

Backup To The Web v5.2



Standard Edition **User's Guide**

Version 5.2.1.0
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Table of Contents

1	Overview	5
1.1	Benefits.....	5
1.2	Features	5
1.3	Security.....	6
1.4	System Requirements	6
2	Installing Backup To The Web.....	7
2.1	Installing Backup To The Web for Windows.....	7
2.2	Installing Backup To The Web for Mac OS X.....	8
2.3	Installing Backup To The Web for Linux	9
2.4	Installing Backup To The Web for Netware	10
2.5	Installing Backup To The Web for Sun Solaris.....	11
3	Uninstalling Backup To The Web	13
3.1	Uninstalling Backup To The Web for Windows	13
3.2	Uninstalling Backup To The Web for Mac OS X	13
3.3	Uninstalling Backup To The Web for Linux	13
3.4	Uninstalling Backup To The Web for Netware.....	13
3.5	Uninstalling Backup To The Web for Solaris.....	14
4	Using Backup To The Web.....	15
4.1	System Tray Launcher (Windows Only).....	15
4.2	Logon Dialog.....	15
4.3	Language Selection	16
4.4	User Profile	17
4.5	Backup Logs	18
5	Setting Up Backup Sets	20
5.1	Backup Set Type	20
5.2	Backup Source	21
5.3	Mapped Network Drive.....	22
5.4	Backup Schedule.....	24
5.5	Backup Filter	24
5.6	Pre/Post-Backup Command	26
5.7	Temporary directory	28
5.8	Transfer Block Size.....	28
5.9	Follow Symbolic Link (Linux/Unix/Mac only).....	28
5.10	Microsoft's Volume Shadow Copy Service (VSS).....	29
5.11	Encryption.....	29
5.12	Retention Policy.....	30
5.13	Extra Backup (Off-line backup, Logout Reminder)	33
5.14	In-File Delta.....	33
5.15	Local Copy.....	33
5.16	Using One Backup Account for Multiple Computers.....	36
6	Backing Up Files	38
6.1	How files are backed up	38
6.2	Backup files directly to the backup server.....	39
6.3	Backup files to removable hard disk (seed loading)	41
7	Restoring Files.....	43
7.1	Restore backup files directly from backup server	43
7.2	Restore backup files from removable hard disk.....	48
7.3	IP addresses Restriction for Online Restore	52
8	In-File Delta Technology	54
8.1	Overview	54
8.2	Block Size.....	56
8.3	Minimum File Size.....	56
8.4	Uploading full file again.....	56
8.5	Advanced In-file delta type.....	57
9	Backup/Restore Windows System State.....	58



9.1	Requirements	58
9.2	Overview	58
9.3	How to backup Windows System State	59
9.4	How to restore Windows System State	62
10	Backup/Restore MySQL Server	63
10.1	Requirements	63
10.2	Overview	63
10.3	How to backup MySQL server on Windows	64
10.4	How to backup MySQL server on Linux (command line mode)	67
10.5	How to restore MySQL server	68
11	Email Reporting	69
11.1	New User Report	69
11.2	Forgot Password Report	70
11.3	Backup Job Report	71
11.4	Setting Change Report	73
11.5	Inactive User Reminder	74
12	Web Features	75
12.1	Install Backup To The Web	75
12.2	Update User Profile	75
12.3	Request Forgotten Password	76
12.4	Restore/Delete/Undelete Backup Files	76
12.5	Review Backup Jobs	77
12.6	Review Storage Statistics	79
13	Further Information	81
13.1	FAQs	81
13.2	Contact Us	81

1 Overview

1.1 Benefits

- Easy Backup of
 1. MySQL 3.2.4 or above
 2. Windows System State
 3. Outlook and Outlook Express (i.e. *.pst, *.dbx and *.wab)
 4. Important personal settings, e.g. Desktop, Favorite, My Documents and History etc
 5. Other common files (e.g. *.doc, *.xls)
- Support backing up only changes within a file (using in-file delta technology)
- Support backing up of open files on Windows XP/2003 (Volume Shadow Copy)
- Support backing up of Windows NTFS access privileges, Linux access privileges and modes, Mac OS X metadata and resource forks
- Easy to use, deploy and maintain

1.2 Features

- (New in 5.2) Choose whether to restore “file permissions” during restore.
- (New in 5.2) For “Local Copy” backup, ability to choose whether to perform a local copy backup only and skip the offsite backup.
- (New in 5.2) Auto Upgrade Agent to automatically upgrade the client software.
- User configurable incremental / differential in-file delta backup mode (i.e. backing up only changes within a file since the last incremental or full backup according to each user's preference).
- Allow in-file delta backup mode to be overridden by each user individually according to backup time (e.g. enforcing full (or incremental or differential) backup of all files every Sunday or the 1st day of every month).
- Volume Shadow Copy backup (i.e. backing up files even when they are exclusively open, e.g. Outlook.pst).
- In-File Delta backup (i.e. backing up only changes within files).
- Off-line backup mode and logout backup reminder.
- Customizable backup schedule allows backups to be scheduled at any time.
- Compress and encrypt data automatically before sending them to the server (server stores only encrypted data).
- Increment backup strategy ensures that only new or updated files are sent to the backup server.
- Can integrate with external “Open File Manager” to provide open file backup support to all open files.
- Access backup data anytime, anywhere by using a web browser.
- Comprehensive backup report lists all files backed up. Backup report delivered automatically via email.
- Backup data are CRC validated before they are stored on server.
- Fully user customizable data retention policy allows users to have access to deleted files using the least possible storage space on the backup server.
- Can select source backup files easily by using a backup filter, e.g. selecting all *.doc and *.xls in your computer in a single operation.
- Run any custom OS commands before/after a backup job.
- Run on Windows, Mac OS X, Linux, NetWare, Unix and all other platforms supporting a Java2 Runtime Environment.
- Periodic backup files validation on backup server ensures backup files are 100% valid and fully restorable when needed.

1.3 Security

- 128-bit point-to-point SSL communication between server and client
- Support HTTP/HTTPS Proxy and Socks v4/v5 firewall
- Data are 128-bit encrypted when stored on the backup server
- Choice of different encryption algorithms, e.g. Twofish, Triple DES, Advanced Encryption Standard (AES)
- Choice of different encryption modes, e.g. Electronic Cook Book (ECB) and Cipher Block Chaining (CBC)
- An random initializing vector, salt and iteration count will be generated by the software automatically for each file when encrypting your data
- Each backup user can restrict online access to his files to his pre-defined list of IP addresses

1.4 System Requirements

- **Operating System:**
 1. Windows 95 / 98 / ME / NT / 2000 / XP / 2003
 2. Linux kernel 2.2 or above ** (e.g. RedHat Linux 6.x or above, though the use of Linux kernel 2.6.9-34 or above is recommended)
 3. Solaris 2.x or above
 4. Mac OS X 10.2 or above
 5. NetWare 5.1 or above
 6. All other operating systems that supports Java2 Runtime Environment 1.3.1 or above
- **Memory:** 128MB (minimum), 256MB (recommended)
- **Disk Space:** 100MB
- **Network Protocol:** TCP/IP (http/https)

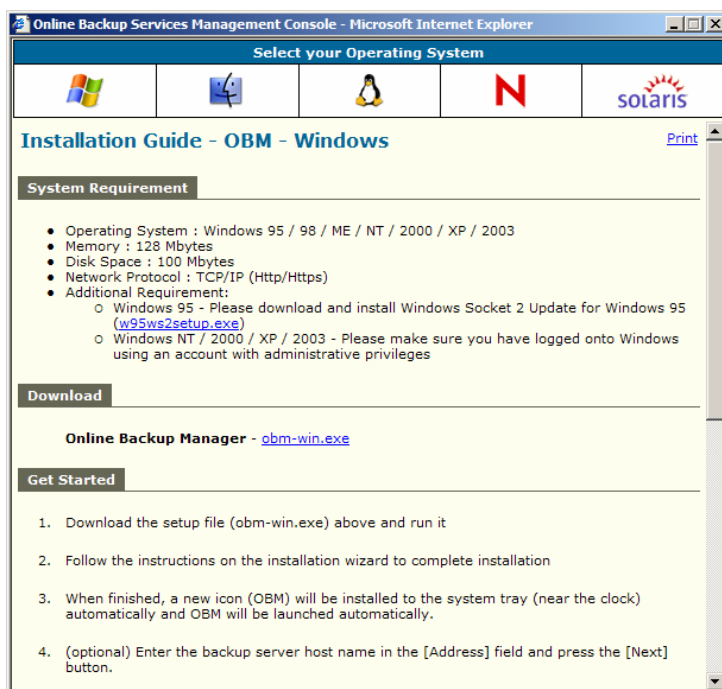
** Standard C++ libraries for backwards compatibility compiler (compat-libstdc++-x.x-y.y.y.i386.rpm) must be installed if you are not using a Linux 2.2 kernel. These libraries are required to run all Java applications.

2 Installing Backup To The Web

Before you can start backing up data to the Offsite Backup Server, you need to install Backup To The Web onto your computer.

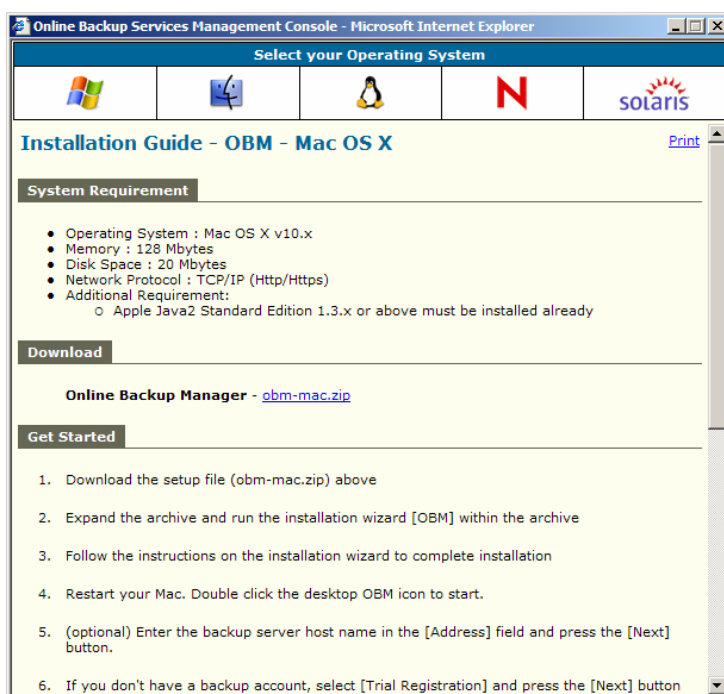
2.1 Installing Backup To The Web for Windows

1. Download the Online Backup Manager installer (obm-win.exe) from the website.
2. Double click the icon to run the installer.
3. Follow on screen instructions.
4. After installation, Backup To The Web will start automatically.



2.2 Installing Backup To The Web for Mac OS X

1. Download the Online Backup Manager installer (obm-mac.zip) from the website.
2. Expand the zip file.
3. Double click the pkg file icon to run the installer.
4. Follow on screen instructions.
5. After installation, the installer will need to **restart your computer**.
6. After restarting your computer, click the newly added Backup To The Web icon on your desktop. You can manually drag the icon to your dock bar if you wish.



2.3 Installing Backup To The Web for Linux

1. Download the Online Backup Manager tarball release (obm-linux.tar.gz) from the website.

2. Set the OBM_HOME environment variable

```
# export OBM_HOME=/usr/local/obm
```

3. Expand the client software to \$OBM_HOME

```
# mkdir $OBM_HOME
# tar -x -C $OBM_HOME -zvf obm-linux.tar.gz
```

4. Install OBM

```
# ./${OBM_HOME}/bin/install.sh
```

5. Start Auto Upgrade Agent

```
# /etc/init.d/auaobm start
```

6. Start backup scheduler

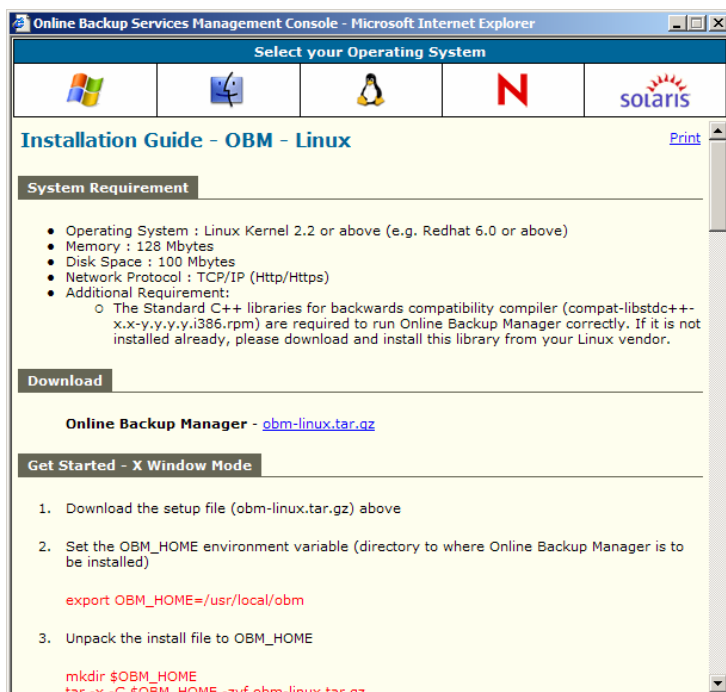
```
# /etc/init.d/obm-scheduler start
```

7. Set the DISPLAY environment variable

```
# export DISPLAY=IP_ADDRESS_OF_XTERMINAL[:0.0]
```

8. Run Backup To The Web

```
# sh $OBM_HOME/bin/BackupManager.sh &
```



2.4 Installing Backup To The Web for Netware

1. Download the Online Backup Manager zip release (obm-netware.zip) from the website.

2. Expand the zip file to **SYS:\OBM**

3. Install Backup To The Web

SYS:\> SYS:\OBM\aua\bin\install-aua.ncf

4. Start Auto Upgrade Agent

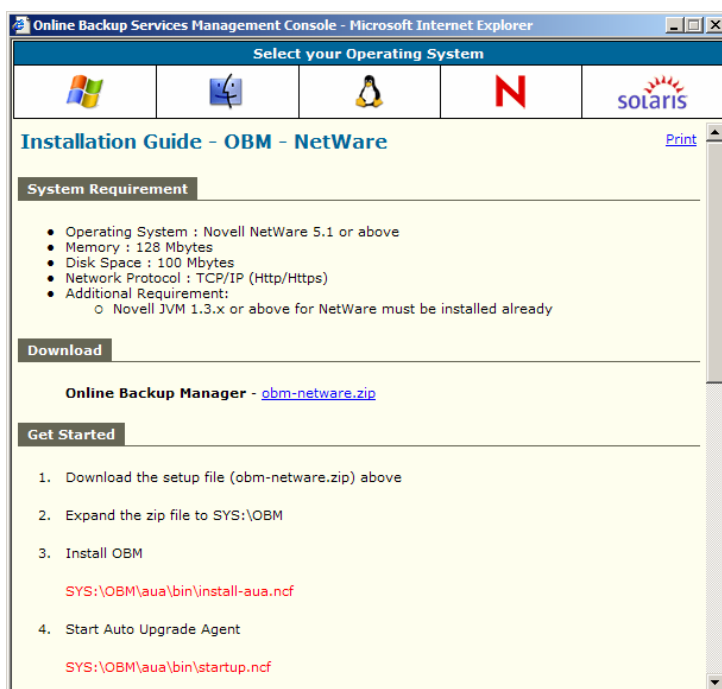
SYS:\> SYS:\OBM\aua\bin\startup.ncf

5. Start backup scheduler

SYS:\> SYS:\OBM\bin\Scheduler.ncf

6. Run Backup To The Web

SYS:\> SYS:\OBM\bin\BackupManager.ncf



2.5 Installing Backup To The Web for Sun Solaris

1. Download the Online Backup Manager tarball release (obm-solaris.tar.gz) from the website.
2. Set the OBM_HOME environment variable

```
# export OBM_HOME=/usr/local/obm; export OBM_HOME
```
3. Set the JAVA_HOME environment variable to the directory where J2SE Java Runtime Environment (JRE) 1.4.x has been installed

```
# export JAVA_HOME=/usr/java/j2re1.4.x; export JAVA_HOME
```
4. Expand the client software to \$OBM_HOME

```
# mkdir $OBM_HOME
# cd $OBM_HOME
# gunzip -c obm-solaris.tar.gz | tar -xf -
```
5. Install Backup To The Web

```
# ./bin/install.sh
```
6. Start Auto Upgrade Agent

```
# /etc/init.d/auaobm start
```
7. Start backup scheduler





```
# /etc/init.d/obm-scheduler start
```
8. Set the DISPLAY environment variable

```
# export DISPLAY=IP_ADDRESS_OF_XTERMINAL[:0.0]
```
9. Run Backup To The Web

```
# sh $OBM_HOME/bin/BackupManager.sh &
```

Online Backup Services Management Console - Microsoft Internet Explorer

Select your Operating System


Installation Guide - OBM - Solaris

[Print](#)

System Requirement

- Operating System : Sun Solaris 2.5 or above
- Memory : 128 Mbytes
- Disk Space : 100 Mbytes
- Network Protocol : TCP/IP (Http/Https)

Download

Online Backup Manager - [obm-solaris.tar.gz](#)

Get Started - X Window Mode

- Download the setup file (obm-solaris.tar.gz) above
- Set the OBM_HOME environment variable (directory to where Online Backup Manager is to be installed)


```
export OBM_HOME=/usr/local/obm
```
- Set the JAVA_HOME environment variable (directory where J2SE Java Runtime Environment (JRE) 1.4.x has been installed)


```
JAVA_HOME=/usr/java/j2re1.4.x; export JAVA_HOME
```
- Unpack the install file to OBM_HOME

3 Uninstalling Backup To The Web

This section describes the steps required to uninstall Backup To The Web from your computer.

3.1 Uninstalling Backup To The Web for Windows

1. Open [Start] -> [Control Panel] -> [Add/Remove Programs]
2. Select [Backup To The Web] from the list and press the [Remove] button

3.2 Uninstalling Backup To The Web for Mac OS X

1. Remove all program files by running

```
# cd $OBM_HOME/bin
# sudo ./uninstall.sh
```
2. Remove all backup setting by removing ~/.obm

```
# rm -rf ~/.obm
```
3. Restart your computer

3.3 Uninstalling Backup To The Web for Linux

1. Change user to "root" or equivalent
2. Remove all program files by running

```
# cd $OBM_HOME/bin
# ./uninstall.sh
```
3. Remove all backup setting by removing ~/.obm

```
# rm -rf ~/.obm
```

3.4 Uninstalling Backup To The Web for Netware

1. Stop the running backup scheduler by running

```
SYS:> touch SYS:\OBM\ipc\Scheduler\stop
```
2. Stop the running auto upgrade agent by running

```
SYS:> SYS:\OBM\aua\bin\shutdown.ncf
```
3. Remove all program files by removing the directory **SYS:\OBM**
4. Remove all backup settings by removing the directory **SYS:\.OBM**

3.5 Uninstalling Backup To The Web for Solaris

1. Change user to "root" or equivalent
2. Set the OBM_HOME environment variable

```
# export OBM_HOME=/usr/local/obm; export OBM_HOME
```
3. Set the JAVA_HOME environment variable to the directory where J2SE Java Runtime Environment (JRE) 1.4.x has been installed

```
# export JAVA_HOME=/usr/java/j2re1.4.x; export JAVA_HOME
```
4. Remove all program files by running

```
# cd $OBM_HOME/bin  
# ./uninstall.sh
```
5. Remove all backup setting by removing ~/.obm

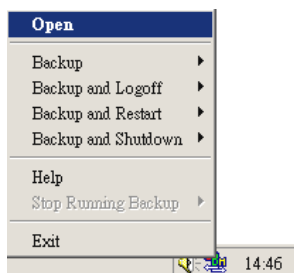
```
# rm -rf ~/.obm
```

4 Using Backup To The Web

This chapter will describe all the features available in Backup To The Web and outline how you can use Backup To The Web to meet various backup needs.

4.1 System Tray Launcher (Windows Only)

After you have successfully installed Backup To The Web onto your computer, an Backup To The Web icon will be added to the system tray area (next to your system clock) automatically.

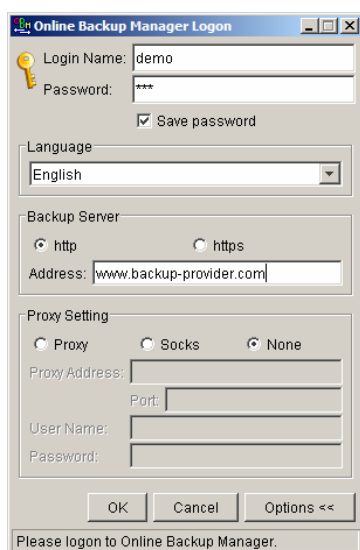


This icon is the entry point to Backup To The Web. Right clicking the icon will show a menu that provides the following functions:

Menu Item	What it does
Open	Run Backup To The Web.
Backup	Runs a specific backup set (or all backup sets) chosen from the sub-menu in silent background mode.
Backup and Logoff	Runs a specific backup set (or all backup sets) chosen from the sub-menu in silent background mode and then logoff from Windows when finished.
Backup and Restart	Runs a specific backup set (or all backup sets) chosen from the sub-menu in silent background mode and restart Windows when finished.
Backup and Shutdown	Runs a specific backup set (or all backup sets) chosen from the sub-menu in silent background mode and shutdown the computer when finished.
Help	Shows a help dialog
Stop running backup	Interrupts a running backup set (or all backup sets) chosen from the sub-menu.
Exit	Close this system tray launcher application.

4.2 Logon Dialog

Before you can use Backup To The Web, you have to be authenticated by the Offsite Backup Server first. The logon dialog shown below will check if you have the right to access Backup To The Web by submitting the username and password you provided to the backup server.



The dialog box is titled "Online Backup Manager Logon". It contains the following fields and controls:

- Login Name:** A text field containing "demo".
- Password:** A text field containing four asterisks "****".
- Save password:** A checked checkbox.
- Language:** A dropdown menu showing "English".
- Backup Server:** A section with two radio buttons: "http" (selected) and "https". Below them is an "Address:" text field containing "www.backup-provider.com".
- Proxy Setting:** A section with three radio buttons: "Proxy", "Socks", and "None" (selected). Below them are fields for "Proxy Address:", "Port:", "User Name:", and "Password:", all of which are currently empty.
- Buttons:** "OK", "Cancel", and "Options <<" at the bottom.
- Status bar:** A message at the bottom says "Please logon to Online Backup Manager."

For secure communication, you can choose to communicate with Offsite Backup Server in SSL (Secure Socket Layer) by selecting the [https] option.

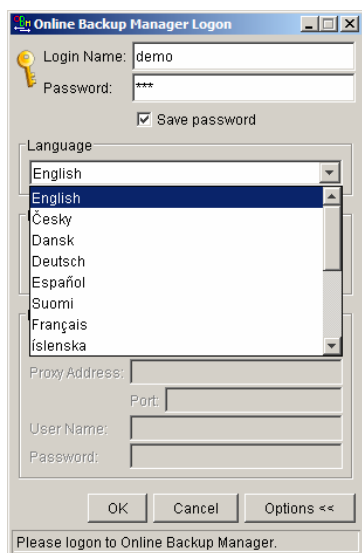
The [Address] field shows the Offsite Backup Server to which Backup To The Web will connect to authenticate your username and password. You can use either a resolvable host name (e.g. backup.your-domain.com) or an IP address (e.g. 192.168.1.1).

If the Offsite Backup Server is not accepting connection from the standard ports (Port 80 and 443 for http and https respectively), you can append a semi-colon ":" and the custom port number to the host name of the [Address] field (e.g. www.backup-provider.com:8080) to connect to the server using the custom port number (port 8080 in this case).

If you need to connect to the server through proxy, just enter your proxy setting in the [Proxy Setting] section. For [SOCKS] proxy, both v4 and v5 without user authentication are supported.

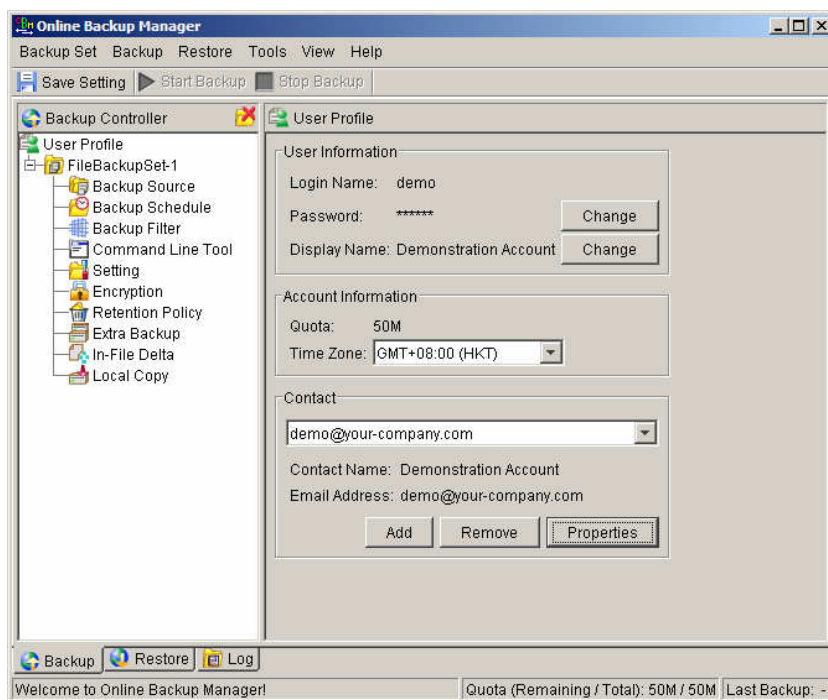
4.3 Language Selection

You can switch the language of the Backup To The Web user interface by choosing the desired language available from the [Language] drop down list. The languages available includes English, Czech, Danish, Dutch, French, Spanish, Portuguese, Icelandic, Norwegian, Finnish, Italian, German, Swedish, Chinese (Traditional and Simplified), Japanese, Lithuanian and Slovenian.



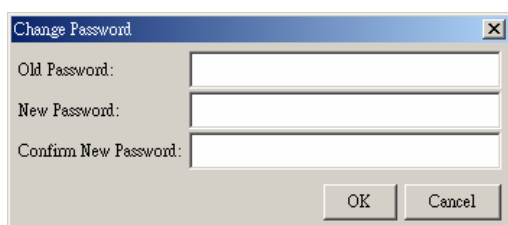
4.4 User Profile

After the backup server authenticates you successfully, the Backup To The Web main window appears. You can then use Backup To The Web to update your user profile.



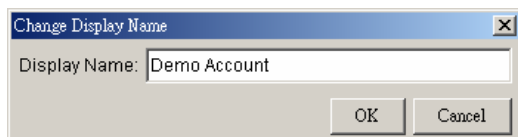
You can perform the following update to your user profile.

To change your [Password], press the [Change] button next to the password field. A Change Password dialog will appear. Enter your original password and new password into the text field of this dialog and press [OK].



A dialog box titled "Change Password" with three text input fields labeled "Old Password:", "New Password:", and "Confirm New Password:". At the bottom right are "OK" and "Cancel" buttons.

To change your [Display Name], press the [Change] button next to the display name field. A Change Display Name dialog will appear. Enter the new display name and press [OK].



A dialog box titled "Change Display Name" with a single text input field labeled "Display Name:" containing the text "Demo Account". At the bottom right are "OK" and "Cancel" buttons.

To change your [Time Zone], just select your time zone from the drop down list next to the time zone entry.

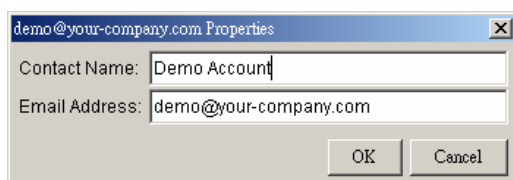
To add a new contact email to this account, press the [Add] button in the [Contact] section. A [Add New Contact] dialog will appear. Enter a name and an email address in the text field provided and then press the [OK] button.



A dialog box titled "Add new Contact" with two text input fields labeled "Contact Name:" and "Email Address:". At the bottom right are "OK" and "Cancel" buttons.

To remove a contact email, select the email that is to be removed from the email list and press the [Remove] button. Press [OK] to confirm the removal.

To update a contact email, select the email that is to be updated from the email list and press the [Properties] button. A [Update Contact Property] dialog will appear. After you have made the changes that you want, press the [OK] button.



A dialog box titled "demo@your-company.com Properties" with two text input fields labeled "Contact Name:" containing "Demo Account" and "Email Address:" containing "demo@your-company.com". At the bottom right are "OK" and "Cancel" buttons.

4.5 Backup Logs

All backup activities are logged to backup activity log files. They are available for reviewing from Backup To The Web.

How to review backup activities?

You can review all your backup Jobs by

1. Select the [Log] tab available at the bottom of Backup To The Web
2. Select the Backup Job you want to review on the [Log Controller] panel

Online Backup Manager

Backup Set Backup Restore Tools View Help

Save Setting

Log Controller

FileBackupSet1

- 2007-01-15-21-00-01.log
- 2007-01-15-18-28-34.log
- 2007-01-15-17-30-40.log
- 2007-01-15-17-20-43.log

Log Table (2007-01-15-21-00-01.log) Page: 1 / 1

Type	Log	Time
Start	[Windows XP (solomon), OBM 5.2.1.0]	[2007/01/15 21:00:01]
Start running pre-commands		[2007/01/15 21:00:02]
Finished running pre-commands		[2007/01/15 21:00:02]
Starting to create Shadow Copy Set...		[2007/01/15 21:00:02]
Shadow Copy Set created successfully		[2007/01/15 21:00:05]
Downloading server file list...		[2007/01/15 21:00:06]
Reading backup source from hard disk...		[2007/01/15 21:00:07]
Reading backup source from hard disk... Completed		[2007/01/15 21:00:08]
[Local Copy] Start running local backup		[2007/01/15 21:00:08]
[Local Copy] Reading local backup files from hard disk...		[2007/01/15 21:00:08]
Downloading server file list... Completed		[2007/01/15 21:00:08]
[Local Copy] Reading local backup files from hard disk... Com...		[2007/01/15 21:00:08]
[Local Copy] Getting all files which have been added... Comple...		[2007/01/15 21:00:08]
[Local Copy] Getting all files which have been updated... Comp...		[2007/01/15 21:00:08]
[Local Copy] Getting all files which have been deleted... Compl...		[2007/01/15 21:00:08]
[Local Copy] Getting all files which have been moved... Comple...		[2007/01/15 21:00:08]
[Local Copy] Total New Files = 0		[2007/01/15 21:00:09]
[Local Copy] Total Updated Files = 0		[2007/01/15 21:00:09]
[Local Copy] Total Update File Permission = 0		[2007/01/15 21:00:09]
[Local Copy] Total Deleted Files = 1		[2007/01/15 21:00:09]
[Local Copy] Total Moved Files = 0		[2007/01/15 21:00:09]
[Local Copy] [Deleted File] Deleting "C:\LocalBackup\1168848...		[2007/01/15 21:00:09]

Show: All Logs per page: 500

Backup Restore Log

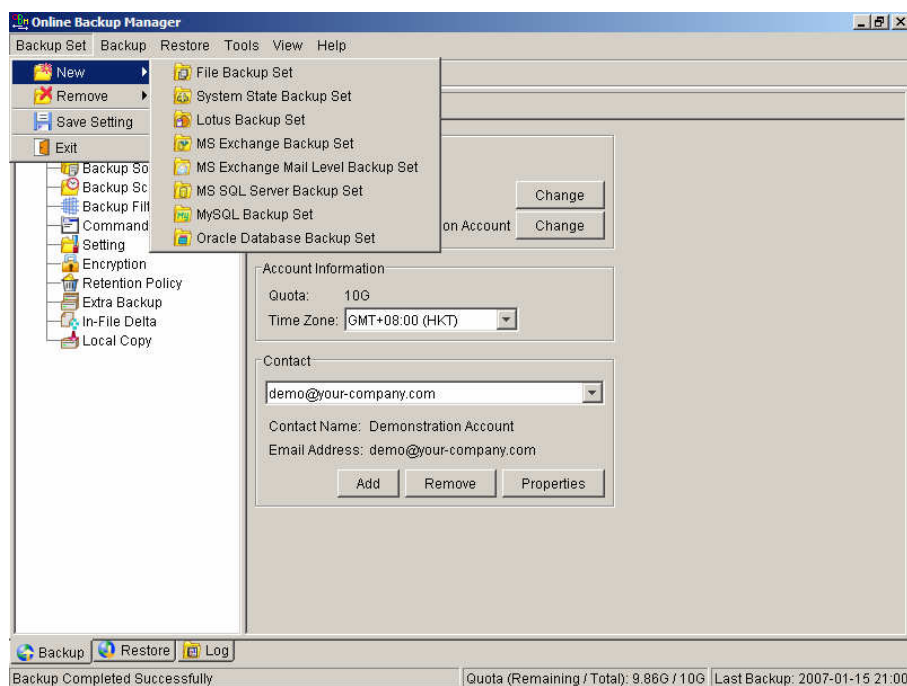
Backup Completed Successfully Quota (Remaining / Total): 9.86G / 10G Last Backup: 2007-01-15 21:00

5 Setting Up Backup Sets

A backup set contains all backup settings of a backup operation. This section will describe all features available within a backup set and explain how you can use each of them to achieve various tasks.

Each backup account can have multiple backup sets. Each backup set is an individual and independent entity. For example, if you want one directory to be backed up during the day and another directory to be backed up during the night, you can create two backup sets, each with a different backup schedule and backup source, to serve this need.

To create a new backup set, simply click [Backup Set] -> [New] and choose a backup set type. For example, let's create a "File Backup Set" for the rest of this chapter.



5.1 Backup Set Type

A backup set can be of one of the following types:

Backup Type	Description
File	Backup set type to backup common files/directories
Microsoft SQL Server	Backup set type to backup Microsoft SQL Server 7.0/2000
Oracle Database Server	Backup set type to backup Oracle 8i/9i database
Lotus Domino/Notes	Backup set type to backup Lotus Domino/Notes
Microsoft Exchange Server	Backup set type to backup Microsoft Exchange Server 2000 / 2003
MySQL	Backup set type to backup MySQL Server
System State	Backup set type to backup Microsoft Window's System State
Microsoft Exchange Mail (MAPI)	Backup set type to backup individual emails, contacts, calendars, tasks etceteras from Microsoft Exchange Server 2000 / 2003

Backup set type is defined at backup set creation and cannot be modified. If you want to change the backup set type, you have to create another backup set in the new backup set type.

5.2 Backup Source

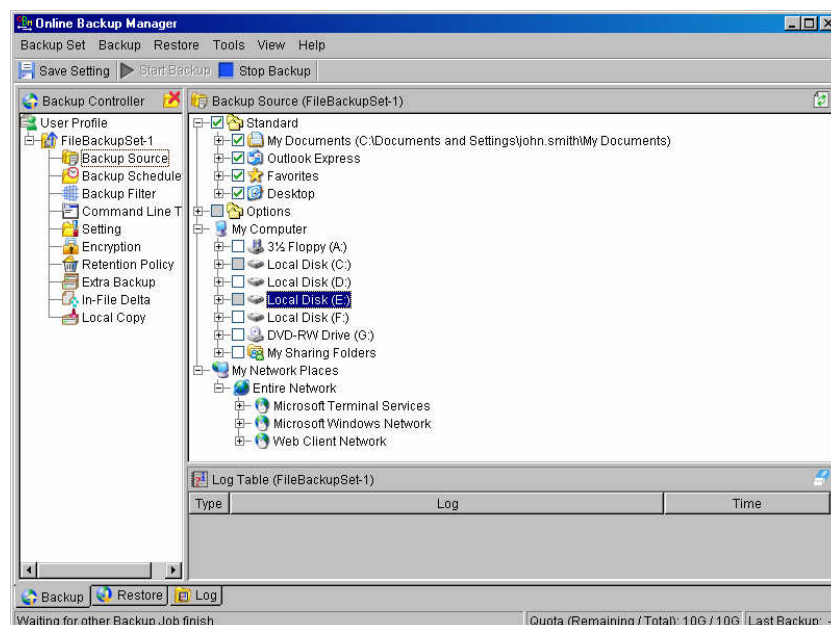
A "Backup Source" defines the files/directories that are to be included in a backup set. There are two types of backup source: Selected and Deselected. Selected backup source defines files/directories that are to be included in a backup set while deselected backup source defines files/directories that are to be excluded from a backup set. Online Backup Manager will generate appropriate backup source setting for you automatically when you make your backup source selection on Backup To The Web.

Please note that for Windows operating systems, if the "Hide protected operating files (Recommended)" setting is enabled for the file explorer, system folders/files will not be shown in the backup source. By selecting the parent folders however, all subfolders (including system folders/files) will be included in the backup set. Thus if you want to exclude system folders (e.g. recycle bin) from the backup, please select the desired folders/files directly rather than selecting the parent folder. Alternatively, you can enter the corresponding system path to the [Exclude List] of the backup set using the web interface.

From the [Standard] node available at the top of the [Backup Source] tree, you can easily select the following common folders to be backed up:

1. "My Documents" folder
2. "Outlook" and "Outlook Express" mail store folder
3. "Favorites" folder
4. "Desktop" folder

From the [Options] node available below the [Standard] node, you can easily select other common folders to be backed up as well. They include the "Application Data" folder, the "Start Menu" folder, the "Templates" folder, the "All Users' Documents" folder, the "Temporary Internet Files" folder, the "Cookies" folder, the "Font" folder, the "History" folder, the "Applications Data" folder, the "Nethood" folder, the "Printhood" folder, the "Recent" folder and the "Send to" folder.



The checkbox next to the files/directories shown above can be in one of the following mode:

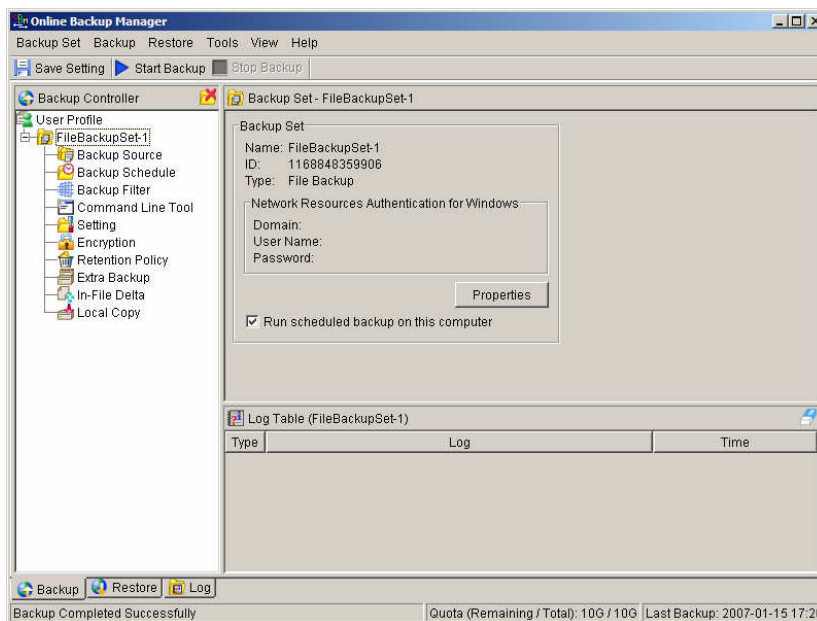
Mode	Description
<input checked="" type="checkbox"/>	All files/directories (recursively) under this directory will be backed up
<input checked="" type="checkbox"/>	All files/directories (recursively), except those explicitly excluded, under this directory will be backed up. If you add files/directories to this directory in the future, they will be backed up as well.
<input type="checkbox"/>	Only the checked files/directories under this directory will be backed up. If you add files/directories to this directory in the future, they will NOT be backed up.
<input type="checkbox"/>	Nothing under this directory will be backed up.

5.3 Mapped Network Drive

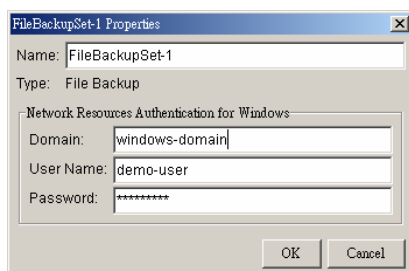
If you need to backup a mapped network drive on Windows (it will only work in Windows NT/2000/XP/2003), you must enter your Window's domain, username and password into the [Network Resources Authentication for Windows] section as shown below. It is required because scheduled backups will always run under the context of Window's "Local System" account (which does not have the privileges required to access network resources) by default. Backup To The Web needs to collect your Windows username, password and domain name to authenticate itself to the windows domain controller to acquire the required access privileges to the network files to be backed up. If you don't supply a username and password, Backup To The Web will have problems accessing network resources in its scheduled backup jobs.

If you need to backup network mapped drive in scheduled backup, please do this:

- i. Select the backup set from the left panel and press the [Properties] button



- ii. Enter your Windows domain, username and password into the dialog shown below and press [OK]



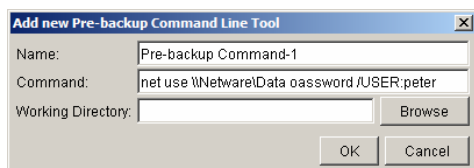
- iii. Press the [Save Setting] button on the toolbar

The steps above apply only to computers running in a Windows domain. If you don't have a windows domain with your network and you are using a workgroup or using a NetWare server, please use the "net use" command to authenticate the running backup process against the computer hosting the mapped drive. Otherwise, you will get "Access Denied" error from the backup report.

For example, if you want to backup \\SERVER\SHARE that is located on a NetWare server (or another computer in a windows workgroup) and you are getting "Network drive is not accessible" error message, please try adding the following command as a [Pre-backup command]

```
net use \\SERVER\SHARE [PASSWORD] /USER:[DOMAIN | MACHINE_NAME]\[USERNAME]
```

E.g.



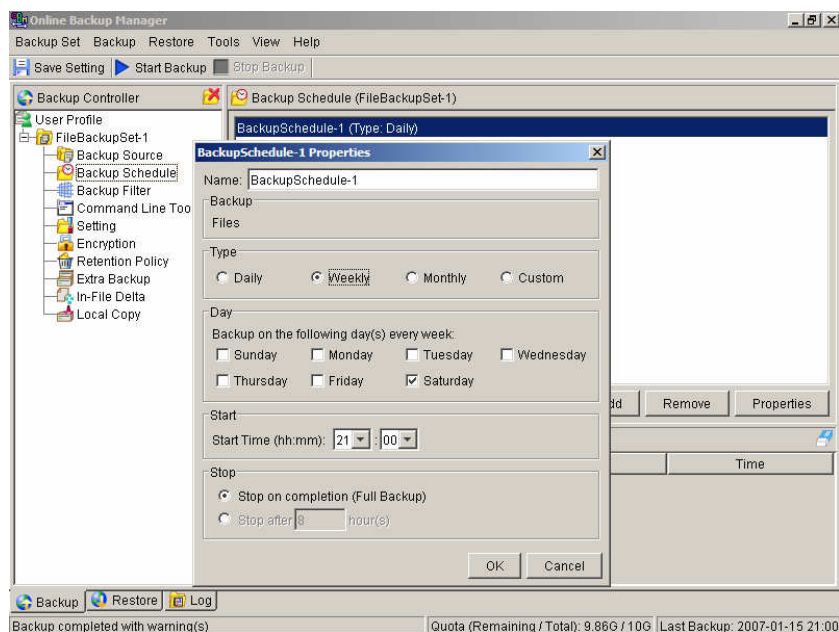
Enter one of the following commands directly into the Pre-Backup Command:

```
net use \\Netware\Data password /USER:peter
net use \\WorkgroupComputer1\Data password /USER:WorkgroupComputer1\peter
```

This will authenticate the current process with the NetWare server (or another computer in a windows workgroup) and backup will then run correctly.

5.4 Backup Schedule

A "Backup Schedule" defines the frequency and the time that backups should run automatically.



Backup schedule can be in one of the following types:

Type	Description
Daily	Backup Jobs will run everyday
Weekly	Backup Jobs will run on the specified day(s) of every week
Monthly	Backup Jobs will run on the specified day or on a day with a given criteria (e.g. first weekend, last weekday) of every month
Custom	Backup job will run once on any particular date

For each schedule type above, backup will run at the scheduled time for a maximum of the duration specified (or until all data are backed up if [Stop on backup completion] option is chosen). If a backup job does not finish within the maximum duration specified, it will be interrupted.

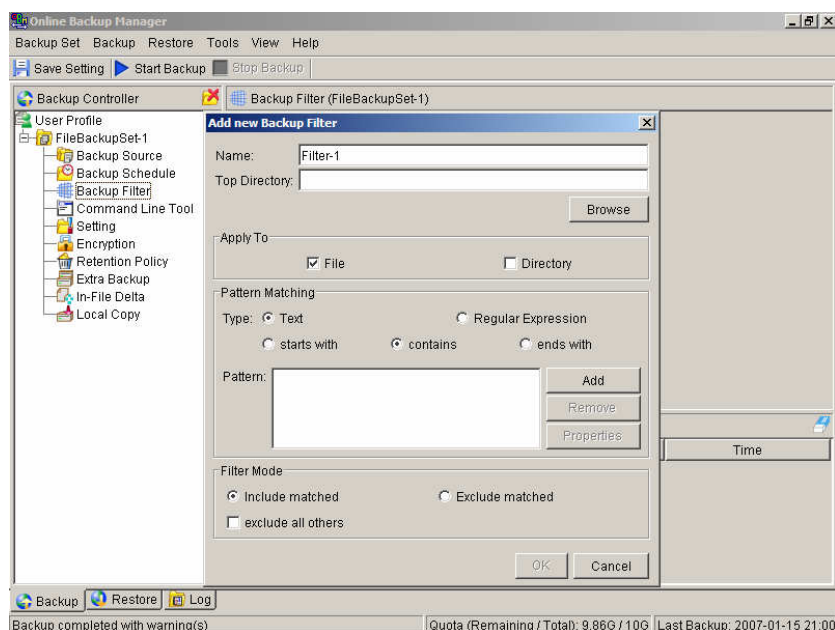
Please note that you can have more than one schedule within a backup set. For example, you can have a daily backup schedule that runs at 13:00 at noon and another daily backup schedule that runs at 00:00 at midnight. The combination of these schedules effectively creates a backup schedule that runs daily at 00:00 and 13:00 everyday.

5.5 Backup Filter

A "Backup Filter" defines the file selection rules that allow user to easily include/exclude files into/from the backup set by applying user defined criteria(s) to the file names or directory names.

There are some basic rules regarding backup filters:

- Filters are checked in creation order. Once inclusion/exclusion has been identified, the remaining filters won't be checked.
- Inclusion/Exclusion made by filter always takes precedence over backup source selections
- If all filters do not apply to a particular file, this file is then checked for inclusion/exclusion backup source selections



Key	Description
Name	The name of a filter
Top Directory	The top directory to which this filter is applied. Filtering rules will be applied to all files and/or directories under this directory.
Apply To	Define whether to apply the filtering rule to files and/or directories
Pattern Matching	It defines the filtering rules of a filter. A filtering rule can be of one of the following types: <div> <div>[Starts With] Include/Exclude all files/directories with name starting with a certain pattern. <u>For example:</u> You can use B* to match all files with name starting with a 'B' character</div> <div>[Contains] Include/Exclude all files/directories with name containing a certain pattern. <u>For example:</u> You can use *B* to match all files with name containing with a 'B' character</div> <div>[Ends With] Include/Exclude all files/directories with name ending with a certain pattern. <u>For example:</u> You can use *.doc to match all files with name ending with '.doc' (all Word documents)</div> <div>[Regular Expression] Include/Exclude all files/directories with name matching a regular expression.</div> </div>
Filter Mode	Defines whether you want to include or exclude matched files into/from the backup set. Also, for those unmatched files, you can choose to exclude (if include filter type) or include (if exclude filter type) them into/from the backup set.

Example 1:

If you want to backup only Word, Excel and PowerPoint documents in your document directory (e.g. C:\My Documents), you should setup your backup filter as follows.

Top Directory = C:\My Documents
 Apply To = File (true)
 Matching Type = End With
 Matching Patterns = *.doc, *.xls, *.ppt
 Filter Mode = Include

Exclude all others = True

Example 2:

If you want to backup all files, excluding all *.exe, *.dll and *.tmp, in C:\Applications, you should setup your backup filter as follows.

Top Directory = C:\Applications
Apply To = File (true)
Matching Type = End With
Matching Patterns = *.exe,*.dll, *.tmp
Filter Mode = Exclude
Include all others = True

Example 3:

If you have made your selection of files (all under C:\) from the backup source setting but you want exclude all images (e.g. *.jpg and *.gif) from your selection, you should setup your backup filter as follows.

Top Directory = C:\
Apply To = File (true)
Matching Type = End With
Matching Patterns = *.jpg, *.gif
Filter Mode = Exclude
Include all others = false

Please note that the [Include all others] setting is not enabled because you don't want to include all other files (NOT *.jpg, *.gif) under C:\ into the backup set.

Example 4: (advanced)

If you want to include everything, except the "log" directory, under C:\Applications into a backup set, you should setup your backup filter as follows.

Top Directory = C:\Applications
Apply To = Directory (true)
Matching Type = Regular Expression
Matching Patterns = ^log\$
Filter Mode = Exclude
Include all others = True

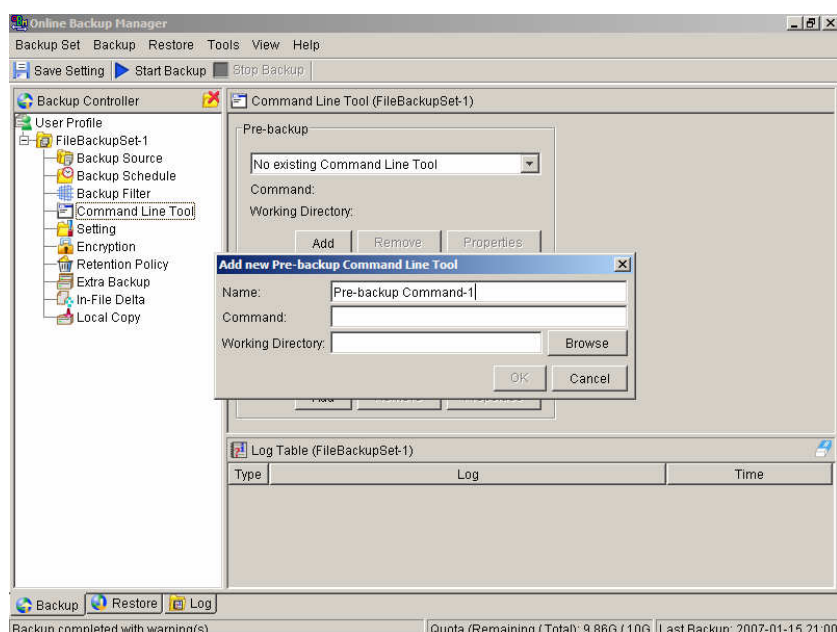
Example 5: (advanced)

If you want to include all directories named "log" from the backup set files with file name starting with "B" and ending with "*.doc" under C:\My Documents into the backup set, you can use a regular expression of "^B.*\doc\$" to do your selection. The filter backup can then be setup as follows.

Top Directory = C:\My Documents
Apply To = File (true)
Matching Type = Regular Expression
Matching Patterns = ^B.*\doc\$
Filter Mode = Include
Exclude all others = True

5.6 Pre/Post-Backup Command

The "Command Line Tool" feature has two major components, the [Pre-Backup] command and the [Post-Backup] command. You can use the [Pre-Backup] or [Post-Backup] commands to run any native OS (operating system) commands before or after running a backup job.



Both [Pre-Backup] and [Post-Backup] commands comprise of the following parameters:

Key	Description
Name	Name of this Command
Command	The command to be run (e.g. C:\My Documents\Application.exe or C:\My Documents\BatchJob.bat)
Working Directory	The directory at which this command will run

The backup set type affects the time at which [Pre-Backup] and [Post-Backup] commands run. The following table outlines when [Pre-Backup] and [Post-Backup] commands will run in different types of backup set.

Backup Set Type	When Pre-Backup Commands run?	When Post-Commands run?
File	Before uploading backup files	After uploading all backup files
Non-File Backup Sets (e.g. Microsoft SQL Server)	Before spooling backup files to temporary directory	After spooling backup files to temporary directory (i.e. before the first backup file is uploaded)

Note: You should never backup an application while it is running as this can result in inconsistent and unusable files getting backed up. Please use the "Volume Shadow Copy" feature if you're running Windows XP/2003 or make use of the Pre-Backup Command feature to shutdown your application before running a backup job and use the Post-Backup Command feature to restart your application after the backup job has completed.

For Example

You want to stop Microsoft Outlook using the Pre-Backup Command and restart it after backup using the Post-Backup Command, create the two following text files and assigned the files to Pre-Backup and Post-Backup Command.

1. Create a text file named "OutlookClose.vbs" using notepad with the following two lines:

```
Set objOLK = createObject("Outlook.Application")
objOLK.quit
```

2. Create a text file named "OutlookStart.bat" using notepad with the following line:

```
"C:\Program Files\Microsoft Office\OFFICE11\OUTLOOK.EXE"
```

5.7 Temporary directory

If you are running a file backup job with in-file delta enabled or a database type backup job, Backup To The Web will generate temporary files and the directory that will be used to store all these files are defined by [Setting] -> [Temporary directory for storing backup files]. Please set this to a non-system disk partition that has enough free space to avoid problems.

You can set the [Temporary directory for storing backup files] to a mapped network drive. If you choose to do this, please use a UNC path (e.g. \\SERVER\SHARE) and don't forget to configure the [Backup Set] -> [Network Resources Authentication for Windows] setting.

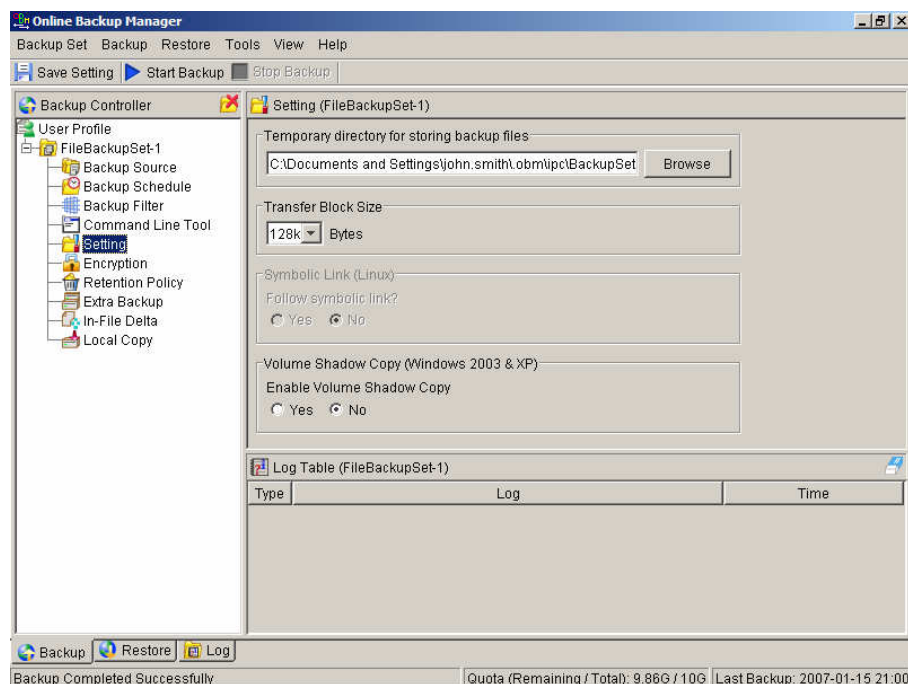
To conserve the use of disk space, you can set the [Remove temporary files after backup] option to delete the temporary files automatically after a backup job has finished.

5.8 Transfer Block Size

Transfer block size defines the block size Backup To The Web will use to transfer your backup blocks. Generally, backup jobs using a larger block size will have better performance, because of the smaller number of connections involved.

However, some firewalls or proxy servers may block out-going network traffic (HTTP/HTTPS POST method) with large block size for security reasons. If you are in a network with this type of restriction, please lower the transfer size value and try again.

To change the transfer block size of any backup set, please select the [Setting] node on the left panel to invoke the [Setting] panel on the right. You can then make changes to the [Transfer Block Size]. After you have made your changes, just press the [Save Setting] button on the toolbar.



5.9 Follow Symbolic Link (Linux/Unix/Mac only)

Under Unix/Linux/Mac, users can create a symbolic link to link a file/directory from another directory. This setting defines whether you want Backup To The Web to traverse any symbolic links encountered on your backup path.

To change the follow symbolic link of any backup set, please select the [Setting] node on the left panel to invoke the [Setting] panel on the right. You can then make changes to the [Follow Symbolic Link]. After you have made

your changes, just press the [Save Setting] button on the toolbar.

5.10 Microsoft's Volume Shadow Copy Service (VSS)

Microsoft Volume Shadow Copy Service (VSS) allows you to backup files that are exclusively opened. Without VSS, you will get the error message "The process cannot access the file because another process has locked a portion of the file" if you are trying to backup a file that is exclusively opened (e.g. Outlook PST file).

Please note that VSS is only available on Windows XP / 2003 and you must have administrative privileges to start the VSS service on a computer. Also VSS will only work if at least one of your partitions is formatted using NTFS.

If you are running Windows 2003, please install the Windows 2003 VSS hot fix available in <http://support.microsoft.com/default.aspx?scid=kb;en-us;887827> before running VSS.

If you are running into problems with VSS running on Windows XP / 2003, Microsoft's recommendation is to try re-registering the Volume Shadow Copy Service again. Simply run the script [Backup To The Web Home]\bin\RegisterVSS.bat to do so.

For more information, please take a look at the following page for a technical introduction to Volume Shadow Copy Services (VSS):

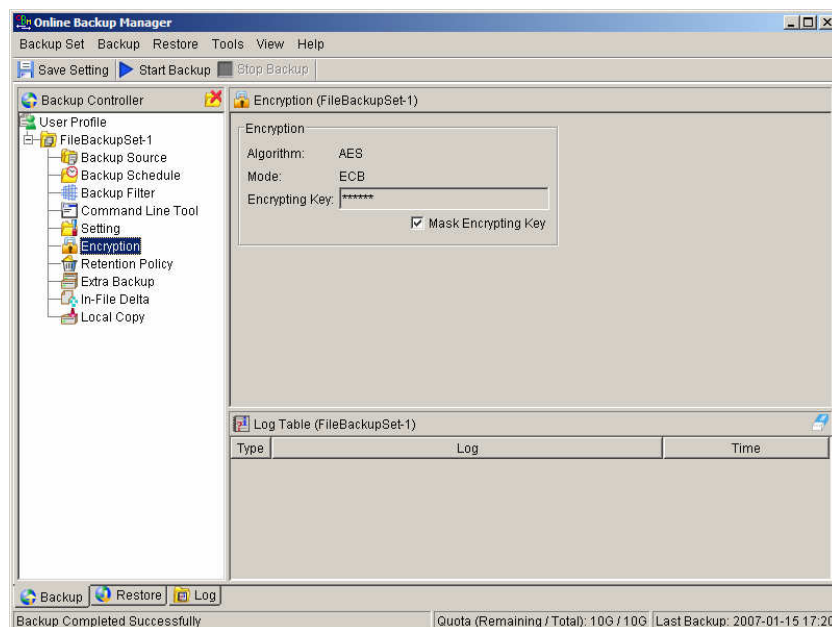
<http://technet2.microsoft.com/windowsserver/en/library/2b0d2457-b7d8-42c3-b6c9-59c145b7765f1033.mspx>

5.11 Encryption

Before your files are sent to the Offsite Backup Server, all your files are compressed and encrypted using your choice of encryption algorithm, mode and key. The following table explains all encryption parameters available within a backup set.

Note:

Encryption settings are set at backup set creation time and cannot be modified. You need to create a new backup set if you want to change your encryption settings for a backup set.



Parameter	Description
Encryption Algorithm	It defines the encrypting algorithm used to encrypt your backup files. There are

	<p>three encryption algorithms available:</p> <p>[AES] Advanced Encryption Standard algorithm [DESe] Triple DES algorithm [Twofish] Twofish algorithm</p> <p>We recommend the use of AES as it has been chosen as the encryption standard for commercial use. Please refer to references on Cryptography for more information about encryption algorithms.</p>
Encryption Mode	<p>It defines the encrypting mode used to encrypt your backup files. There are two encryption modes available:</p> <p>[ECB] Electronic Cook Book Mode [CBC] Cipher Block Chaining Mode</p> <p>We recommend the use of CBC mode as it offers better security. Please refer to references on Cryptography for more information about encryption modes.</p>
Encrypting Key	<p>The key used to encrypt all files within a backup set. Please write it down on paper and keep it in a safe place. If the key is lost, you will not be able to recover your files from the encrypted backup files.</p>

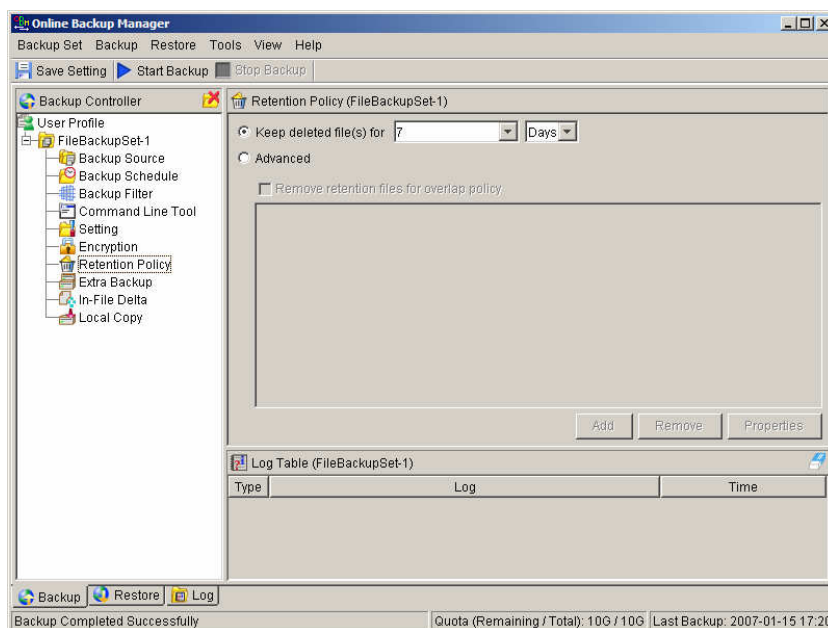
5.12 Retention Policy

During backup, if Backup To The Web finds that you have deleted a file (or updated a file) on your computer, it will put the corresponding deleted (or updated) file already backed up on the backup server into a retention area. The retention policy setting defines how long files inside the retention area will be kept on the backup server before they are deleted automatically from the server.

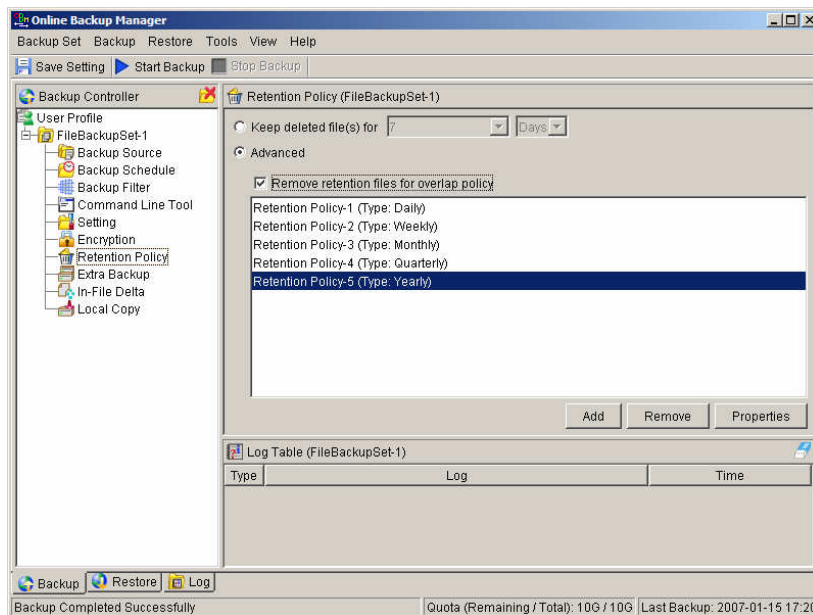
Retention policy will only affect "retained" file (i.e. files that have already been deleted or updated on your computer and thus are moved to the retention area of the backup server). For those files that have not been updated on your computer, the backup of these files is kept in the data area on the backup server and won't be affected by the setting of retention policy. These backup files of unchanged files will stay on the backup server forever until the original files are removed (or updated) from your computer.

Standard Retention Policy

The [Standard] retention policy allows you to delete retained files automatically after a user defined number of days or after a user defined number of backup Jobs. To change the retention policy setting of any backup set, please select the [Retention Policy] node on the left panel. You can then make changes to your retention policy under the [Retention Policy] section. After you have made your changes, just press the [Save Setting] button on the toolbar.



Advanced Retention Policy



The [Advanced] retention policy allows you to configure a more flexible retention policy. It allows you to keep a set of snapshots of all backup files based on the time of the backup Jobs. For example, you can configure the advanced retention policy to keep the following sets of backup files to mimic the retention policy of the old days when you were still doing tape rotations:

- ◆ All files available within the last 7 days
- ◆ All files available on the last 4 Saturdays within the last 28 days
- ◆ All files available on the 1st day of each month within the last 3 months

- ◆ All files available on the 1st day of each quarter within the last 12 months
- ◆ All files available on the 1st day of each year within the last 7 years

To do so, you need to setup your advanced retention policy as follows:

- ◆ Type = Daily; Number of copy to keep = 7
- ◆ Type = Weekly; Frequency = Saturday; Number of copy to keep = 4
- ◆ Type = Monthly; Frequency = Day 1; Number of copy to keep = 3
- ◆ Type = Quarterly; Frequency = Day 1 of Jan, Apr, Jul, Oct; Number of copy to keep = 4
- ◆ Type = Yearly; Frequency = Date 01-01; Number of copy to keep = 7

Assuming today is 17-Jan-2006, if [Remove retention files for overlap policy] is NOT enabled, a total of 22 snapshots (provided you have run backups daily for more than 7 years) will be kept on the server accordingly, i.e.:

Daily	Weekly	Monthly	Quarterly	Yearly
16-Jan-2006	14-Jan-2006	01-Jan-2006	01-Jan-2006	01-Jan-2006
15-Jan-2006	07-Jan-2006	01-Dec-2005	01-Oct-2005	01-Jan-2005
14-Jan-2006	31-Dec-2005	01-Nov-2005	01-Jul-2005	01-Jan-2004
13-Jan-2006	24-Dec-2005		01-Apr-2005	01-Jan-2003
12-Jan-2006				01-Jan-2002
11-Jan-2006				01-Jan-2001
10-Jan-2006				01-Jan-2000

If [Remove retention files for overlap policy] is enabled, only the following snapshots are kept:

Daily	Weekly	Monthly	Quarterly	Yearly
16-Jan-2006	14-Jan-2006	01-Jan-2006	01-Jan-2006	01-Jan-2006
15-Jan-2006	07-Jan-2006	01-Dec-2005	01-Oct-2005	01-Jan-2005
14-Jan-2006	31-Dec-2005	01-Nov-2005	01-Jul-2005	01-Jan-2004
13-Jan-2006	24-Dec-2005		01-Apr-2005	01-Jan-2003
12-Jan-2006				01-Jan-2002
11-Jan-2006				01-Jan-2001
10-Jan-2006				01-Jan-2000

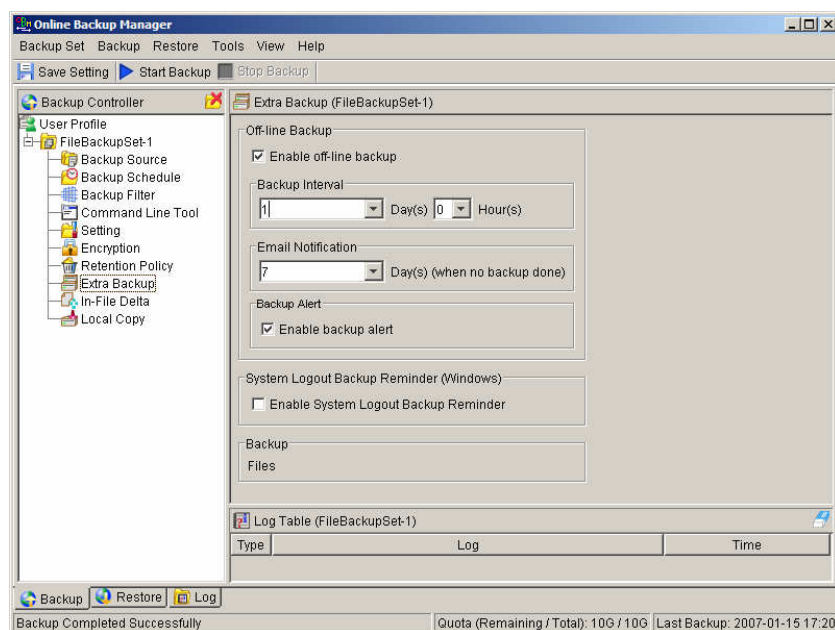
The weekly policy overrides the daily policy so the snapshots of 10-Jan-2006, 11-Jan-2006, 12-Jan-2006, 13-Jan-2006 and 14-Jan-2006 are removed. The monthly policy overrides the weekly policy so the snapshots of 24-Dec-2005 and 31-Dec-2005 are removed. The same applies to the monthly, quarterly and yearly policy giving a total of 11 snapshots.

5.13 Extra Backup (Off-line backup, Logout Reminder)

Off-line backup is basically designed for notebook users who are off-line most of the time and cannot rely on the backup schedule to backup regularly. The "Backup Interval" allows notebook users to specify the interval that they would like their data to backup. When the machine is online and this interval has elapsed, backup will run automatically. If "Backup Alert" is enabled, a popup message box will ask the user to confirm starting the backup.

The "Email Notification" setting is the number of days since the last backup that triggers the backup server to send email notification to the client to remind him to run an off-line backup.

When the "Logout Reminder" setting is enabled, a popup message box will ask the user to start a backup before logging out / shutting down Windows.



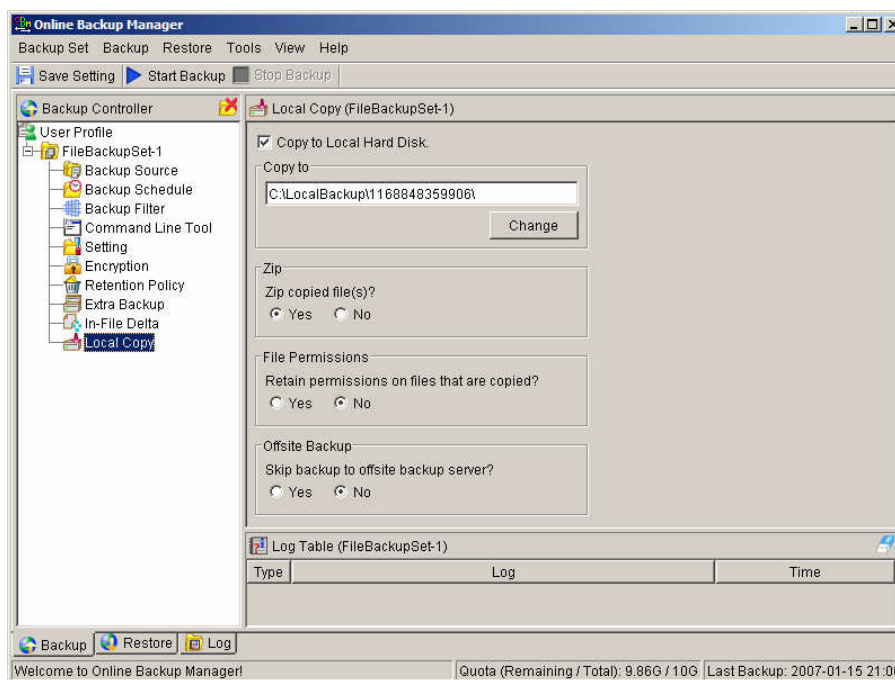
5.14 In-File Delta

Please refer to the [in-file delta section](#) for more information on this topic.

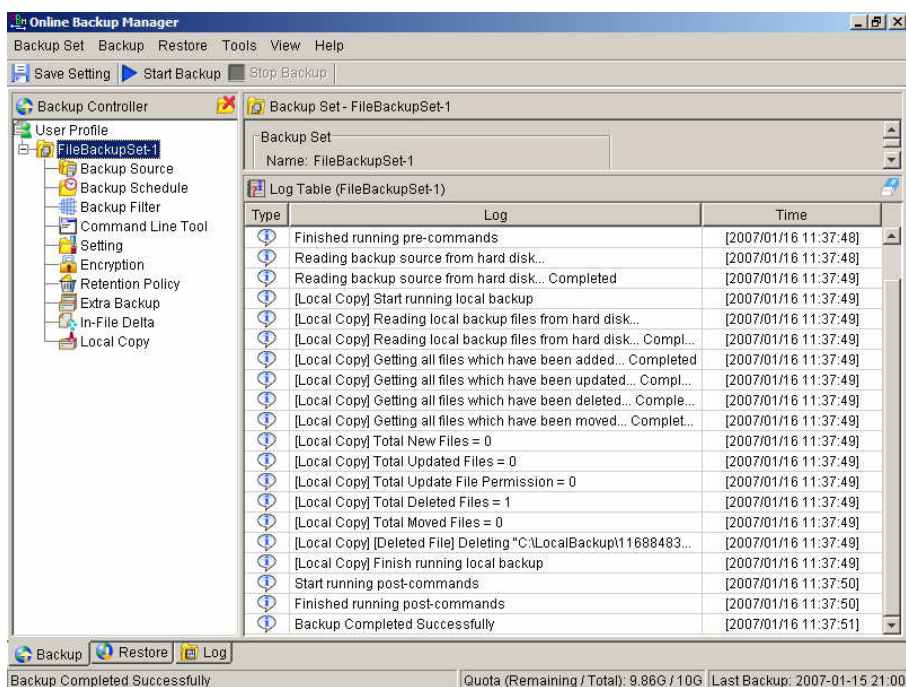
5.15 Local Copy

If you want to save an extra copy of backup data on your local hard disk (in addition to a copy of backup data stored on the backup server) to minimize file-restoring time and/or to provide an extra safety precaution, you can do the following:

- i. Open Backup To The Web from the System Tray (see previous sections for details)
- ii. Setup your backup set (see previous sections for details)
- iii. Select [Local Copy] under your backup set from the left panel



- iv. Check the [Copy to Local Hard Disk] checkbox
- v. Enter a directory to where you want an extra copy of your backup files to be stored in the [Copy to] field provided (preferably a directory under another hard disk)
- vi. (Optional) Select the [Yes] radio button if you want to store your backup files in compressed form to conserve free space usage
- vii. An extra copy of backup will be saved in the [Copy to] directory when you run your backup job



If you want to make local copy to a directory located on a NetWare server (or another computer is a windows workgroup) and you are getting "Network drive is not accessible" error message, please try adding the following command as a [Pre-backup command]

```
net use \\SERVER\SHARE [PASSWORD] /USER:[DOMAIN | MACHINE_NAME]\[USERNAME]
```

E.g.

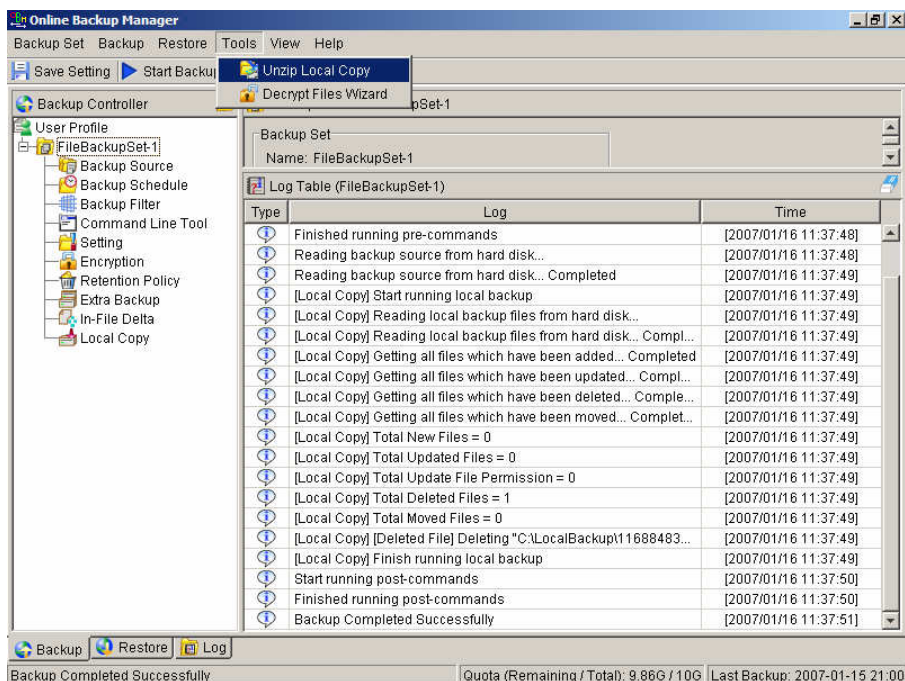
```
C:\> net use \\Netware\Data password /USER:peter
C:\> net use \\WorkgroupComputer1\Data password /USER:WorkgroupComputer1\peter
```

This will authenticate the current process with the NetWare server (or another computer is a windows workgroup). Backup will then be allowed to run correctly.

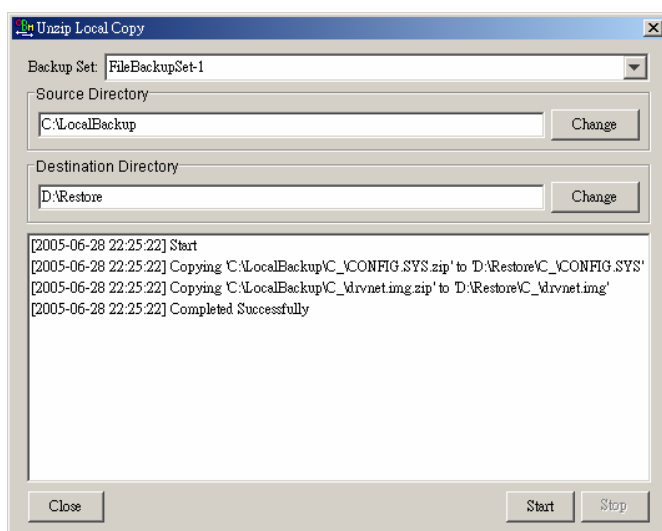
How to restore "Local Copy" files

"Local Copy" files are stored in the [Copy to] directory (under [Local Copy] setting). To restore backup files, please do the followings:

- i. Choose [Tools] -> [Unzip Local Copy]



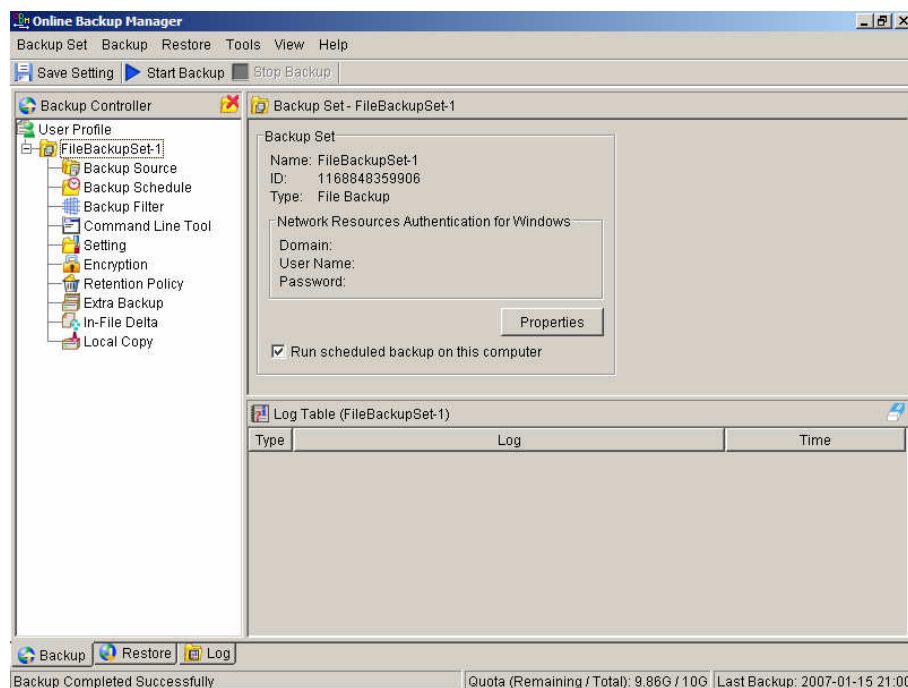
- ii. Select the required [Backup Set] from the drop down list



- iii. Fill in the [Source Directory] (directory where "Local Copy" files are stored) and [Destination Directory] (directory to where you want "Local Copy" files to be restored)
- iv. Click [Start]

5.16 Using One Backup Account for Multiple Computers

Backup To The Web allows you to backup multiple computers using a single backup account. To backup multiple computers, you need to create a different backup set to backup each individual computer and to configure the [Run scheduled backup on this computer] checkbox.



For version 5.2

Since the computer that created the backup set will have its computer name associated with the backup set. The

backup scheduler running on each computer will only run backup sets with the same computer name as itself. Thus, you just need to make sure that all your computer names using a single backup account are unique.

For version 5.1 or Earlier

You must configure Backup To The Web on each computer that it only runs scheduled backup for the intended backup sets only. If this is not setup properly, scheduled backup job of the same backup set from different computers will both be started. This will result in lots of checksum errors and files being deleted on the backup server.

To allow multiple computers to be backed up under a single backup account, you are required to do the following **for each computer** that has installed Backup To The Web under the same backup account:

- i. Logon to one of the computers that has Backup To The Web installed under the same backup account.
- ii. Open Backup To The Web and select a backup set that is not intended to run on this computer from the left panel.
- iii. Make sure that the [Run scheduled backup on this computer] checkbox on the right panel is not checked.
- iv. Repeat the previous step for the rest of the backup sets that are not intended to run on this computer.
- v. Repeat steps ii to iv for each computer that has Backup To The Web installed under the same backup account.

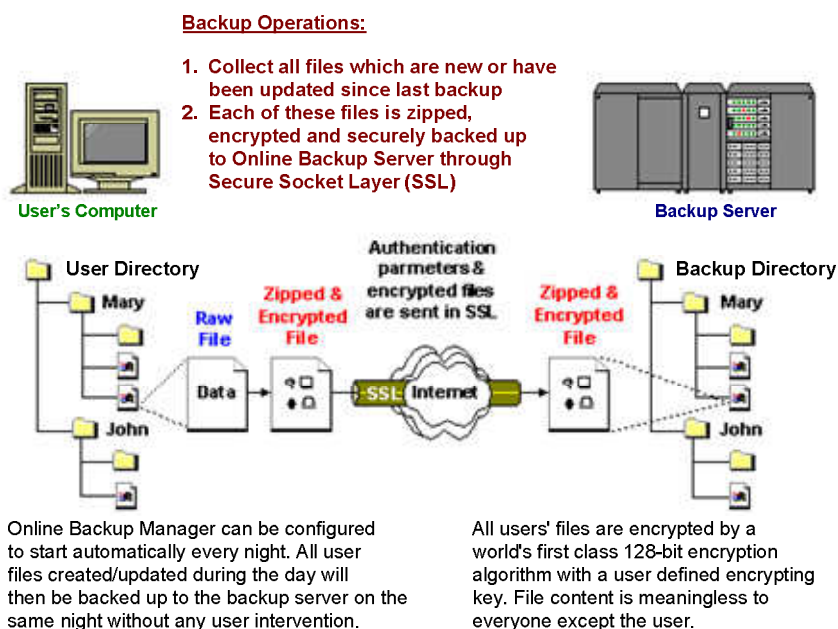
IMPORTANT If you create a new backup set or want to backup another computer using the same backup account at a later date (this implies that you need to create an additional backup set under this backup account for the new computer), please make sure to repeat the procedure above (i.e. uncheck the [Run scheduled backup on this computer] checkbox for the added backup set) for each computer.

6 Backing Up Files

This chapter describes how files are backed up by Backup To The Web to the backup server

6.1 How files are backed up

The diagram below describes how Backup To The Web backs up your files.



Run backup at scheduled time automatically

Once you set your backup scheduled, a backup job will be started automatically to perform backup operation for you at your absence. You can have backup running at your scheduled time as often as you want (e.g. twice a day or hourly during office hour) without requiring doing any extra work.

Incremental Backup

Unchanged files are already backed up to server and need not to be backed up again. Backup To The Web will pick the new or updated files from your backup set files and upload only these files to the server. It significantly reduces the time required to perform the backup operation since most users update less than 5% of their total data each day.

Compress and encrypt data automatically

Data are compressed and encrypted before they are uploaded to the server. Not only does it reduce the storage space to keep you backup files, it also ensures the privacy of your data.

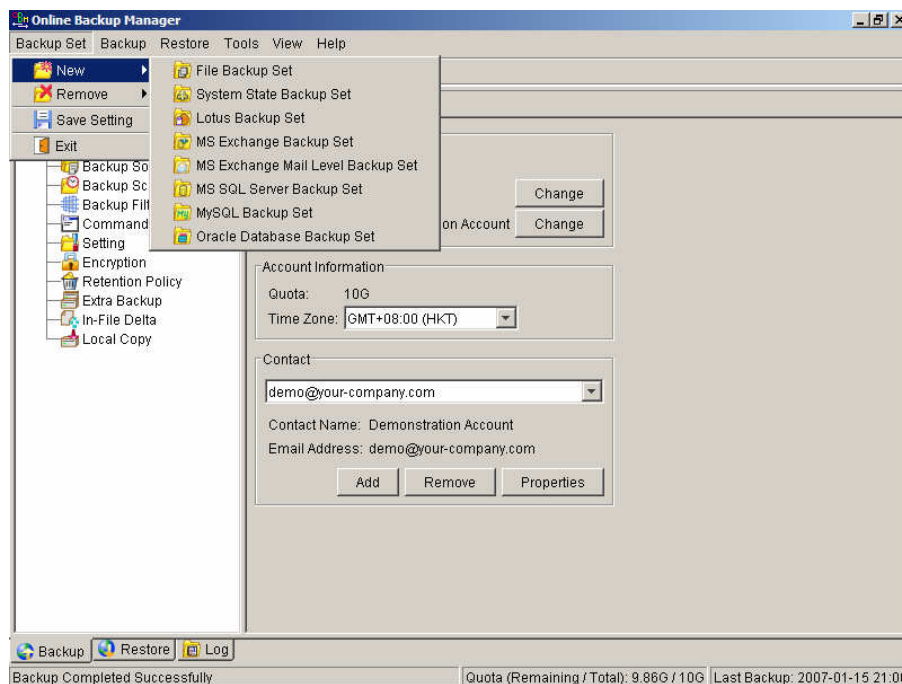
File Retention Policy

The built-in file retention policy allows you to access multiple versions of the same file or even deleted files from your backup set. Backup files are put into a retention area before they are removed from the server. If you want to get back a deleted file (or you want to get back the previous versions of an updated files) within the retention period, these files will always be available in the retention area. This feature is particularly useful when you have accidentally deleted a file or incorrectly updated a file within the file retention period (file retention period is user customizable).

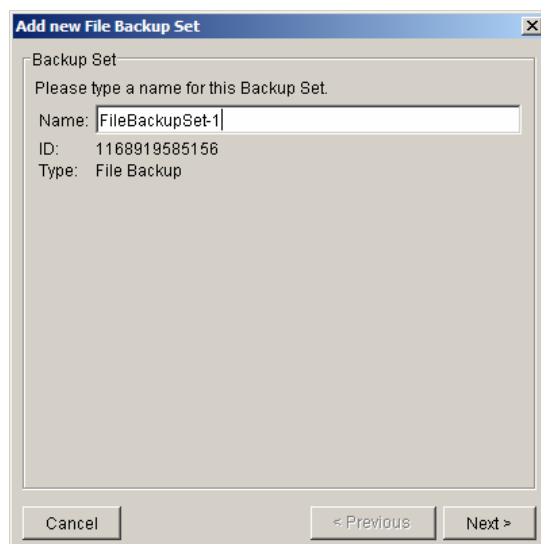
6.2 Backup files directly to the backup server

You can backup your data to an Offsite Backup Server by following instructions below.

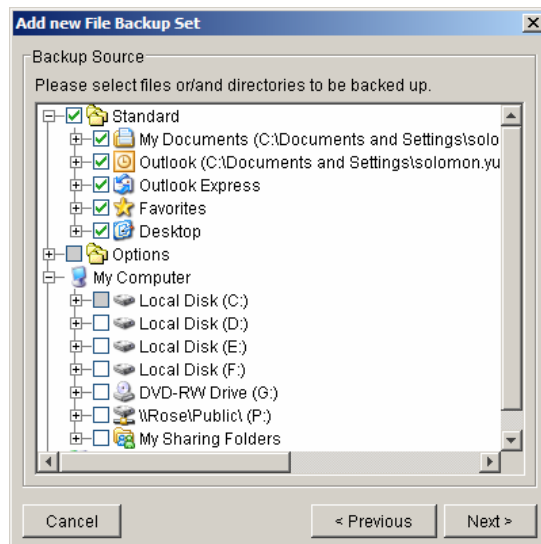
- vi. Open Backup To The Web
- vii. Right click Backup To The Web icon available in the system tray and choose [Open]
 - a. Create a backup set
 - b. From the Menu, Choose [Backup Set] -> [New] -> [File Backup Set]



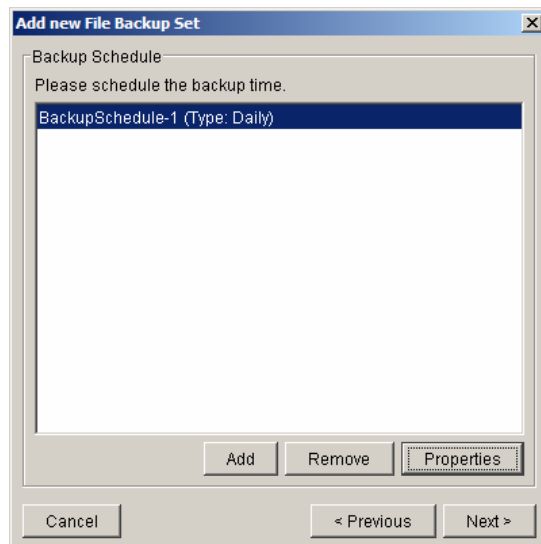
- c. Enter a name for your backup set



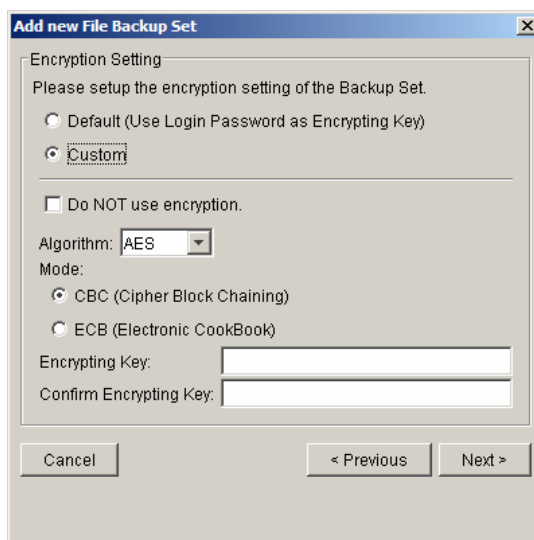
- d. Select the files/directories you want to backup



- e. Set the backup schedule (Note: You can have more than one schedule in a backup set)



- f. Set the encryption algorithm, encryption mode and encrypting key for this backup set
 (Hint: For the sake of simplicity, just select the [Default] radio button (your encrypting key is set to be the same as your backup account password))



Add new File Backup Set

Encryption Setting

Please setup the encryption setting of the Backup Set.

☐ Default (Use Login Password as Encrypting Key)

☒ Custom

☐ Do NOT use encryption.

Algorithm: AES

Mode:

☒ CBC (Cipher Block Chaining)

☐ ECB (Electronic CookBook)

Encrypting Key:

Confirm Encrypting Key:

Cancel < Previous Next >

viii. Run Backup

- a. Select the backup set you want to run on the left panel and press the [Start Backup] button (▶) on the toolbar
- b. Select [Off-site Backup Server] to start backing up your files to an Offsite Backup Server.



Confirm Backup Start

Backup to

☒ Offsite Backup Server

☐ Local Hard Disk (Seed Load Utility)

Start the backup for [FileBackupSet-1] ?

OK Cancel Options >>

Note:

1. You can have more than one backup set in a backup account.
2. Please write the encrypting key down on paper and keep it in a safe place. If you lose your encrypting key, you will **not be able to restore** your backup files.

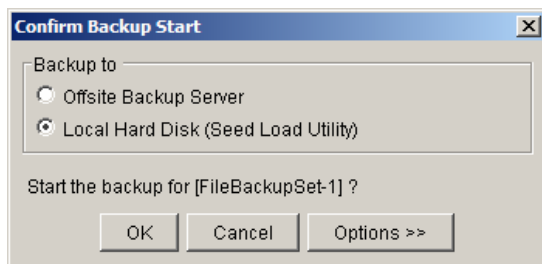
6.3 Backup files to removable hard disk (seed loading)

If you have a lot of data (e.g. 300GB) to backup to the backup server, it would take a considerable amount of time to perform the first full backup through the Internet. If you run into this problem, you can use the Seed Loading Utility to backup your backup set to local hard disk (instead of directly to the backup server) and then transport the backup data, using removable hard disk, to the offsite backup server. The administrator can then load all your backup files from your removable hard disk into your backup account. This could then save you days (even weeks) of performing your first full backup. Since subsequent backup will be incremental backup (only new or updated files will be uploaded to the server) you should have no problems uploading your backup data afterwards.

To perform seeding loading, please do the following:

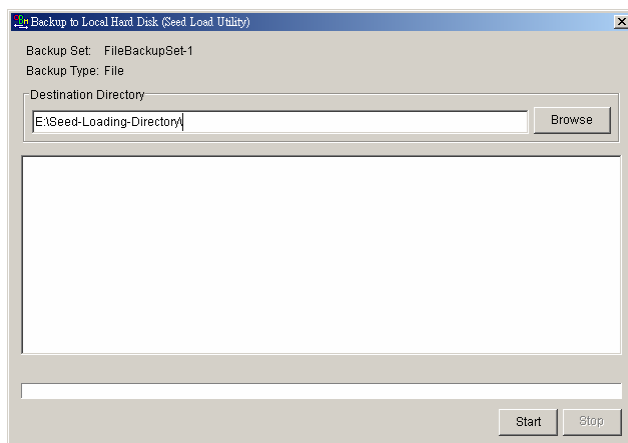
- i. Open Backup To The Web from the System Tray (see previous sections for details)
- ii. Setup your backup set (see previous sections for details)

- iii. Select the backup set you want to run on the left panel and press the [Start Backup] button (►) on the toolbar
- iv. Select [Local Hard Disk (Seed Load Utility)] to start backing up your files to local hard disk and press the [OK] button

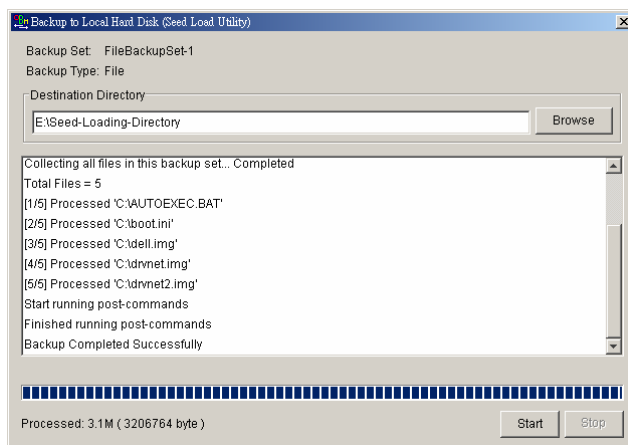


- v. Enter a directory where you want all backup files to be stored in the [Destination Directory] field and press the [Start] button.

Please make sure you have enough free space in the directory specified. If you are going to transport a removable hard disk to the offsite backup server, please enter a directory under your removable hard disk here.



- vi. You should get the message "Backup Completed Successfully" as shown below after all backup files are spooled to the directory you specified.



- vii. Transport the data specified in the [Destination Directory] field to the offsite backup server

7 Restoring Files

This chapter describes different ways files can be restored from to the backup server

It is very important to write down your encrypting key on paper and keep it in a safe place because there will be no way to restore your backup files if you lose your encrypting key.

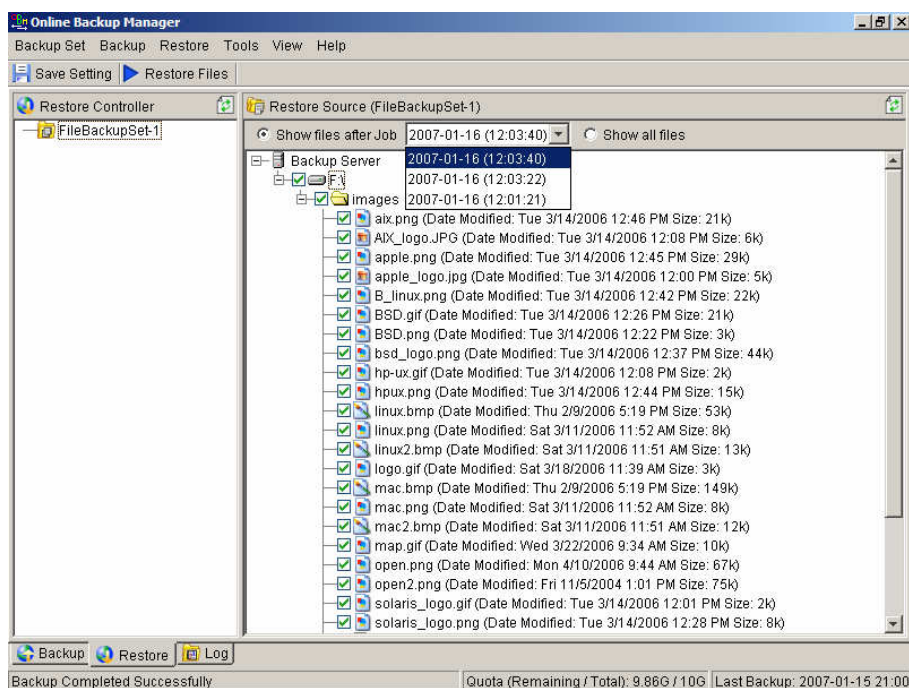
7.1 Restore backup files directly from backup server

You can use either Backup To The Web or the web restorer to restore backup files from the backup server.

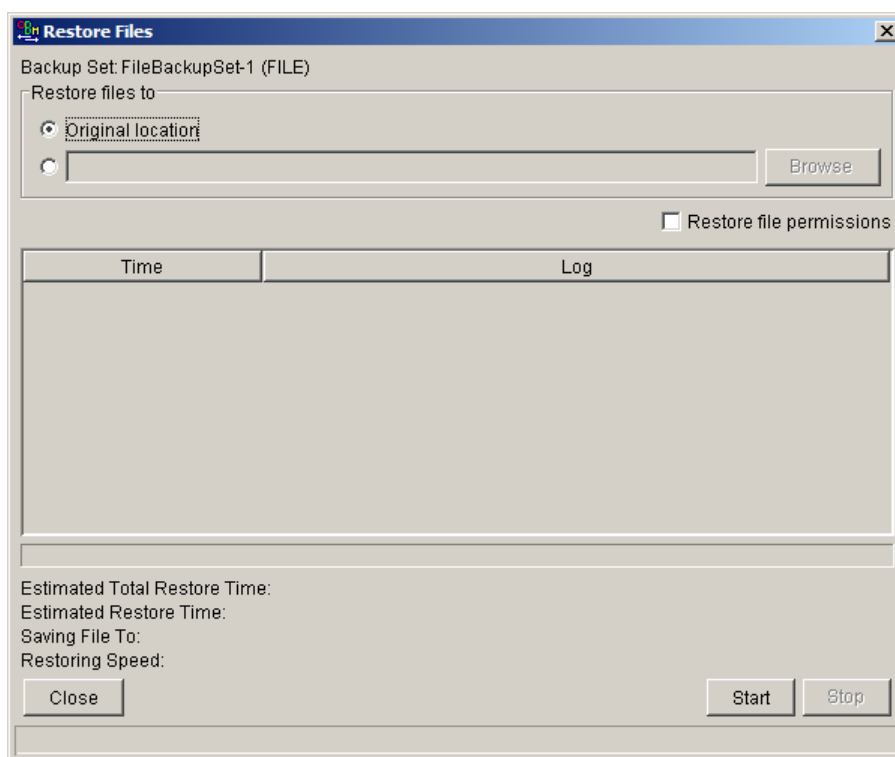
Using Backup To The Web

You can restore your data from the backup server by following instructions below.

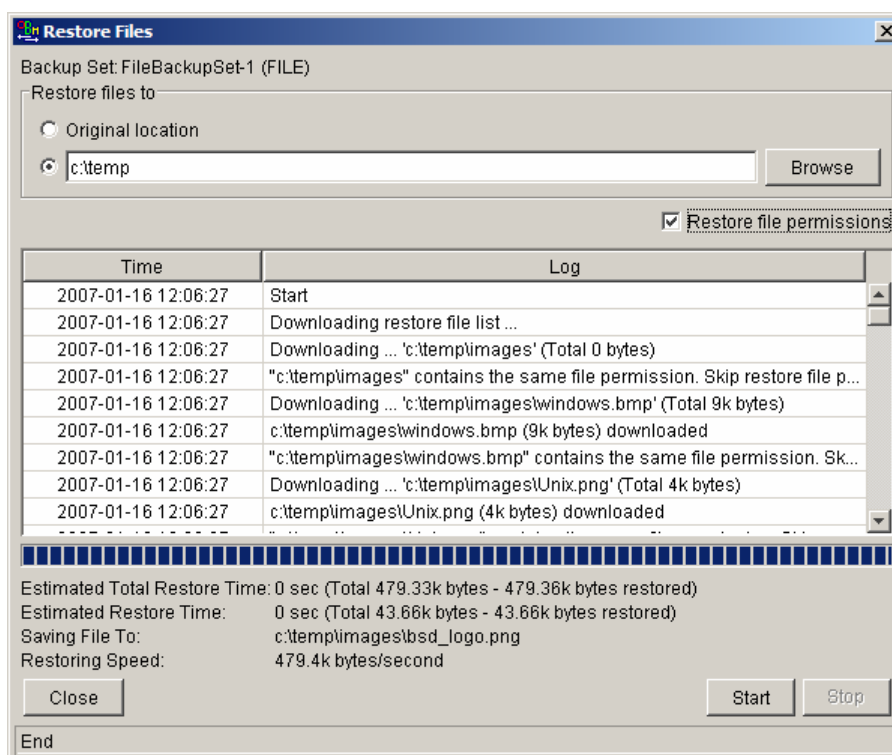
- i. Open Backup To The Web from the System Tray (see previous sections for details)
- ii. Select the [Restore] tab at the bottom part of Backup To The Web



- iii. Select the backup set from which you would like files to be restored from the left panel
- iv. Select the snapshot of your backup files that you would like to restore from the backup server by using [Show files after Job] drop down list
- v. Select the files that you would like to restore and press the [Restore Files] button on the toolbar



- vi. Use the [Browse] button to select the directory to where you want files to be restored (or simply select [Original location] to restore files to their original path)
- vii. Files will be restored automatically as shown below (a file won't be downloaded from the backup server again if an identical file exists on local path already)



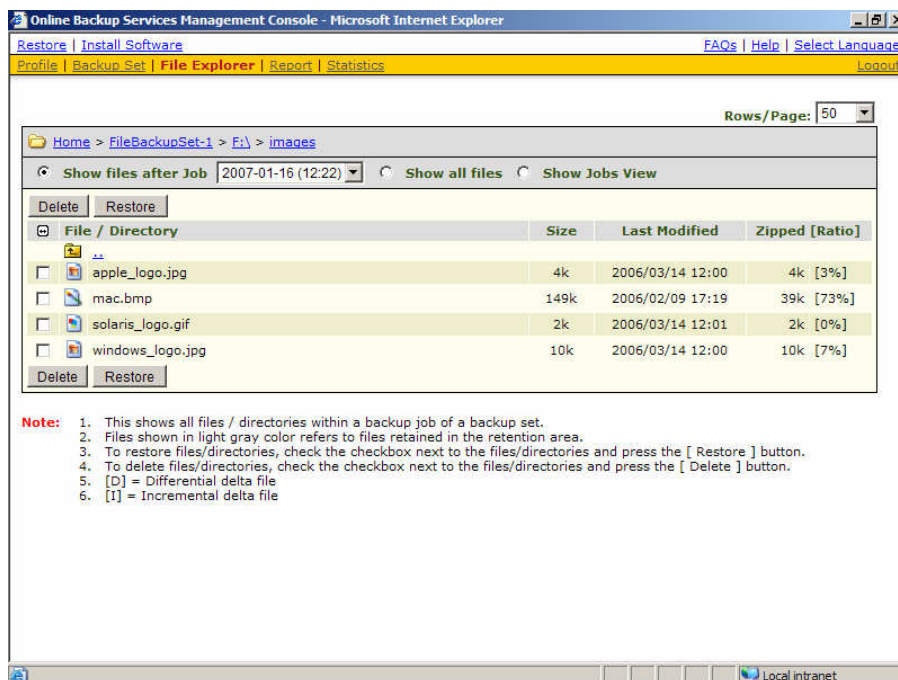
Using the web interface

You can restore your data from an Offsite Backup Server by following instructions below.

- i. Logon to the Offsite Backup Server web interface
- ii. From the top menu, click [File Explorer]

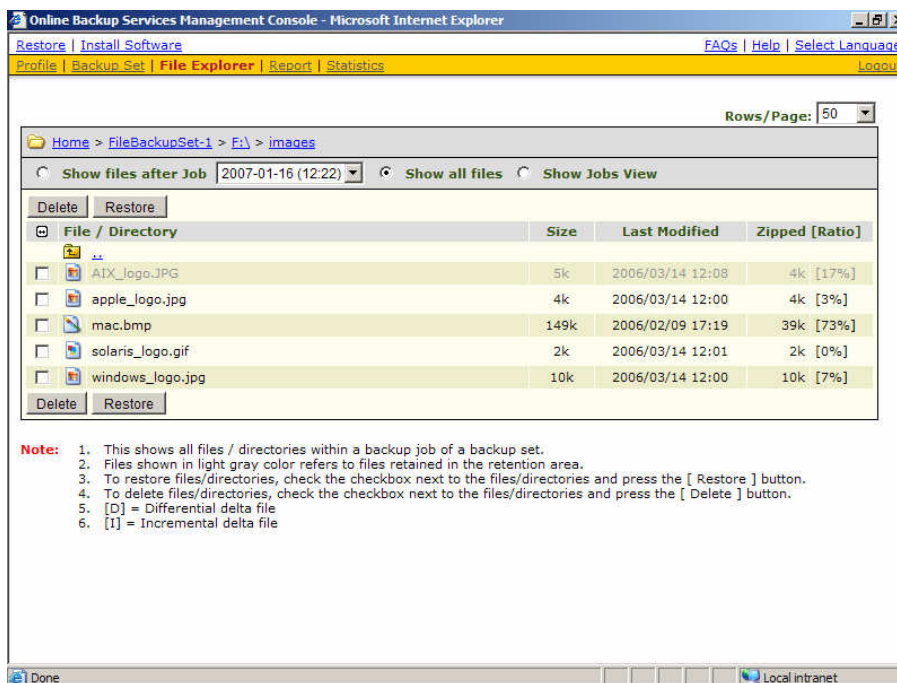


- iii. Click the [Backup Set] link that contains the files that you want to restore
- iv. Select the snapshot of your backup files that you would like to restore from the backup server by using [Show files after Job] drop down list

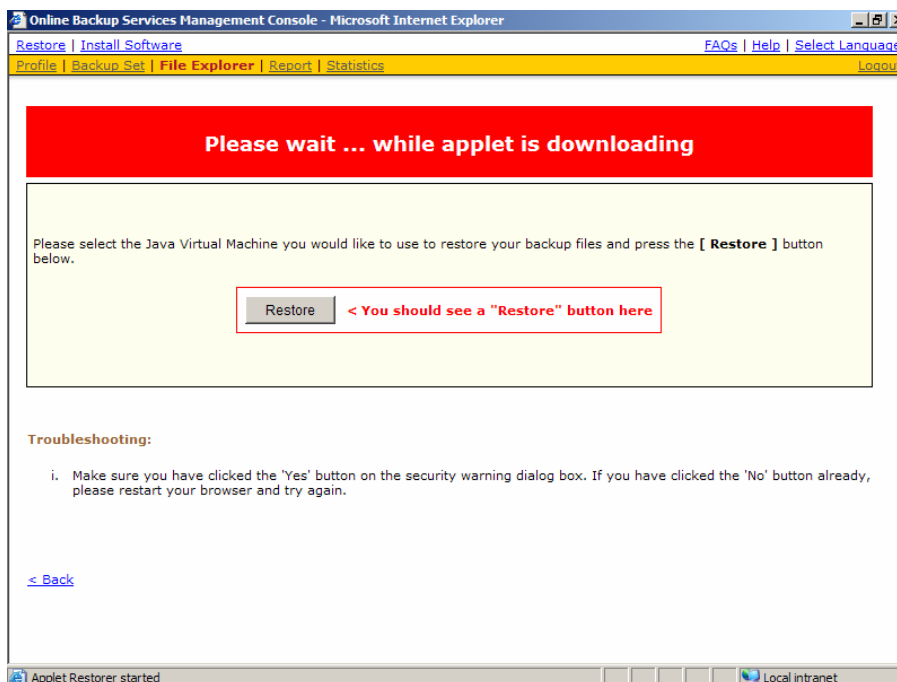


- v. If you want to see all the different versions of all files (shown as gray below), just choose the [Show all files] radio button on the [File Explorer] page.

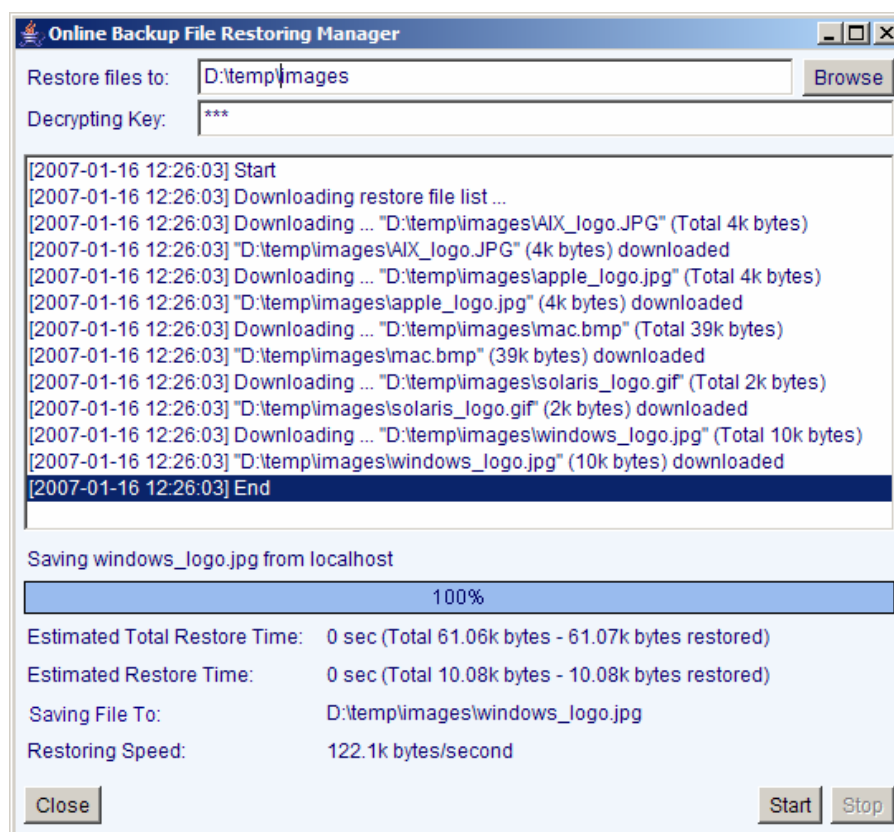
Files, which are shown in gray below (e.g. AIX_logo.JPG) are being stored in the retention area on the backup server but you can still restore these files from the backup server.



- vi. Select the files that you would like to restore and press the [Restore] button on the toolbar
- vii. A dialog shown below would appear



- a. Press the [Restore] button
- b. Enter the directory to which backup files should be restored to in the [Restore files to] textbox

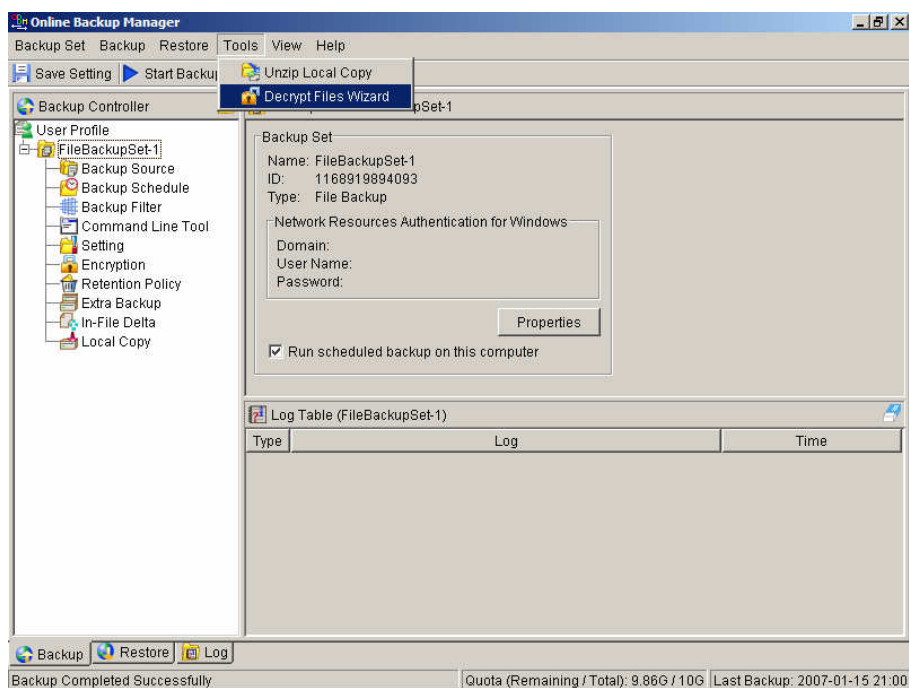


- c. Enter the encrypting key which will be used to decrypt your backup files upon restoring your backup files
- d. Press the [Start] button

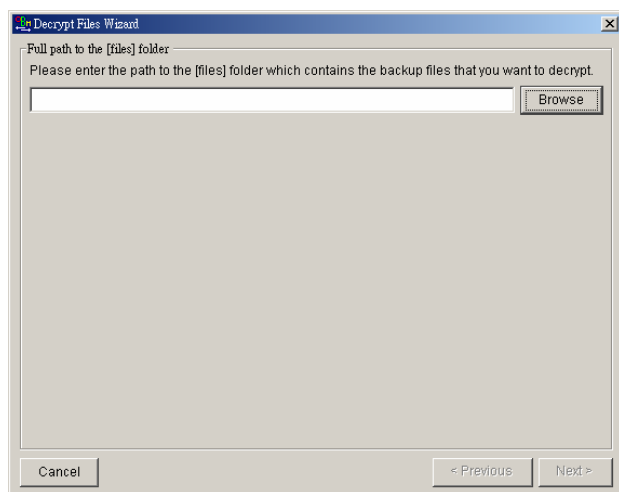
7.2 Restore backup files from removable hard disk

If you want to restore lots of backup files from the backup server and you find it too slow to restore all your backup files from the backup server through the internet. You can ask your backup services provider to send you all your backup files in removable hard disk (or CD/DVD). However, all backup files stored on backup server are in encrypted format. You need to decrypt them back to their original format before you can use them. To decrypt your backup files from removable media, please do the followings:

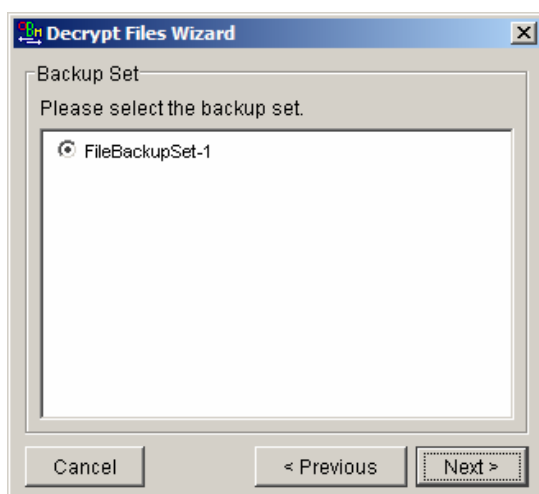
- i. Open Backup To The Web from the System Tray
- ii. Select the [Tools] -> [Decrypt Files Wizard] from the menu



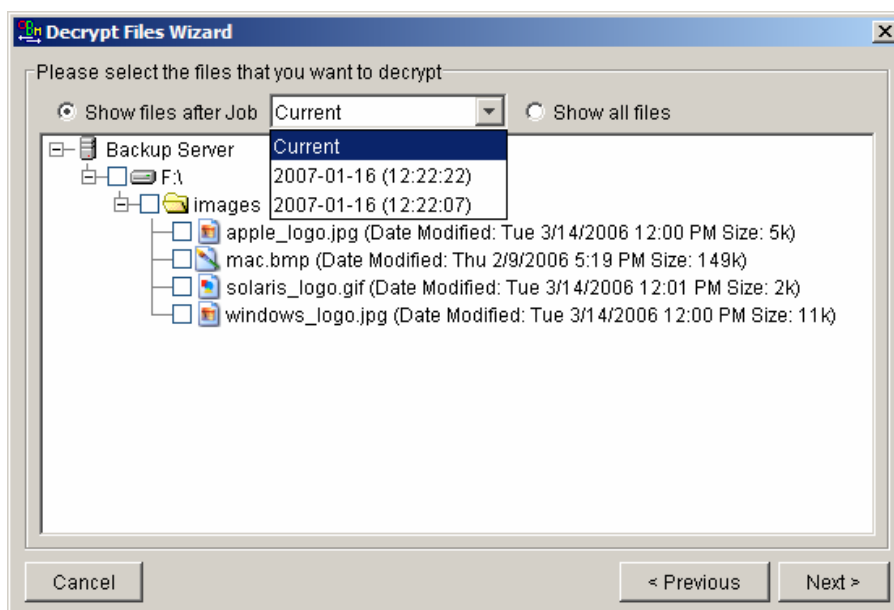
- iii. Use the [Browse] button to locate the "files" directory (provided by your backup provider in removable hard disk or DVD) which contains the backup files that you want to decrypt



- iv. If you have more than one backup set under the "files" directory, select the [Backup Set] which contains the backup files that you want to decrypt

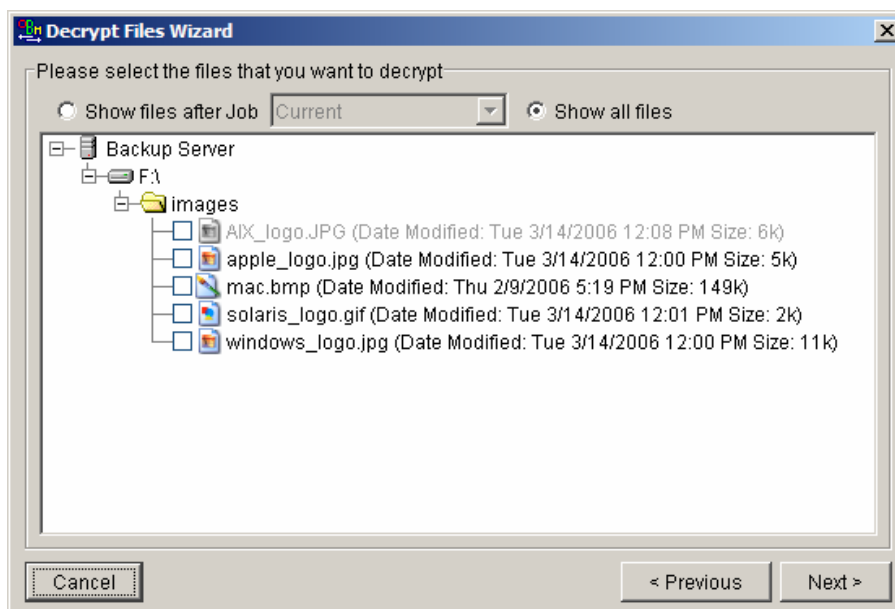


- v. Select the snapshot of your backup files that you would like to restore from the removable media by using [Show files after Job] drop down list

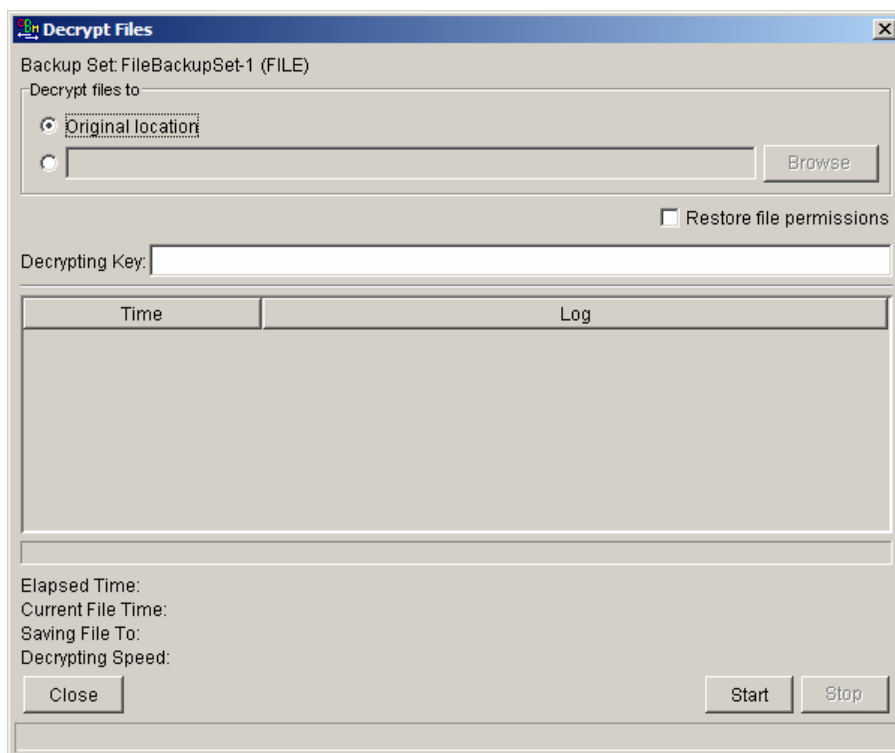


- vi. If you want to see all the different versions of all files (shown as gray below), just choose the [Show all files] radio button on the [Decrypt Files Wizard] dialog.

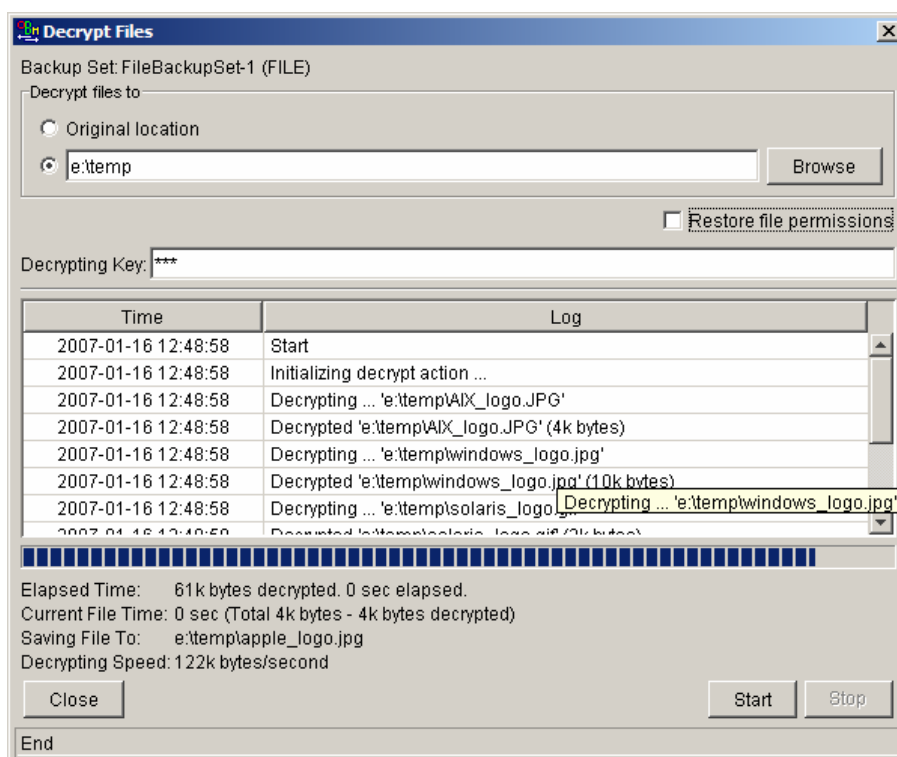
Files, which are shown in gray below (e.g. AIX_logo.JPG) are being stored in the retention area on the removable media (but you can still restore these files).



- vii. Enter the directory to which you want the backup files to be restored to in the [Decrypt files to] section and enter the [Decrypting Key] (the same as the encrypting key of this backup set)



- viii. Press the [Start] button



7.3 IP addresses Restriction for Online Restore

Online file restore operation can be restricted by IP addresses. You can ask your backup service provider to restrict online file restoration for your backup sets by IP addresses to only allow people from authorized IP addresses to restore files from the backup server. To check if online file restore of any backup set is restricted this way, please take a look at the web interface of OBS, [Online Backup Services Management Console] -> [Backup Set] -> [Online Restore IP restriction] (shown below).

Users are not allowed to update the [Online Restore IP restriction] directly. Please ask your backup services provider to do the changes for you.

Online Backup Services Management Console - Microsoft Internet Explorer

[Restore](#) | [Install Software](#) [FAQs](#) | [Help](#) | [Select Language](#)

[Profile](#) | **[Backup Set](#)** | [File Explorer](#) | [Report](#) | [Statistics](#) [Logout](#)

Command

Working Directory

[\[Help\]](#) **Post-backup command**

1 . Name [[Add](#)]

Command

Working Directory

[\[Help\]](#) **Online Restore IP restriction**

1 . Only from **192.168.1.10** to **192.168.1.200**

Key :

Name	Name of the backup set
Backup Source	Files/Directories that are to be included into or excluded from the backup set
Backup Schedule	Schedules when backup should be performed automatically
Enable In-File Delta	Enable In-File Delta backup feature
Block Size	Block size used to detect changes within backup files.

Done Local intranet

8 In-File Delta Technology

The chapter describes what in-file delta technology is and how in-file delta can be used to backup large database files (e.g. a 10GB Outlook.pst file) without uploading the whole database file everyday.

8.1 Overview

In-file delta technology is an advanced data block matching algorithm which has the intelligence to pick up changes (delta) of file content between two files. Using this algorithm, daily backing up of large files (e.g. a 10GB Outlook.pst file) over low-speed internet connection is made possible because it requires only the changes of information (should be marginal) since the last backup to be sent over a low-speed internet connection to complete the backup of a large file (here we assume that the full backup of the file has been saved on the backup server already).

This is what will happen in the backup of a 10GB Outlook.pst file when it is backed up by Backup To The Web with in-file delta technology.

- i. The whole files (10GB), along with its checksum file, are backed up to the backup server. This can be done directly through the internet or indirectly using the [seed loading utility](#) on a removable hard disk.
- ii. When backup runs again later (normally the next day), Backup To The Web will download a checksum listing of all data blocks of the full backup file (or last incremental backup file) from the backup server and use it to pick up all changes that have been made to the current Outlook.pst file.
- iii. Changes detected are then saved in a delta file which is uploaded to the backup server. A new checksum file is generated and is also uploaded. (This delta file is assumed to be small because the content of PST files doesn't change a lot during daily usage)
- iv. Subsequent backups of this 10GB Outlook.pst file will go through step ii and step iii again. As explained, only a small delta file and checksum file will be uploaded to the backup server.
- v. With in-file delta technology, daily backing up of large file over low-speed internet connection is now possible

Incremental in-file delta type

Incremental Delta will facilitate ease of backup. The delta is generated by comparing with the latest uploaded full or delta file. The delta file generated is the smallest possible and uses the least bandwidth during backup. For restoration, the full file and all delta files up to the required point-in-time is required to restore the file to a specific point-in-time.

Example: If you are adding around 100MB changes to a 10G Outlook.pst everyday.

After the first full backup job, Backup To The Web will continue to generate and upload delta files instead of uploading the full file until either one of the following two rules are true:

- a) Number of deltas generated since the last full backup is greater than the [Number of Delta] setting.
- b) The delta ratio (the ratio of the delta file size against the full file size) is greater than the [Delta Ratio] setting

Using incremental delta, the delta generated by comparing the current file with the latest uploaded full or delta file is around 100MB.

Since the delta file size is around 100MB daily, the delta ratio (around 1%) will not trigger a full file upload. Instead Backup To The Web will continue to generate and upload delta files until day 102 (assuming the full file was uploaded on day 1) when the number of deltas generated exceeds the [Number of Delta] setting and triggers the upload of the full Outlook.pst file. You can disable the [Number of Delta] and [Delta Ratio] if you don't want to upload the full file.

All delta files are generated with respect to changes made since the last incremental or full backup. This means

that the last full backup file and **ALL** incremental delta backup files are required to restore the latest snapshot of a backup file.

Differential in-file delta type

Differential Delta will facilitate ease of restore. The delta is generated by comparing with the latest uploaded full file. The delta file generated grows daily and uses more bandwidth during backup. For restoration, the full file and a single delta file is required to restore the file to a specific point-in-time.

Example: If you are adding around 100MB changes to a 10G Outlook.pst everyday.

After the first full backup job, Backup To The Web will continue to generate and upload delta files instead of uploading the full file until either one of the following two rules are true:

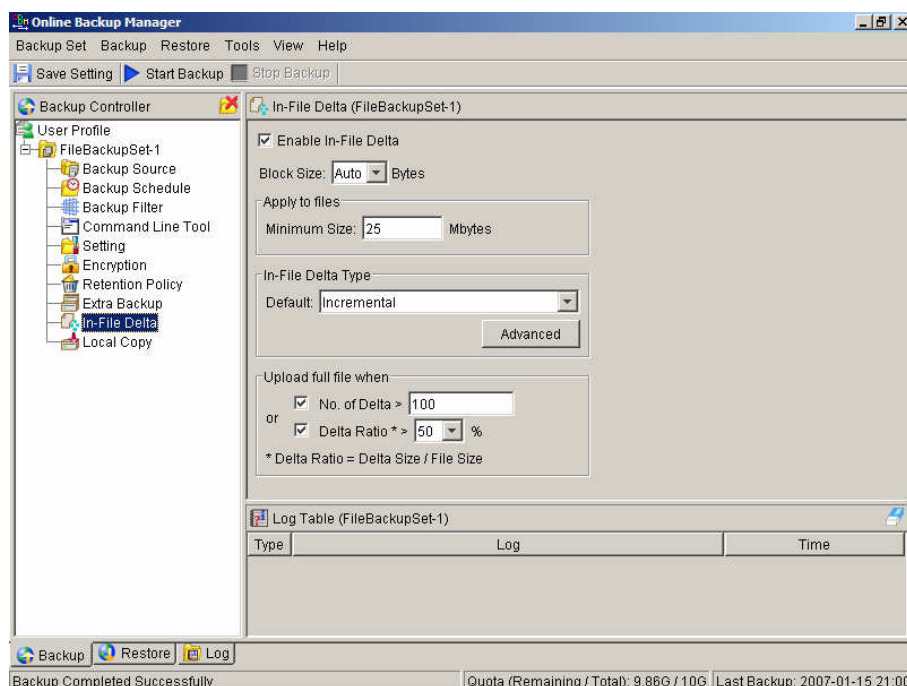
- c) Number of deltas generated since the last full backup is greater than the [Number of Delta] setting.
- d) The delta ratio (the ratio of the delta file size against the full file size) is greater than the [Delta Ratio] setting

Using differential delta, the delta generated by comparing the current file with the latest uploaded full file is around 100MB for the 1st delta, 200MB for the 2nd delta, 300MB for the 3rd delta and so on.

Since the delta file grows by 100MB daily, the delta ratio for day 52 (delta file size is approximately $51 \times 100 = 5.1\text{GB}$, assuming the full file was uploaded on day 1) being over 50% exceeds the [Delta Ratio] setting and triggers the upload of the full Outlook.pst file. You can disable the [Number of Delta] and [Delta Ratio] if you don't want to upload the full file.

All delta files are generated with respect to changes made since the last full backup file (i.e. differential backup). This means that only last full backup file and the last delta file are required to restore the latest snapshot of a backup file. This means that other intermediate delta files are only required if you want to restore other snapshots of a backup file.

Differential in-file delta backup has the benefits that a corrupted delta file would only make one particular version of a backup file non-recoverable and all other backups created by other delta files of the same file would still be intact.



8.2 Block Size

The block size defines the size of data block being used to detect the changes between the last full or delta backup file and the file sitting on the local computer right now. In general, the smaller the block size, the more likely a matched data block can be found between the last backup file and the file on local computer. It, therefore, produces a smaller delta file but it would require more processing power to detect these changes. On the other hand, in-file delta backup running with larger block size will run faster but this will generally produce a larger delta file.

In most case, the default setting [Auto] will choose the optimal block size for each file (depending on the size of the file) for you.

8.3 Minimum File Size

The [Minimum File Size] setting defines the smallest file size a file must have before the use and application of in-file delta backup technology.

If the size of a file that is being backed up is smaller than the [Minimum File Size] setting, in-file delta backup technology won't be applied to this file and the whole file, instead of just the delta file, will be uploaded to the backup server. It is not necessary to perform in-file delta backup on small files because backing up the whole file doesn't take too long anyway. Backing up the whole file instead reduces the time required to restore a backup file.

8.4 Uploading full file again

No. of Delta

The [No. of delta] setting defines the maximum number of delta files from the same full backup file to be generated and backed up to the backup server before a full backup (the whole file) of this file is uploaded to the backup server instead.

For example, if you have created 100 delta files from the full backup file already and the [No. of delta] setting is set to 100, the next backup will upload a full backup file (the whole file) instead of just the delta file. However, if the [No. of delta] rule is disabled, it will keep generating delta files and uploading these delta files to the backup server until the other delta rule forces a full backup (i.e. delta ratio exceeded). This setting is here to make sure that there will always be a full backup file after a certain number of delta files have been generated.

Delta Ratio

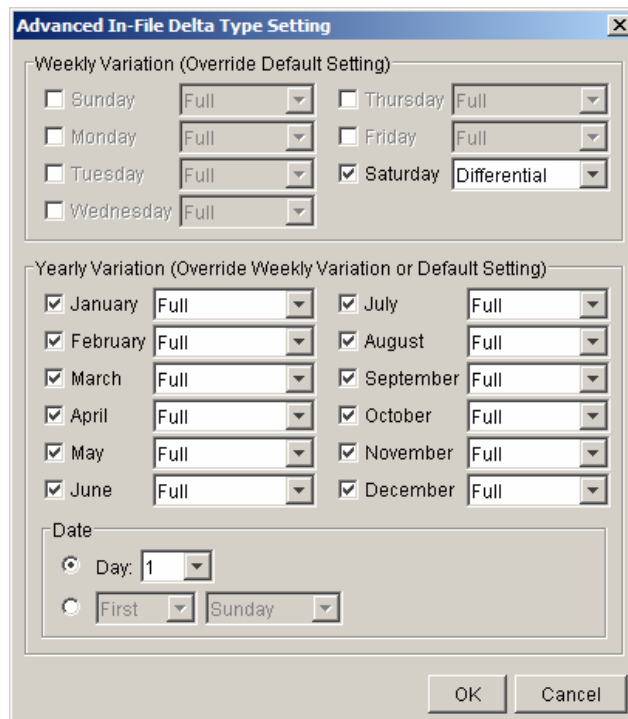
The [Delta Ratio] setting is defined to be the size of a delta file divided by the size of its full backup file (i.e. the percentage of changes detected between the last full backup file and the current file).

If the delta ratio calculated from the size of the generated delta file and the size of the full backup file is greater than the [Delta Ratio] setting, the whole file, instead of just the delta file, will be backed up to the backup server. It is done this way because the difference between backing up the whole file and the delta file is not significant and it is better to upload the whole file instead to reduce the time required to restore the file.

The default setting of [Delta Ratio] is 50%. This means that if a file changes by more than 50%, the whole file, instead of just the delta file, will be backed up and uploaded to the backup server.

8.5 Advanced In-file delta type

The [In-file delta] -> [Advanced] setting allows users to override default in-file delta type when on a certain number of days (e.g. all Sundays or the 1st day of each month). This is useful if you want all in-file delta backups to be incremental but you want to do a differential in-file delta backup on Saturdays as well as the full file backups on the 1st day of every month. If you want to do this, simply configure [In-file delta] -> [Advanced] -> [Advanced In-file Delta Type Setting] to what is shown below.



The dialog box is titled "Advanced In-File Delta Type Setting". It contains two main sections: "Weekly Variation (Override Default Setting)" and "Yearly Variation (Override Weekly Variation or Default Setting)".

Weekly Variation (Override Default Setting):

<input type="checkbox"/> Sunday	Full	<input type="checkbox"/> Thursday	Full
<input type="checkbox"/> Monday	Full	<input type="checkbox"/> Friday	Full
<input type="checkbox"/> Tuesday	Full	<input checked="" type="checkbox"/> Saturday	Differential
<input type="checkbox"/> Wednesday	Full		

Yearly Variation (Override Weekly Variation or Default Setting):

<input checked="" type="checkbox"/> January	Full	<input checked="" type="checkbox"/> July	Full
<input checked="" type="checkbox"/> February	Full	<input checked="" type="checkbox"/> August	Full
<input checked="" type="checkbox"/> March	Full	<input checked="" type="checkbox"/> September	Full
<input checked="" type="checkbox"/> April	Full	<input checked="" type="checkbox"/> October	Full
<input checked="" type="checkbox"/> May	Full	<input checked="" type="checkbox"/> November	Full
<input checked="" type="checkbox"/> June	Full	<input checked="" type="checkbox"/> December	Full

Date:

☒ Day: 1

☐ First Sunday

Buttons: OK, Cancel

With this setting, all backup Jobs on Saturdays will be differential in-file delta backups, backups for the 1st day of each month will run a full backup. This ensures that all backup files will be backed up in full at a regular interval. One benefit of this is that restore time will run faster because of less delta merging. Another benefit is that the risk of a corrupted incremental delta file resulting in data loss is much lower because a full backup is always available periodically.

9 Backup/Restore Windows System State

This chapter will describe in details how to use Backup To The Web to backup Windows System State and how you can restore your Windows System State from backup.

9.1 Requirements

- i. Microsoft Windows XP Professional / 2003
- ii. Backup To The Web must be installed onto the computer containing the system state you want to backup
- iii. Windows system state will be backed up to a temporary file before it is sent to OBS. Please make sure you have sufficient space on your computer to store the temporary file when you run the backup job.

9.2 Overview

Backup To The Web will backup your Microsoft Exchange Server by taking the following steps:

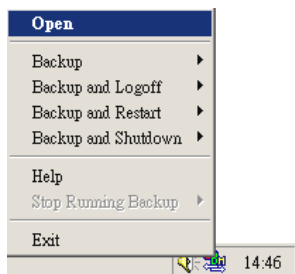
- i. Run all Pre-Commands of this backup set
- ii. Windows System State will be backed up to a temporary directory specified in its backup set
- iii. Run all Post-Commands of this backup set
- iv. Upload the Windows System State backup files from the temporary directory to an Offsite Backup Server
- v. Remove the Windows System State temporary backup files from the temporary directory if [Setting] -> [Temporary Directory for storing backup files] is enabled

9.3 How to backup Windows System State

Please follow the instructions below to backup Windows System State using Backup To The Web:

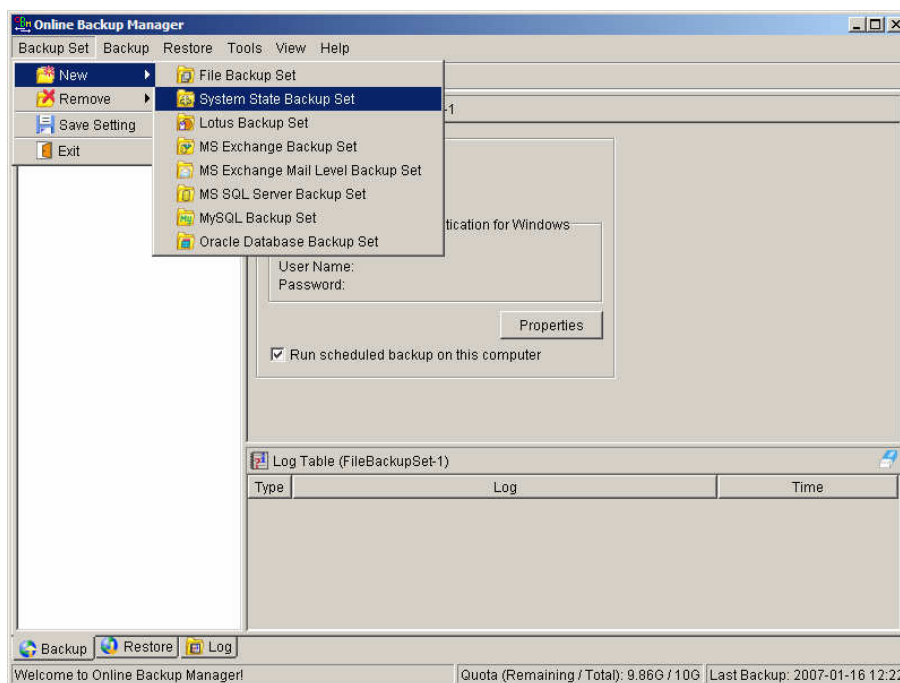
- i. Open Backup To The Web

Right click Backup To The Web icon available in the system tray and choose [Open]

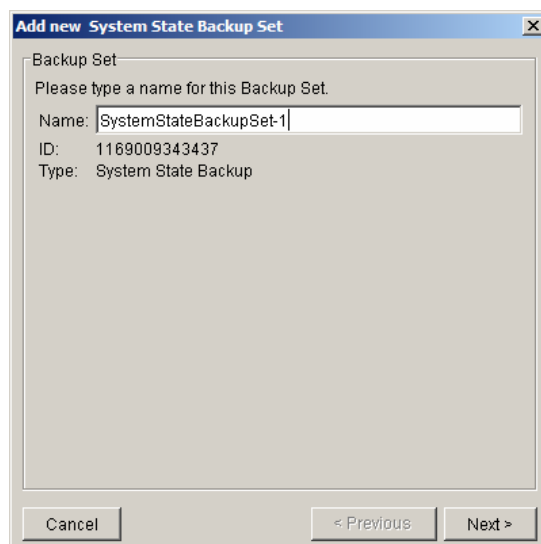


- ii. Create a backup set

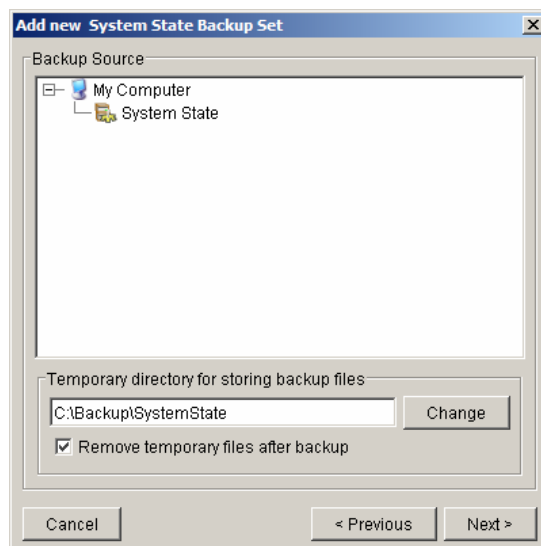
- a. From the Menu, Choose [Backup Set] -> [New] -> [System State Backup Set]



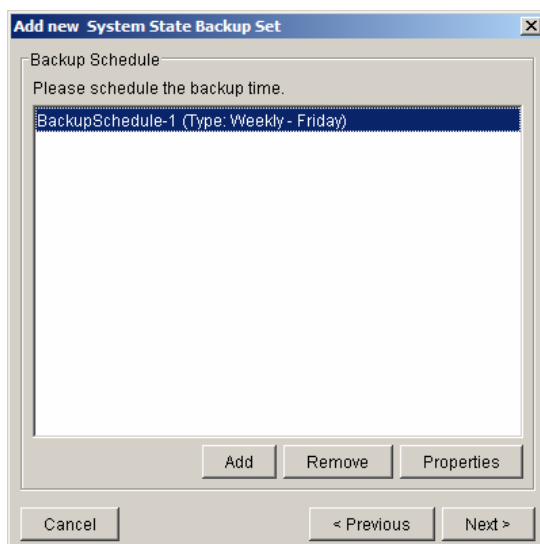
- b. Enter a name for your backup set



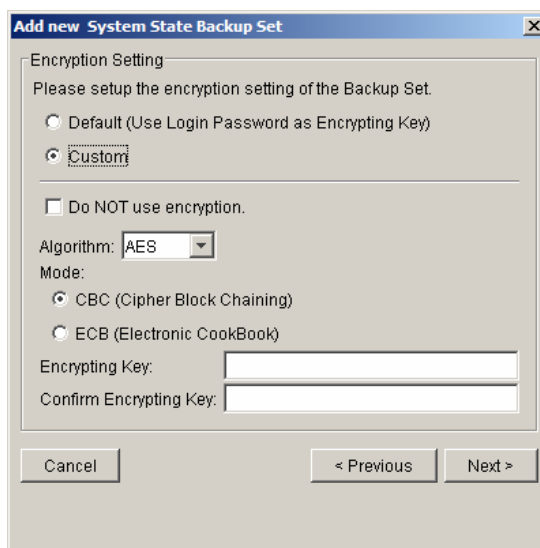
- c. Use the [Change] button to configure the [Temporary directory for storing backup files] setting and check the [Remove temporary files after backup] if you want temporary files to be removed automatically after backup



- d. Enter a temporary directory for storing the backup files before they are sent to an Offsite Backup Server
- e. Set the backup schedule for this backup set

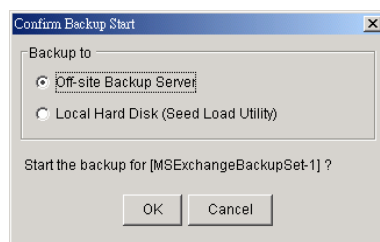


- f. Set the encryption algorithm, encryption mode and encrypting key for this backup set

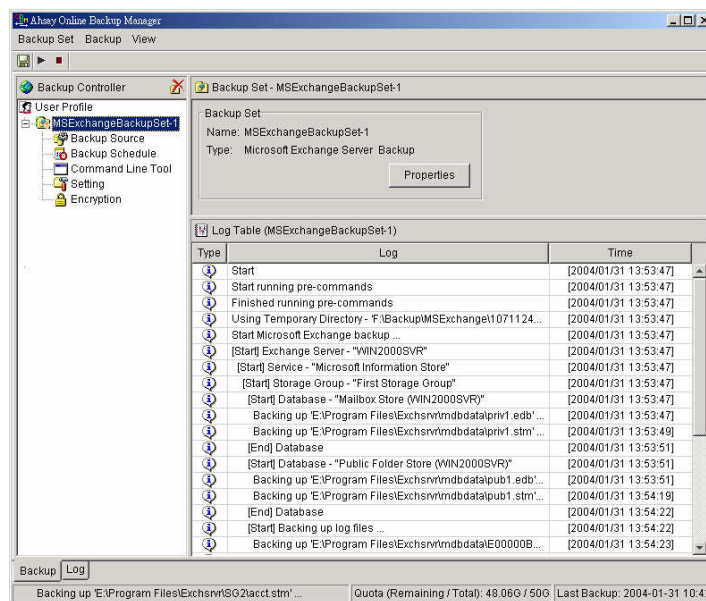


(Hint: For maximum security, please select AES (Advanced Encryption Standard) Algorithm, CBC (Cipher Block Chaining) mode and use an encrypting key with more than 8 characters.)

- iii. Run Backup
- Select the backup set you want to run on the left panel and press the [Start Backup] button (▶)
 - Select [Off-site Backup Server] to start backing up your files to an Offsite Backup Server and press the [OK] button



- c. You should get something similar to the screen shot below.



9.4 How to restore Windows System State

Please follow the instructions below to restore Windows System State from an Offsite Backup Server.

- i. Install Backup To The Web (if required)

Please refer to the [Installation] section for information on how to install Backup To The Web onto your computer.
- ii. Restore the Windows System State Backup File (i.e. SystemState.bkf) from the backup server
- iii. Use [NTBackup.exe] to restore your Windows System State to its backup time from the backup file by following the instructions below:
 - a. Run [NTBackup.exe] from [Start] -> [Run]
 - b. Press the [Restore Wizard] button and then press the [Next] button
 - c. Press the [Import] button and use the [Browse] button to select the backup file [SystemState.bkf] downloaded
 - d. Select the checkbox next to the description that matches your backup file
 - e. Press the [Next] button and then the [Finish] button
- iv. Completed

10 Backup/Restore MySQL Server

This chapter will describe in details how to use Backup To The Web to backup your MySQL server and how you can restore your MySQL server from the database backup files.

10.1 Requirements

- i. Backup To The Web must be installed onto the computer running MySQL server.
- ii. Data from MySQL server will be backed up to a temporary directory before they are sent to Offsite Backup Server. Please make sure you have sufficient space on your computer to store these data when you run the backup job.
- iii. There must be a MySQL account can be used to connect from localhost.

Add two new MySQL accounts for Backup Manager

```
mysql> GRANT ALL PRIVILEGES ON *.* TO 'root'@'localhost'  
-> IDENTIFIED BY 'some_pass';  
mysql> GRANT ALL PRIVILEGES ON *.* TO 'root'@'localhost.localdomain'  
-> IDENTIFIED BY 'some_pass';  
mysql> FLUSH PRIVILEGES;
```

They are superuser accounts with full privileges to do anything with a password of some_pass.

10.2 Overview

Backup To The Web will backup your MySQL server by taking the following steps:

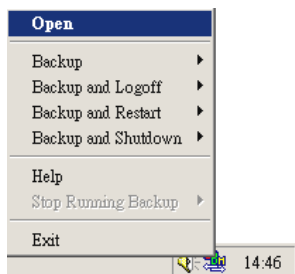
- i. Run all Pre-Commands of this backup set
- ii. All database(s) (either local or external) selected are backed up to a temporary directory specified in its backup set
- iii. Run all Post-Commands of this backup set
- iv. Upload all backup files from the temporary directory to an Offsite Backup Server
- v. Remove temporary files from the temporary directory if [Setting] -> [Temporary Directory for storing backup files] is enabled

10.3 How to backup MySQL server on Windows

Please follow the instructions below to backup your MySQL server using Backup To The Web:

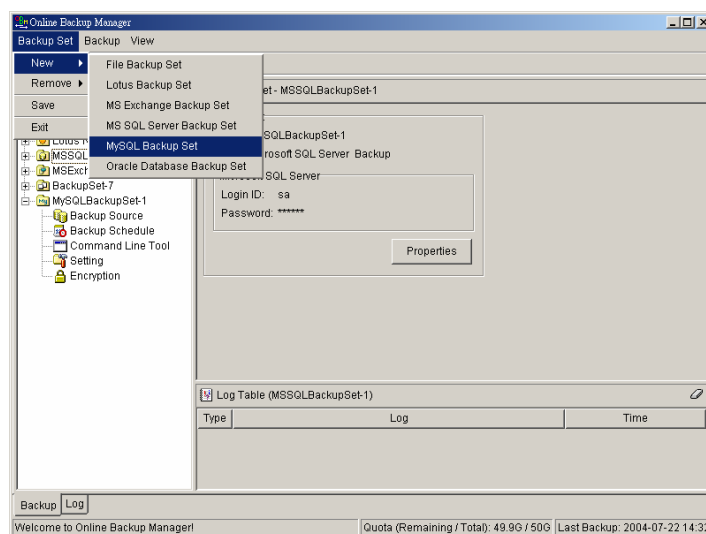
- i. Open Backup To The Web

Right click Backup To The Web icon available in the system tray and choose [Open]

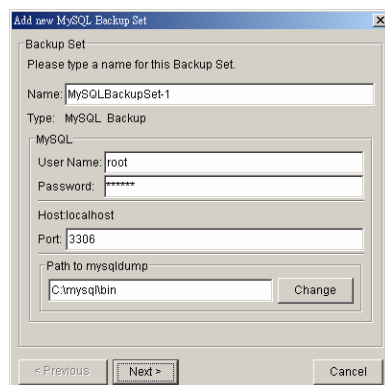


- ii. From the Menu, Choose [Backup Set] -> [New] -> [MySQL Backup Set]
Create a backup set

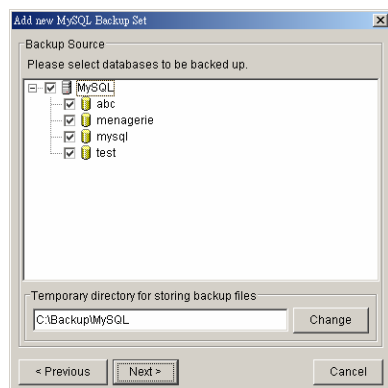
- a. From the Menu, Choose [Backup Set] -> [New] -> [MySQL Backup Set]



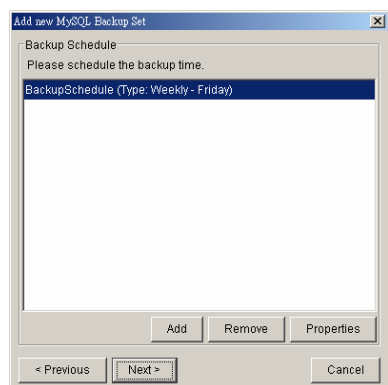
- b. Enter a name for your backup set



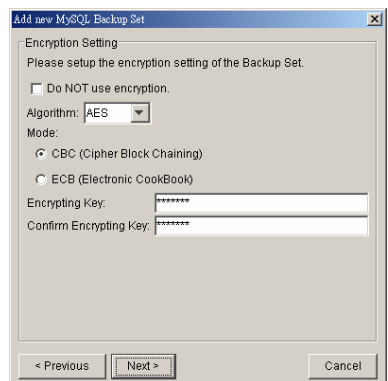
- c. Enter the root password, the MySQL server TCP/IP port number and the path to MySQL backup utility (mysqldump)
- d. Select the database(s) to be backup



- e. Enter a temporary directory for storing the backup files before they are sent to an Offsite Backup Server, e.g. C:\Backup\MySQL
- f. Set the backup schedule for Database Backup



- g. Set the encryption algorithm, encryption mode and encrypting key for this backup set



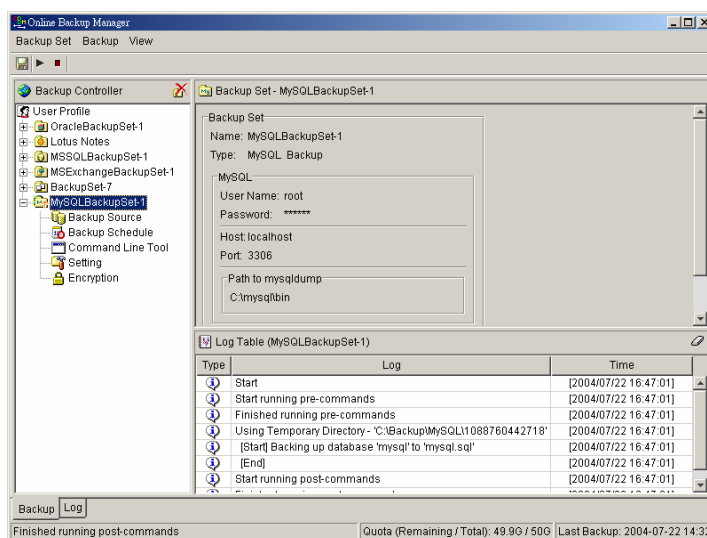
(Hint: For maximum security, please select AES (Advanced Encryption Standard) Algorithm, CBC (Cipher Block Chaining) mode and use an encrypting key with more than 8 characters.)

iii. Run Backup

- Select the backup set you want to run on the left panel and press the [Start Backup] button (▶)
- Select [Off-site Backup Server] to start backing up your files to an Offsite Backup Server and press the [OK] button



- You should get something similar to the screen shot below.



10.4 How to backup MySQL server on Linux (command line mode)

If you want to setup Backup To The Web to backup MySQL server running on Linux using command line mode, please do the followings:

- i. Create a backup account on OBS
- ii. Logon to the web interface of OBS using the backup account created in the previous step (doesn't matter if it is not from the Linux server running the MySQL server to be backed up)
- iii. Create a new backup set by pressing the [Backup Set] -> [Add] button
- iv. Select the [Backup Set] -> [Type] -> [MySQL Database Server] radio button and press the [Update] button (which can be found at the bottom of the page)
- v. Setup all [Backup Set] -> [Database Backup Setting]

Settings	Descriptions
MySQL Username (e.g. root)	A MySQL user account that has backup access to the databases to be backed up (e.g. root). Please refer to the Requirements section for details
MySQL Password	Password of the MySQL user account being used
Host	IP address / Hostname of the MySQL Server
MySQL Connection TCP/IP Port	TCP/IP port used to access the MySQL Server (default: 3306)
Path to MySQL backup utility (mysqldump)	Full path to where mysqldump can be found (e.g. /usr/bin/mysqldump)
Temporary Spooling Directory	A temporary directory to be used to store all MySQL database dump files before they are uploaded to the backup server
Enable Delete Temp. File	Whether to delete the temporary MySQL database dump files after they are uploaded to the backup server

- vi. Setup the [Backup Set] -> [Backup Source] setting
 - Add an "MySQL" entry to the [Backup Source] if you want to backup all databases under this MySQL Server
 - Add two entries, "MySQL/database1" and "MySQL/database2", to the [Backup Source] if you want to backup both "database1" and "database2" under this MySQL Server
 (Please use "\" instead of "/" if the MySQL server to be backed up is running on Windows instead of Linux)
- vii. Setup the [Backup Set] -> [Backup Schedule] by pressing the [Add] link next the the "Backup Schedule" sub-title
- viii. Install Backup To The Web onto the Linux server running MySQL server (Please refer to the [2.1 Installation of Backup To The Web](#) section for details. The command line mode installation instructions are available on the web interface)
- ix. Completed

If you have started up the Backup To The Web backup scheduler in the previous step, selected databases will be backed up automatically at scheduled time

10.5 How to restore MySQL server

Please follow the instructions below to restore MySQL server from an Offsite Backup Server.

- i. Download the database backup files to be restored from the Offsite Backup Server

Please refer to the [\[5.3 Restoring file\]](#) section for information on how to download backup files from Offsite Backup Server.

- ii. Restore the database named [db_name] from the database backup file [db_name.sql]:

- a. Connect to the MySQL server

(Windows) C:\> mysql
(Linux) [root@server ~]# mysql

- b. Create the database to be restored

mysql> CREATE DATABASE IF NOT EXISTS db_name

- c. Restore the database backup file back into the MySQL server

mysql> use db_name ;
mysql> source db_name.sql ;

If db_name.sql is not located in the current directory, please specify the full path to the db_name.sql file in the command above.

- iii. Repeat the same procedure for each database to be restored to the MySQL Server.
- iv. Completed

11 Email Reporting

Backup To The Web makes use of the email system to keep you informed with the status of your backup activities. Please make sure your contact information within the backup system is correct to receive the reports described in this chapter.

11.1 New User Report

When a new backup account is added to the backup server, a new user report will be delivered to the contact email(s) of the new account. The New User Report contains the following information:

Sample Report																	
<p>Welcome to Online Backup Services</p> <p>Generated at: Sat Jun 21 09:32:36 HKT 2003</p>																	
<p>Getting started:</p> <ol style="list-style-type: none"> 1. Login to our homepage 2. Follow the "User's Guide" to start using our backup services <p>Further Information: If further assistance is necessary, please refer to the FAQs section.</p>	<table border="1"> <thead> <tr> <th colspan="2">User Setting</th> </tr> </thead> <tbody> <tr> <td>Login Name</td> <td>: NewAccount</td> </tr> <tr> <td>Password</td> <td>: pwd</td> </tr> <tr> <td>Alias</td> <td>: New Testing Account Name</td> </tr> <tr> <td>Language</td> <td>: English</td> </tr> <tr> <td>Contact</td> <td>: user@your-company.com</td> </tr> <tr> <td>Backup Quota</td> <td>: 50M</td> </tr> <tr> <td>Backup Server</td> <td>: backup.your-company.com</td> </tr> </tbody> </table>	User Setting		Login Name	: NewAccount	Password	: pwd	Alias	: New Testing Account Name	Language	: English	Contact	: user@your-company.com	Backup Quota	: 50M	Backup Server	: backup.your-company.com
User Setting																	
Login Name	: NewAccount																
Password	: pwd																
Alias	: New Testing Account Name																
Language	: English																
Contact	: user@your-company.com																
Backup Quota	: 50M																
Backup Server	: backup.your-company.com																

Key	Description
Login Name	Login name
Password	Password
Alias	Alias
Language	Preferred Language for your backup report
Contact	Email Address that will be used to contact you
Backup Quota	Backup quota
Backup Server	Backup server

11.2 Forgot Password Report

If you have forgotten your password, you can use the [Forgot Password] feature available on the web interface to have your password delivered to you through email. (Please refer to "Retrieve Forgotten Password" section in the next chapter for more information on how to retrieve your forgot password report.) The Forgot Password Report contains the following information:

Sample Report	
Request for forgotten password	
Generated at: Sat Jun 21 09:47:14 HKT 2003	
FAQs: 1. Why are you receiving this report? When a user visits the forgot password page and requests for the lost password of this backup account, all registered contacts of this particular account will receive a password reminder email. If none of the contact person has visited the page above and you are receiving this email in error, please contact us.	User Setting Login Name : NewAccount Password : pwd Alias : New Testing Account Name Language : English Contact : user@your-company.com
2. What should you do after reading this email ? Your current password is shown under the user setting. You are suggested to change your password to a more easily remembered password and delete this email to avoid any third party gaining your password.	

Key	Description
Login Name	Login name
Password	Password
Alias	Alias
Language	Preferred Language for your backup report
Contact	Email Address that will be used to contact you

11.3 Backup Job Report

For each backup job you have run, a backup job report will be sent to you by email. This report contains a summary for the backup job that was run and a full listing of all files being backed up by the backup job. The backup summary report contains the following information:

Sample Backup Summary Report

Online Backup Job Report

Generated at: Sat Jun 21 10:00:05 HKT 2003

Backup Job Summary		User Setting	
Backup Time	: 21-Jun-2003 09:57 - 21-Jun-2003 09:57	Login Name	: NewAccount
Status	: Backup finished successfully	Alias	: New Testing Account Name
New Files*	: 1 [9k]	Language	: English
Updated Files*	: 1 [9k]	Contact	: user@your-company.com
Deleted Files*	: 1 [4k]		
Moved Files*	: 1 [3k]		

* Unit = No. of Files [Total Size]

A full listing of all backup files is available in the attached file.

FAQs:

1. Why are you receiving this report?
 You are receiving this report because you are registered as one of the contacts of this Online Backup account and this particular account has performed a backup job recently.

2. What if you have exceeded your quota?
 If your recycle bin size is not empty, you can empty your recycle bin to free up more space. Please contact us for more information on how to increase your storage quota.

If further assistance is necessary, please refer to the [FAQs](#) section.

Backup Setting	
Backup Source	: C:\My Document\

Backup Statistics	
Backup Data Size*	: 7 [314k]
Retention Area Size*	: 2 [13k]
Backup Quota	: 50M
Remaining Quota	: 49.7M

* Unit = No. of Files [Total Size]

Key	Description
Backup Time	The time when the backup job ran
Backup Status	The overall status of the backup job. Normally, you should see "Backup finished successfully" in this field. If you happen to get something else, please consult the attached full report for more information.
New Files	Total number and size of backup files added to your backup set
Updated Files	Total number and size of backup files updated in your backup set
Deleted Files	Total number and size of backup files deleted from your backup set
Moved Files	Total number and size of backup files relocated in your backup set
Login Name	Login name
Alias	Alias
Language	Preferred Language for your backup report
Contact	Email Address that will be used to contact you
Backup Source	All files/directories that will be backed up
Backup Data Size	The total backup data stored in the data area
Retention Area Size	The total backup data stored in the retention area. Old copies of updated or deleted backup files are retained in the retention area for the number of days as specified by the retention policy of the backup set before they are removed from the system.
Backup Quota	Backup Quota
Remaining Quota	Remaining Quota

The full backup report, which contains a full listing of all files backed up by the backup job, is attached to the backup job report email as a zip file. You need to unzip it before you can read the full report.

Sample Report			
Full Backup Report		Generated at: Sat Jun 21 10:00:05 HKT 2003	
Backup Job Summary		Backup Job Statistics	
Backup Set	: BackupSet-0	New files*	1 [9k bytes]
Backup Job	: 2003-06-21 (09:58)	Updated files*	1 [9k bytes]
Backup Status	: Backup finished successfully	Deleted files*	1 [4k bytes]
Backup Time	: 2003-06-21 09:57 - 2003-06-21 09:57	Moved files*	1 [3k bytes]
* Unit = Number of files [Total file size]			
Backup Logs			
No.	Type	Timestamp	Backup Logs
1	Info	2003-06-21 09:57	Start running pre-commands
2	Info	2003-06-21 09:57	Finished running pre-commands
3	Info	2003-06-21 09:57	Start running post-commands
4	Info	2003-06-21 09:57	Finished running post-commands
New Files			
No.	Files	Size*	*compressed Last Modified
1	C:\Test\lib\New DANIEL.DOC	9k	2003-06-21 09:57
Updated Files			
No.	Files	Size*	*compressed Last Modified
1	C:\Test\lib\ DANIEL.DOC	9k	2003-06-21 09:57
Deleted Files			
No.	Files	Size*	*compressed Last Modified
1	C:\Test\lib\ DANIEL_A.BAK	4k	1996-11-29 18:45
Moved Files			
No.	Files	Size*	*compressed Last Modified
1	C:\Test\KING1.BAK -> C:\Test\lib\KING1.BAK	3k	2003-06-05 12:35

Key	Description
Backup Set	The name of the backup set
Backup Job	The name of the backup job (which is the start time of the backup job)
Backup Status	The overall status of the backup job. Normally, you should see "Backup finished successfully" in this field. If you happen to get something else, please consult the attached full report for more information.
Backup Time	The time when the backup job ran
Backup Log	All messages logged when running this backup job
New Files	Total number and size of backup files added to your backup set
Updated Files	Total number and size of backup files updated in your backup set
Deleted Files	Total number and size of backup files deleted from your backup set
Moved Files	Total number and size of backup files relocated in your backup set
New File List	Full list of all backup files added to your backup set
Updated File List	Full list of all backup files updated in your backup set
Deleted File List	Full list of all backup files deleted from your backup set
Moved File List	Full list of all backup files relocated in your backup set

11.4 Setting Change Report

After you have updated your user profile or backup setting, a setting change report will be sent to you. This report allows you to track record of the changes that have been made to your backup account.

Sample Report																	
Backup Setting Changes Report																	
Generated at: Sat Jun 21 11:00:00 HKT 2003																	
<p>Why are you receiving this report ?</p> <p>You are receiving this report since your personal or backup setting has been updated. Please confirm the information shown on the right is correct. Please make sure your setting is not updated by someone on your contact list. If none of them makes this changes, change your password, correct your setting and see if this happens again. If this happens again, please contact us for further investigation.</p> <p>If further assistance is necessary, please refer to the FAQs section.</p>	<table border="1"> <thead> <tr> <th colspan="2">User Setting</th> </tr> </thead> <tbody> <tr> <td>Login Name</td> <td>: NewAccount</td> </tr> <tr> <td>Alias</td> <td>: New Testing Account Name</td> </tr> <tr> <td>Language</td> <td>: English</td> </tr> <tr> <td>Contact</td> <td>: user@your-company.com</td> </tr> <tr> <td>Backup Quota</td> <td>: 50M</td> </tr> </tbody> </table>	User Setting		Login Name	: NewAccount	Alias	: New Testing Account Name	Language	: English	Contact	: user@your-company.com	Backup Quota	: 50M				
User Setting																	
Login Name	: NewAccount																
Alias	: New Testing Account Name																
Language	: English																
Contact	: user@your-company.com																
Backup Quota	: 50M																
<table border="1"> <thead> <tr> <th colspan="2">Backup Set - BackupSet-0</th> </tr> </thead> <tbody> <tr> <td>Source(s)</td> <td>: C:\My Document\</td> </tr> <tr> <td>Schedule(s)</td> <td>: None</td> </tr> <tr> <td>Filter</td> <td>: None</td> </tr> <tr> <td>Retention Policy</td> <td>: Keep deleted files for 7 days</td> </tr> <tr> <td>Transfer Size</td> <td>: 256k bytes</td> </tr> <tr> <td>Pre-Command(s)</td> <td>: None</td> </tr> <tr> <td>Post-Command(s)</td> <td>: None</td> </tr> </tbody> </table>		Backup Set - BackupSet-0		Source(s)	: C:\My Document\	Schedule(s)	: None	Filter	: None	Retention Policy	: Keep deleted files for 7 days	Transfer Size	: 256k bytes	Pre-Command(s)	: None	Post-Command(s)	: None
Backup Set - BackupSet-0																	
Source(s)	: C:\My Document\																
Schedule(s)	: None																
Filter	: None																
Retention Policy	: Keep deleted files for 7 days																
Transfer Size	: 256k bytes																
Pre-Command(s)	: None																
Post-Command(s)	: None																

Key	Description
Login Name	Login name
Alias	Alias
Language	Preferred Language for your backup reports
Contact	Email Address that will be used to contact you
Backup Quota	Backup Quota
Backup Source(s)	All backup sources of the backup set
Backup Schedule(s)	All backup schedules of the backup set
Filter(s)	All backup filters of the backup set
Retention Policy	The retention policy of the backup set
Transfer Size	The transfer block size of the backup set
Pre-Command(s)	All Pre-Command(s) of the backup set
Post-Command(s)	All Post-Command(s) of the backup set

11.5 Inactive User Reminder

You will receive an inactive user reminder in email if your account has been left inactive for the period of 7 days (or the period specified by the system administrator). This is to remain you that you have not been running backup for more 7 days. If you are a free trial user, your account will be removed from the system automatically if the system can track no records of your backup activities in the next 30 days after receiving this report.

Sample Report											
Inactive User Reminder											
Generated at: Sat Jun 21 11:53:38 HKT 2003											
<p>Why are you receiving this report ?</p> <p>You are receiving this report because this backup account has been inactive for 30 days. If this account stays inactive for another 30 days, this account will be removed from our system automatically without further notice. The following is the backup activity of this account:</p> <p>Last Login Time : 2003-06-21 10:18 AM Last Backup Time : 2003-06-21 09:57 AM</p> <p>If further assistance is necessary, please refer to the FAQs section.</p>	<table border="1"> <thead> <tr> <th colspan="2">User Setting</th> </tr> </thead> <tbody> <tr> <td>Login Name</td> <td>: NewAccount</td> </tr> <tr> <td>Alias</td> <td>: New Testing Account Name</td> </tr> <tr> <td>Language</td> <td>: English</td> </tr> <tr> <td>Contact</td> <td>: user@your-company.com</td> </tr> </tbody> </table>	User Setting		Login Name	: NewAccount	Alias	: New Testing Account Name	Language	: English	Contact	: user@your-company.com
User Setting											
Login Name	: NewAccount										
Alias	: New Testing Account Name										
Language	: English										
Contact	: user@your-company.com										

Key	Description
Login Name	Login name
Alias	Alias
Language	Preferred Language for your backup reports
Contact	Email Address that will be used to contact you
Backup Quota	Backup Quota
Last Login Time	The last time you logon to the backup system
Last Backup Time	The last time you ran a backup job

12 Web Features

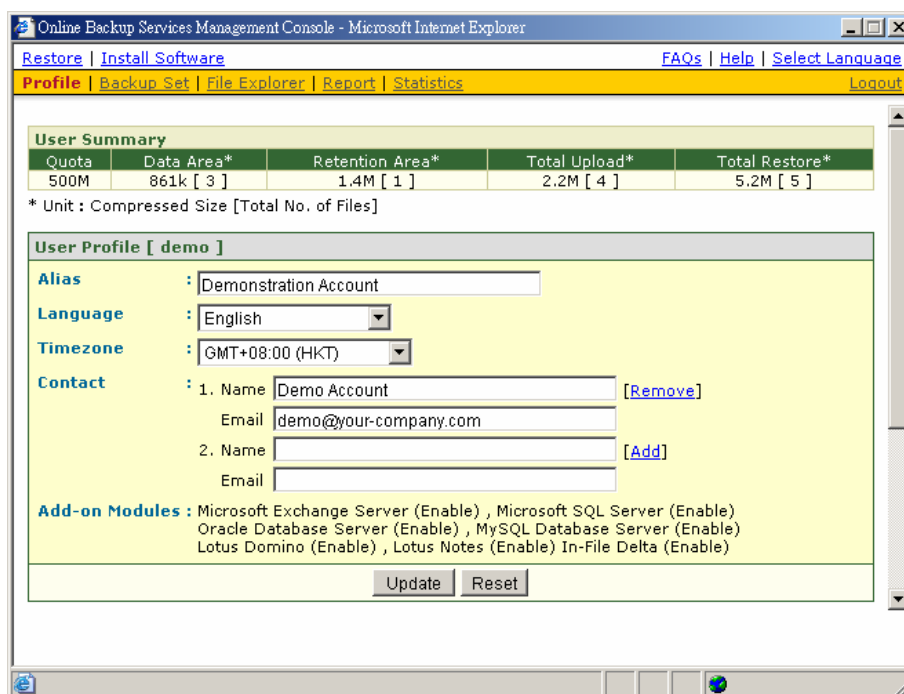
Other than the features of Backup To The Web described in the previous chapter, the web interface of Offsite Backup Server provides you access to some additional features that are not available in Backup To The Web. This chapter describes each of these features in details.

12.1 Install Backup To The Web

Before you can use Backup To The Web, you have to download the Backup To The Web installer from the web interface of Offsite Backup Server and install Backup To The Web onto your computer. Please refer to the [installation section](#) (Chapter 2) for information on how to install Backup To The Web onto your computer.

12.2 Update User Profile

You can update your user profile by using the [Profile] panel available on the web interface. To change your profile, just make any changes to your profile on the panel shown below and press the [Update] button.



The screenshot shows the 'Online Backup Services Management Console' in a Microsoft Internet Explorer browser window. The navigation bar includes links for 'Restore', 'Install Software', 'FAQs', 'Help', 'Select Language', and 'Logout'. The 'Profile' link is highlighted in the main menu. The 'User Summary' table shows the following data:

Quota	Data Area*	Retention Area*	Total Upload*	Total Restore*
500M	861k [3]	1.4M [1]	2.2M [4]	5.2M [5]

* Unit : Compressed Size [Total No. of Files]

The 'User Profile [demo]' section contains the following fields:

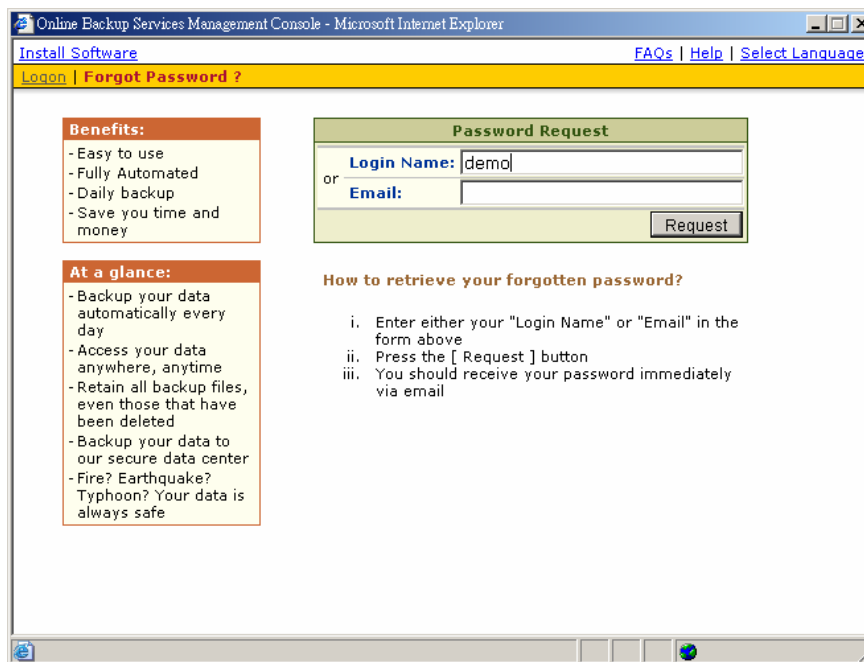
- Alias**: Text input field with 'Demonstration Account'.
- Language**: Dropdown menu with 'English' selected.
- Timezone**: Dropdown menu with 'GMT+08:00 (HKT)' selected.
- Contact**: A list of contact entries. The first entry is '1. Name: Demo Account' with a '[Remove]' button. Below it is an 'Email' field with 'demo@your-company.com'. The second entry is '2. Name: ' with an '[Add]' button. Below it is an 'Email' field.
- Add-on Modules**: A list of modules with checkboxes: Microsoft Exchange Server (Enable), Microsoft SQL Server (Enable), Oracle Database Server (Enable), MySQL Database Server (Enable), Lotus Domino (Enable), Lotus Notes (Enable), In-File Delta (Enable).

At the bottom of the profile section are 'Update' and 'Reset' buttons.

Key	Description
Quota	Backup Quota
Data Area	Total number and size backup files stored in the data area
Retention Area	Total number and size of backup files stored in the retention area
Total Upload	Total number and size of backup files uploaded to the backup server
Total Restore	Total number and size of backup files restored from the backup server
Login Name	Login name
Display Name	Alias of your backup account
Language	Preferred Language for your backup report
Time Zone	Your Time zone
Contact	Email Address that will be used to contact you

12.3 Request Forgotten Password

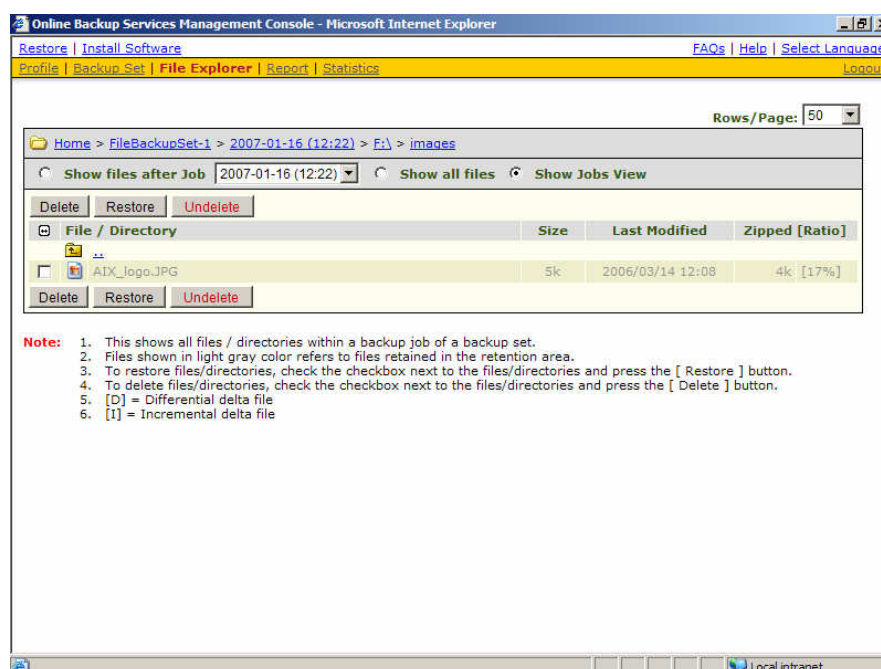
If you have forgotten your password, you can retrieve it by simply entering your login name or your registered email address on the [Password Request] form and press the [Request] button. Your password will be sent to your registered email address automatically.



The screenshot shows a web browser window titled "Online Backup Services Management Console - Microsoft Internet Explorer". The address bar shows "Install Software" and "FAQs | Help | Select Language". The main content area has a yellow navigation bar with "Login" and "Forgot Password?". Below this, there are two columns. The left column contains two boxes: "Benefits:" with a list of features (Easy to use, Fully Automated, Daily backup, Save you time and money) and "At a glance:" with a list of benefits (Backup your data automatically every day, Access your data anywhere, anytime, Retain all backup files, even those that have been deleted, Backup your data to our secure data center, Fire? Earthquake? Typhoon? Your data is always safe). The right column contains a "Password Request" form with fields for "Login Name:" (containing "demo") and "Email:", a "Request" button, and a section titled "How to retrieve your forgotten password?" with three steps: i. Enter either your "Login Name" or "Email" in the form above, ii. Press the [Request] button, iii. You should receive your password immediately via email.

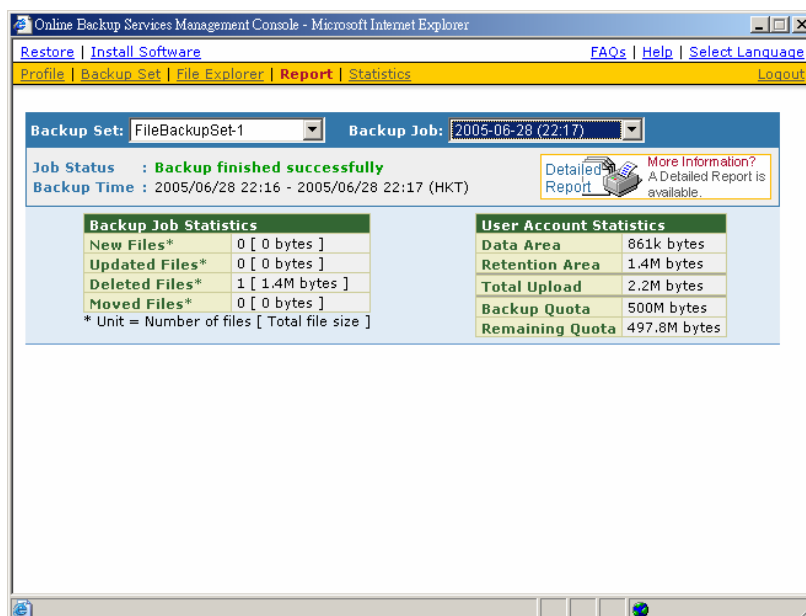
12.4 Restore/Delete/Undelete Backup Files

Using the [File Explorer], you can browse through the backup data (both current and previous versions) on OBS. You can select any current backup files to Restore or Delete. You can also select any deleted backup files (in gray) to Undelete.



12.5 Review Backup Jobs

In addition to reviewing your backup activities from the email report and from Backup To The Web, you can also review any of your backup Jobs by using the [Report] panel available on the web interface. To review a backup job, just select the required backup job from the [Backup Set] and [Backup Job] drop down list.



Key	Description
Job Status	The overall status of the backup job. Normally, you should see "Backup finished successfully" in this field. If you happen to get something else, please click the [Detailed Report] images on the page.
Backup Time	The time when the backup job ran



New Files	Total number and size of backup files added to your backup set
Updated Files	Total number and size of backup files updated in your backup set
Deleted Files	Total number and size of backup files deleted from your backup set
Moved Files	Total number and size of backup files relocated in your backup set
Backup Data Size	The total backup data stored in the data area
Retention Area Size	The total backup data stored in the retention area. Old copies of updated or deleted backup files are retained in the retention area for the number of days as specified by the retention policy of the backup set before they are removed from the system.
Total Upload	Total number and size of backup files uploaded to the backup server
Backup Quota	Backup Quota
Remaining Quota	Remaining Quota

You can open the [Full Backup Report] to review all information logged by a backup job by clicking the [Detailed Report] image on the [Report] panel.

Full Backup Report

Generated at: Sat Jun 21 10:00:05 HKT 2003

Backup Job Summary	
Backup Set	: BackupSet-0
Backup Job	: 2003-06-21 (09:58)
Backup Status	: Backup finished successfully
Backup Time	: 2003-06-21 09:57 - 2003-06-21 09:57

Backup Job Statistics	
New files*	1 [9k bytes]
Updated files*	1 [9k bytes]
Deleted files*	1 [4k bytes]
Moved files*	1 [3k bytes]

* Unit = Number of files [Total file size]

Backup Logs			
No.	Type	Timestamp	Backup Logs
1	Info	2003-06-21 09:57	Start running pre-commands
2	Info	2003-06-21 09:57	Finished running pre-commands
3	Info	2003-06-21 09:57	Start running post-commands
4	Info	2003-06-21 09:57	Finished running post-commands

New Files				*compressed
No.	Files	Size*	Last Modified	
1	C:\Test\lib\New DANIEL.DOC	9k	2003-06-21 09:57	

Updated Files				*compressed
No.	Files	Size*	Last Modified	
1	C:\Test\lib\ DANIEL.DOC	9k	2003-06-21 09:57	

Deleted Files				*compressed
No.	Files	Size*	Last Modified	
1	C:\Test\lib\ DANIEL_A.BAK	4k	1996-11-29 18:45	

Moved Files				*compressed
No.	Files	Size*	Last Modified	
1	C:\Test\KING1.BAK -> C:\Test\lib\KING1.BAK	3k	2003-06-05 12:35	

Parameter	Description
Backup Set	The name of the backup set
Backup Job	The name of the backup job (which is the start time of the backup job)
Backup Status	The overall status of the backup job.
Backup Time	The time when the backup job ran
Backup Log	All messages logged when running this backup job
New Files	Total number and size of backup files added to your backup set
Updated Files	Total number and size of backup files updated in your backup set
Deleted Files	Total number and size of backup files deleted from your backup set
Moved Files	Total number and size of backup files relocated in your backup set
New File List	Full list of all backup files added to your backup set
Updated File List	Full list of all backup files updated in your backup set
Deleted File List	Full list of all backup files deleted from your backup set
Moved File List	Full list of all backup files relocated in your backup set

12.6 Review Storage Statistics

You can review the amount of data you have stored on the backup server and uploaded to the backup server on each day by opening the [Statistics] panel available on the web interface. To review your storage statistics for a different month, just select the month you are after by selecting from the [Month] drop down list.

Online Backup Services Management Console - Microsoft Internet Explorer

[Restore](#) | [Install Software](#) [FAQs](#) | [Help](#) | [Select Language](#)

[Profile](#) | [Backup Set](#) | [File Explorer](#) | [Report](#) | **Statistics** [Logout](#)

Storage Usage Summary Month (YYYY-MM): 2005-06

Date	Data Area*	Retention Area*	Uploaded Size*	Total Storage*
2005-06-01	9.7M [36]	816.5M [3076]	0 [0]	826.2M [3112]
2005-06-02	9.7M [30]	768.5M [3081]	0 [0]	778.2M [3111]
2005-06-03	9.7M [30]	768.5M [3081]	0 [0]	778.2M [3111]
2005-06-04	11.9M [35]	768.5M [3084]	2.2M [8]	780.4M [3119]
2005-06-05	209.7M [1394]	1,006.8M [4616]	436.2M [2891]	1.19G [6010]
2005-06-06	209.7M [1394]	868.3M [4518]	0 [0]	1.05G [5912]
2005-06-07	209.7M [1394]	868.3M [4518]	0 [0]	1.05G [5912]
2005-06-08	209.7M [1394]	868.3M [4518]	0 [0]	1.05G [5912]
2005-06-09	98.6M [1536]	1,000.2M [5289]	68.9M [914]	1.07G [6825]
2005-06-10	98.6M [1536]	875.2M [5288]	0 [0]	973.9M [6824]
2005-06-11	98.6M [1536]	875.2M [5288]	0 [0]	973.9M [6824]
2005-06-12	98.6M [1536]	875.2M [5288]	0 [0]	973.9M [6824]
2005-06-13	98.6M [1536]	875.2M [5288]	0 [0]	973.9M [6824]
2005-06-14	56.4M [843]	917.7M [6041]	186k [60]	974M [6884]
2005-06-15	56.4M [843]	917.7M [6041]	0 [0]	974M [6884]
2005-06-16	56.4M [843]	917.7M [6041]	0 [0]	974M [6884]
2005-06-17	66.7M [1140]	918.2M [6066]	10.9M [322]	984.9M [7206]
2005-06-18	66.7M [1140]	918.2M [6066]	0 [0]	984.9M [7206]
2005-06-19	66.7M [1140]	918.2M [6066]	0 [0]	984.9M [7206]
2005-06-20	66.7M [1140]	918.2M [6066]	0 [0]	984.9M [7206]
2005-06-21	66.5M [1075]	918.4M [6131]	0 [0]	984.9M [7206]
2005-06-22	66.5M [1075]	918.4M [6131]	0 [0]	984.9M [7206]

Key	Description
Date	The date the following statistics are collected
Data Area	Total number and size of backup files stored in the data area on a particular date
Retention Area	Total number and size of backup files stored in the retention area on a particular date
Uploaded Size	Total number and size of backup files uploaded to the backup server on a particular date
Total Storage	Total number and size of backup files stored under your backup account on a particular date

13 Further Information

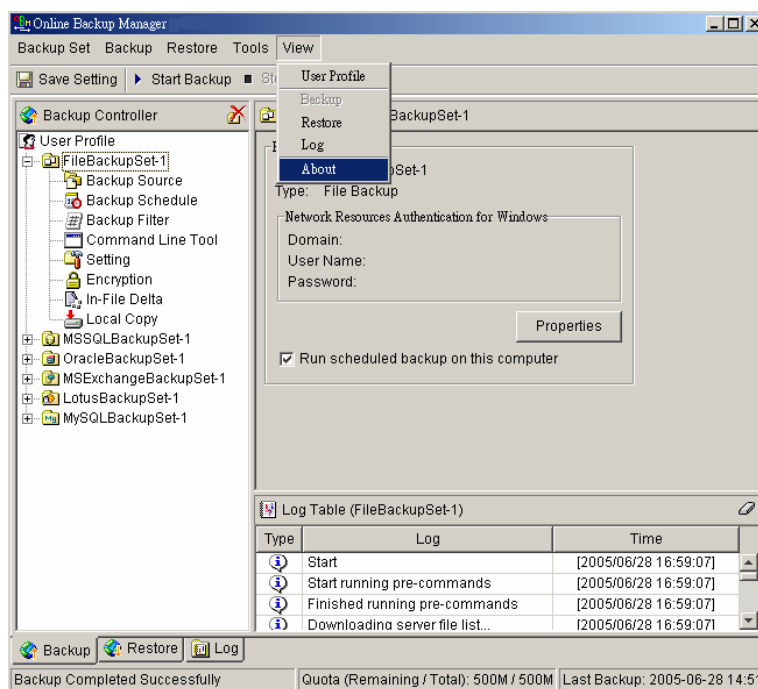
13.1 FAQs

Please see if your question has already been answered in our FAQs available on our website.

13.2 Contact Us

You can backup your data to an Offsite Backup Server by following instructions below.

- i. Open Backup To The Web from the system tray
- ii. Choose [View] -> [About] from the top menu



- iii. Contact your backup service provider using the information shown in the [About] dialog box

