv**.

Run the Tivoli Storage Manager FastBack for Workstations client as a service

You can run the client as a service instead of a logged-in application.

In the client install directory there is a program called `FpForFileServers.js`. If you invoke this executable file, the client runs as a service instead of as a logged-in application.

The default account for services on Microsoft Windows has no privilege for accessing folders shared via a network. The `FpForFileServers.js` executable file launches the Microsoft Windows services configuration panel so that you can

update the FilePathSrv service. Specify a valid account name and password that can access your remote backup locations. On Windows Vista and Windows 7, run the command in a command prompt with elevated privileges.

When you uninstall the Tivoli Storage Manager FastBack for Workstations client, the Tivoli Storage Manager FastBack for Workstations service is also uninstalled.

Note: The Tivoli Storage Manager FastBack for Workstations client installation directory and tree allows full access by all users on the system during installation. This is done so that non-privileged users (users without administration rights) can still be protected by the software and use the GUI. This is probably not a desirable setting for multi-user workstations. This is also not desirable because on the installation tree there are log files and programs whose contents and use should not be available to all users. Consider setting more restrictive ACLs on the installation directory and tree.

Chapter 5. Monitoring the protection of Tivoli Storage Manager FastBack for Workstations

Once Tivoli Storage Manager FastBack for Workstations is installed and configured, you can monitor the state of your protection. You can receive pop-up messages, check that the Tivoli Storage Manager FastBack for Workstations daemon is running, and use the Tivoli Storage Manager FastBack for Workstations user interface to check detailed status of your protection.

If you determine that Tivoli Storage Manager FastBack for Workstations is not protecting your files as you intended, often the solution will be suggested by the data available from Tivoli Storage Manager FastBack for Workstations reports or configuration settings. If the solution is not clear, consider the information in Chapter 8, "Troubleshooting the Tivoli Storage Manager FastBack for Workstations client," on page 89. The following monitoring opportunities are available.

Pop-up Messages

Once you install and configure Tivoli Storage Manager FastBack for Workstations, it will work unobtrusively in the background. As a result, you should not need to access Tivoli Storage Manager FastBack for Workstations until you want to restore a file. Unless you will do some active monitoring of Tivoli Storage Manager FastBack for Workstations, it is recommended that you allow Tivoli Storage Manager FastBack for Workstations to notify you when your attention is needed for your system. For example, if you are running out of space in your storage area, Tivoli Storage Manager FastBack for Workstations will warn you with a message.

To receive messages from Tivoli Storage Manager FastBack for Workstations, you must configure Tivoli Storage Manager FastBack for Workstations to send you messages. By default, Tivoli Storage Manager FastBack for Workstations sends you messages. You configure this setting in the **Allow program messages to pop up** drop down list in the **Advanced** page of the Settings Notebook.

Tivoli Storage Manager FastBack for Workstations Icon in the System Tray

When the Tivoli Storage Manager FastBack for Workstations daemon is protecting your files as a logged in application, the Tivoli Storage Manager FastBack for

Workstations icon appears in the desktop system tray. (If Tivoli Storage Manager FastBack for Workstations is running as a service, the icon does not appear in the system tray). If you do not see the icon in your system tray, and Tivoli Storage Manager FastBack for Workstations is not running as a service, you must restart the process. See "Restarting the Tivoli Storage Manager FastBack for Workstations client process" on page 70.

Monitoring protection with the Tivoli Storage Manager FastBack for Workstations client

If you want to actively check the status of your protection, there are several checks you can do in the Tivoli Storage Manager FastBack for Workstations client user interface.

Tivoli Storage Manager FastBack for Workstations client Status page

The Status page provides status information at a glance. The items below help you monitor the status of your protection. For an explanation of all fields on the page, see "Status panel of Tivoli Storage Manager FastBack for Workstations" on page 76.

Icon Color

> The icons on the Status panel reflect the status of those areas. In normal conditions, the icons are blue. The icon changes to yellow as a warning.

> The **Remote Storage** icon becomes yellow when you are disconnected from your remote storage area. This is not necessarily cause for alarm. For example, if you know that you will connect to your remote storage location before long, you do not need to worry. Tivoli Storage Manager FastBack for Workstations queues changed files while the storage area is unavailable, and transfers the files when the storage becomes available. However, if you are not aware that your remote storage is unavailable, and do not know that you will soon recover your connection, you should investigate your remote storage.

> The **Local Storage** icon becomes yellow if Tivoli Storage Manager FastBack for Workstations cannot access the local storage area.

> If the color of any icon is not blue and you are not aware of a transient threat to your protection system, you should investigate further.

> The **Restore** icon and the **My Files** icon never change color.

Icon Displays Data and Links

> Let your pointer hover over an icon to display summary information and links to detailed information.

> The summary information for each icon gives clues about your protection status, and the links provide details.

> **My Files icon**

>> **Files under protection**
>>> If the number of files under protection is not reasonable given the changes you've made and list of files that you've configured, you should investigate further. Verify that you accurately configured the list of files to protect.

>>> Click the **Settings** link below **Files under protection** to configure the files to protect.

>> **View Report**
>>> The **View Report** link opens a detailed list of recent protection activity. The top of the list contains failed activities and messages describing the failures.

>> **E-mail protection**
>>> If the **Last successful backup on** field does not indicate a recent successful backup, verify the configuration of your e-mail application and the schedule for your e-mail backups.

>>> Click the **Settings** link below **E-mail protection** to configure your e-mail protection.

Local Storage icon

If the **Usage** bar indicates that your local storage is full, you should investigate further. You can re-configure your local storage area.

Click the **Settings** link to configure your local storage area.

Remote Storage icon

Usage bar

If the usage bar indicates that your remote storage is full, you should investigate further. You can re-configure your remote storage area.

Click the **Settings** link to configure your remote storage area.

Continuous Protection Activity Report

A report of continuous protection activity is available from a link in the Status panel. The report is called **Activity Report**. To navigate to the **Activity Report**, see "Viewing the continuous protection activity report of a Tivoli Storage Manager FastBack for Workstations client" on page 80.

Activity Report			Tuesday, March 27, 2007 2:18:28 PM

Failures — The following lists the operations that failed. Look for repeated failures as a basis for troubleshooting. For information on how to correct issues, see Troubleshooting.

Date and Time	File Name	Activity	Reason for Failure
03/27/2007 11:18:41	de	Rmdir (Local)	This replication item is being skipped due the target directory not being empty (possibly has versioned files).

Successful — The following is a list of recent successful operations.

Date and Time	File Name	Activity
03/27/2007 13:22:16	cdp_cpt_upgrade.dita	Backup (Local)
03/27/2007 13:21:20	cdp_cpt_upgrade.dita.asv	Backup (Local)
03/27/2007 13:11:19	cdp_cpt_upgrade.dita.asv	Backup (Local)
03/27/2007 13:02:09	DitaLink.cat	Backup (Local)
03/27/2007 13:02:09	DitaLink.cat.old	Backup (Local)
03/27/2007 13:02:09	DitaLink.cat	Backup (Local)
03/27/2007 13:02:09	DitaLink.cat.old	Backup (Local)
03/27/2007 11:49:55	CDP31_helpxhm.log	Backup (Local)

The **Activity Report** lists failed activities (if any) at the top of the report. The failed activity is accompanied by a reason for the failure. Successful activities are listed below.

The list is not a complete list of all activities; only the most recent activities are listed.

The activity can be one of the following:

Backup
Tivoli Storage Manager FastBack for Workstations creates a backup copy on the storage area.

Delete Tivoli Storage Manager FastBack for Workstations deletes the most recent backup copy from the storage area.

Purge Tivoli Storage Manager FastBack for Workstations deletes a versioned backup copy because the storage area is full.

Report
Tivoli Storage Manager FastBack for Workstations sends a report of scheduled backup activity to the central management area.

Version
Tivoli Storage Manager FastBack for Workstations adds a version suffix to a backup copy. A backup copy becomes versioned when Tivoli Storage Manager FastBack for Workstations creates a newer backup copy of the same file.

Status panel of Tivoli Storage Manager FastBack for Workstations

The Status panel is the entry to the Tivoli Storage Manager FastBack for Workstations user interface. You can view a summary of how your files are being protected, and link to other panels to view details and change protection settings.

The Status panel displays when you click twice the Tivoli Storage Manager

FastBack for Workstations client icon ▦ in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

Menu Links

The top of the panel has 4 links:

Settings
Links to the "Settings Notebook of Tivoli Storage Manager FastBack for Workstations" on page 27. Use the Settings Notebook to change your protection settings.

Restore
Links to the "Restore Wizard of Tivoli Storage Manager FastBack for Workstations" on page 81. Use the Restore Wizard to restore a file from a backup copy.

About Provides information about the product, including version level.

Help Links to the online help documentation.

Graphic Icons

The center of the screen contains a graphic representation of Tivoli Storage Manager FastBack for Workstations protection. Let your pointer hover over an icon to display summary information and links to detailed information.
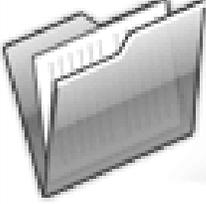
My Files

Files under protection:

    Number

        An approximation of the total number of files that have been protected. Due to the nature of the program and how the logging is done, this number is only an approximation.

    Settings

        Links to the **Files to Protect** panel of the Settings Notebook. Use this link to change the files that are continuously protected.

    View Report

        Links to the **Activity Report**. The **Activity Report** shows details of recent backup and restore activity.

        For an explanation of the **Activity Report**, see "Continuous Protection Activity Report" on page 75

E-mail Protection

    Settings

        Links to the **E-mail** panel of the Settings Notebook. Use this link to change the e-mail application that is protected.

Restore

Links to the restore wizard, which helps you restore files from backup copies.

Local Storage

Usage: Shows approximately how much space is being used by backup copies on local storage. The bar graph indicates what portion of the storage is being used. The text indicates the usage in bytes.

Settings

Links to the **General** panel of the Settings Notebook. Use this link to change the size or location of your local storage; how many versions to keep of each protected file; and whether to use local storage, remote storage, or both.

Remote Storage

Usage: Shows approximately how much space is being used by backup copies on remote storage. The bar graph indicates what portion of the storage is being used. The text indicates the usage in bytes.

Files Pending:

When remote storage is not available, Tivoli Storage Manager FastBack for Workstations queues backup copies that are destined for remote storage. When the remote storage becomes available, Tivoli Storage Manager FastBack for Workstations transmits the queued backup copies. This field indicates the number of files that are destined for remote storage but have not yet been transmitted.

Settings
> Links to the **Remote Storage** panel of the Settings Notebook.

Status Panel

The bar at the bottom of the screen displays a brief text message of the status of backup and restore activities. Let your cursor hover over the text to pop up status of 5 activities and links to detailed status reports.

The status of the activities can be one of the following:

idle   The activity is idle. An activity can become idle before finishing if it is stopped by the user.

preempted
> The activity is idle, pending a higher-priority activity.

active   The activity is active.

paused
> The activity was paused by the user.

disconnected
> The storage area is unavailable.

disabled
> The storage area is not configured.

System Tray

The System Tray in the bottom left of the computer screen displays the FastBack for Workstations icon. When you hover the cursor over this icon, a pop up displaying the IBM Tivoli Storage Manager FastBack For Workstations version is displayed along with a summary status of the Local Backup and the Remote Backup.

If the status is disconnected or paused, the icon will change to .

If errors have occurred, the icon will change to .

Note:
- The error icon will disappear when the user views the activity report. The error icon will reappear when the error occurs again.
- Only the error icon will be displayed if errors have occurred and the status is disconnected.

Viewing reports by Tivoli Storage Manager FastBack for Workstations

You can view a report of continuous protection activities on the Tivoli Storage Manager FastBack for Workstations client.

Assume that you start from the Tivoli Storage Manager FastBack for Workstations Status panel.

The Status panel displays when you click twice the Tivoli Storage Manager

FastBack for Workstations client icon [icon] in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

Viewing the continuous protection activity report of a Tivoli Storage Manager FastBack for Workstations client

About this task

You can see a detailed report of recent backup activities. The report shows successful activities, and failed activities with messages.In the central administration console, this same report is called the client activity log.

Procedure

1. Open the Tivoli Storage Manager FastBack for Workstations Status panel.
2. Let your pointer hover over the **My Files** icon. Summary information and links fly down from the icon.
3. Click the link **View Report**. The **Activity Report** displays.

Chapter 6. Restoring files with the Tivoli Storage Manager FastBack for Workstations client

The Tivoli Storage Manager FastBack for Workstations client makes backup copies of your files so that when the time comes, you can restore your files. You can restore a file that you deleted, and you can restore an earlier version of a file that does not have your recent changes. A wizard guides you to find the file; choose the right version, and choose the location to restore your file.

Start from the Tivoli Storage Manager FastBack for Workstations client Status panel.

The Status panel displays when you click twice the Tivoli Storage Manager FastBack for Workstations client icon in the system tray, or start the client from the **Start** menu.

You can also start the client GUI from the **Start** menu. Choose **Start > All Programs > Tivoli > IBM Tivoli Storage Manager FastBack for Workstations**.

Click the large arrow in the middle of the Status panel. The Restore Wizard guides you to restore your file.

For explanations of the Restore Wizard fields, see "Restore Wizard of Tivoli Storage Manager FastBack for Workstations."

Restore Wizard of Tivoli Storage Manager FastBack for Workstations

Restore a protected file with this Restore Wizard.

Use the control buttons at the bottom of each wizard page to navigate to all pages. When you reach the final page, click the **Finish** button to restore your files.

The wizard has 4 pages:
- "**Welcome** panel (Restore Wizard) of Tivoli Storage Manager FastBack for Workstations"
- "**Files to Restore** panel of Tivoli Storage Manager FastBack for Workstations" on page 82
- "**Restore Location** panel of Tivoli Storage Manager FastBack for Workstations" on page 85
- "**Summary** panel (Restore Wizard) of Tivoli Storage Manager FastBack for Workstations" on page 85

Welcome panel (Restore Wizard) of Tivoli Storage Manager FastBack for Workstations

The **Welcome** panel lists the steps to restore your files. Click the **Next** button to advance to the next panel of the wizard. Click the **Cancel** button to exit the wizard without restoring any files.

Files to Restore panel of Tivoli Storage Manager FastBack for Workstations

Choose files to restore.

Files to Restore list
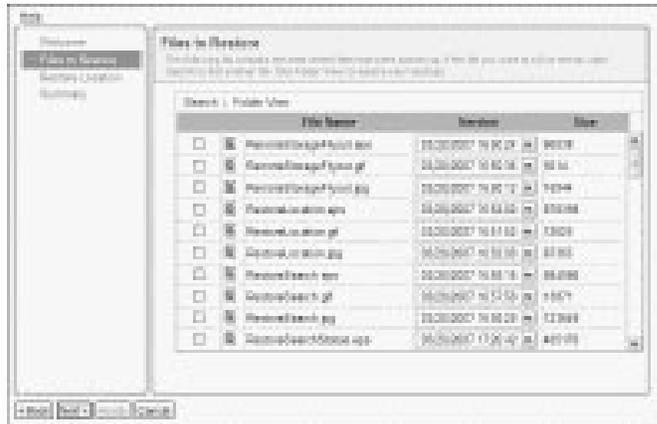
The box contains a list of files that you can choose to restore. Each row contains the following fields:

Select   Check the box if you want to restore the file.

File Name

> The name of the file that you can restore. Let your pointer hover over the file name to pop up the full path of the file.

Version

> The drop-down box lists the dates and times that this file was modified. Choose the version that you want to restore.

Size   The size of the file.

The list initially contains approximately 20 of the files that were most recently backed up. Change the list of files by clicking the **Search** or **Folder View** menu items at the top of the box:

Search

> Presents a dialog that allows you to search for backup copies to add to the list.
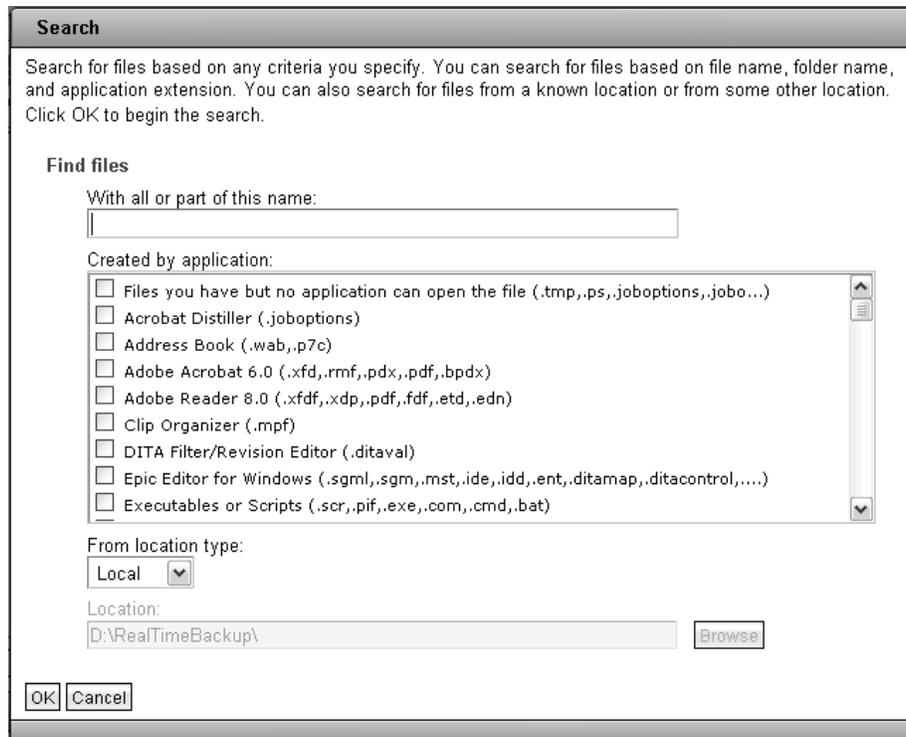
The **Search** dialog has several fields. The fields are combined to narrow the search criteria. Leaving any field blank increases the chances of finding more files.

Find files With all or part of this name: field
> Use this field if you know the name or part of the name of the file you want to restore. You can enter a partial file name or folder and use an asterisk as wildcard. If you enter nothing, the search can yield files from any folder with any name.

Find files Created by application: check box list
> Use this list if you know the application that created the file you want to restore. Check as many applications as you want. If you enter nothing, the search can yield files from any application.

Find files From location type: drop down list
> Choose the location of the backup copy.
>
> You can choose from three locations:
>
> **Local** The local storage area that is currently configured.
>
> **Remote**
> > The remote storage area that is currently configured.
>
> **Other** Any folder of your choosing. If you previously configured your local or remote storage areas differently than your current configurations, you can search in those previously configured areas. When you choose this option, the **Location** text entry field becomes active. Type the location to search or click the **Browse** button to browse for the folder.

Click the **Search** dialog **OK** to begin searching.

Click the **Search** dialog **Cancel** button to exit the **Search** dialog without searching.
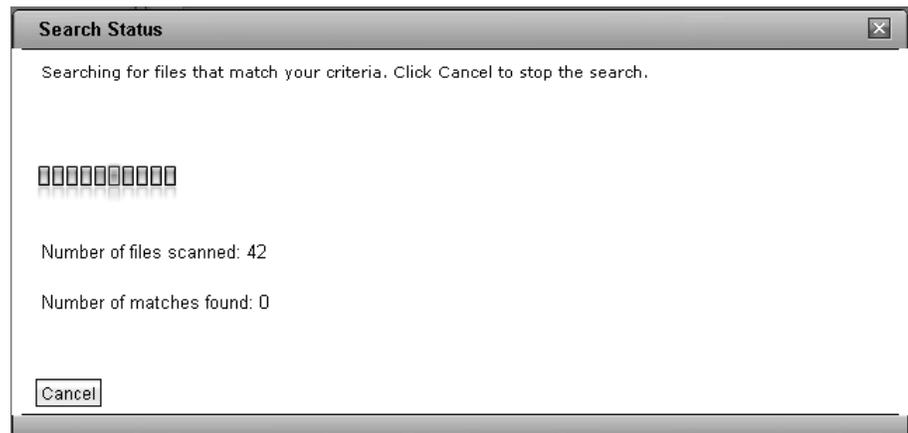
The **Search Status** window will show the progress of your search. The **Search Status Cancel** button will stop the search and return to the list of files without adding the files in your search criteria. If the search completes without being cancelled, the **Files to Restore** list will contain the results of your search.

Folder View
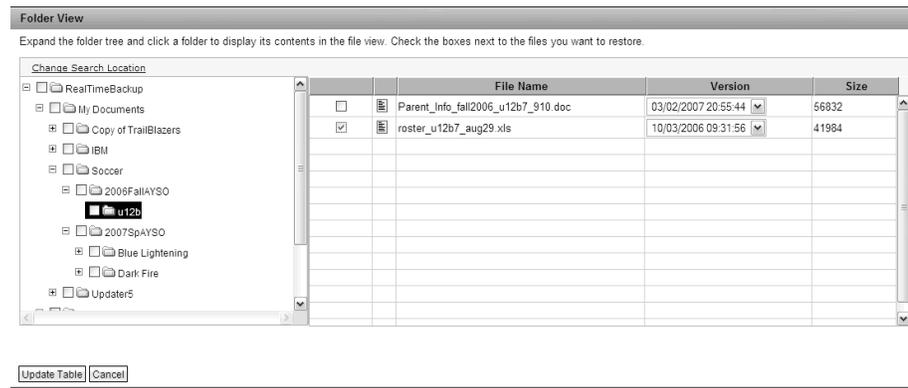
Presents a dialog that allows you to browse folders to find your files. **Folder View** dialog has the following fields:

Folder tree
Browse the tree to find a folder. Click a folder and the files in that folder will display in the file view to the right of the folder tree.

File view
Displays the files in a folder that you chose. Check the box in the **Select** column to select a file. The **Version** drop-down list shows the dates that the file was backed up. Choose the version that you want to restore.

Click **Update Table** to add the selected files to the list of files.

Click **Cancel** to exit the dialog without adding any files to the list of files.

Restore Location panel of Tivoli Storage Manager FastBack for Workstations

Choose the location to restore your files.
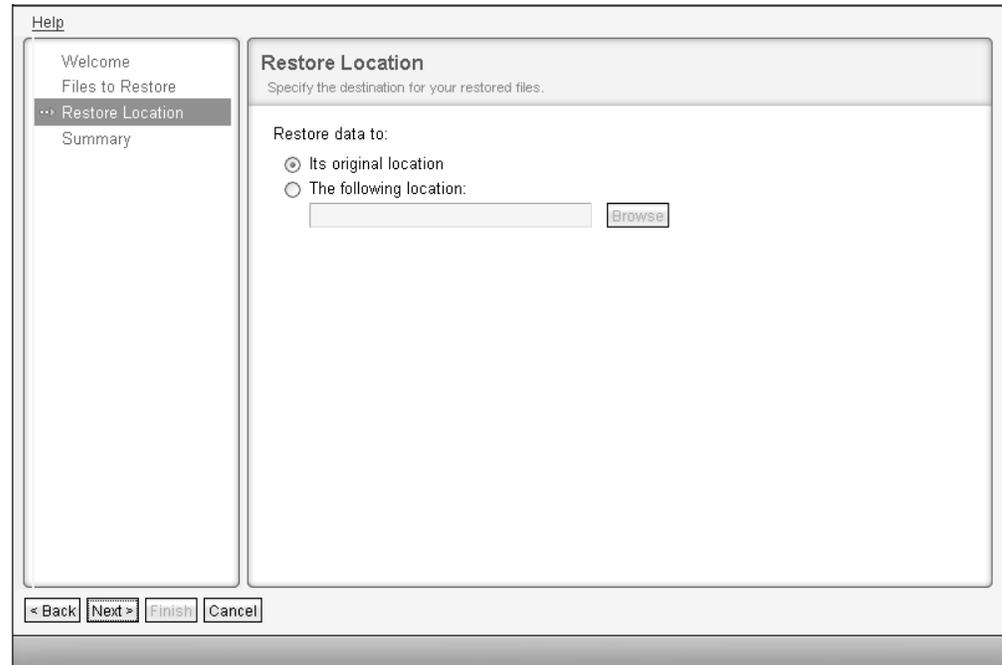
You can restore your files to their original location, or to a different location.

Restore data to: Its original location

Check the button if you want to restore the files you chose to their original locations. The original location is the full path that pops up when you let your pointer hover over the file name in the **Files to Restore** panel.

Restore data to: The following location

If you want to restore the files to a different location, check the button and enter the new location in the field. You can use the **Browse** button to select the location. All files that you chose will be restored to the path that you specify. No part of the original path will be appended to the path that you specify.

For example, assume the original file's full path is `C:\Documents and Settings\Administrator\My Documents\My Pictures\Vacation2006\Family.jpg`. Assume also that you want to restore the file to a folder called `D:\BestPhotos`. In the **Restore data to:** field, you must provide the folder name and a file name. Assume that you specify `D:\BestPhotos\Family2006.jpg`. Tivoli Storage Manager FastBack for Workstations will restore the file to this path: `D:\BestPhotos\Family2006.jpg`.

Summary panel (Restore Wizard) of Tivoli Storage Manager FastBack for Workstations

Use the **Summary** panel to view a summary of your choices, and decide if you want to restore your files.

The **Summary** panel displays the locations and number of files that you specified in the previous panels of the wizard.

Choose **Back** to return to a previous panel to modify your choices.

Choose **Finish** to restore your files. If popup messages are enabled, you see a message when your restore is complete.

Choose **Cancel** to exit the wizard without restoring your files.

Chapter 7. Storage areas of Tivoli Storage Manager FastBack for Workstations

Tivoli Storage Manager FastBack for Workstations stores many backup copies in the native file format. You can restore the backup copies by using native file system commands. Some backup copies are created using sub-file copy, compression, or encryption. These must be restored with the Tivoli Storage Manager FastBack for Workstations client.

Format of backup copies created by Tivoli Storage Manager FastBack for Workstations

Tivoli Storage Manager FastBack for Workstations keeps most backup copies in the same format as the original file.

Although Tivoli Storage Manager FastBack for Workstations provides tools and views to see the backup copies and to restore them, in many cases it is not necessary to use Tivoli Storage Manager FastBack for Workstations to restore those backup copies. They are simply files, with contents exactly like the originals, in a directory tree structure that simulates the original tree.

Some backup copies are not in the same format as the original files, and must be restored using Tivoli Storage Manager FastBack for Workstations:

- Backup copies stored on Tivoli Storage Manager server
- Backup copies that were encrypted
- Backup copies that were compressed
- Large files that were backed up with sub-file copy. In the storage area, the sub-file copies have -FPdelta file name suffix.
- Versioned bit map backups. In the storage area, these backup copies have -TPdelta file name suffix.

Versioning of backup copies created by Tivoli Storage Manager FastBack for Workstations

As you change a file, Tivoli Storage Manager FastBack for Workstations keeps backup copies of each version of the original file.

To track versions of a file, Tivoli Storage Manager FastBack for Workstations adds a version suffix to the file name of the backup copy. On the local storage area, all backup copies contain a version suffix. On the remote storage area, all backup copies except the most recent backup copy contain a version suffix. When a file is deleted on your computer, Tivoli Storage Manager FastBack for Workstations adds a version identifier to the file name of the most recent backup copy on the remote storage area.

The version suffix is "-FP" followed by a number. For example, a file named `data.xls` could be stored as versioned backup copy `data.xls-FP1168376676.xls`.

The most recent backup copy of a file is the "active" backup copy. Older backup copies of that file are "inactive" backup copies. If storage space is approaching the

limit, Tivoli Storage Manager FastBack for Workstations will delete inactive backup copies of a file before deleting active backup copies.

A file that is protected by schedule could change several times during the schedule interval. Only the last version of the file prior to the end of the schedule will be backed up. A continuously protected file (one that is protected, but not protected by schedule) is backed up after every change.

Tivoli Storage Manager FastBack for Workstations keeps as many versions of a file on local storage as you configure in the **Versions to keep:** field of the **General** page of the Settings Notebook, and as space allows.

Tivoli Storage Manager FastBack for Workstations keeps as many versions of a file on remote storage as you configure in the **Versions to keep:** field of the **Remote Storage** page of the Settings Notebook, and as space allows.

Modifying backup copies

If you move or modify backup copies with native file system tools, the client ceases to function correctly and is not supported.

You can use native file system tools to copy backup copies to restore your original files. Do not use native file system tools to modify backup copies. Use native file system tools to remove backup copies only if you uninstall the client.

Chapter 8. Troubleshooting the Tivoli Storage Manager FastBack for Workstations client

Information is available for some common problems and suggested solutions are provided.

Files are not backed up by Tivoli Storage Manager FastBack for Workstations

Files can fail backup for several reasons. Some common reasons are provided in this section.

Storage for backup copies is not correctly configured in Tivoli Storage Manager FastBack for Workstations

If the area to store backup copies of your protected files is not properly specified, Tivoli Storage Manager FastBack for Workstations can not back up files.

Verify that you have correctly specified local or remote storage areas in the Settings Notebook. Local storage and which location (local or remote) is specified in the "**General** panel of client Settings Notebook" on page 28 of the Settings Notebook. Remote storage is specified in the "**Remote Storage** panel of client Settings Notebook" on page 43.

Files to protect are incorrectly configured in Tivoli Storage Manager FastBack for Workstations

The files that Tivoli Storage Manager FastBack for Workstations protects are configurable. If you have configured your list of protected files incorrectly, Tivoli Storage Manager FastBack for Workstations does not back up the files.

Tivoli Storage Manager FastBack for Workstations backs up only those files that are configured for protection. The list of continuously protected files is configured in the "**Files to Protect** panel of client Settings Notebook" on page 30 of the Settings Notebook. Note that exclusions from protection have priority over inclusions. If an application or file path is explicitly included for protection, verify that no list items exclude the file from protection. See "Including and excluding files from protection" on page 33.

Files in use are not backed up by Tivoli Storage Manager FastBack for Workstations

Attempts to perform a local or remote backup of a file that is saved but not closed can fail. This can occur with Quicken Quick Books objects (files with an extension ending in .QBW).

The failure is indicated by the message in the Windows System Tray: `The software has experienced a problem. Check for details in the View Report link from the Status page. Also check the Windows System Event log and Application log.`

Details of the failure in the linked report and in `replication.log` can look like this:

```
<replication-status when="date/time" lastStatus="FAIL"
explanation="WinErr:32(creln)"
errValue="5081" errMnemonic="SRCFILE" action="COPY"
src="X:\path\to\filename.QBW"
dst="C:\RealTimeBackup\x\path\to\filename.QBW"
```

To protect such files, add the application type to the include list for scheduled backup, and select a time for scheduled backup when the application is not in use.

Files are not backed up to Tivoli Storage Manager server

These topics discuss problems backing up files to Tivoli Storage Manager server.

Tivoli Storage Manager node name does not match hostname

If the node name assigned by the Tivoli Storage Manager administrator is different from the Tivoli Storage Manager FastBack for Workstations client's hostname, back up to the Tivoli Storage Manager server fails, since Tivoli Storage Manager FastBack for Workstations cannot identify itself properly to the Tivoli Storage Manager server.

The following error message displays:

```
FilePath ERROR ANS1353E (RC53)
Session rejected: Unknown or incorrect ID entered
node:<node name> rc=53 reason=65535 tsm_init_api_session tsmInitEx failed
```

Tivoli Storage Manager FastBack for Workstations uses Tivoli Storage Manager API. By default, the Tivoli Storage Manager API uses the client's hostname as the Tivoli Storage Manager node name when identifying itself to the Tivoli Storage Manager server. A Tivoli Storage Manager server administrator typically registers a node using the hostname. In some cases, the Tivoli Storage Manager server administrator uses a name that is different from the client's hostname, and this causes the problem.

When this happens, you must configure the Tivoli Storage Manager API to use the appropriate node name when logging on to the Tivoli Storage Manager server. You can correct this problem by doing the following:

1. Edit the dsm.opt file. This file is in the Tivoli Storage Manager FastBack for Workstations subfolder of the "Program data folder" on page 47.
2. Add the node name to the dsm.opt file. To do this, go to the end of the file, and on a new line add the NODENAME parameter followed by the node name. For example: NODENAME TSMclientnode1.
3. Save the dsm.opt file.

The next time Tivoli Storage Manager FastBack for Workstations connects to the Tivoli Storage Manager server, it uses the node name you specified. Tivoli Storage Manager FastBack for Workstations prompts you for the password, if necessary.

Tivoli Storage Manager client node lacks authority to delete backup copies

If Tivoli Storage Manager FastBack for Workstations does not have delete backup permission on the Tivoli Storage Manager server, it cannot successfully purge older files when the designated storage space is getting full.

The following error is displayed in the replication.log file:

```
FilePath ERROR ANS1126E (RC27)
The file space cannot be deleted because
this node does not have permission to delete archived or backed up data.
```

The following error is displayed in a pop-up window:

`Target file system can only handle sequential I/Os.`

Remote backup can be suspended because the backup storage space cannot be purged to make room for new files.

Tivoli Storage Manager FastBack for Workstations requires permission to manage space on the Tivoli Storage Manager server and to create file versions. The registered node which is used by the Tivoli Storage Manager FastBack for Workstations client to access the Tivoli Storage Manager server must have the permission to delete the backups it creates. This function is required when Tivoli Storage Manager FastBack for Workstations needs to purge files when the backup storage space is full.

Enable permission to delete backup copies for Tivoli Storage Manager Enterprise server as below. This sample assumes node name of TSMclientnode1; replace the node name appropriately when you enter the command:

1. Log into the Tivoli Storage Manager server and bring up the Tivoli Storage Manager administrative command line.
2. Enter this command to the Tivoli Storage Manager server: update node TSMclientnode1 **backdel=y**.

Enable permission to delete backup copies for Tivoli Storage Manager Express server as follows:

1. Open an administrative command prompt.
2. Enter this command: `query session`. Note the session numbers for your client node.
3. Enter this command, where session_number is the session number you identified in the previous step: `cancel session session_number`. Repeat if there is more than one session for your client node.
4. Enter this command, where TSMclientnode1 is the name of your client node: `update node TSMnode backdel=y`

Non-system accounts do not have appropriate user security rights to use Tivoli Storage Manager

If a non-system account does not have appropriate user security rights, and Tivoli Storage Manager FastBack for Workstations is configured to back up files to Tivoli Storage Manager server, files modified by the non-system account are not backed up.

In order to back up files to a Tivoli Storage Manager server, the proper user security rights must be given to the non-system user account to use the Tivoli Storage Manager client. Any non-system account (local or domain) must have the following rights:

Back up files and directories

Restore files and directories

Manage auditing and security logs

Tivoli Storage Manager FastBack for Workstations user interface replaces existing browser session

When the user interface is started, it replaces an existing browser session. You can change this behavior by changing the settings in more recent versions of Mozilla Firefox and Internet Explorer. In Internet Explorer version 7, you can prevent this behavior.

In Internet Explorer version 7 and above, change the tabbed browsing settings as follows:

1. In **Tools** menu, choose **Internet Options**. The **Internet Options** notebook displays.
2. Select the **General** tab. The **General** page displays
3. In the **Tabs** section, click the **Settings** button. The **Tabbed Browsing Settings** dialog displays.
4. In the **Open links from other programs in:** section, click the **A new window** radio button.
5. Click the **OK** button. The **Tabbed Browsing Settings** dialog exits.
6. In the **Internet Options** notebook, click the **OK** button.
7. The **Internet Options** notebook exits and your new settings are applied.

In Mozilla Firefox version 1.5.0.10 and above, change the tabbed browsing settings as follows:

1. In **Tools** menu, choose **Options**. The **Options** notebook displays.
2. Select the **Tabs** tab. The **Tabs** page displays
3. In the **Open links from other applications in:** section, click the **A new window** radio button.
4. Click the **OK** button. The **Options** notebook exits and your new settings are applied.

Tivoli Storage Manager FastBack for Workstations user interface contains no file data

If the Tivoli Storage Manager FastBack for Workstations daemon is not running, or if your browser is in offline mode, the Tivoli Storage Manager FastBack for Workstations user interface contains no file data. This condition is accompanied by an error message which begins like this: FPA_getNamedObject: **Could not find:**. There are two possible causes for this problem.

Your browser is offline.
> Your browser must be in online mode to see file data. Internet Explorer and Firefox browsers are turned on- or off- line by checking or unchecking **File** > **Work Offline** from the browser menu. Confirm that this menu item is not checked.

The Tivoli Storage Manager FastBack for Workstations daemon is not running.

> To determine if the Tivoli Storage Manager FastBack for Workstations daemon is running, and restart if necessary, see "Restarting the Tivoli Storage Manager FastBack for Workstations client process" on page 70.

Restarting the Tivoli Storage Manager FastBack for Workstations client process

The `FilePathSrv.exe` client process is started automatically every time the computer starts. If the `FilePathSrv.exe` client process does not start automatically or stops running, your files are not protected.

To determine if the `FilePathSrv.exe` process is running, look for the FilePathSrv.exe process in Task Manager. If you cannot see this process, the process is not running.

To restart the process on a Command Prompt window, do the following:
1. Open a Command Prompt window.
2. Navigate to the Tivoli Storage Manager FastBack for Workstations installation folder. (The default installation folder is `c:\Program Files\Tivoli\TSM\ FastBack_for_Workstations..`
3. Type the following: `filepathsrv -d`

Confirm that the process is running by checking the System Event log or Task Manager. In the System Event log, there should be an entry which states: `HTML listener started successfully and listening on port 9003`. This is event # 6049. In Task Manager, you should see FilePathSrv.exe process.

You can also restart the process from the **Start** menu. Choose **Start > All Programs > Startup > FB4WKSTNSSrv**.

The number of backup copy versions is greater than configured in Tivoli Storage Manager FastBack for Workstations

The number of backup copy versions exceeds **How many versions to keep** configuration setting.

The problem occurs when versions are not tracked properly.

The problem can occur because data folders were not removed between an uninstall and a new install. The new install does not have a record of the backup copies created from the previous install and use of the product. This can occur on local storage, remote storage, or both. For a list of folders to remove after uninstall, and before installing again, see "Cleaning up after uninstallation" on page 23.

The problem can also be caused, on remote storage only, because of changes to the encryption or compression settings.

When encryption or compression settings are turned on or off, the versions counter is reset to 0, even if some backup copies exist. This behavior results because Tivoli Storage Manager FastBack for Workstations tracks file versions without encryption/compression differently than file versions with encryption/ compression.

As an example, assume that a file `file.txt` is continuously protected, and has reached its 5 version limit (5 is the default version limit). The backup copies were neither encrypted nor compressed. The user then enables compression. Tivoli Storage Manager FastBack for Workstations then creates up to 5 new backup copy versions of the file. The restore view will show 5 versions of the file having name `file.txt` (corresponding to the original 5 versions backed up without

compression), and 5 versions of the file named `file.txt.cdp` (corresponding to the new 5 versions backed up with compression enabled).

Limit user access to files on a target file server

Set up the security permissions on a target file server to make sure that users only have access to the files that they back up.

By default, the first client that connects to a given server share creates the `RealTimeBackup` directory. Permissions assigned to the `RealTimeBackup` directory do not prevent users from reading files they do not own.

The settings used in this example assume one primary user of Tivoli Storage Manager FastBack for Workstations on the client. This primary user is the first user from a client that connects to the server and creates the subdirectory for files backed up from that client. If Tivoli Storage Manager FastBack for Workstations operates from other accounts on that client, failures might occur when copying files to the remote server. Error messages such as `Failed to open the destination file` are logged to the activity report.

Windows file server

This example assumes that the following conditions exist:
- The Windows XP server shares a directory named `c:\fileservertest`.
- The accounts used to access the server are members of the `Users` group.

Access Control List (ACL) settings for the `RealTimeBackup` directory

ACL settings enable client accounts to create directories that are only accessible by the account that created them. As a result, the directory that contains data for a node is not created until that node connects to the server.

Using Windows Explorer, set the ACL for the `c:\fileservertest\RealTimeBackup` directory according to these settings:

Table 5. ACL settings for the `RealTimeBackup` directory

Type	Name	Permission	Applies to
Allow	Administrators	Full Control	This folder, subfolders, and files
Allow	CREATOR OWNER	Full Control	This folder, subfolders, and files
Allow	Users	Special	This folder only
Allow	OWNER RIGHTS*	Full Control	This folder, subfolders, and files

* Note: The OWNER RIGHTS object must be added for Windows 2008 Servers.

The ability for objects to inherit permissions from the parent is not set. As a result, set the `Special` access for the `Users` group to only permit these settings:

```
Traverse Folder / Execute Allow
List Folder / Read Data Allow
Read Attributes Allow
Read Extended Attributes Allow
```

```
Create Files / Write Data Allow
Create Folders / Append Data Allow
Delete subfolders and files Allow
Read Permission's Allow
```

ACL settings for the `RealTimeBackup\BackupAdmin` directory

The `RealTimeBackup\BackupAdmin` directory is used by the Tivoli Storage Manager
FastBack for Workstations client to download revisions and configurations. Nodes
require read-only access to these directories:

```
c:\fileservertest\RealTimeBackup\BackupAdmin
```

Table 6. ACL settings for the `RealTimeBackup\BackupAdmin` directory

Type	Name	Permission	Applies to
Allow	Users	Read, Execute	This folder, subfolders, and files
Allow	Administrators	Full Control	This folder, subfolders, and files

The ability for objects to inherit permissions from the parent is not set. As a result,
set the Special access for the Users group to only permit these settings:

```
Traverse Folder / Execute Allow
List Folder / Read Data Allow
Read Attributes Allow
Read Extended Attributes Allow
Delete subfolders and files Allow
Delete Allow
Read Permission's Allow
```

UNIX file server running Samba

This example, assumes that the Samba server is set up to share a directory named
`/fileservertest`.

These settings enable users to create directories under the `RealTimeBackup`
directory:

```
chmod o+wrxt /fileservertest/RealTimeBackup
chmod o+rx /fileservertest/RealTimeBackup/BackupAdmin
chown root /fileservertest/RealTimeBackup/BackupAdmin
```

In the Samba configuration file (smb.conf), set the `create mask` and `directory mask`
parameters to each specify *0700*. For example:

```
[fileservertest]
path = /fileservertest
writable = yes
create mask = 0700
directory mask = 0700
```

Appendix. Accessibility features for Tivoli Storage Manager FastBack for Workstations

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features of Tivoli Storage Manager FastBack for Workstations are described in this topic.

Accessibility features

The following list includes the major accessibility features in Tivoli Storage Manager FastBack for Workstations:

- Keyboard-only operation
- Interfaces that are commonly used by screen readers
- Keys that are discernible by touch but do not activate just by touching them
- Industry-standard devices for ports and connectors
- The attachment of alternative input and output devices
- User documentation provided in HTML and PDF format. Descriptive text is provided for all documentation images.

The Tivoli Storage Manager FastBack for Workstations Information Center, and its related publications, are accessibility-enabled.

Keyboard navigation

Tivoli Storage Manager FastBack for Workstations follows Microsoft conventions for most keyboard navigation and access. Drag and Drop support is managed using the Microsoft Windows Accessibility option known as MouseKeys. For more information about MouseKeys and other Windows accessibility options, please refer to the Windows Online Help (keyword: MouseKeys).

The following access methods differ from Microsoft conventions.

In the Tivoli Storage Manager FastBack for Workstations client, there are several tasks in which you select files:

- Select files to include for continuous protection and to exclude from any protection.
- Select files to include for scheduled protection.
- Select files to vault

Each of these tasks presents a list of file specifications labeled **Folders and Files**. You can add file specifications to the list and remove file specifications. When you add a file specification, you can browse for files in a file tree. The file tree opens when you click **Include**, **Exclude**, or **Vault**. Navigate the file tree with the following method:

1. Press Tab and Shift+Tab to navigate to + (expand folder). Press Enter to expand the folder.
2. Press Down Arrow and Up Arrow to navigate among the objects in the folder.
3. On an expanded folder, press Enter to collapse the folder.

4. As you navigate the file tree, the object that has focus is displayed in the **Folder name (wildcards allowed)** field at the bottom of the panel.

5. Press Tab to navigate to the text field. Optionally, edit the text field.

6. Press Tab to navigate to **OK**. Click **OK** to add the file specification to the **Folders and Files** list.

To remove file specifications from the list, select a file specification and click **Remove**. Navigate the list of file specifications with this method:

1. Press Tab to move down to the next file specification and Shift+Tab to move up to the previous file specification.

2. Press Spacebar to select a file specification or to clear a selection.

3. Press Shift+Tab to navigate to **Remove**. Click **Remove** to remove the file specification from the **Folders and Files** list.

The **Folders and Files** list is displayed when you navigate the following paths:
- **Settings** > **Files to Protect** > **Folders and Files** box > **Details**
- **Settings** > **Files to Protect** > **Vault** box > **Details**
- **Settings** > **E-mail Protection** > **Scheduled Backup Settings**
- **Settings** > **Advanced** > **Scheduled Backup Settings**

The **Files to Restore** panel in the restore wizard also allows you to select files from a file tree, and add and remove files from a list. When you select **Folder View**, a panel with a file tree and a list of files is displayed. The restore file tree and files list is similar to other file trees and files lists. The restore controls are different in the following ways:
- The file tree folder items each have a check box.
- The items in the folders and files list each have a check box. If there are more than one versions of a file, the row contains list of versions in the **Version** column.

Press Spacebar to select or clear a check box. If more than one version of a file is available, select the version this way:
- Press Tab to navigate to the **Version** column.
- Use Up Arrow and Down Arrow to select a version.

Related accessibility information

You can view the publications for Tivoli Storage Manager FastBack for Workstations in Adobe Portable Document Format (PDF) using the Adobe Acrobat Reader. You can access these or any of the other documentation PDFs at IBM Publications Center at http://www.ibm.com/shop/publications/order/.

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