Enabling Backup with WebDrive
Case Study using WinBackup®

Introduction

Rationale

The necessity of regular backup of your local data is known to be of critical importance. However, the execution of this necessity is not always a top priority. Combining a backup utility that has scheduling capability with WebDrive® from South River Technologies provides a solution that takes care of itself.

Overview

Technology Application

Many backup utilities enable you to select any Windows drive to receive the data being archived. If you're connected to a local file server, the archive can be written to the appropriate folder on the selected network drive; if you have a mass media device attached, such as a CD-RW, you can select to have your archive deposited on the removable media. Maybe you have an on-line storage provider that provides gigabytes of storage for your personal use. This is typically accomplished by providing an account on a subscription-only, public FTP server. Any of these options can provide a destination for your archived data.

Pairing WebDrive with your backup utility, whether it's Windows NT Backup or a commercially available 3rd party product, such as WinBackup® by LIUtilities, enables you to access your available FTP server as a locally mapped Windows drive. WebDrive provides the graphical user interface that makes the FTP connection between the destination folder and your local desktop backup application a familiar interface. This capability in WebDrive enables a backup utility to write to an FTP server, one that is maintained either in-house or externally on the internet.

Archival Theory

The backup strategy that you implement is dependent on the amount of risk that you find acceptable. A sample backup strategy is to perform daily incremental, weekly full and monthly full backups of your important data. Daily archive files could be deleted at the end of each week when the full weekly backup is complete. Weekly full backup files could be deleted at the end of each month when the full monthly backup is complete. The full monthly backup should not be deleted and it is even recommended that this backup file be archived to removable media and stored off site. At the end of the year you would then have 12 CD-Rs (or sets of CD-Rs, or tapes, etc.) that would enable you to restore any file over the past year.

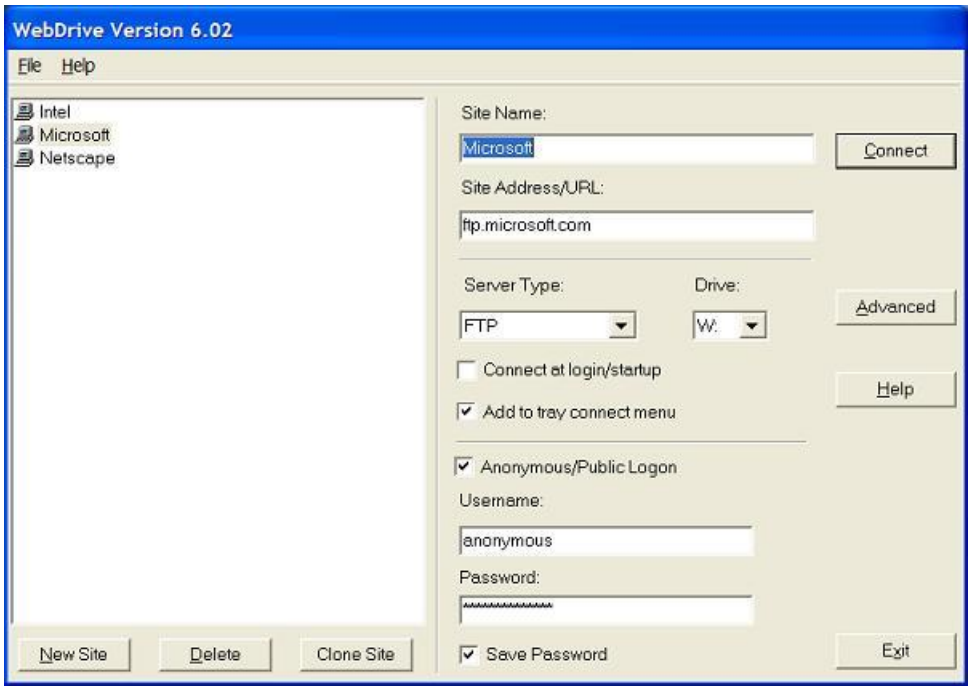
Scheduling the backup through Windows Task Scheduler or via the capabilities of WinBackup enables the backup to run at the most convenient time. This eliminates the issue of forgetting to run the backup daily, weekly or monthly. The Task Scheduler can be used to schedule WebDrive drive mapping to the FTP Server so that your connection is “live” only for the period of time it is needed.

Implementation

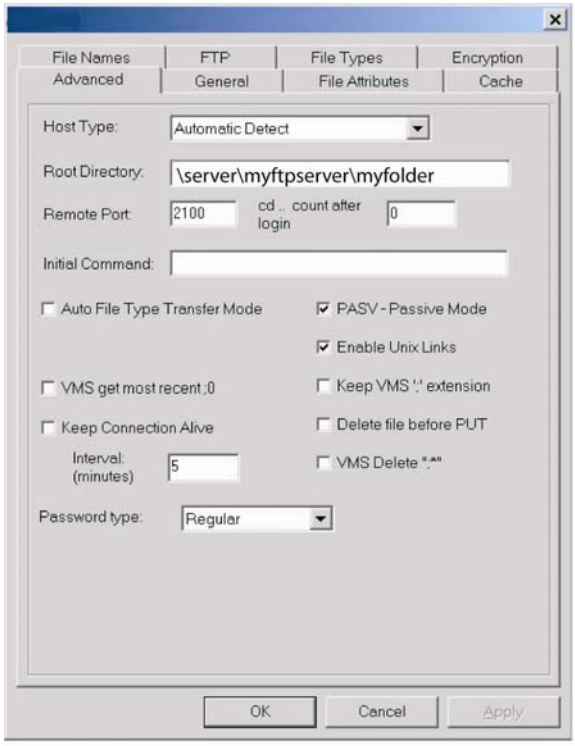
WebDrive Setup

The start of this process is to configure WebDrive to connect to your user area on the FTP server. The first thing to do is to provide a name for the connection. For the purpose of this document the site will be called “My Backup Folder”. The network administrator or service provider will be able to give you the address of the server or the URL of the storage location. This URL may look like ftp.myftpserver.com or it may be an IP address, such as 10.100.152.100. This information is entered into the “Site Address/URL” box on the main WebDrive site configuration screen. WebDrive defaults to a Server Type of “FTP”, so no changes are needed here. It also defaults to selecting “W:” as the Windows drive mapping, or you may select a letter. We will use “P:” in this example.

Depending on your provider, you may need to use an assigned username and password or an anonymous logon. See your FTP site administrator for help. Once these values are set you should not need to make any other configurations settings, so long as the Site Address value points directly to the folder area on the FTP server where you have access.



If the Site Address value does not point directly to your storage area on the FTP server, you will have to “drill down” to the proper folder and add that folder as the “root directory”. This setting is made on the next page of the WebDrive configuration utility. It is reached by clicking on the “Advanced” button to the right of the Drive selection. In the example below the root directory has been set to “\server\myftpserver\myfolder”.



Once these settings have been made you can select “OK” to return to the previous WebDrive configuration screen. If you want WebDrive to automatically connect to your backup destination every time your system is started or logged on, the check box next to “Connect at login/startup” must be selected. If you prefer to make this connection manually or via a scheduled command line interface, the check box should be left clear. Select “Connect” and WebDrive will connect to your FTP server. A directory listing of the folder contents will be displayed on your screen. At this point you can access the “P” drive as if it were a local drive on your PC. You can drag and drop files to it, you can edit files that are on it; you can cut and paste files to it.

From a backup point of view, the mapped P drive is now able to be accessed by your backup utility as a destination for your archived date. The next step, now that you have a remote storage area set up, is to configure your backup utility to use the “P” drive as the destination for your backup job.

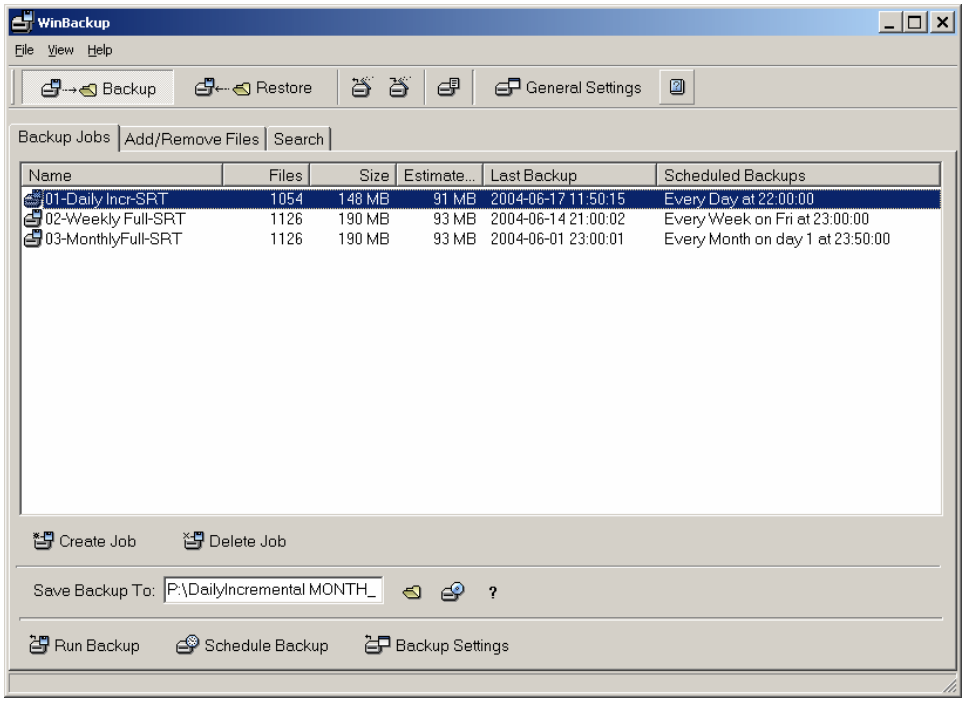
Backup Utility Configuration - WinBackup

For the purposes of this paper, WinBackup® from LIUtilities will be used to create and schedule the three backup tasks identified previously: a daily incremental job, a weekly full backup and a monthly full backup.

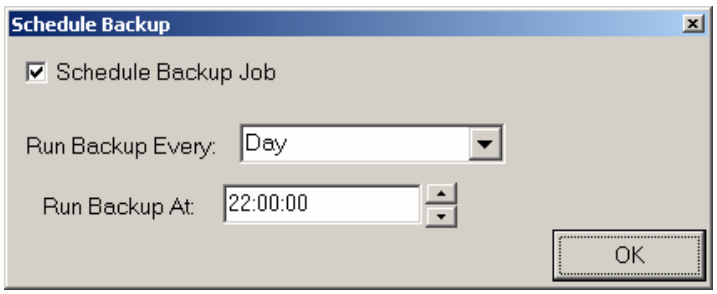
We will identify the jobs as: "Job 01-Daily Incremental", "Job 02-Weekly Full", and "Job 03-Monthly Full". Job 01 is set up to run every weekday at the same time (10:00pm). Job 02 is set up to run every Friday (11:00pm) and Job 03 is set up to run on the first of every month at 11:50pm. Setting up the last two jobs to run staggered from the daily job insures that they will not conflict with the regular daily and weekly backup jobs that run at 10:00pm and 11:00pm. This time may have to be adjusted if you find that the daily and weekly job takes more than an hour to run.

The first task is to create backup jobs to do incremental daily backup of important data. This activity is accomplished using the backup application. A weekly full backup captures all the files – not just the ones that have changed. A monthly full backup serves as a permanent archive of periodic activity. The monthly is later saved to CD for off site storage.

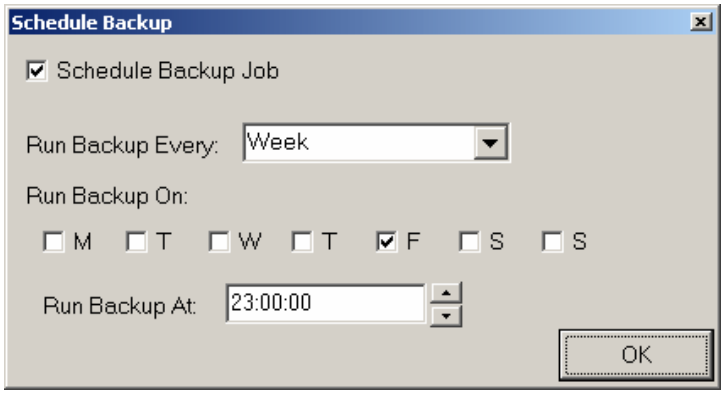
The screen shot below displays the three jobs after they have been configured. The following screen shots highlight the scheduling of the jobs.



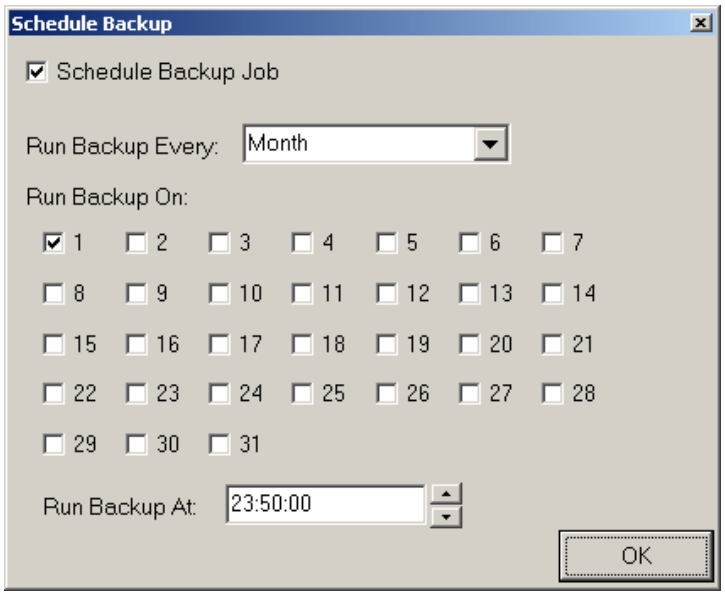
This job is being scheduled to run daily at 10:00 pm.



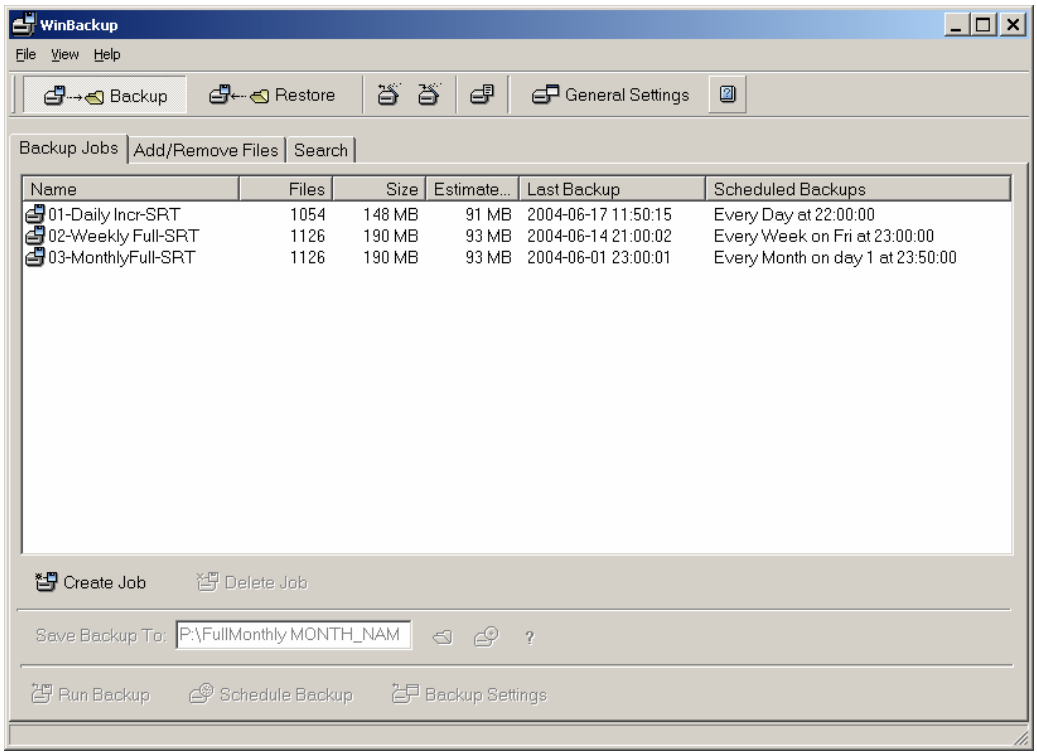
This job is being scheduled to run weekly on Fridays at 11:00 pm.



This job is being scheduled to run monthly on the first of the month at 11:50 pm.



This screen displays the status of the three jobs after they have been scheduled.



After the three jobs have been configured it is time to run the jobs.

Execution

Once the three jobs have been configured and scheduled, they will execute at the predetermined time. It is recommended that the daily and weekly full backup jobs be run manually at least once to insure that all of the settings are correct. As with any backup process, a test restore of a file is recommended to insure that the entire cycle of the process is intact.

In order to begin the backup, WebDrive must be running and the backup drive must be connected. If the drive is not already connected (from your initial configuration activity), right click on the WebDrive program icon in the systray, select the “Connect To” menu option and click the name corresponding to your FTP server. WebDrive will connect to the FTP server and display a directory listing of the folder.

WinBackup offers a “Run Backup” selection at the bottom of its main configuration screen. You select the job to be executed and then click the “Run Backup” button. You will begin to see the application cataloguing all of the files to be archived. Once the catalogue is complete, the backup utility then begins to write the data to the destination.

Typical operation of the solution would include having WebDrive running in the SysTray at all times (started at system boot up) and having WinBackup running in the

background. With the two programs running in the background, you will assure that your FTP is connected and ready, and your backup utility is ready to run as scheduled.

Another option is to leave your WebDrive connected but only start up the backup utility as needed. For this to occur, you will need to create a “scheduled task” entry in Windows “Scheduled Tasks” folder. The setup of an entry in this Microsoft utility is not covered in this document. More information on this topic can be found in the Microsoft Knowledge Base (Article 308569 XP or Article 300160 Win2000). You should set up multiple schedules to run the backup utility for each job configured. It is recommended that you set the starting time of the job in the Microsoft Scheduled Tasks folder to be 5 minutes before the start of the configured backup job. With this setup you do not need to leave your backup utility running all the time.

Still another option is to run both utilities, WebDrive and your backup application, only when you need them. In this scenario, your WebDrive FTP drive is only connected during the backup process and it is disconnected when not in use.

In order to setup this scenario, you will need to add two more scheduled tasks to the Windows task scheduler. These two tasks will run WebDrive in command line mode. In command line mode, the options to connect the proper Windows drive letter to the appropriate FTP site are passed to the WebDrive application as command line options. Two task entries are needed; one to make the connection, and one to break the connection.

The first task to be scheduled makes the connection to your FTP site. In the RUN box of the task scheduler you enter:

> "c:\program files\webdrive\WebDrive.exe” /S:"My Backup Folder" /D:P
>
> … where the “/S” option specifies the name of the site to which you are connecting. This name was assigned during your initial WebDrive configuration activity. The /D option specifies the drive letter to be mapped.

This task would be scheduled to be started just prior to the 3 scheduled times for the backup utility.

The second task to be scheduled will have the following line of code in the RUN box:

> “c:\program files\webdrive\WebDrive.exe” P:/D
>
> … where the /D option indicates the drive letter (“P:”) to be disconnected.

To disconnect the WebDrive drive mapping from the FTP server after the backup is complete, this command should be scheduled to execute approximately 1 hour after the backup is scheduled to run. As noted previously, the scheduled times for the starting (and

stopping) of all the jobs may have to be tweaked depending upon the length of time the backup takes to execute. The time is dependent upon your internet connection and the amount of data being backed up with each job.

Both of these command lines assume that the WebDrive executable was installed in the default location of “c:\program files\webdrive\”.

This last configuration provides for a fully automated solution with minimal impact on the resources in your PC.

Conclusion

The need for an automated backup solution is ever more important as the dependence on the PC for the creation of business critical data increases. There are a variety of backup solutions being offered to the marketplace. Paring a software based solution, such as WinBackup, with the unique drive mapping capabilities of WebDrive, creates an easy to implement and self managing, effective solution for an otherwise mundane task. The command line execution capabilities of WebDrive permit the application to operate behind the scenes to make the best use of the limited desktop resources available. In addition to preserving the modest capabilities of the desktop, WebDrive utilizes the efficiency of a stable transfer protocol - FTP (or SFTP if required) – to complete a daily utility task in a competent manner.

About South River Technologies

South River Technologies, headquartered in Annapolis, Maryland, develops file management software that is used for file collaboration, website management and shared access. SRT’s unique client technology creates an instantly familiar interface by integrating seamlessly into the Windows Operating System. Founded in 1996, South River Technologies directly sells and markets Windows based utilities, and licenses its technologies to Software Publishers and Independent Software Vendors.

For more information about products from South River Technologies, please contact sales@SouthRiverTech.com or visit http://www.SouthRiverTech.com.

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