

Ahsay Offsite Backup Server v5.2

Administrator's Guide

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# Ahsay Offsite Backup Server v5.2

## Administrator's Guide

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# 1 Overview

## 1.1 Benefits

- Easy Backup of
  1. Microsoft Exchange Server 2000 / 2003 / 2007
  2. Microsoft SQL Server 7.0 / 2000 / 2005
  3. Lotus Domino/Notes 5.0 or above
  4. Oracle 8i or above
  5. MySQL 3.2.4 or above
  6. Windows System State
  7. Outlook and Outlook Express (i.e. \*.pst, \*.dbx and \*.wab)
  8. Important personal settings, e.g. Desktop, Favorite, My Documents and History etc
  9. 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 / Vista (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) Full support of Microsoft Exchange individual email, contacts, calendars, tasks etc.
- (New in 5.2) New easy to use backup client for home/SOHO users.
- (New in 5.2) Allow the administrator to set whether to "copy a file" to retention area when the file permissions are updated.
- (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) Lotus Notes/Domino agent for Linux.
- (New in 5.2) Auto Upgrade Agent to automatically upgrade the client software.
- (OEM version only) All references to Ahsay can be removed or branded to your own company name, address, phone and email
- (OEM version only) Allow unlimited backup trial accounts to be created on the backup server (with unlimited backup quota for a trial period of 30 days)
- (OEM version only) Create branded installer for backup client software. No special setup is required to offer free trial subscriptions to potential users
- 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 on every Sunday or the 1<sup>st</sup> day of every month).
- Volume Shadow Copy backup (i.e. backing up files even when they are exclusively open, e.g. Outlook.pst).
- Bandwidth Throttling at backup account level.
- In-File Delta backup (i.e. backing up only changes within files).
- Off-line backup mode and logout backup reminder.
- Real time backup server replication allows the backup server to be easily backed up.
- Customizable backup schedule allows backup 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.
- Support both full backup (database backup) and incremental backup (transaction log backup) for Microsoft SQL Server 7.0/2000, Microsoft Exchange Server 2000/2003, Lotus Domino/Notes 5.0 and Oracle 8i or above.
- 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 will be delivered to user 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.
- Select files to be backed up 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.
- System activity report, showing all backup system information, will be delivered to system administrator via email everyday.
- Complete set of external APIs allow system integration with external systems (e.g. billing/payment system) to be done easily.
- 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 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

#### Server Software (OBS)

- **Operating System:**
  1. Windows 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. Mac OS X 10.2 or above
  4. All other operating systems that supports Java2 Runtime Environment 1.4.1 or above
- **Memory:** 128MB (minimum), 512MB (recommended)
- **Disk Space:** 250MB
- **Network Protocol:** TCP/IP (http/https)

\* The use of Windows 2000 WorkStation and XP Professional is only recommended for backup system with less than 20 users. For 20 or more users, please use Windows 2000 or 2003 Server instead.

\*\* 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.

#### Client Software (OBM)

- **Operating System:**
  1. Windows 95 / 98 / ME / NT / 2000 / XP / 2003 / Vista
  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)

## 2 Installation

This chapter describes how to install/uninstall OBS onto/from your computer and how to startup/shutdown the OBS software installed on your computer.

### 2.1 Install Software

To install OBS onto your computer, please do the followings:

- i. Go to [http://www.ahsay.com/en/download/download\\_customer\\_latest.html](http://www.ahsay.com/en/download/download_customer_latest.html)
- ii. Download the corresponding version of the software you required, e.g. "Windows" -> "New Installation"
- iii. Download the "Installation and Upgrade Guide"
- iv. Follow the instructions in the "Installation and Upgrade Guide" to complete the installation

### 2.2 Startup/Shutdown

To startup/shutdown OBS, please do the followings:

#### On Windows

- i. Logon as [administrator] to Windows
- ii. Select the [Ahsay Offsite Backup Server] service from either:
  - a. (For Windows NT) [Control Panel] -> [Services]
  - b. (For Windows XP) [Control Panel] -> [Performance and Maintenance] -> [Administrative Tools] -> [Services]
  - c. (For Windows 2000/2003) [Control Panel] -> [Administrative Tools] -> [Services]
- iii. Startup/Shutdown
  - a. To startup OBS, press the [Start] button
  - b. To shutdown OBS, press the [Stop] button

#### On Linux/Unix

- iv. Logon as [root]
- v. To startup OBS , please run

```
(Unix / Linux)    [root]# /etc/init.d/obs start
(FreeBSD)         [root]# /usr/local/etc/init.d/obs start
```
- vi. To shutdown OBS, please run

```
(Unix / Linux)    [root]# /etc/init.d/obs stop
(FreeBSD)         [root]# /usr/local/etc/init.d/obs stop
```

#### On Mac OS X

- i. Logon as a Mac user with [administrative privileges]
- ii. To startup OBS, please do the followings by using [Applications] → [Utility] → [Terminal]

```
[localhost:~] user1% su -
```





```
Password:  
[localhost:~] root# SystemStarter start AhsayOBS
```

- iii. To shutdown OBS, please do the followings by using [Applications] → [Utility] → [Terminal]

```
[localhost:~] user1% su -  
Password:  
[localhost:~] root# SystemStarter stop AhsayOBS
```

## 2.3 Uninstall Software

Please follow the following instructions to remove OBS from your computer:

### On Windows

- iv. Logon as [administrator] to windows
- v. From [Control Panel] -> [Add or Remove Program]
- vi. Select the [Ahsay Offsite Backup Server] entry
- vii. Press the [Change / Remove] button
- viii. Press the [Uninstall] on the uninstall dialog
- ix. Remove the directory [C:\Program Files\Ahsay Offsite Backup Server] manually
- x. Remove all user backup and system files manually if they are not stored under OBS\_HOME.

### On Linux/Unix

- i. Logon as [root]
- ii. Shutdown OBS  
(Unix / Linux) [root]# /etc/init.d/obs stop  
(FreeBSD) [root]# /usr/local/etc/init.d/obs stop
- iii. Delete all files  

```
[root]# export OBS_HOME=/usr/local/obs  
[root]# rm -rf $OBS_HOME
```
- iv. Remove all user backup and system files manually if they are not stored under OBS\_HOME.

### On Linux/Unix

- i. Logon as a Mac user with [administrative privileges]
- ii. Shutdown OBS, please do the followings by using [Applications] → [Utility] → [Terminal]  

```
[localhost:~] user1% su -  
Password:  
[localhost:~] root# SystemStarter stop AhsayOBS
```
- iii. Delete all files under [/Applications/AhsayOBS]
- iv. Remove all user backup and system files manually if they are not stored under OBS\_HOME.

### 3 Quick Start

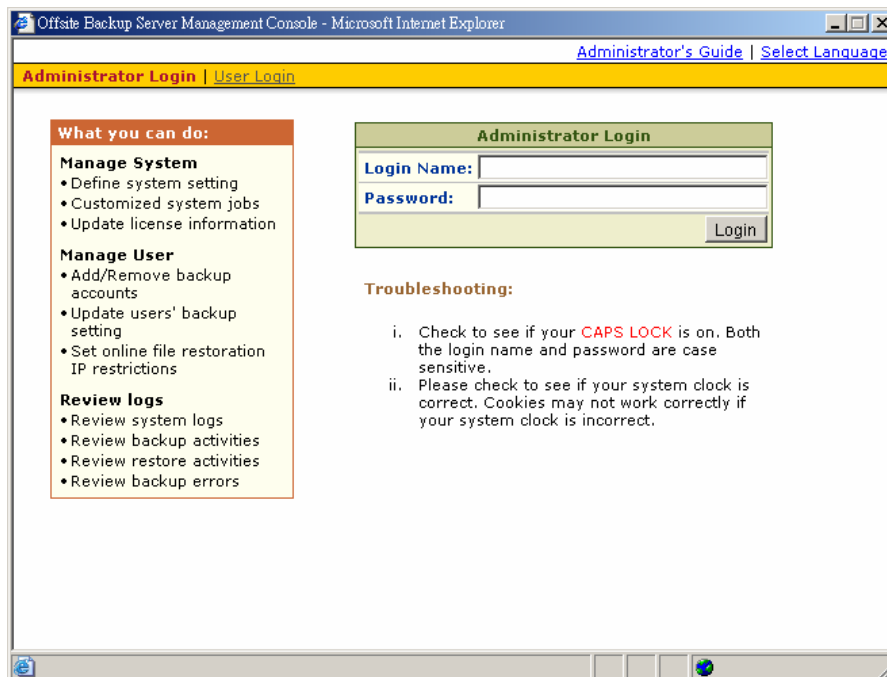
This chapter describes the minimum steps required to start using OBS. Please consult the information in the following chapters for a complete reference to all features available in OBS.

#### 3.1 Getting started

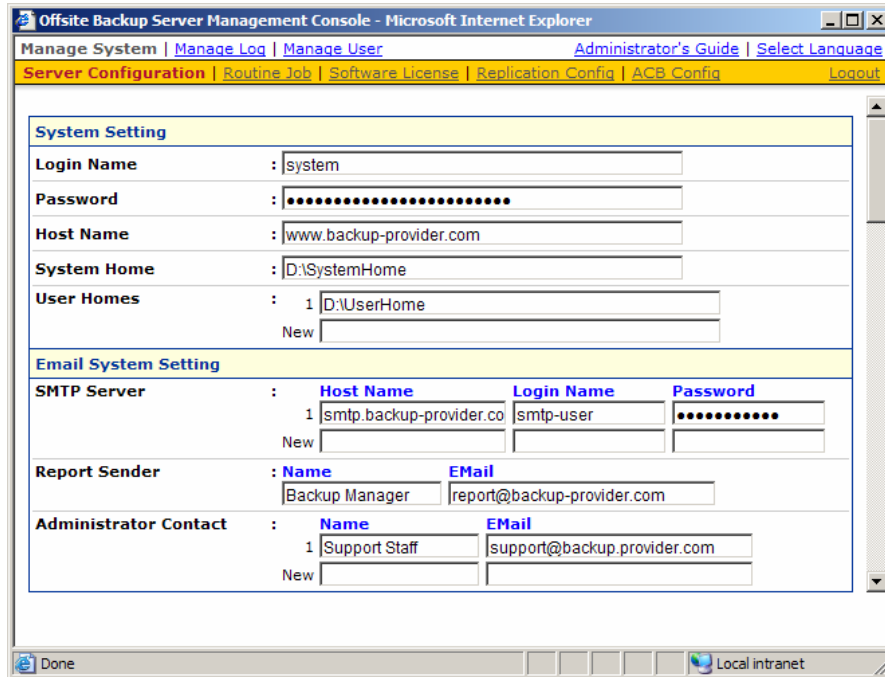
To setup your OBS, please do the followings:

- i. Point your browser to `http://your-server/`.
- ii. Logon to [Backup System Administration Logon]

The default login name and password are "system" and "system" respectively.



- iii. Setup backup server



Prior to using OBS to backup your users' data, please do the followings:

- a. Set your hostname

Enter a resolvable hostname of your backup server (e.g. backup.your-company.com) into the [Host Name] text field. Although you can supply an IP address here, it is preferable to use a host name instead.

Are you using custom TCP port? If so, try appending the custom port number to the [Host Name] field (e.g. backup.yourcompany.com:8080)

If you are not using custom port, make open a browser on the backup server and type in the value of [Host Name] as an URL. Check if you get the backup server homepage. If you don't get the webpage, try until you can reach it and put this value in the [Host Name] field.

- b. Set the [User Homes] directory

[User Homes] refers to directories where OBS stores the backup files and backup log for all its users. You should set [User Homes] to directories where there are lots of free spaces.

- c. Set your SMTP Server

Enter a resolvable hostname (or an IP address) of your SMTP server into the [SMTP Server] text field

If your SMTP server is not running on standard SMTP ports (i.e. port 25), you can append your custom port number to your SMTP server address to use this server (e.g. mail.your-company.com:8025).

You are only required to enter The [Login Name] and [Password] text fields if your SMTP server requires user authentication when sending emails

- d. Press the [Update] button

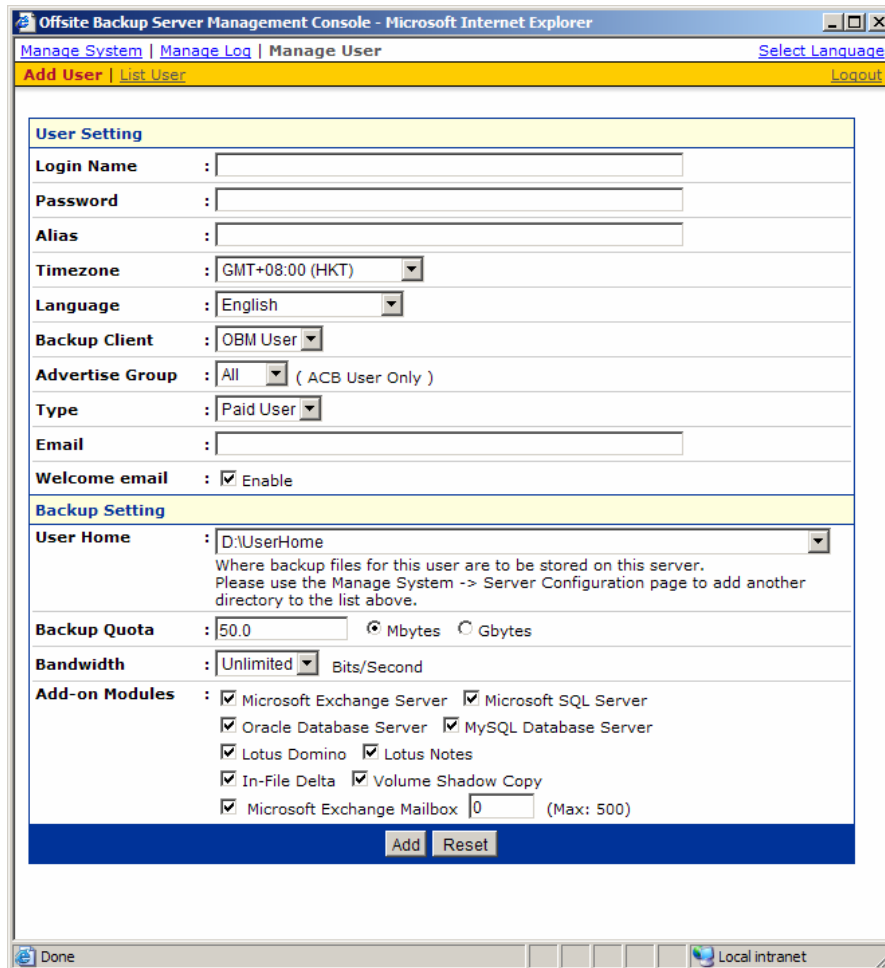
- e. Enter your license key (You can skip this step if you are evaluating this software)

Enter the licensing information printed on [End User License Agreement] printout into the text field provided in the [Manage System] -> [Software License] panel. Please note that both [Licensee Name] and [License Key] are case sensitive.

iv. Add Backup User

You need to add a backup user to the system before you can start backing up data to OBS. To add a backup user to the system, please do the followings:

- f. Click the [Manage User] link available at the top menu and choose [Add User]
- g. Enter the user information for the new user account into the form provided



Key	Description
Login Name	Login Name of the new account
Password	Password of the new account
Alias	Another name of the new account
Time zone	Time zone of the new account
Language	Preferred language for email report of the new account
Backup Client	Choose OBM client or ACB client
Advertise Group	For ACB clients only. Choose whether advertisements are displayed at the bottom of the ACB client
Type	Trial User – Account of this type will be deleted from the system after an inactivity period of 30 days (max. quota of 500MB after 30 days trial period) Paid User - Account of this type will stay within the system until it is removed from the system by the administrator
Email	Email address of the new account
Welcome email	Check this option to send a welcome email
User Home	The top directory where the software stores backup files and all other information for the new account
Backup Quota	Backup Quota of the new account
Bandwidth	Bandwidth throttling for this user account
Add-on modules	Add-on modules for this user account



- v. Logon as the new user
  - a. Point your browser to <http://your-server/>.
  - b. Click the [Backup User Logon] link
  - c. Logon with the login name and password you have just created

- vi. Run Backup

Please follow the [Quick Start] information available in the Users' Guide to install the Online Backup Manager onto users' computer to start backing up data.

## 4 Best Practices and Recommendations

This chapter lists out all best practices and recommendations which you should consider before deploying OBS to a production environment.

### 4.1 Setting [System Home] and [User Homes] to disk partition with large free space

The default location of the [System Home] and [User Homes] settings are set to the system partition of a computer (i.e. C:\ or /usr). Since [System Home] and [User Homes] directories will be used to store application data (e.g. backup data, setting and log files), from a system performance point of view, it is not advisable to use the system partition of a computer to store application data. Before production, it is **HIGHLY IMPORTANT** to change the [System Home] and [User Homes] settings to a directory under a non-system partition to ensure the best overall performance and to avoid unexpected fill up of the system partition.

### 4.2 Avoid Disk partitions larger than 500GB

We recommend all disk partitions used by OBS to be no larger than 500GB size. From our experience with using partitions of larger than 500GB, we notice that OBS starts running into strange unexplainable problems after using these partitions for a couple of months. After further investigations, we find out that some storage devices do have undocumented restrictions of running partitions with up to 1TB of storage. As it is impossible to find which storage device has this limitation, to avoid unnecessary problems, we would recommend using partitions of no more than 500GB in size, though there are partners who have been using partitions of larger than 500GB size with no problem.

Having a smaller partition has a number of other benefits as well, e.g. it is a lot faster to do a scandisk on a smaller partition. This helps reducing downtime when you need to do maintenance on your storage devices. Also, it is better not to put all eggs in one basket by storing everything in a single partition. If your data is spanning across different partitions, even if you lost one partition, data on other partitions are still safe. Furthermore, file addition and deletion add entries to the MFT (master file table) of the NTFS partition table which never gets cleaned up (similar overhead can be found in Linux ext partition as well). Performance will degrade much faster on large partitions than on smaller partitions.

### 4.3 Running OBS as non-root user

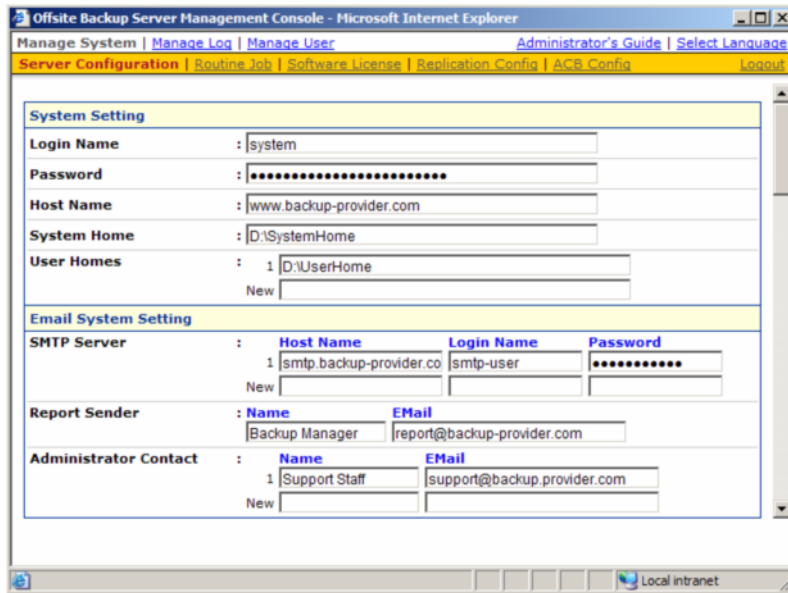
If you are running OBS on Linux, you are advised to run the OBS service as non-root user. (OBS service is run under root by default). This minimizes the impact of damages that could be done on the system in case the system has been compromised by hackers. Please refer to the FAQ question of "[How do I run OBS under non-root user on Linux?](#)" for detailed instructions of how to do so.

### 4.4 Expose only TCP port 80 and 443 to the public

It is recommended to expose only TCP port 80 and 443 to the public on your firewall. Please consult the user's manual of your firewall for more information on how to do so.

## 5 Server Configuration

This chapter describes how you can use the [Manage System] -> [Server Configuration] page (shown below) to manage the configuration of your backup server.



**System Setting**

Login Name : system

Password : .....

Host Name : www.backup-provider.com

System Home : D:\SystemHome

User Homes : 1 D:\UserHome

New

---

**Email System Setting**

SMTP Server : 

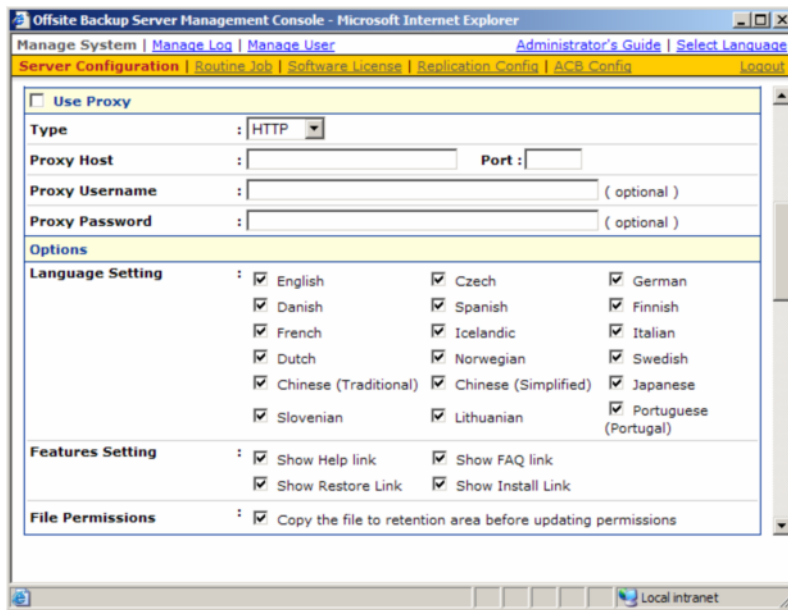
Host Name	Login Name	Password
1 smtp.backup-provider.co	smtp-user	.....
New		

Report Sender : 

Name	EEmail
Backup Manager	report@backup-provider.com

Administrator Contact : 

Name	EEmail
1 Support Staff	support@backup.provider.com
New	



Use Proxy

Type : HTTP

Proxy Host : Port :

Proxy Username : ( optional )

Proxy Password : ( optional )

---

**Options**

**Language Setting** :  English  Czech  German  
 Danish  Spanish  Finnish  
 French  Icelandic  Italian  
 Dutch  Norwegian  Swedish  
 Chinese (Traditional)  Chinese (Simplified)  Japanese  
 Slovenian  Lithuanian  Portuguese (Portugal)

**Features Setting** :  Show Help link  Show FAQ link  
 Show Restore Link  Show Install Link

**File Permissions** :  Copy the file to retention area before updating permissions

This section describes all settings under the [Manage System] menu.

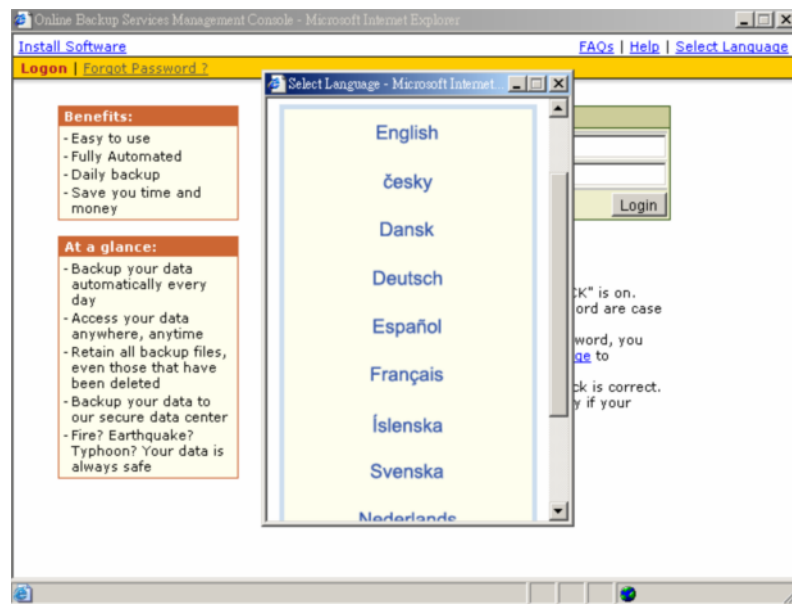
Key	Description
Login Name / Password	Username and password of system account
Host Name	A resolvable hostname of this server (e.g. backup.your-company.com). Although you can supply an IP address here, it is preferable to use a host name instead.
System Home	The directory where OBS stores its system information. The default directory for [System Home] is %OBS_HOME%\system. Normally, you don't need to modify the value of this setting unless you want to store this information elsewhere.
User Homes	The directories where OBS stores the backup files and backup log for all its users. You should set [User Homes] to directories where there are lots of

	free spaces.
SMTP Server	The SMTP server that OBS will use to deliver its email reports
Report Sender	The name and email address that will be used as a sender for all outgoing emails
Administrative Contact	The name(s) and email address(es) of the system administrator. System reports (e.g. Daily Usage Report and Daily Error Report) will be delivered to these mailboxes.
Use Proxy	Whether to use proxy to access the internet
Proxy Host / Port	Proxy server host and port number
Proxy Username / Password	Proxy user name and password if user authentication is used
Language Setting	It determines whether different languages are enabled
Features Setting	It determines whether the [FAQ], [Help], restore link and install link should be available to users
File Permissions	It determines whether the existing file are copied to retention area before updating the permission settings

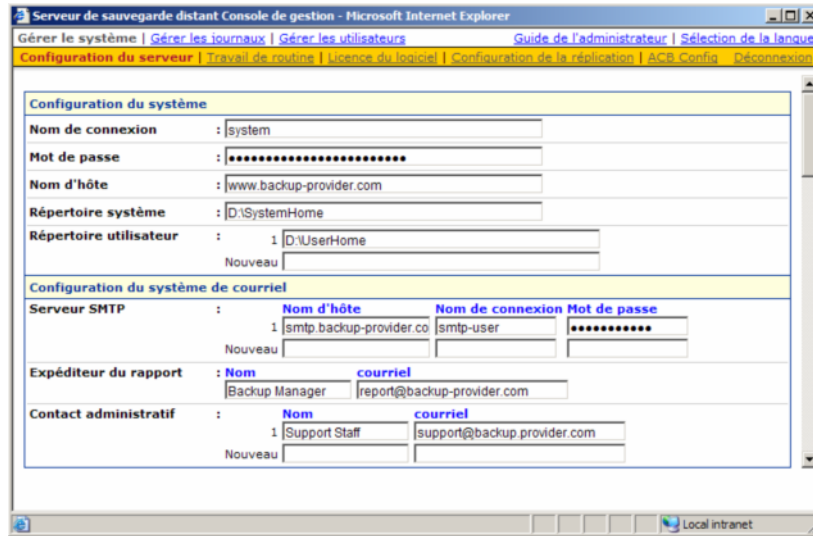
## 5.1 User Languages Setting

The language of the web interface can be easily changed to another language by:

- i. Click the [Select Language] link available on the top right hand corner of the web interface
- ii. Select the language of your choice
- iii. All text messages from the original window are now displayed in the language you have just selected (see example below)

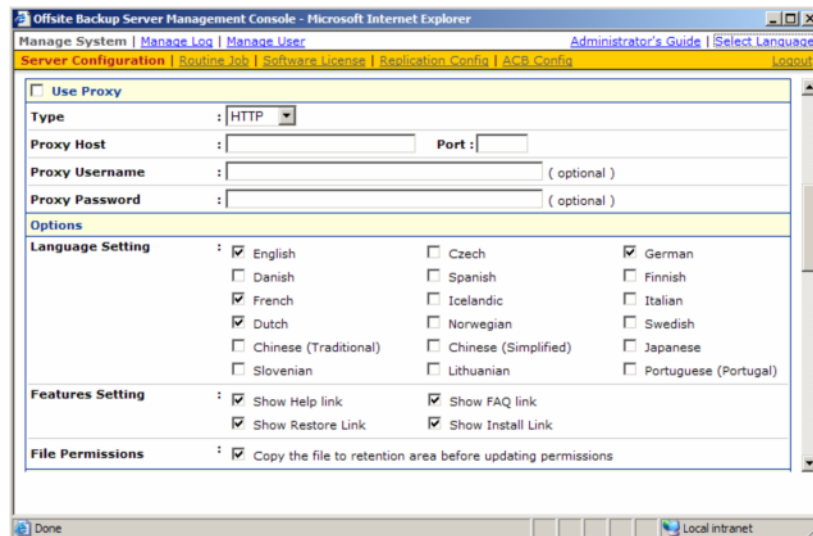






The languages currently supported by OBS include English, Czech, Danish, Dutch, French, Spanish, Portuguese, Icelandic, Norwegian, Finnish, Italian, German, Swedish, Chinese (Traditional and Simplified), Japanese, Lithuanian and Slovenian. You can limit the list of languages available to users by using the [Manage System] -> [Server Configuration] -> [Language Setting] options.

If you uncheck all checkboxes for all languages available in [Manage System] -> [Server Configuration] -> [Language Setting], the [Select Language] will no longer be available on the top right and corner of the web interface (you need to refresh the top menu bar to see the change). Users will not be able to change the language of the web interface.





## 5.2 System Login Name/Password

The [Login Name] and [Password] setting under the [Manage System] -> [Server Configuration] page sets the login name and password (the default username/password is system/system) that you would use to logon the system administration console. Users are recommended to change both the login name and password to something other than the default setting to avoid unauthorized access to the backup system.

## 5.3 Host Name

The [Host Name] setting under the [Manage System] -> [Server Configuration] page sets the hostname of the backup server. This entry will be used as a reference to the backup server in all email reports. Please enter a hostname/IP address (a public hostname/IP address if you expect backup requests originating from the internet).

Also, please make sure that the [Host Name] entry is accessible from the backup server itself. This means that if you enter "backup.your-backup.com" into the [Host Name] entry, please make sure that when you enter "http://backup.your-backup.com" into the URL of a browser on the backup server itself, you can access the backup system welcome page.

If you are running OBS on custom TCP port (i.e. NOT Port 80 and Port 443), please append your custom TCP port number to the [Host Name] entry. For example, if you are running OBS on TCP Port 8080 for HTTP, please enter "backup.your-backup.com:8080" as your [Host Name] entry (Please do not enter the custom TCP Port for HTTPS, e.g. 8443, into the [Host Name] field as it will not work).

## 5.4 System Home and User Home Directories

The [System Home] and [User Homes] setting under the [Manage System] -> [Server Configuration] page sets the system home directory and user home directories for OBS (the default values are "C:\Program Files\Ahsay Offsite Backup Server\system" and "C:\Program Files\Ahsay Offsite Backup Server\user" for Windows).

The system home directory for OBS defines a directory in which OBS will store all its system information.

The user home directories for OBS define a list of directories in which OBS can be used to store the user folder for each backup user. Each user folder contains the backup setting as well as all backup data owned by this particular user.

Multiple user home directories can be set for OBS. This means that you can spread your users across different hard disk partitions (or different hard disks) and this will allow you to expand the storage available to OBS easily. For example, if you want to add more storage to OBS, you can simply add another hard disk (or NAS device) to the system and add the path to this new drive (e.g. E:\ or E:\Users) to the [User Homes] setting. You can then add new backup users (or [move existing backup users](#)) to this user home folder.

Backup users created by OBM "Free Trial Registration" wizard will always use the first [User Homes] entry as the user home to create backup users. If you want to offer free trial to your users and have enabled the "Free Trial Registration" option on the [Manage System] -> [Server Configuration] page, please make sure that there is enough free space available in the first entry of the [User Homes] settings to avoid running out of free space.

Please also see "[How do I set the user home directory to a network drive?](#)" in the FAQ section.

## 5.5 Email System Setting

The [Email System Setting] settings under the [Manage System] -> [Server Configuration] page defines the various email setting OBS will use to generate email reports to backup system administrator and backup users.

The [Email System Setting] -> [SMTP Server] -> [Host Name] entry defines the SMTP server that will be used by OBS to deliver its email reports. If you are using a SMTP server that is not running on SMTP standard TCP port (port 25), please append your custom TCP port number for SMTP service to the [SMTP Server] -> [Host Name] entry (e.g. mail.your-company.com:8025).

You are only required to fill in the [SMTP Server] -> [Login Name] and [SMTP Server] -> [Password] entry if the SMTP server you are using required user authentication before accepting mail delivery requests.

Multiple SMTP servers can be setup for OBS. If the first SMTP server is unavailable, the next SMTP server will be used.

The [Email System Setting] -> [Report Sender] entry defines the "Mail-From" email address that appears in all outgoing emails generated by OBS.

The [Email System Setting] -> [Administrator Contact] entry defines the administrative contact of OBS. OBS will send daily usage and error report and all critical system alert to all email addresses defined here.

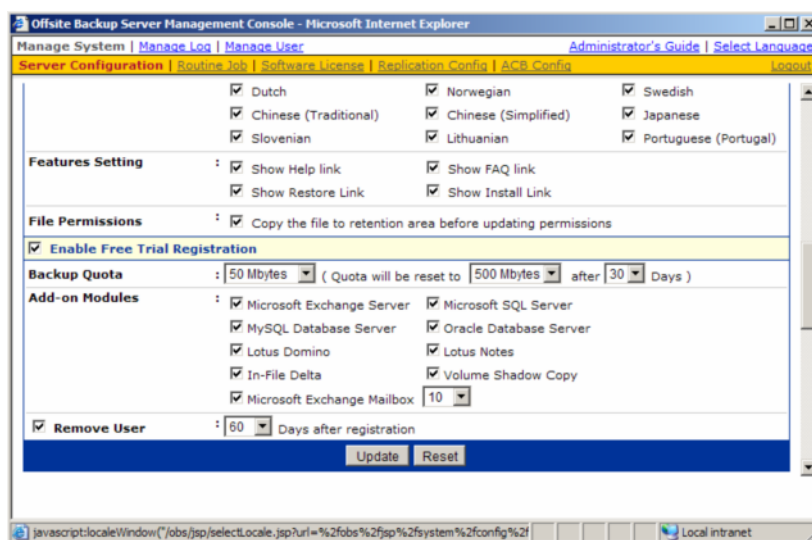
## 5.6 Proxy Setting

The [Use Proxy] settings under the [Manage System] -> [Server Configuration] page defines whether OBS should use a proxy to gain access to the internet.

Two types of proxy, HTTP/HTTPS and SOCKS 4/5, are supported. You can use the [Proxy Host] and [Port] entries to define the location of your proxy server. If the proxy server you are using requires user authentication, please use the [Proxy Username] and [Proxy Password] entries to set the username/password for your proxy server.

## 5.7 Features Setting

The [Features Setting] settings under the [Manage System] -> [Server Configuration] page defines whether some customizable features on the web interface should be enabled or not.



Key	Description
Show FAQ link	It defines whether the [FAQs] link should appear at the top right hand corner of the web administration console (user interface only)

Show Help link	It defines whether the [Help] link should appear at the top right hand corner of the web administration console (user interface only)
Show Restore Link	It defines whether the [Restore] link should appear at the top right hand corner of the web administration console (user interface only)
Show Install Link	It defines whether the [Install Software] link should appear at the top right hand corner of the web administration console (user interface only)

## 5.8 File Permissions

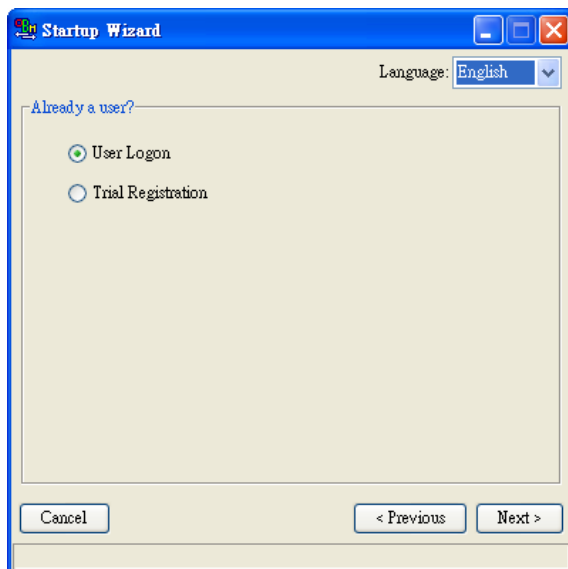
The [File Permissions] settings under the [Manage System] -> [Server Configuration] page defines whether OBS should make a copy of the file to the retention area before the file permission changes. When this option is set, all backup accounts will use more retention space but allows the users to restore the same file with various permissions. When this option is not set, the permission changes are updated to the backed up file directly.

## 5.9 Free Trial Setting

The [Enable Free Trial Registration] settings under the [Manage System] -> [Server Configuration] page defines various free trial settings available in OBS.

Trial users do not count towards the maximum number of users allowed within OBS by the software license and there can be unlimited number of trial users within OBS. However, each backup user can have a maximum backup quota of 100GB for a trial period of 30 days. After expiration of the trial period, the backup quota will reset to a maximum of 500MB automatically.

To allow backup accounts to be created from OBM upon installation of OBM (if no backup account can be found on the system), please enable the [Enable Free Trial Registration] option. If this checkbox is unchecked, the option to register for a trial account (see below) will not be available to users.



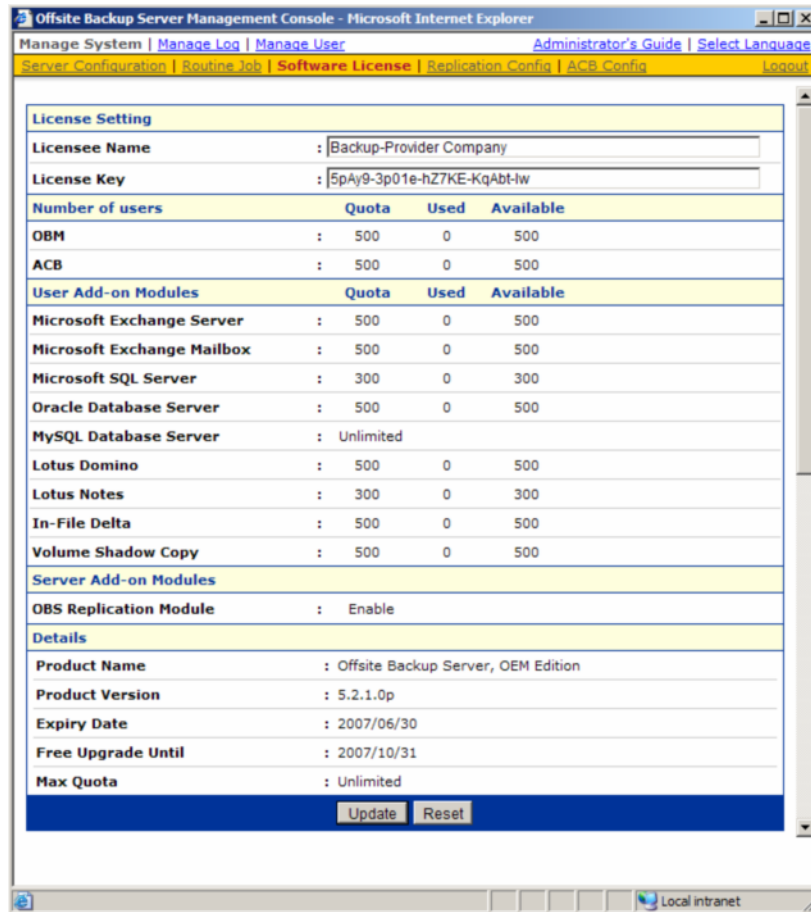
The [Backup Quota] defines the maximum backup quota of trial backup accounts upon registration.

The [Add-on Modules] option defines whether you want to allow trial users to have different add-on modules.

The [Remove User] option defines whether you want to remove trial backup users for certain number of days after registration. For example, you can use this option to tell OBS to remove trial backup users from the system automatically after backup users have registered for 60 days.

## 6 Software License

This chapter describes how you can use the [Manage System] -> [Software License] page (shown below) to manage software license of OBS.



Key	Description
Licensee Name	Business name of the licensee
License Key	License Key to activate this software. Please enter [License Key] as printed on the [Software License Agreement] into the text field provided.
Number of users	The maximum number of OBM and ACB backup accounts allowed.
Add-on Modules	It shows whether different add-on modules are enabled. You need to have a new license key to enable these modules. <ul style="list-style-type: none"> <li>➤ Quota – the total number licenses of a particular module available in total</li> <li>➤ Used – the total number licenses of a particular module assigned to all users</li> <li>➤ Available – the total number licenses of a particular module available for further</li> </ul>
Product Name	Name of the licensed product
Product Version	Version number of the licensed product
Expiry Date	The date when the current license key will expire. You will not be able to use OBS this date.
Free Upgrade Until	The last date you are allowed to upgrade to the latest OBS available. You will not be able to upgrade to software release after this date with your current license key. You will still be able to use existing running software with this license key.
Max Quota	The maximum quota for each backup user supported.

## 6.1 Licensee Name and License Key

When you click the [Manage System] -> [Software License] link available at the top menu, the [Software License] panel will appear (see above). You can use the form available on this panel to activate the software.

Please remember the following notes when you enter your licensee name and your license key:

- Both [Licensee Name] and [License Key] are case sensitive and they must be entered EXACTLY as stated in your software receipt. If possible, please use copy and paste shortcuts (CTRL-C and CTRL-V) to enter both the [Licensee Name] and [License Key] into the field provided to avoid typo error.
- If a proxy server is required to access the Internet from OBS, please setup the [proxy setting](#). Access to the Internet is required because the license key must be activated by our license server before it is usable.
- One license key can only be used on one machine once it has been activated. If you use the same license key to activate another copy of OBS on another server, you will get an "Internal Error 1011" message. You can still run this copy of OBS for another 7 days without any problems but it will stop working after this grace period. Please [contact us](#) to re-activate your license key if you run into this situation.

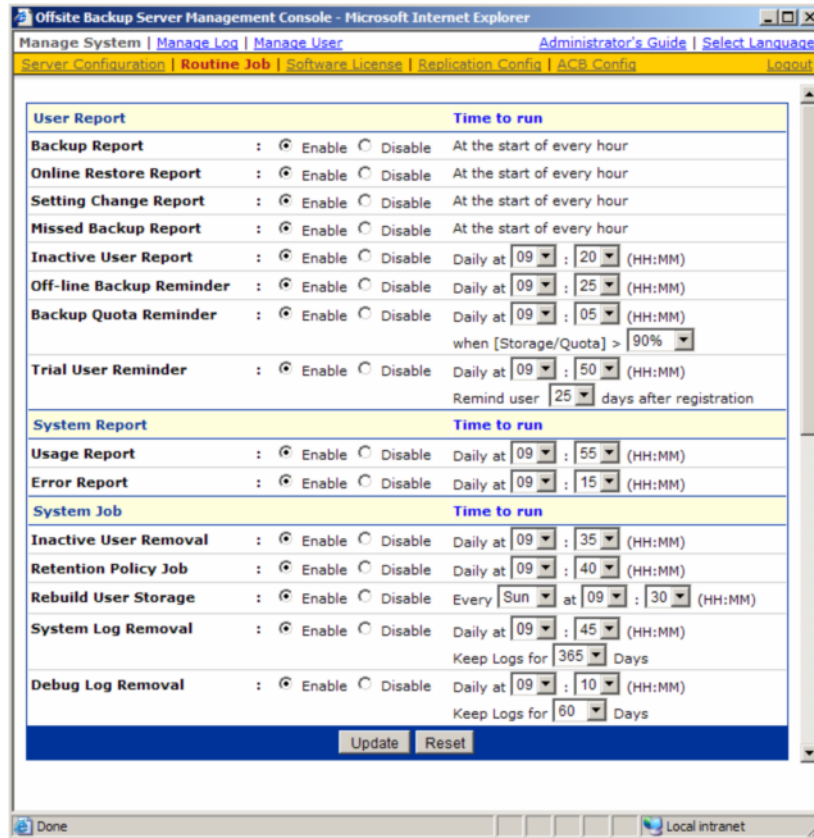
## 6.2 Automatic License Renewal

If you are using OBS under a monthly leasing plan, you will be given a license key that will run only for 30 days (expiry date in the next 30 days). Upon expiration, your license key will be renewed automatically. This means that even if you have a license key that will expire in no more than 30 days, the license key will be renewed automatically and no user intervention is required to make it happen.

If there is anything wrong with the license renewal process (e.g. our license server is down or the network connection is unavailable), expired license will have a grace period of 14 days to renew its license key. This means that OBS could still function with expired license for an extra 14 days before it shuts down itself. Hopefully, a grace period of 14 days should be enough to resolve any problems arising from the automatic license renewal process.

## 7 Managing Routine Job

This chapter describes how you can use the [Manage System] -> [Routine Job] page (shown below) to manage a number of system routine jobs of OBS. When you click the [Manage System] -> [Routine Jobs] link available at the top menu, the [Routine Jobs] panel will appear. You can use the form available on this panel to define your preferences of how you want different system routine jobs to run.



User Report		Time to run
Backup Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	At the start of every hour
Online Restore Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	At the start of every hour
Setting Change Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	At the start of every hour
Missed Backup Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	At the start of every hour
Inactive User Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 20 (HH:MM)
Off-line Backup Reminder	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 25 (HH:MM)
Backup Quota Reminder	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 05 (HH:MM) when [Storage/Quota] > 90%
Trial User Reminder	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 50 (HH:MM) Remind user 25 days after registration
System Report		Time to run
Usage Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 55 (HH:MM)
Error Report	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 15 (HH:MM)
System Job		Time to run
Inactive User Removal	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 35 (HH:MM)
Retention Policy Job	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 40 (HH:MM)
Rebuild User Storage	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Every Sun at 09 : 30 (HH:MM)
System Log Removal	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 45 (HH:MM) Keep Logs for 365 Days
Debug Log Removal	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 09 : 10 (HH:MM) Keep Logs for 60 Days

Key	Description
Backup Report	Hourly job sending backup reports to users whose backup job have completed within the last hour.
Online Restore Report	Hourly job sending online file restoration reports to users who have performed and completed an online file restoration action within the last hour.
Setting Change Report	Hourly job sending setting change reports to users who have updated their backup setting within the last hour.
Missed Backup Report	Hourly job checking whether any scheduled backup job has been missed for all backup users and sending missed backup reports to users who have missed their backup jobs.
Inactive User Report	Daily job sending inactive user reports to users if their accounts have been inactive for more than 7 days.
Off-line Backup Reminder	Daily job sending off-line backup reminders to users who have set the off-line backup option and have not performed a backup for the required number of days.
Backup Quota Reminder	Daily job sending backup quota reminders to users whose storage quotas are above a certain percentage.
Trial User Reminder	Daily job sending trial user reminders to users whose trial account are about to expire.
Usage Report	Daily job sending system usage reports to system administrators.
Error Report	Daily job sending system error reports to system administrators.
Inactive User Removal	Daily job deleting all trial accounts that have been inactive for 60 days.
Retention Policy Job	Daily job removing obsolete files from the retention area according to each user's retention policy setting.
Rebuild User Storage	Weekly job rebuilding all users' storage information by walking through all users' backup files.
System Log removal	Daily job removing system logs older than this number of days from the system
Debug Log Removal	Daily job removing debugging logs older than this number of days from the

system.
---------

## 7.1 Backup Report

The [User Report] -> [Backup Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Backup Report] routine job. The role of the [Backup Report] routine job is to send backup reports to users who have finished one of their backup jobs within the last hour.

This job runs at the start of every hour. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.2 Online Restore Report

The [User Report] -> [Online Restore Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Online Restore Report] routine job. The role of the [Online Restore Report] routine job is to send online file restoration reports out to users who have performed and completed an online file restoration action within the last hour.

This job runs at the start of every hour. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.3 Setting Change Report

The [User Report] -> [Setting Change Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Setting Change Report] routine job. The role of the [Setting Change Report] routine job is to send reports out to users who have updated their profiles or backup sets within the last hour.

This job runs at the start of every hour. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.4 Missed Backup Report

The [User Report] -> [Missed Backup Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Missed Backup Report] routine job. The role of the [Missed Backup Report] routine job is to send reminder notice to users who have missed one of their scheduled backup jobs. OBS defines a scheduled backup job to be a missed backup job if there is no backup run 6 hours after a backup has been scheduled.

This job runs at the start of every hour. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.5 Inactive User Report

The [User Report] -> [Inactive User Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Inactive User Report] routine job. The role of the [Inactive User Report] routine job is to send a reminder notice to users who have been inactive on the system.

This job will run daily as defined by the [Daily at] setting. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.6 Off-line Backup Reminder

The [User Report] -> [Off-line Backup Reminder] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Off-line Backup Reminder] routine job. The role of the [Off-line Backup Reminder] routine job is to send a reminder notice to users who have set the off-line backup option in their backup sets but failed to backup for a certain amount of time.

This job will run daily as defined by the [Daily at] setting. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.



## 7.7 Backup Quota Reminder

The [User Report] -> [Backup Quota Reminder] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Backup Quota Reminder] routine job. The role of the [Backup Quota Reminder] routine job is to send a reminder notice to users whose storage quota usage has hit a pre-defined percentage.

This job will run daily as defined by the [Daily at] setting. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option. Please also set the pre-defined percentage of storage divide by quota that will trigger this reminder.

## 7.8 Trial User Reminder

The [User Report] -> [Trial User Reminder] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Trial User Reminder] routine job. The role of the [Trial User Reminder] routine job is to send a reminder notice to users whose trial accounts are about to expire.

This job will run daily as defined by the [Daily at] setting. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option. Please also set the number of days after registration that the users should get this reminder.

## 7.9 Usage Report

The [System Report] -> [Usage Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Usage Report] routine job. The role of the [Usage Report] routine job is to send usage report, which contains a statistics of all backup users activities, to the administrative contacts of OBS.

This job will run daily as defined by the [Daily at] setting. If you want the administrative contacts of OBS to receive the usage report, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.10 Error Report

The [System Report] -> [Error Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Error Report] routine job. The role of the [Error Report] routine job is to send error report, which contains a full listing of all system and backup errors, to the administrative contacts of OBS.

This job will run daily as defined by the [Daily at] setting. If you want the administrative contacts of OBS to receive the error report, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.11 Inactive User Removal

The [System Job] -> [Inactive User Removal] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Inactive User Removal] routine job. The role of the [Inactive User Removal] routine job is to remove inactive trial users (i.e. no logon or backup traffic from this user) from OBS as defined by the [Free Trial Setting](#).

This job will run daily as defined by the [Daily at] setting. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.12 Retention Policy

The [System Job] -> [Retention Policy] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Retention Policy] routine job. The role of the [Retention Policy] routine job is to delete files from the retention area for each user according to the retention policy of each backup set of each backup user.

This job will run daily as defined by the [Daily at] setting. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

The [Enable File Validation] option defines the setting of whether backup files will be validated for integrity while

running retention policy:

- [Filesize & Checksum] – check both file size and checksum number to validate file integrity
- [Filesize only] –check only the file size to validate file integrity. Checksum is not checked in this case to make validation run faster
- [Skip Validated File] – Skip validating a backup file if it has been validated already by a previous validation job
- [Log Information Only] – If a file fails to pass the validation check, a message will be logged in the [Manage Log] -> [System Log] log. In this case, this file will still be residing in the user directory as valid backup file, though it is likely that it can't be restored successfully
- [Move to retention dir] –If a file fails to pass the validation check, a message will be logged in the [Manage Log] -> [System Log] log and this file will be moved from the user directory ([User Home] \ [Login Name] \ files) to the retention directory ([User Home] \ [Login Name] \ errfiles). In this case, this backup file will be uploaded from the client's computer to the backup server next time when this user runs a backup job.

## 7.13 Rebuild User Storage

The [System Job] -> [Rebuild User Storage] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Rebuild User Storage] routine job. The role of the [Rebuild User Storage] routine job is to recalculate all users' storage information (e.g. data area file size/number, retention area file size/number) by traversing through all backup files for all users within the system.

This job is designed to run weekly and will run at the time defined by the [Every WEEKDAY at] setting. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.14 System Log Removal

The [System Job] -> [System Log Removal] setting under the [Manage System] -> [Routine Job] page defines the setting of the [System Log Removal] routine job. The role of the [System Log Removal] routine job is to remove all system logs (i.e. all information under the System Home, e.g. system error logs or backup error logs) from OBS after the [Keep Logs for] number of days.

This job is designed to run daily and will run at the time defined by the [Daily at] setting. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

## 7.15 Debug Log Removal

The [System Job] -> [Debug Log Removal] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Debug Log Removal] routine job. The role of the [Debug Log Removal] routine job is to remove all debugging logs (e.g. access logs and web application context logs) from OBS after the [Keep Logs for] number of days.

This job is designed to run daily and will run at the time defined by the [Daily at] setting. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

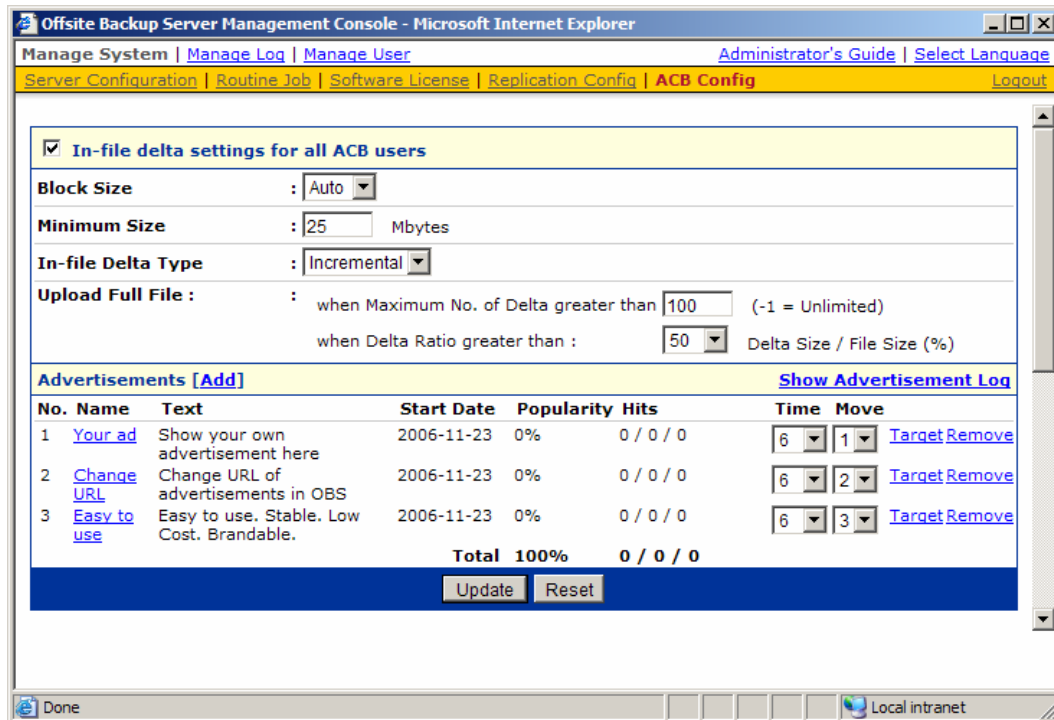


## **8 Managing Replication**

Please refer to the [Installation and Upgrade Guide for Ahsay Replication Server](#) for information on how to install the Replication Server (RPS) to work with OBS. For further information, please refer to the [Ahsay Replication Server Administrator's Guide](#).

## 9 Managing ACB Configuration

This chapter describes how you can use the [Manage System] -> [ACB Config] page (shown below) to manage the advertisements and default In-file delta setting for all ACB users.



The screenshot shows the 'ACB Config' page in the management console. It features a navigation bar at the top with links like 'Manage System', 'Manage Log', and 'ACB Config'. The main content area is divided into two sections: 'In-file delta settings for all ACB users' and 'Advertisements'. The first section contains several configuration options with dropdown menus and input fields. The second section is a table with columns for advertisement details and actions.

In-file delta settings for all ACB users					
Block Size	:	Auto			
Minimum Size	:	25	Mbytes		
In-file Delta Type	:	Incremental			
Upload Full File :	:	when Maximum No. of Delta greater than	100	(-1 = Unlimited)	
	:	when Delta Ratio greater than :	50	Delta Size / File Size (%)	

No.	Name	Text	Start Date	Popularity	Hits	Time	Move	
1	Your ad	Show your own advertisement here	2006-11-23	0%	0 / 0 / 0	6	1	Target Remove
2	Change URL	Change URL of advertisements in OBS	2006-11-23	0%	0 / 0 / 0	6	2	Target Remove
3	Easy to use	Easy to use. Stable. Low Cost. Brandable.	2006-11-23	0%	0 / 0 / 0	6	3	Target Remove
<b>Total</b>			<b>100%</b>	<b>0 / 0 / 0</b>				

Key	Description
In-file delta setting for all ACB users	Select this option to enable and use in-file delta technology for all ACB clients
Block Size	The in-file delta block size used to detect changes within a file. A smaller block size should produce a smaller delta file but requires more processing power. The default setting of [Auto] will choose the optimal block size for each file based on the file's original file size.
Minimum Size	The minimum size setting defines the smallest file size to apply the in-file delta.
In-file Delta Type	The in-file delta type to use for calculating the delta file <ul style="list-style-type: none"> <li>Incremental – this option uses the previous uploaded full or incremental file to calculate the delta. It produces the smallest delta for upload but requires the most time and processor power to restore.</li> <li>Differential – this option always uses the latest uploaded full file to calculate the delta. It produces a larger delta but allows for the fastest restore.</li> </ul>
Upload Full File	The upload full file setting determines when the full file should be uploaded to the server instead of the delta. It depends on either of the following rules being true: <ul style="list-style-type: none"> <li>Maximum No. of Delta – the total number of deltas uploaded since the last full file. The default setting is 100 deltas.</li> <li>Delta Ratio – the ratio of the Delta Size divided by the Full file size. The default setting is 50%.</li> </ul>
Advertisements	Click the [Add] link to add new advertisements

### 9.1 In-file Delta Settings for all ACB users

The [In-file delta settings for all ACB users] setting under the [Manage System] -> [ACB Config] page defines a global setting for all ACB clients. Select this option to enable In-file Delta Technology for ACB clients.

## 9.2 Block Size

The [Block Size] setting defines the size of data block being used to detect changes between the last full backup file and the file being backed up. In general, the smaller the block size, the more likely a matched data block can be found, hence produces a smaller delta file but require more processing power to detect these changes. On the other hand, in-file delta backup running with a 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.

## 9.3 Minimum Size

The [Minimum 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.

## 9.4 In-file Delta Type

The [In-file Delta Type] setting defines the way in-file delta files are handled. There are two different versions as follows:

### Incremental in-file delta type

All delta files are generated with respect to changes made since the last incremental 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.

The full backup file, its checksum file and all incremental delta files stored on the server are always stored in the data area. This means that these files are not affected by the setting of the retention policy and will always be kept on the backup server. It is done this way because all these files are required to get the latest snapshot of the backup file and they should not be removed from the backup server by the retention area cleanup routine.

### Differential in-file delta type

All delta files are generated with respect to changes made since the last full backup file (i.e. differential backup). This means that only the 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.

The full backup file, its checksum file and the last delta file uploaded (if more than one delta files have been uploaded to the backup server) is always stored in the data area. This means that these files are not affected by the setting of the retention policy and will always be kept on the backup server. It is done this way because all these files are required to get the latest snapshot of the backup file and they should not be removed from the backup server by the retention area cleanup routine. All other intermediate delta files are stored in the retention area.

## 9.5 Upload Full File

The [Upload Full File] setting defines when to upload a full file instead of a delta file.

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 at 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] setting is unlimited, it will keep generating delta files and uploading these delta files to the backup server until the other delta setting condition (delta ratio exceeded) forces a full backup. 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

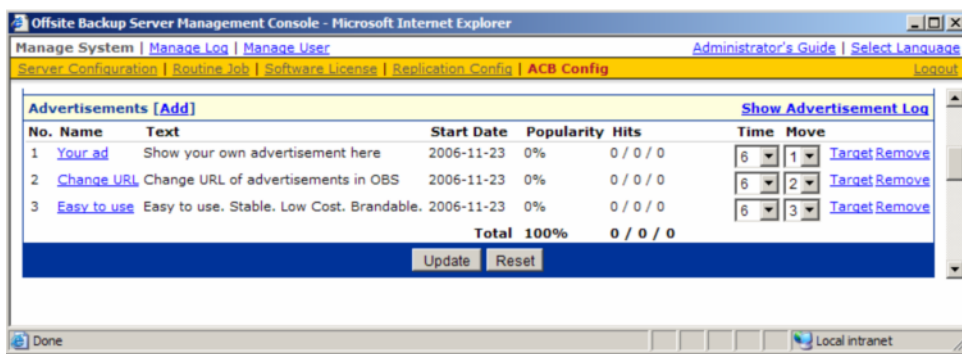
The [Delta Ratio] setting is defined as the size of a delta file divided by the size of its full backup file (i.e. the percentage of changes detected between the last full backup file and the current file).

If the delta ratio calculated from the size of the generated delta file and the size of the full backup 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.

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

## 9.6 Advertisements

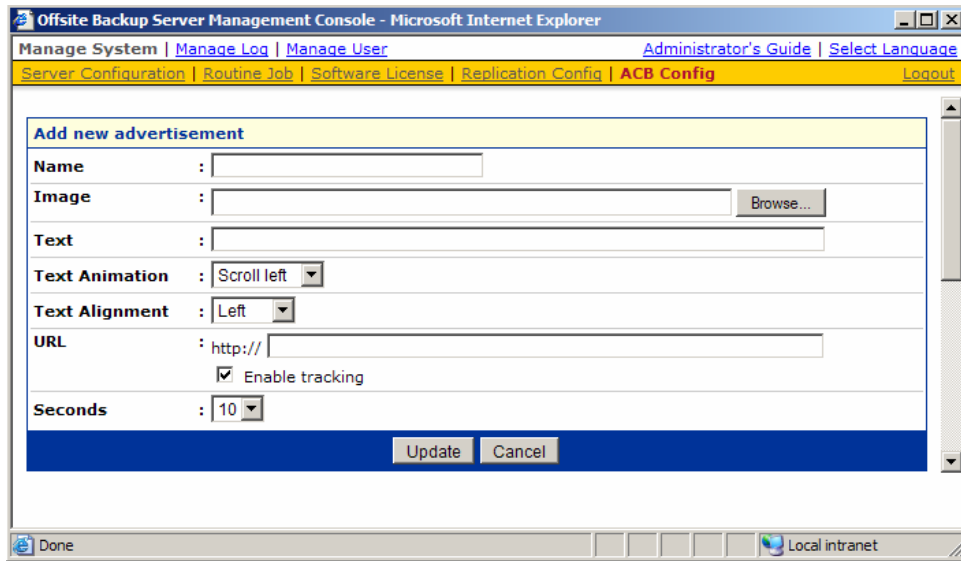
The [Advertisements] setting defines the advertisements and related information that is displayed at the bottom of all ACB clients.



Key	Description
Add	Click this link to add a new advert.
Show Advertisement Log	Click this link to view the advertisement log.
Name	The name of the advertisement. Click the link to edit this advert.
Text	The text to be displayed at the bottom of the ACB client.
Start Date	The date when this advert was created.
Popularity	Calculated value to indicate which advert is the most popular. The value is calculated as the percentage of [Hits for this advert] divided by [Total Hits].
Hits	The "Hits" counter indicates the number of times this advert has been clicked. These counters are only updated if the option "Enable Tracking" is set. The three values are [Hits within 1 day] / [Hits within the last 7 days] / [Hits within the last 30 days].
Time	The number of seconds to display the advert.
Move	The display sequence of the adverts.
Target	Click this link to test the advertisement's URL. This will open a browser and displays the URL web page.
Remove	Click this link to delete the advert.

Add New Advertisement

Click the [Add] link to add new advertisements. Enter the advert information into the form provided.



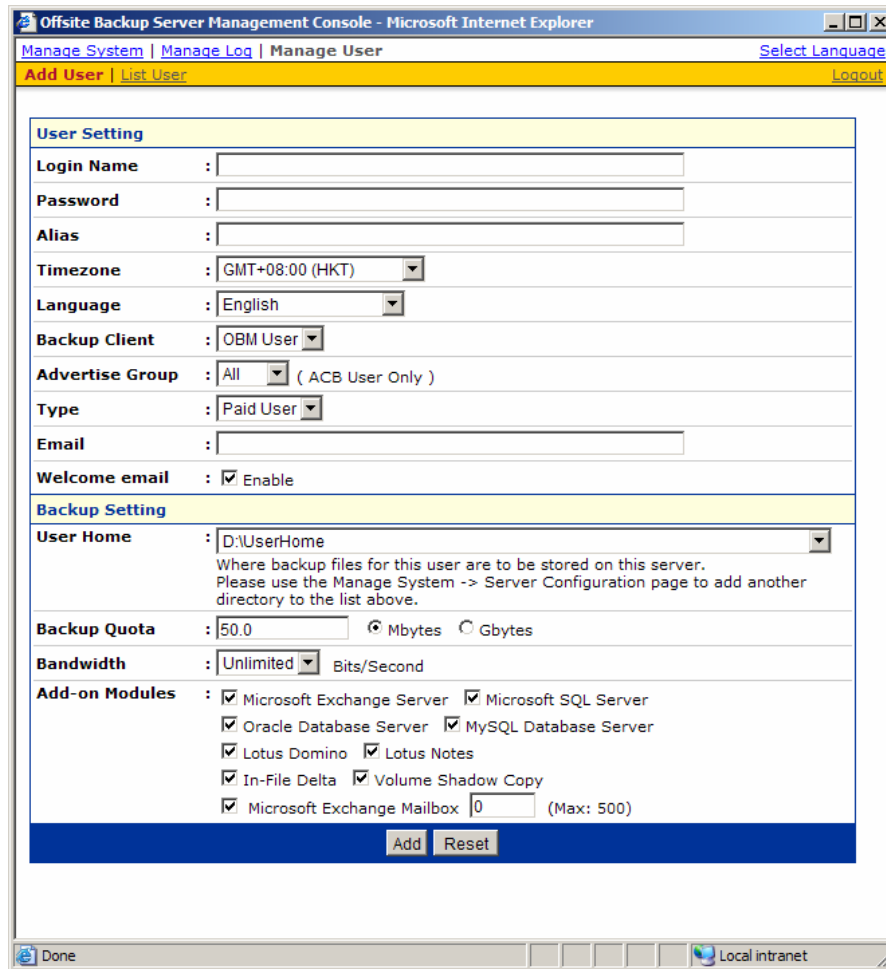
Key	Description
Name	The name of the advertisement.
Image	The full pathname of the image file to be displayed at the bottom of the ACB client. The image size should be 468 x 60.
Text	The text to be displayed at the bottom of the ACB client.
Text Animation	Setting to define whether the text should scroll. <ul style="list-style-type: none"> <li>➤ Scroll Left – text scrolls from right to left.</li> <li>➤ Scroll Right – text scrolls from left to right.</li> <li>➤ None – do not scroll text.</li> </ul>
Text Alignment	Setting to define the text alignment. <ul style="list-style-type: none"> <li>➤ Left – text is aligned left.</li> <li>➤ Center – text is centered.</li> <li>➤ Right – text is aligned right.</li> </ul>
URL	The URL of the advert. If the user clicks the advert in ACB, a browser will open and displays this web page.
Enable tracking	When selected, every time the user clicks the advert in the ACB client, a "Hits" counter is incremented.
Seconds	The number of seconds to display the advert.

## 10 Managing User

This chapter describes how you can use all pages under the [Manage User] menu to manage the backup users within OBS.

### 10.1 Create Backup User

When you click the [Manage User] -> [Add User] link available at the top menu, the [Add User] form will appear (see below). You can then add a backup user to the system by submitting this form to OBS.



A description of all fields above is provided in the following table.

Key	Description
Login Name	Login Name of the new backup user
Password	Password of the new backup user
Alias	Another name of the new backup user
Time zone	Time zone of the new backup user
Language	Preferred language for all email reports of the new backup user
Backup Client	Choose OBM client or ACB client
Advertise Group	For ACB clients only. Choose whether advertisements are displayed at the bottom of the ACB client
Account Type	<p>Either [Trial] or [Paid] type. Trial accounts and paid users differ in the following ways:</p> <ol style="list-style-type: none"> <li>1. Trial users can only have a maximum backup quota of 500MB after the trial period.</li> <li>2. Trial users subject to automatic removal as defined by the [Free Trial Registration] setting (though automatic removal can be disabled)</li> </ol> <p>Other than the differences listed above, both trial and paid users are the same in all</p>

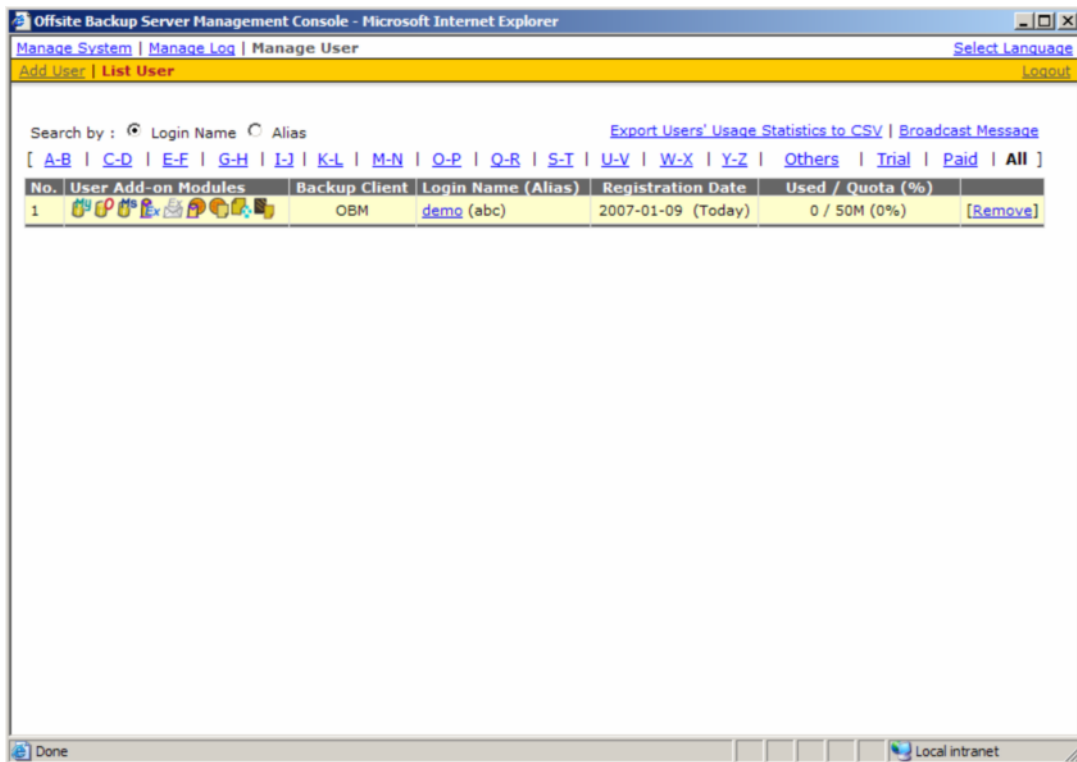


	other areas.
Email	Email address of the new backup user
Welcome email	Define whether a welcome email should be sent to the new user email address
User Home	The top directory where the software stores backup files and all other information for the new account. If you want this user to be in another partition (or in another drive), please add another user home to OBS by using the [Manage System] -> [System Configuration] page.  If you want to <a href="#">setup your user home directories to a network drive</a> , please do refer to our FAQs section for more information.
Backup Quota	Backup Quota of the new account
Bandwidth	Bandwidth allowed for the new account
Add-on Modules	Whether to enable any of the add-on modules to the new backup user  The [Microsoft Exchange Mailbox] text field defines the number of exchange mailboxes that's allowed to be backed up under this user account

## 10.2 List / Remove Backup User

When you click the [Manage User] -> [List User] link available at the top menu, the [List User] panel will appear. You can use the alphabet categories at the top of the user listing to limit the listing to show only those users whose login names starting with a certain alphabet. You can also use the [All] function available to list all users within the system.

To remove a user from the system, just press the [Remove] link next the user you would like to remove.

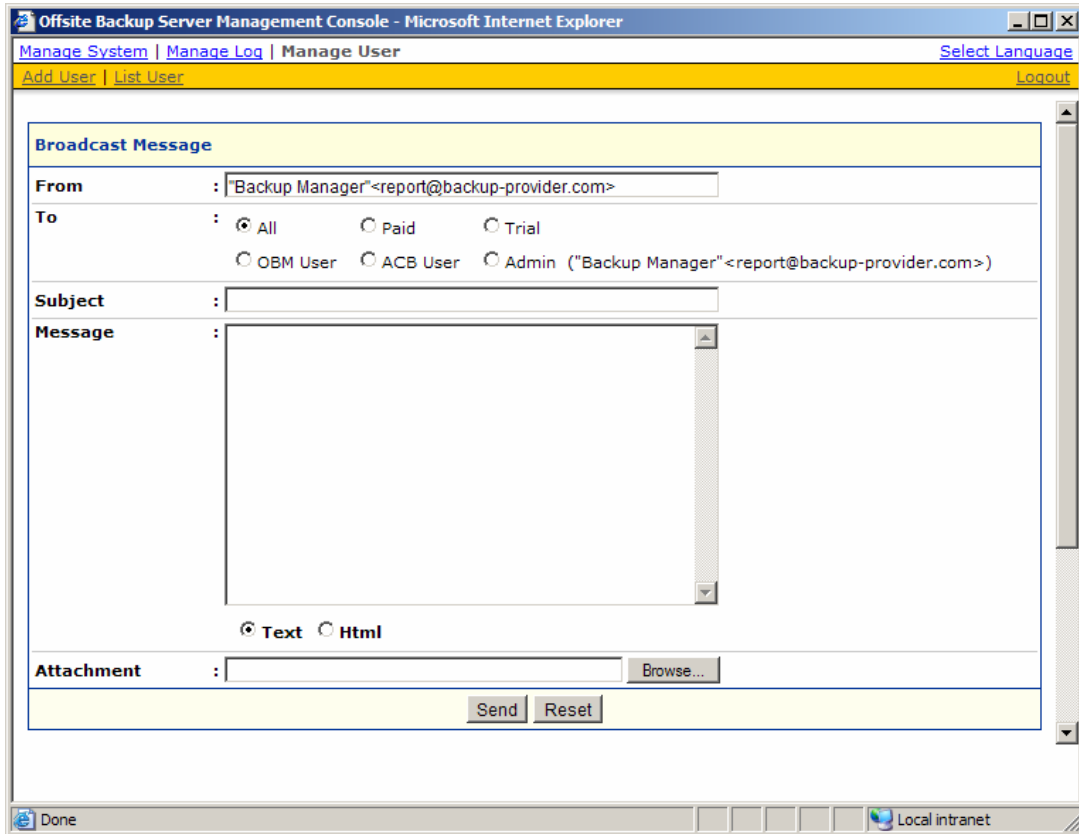


Key	Description
Search By	Define whether alphabetically search should be applied to [Login Name] or [Alias]
User Add-on modules	Indicates the add-on modules for this account
Backup Client	Indicates the backup client for this account
Login Name	Login Name of this account. Click the link to see account details
Alias	Alias of this account
Registration Date	Date when this account was created
Used/Quota (%)	The used/allocated quota (and the quota usage percentage) of this backup user.
Remove	Remove this backup user

Broadcast Message	Use this option if you want to broadcast messages to backup users
-------------------	---

### 10.3 Broadcast messages to backup users

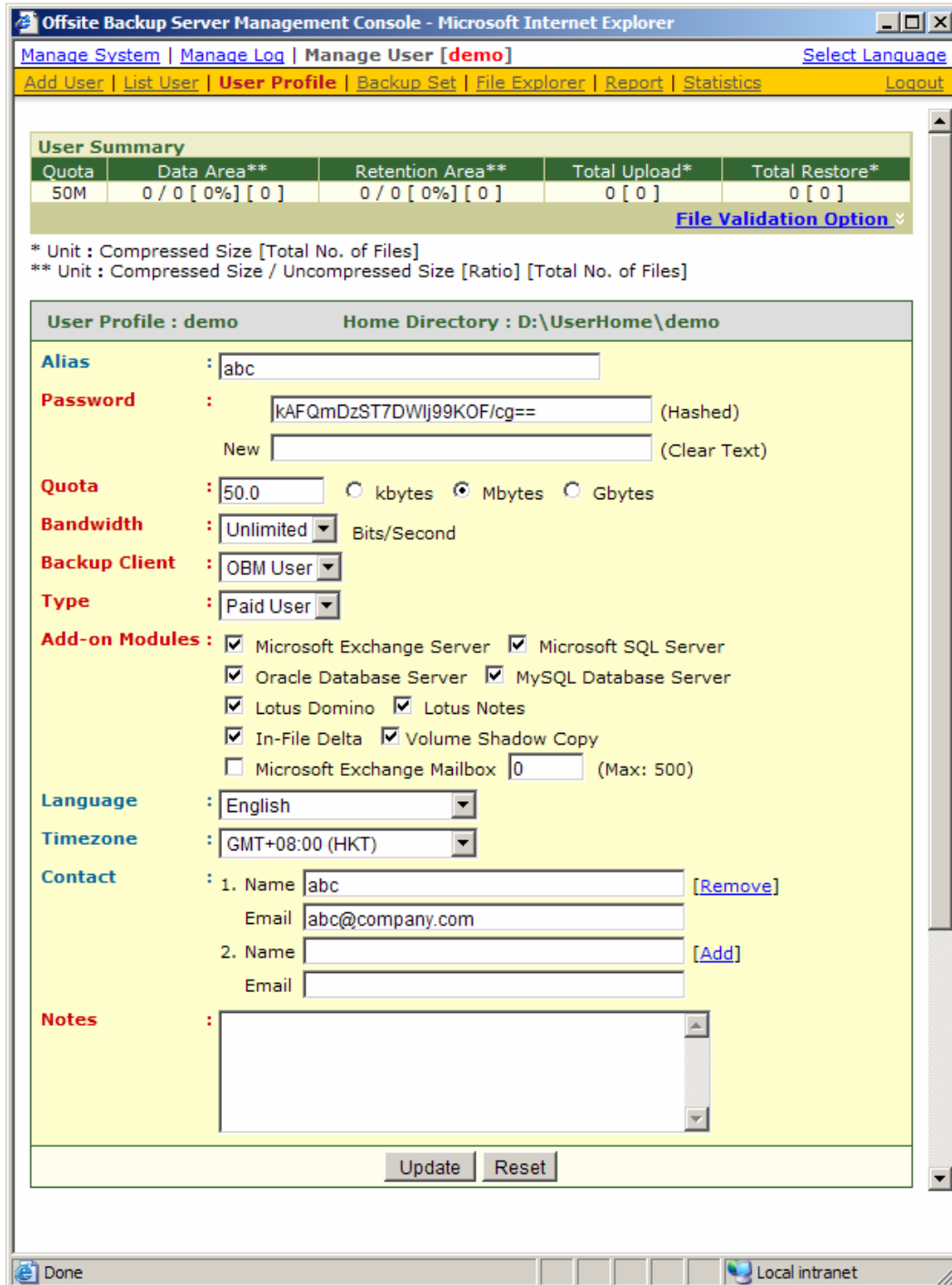
After you press the [Broadcast Message] link on the top right hand corner of the [Manage User] -> [List User] panel, you will be brought to the [Broadcast Message] page. You can use this page to broadcast messages to different types of backup users.



Key	Description
From	Sender of this message
To	Broadcast message to the following user types: <ul style="list-style-type: none"> <li>➤ All – all backup users</li> <li>➤ Paid – backup users of [Paid] user type</li> <li>➤ Trial – backup users of [Trial] user type</li> <li>➤ OBM User – backup users of OBM client type</li> <li>➤ ACB User – backup users of ACB client type</li> <li>➤ Admin – backup administrator, i.e. email address defined on the [Manage System] -&gt; [Server Configuration] -&gt; [Administrator Contact] list (useful if you want to test the broadcast feature before sending the message out to all users)</li> </ul>
Subject	Subject of this message
Message	Content of this message
Text/Html	The content type of this message, i.e. whether content should be considered as plain text or HTML.
Attachment	A file to be broadcasted with this message

### 10.4 Managing User Profile

After you press the user name link on the [Manage User] -> [List User] panel, you will be brought to the [User Profile] panel for this particular user. You can use this panel to update the profile of this user.



This panel is no different to the [User Profile] panel that users will see when they logon to the user area except that you can now update the [Type], [Quota] and [Add-on Module] (shown in RED) entries on this page.

Click the [File Validation Option] link to rebuild this user's storage information.

You can reset a user password by applying a new password to [User Profile] -> [Password] -> [New] entry and press the [Update] button. Before the user logon to OBS using OBM, both old and new passwords are valid. It is designed this way because a copy of the user's password is saved on the client machine for the backup scheduler to use to run scheduled backups. It is important to allow the old password to be valid until the new password is saved the on client machine when user logon to OBM with the new password.

The [Microsoft Exchange Mailbox] text field defines the number of exchange mailboxes allow to be backed up under this backup account. The [Max] message indicates the maximum number remaining licenses available.

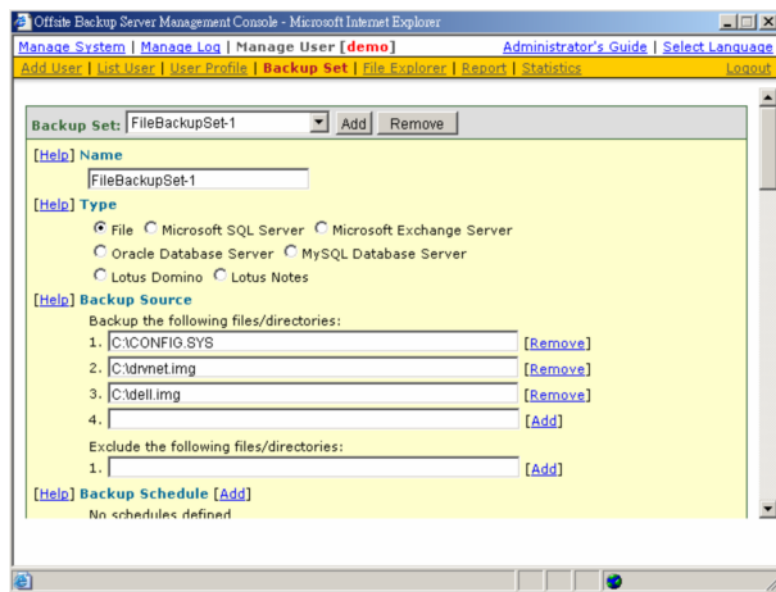
The [Bandwidth] option allows you to set a maximum network usage for all running backup sets of this particular backup account. All backup sets will share the same bandwidth defined by this setting. If you have set the bandwidth to be 128kbits/second and there are two backup sets running at the same time, each backup set will share roughly half of the bandwidth assigned, i.e. 64kbits/seconds.

The [Notes] field allows you to attach some other information, e.g. telephone number or billing address, with this backup account.

## 10.5 Managing Backup Set

After pressing the [Detail] button next to a user on the [Manage User] -> [List User] panel, a [Backup Set] link is now available in the extended user menu. You can review the backup sets setting of this particular user by clicking the [Backup Set] link.

To update the backup set setting of this particular user, just make the required changes on the form below and press the [Update] button.

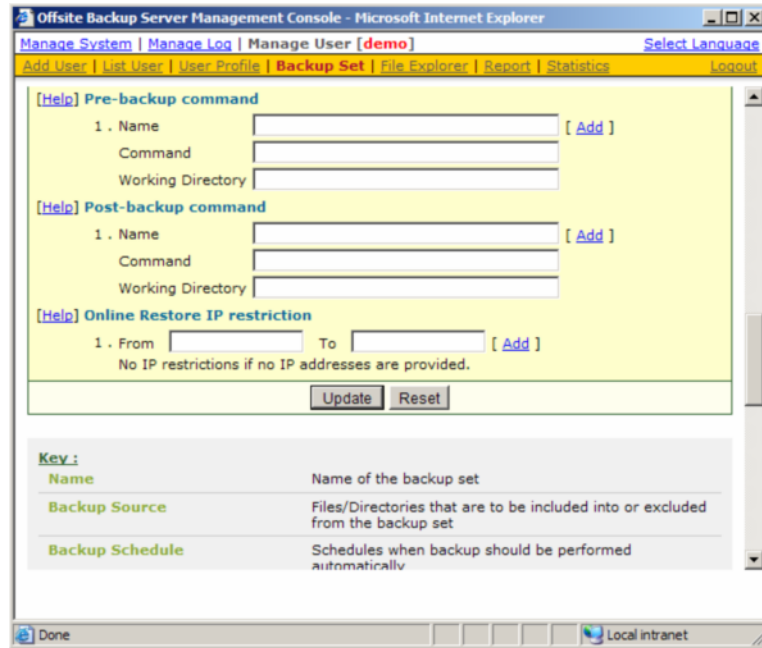


The screenshot shows a web browser window titled "Offsite Backup Server Management Console - Microsoft Internet Explorer". The navigation bar includes links for "Manage System", "Manage Log", "Manage User [demo]", "Administrator's Guide", and "Select Language". Below the navigation bar, there are tabs for "Add User", "List User", "User Profile", "Backup Set", "File Explorer", "Report", "Statistics", and "Logout". The main content area is titled "Backup Set: FileBackupSet-1" and contains the following sections:

- Name:** FileBackupSet-1
- Type:** Radio buttons for File (selected), Microsoft SQL Server, Microsoft Exchange Server, Oracle Database Server, MySQL Database Server, Lotus Domino, and Lotus Notes.
- Backup Source:** A list of files/directories to backup:
  - C:\CONFIG.SYS [Remove]
  - C:\drvnet.img [Remove]
  - C:\dell.img [Remove]
  - [Empty field] [Add]
- Exclude the following files/directories:**
  - [Empty field] [Add]
- Backup Schedule:** [Add] (No schedules defined)

### Setting Online Restore IP Restriction

At the bottom of the [Backup Set] panel, you should be able to find the [Online Restore IP Restriction] section. If you would like to restrict online file restore of this backup set to only a subset of trusted IP addresses, you just need to enter the trusted IP addresses here. Once you have entered some IP addresses into the IP restriction list, online file restore request originating from IP addresses not listed on this list will no longer be able to restore any files from this backup set. (You can use the IP range of 127.0.0.1 – 127.0.0.1 to disable online restore completely)



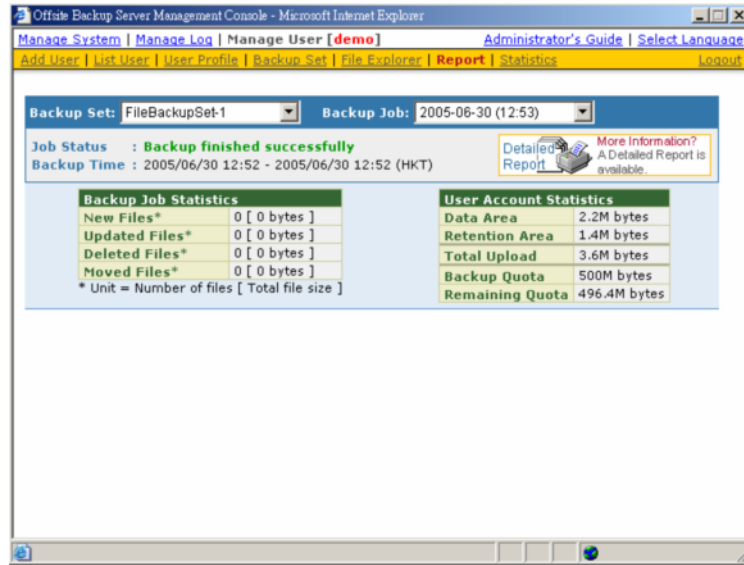
## 10.6 Browsing User Backup File

You can click the [File Explorer] link available at the extended [Manage User] menu to invoke the [File Explorer] panel. You can use this panel to browse and restore user's backup files. This panel is the same [File Explorer] panel that users would see when they click the [File Explorer] link after they have logged on to the system. Please refer to the User's Guide for information on how to restore user's backup files.



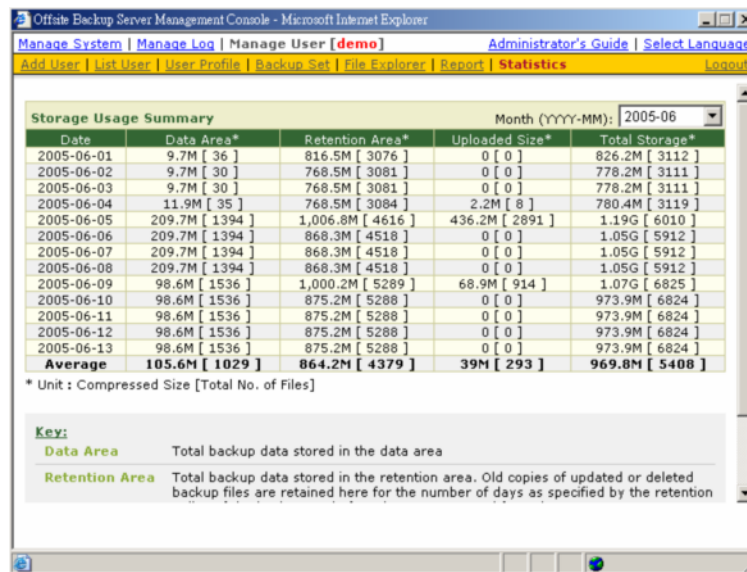
## 10.7 Reviewing User Backup Report

You can click the [Report] link available at the extended [Manage User] menu to invoke the [Report] panel. You can use this panel to review users' backup activities. This panel is the same [Report] panel that users would see when they click the [Report] link after they have logged on to the system. Please refer to the User's Guide for information on how to review users' backup activities.



## 10.8 Reviewing User Storage Statistic

You can click the [Statistics] link available at the extended [Manage User] menu to invoke the [Statistics] panel. You can use this panel to review users' storage statistics. This panel is the same [Statistics] panel that users would see when they click the [Statistics] link after they have logged on to the system. Please refer to the User's Guide for information on how to review users' storage statistics.



## 11 AutoUpdate

This chapter describes how you can use the AutoUpdate feature to deliver update of OBM to all running instances of OBM automatically.

### 11.1 How it works

AutoUpdate works in the following sequences:

- i. Backup scheduler running on the client machine will download the index file (%INSTALL\_DIR%\webapps\obs\liveUpdate\index.xml) which contains the information of the latest client software available from this backup server
- ii. If the backup scheduler finds out that OBS contains a patch for OBM which is more recent than the one running on its own machine, it will download and install the patch from OBS automatically (%INSTALL\_DIR%\webapps\obs\liveUpdate\obm????.zip)
- iii. Scheduled backup now run with the latest version of OBM

As you can see from the steps above, AutoUpdate relies on backup scheduler to function properly. No new updates will be delivered to a machine running OBM if backup scheduler is not enabled or no scheduled backup has been run since a new update has been installed on OBS.

### 11.2 Using AutoUpdate

When you install an updated version of OBS on your backup server, a new version of the AutoUpdate module for OBM is already bundled with the updated version of OBS. This means that a new version of OBM will be delivered to all your client machines through AutoUpdate when you install an updated version of OBS on your server.

### 11.3 Customizing AutoUpdate

If you want to customize the AutoUpdate patch file that will be delivered to your existing client installations (i.e. sending your own patch file to your client), please do this:

- i. Find the "%INSTALL\_DIR%\webapps\obs\liveUpdate\obm????.zip" file on the running OBS
- ii. Expand obm????..zip to a directory
- iii. Replace all \*.properties files with your customized version (these files can be generated from "%INSTALL\_DIR%\properties.xls" easily)
- iv. Replace all \*.gif files with your customized version

The following is some common files that you are likely to customize:

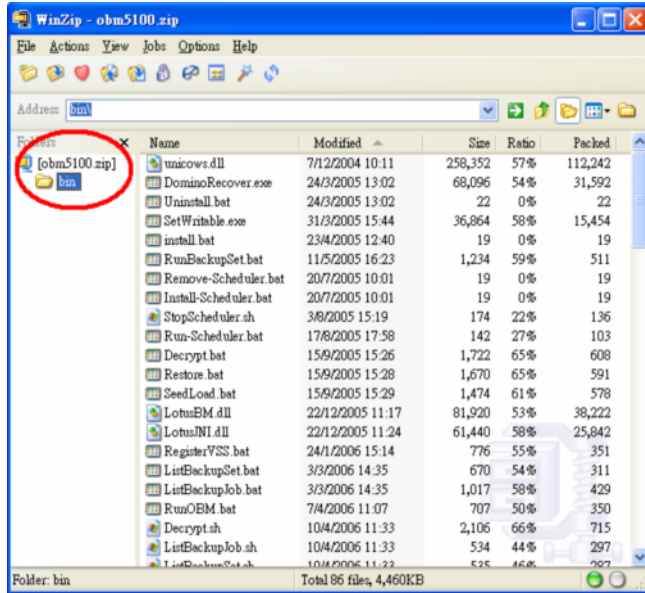
- a. OBMLogo.gif – This is the image file used as the Windows icon for OBM
- b. aboutBG.gif – This is the image file used in the [View] -> [About] dialog box



- v. Replace all \*.ico files with your customized version

The animation produced when backup is running, i.e. the "running arrow", is made up by showing icon1.ico, icon2.ico, icon3.ico and icon4.ico in sequence. You can change the animation by replacing these files by your own files (in fact, you can use more than 4 ICO files for your animation. Just make sure they are named in consecutive sequence as you want the images to be rotated).

- vi. Zip all files back to obm?????.zip (make sure all files are under the "bin" directory within the zip archive as shown below)



- vii. Finish

## 11.4 Forcing an extra AutoUpdate

If you want to customize the AutoUpdate patch file that will be delivered to your existing client installations (i.e. sending your own patch file to your client), please do this:

- i. Find the "%INSTALL\_DIR%\webapps\obs\liveUpdate\index.xml" file on OBS
- ii. Modify the line

```
<Update version="x.x.x.x" url="/obs/liveUpdate/obm?????.zip" crc="-1" last-modified="0" size="-1" />
```

to

```
<Update version="x.x.x.xa" url="/obs/liveUpdate/obm?????a.zip" crc="-1" last-modified="0" size="-1" />
```

Please note that there is an "a" character appended to both the version and url attributes.

- iii. Make change to the AutoUpgrade file, [obm?????.zip], as required and rename it to [obm?????a.zip]
- iv. Backup scheduler on the client machine will consider version "x.x.x.xa" to be a more recent release of OBM and will download the AutoUpgrade file, /obs/liveUpdate/obm?????a.zip, before starting the next scheduled backup.

If you need to force another extra AutoUpdate again, just redo all previous steps using the letter "b" instead of the letter "a". The new AutoUpdate file /obs/liveUpdate/obm?????b.zip, in this case, will be delivered to the client machine automatically before the next scheduled backup starts.



## 12 Backup / Restore files using off-line media

Backing up large amount of files (e.g. 300GB) online through the Internet is a very lengthy task. It is sometimes necessary to ship the first full backup through offline media (e.g. removable USB hard disk) to the backup server. Once the first full backup is loaded onto the backup server through offline media, all subsequent backups will be able to run and complete successfully in a timely manner because it is only necessary to upload new/updated files to the backup server.

Restoring large amount of files (e.g. 300GB) online through the Internet is also a very lengthy process. It is also important to be able to allow users to restore their backup files through offline media to reduce the time required to restore large amount of files.

This chapter describes the steps required to import/export backup files to/from OBS.

### 12.1 Seed loading backup files (Import)

A backup user can use the [Seed Load Utility] to transport its first full backup to an offsite backup server without having to upload a large volume of data through the Internet (Please refer to the User's Guide for more information). When the seed load files are transported to the backup server (e.g. using removable hard disk), please follow the instructions below to install them into the required user account:

- i. Locate the home directory of the backup user

A backup user's home directory is a directory named the login name of the backup user under one of the OBS's [User Homes] directories. [User Homes] is a system-wide setting which can be accessed under the [Manage System] menu after logging onto the web system management console.

For example:

The default [Users Homes] directory is "C:\Program Files\Ahsay Offsite Backup Server\user". If the login name of the backup account is "john", the home directory of user "john" should be "C:\Program Files\Ahsay Offsite Backup Server\user\john"

- ii. Copy all seed load files to the home directory

Find the "files" directory from the seed load files, and copy the "files" directory to the backup user's home directory.

In this example, you should copy the "files" directory to "C:\Program Files\Ahsay Offsite Backup Server\user\john"

If you are running OBS on Linux under a non-root user (e.g. obs), please make sure that the "files" directory and all its contents are owned and writable by the user running OBS (e.g. obs).

- iii. Check if all files are installed correctly

Logon to the web interface of OBS with the backup user account ("john" in this example) and click the [File Explorer] link available at the top of the menu. Check if you can see all seed load files correctly installed.

- iv. Total number of files and total file size imported into the data area through seed loading is not visible in the profile of this backup user (i.e. The [User Profile] page still reports no files in the data area). You need to run the [Rebuild User Storage](#) job by setting the scheduled run time of this routine job to a more recent time to rebuild the user storage information for this user.

If you need to perform another import (seed loading) when there are backup files on the backup server already, please remove all existing backup files from the backup server by removing the backup set ID directory (i.e. a numerically named directory under the "files" directory under a user directory) before copying all new seed loading files into the system. If you have more than one backup set ID directory under the "files" directory, please take a look at [User Home Directory] \ db \ Profile.xml to find out the correct backup set ID for the required backup set.



## 12.2 Saving backup files to off-line media (Export)

If you want to save a copy of all backup files under a backup user account to an offline media, please do the following:

- i. Locate the home directory of the backup user

A backup user's home directory is a directory named the login name of the backup user under one of the OBS's [User Homes] directories. [User Homes] is a system-wide setting which can be accessed under the [Manage System] menu after logging onto the web system management console.

For example:

The default [Users Homes] directory is "C:\Program Files\Ahsay Offsite Backup Server\user". If the login name of the backup account is "john", the home directory of user "john" should be "C:\Program Files\Ahsay Offsite Backup Server\user\john"

- ii. Copy the complete home directory of this backup user to an offline media
- iii. Once the offline media is shipped to the user, the user can then use the [Decrypt File Wizard] available in OBM to decrypt and restore the backup files available in the offline backup back to its original format

## 13 Secure Socket Layer (SSL) Configuration

This chapter describes how you can use the Management Console to configure various settings of OBS.

### 13.1 Installing a trusted SSL certificate

Default installation of OBS enables SSL (Secure Socket Layer) support using a dummy certificate. For your own security, you are advised to replace the pre-installed dummy SSL certificate with a secure SSL certificate from a trusted CA (Certificate Authority). To replace the non-secure dummy SSL certificate with a secure SSL certificate, please do the following:

- i. Identify the location of the keystore file

You need to store your SSL certificate in a keystore file. The default location of the keystore file is %INSTALL\_DIR%\conf\keystore.

- ii. Delete dummy certificate from keystore

You can delete the dummy SSL certificate from the keystore by running:

```
%INSTALL_DIR%\java\bin\keytool -delete -alias tomcat -keystore %INSTALL_DIR%\conf\keystore
```

You will be prompted for the keystore password. The default password is "changeit".

Platform	Example
Windows	C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -delete -alias tomcat -keystore keystore
Linux	[root]# \$OBS_HOME/java/bin/keytool -delete -alias tomcat -keystore \$OBS_HOME/conf/keystore
Mac OS X	[root]# keytool -delete -alias tomcat -keystore /Applications/OBS/conf/keystore

- iii. Generate RSA key pair

A SSL certificate contains a RSA key pair. You can generate a RSA key pair by running:

```
%INSTALL_DIR%\java\bin\keytool -genkey -alias tomcat -keyalg RSA -keysize 1024 -keystore %INSTALL_DIR%\conf\keystore
```

Also, the key password for the alias "tomcat" must be the same as the keystore password. Please simply press the [Enter] key when you are prompted for the key password for tomcat (i.e. press [Enter] when you see the "key password for <tomcat>" prompt)

Platform	Example
Windows	C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -genkey -alias tomcat -keyalg RSA -keystore keystore
Linux	[root]# \$OBS_HOME/java/bin/keytool -genkey -alias tomcat -keyalg RSA -keystore \$OBS_HOME/conf/keystore
Mac OS X	[root]# keytool -genkey -alias tomcat -keyalg RSA -keystore /Applications/OBS/conf/keystore

- iv. Create a local Certificate Signing Request (CSR)

You can create a CSR for your SSL certificate by running:

```
%INSTALL_DIR%\java\bin\keytool -certreq -keyalg RSA -alias tomcat -file ssl.csr -keystore %INSTALL_DIR%\conf\keystore
```

Platform	Example
Windows	C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -certreq -keyalg RSA -alias tomcat -keystore keystore
Linux	[root]# \$OBS_HOME/java/bin/keytool -certreq -keyalg RSA -alias tomcat -keystore \$OBS_HOME/conf/keystore
Mac OS X	[root]# keytool -certreq -keyalg RSA -alias tomcat -keystore /Applications/OBS/conf/keystore

- v. Submit the CSR file to a trusted CA of your choice



- vi. Import signed SSL certificate from CA back to the keystore from which the CSR was generated by:

```
%INSTALL_DIR%\java\bin\keytool -import -alias tomcat -trustcacerts -file ssl.crt
-keystore %INSTALL_DIR%\conf\keystore
```

Platform	Example
Windows	C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -import -alias tomcat -trustcacerts -file ssl.crt -keystore keystore
Linux	[root]# \$OBS_HOME/java/bin/keytool -import -alias tomcat -trustcacerts -file ssl.crt -keystore \$OBS_HOME/conf/keystore
Mac OS X	[root]# keytool -import -alias tomcat -trustcacerts -file ssl.crt -keystore /Applications/OBS/conf/keystore

If you are getting the "keytool error: java.lang.Exception: Failed to establish chain from reply" message when importing the SSL certificate file from CA, please try double-clicking the ssl.crt file on Windows to view all intermediate certificates being used to sign your certificate and import all intermediate certificates (downloadable from your CA) into your keystore file before importing your SSL certificate.

- vii. Check if you have installed the SSL certificate correctly by:

```
%INSTALL_DIR%\java\bin\keytool -list -alias tomcat -keystore %INSTALL_DIR%\conf\keystore
```

Platform	Example
Windows	C:\Program Files\Ahsay Offsite Backup Server\conf>"C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -list -alias tomcat -keystore keystore
Linux	[root]# \$OBS_HOME/java/bin/keytool -list -alias tomcat -keystore \$OBS_HOME/conf/keystore
Mac OS X	[root]# keytool -list -alias tomcat -keystore /Applications/OBS/conf/keystore

```
tomcat, 2003/6/13, keyEntry,
Certificate fingerprint (MD5): xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx
```

Please make sure that you are getting the type "keyEntry" instead of "trustedCertEntry" from the output above. If you are getting "trustedCertEntry", the most likely cause of this is that you are NOT importing the SSL certificate back into the same keystore from which the CSR was generated. The only solution to this is to find this keystore file and import the certificate(s) to the keystore file again. If you can't find this file, please repeat the instructions in this section from step (i) and try again.

\* When asked for your "first and last name" during the key generation, please specify the domain that you will be using this certificate for. Please refer to the following example.

```
Full Example
C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -
delete -alias tomcat -keystore keystore

C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -
genkey -alias tomcat -keyalg RSA -keystore keystore

Enter keystore password: changeit
What is your first and last name?
[Unknown]: www.secure-company.com
What is the name of your organizational unit?
[Unknown]: NOT SECURE
What is the name of your organization?
[Unknown]: NOT SECURE
What is the name of your City or Locality?
[Unknown]: NOT SECURE
What is the name of your State or Province?
[Unknown]: NOT SECURE
What is the two-letter country code for this unit?
[Unknown]: NS
Is <CN=www.secure-company.com, OU=NOT SECURE, O=NOT SECURE, L=NOT SECURE, ST=NOT SECURE, C=NS> correct?
[no]: yes

Enter key password for <tomcat>
(RETURN if same as keystore password):

C:\Program Files\Ahsay Offsite Backup Server\conf> "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -
certreq -keyalg RSA -alias tomcat -file certreq.csr -keystore keystore
Enter keystore password: changeit

C:\Program Files\Ahsay Offsite Backup Server\conf > "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -
import -alias tomcat -keystore keystore -trustcacerts -file ssl.crt
Enter keystore password: changeit
Certificate reply was installed in keystore

C:\Program Files\Ahsay Offsite Backup Server\conf > "C:\Program Files\Ahsay Offsite Backup Server\java\bin\keytool -list
-alias tomcat -keystore keystore

tomcat, 2003/6/13, keyEntry,
Certificate fingerprint (MD5): xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx
```



## 13.2 Enforcing SSL to the web interface

If you want all users to connect to the web interface of OBS using SSL to enforce secure connection, please do the followings:

- i. Open %INSTALL\_DIR%\webapps\obs\WEB-INF\web.xml
- ii. Locate the [Enforce SSL] section at the end of "web.xml"

```
web.xml
....
<!-- ===== Enforce SSL ===== -->
<!-- == Please uncomment the following section to enforce SSL for the web interface == -->
<!-- ===== -->
<!--
<security-constraint>
  <web-resource-collection>
    <web-resource-name>Automatic SSL Forwarding</web-resource-name>
    <url-pattern>/jsp/user/*</url-pattern>
    <url-pattern>/jsp/system/*</url-pattern>
  </web-resource-collection>
  <user-data-constraint>
    <transport-guarantee>CONFIDENTIAL</transport-guarantee>
  </user-data-constraint>
</security-constraint>
-->
....
```

- iii. Remove the XML comment tags ("**<!--**" and "**-->**", shown in red and bold above) from "web.xml"
- iv. Restart OBS

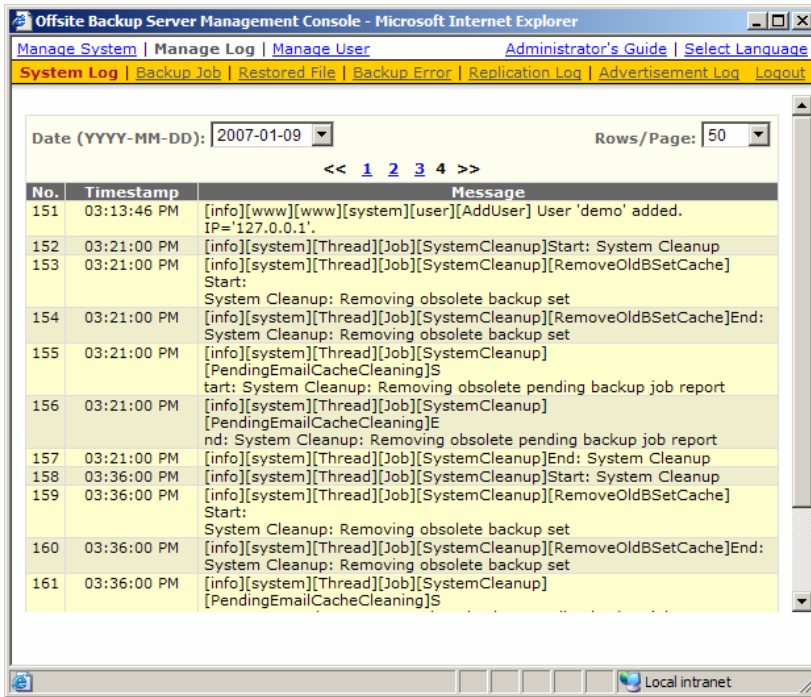
Please note that this only enforces SSL when users log onto the web interface of OBS. It doesn't enforce backup traffic from OBM to be SSL.

## 14 Monitoring System Activities

This chapter describes how you can use the [Manage Log] -> [System Log] page (shown below) to review system and backup activities of OBS.

### 14.1 Reviewing System Log

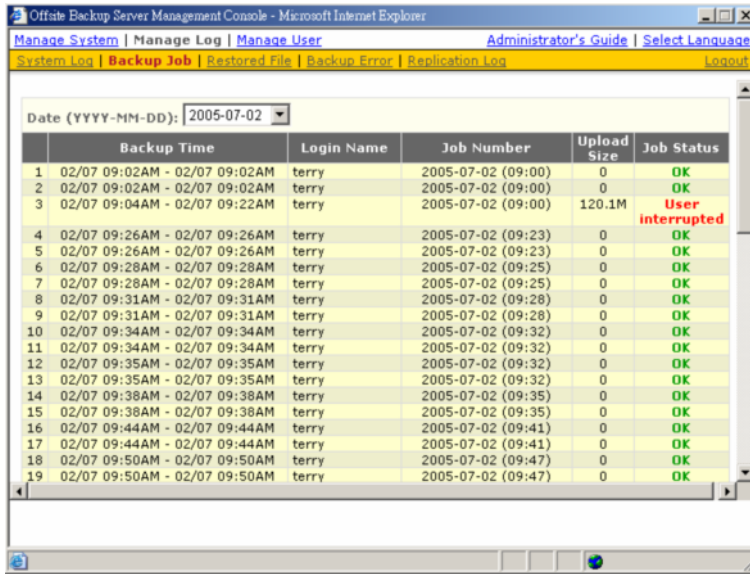
When you click the [Manage Log] -> [System Log] link available at the top menu, the [System Log] panel will appear. It lists all system messages / warnings / errors logged within the date shown on the drop down list. You can review the system messages / warnings / errors logged on any particular date by selecting the required date from the drop down list.



Key	Description
Date	The date when all messages were logged
Rows/Page	The number of rows to display per page
Timestamp	The time when the message was logged
Message	The system log message

### 14.2 Reviewing Backup Log

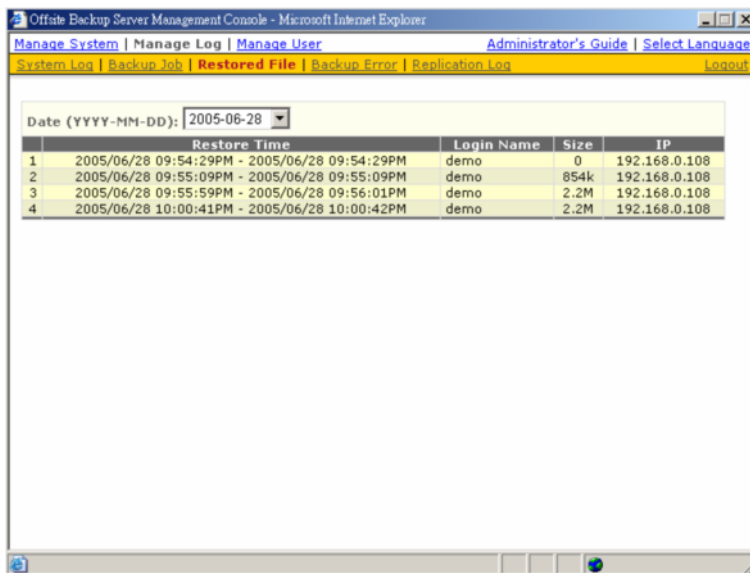
When you click the [Manage Log] -> [Backup Log] link available at the top menu, the [Backup Log] panel will appear. It lists all backup jobs run on a particular date. You can review the backup jobs run on any particular date by selecting the required date from the drop down list.



Key	Description
Date	The date when all backup jobs listed below were run
Backup Period	Start and end time of this backup job
Login Name	Backup Account that ran this backup job
Job No.	Backup Job Number
Upload Size	Size of backup data uploaded
Status	Overall status of the backup job

### 14.3 Reviewing Restored File Log

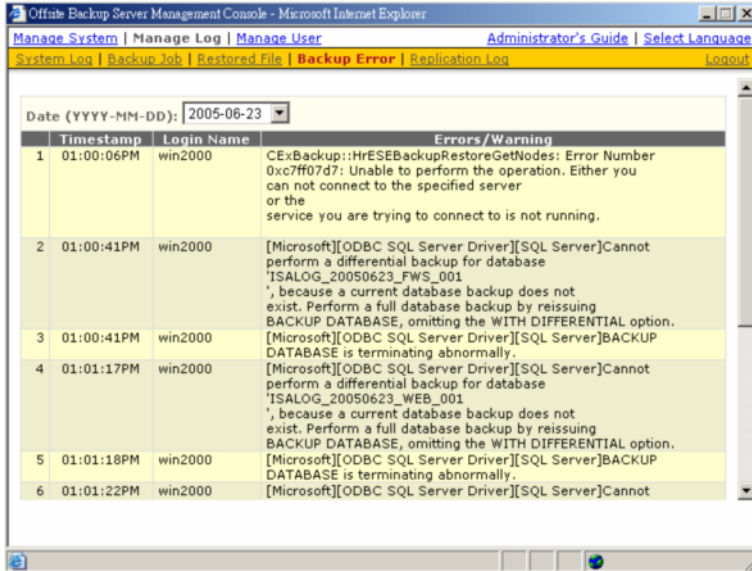
When you click the [Manage Log] -> [Restored File] link available at the top menu, the [Restore Log] panel will appear. It lists all online file restoration activities logged within a date. You can review online file restoration activities recorded on any particular date by selecting the required date from the drop down list.



Key	Description
Date	The date when all online file restoration were recorded
Timestamp	Start and end time of the file restoration activities
Login Name	Backup account restoring files from the server
Size	Total backup data restored from the server
IP	IP address to where backup data were restored

## 14.4 Reviewing Backup Error Log

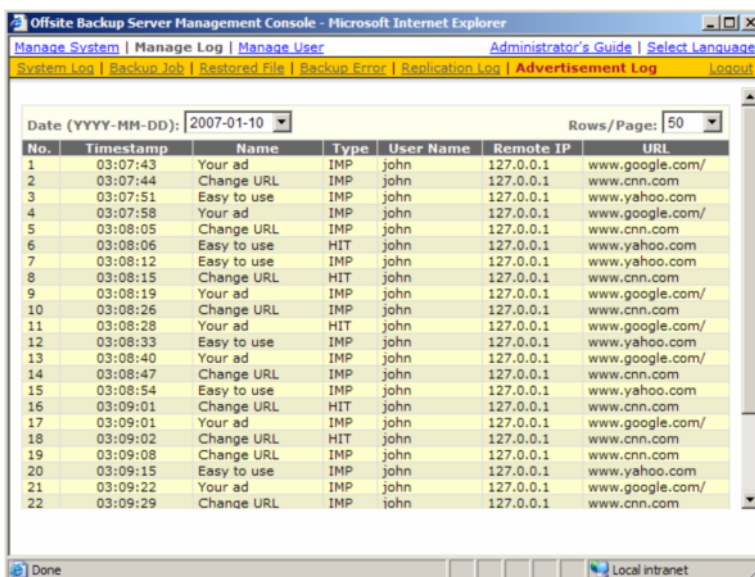
When you click the [Manage Log] -> [Backup Error] link available at the top menu, the [Backup Error] panel will appear. It lists all backup errors or warning logged within a date. You can review backup errors or warnings logged on any particular date by selecting the required date from the drop down list.



Key	Description
Date	The date when all messages were logged
Timestamp	The time when this message was logged
Login Name	Backup account raising this error or warning
Errors / Warnings	Details of the error or warning recorded

## 14.5 Reviewing Advertisement Log

When you click the [Manage Log] -> [Advertisement Log] link available at the top menu, the [Advertisement Log] panel will appear. It lists all the advertisements displayed by ACB clients for a particular date. You can review displayed adverts on any particular date by selecting the required date from the drop down list.



Key	Description
Date	The date when the advertisements listed below were displayed
Rows/Page	The number of rows to display per page
Timestamp	The time when the advert was displayed





Name	The name of the advertisement
Type	Advertisement display types: ➤ IMP – Impression, this advertisement was displayed ➤ HIT – Hit, this advertisement was displayed and the user clicked the advert to go to the target web page.
User Name	The user account name of the ACB client
Remote IP	The remote IP address of the ACB client
URL	The target URL associated with this advert

## 14.6 Reviewing access logs

If you are interested in reviewing how your clients are accessing OBS, you can take a look at the access logs files available in %INSTALL\_DIR%\logs\access\_log.YYYY-MM-DD.txt

## 15 Branding OBM (Partners Only)






### 15.1 Customization Portal

The OBM customization portal (<http://partners.ahsay.com/>) allows you to do the followings:

- i. Building an OBM installer (e.g. obm-win.exe for Windows) under your own company name
- ii. Set the vendor name, support email and URL to your own values
- iii. Put your own company logo and other images into OBM
- iv. Set the default backup server hostname, TCP port number and protocol (HTTP/HTTPS) to your own values
- v. Hide/Show encrypting key checkbox in OBM
- vi. Hide/Show language selection list in OBM
- vii. Hide/Show the backup server URL textbox in OBM
- viii. Set the default language for OBM
- ix. Enable/Disable languages for OBM
- x. Enable/Disable user account profile update from OBM
- xi. Customize the terms of use statements shown in the installer of OBM

Once you have made all the customization you want, you can download a customized version of OBM from the download page (shown below) of the customization portal.

Please refer to the [Installers Customization Guide](#) from the OBM customization portal for more information.

Download Area			
Platform	Download	File Size	Last Modified
	<a href="#">Download</a>	37 Mb	14-06-2005 03:38:33 GMT
	<a href="#">Download</a>	9 Mb	14-06-2005 03:39:03 GMT
	<a href="#">Download</a>	34 Mb	14-06-2005 03:39:55 GMT
	<a href="#">Download</a>	4 Mb	14-06-2005 03:39:59 GMT
	<a href="#">Download</a>	4 Mb	14-06-2005 03:40:10 GMT
	<input type="button" value="Check Status"/>		

## 16 Branding OBS

This chapter describes how you can customize OBS to make it look the way you want it to be.

### 16.1 Welcome page

If you would like to use your own welcome page on the backup server, simply replace the default welcome page, %INSTALL\_DIR%\webapps\ROOT\index.html, with your own welcome page.

### 16.2 Different welcome pages for different domains

If you want to show different welcome pages for requests to different domain names, please do the followings:

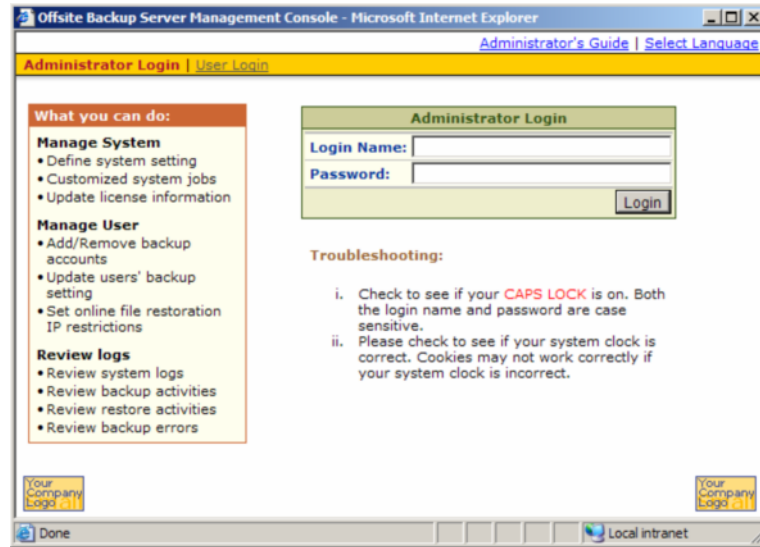
- i. Rename %INSTALL\_DIR%\webapps\ROOT\index.html to %INSTALL\_DIR%\webapps\ROOT\index\_defaultDomain.html
- ii. Create %INSTALL\_DIR%\webapps\ROOT\index.jsp with the following content. Suppose you have 4 domains in total. If you want requests to OBS using the domain name "domain2.com" to see "index\_Domain2.html" and requests to OBS using the domain name "domain3.com" to see "index\_Domain3.html", you should put the highlighted code below.

```
%INSTALL_DIR%\webapps\ROOT\index.jsp
<%@ page language="java" %>
<%--
    If you want to redirect request from different domains to different
    index pages, please modify the "domain to URL mapping" defined by the
    String array declaration below to define your own mapping.
--%>
<%
String sURL = "index_defaultDomain.html";
String sRequestURL = request.getRequestURL().toString().toLowerCase();
String[] asMap = {
    "domain2.com", "index_Domain2.html",
    "domain3.com", "index_Domain3.html",
};
for(int i=0; asMap!=null && i<asMap.length; i+=2) {
    String sDomain = asMap[i].toLowerCase();
    if(sRequestURL.indexOf(sDomain)!=-1) {
        sURL=asMap[i+1];
        break;
    }
}
response.sendRedirect(sURL);
%>
```

Please note that you need to create the both "index\_Domain2.html" and "index\_Domain3.html" yourself and place it in the %INSTALL\_DIR%\webapps\ROOT directory.

### 16.3 Customizing the company logo displayed

Two different logos are displayed on the bottom left hand corner and bottom right hand corner of every page.



You can customize the logos shown on the bottom left hand corner and the bottom right hand corner of every page by:

- i. Go to %INSTALL\_DIR%\webapps\obs\logo
- ii. To display your image at the bottom left hand corner of every page, simply save your image as "default.small.left.gif" in the directory above
- iii. To display your image at the bottom right hand corner of every page, simply save your image as "default.small.right.gif" in the directory above
- iv. If you don't want to display any images at these locations, just rename "empty.gif" to "default.small.left.gif" or "default.small.right.gif"

#### Different logos for different domain names

If you are mapping both domain "[www.company-A.com](http://www.company-A.com)" and domain "[www.company-B.com](http://www.company-B.com)" to the IP address of the OBS and you want to display different logos when users are browsing the web pages using different domain names, you can do the followings:

- i. Go to %INSTALL\_DIR%\webapps\obs\logo
- ii. To display your image at the bottom left and right hand corner of every page for domain "[www.company-A.com](http://www.company-A.com)", simply save your image as "www.company-A.com.small.left.gif" and "www.company-A.com.small.right.gif" respectively in the directory above
- iii. To display your image at the bottom left and right hand corner of every page for domain "[www.company-B.com](http://www.company-B.com)", simply save your image as "www.company-B.com.small.left.gif" and "www.company-B.com.small.right.gif" respectively in the directory above

## 16.4 Customizing the Look and Feel of the web interface

The Look and Feel (e.g. font size and color) of the web interface of OBS is defined by a set of rules defined in a cascade style sheet. If you want to customize the Look and Feel of the web interface to fully integrate OBS into your website, you can do the followings:

- i. Open %INSTALL\_DIR%\webapps\obs\jsp\lib\jsp\_\*.css (e.g. en=English, fr=French, cs=Czech, da=Danish, nl=Dutch, de=German, es=Spanish, sv=Swedish, zh\_TW=Traditional\_Chinese, zh\_CN=Simplified\_Chinese etc)
- ii. Make the changes to the cascade style sheet file to what you would like to see.

For example, if you want to change the English user menu bar from yellowish color (#FFCC00) to

red color. Please do the followings:

Extract of jsp_en.css (Original)
<pre>.... /* menu bar - background color; text color, weight */ .usermenu_menubar {     background-color: #FFCC00;     color: #000000     font-weight: normal } ....</pre>

Extract of jsp_en.css (updated)
<pre>.... /* menu bar - background color; text color, weight */ .usermenu_menubar {     background-color: red;     color: #000000     font-weight: normal } ....</pre>

- iii. Restart your browser to see the changes

## 16.5 Customizing all text of the web interface

All text displayed on the web interface of OBS are stored in properties files. If you want to modify any of the text information displayed on the web interface, please do the followings:

- i. Open %INSTALL\_DIR%\properties.xls located on OBS (There are VBA scripts inside this Excel file. Please use Excel 2000 or above to open this file)
- ii. Switch to the [obs-jsp] worksheet
- iii. Modify the entries that you want to customize
- iv. Press the [Generate] button
- v. Copy the generated jsp\_\*.properties files, which can be found under the [obs] subdirectory under the directory where the Excel file is located, to %INSTALL\_DIR%\webapps\obs\WEB-INF\classes
- vi. Restart OBS backup services to see the changes

## 16.6 Customizing email reports

The instruction of customizing all text in all outgoing email reports is the same as the instruction of customizing all text displayed on the web interface. Simply do this:

- i. Open %INSTALL\_DIR%\properties.xls located on OBS (There are VBA scripts inside this Excel file. Please use Excel 2000 or above to open this file)
- ii. Switch to the [obs-jsp] worksheet
- iii. Modify the [jsp.report.\*] entries that you want to customize
- iv. Press the [Generate] button
- v. Copy the generated [ obs \ jsp\_\*.properties] files to %INSTALL\_DIR%\webapps\obs\WEB-INF\classes
- vi. Restart OBS backup services to see the changes

If you are interested in displaying your own logo in all out-going email reports, simply replace %INSTALL\_DIR%\webapps\obs\logo\default.large.gif with your own logo. All email reports sent after you have made the changes will carry your customized logo.

It is currently not possible to change the layout and the Look&Feel (e.g. color, font size) of all out-going email



reports. This feature will be available in v6.0 scheduled late 2006.

## **16.7 Localizing the software**

It is currently possible to have OBS localized to another language without the assistance of our development team. If you would like to have OBS available in languages other than those currently supported, please feel free to contact us to discuss possible arrangement.

## 17 Other Configuration

The default installation of OBS setup a typical environment to run your backup server but it is still possible that the default setting does not fit well into your environment. The chapter describes all supported customizations you can do to the software to fulfil your special needs.

### 17.1 Listening to non-standard TCP/IP Port

If you like to run your own web server, or some other services using port 80 and 433, on your backup server, you can change the listening TCP/IP port of OBS from port 80 and 443 to some other port numbers by:

- i. Open %INSTALL\_DIR%\conf\server.xml

Server.xml
<pre> &lt;Server port="8014" shutdown="SHUTDOWN" debug="0"&gt;    &lt;Service name="Tomcat-Standalone"&gt;      &lt;!-- Define a non-SSL HTTP/1.1 Connector on port 80 --&gt;     &lt;Connector className="org.apache.coyote.tomcat5.CoyoteConnector"       address="0.0.0.0" <b>port="80"</b> maxHttpHeaderSize="8192" maxKeepAliveRequests="1"       maxThreads="1000" minSpareThreads="25" maxSpareThreads="100"       enableLookups="false" <b>redirectPort="443"</b> bufferSize="32768" acceptCount="1000"       connectionTimeout="600000" disableUploadTimeout="true"/&gt;      &lt;!-- Define a SSL HTTP/1.1 Connector on port 443 --&gt;     &lt;Connector className="org.apache.coyote.tomcat5.CoyoteConnector"       address="0.0.0.0" <b>port="443"</b> maxHttpHeaderSize="8192" maxKeepAliveRequests="1"       maxThreads="1000" minSpareThreads="25" maxSpareThreads="100"       enableLookups="false" disableUploadTimeout="true"       acceptCount="1000" bufferSize="32768" scheme="https" secure="true"       keystoreFile="conf/keystore" keystorePass="changeit"       clientAuth="false" sslProtocol="TLS" connectionTimeout="600000"/&gt;      ... </pre>

- ii. Change the [port] values (shown in red and bold above) to the preferred port numbers. For example, to change the HTTP port from port 80 to 8080 and HTTPS port from port 443 to port 8443, please do the followings:

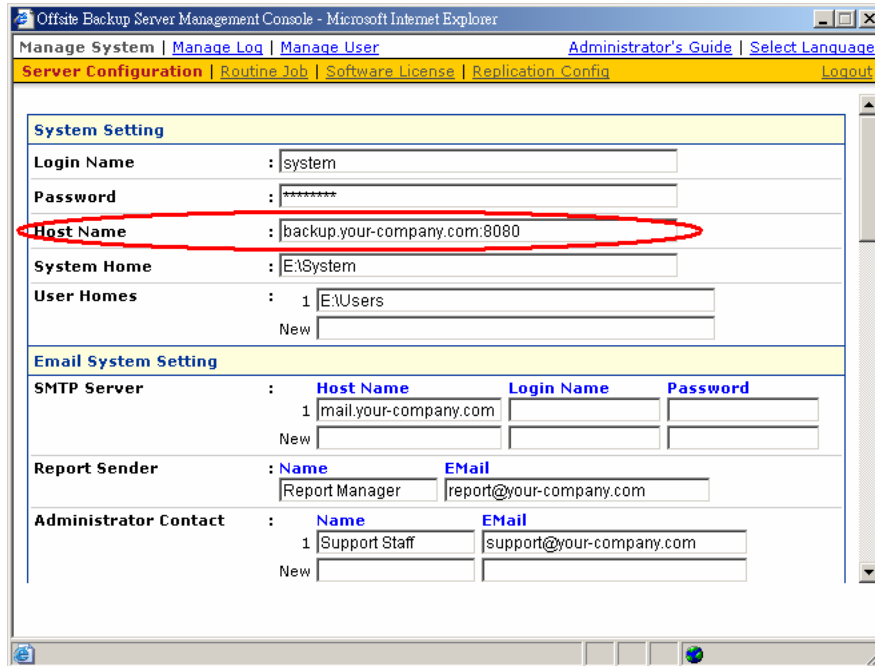
```

port="80" -> port="8080
redirectPort="443" -> redirectPort="8443"
port="443" -> port="8443"

```

- iii. Restart OBS
- iv. Logon to the System Management Console
- v. Append the custom TCP/IP port number to the [Host Name] setting

For example: backup.your-company.com:8080



## 17.2 Listening to a single IP address

If the backup server has more than one network interface installed or has more than one IP address bind to a single network interface, you can configure OBS to use only a single IP address for backup services (by default the TCP port of all IP addresses available within the system are used and open). This has the benefits of sparing other IP addresses for other applications, e.g. Apache Web Server or Microsoft Internet Information Server (IIS). To do so,

- i. Open %INSTALL\_DIR%\conf\server.xml

```

Server.xml
<Server port="8014" shutdown="SHUTDOWN" debug="0">

  <Service name="Tomcat-Standalone">

    <!-- Define a non-SSL HTTP/1.1 Connector on port 80 -->
    <Connector className="org.apache.coyote.tomcat5.CoyoteConnector"
      address="0.0.0.0" port="80" maxHttpHeaderSize="8192" maxKeepAliveRequests="1"
      maxThreads="1000" minSpareThreads="25" maxSpareThreads="100"
      enableLookups="false" redirectPort="443" bufferSize="32768" acceptCount="1000"
      connectionTimeout="600000" disableUploadTimeout="true"/>

    <!-- Define a SSL HTTP/1.1 Connector on port 443 -->
    <Connector className="org.apache.coyote.tomcat5.CoyoteConnector"
      address="0.0.0.0" port="443" maxHttpHeaderSize="8192" maxKeepAliveRequests="1"
      maxThreads="1000" minSpareThreads="25" maxSpareThreads="100"
      enableLookups="false" disableUploadTimeout="true"
      acceptCount="1000" bufferSize="32768" scheme="https" secure="true"
      keystoreFile="conf/keystore" keystorePass="changeit"
      clientAuth="false" sslProtocol="TLS" connectionTimeout="600000"/>
  ...
  
```

- ii. Change the [address] values (shown in red and bold above) to the IP address that are to be used for OBS. For example, to use only the IP address, 192.168.1.1, for backup service, change the address values from "0.0.0.0" (means all available IP addresses) to "192.168.1.1"

address="0.0.0.0" -> address="192.168.1.1"

- iii. Restart OBS

If you are going to use IIS along with OBS on different IP addresses as mentioned here, please make sure that you have configured IIS to spare the IP address configured above to be used by OBS (by default IIS will use the all IP addresses available). Failing to do so will result in failing to start both IIS and OBS at the same time.



This chapter describes all other features available in the software.

## 17.3 Backing up OBS

All system settings you have made on the web pages behind the [Backup System Administration Logon] link are saved in %INSTALL\_DIR%\config\obs.xml. You just need to backup this file to backup all the settings.

Of course, all files under the [User Homes] directories and [System Home] directory are to be backed up unless you can afford to lose your users' backup data and all system information logged by OBS.

## 17.4 Restricting access to system page by IP address

For better security, you can restrict access to the system administration console by IP addresses. To do so, please do the followings:

- i. Open %INSTALL\_DIR%\webapps\obs\WEB-INF\web.xml
- ii. Locate the [filter] section near the beginning of "web.xml"

```

web.xml
....
<filter>
  <filter-name>SystemConsole</filter-name>
  <filter-class>com.ahsay.obs.www.IPFilter</filter-class>
  <init-param>
    <param-name>Range1</param-name>
    <param-value>localhost</param-value>
  </init-param>
  <init-param>
    <param-name>Range2</param-name>
    <param-value>0.0.0.0-255.255.255.255</param-value>
  </init-param>
</filter>
....

```

- iii. Change the [Range2] parameter value from "127.0.0.1-127.0.0.1" (shown in red and bold above) to a range of IP addresses from where access to the system administration console is allowed.

For example, changing [Range2] value from " 127.0.0.1-127.0.0.1" to "192.168.1.1-192.168.1.255" to allow the 192.168.1.x network to invoke the APIs.

```

web.xml (Updated)
....
<filter>
  <filter-name>SystemConsole</filter-name>
  <filter-class>com.ahsay.obs.www.IPFilter</filter-class>
  <init-param>
    <param-name>Range1</param-name>
    <param-value>localhost</param-value>
  </init-param>
  <init-param>
    <param-name>Range2</param-name>
    <param-value>192.168.1.1-192.168.1.255</param-value>
  </init-param>
</filter>
....

```

Please note that you can configure more than one IP range by adding additional init parameters (i.e. "Range3", "Range4" and so do) to the filter XML tag.

For example,

```

<filter>
  <filter-name>SystemConsole</filter-name>
  <filter-class>com.ahsay.obs.www.IPFilter</filter-class>
  <init-param>
    <param-name>Range1</param-name>
    <param-value>localhost</param-value>
  </init-param>
  <init-param>
    <param-name>Range2</param-name>
    <param-value>192.168.1.1-192.168.1.255</param-value>
  </init-param>
  <init-param>
    <param-name>Range3</param-name>
    <param-value>192.168.2.1-192.168.2.255</param-value>
  </init-param>
</filter>

```

- iv. Restart OBS

## 18 External APIs

OBS contains a set of APIs (Application Programming Interface), which allows you to integrate external applications (e.g. billing system or automated registration system) with OBS. This chapter describes what APIs are available and how you can invoke different APIs.

You can find more information on processing XML using Java at <http://java.sun.com/xml/>.

### 18.1 Overview

OBS APIs can be invoked by using standard HTTP request method (i.e. either POST or GET). For example, to invoke the [Remove User] API, simply use any programming/scripting languages of your choice to invoke "http://BACKUP\_SERVER/obs/api/RemoveUser.do?SysUser=system&SysPwd=system&LoginName=test" to delete user "test".

**URL encoding** must be applied to all non-alphanumeric parameters when submitting the API requests as specified in the HTTP protocol specification. For example, a value of "GMT-08:00 (PST)" must be submitted to OBS in external API as "GMT%2d08%3a00+%28PST%29".

### 18.2 IP Restrictions

To avoid OBS's APIs from being exploited by hackers from an unauthorized network, OBS, by default, accepts and handles only the API requests originating from the same local machine. To loosen this restriction, please do the followings:

- i. Open %INSTALL\_DIR%\webapps\obs\WEB-INF\web.xml
- ii. Locate the [filter] section near the beginning of "web.xml"

```

web.xml
....
<filter>
  <filter-name>LocalhostOnly</filter-name>
  <filter-class>com.ahsay.obs.www.IPFilter</filter-class>
  <init-param>
    <param-name>Range1</param-name>
    <param-value>localhost</param-value>
  </init-param>
  <init-param>
    <param-name>Range2</param-name>
    <param-value>127.0.0.1-127.0.0.1</param-value>
  </init-param>
</filter>
....

```

- iii. Change the [Range1] parameter value from "127.0.0.1-127.0.0.1" (shown in red and bold above) to another range of IP addresses from where APIs can be invoked.

For example, changing [Range1] value from " 127.0.0.1-127.0.0.1" to "192.168.1.1-192.168.1.255" to allow the 192.168.1.x network to invoke the APIs.

```

web.xml (Updated)
....
<filter>
  <filter-name>LocalhostOnly</filter-name>
  <filter-class>com.ahsay.obs.www.IPFilter</filter-class>
  <init-param>
    <param-name>Range1</param-name>
    <param-value>localhost</param-value>
  </init-param>
  <init-param>
    <param-name>Range2</param-name>
    <param-value>192.168.1.1-192.168.1.255</param-value>
  </init-param>
</filter>
....

```

Please note that you can configure more than two IP ranges by adding additional init parameters (i.e. "Range3", "Range4" and so do) to the filter XML tag.

For example,

```

<filter>
  <filter-name>LocalhostOnly</filter-name>
  <filter-class>com.ahsay.obs.www.IPFilter</filter-class>

```



```
<init-param>
  <param-name>Range1</param-name>
  <param-value>localhost</param-value>
</init-param>
<init-param>
  <param-name>Range2</param-name>
  <param-value>192.168.1.1-192.168.1.255</param-value>
</init-param>
<init-param>
  <param-name>Range3</param-name>
  <param-value>192.168.2.1-192.168.2.255</param-value>
</init-param>
</filter>
```

iv. Restart OBS

### 18.3 User Authorization

The following table describes all information required to invoke the [Auth User] API to check whether an existing user is authorized.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/AuthUser.do">http://BACKUP_SERVER/obs/api/AuthUser.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	Login name of the user	
Password	String	Password of the user	
<b>Return Value:</b>			
If successful, returns <OK/>			
If there is an error, returns <err>%ERROR_MESSAGE%</err>			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/AuthUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test&amp;Password=abc">http://BACKUP_SERVER/obs/api/AuthUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test&amp;Password=abc</a>			

### 18.4 Adding User

The following table describes all information required to invoke the [Add User] API to add a new user to OBS.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/AddUser.do">http://BACKUP_SERVER/obs/api/AddUser.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	New user's login name	
Password	String	New user's password	
Alias	String	New user's alias	
Language	String	New user's language, e.g. [ en   cs   da   de   es   fr   fi   is   it   ja   lt   nl   no   pt_PT   sl   sv   zh_TW   zh_CN ] where "en" = English, "cs" = Czech, "da" = Danish, "de" = German, "es" = Spanish, "fr" =French, "fi" = Finnish, "is" = Icelandic, "it" =Italian, "ja" = Japanese, "lt" = Lithuanian, "nl" = Dutch, "no"=Norwegian, "pt_PT" = Portuguese, "sl" = Slovenian, "sv" = Swedish, "zh_CN" = Chinese (Simplified), "zh_TW" = Chinese (Traditional)	
Type	String	New user's type, e.g. [ TRIAL   PAID ]	
ClientType	String	New user's client type, e.g. [ OBM   ACB ]	
AdGroup	String	Advertisement group (ACB clients only) e.g. [ ALL   NONE ]	
Quota	Number	New user's quota, e.g. 104857600 (for 100MB)	
UserHome	String	User Home to use for the new user (must be one of the configured user home), e.g. C:\Program Files\Ahsay Offsite Backup Server\user	
EnableMSSQL	Boolean	Whether to enable Microsoft SQL Server module for the new user, e.g. [ Y   N ]	
EnableMSExchange	Boolean	Whether to enable Microsoft Exchange Server module for the new user, e.g. [ Y   N ]	
EnableOracle	Boolean	Whether to enable Oracle module for the new user, e.g. [ Y   N ]	
EnableLotusNotes	Boolean	Whether to enable Lotus Notes module for the new user, e.g. [ Y   N ]	
EnableLotusDomino	Boolean	Whether to enable Lotus Domino module for the new user, e.g. [ Y   N ]	





Alias	String	User's alias																																																																																																																																								
Language	String	User's language, e.g. [ en   cs   da   de   es   fr   fi   is   it   ja   lt   nl   no   pt_PT   sl   sv   zh_TW   zh_CN ] where "en" = English, "cs" = Czech, "da" = Danish, "de" = German, "es" = Spanish, "fr" =French, "fi" = Finnish, "is" = Icelandic, "it" =Italian, "ja" = Japanese, "lt" = Lithuanian, "nl" = Dutch, "no"=Norwegian, "pt_PT" = Portuguese, "sl" = Slovenian, "sv" = Swedish, "zh_CN" = Chinese (Simplified), "zh_TW" = Chinese (Traditional)																																																																																																																																								
Type	String	User's type, e.g. [ TRIAL   PAID ]																																																																																																																																								
ClientType	String	User's client type, e.g. [ OBM   ACB ]																																																																																																																																								
Status	String	User's status, e.g. [ ENABLE   SUSPENDED ]																																																																																																																																								
Quota	Number	User's quota, e.g. 104857600 (for 100MB)																																																																																																																																								
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EnableMSSQL	Boolean	Whether to enable Microsoft SQL Server module for this user, e.g. [ Y   N ]																																																																																																																																								
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EnableLotusNotes	Boolean	Whether to enable Lotus Notes module for this user, e.g. [ Y   N ]																																																																																																																																								
EnableLotusDomino	Boolean	Whether to enable Lotus Domino module for this user, e.g. [ Y   N ]																																																																																																																																								
EnableMySQL	Boolean	Whether to enable MySQL module for this user, e.g. [ Y   N ]																																																																																																																																								
EnableInFileDelta	Boolean	Whether to enable In-File Delta module for this user, e.g. [ Y   N ]																																																																																																																																								
EnableShadowCopy	Boolean	Whether to enable Shadow Copy module for this user, e.g. [ Y   N ]																																																																																																																																								
EnableExchangeMailbox	Boolean	Whether to enable Brick Level Microsoft Exchange module for this user, e.g. [ Y   N ]																																																																																																																																								
ExchangeMailboxQuota	Number	The number of Microsoft Exchange mailboxes allowed for this user.																																																																																																																																								
AppendContact	String	Whether to append or overwrite contact information [ Y   N ]																																																																																																																																								
Contact1	String	Extra contact name. Notes, There can be more than one extra name added, extra contact name must be in pair with extra email below																																																																																																																																								
Email1	String	Extra contact e-mail. Notes, There can be more than one extra email added, extra contact email must be in pair with extra contact name above																																																																																																																																								
Timezone	String	User's time zone setting. It has to be either one of the following entries: Please make sure the parameter is properly URL encoded. E.g. GMT-08:00 (PST) => GMT%2d08%3a00+%28PST%29 <table border="0" style="width: 100%; font-size: small;"> <tr> <td>GMT-11:00 (WST)</td> <td>GMT-04:00 (AMT)</td> <td>GMT+03:00 (MSD)</td> <td>GMT+08:00 (IRKST)</td> </tr> <tr> <td>GMT-11:00 (NUT)</td> <td>GMT-04:00 (CLT)</td> <td>GMT+04:00 (AQTST)</td> <td>GMT+08:00 (MYT)</td> </tr> <tr> <td>GMT-11:00 (SST)</td> <td>GMT-04:00 (FKT)</td> <td>GMT+04:00 (AZST)</td> <td>GMT+08:00 (PHT)</td> </tr> <tr> <td>GMT-10:00 (HADT)</td> <td>GMT-03:00 (ART)</td> <td>GMT+04:00 (GST)</td> <td>GMT+08:00 (SGT)</td> </tr> <tr> <td>GMT-10:00 (HST)</td> <td>GMT-03:00 (GFT)</td> <td>GMT+04:00 (GEST)</td> <td>GMT+08:00 (BORT)</td> </tr> <tr> <td>GMT-10:00 (TKT)</td> <td>GMT-03:00 (BRT)</td> <td>GMT+04:00 (AMST)</td> <td>GMT+08:00 (ULAT)</td> </tr> <tr> <td>GMT-10:00 (HST)</td> <td>GMT-03:00 (VWGST)</td> <td>GMT+04:00 (SAMST)</td> <td>GMT+09:00 (JAYT)</td> </tr> <tr> <td>GMT-10:00 (CKT)</td> <td>GMT-03:00 (PMDT)</td> <td>GMT+04:00 (SCT)</td> <td>GMT+09:00 (KST)</td> </tr> <tr> <td>GMT-10:00 (TAHT)</td> <td>GMT-03:00 (UYT)</td> <td>GMT+04:00 (MUT)</td> <td>GMT+09:00 (JST)</td> </tr> <tr> <td>GMT-09:00 (AKDT)</td> <td>GMT-03:00 (SRT)</td> <td>GMT+04:00 (RET)</td> <td>GMT+09:00 (YAKST)</td> </tr> <tr> <td>GMT-09:00 (GAMT)</td> <td>GMT-02:00 (FNT)</td> <td>GMT+05:00 (TMT)</td> <td>GMT+09:00 (PWT)</td> </tr> <tr> <td>GMT-08:00 (PST)</td> <td>GMT-02:00 (GST)</td> <td>GMT+05:00 (KGST)</td> <td>GMT+10:00 (EST)</td> </tr> <tr> <td>GMT-08:00 (PDT)</td> <td>GMT-01:00 (EGST)</td> <td>GMT+05:00 (TJT)</td> <td>GMT+10:00 (DDUT)</td> </tr> <tr> <td>GMT-07:00 (MST)</td> <td>GMT-01:00 (AZOST)</td> <td>GMT+05:00 (PKT)</td> <td>GMT+10:00 (VLAST)</td> </tr> <tr> <td>GMT-07:00 (MDT)</td> <td>GMT-01:00 (CVT)</td> <td>GMT+05:00 (UZT)</td> <td>GMT+10:00 (ChST)</td> </tr> <tr> <td>GMT-06:00 (CST)</td> <td>GMT-01:00 (EGT)</td> <td>GMT+05:00 (YEKST)</td> <td>GMT+10:00 (PGT)</td> </tr> <tr> <td>GMT-06:00 (CDT)</td> <td>GMT+00:00 (GMT)</td> <td>GMT+05:00 (IOT)</td> 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<td>GMT+07:00 (ICT)</td> <td>GMT+12:00 (PETST)</td> </tr> <tr> <td>GMT-05:00 (GMT-05:00)</td> <td>GMT+02:00 (CAT)</td> <td>GMT+07:00 (JAVT)</td> <td>GMT+12:00 (FJT)</td> </tr> <tr> <td>GMT-04:00 (AST)</td> <td>GMT+02:00 (SAST)</td> <td>GMT+07:00 (KRST)</td> <td>GMT+12:00 (TJT)</td> </tr> <tr> <td>GMT-04:00 (PYT)</td> <td>GMT+02:00 (EET)</td> <td>GMT+07:00 (CXT)</td> <td>GMT+12:00 (MHT)</td> </tr> <tr> <td>GMT-04:00 (VET)</td> <td>GMT+02:00 (IDT)</td> <td>GMT+08:00 (HKT)</td> <td>GMT+12:00 (NRT)</td> </tr> <tr> <td>GMT-04:00 (AMT)</td> <td>GMT+03:00 (EAT)</td> <td>GMT+08:00 (CST)</td> <td>GMT+12:00 (GILT)</td> </tr> <tr> <td>GMT-04:00 (GYT)</td> <td>GMT+03:00 (AST)</td> <td>GMT+08:00 (BNT)</td> <td>GMT+12:00 (WAKT)</td> </tr> <tr> <td>GMT-04:00 (ADT)</td> <td>GMT+03:00 (ADT)</td> <td>GMT+08:00 (WST)</td> <td>GMT+12:00 (WFT)</td> </tr> <tr> <td>GMT-04:00 (BOT)</td> <td></td> <td></td> <td></td> </tr> </table>	GMT-11:00 (WST)	GMT-04:00 (AMT)	GMT+03:00 (MSD)	GMT+08:00 (IRKST)	GMT-11:00 (NUT)	GMT-04:00 (CLT)	GMT+04:00 (AQTST)	GMT+08:00 (MYT)	GMT-11:00 (SST)	GMT-04:00 (FKT)	GMT+04:00 (AZST)	GMT+08:00 (PHT)	GMT-10:00 (HADT)	GMT-03:00 (ART)	GMT+04:00 (GST)	GMT+08:00 (SGT)	GMT-10:00 (HST)	GMT-03:00 (GFT)	GMT+04:00 (GEST)	GMT+08:00 (BORT)	GMT-10:00 (TKT)	GMT-03:00 (BRT)	GMT+04:00 (AMST)	GMT+08:00 (ULAT)	GMT-10:00 (HST)	GMT-03:00 (VWGST)	GMT+04:00 (SAMST)	GMT+09:00 (JAYT)	GMT-10:00 (CKT)	GMT-03:00 (PMDT)	GMT+04:00 (SCT)	GMT+09:00 (KST)	GMT-10:00 (TAHT)	GMT-03:00 (UYT)	GMT+04:00 (MUT)	GMT+09:00 (JST)	GMT-09:00 (AKDT)	GMT-03:00 (SRT)	GMT+04:00 (RET)	GMT+09:00 (YAKST)	GMT-09:00 (GAMT)	GMT-02:00 (FNT)	GMT+05:00 (TMT)	GMT+09:00 (PWT)	GMT-08:00 (PST)	GMT-02:00 (GST)	GMT+05:00 (KGST)	GMT+10:00 (EST)	GMT-08:00 (PDT)	GMT-01:00 (EGST)	GMT+05:00 (TJT)	GMT+10:00 (DDUT)	GMT-07:00 (MST)	GMT-01:00 (AZOST)	GMT+05:00 (PKT)	GMT+10:00 (VLAST)	GMT-07:00 (MDT)	GMT-01:00 (CVT)	GMT+05:00 (UZT)	GMT+10:00 (ChST)	GMT-06:00 (CST)	GMT-01:00 (EGT)	GMT+05:00 (YEKST)	GMT+10:00 (PGT)	GMT-06:00 (CDT)	GMT+00:00 (GMT)	GMT+05:00 (IOT)	GMT+10:00 (TRUT)	GMT-06:00 (EAST)	GMT+00:00 (WET)	GMT+05:00 (TFT)	GMT+11:00 (MAGST)	GMT-06:00 (GALT)	GMT+00:00 (WEST)	GMT+05:00 (MVT)	GMT+11:00 (VUT)	GMT-05:00 (EST)	GMT+00:00 (IST)	GMT+06:00 (MAWT)	GMT+11:00 (SBT)	GMT-05:00 (EDT)	GMT+00:00 (BST)	GMT+06:00 (ALMST)	GMT+11:00 (KOST)	GMT-05:00 (COT)	GMT+00:00 (UTC)	GMT+06:00 (LKT)	GMT+11:00 (NCT)	GMT-05:00 (ECT)	GMT+01:00 (CET)	GMT+06:00 (BDT)	GMT+11:00 (PONT)	GMT-05:00 (CDT)	GMT+01:00 (WAT)	GMT+06:00 (NOVST)	GMT+12:00 (NZST)	GMT-05:00 (PET)	GMT+01:00 (CEST)	GMT+06:00 (BTT)	GMT+12:00 (ANAST)	GMT-05:00 (ACT)	GMT+02:00 (EEST)	GMT+07:00 (ICT)	GMT+12:00 (PETST)	GMT-05:00 (GMT-05:00)	GMT+02:00 (CAT)	GMT+07:00 (JAVT)	GMT+12:00 (FJT)	GMT-04:00 (AST)	GMT+02:00 (SAST)	GMT+07:00 (KRST)	GMT+12:00 (TJT)	GMT-04:00 (PYT)	GMT+02:00 (EET)	GMT+07:00 (CXT)	GMT+12:00 (MHT)	GMT-04:00 (VET)	GMT+02:00 (IDT)	GMT+08:00 (HKT)	GMT+12:00 (NRT)	GMT-04:00 (AMT)	GMT+03:00 (EAT)	GMT+08:00 (CST)	GMT+12:00 (GILT)	GMT-04:00 (GYT)	GMT+03:00 (AST)	GMT+08:00 (BNT)	GMT+12:00 (WAKT)	GMT-04:00 (ADT)	GMT+03:00 (ADT)	GMT+08:00 (WST)	GMT+12:00 (WFT)	GMT-04:00 (BOT)			
GMT-11:00 (WST)	GMT-04:00 (AMT)	GMT+03:00 (MSD)	GMT+08:00 (IRKST)																																																																																																																																							
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GMT-10:00 (CKT)	GMT-03:00 (PMDT)	GMT+04:00 (SCT)	GMT+09:00 (KST)																																																																																																																																							
GMT-10:00 (TAHT)	GMT-03:00 (UYT)	GMT+04:00 (MUT)	GMT+09:00 (JST)																																																																																																																																							
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GMT-05:00 (COT)	GMT+00:00 (UTC)	GMT+06:00 (LKT)	GMT+11:00 (NCT)																																																																																																																																							
GMT-05:00 (ECT)	GMT+01:00 (CET)	GMT+06:00 (BDT)	GMT+11:00 (PONT)																																																																																																																																							
GMT-05:00 (CDT)	GMT+01:00 (WAT)	GMT+06:00 (NOVST)	GMT+12:00 (NZST)																																																																																																																																							
GMT-05:00 (PET)	GMT+01:00 (CEST)	GMT+06:00 (BTT)	GMT+12:00 (ANAST)																																																																																																																																							
GMT-05:00 (ACT)	GMT+02:00 (EEST)	GMT+07:00 (ICT)	GMT+12:00 (PETST)																																																																																																																																							
GMT-05:00 (GMT-05:00)	GMT+02:00 (CAT)	GMT+07:00 (JAVT)	GMT+12:00 (FJT)																																																																																																																																							
GMT-04:00 (AST)	GMT+02:00 (SAST)	GMT+07:00 (KRST)	GMT+12:00 (TJT)																																																																																																																																							
GMT-04:00 (PYT)	GMT+02:00 (EET)	GMT+07:00 (CXT)	GMT+12:00 (MHT)																																																																																																																																							
GMT-04:00 (VET)	GMT+02:00 (IDT)	GMT+08:00 (HKT)	GMT+12:00 (NRT)																																																																																																																																							
GMT-04:00 (AMT)	GMT+03:00 (EAT)	GMT+08:00 (CST)	GMT+12:00 (GILT)																																																																																																																																							
GMT-04:00 (GYT)	GMT+03:00 (AST)	GMT+08:00 (BNT)	GMT+12:00 (WAKT)																																																																																																																																							
GMT-04:00 (ADT)	GMT+03:00 (ADT)	GMT+08:00 (WST)	GMT+12:00 (WFT)																																																																																																																																							
GMT-04:00 (BOT)																																																																																																																																										
Bandwidth	Number	0 = Unlimited Bandwidth																																																																																																																																								
Notes	String																																																																																																																																									
<b>Return Value:</b>																																																																																																																																										
If successful, returns <OK/> If there is an error, returns <err>%ERROR_MESSAGE%</err>																																																																																																																																										
<b>Example:</b>																																																																																																																																										
<a href="http://BACKUP_SERVER/obs/api/ModifyUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test&amp;Password=abc&amp;Alias=Testing&amp;Language=en&amp;Type=PAID&amp;Status=ENABLE&amp;Quota=100000&amp;UserHome=E%3A%5C&amp;EnableMSSQL=Y&amp;EnableMSExchange=Y&amp;EnableOracle=Y&amp;EnableLotusNotes=Y&amp;EnableLotusDomino=Y&amp;AppendContact=Y&amp;Contact1=john.john&amp;Email1=john.john%40someDomain">http://BACKUP_SERVER/obs/api/ModifyUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test&amp;Password=abc&amp;Alias=Testing&amp;Language=en&amp;Type=PAID&amp;Status=ENABLE&amp;Quota=100000&amp;UserHome=E%3A%5C&amp;EnableMSSQL=Y&amp;EnableMSExchange=Y&amp;EnableOracle=Y&amp;EnableLotusNotes=Y&amp;EnableLotusDomino=Y&amp;AppendContact=Y&amp;Contact1=john.john&amp;Email1=john.john%40someDomain</a>																																																																																																																																										



<a href="#">n%2Ecom&amp;Contact2=paul&amp;Email2=paul%40anotherDomain%2Ecom&amp;EnableExchangeMailbox=Y&amp;ExchangeMailboxQuota=10&amp;ClientType=OBM</a>
--

## 18.6 Deleting User

The following table describes all information required to invoke the [Remove User] API to remove an existing user from an OBS.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/RemoveUser.do">http://BACKUP_SERVER/obs/api/RemoveUser.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	Login name of user to be deleted	
<b>Return Value:</b>			
If successful, returns <OK/> If there is an error, returns <err>%ERROR_MESSAGE%/</err>			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/RemoveUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test">http://BACKUP_SERVER/obs/api/RemoveUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test</a>			

## 18.7 Listing Users

The following table describes all information required to invoke the [List Users] API to get a list of all users available within OBS.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/ListUsers.do">http://BACKUP_SERVER/obs/api/ListUsers.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
<b>Return Value:</b>			
If successful, returns			
<pre>&lt;users&gt; &lt;user LoginName="john" Alias="" UserType="" ClientType="OBM" Quota=""   Timezone="GMT+08:00 (CST)" Language="en"   DataFile="1234" DataSize="1234"   RetainFile="1234" RetainSize="1234"   EnableMSSQL="Y" EnableMSExchange="Y"   EnableOracle="Y" EnableLotusNotes="Y"   EnableLotusDomino="Y" EnableMySQL="Y"   EnableInFileDelta="Y" EnableShadowCopy="Y"   EnableExchangeMailbox=Y ExchangeMailboxQuota=10   Bandwidth="0" Notes=""   Status="ENABLE" RegistrationDate=" 1185249951156" &gt; &lt;Contact name="John (Email1)" email="john@yourcompany.com" /&gt; &lt;Contact name="John (Email2)" email="johnmy@yourcompany.com" /&gt; &lt;/user&gt; ... ... &lt;/users&gt;</pre>			
If there is an error, returns <err>%ERROR_MESSAGE%/</err>			
<b>Where</b>			
<pre>LoginName = login name Alias = user's alias UserType = user type [ PAID   TRIAL ] ClientType = client type [ OBM   ACB ] Quota = quota in bytes Timezone = user's time zone Language = user's language DataFile = total number of files in the data area DataSize = total amount of bytes in the data area RetainFile = total number of files in the retention area RetainSize = total amount of bytes in the retention area EnableMSSQL = MS SQL enabled [ Y   N ] EnableMSExchange = MS Exchange enabled [ Y   N ]</pre>			



EnableOracle = Oracle enabled [ Y   N ] EnableLotusNotes = Lotus Notes enabled [ Y   N ] EnableLotusDomino = Lotus Domino enabled [ Y   N ] EnableMySQL = MySQL enabled [ Y   N ] EnableInFileDelta = In-file Delta enabled [ Y   N ] EnableShadowCopy = Shadow Copy enabled [ Y   N ] EnableExchangeMailbox = MS Exchange Mailbox enabled [ Y   N ] ExchangeMailboxQuota = MS Exchange Mailbox quota Bandwidth = user's bandwidth Notes = user's notes Status = status of user account [ENABLE   SUSPENDED] (added since v.5.2.2.5) RegistrationDate = registration date of user account (added since v.5.2.2.5)
<b>Example:</b>
<a href="http://BACKUP_SERVER/obs/api/ListUsers.do?SysUser=system&amp;SysPwd=system">http://BACKUP_SERVER/obs/api/ListUsers.do?SysUser=system&amp;SysPwd=system</a>

## 18.8 Getting User Information

The following table describes all information required to invoke the [Get User] API to get a user's account information.

<b>URL:</b>												
<a href="http://BACKUP_SERVER/obs/api/GetUser.do">http://BACKUP_SERVER/obs/api/GetUser.do</a>												
<b>Parameters:</b>												
<table border="1"> <thead> <tr> <th>Key</th> <th>Value</th> <th>Descriptions</th> </tr> </thead> <tbody> <tr> <td>SysUser</td> <td>String</td> <td>OBS's System Username</td> </tr> <tr> <td>SysPwd</td> <td>String</td> <td>OBS's System password</td> </tr> <tr> <td>LoginName</td> <td>String</td> <td>The user's login name</td> </tr> </tbody> </table>	Key	Value	Descriptions	SysUser	String	OBS's System Username	SysPwd	String	OBS's System password	LoginName	String	The user's login name
Key	Value	Descriptions										
SysUser	String	OBS's System Username										
SysPwd	String	OBS's System password										
LoginName	String	The user's login name										
<b>Return Value:</b>												
<p>If successful, returns</p> <pre>&lt;user LoginName="john" Alias="" UserType="PAID" ClientType="OBM"   Status="ENABLE" Quota="53687091200"   Timezone="GMT+08:00 (CST)" Language="en"   DataFile="1234" DataSize="1234"   RetainFile="1234" RetainSize="1234"   UncompressedSize="55837504"   EnableMSSQL="Y" EnableMSExchange="Y"   EnableOracle="Y" EnableLotusNotes="Y"   EnableLotusDomino="Y" EnableMySQL="Y"   EnableInFileDelta="Y" EnableShadowCopy="Y"   ExchangeMailboxQuota="0" Bandwidth="0" Notes=""   UserHome="C:\Program Files\Offsite Backup Server\user\john"   RegistrationDate="1185249951156" MailboxUsage="11" &gt; &lt;Contact name="John (Email1)" email="john@yourcompany.com" /&gt; &lt;Contact name="John (Email2)" email="johnmy@yourcompany.com" /&gt; &lt;/user&gt;</pre> <p>If there is an error, it returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>												
<p>Where</p> <ul style="list-style-type: none"> <li>LoginName = login name</li> <li>Alias = user's alias</li> <li>UserType = user type [ PAID   TRIAL ]</li> <li>ClientType = client type [ OBM   ACB ]</li> <li>Status = status of user account [ENABLE   SUSPENDED] (added since v.5.2.2.5)</li> <li>Quota = quota in bytes</li> <li>Timezone = user's timezone</li> <li>Language = user's language</li> <li>DataFile = total number of files in the data area</li> <li>DataSize = total amount of bytes in the data area</li> <li>RetainFile = total number of files in the retention area</li> <li>RetainSize = total amount of bytes in the retention area</li> <li>UncompressedSize = total amount (bytes) of uncompressed file size in data area</li> <li>EnableMSSQL = MS SQL enabled [ Y   N ]</li> <li>EnableMSExchange = MS Exchange enabled [ Y   N ]</li> <li>EnableOracle = Oracle enabled [ Y   N ]</li> <li>EnableLotusNotes = Lotus Notes enabled [ Y   N ]</li> <li>EnableLotusDomino = Lotus Domino enabled [ Y   N ]</li> <li>EnableMySQL = MySQL enabled [ Y   N ]</li> <li>EnableInFileDelta = In-file Delta enabled [ Y   N ]</li> <li>EnableShadowCopy = Shadow Copy enabled [ Y   N ]</li> <li>EnableExchangeMailbox = MS Exchange Mailbox enabled [ Y   N ]</li> <li>ExchangeMailboxQuota = MS Exchange Mailbox quota</li> <li>Bandwidth = user's bandwidth</li> <li>Notes = user's notes</li> </ul>												



UserHome = the directory where OBS stores the backup files and backup logs (added since v.5.2.2.5)
RegistrationDate = registration date of user account (added since v.5.2.2.5)
MailboxUsage = the number of mailboxes used (added since v5.2.5.0)
<b>Example:</b>
<a href="http://BACKUP_SERVER/obs/api/GetUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John">http://BACKUP_SERVER/obs/api/GetUser.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John</a>

## 18.9 Adding a Backup Set

The following table describes all information required to invoke the [Add Backup Set] API to add a new backup set.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/AddBackupSet.do">http://BACKUP_SERVER/obs/api/AddBackupSet.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	
<b>Return Value:</b>			
If successful, returns			
<BackupSet ID="1122260638375"></BackupSet >			
If there is an error, returns <err>%ERROR_MESSAGE%</err>			
where ID = new backup set ID			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/AddBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John">http://BACKUP_SERVER/obs/api/AddBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John</a>			

## 18.10 Deleting a Backup Set

The following table describes all information required to invoke the [Delete Backup Set] API to delete a backup set for a particular user.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/DeleteBackupSet.do">http://BACKUP_SERVER/obs/api/DeleteBackupSet.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	
BackupSetID	String	The ID of the backup set to delete	
<b>Return Value:</b>			
If successful, returns <OK/>			
If there is an error, returns <err>%ERROR_MESSAGE%</err>			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/DeleteBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John&amp;BackupSetID=1122260638375">http://BACKUP_SERVER/obs/api/DeleteBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John&amp;BackupSetID=1122260638375</a>			

## 18.11 Listing Backup Sets

The following table describes all information required to invoke the [List Backup Sets] API to list all the backup sets for a particular user.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/ListBackupSets.do">http://BACKUP_SERVER/obs/api/ListBackupSets.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	





Return Value:	
	<p>If successful, returns</p> <pre>&lt;BackupSets&gt; &lt;BackupSet ID="1099561060222" Name="BackupSet-1" Type="File" /&gt; &lt;BackupSet ID="1099561060223" Name="BackupSet-2" Type="Microsoft SQL Server" /&gt; &lt;BackupSet ID="1099561060224" Name="BackupSet-3" Type="Oracle Database Server" /&gt; &lt;BackupSet ID="1099561060225" Name="BackupSet-4" Type="Microsoft Exchange Server" /&gt; &lt;BackupSet ID="1099561060226" Name="BackupSet-5" Type="Lotus Domino" /&gt; &lt;BackupSet ID="1099561060227" Name="BackupSet-6" Type="Lotus Notes" /&gt; &lt;BackupSet ID="1099561060228" Name="BackupSet-7" Type="MySQL" /&gt; &lt;BackupSet ID="1099561060229" Name="BackupSet-8" Type="System State" /&gt; &lt;BackupSet ID="1099561060230" Name="BackupSet-9" Type="Microsoft Exchange Mail" /&gt; &lt;BackupSet ID="1099561060231" Name="BackupSet-10" Type="Microsoft Exchange Mail (MAPI)" /&gt; &lt;/BackupSets&gt;</pre> <p>If there is an error, returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>
	<p>where  ID = backup set ID  Name = backup set name  Type = backup set type</p>
Example:	
	<p><a href="http://BACKUP_SERVER/obs/api/ListBackupSets.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John">http://BACKUP_SERVER/obs/api/ListBackupSets.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John</a></p>

## 18.12 Getting a Backup Set

The following table describes all information required to invoke the [Get Backup Set] API to get a backup set.

URL:			
	<a href="http://BACKUP_SERVER/obs/api/GetBackupSet.do">http://BACKUP_SERVER/obs/api/GetBackupSet.do</a>		
Parameters:			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	
BackupSetID	String	The backup set ID	
Return Value:			
	<p>If successful, returns</p> <pre>&lt;BackupSet ID="1065821983562" Name="FileBackupSet-1" TransferBlockSize="131072" FollowSymbolicLink="N" Type="FILE" AdminUsername="" AdminPassword="" WorkingDir="D:\temp" OracleSID="" Port="" Host="" LogRetentionDays="60" NotesINI="" BackupSystemState="N" LanDomain="" LanUsername="" LanPassword="" LastBackupRun="1168658269937" LastBackupAccess="1168658296640" EnableInFileDelta="Y" MinDeltaFileSize="26214400" DeltaBlockSize="-1" MaxNumOfDelta="100" MaxDeltaRatio="50" EnableShadowCopy="Y" EnableOfflineBackup="Y" EnableLogoutBackup="Y" FullBackup="N" LastBackupCompleted="1168658297156" BackupIntervalDay="1" BackupIntervalHour="0" LogoutType="" OfflineNotificationDay="7" DeleteTempFile="N" SqiServer="" DefaultDeltaType="1" TotalUncompressedDataSize="2988032" NumberOfFiles="6" TotalBackupSetSize="1064224" TotalBSetRetainUncompress="139301468" TotalBSetRetainFileNo="92" TotalBsetRetainFileSize="40579168" ScheduleHost="John"&gt;</pre> <p>&lt;SelectedSource&gt;E:\temp\Test.txt&lt;/SelectedSource&gt;  &lt;SelectedSource&gt;D:\Outlook&lt;/SelectedSource&gt;</p> <p>&lt;DailySchedule ID="1168669116421" Name="BackupSchedule" Hour="23" Minute="0" Duration="-1" BackupType="FILE"/&gt;  &lt;WeeklySchedule ID="1168669135671" Name="BackupSchedule" Sun="N" Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="Y" Hour="23" Minute="0" Duration="8" BackupType="FILE"/&gt;  &lt;MonthSchedule ID="1168669142593" Name="BackupSchedule" Occurrence="First" Criteria="Day" Date="1" Hour="23" Minute="0" Duration="-1" BackupType="FILE"/&gt;  &lt;CustomSchedule ID="1168669167078" Name="BackupSchedule" BackupType="FILE" Date="2007-12-31" Hour="23" Minute="0" Duration="-1"/&gt;</p> <p>&lt;Filter ID="1168669208375" Name="Filter-1" Type="END_WITH" TopDir="C:\" Include="Y" Only="N" ApplyToDir="N" ApplyToFile="Y"&gt;&lt;Pattern&gt;*.doc&lt;/Pattern&gt;&lt;/Filter&gt;</p> <p>&lt;RetentionPolicy Unit="CUSTOMIZE" Period="7"&gt;  &lt;RetentionSetting ID="1168669352281" Name="" OverlapSensitive="Y"&gt;  &lt;Setting ID="1168669443453" Name="Retention Policy-1" Type="DAILY" NumOfCopiesToKeep="7" DateType="" Sun="N" Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="N" Day="1" Week="1" Month="1" Year="2007"/&gt;  &lt;Setting ID="1168669452343" Name="Retention Policy-2" Type="WEEKLY" NumOfCopiesToKeep="4" DateType="" Sun="N" Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="Y" Day="1" Week="1" Month="1" Year="2007"/&gt;  &lt;Setting ID="1168669466796" Name="Retention Policy-3" Type="MONTHLY" NumOfCopiesToKeep="12" DateType="EXACT" Sun="N" </p>		



<pre> Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="N" Day="1" Week="1" Month="1" Year="2007"/&gt; &lt;Setting ID="1168669484781" Name="Retention Policy-4" Type="QUARTERLY" NumOfCopiesToKeep="4" DateType="EXACT" Sun="N" Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="N" Day="32" Week="1" Month="1" Year="2007"/&gt; &lt;Setting ID="1168669493468" Name="Retention Policy-5" Type="YEARLY" NumOfCopiesToKeep="7" DateType="EXACT" Sun="N" Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="N" Day="1" Week="1" Month="1" Year="2007"/&gt; &lt;Setting ID="1168669503984" Name="Retention Policy-6" Type="CUSTOM" NumOfCopiesToKeep="7" DateType="EXACT" Sun="N" Mon="N" Tue="N" Wed="N" Thu="N" Fri="N" Sat="N" Day="25" Week="1" Month="12" Year="2007"/&gt; &lt;/RetentionSetting&gt; &lt;/RetentionPolicy&gt;  &lt;PreBackupCommand ID="1168669311468" Name="Pre-backup Command-1" Path="pre-command.bat" WorkingDir="D:\"/&gt; &lt;PostBackupCommand ID="1168669328625" Name="Post-backup Command-1" Path="post-command.bat" WorkingDir="D:\"/&gt;  &lt;ExtraLocalBackup ENABLED="Y" Zip="N" BackupTo="C:\LocalBackup" SkipOffsiteBackup="N" SetLocalCopyPermission="N"/&gt; &lt;DeltaWeeklySchedule Sun="" Mon="" Tue="" Wed="" Thu="" Fri="" Sat="D"/&gt; &lt;DeltaMonthlySchedule Date="1" Occurrence="First" Criteria="Friday" JAN="F" FEB="F" MAR="F" APR="F" MAY="F" JUN="F" JUL="F" AUG="F" SEP="F" OCT="F" NOV="F" DEC="F"/&gt;  &lt;/BackupSet&gt;  If there is an error, returns &lt;err&gt;[UserCacheManager] User 'Johnny' not found.&lt;/err&gt; &lt;err&gt;Backup Set for ID='1065821983563' not found&lt;/err&gt; </pre>	<pre> where under Tag &lt;BACKUP_SET&gt;   ID = backup set ID   Name = backup set name   TransferBlockSize = block size for transfer   FollowSymbolicLink = follow symbolic link (Linux only)   Type = backup set type   AdminUsername = administrator user name   AdminPassword = administrator password   WorkingDir = temporary working directory   OracleSID = Oracle SID setting   Port = Oracle port number   Host = Oracle hostname   LogRetentionDays = retention day logging   NotesINI = path location of notes.ini file   BackupSystemState = whether to backup system state   LanDomain = LAN domain name   LanUsername = LAN user name   LanPassword = LAN password   LastBackupRun = time of last backup run   LastBackupAccess = time of last backup   EnableInFileDelta = enabling in-file delta feature   MinDeltaFileSize = minimum delta file size setting field   DeltaBlockSize = delta block size setting field   MaxNumOfDelta = maximum delta number setting field   MaxDeltaRatio = maximum delta ratio setting field   EnableShadowCopy = enabling shadow copy feature field   EnableOfflineBackup = enabling offline copy feature field   EnableLogoutBackup = enabling logout backup feature field   FullBackup = enabling full backup field   LastBackupCompleted = time when the last backup was completed   BackupIntervalDay = Offline backup day interval   BackupIntervalHour = Offline backup hour interval   LogoutType = unused   OfflineNotificationDay = Offline backup email reminder days   DeleteTempFile = Remove temporary files after backup   SqlServer = SQL server hostname   DefaultDeltaType = Default in-file delta type   TotalUncompressedDataSize = Total uncompressed size in bytes of the data area   NumberOfFiles = Total number of files in the data area   TotalBackupSetSize = Total compressed size in bytes of the data area   TotalBSetRetainUncompress = Total uncompressed size in bytes of the retention area   TotalBSetRetainFileNo = Total number of files in the retention area   TotalBSetRetainFileSize = Total compressed size in bytes of the retention area   ScheduleHost = Computer name of this backup set that the scheduler will use to determine whether to run Tag &lt; SelectedSource &gt;   SelectedSource = selected sources for backup Tag &lt; DeseletedSource &gt;   DeseletedSource = deselected sources for backup Tag &lt; DailySchedule &gt;   ID = schedule ID   Name = schedule name   Hour = time setting for such schedule   Minute = time setting for such schedule   Duration = how long to run. Use -1 for "Stop on completion"   BackupType = Backup set type Tag &lt; WeeklySchedule &gt;   ID = schedule ID </pre>
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	<p>Name = schedule name  Sun = enable field  Mon = enable field  Tue = enable field  Wed =enable field  Thu = enable field  Fri = enable field  Sat = enable field  Hour = time setting for such schedule  Minute = time setting for such schedule  Duration = how long to run. Use -1 for "Stop on completion"  BackupType = Backup set type</p> <p>Tag &lt; MonthSchedule &gt;  ID = schedule ID  Name = schedule name  Date = exact day of the month. When "0" use occurrence and criteria.  Occurrence= occurrence to run e.g. First, Second, Third, Forth Last  Criteria = day to run e.g. Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday  Hour = time setting for such schedule  Minute = time setting for such schedule  Duration = how long to run. Use -1 for "Stop on completion"  BackupType = Backup set type</p> <p>Tag &lt; CustomSchedule &gt;  ID = schedule ID  Name = schedule name  BackupType = Backup set type  Date = the date to run this schedule  Hour = time setting for such schedule  Minute = time setting for such schedule  Duration = how long to run. Use -1 for "Stop on completion"</p> <p>Tag &lt; Filter&gt;  ID = filter ID  Name = filter name  Type = filter type  TopDir = the top most directory to apply this filter  Include = filter mode  Only = filter mode  ApplyToDir = applying to such directory  ApplyToFile = applying to such file</p> <p>Tag &lt; Pattern&gt;  Pattern = the filter pattern to apply</p> <p>Tag &lt; RetentionPolicy &gt;  Unit= type for the retention policy, by JOB, DAYS, or CUSTOMIZE  Period= days for the policy</p> <p>Tag &lt; RetentionSetting &gt;  ID = retention ID  OverlapSensitive = enable feature setting</p> <p>Tag &lt; Setting&gt;  ID = retention ID  Name = retention name  Type = retention type. Allowed values are [DAILY   WEEKLY   MONTHLY   QUARTERLY   YEARLY   CUSTOM  NumOfCopiesToKeep = number of copies to keep  DateType = normally empty. Use "EXACT" when the date is known.  Sun, Mon, Tue, Wed, Thu, Fri, Sat = days enabled  Day, Week, Month, Year = date enabled</p> <p>Tag &lt; PreBackupCommand&gt;  ID = pre-command ID  Name = pre-command name  Path = path for such pre command  WorkingDir = directory for such pre-command</p> <p>Tag &lt; PostBackupCommand &gt;  ID = post command ID  Name = post command name  Path = path for such post command  WorkingDir = directory for such post command</p> <p>Tag &lt; ExtraLocalBackup &gt;  ENABLED = enable "Extra Local Copy" feature field  Zip = zip the copied file feature  BackupTo = location to save extra copy  SkipOffsiteBackup = whether to skip off-site backup  SetLocalCopyPermission = set local copy permission</p> <p>Tag &lt; DeltaWeeklySchedule&gt;  Sun, Mon, Tue, Wed, Thu, Fri, Sat = advance delta weekly schedule enabled. [   D   F ]</p> <p>Tag &lt; DeltaMonthlySchedule&gt;  Date = exact day of the month. When "0" use occurrence and criteria.  Occurrence= occurrence to run e.g. First, Second, Third, Forth Last  Criteria = day to run e.g. Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday  Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec = advance monthly schedule enabled. [   D   F ]</p>
<b>Example:</b>	
<a href="http://BACKUP_SERVER/obs/api/GetBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John&amp;BackupSetID=1077097041763">http://BACKUP_SERVER/obs/api/GetBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John&amp;BackupSetID=1077097041763</a>	



### 18.13 Updating a Backup Set

The following table describes all information required to invoke the [Update Backup Set] API to update a backup set. Note, use [Get Backup Set] API above to retrieve a backup set and save it as an xml file; modify the file as you need, and post it as a content using parameter name "Profile" when calling [Update Backup Set] API

<b>URL:</b>			
	<a href="http://BACKUP_SERVER/obs/api/UpdateBackupSet.do">http://BACKUP_SERVER/obs/api/UpdateBackupSet.do</a>		
<b>Parameters:</b>			
	<b>Key</b>	<b>Value</b>	<b>Descriptions</b>
	SysUser	String	OBS's System Username
	SysPwd	String	OBS's System password
	LoginName	String	The user's login name
	Profile	String	The whole content of backup set in XML format posted up when calling this API
<b>Return Value:</b>			
	If successful, returns <OK/>		
	If there is an error, returns <err>%ERROR_MESSAGE%</err>		
<b>Example:</b>			
	<a href="http://BACKUP_SERVER/obs/api/UpdateBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John">http://BACKUP_SERVER/obs/api/UpdateBackupSet.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John</a>		

### 18.14 Listing Backup Jobs

The following table describes all information required to invoke the [List Backup Jobs] API to get a list of all backup jobs for all backup sets.

<b>URL:</b>			
	<a href="http://BACKUP_SERVER/obs/api/ListBackupJobs.do">http://BACKUP_SERVER/obs/api/ListBackupJobs.do</a>		
<b>Parameters:</b>			
	<b>Key</b>	<b>Value</b>	<b>Descriptions</b>
	SysUser	String	OBS's System Username
	SysPwd	String	OBS's System password
	LoginName	String	The user's login name
<b>Return Value:</b>			
	If successful, returns		
	<pre>&lt;BackupSets&gt; &lt;BackupSet ID="1121746638656"&gt; &lt;BackupJob ID="2005-12-29-12-00-00" /&gt; &lt;BackupJob ID="2005-12-30-12-00-00" /&gt; &lt;BackupJob ID="2005-12-31-12-00-00" /&gt; &lt;/BackupSet&gt; ... &lt;/BackupSets&gt;</pre>		
	If there is an error, returns <err>%ERROR_MESSAGE%</err>		
	Where under		
	Tag <BackupSet>		
	ID = backup set ID		
	Tag <BackupJob>		
	ID = backup job ID		
<b>Example:</b>			
	<a href="http://BACKUP_SERVER/obs/api/ListBackupJobs.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John">http://BACKUP_SERVER/obs/api/ListBackupJobs.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John</a>		

### 18.15 Listing Backup Job Status

The following table describes all information required to invoke the [List Backup Job Status] API to get a list of all backup jobs for all backup sets.

<b>URL:</b>			
	<a href="http://BACKUP_SERVER/obs/api/ListBackupJobStatus.do">http://BACKUP_SERVER/obs/api/ListBackupJobStatus.do</a>		
<b>Parameters:</b>			
	<b>Key</b>	<b>Value</b>	<b>Descriptions</b>
	SysUser	String	OBS's System Username



SysPwd	String	OBS's System password
LoginName	String	The user's login name. Optional argument, if specified, only the backup jobs of the user is displayed otherwise all backup jobs are displayed.
BackupDate	String	A date in YYYY-MM-DD format
<b>Return Value:</b>		
<p>If successful, returns</p> <pre>&lt;BackupJobs BackupDate="2007-01-02" &gt; &lt;BackupJob ID="2007-01-02-02-01-01" LoginName="demo" StartTime="2007-01-02 02:01:01" EndTime="2007-01-02 02:01:04" BackupJobStatus="BS_STOP_SUCCESS" BackupSetID="1190692945178" /&gt; &lt;BackupJob ID="2007-01-02-16-45-45" LoginName="demo" StartTime="2007-01-02 16:45:45" EndTime="2007-01-02 16:45:48" BackupJobStatus="BS_STOP_SUCCESS" BackupSetID="1190692945178" /&gt; &lt;/BackupJobs&gt;</pre> <p>If there is an error, it returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>		
<p>where under</p> <p>Tag &lt;BackupJobs&gt; BackupDate = date of backup</p> <p>Tag &lt;BackupJob&gt; ID = backup job ID LoginName = user name StartTime = job start time EndTime = job end time BackupJobStatus = the status of the backup job as follow:</p> <ol style="list-style-type: none"> <li>1. BS_STOP_SUCCESS = backup completed successfully</li> <li>2. BS_STOP_BY_SYSTEM_ERROR = backup stopped due to system error</li> <li>3. BS_STOP_BY_SCHEDULER = backup stopped by scheduler</li> <li>4. BS_STOP_BY_USER = backup stopped by user</li> <li>5. BS_STOP_BY_QUOTA_EXCEEDED = backup stopped due to quota exceeded</li> <li>6. BS_STOP_SUCCESS_WITH_ERROR = backup completed with errors</li> <li>7. BS_STOP_SUCCESS_WITH_WARNING = backup completed with warnings</li> <li>8. BS_STOP_MISSED_BACKUP = backup missed</li> <li>9. Empty = backup in progress</li> <li>10. Others = other client errors not defined above.</li> </ol> <p>BackupSetID = backup set ID (added since v5.2.5.0)</p>		
<b>Example:</b>		
<a href="http://BACKUP_SERVER/obs/api/ListBackupJobStatus.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John&amp;BackupDate=2007-01-08">http://BACKUP_SERVER/obs/api/ListBackupJobStatus.do?SysUser=system&amp;SysPwd=system&amp;LoginName=John&amp;BackupDate=2007-01-08</a>		

## 18.16 Getting Backup Job Report

The following table describes all information required to invoke the [Get Backup Job Report] API to get a backup job status.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/GetBackupJobReport.do">http://BACKUP_SERVER/obs/api/GetBackupJobReport.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	
BackupSetID	String	A backup set ID	
BackupJobID	String	A backup job ID	
<b>Return Value:</b>			
<p>If successful, returns</p> <pre>&lt;BackupJob ID="2005-07-19-12-11-20" StartTime=" 2005-07-19 12:11:20" EndTime="2005-07-19 12:21:20" JobStatus="BS_STOP_SUCCESS" NumOfErrorEntries="0" NumOfWarnEntries="0" NumOfNewFiles="1" TotalNewFilesSize="37487104" NumOfUpdatedFiles="1" TotalUpdatedFilesSize="37487104" NumOfDeletedFiles="1" TotalDeletedFilesSize="37487104" NumOfMovedFiles="1" TotalMovedFilesSize="37487104" &gt;  &lt;Info Timestamp="2005-12-31 12:59:59" Message="???????" /&gt; ... &lt;Warn Timestamp="2005-12-31 12:59:59" Message="???????" /&gt; ... &lt;Error Timestamp="2005-12-31 12:59:59" Message="???????" /&gt; ... &lt;NewFile LastModified="2005-12-31 12:59:59" Name="C:\abc.doc" FileSize="374 LastModified="2005-12-31 12:59:59"/&gt; ...</pre>			



<pre> &lt;UpdatedFile LastModified="2005-12-31 12:59:59" Name="C:\abc.doc"   FileName="abc.doc" FileSize="374 LastModified="2005-12-31 12:59:59"/&gt; ... &lt;DeletedFile LastModified="2005-12-31 12:59:59" Name="C:\abc.doc"   FileName="abc.doc" FileSize="374 LastModified="2005-12-31 12:59:59"/&gt; ... &lt;MovedFile LastModified="2005-12-31 12:59:59" FromFile="C:\abc.doc" ToFile="C:\abc.doc"   FileName="abc.doc" FileSize="374 LastModified="2005-12-31 12:59:59"/&gt; ... &lt;/BackupJob&gt; </pre> <p>If there is an error, returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>
<p>where under</p> <p>Tag &lt;BackupJob&gt;</p> <ul style="list-style-type: none"> <li>ID = backup job ID</li> <li>StartTime = backup job start time</li> <li>EndTime = backup job end time</li> <li>JobStatus = status of backup job</li> <li>NumOfErrorEntries = number of backup job errors</li> <li>NumOfWarnEntries = number of backup job warnings</li> <li>NumOfNewFiles = number of new files</li> <li>TotalNewFilesSize = new files size</li> <li>NumOfUpdatedFiles = number of updated files</li> <li>TotalUpdatedFilesSize = updated files size</li> <li>NumOfDeletedFiles = number of deleted files</li> <li>TotalDeletedFilesSize = deleted files size</li> <li>NumOfMovedFiles = number of moved files</li> <li>TotalMovedFilesSize = move files size</li> </ul> <p>Tag &lt;Info&gt;, &lt;Warn&gt;, &lt;Error&gt;</p> <ul style="list-style-type: none"> <li>TimeStamp = time of this message</li> <li>Message = message text</li> </ul> <p>Tag &lt;NewFile&gt;, &lt;UpdatedFile&gt;, &lt;DeletedFile&gt;, &lt;MovedFile&gt;</p> <ul style="list-style-type: none"> <li>Name = filename</li> <li>FileSize = filesize</li> <li>LastModified = last modified time of such file</li> </ul>
<p><b>Example:</b></p> <p><a href="http://BACKUP_SERVER/obs/api/GetBackupJobReport.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;BackupSetID=1108378758790&amp;BackupJobID=2007-01-08-16-02-07">http://BACKUP_SERVER/obs/api/GetBackupJobReport.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;BackupSetID=1108378758790&amp;BackupJobID=2007-01-08-16-02-07</a></p>

## 18.17 Getting Backup Job Report Summary

The following table describes all information required to invoke the [Get Backup Job Report Summary] API to get a backup job status.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/GetBackupJobReportSummary.do">http://BACKUP_SERVER/obs/api/GetBackupJobReportSummary.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	
BackupSetID	String	A backup set ID	
BackupJobID	String	A backup job ID	
<b>Return Value:</b>			
If successful, returns			
<pre> &lt;BackupJob ID="2007-01-08-16-02-07" StartTime="2007-01-08 16:02:07"   EndTime="2007-01-08 16:02:12" BackupJobStatus="BS_STOP_SUCCESS"   NumOfWarnEntries="0" NumOfErrorEntries="0"   NumOfNewFiles="15" TotalNewFilesSize="790256"   NumOfUpdatedFiles="0" TotalUpdatedFilesSize="0"   NumOfDeletedFiles="0" TotalDeletedFilesSize="0"   NumOfMovedFiles="0" TotalMovedFilesSize="0"   NumOfUpdatedPermissionFiles="0" TotalUpdatedPermissionFilesSize="0"&gt; &lt;/BackupJob&gt; </pre> <p>If there is an error, returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>			
where under			
Tag <BackupJob>			
<ul style="list-style-type: none"> <li>ID = backup job ID</li> <li>StartTime = backup job start time</li> <li>EndTime = backup job end time</li> </ul>			



<p>JobStatus = status of backup job          NumOfErrorEntries = number of backup job errors          NumOfWarnEntries = number of backup job warnings          NumOfNewFiles = number of new files          TotalNewFilesSize = new files size          NumOfUpdatedFiles = number of updated files          TotalUpdatedFilesSize = updated files size          NumOfDeletedFiles = number of deleted files          TotalDeletedFilesSize = deleted files size          NumOfMovedFiles = number of moved files          TotalMovedFilesSize = move files size          NumOfUpdatedPermissionFiles = number of updated file permission files (added since v5.2.5.0)          TotalUpdatedPermissionFilesSize = updated file permission files size (added since v5.2.5.0)</p>
<b>Example:</b>
<a href="http://BACKUP_SERVER/obs/api/GetBackupJobReportSummary.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;BackupSetID=1108378758790&amp;BackupJobID=2007-01-08-16-02-07">http://BACKUP_SERVER/obs/api/GetBackupJobReportSummary.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;BackupSetID=1108378758790&amp;BackupJobID=2007-01-08-16-02-07</a>

## 18.18 Listing Backup Files

The following table describes all information required to invoke the [List Backup Files] API to get all backup files by given a directory.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/ListBackupFiles.do">http://BACKUP_SERVER/obs/api/ListBackupFiles.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	
BackupSetID	String	A backup set ID	
BackupJobID	String	A backup job ID	
Path	String	A directory path	
<b>Return Value:</b>			
If successful, returns			
<pre>&lt;Files&gt; &lt;File Type="DIR" Name="My Document Folder" /&gt; &lt;File Type="FILE" Name="changeStatus.bat"   OriginalFileSize="187" FileSize="1712"   BackupByJob="2005-07-25-17-07-07" InBackupJob="Current"   LastModified="1109233592750" /&gt; &lt;/Files&gt;</pre>			
If there is an error, returns <err>%ERROR_MESSAGE%</err>			
where under Name = name of the file OriginalFileSize = the first size of the file when first uploading FileSize = the file size while doing uploading BackedByJob = the day when such file uploaded InBackupJob = The file which has been updated LastModified = The time of last modification			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/ListBackupFiles.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;BackupSetID=1108378758790&amp;BackupJobID=2007-001-08-16-02-07&amp;Path=C:\Documents%20and%20Settings\john.my.company">http://BACKUP_SERVER/obs/api/ListBackupFiles.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;BackupSetID=1108378758790&amp;BackupJobID=2007-001-08-16-02-07&amp;Path=C:\Documents%20and%20Settings\john.my.company</a>			

## 18.19 Getting User Storage Statistics

The following table describes all information required to invoke the [Getting User Storage Statistics] API to get a list of storage information for a user.

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/GetUserStorageStat.do">http://BACKUP_SERVER/obs/api/GetUserStorageStat.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	The user's login name	



YearMonth	String	Year and month (yyyy-MM)
<b>Return Value:</b>		
<p>If successful, returns</p> <pre>&lt;Statistics YearMonth="2005-07"   AvgDataSize="" AvgDataRowSize="" AvgDataNo=""   AvgRetainSize="" AvgRetainRawSize="" AvgRetainNo=""   AvgUploadSize="" AvgUploadRawSize="" AvgUploadNo=""   AvgTotalStorageSize="" AvgTotalStorageRawSize="" AvgTotalStorageNo="" &gt;   &lt;Storage Date="2005-07-25"     DataSize="0" DataRowSize="0" DataNo="0"     RetainSize="0" RetainRawSize="0" RetainNo="0"     UploadSize="0" UploadRawSize="0" UploadNo="0"     TotalStorageSize="0" TotalStorageRawSize="0" TotalStorageNo="0" /&gt;   &lt;Storage Date="2005-07-26"     DataSize="0" DataRowSize="0" DataNo="0"     RetainSize="0" RetainRawSize="0" RetainNo="0"     UploadSize="0" UploadRawSize="0" UploadNo="0"     TotalStorageSize="0" TotalStorageRawSize="0" TotalStorageNo="0" /&gt; &lt;/Statistics&gt;</pre> <p>If there is an error, returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>		
<p>where under</p> <p>Tag &lt;Statistics &gt;</p> <ul style="list-style-type: none"> <li>YearMonth = month of a year</li> <li>AvgDataSize = average size in data area</li> <li>AvgDataRowSize = average size in data area (in bytes) (added since v5.2.5.0)</li> <li>AvgDataNo = average number of files in data area</li> <li>AvgRetainSize = average size in retention area</li> <li>AvgRetainRawSize = average size in retention area (in bytes) (added since v5.2.5.0)</li> <li>AvgRetainNo = average number of files in retention area</li> <li>AvgUploadSize = average uploaded size</li> <li>AvgUploadRawSize = average uploaded size (in bytes) (added since v5.2.5.0)</li> <li>AvgUploadNo = average number of uploaded files</li> <li>AvgTotalStorageSize = average size in storage</li> <li>AvgTotalStorageRawSize = average size in storage (in bytes) (added since v5.2.5.0)</li> <li>AvgTotalStorageNo = average number of files in storage</li> </ul> <p>Tag &lt;Storage&gt;</p> <ul style="list-style-type: none"> <li>Date = the date of the statistics calculated</li> <li>DataSize = total data size uploaded</li> <li>DataRawSize = total data size uploaded (in bytes) (added since v5.2.5.0)</li> <li>DataNo = total data number</li> <li>RetainSize = total size in retention area</li> <li>RetainRawSize = total size in retention area (in bytes) (added since v5.2.5.0)</li> <li>RetainNo = total number in retention area</li> <li>UploadSize = total uploaded size</li> <li>UploadRawSize = total uploaded size (in bytes) (added since v5.2.5.0)</li> <li>UploadNo = total uploaded number</li> <li>TotalStorageSize = total size of storage</li> <li>TotalStorageRawSize = total size of storage (in bytes) (added since v5.2.5.0)</li> <li>TotalStorageNo = total storage number</li> </ul>		
<b>Example:</b>		
<a href="http://BACKUP_SERVER/obs/api/GetUserStorageStat.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;YearMonth=2005-07">http://BACKUP_SERVER/obs/api/GetUserStorageStat.do?SysUser=system&amp;SysPwd=system&amp;LoginName=john&amp;YearMonth=2005-07</a>		

## 18.20 Listing User Storage

The following table describes all information required to invoke the [List Users Storage] API to get a list of storage information for all users available within OBS.

<b>URL:</b>		
<a href="http://BACKUP_SERVER/obs/api/ListUsersStorage.do">http://BACKUP_SERVER/obs/api/ListUsersStorage.do</a>		
<b>Parameters:</b>		
Key	Value	Descriptions
SysUser	String	OBS's System Username
SysPwd	String	OBS's System password
<b>Return Value:</b>		
<p>If successful, returns</p> <pre>&lt;users&gt; &lt;user LoginName="john" Alias="" UserType="" Quota=""   EnableMSSQL="Y" EnableMSExchange="Y"   EnableOracle="Y" EnableLotusNotes="Y"   EnableLotusDomino="Y" EnableMySQL="Y"   EnableInFileDelta="Y" EnableShadowCopy="Y"</pre>		





	<pre> EnableExchangeMailbox=Y ExchangeMailboxQuota=10 DataSize="1234" DataFile="1234" RetainSize="1234" RetainFile="1234" Status="SUSPENDED" ClientType="OBM" Language="en" &gt; &lt;Contact name="John (Email1)" email="john@yourcompany.com" /&gt; &lt;Contact name="John (Email2)" email="johnmy@yourcompany.com" /&gt; &lt;/user&gt; ... ... &lt;/users&gt; </pre> <p>If there is an error, returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>
	<p>Where</p> <ul style="list-style-type: none"> <li>LoginName = login name</li> <li>Alias = user's alias</li> <li>UserType = user type [ PAID   TRIAL ]</li> <li>Quota = quota in bytes</li> <li>Language = user's language</li> <li>EnableMSSQL = MS SQL enabled [ Y   N ]</li> <li>EnableMSExchange = MS Exchange enabled [ Y   N ]</li> <li>EnableOracle = Oracle enabled [ Y   N ]</li> <li>EnableLotusNotes = Lotus Notes enabled [ Y   N ]</li> <li>EnableLotusDomino = Lotus Domino enabled [ Y   N ]</li> <li>EnableMySQL = MySQL enabled [ Y   N ]</li> <li>EnableInFileDelta = In-file Delta enabled [ Y   N ]</li> <li>EnableShadowCopy = Shadow Copy enabled [ Y   N ]</li> <li>EnableExchangeMailbox = MS Exchange Mailbox enabled [ Y   N ]</li> <li>ExchangeMailboxQuota = MS Exchange Mailbox quota</li> <li>DataFile = total number of files in the data area</li> <li>DataSize = total amount of bytes in the data area</li> <li>RetainFile = total number of files in the retention area</li> <li>RetainSize = total amount of bytes in the retention area</li> <li>Status = status of user account [ENABLE   SUSPENDED] (added since v.5.2.2.5)</li> <li>ClientType = client type [ OBM   ACB ]</li> </ul>
<b>Example:</b>	
	<a href="http://BACKUP_SERVER/obs/api/ListUsersStorage.do?SysUser=system&amp;SysPwd=system">http://BACKUP_SERVER/obs/api/ListUsersStorage.do?SysUser=system&amp;SysPwd=system</a>

## 18.21 Get License

The following table describes all information required to invoke the [List License] API to get version of OBS, used and unused licenses available within OBS. (added since v5.2.5.0)

<b>URL:</b>			
	<a href="http://BACKUP_SERVER/obs/api/GetLicense.do">http://BACKUP_SERVER/obs/api/GetLicense.do</a>		
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
<b>Return Value:</b>			
	<p>If successful, returns</p> <pre> &lt;License ProductName="Offsite Backup Suite, OEM Edition" ObsVersion="5.2.4.3" ExpiryDate="Unlimited" SupportExpiryDate="2008/10/31" MaxQuota="Unlimited"&gt;&lt;OBM Quota="500" Available="498" Used="2"/&gt;&lt;ACB Quota="500" Available="500" Used="0" AcbUsedObmUsers="0"/&gt;&lt;MSExchange Quota="500" Available="499" Used="1"/&gt;&lt;MSExchangeMail Quota="500" Available="500" Used="0"/&gt;&lt;MSSQL Quota="300" Available="299" Used="1"/&gt;&lt;Oracle Quota="500" Available="499" Used="1"/&gt;&lt;MySQL Quota="Unlimited" Available="Unlimited"/&gt;&lt;LotusDomino Quota="500" Available="499" Used="1"/&gt;&lt;LotusNotes Quota="300" Available="299" Used="1"/&gt;&lt;InFileDelta Quota="500" Available="499" Used="1"/&gt;&lt;VolumeShadowCopy Quota="500" Available="499" Used="1"/&gt;&lt;/License&gt; </pre> <p>If there is an error, returns &lt;err&gt;%ERROR_MESSAGE%&lt;/err&gt;</p>		
	<p>Where</p> <ul style="list-style-type: none"> <li>ProductName = product name of OBS</li> <li>ObsVersion = version of OBS</li> <li>ExpiryDate = expiry date of OBS</li> <li>SupportExpiryDate = support expiry date of OBS</li> <li>MaxQuota = maximum quota of OBS</li> <li>Quota = quota</li> <li>Available = unused quota</li> <li>Used = used quota</li> <li>AcbUsedObmUsers = number of ACB users which used the quota of OBM users</li> <li>OBM = OBM users</li> <li>ACB = ACB users</li> <li>MSExchange = MS Exchange Brick level module</li> <li>MSExchangeMail = MS Exchange Mail level module</li> </ul>		



MSSQL = MSSQL module OracleUsers = Oracle module MySQL = MySQL module LotusDomino = Lotus Domino module LotusNotes = Lotus Notes module InFileDelta = In-file delta module VolumeShadowCopy = Volume shadow copy module
<b>Example:</b>
<a href="http://BACKUP_SERVER/obs/api/GetLicense.do?SysUser=system&amp;SysPwd=system">http://BACKUP_SERVER/obs/api/GetLicense.do?SysUser=system&amp;SysPwd=system</a>

## 18.22 Get Replication Mode

The following table describes all information required to invoke the [List Replication Mode] API to get the mode of replication available within OBS. (added since v5.2.5.0)

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/GetReplicationMode.do">http://BACKUP_SERVER/obs/api/GetReplicationMode.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
<b>Return Value:</b>			
If successful, returns <Replication Mode="DISABLED"/> Or <Replication Mode="UNSYNC" File="D:\Test-Data\obs52\user\kwong\files\1194504073875\Current\0x5f\0x3d\0xd2\0xc3\1103301195"/> Or <Replication Mode="SYNC" File="D:\Test-Data\obs52\user\kwong\files\1194504073875\Current\0x5f\0x3d\0xd2\0xc3\1103301195"/> Or <Replication Mode="LOGGING" File="D:\Test-Data\obs52\system\logfiles\log0001.alf"/>  If there is an error, returns <err>%ERROR_MESSAGE%</err>			
Where Mode = mode of replication as follow: 1. DISABLED = disabled replication 2. LOGGING = logging mode 3. UNSYNC = un-synchronization mode 4. SYNC = synchronization mode File = current replicating file			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/GetReplicationMode.do?SysUser=system&amp;SysPwd=system">http://BACKUP_SERVER/obs/api/GetReplicationMode.do?SysUser=system&amp;SysPwd=system</a>			

## 18.23 Send Forgot Password Email

The following table describes all information required to invoke the [Send Forgot Password Email] API to invoke the sending forgot password email operation in OBS. (added since v5.2.5.0)

<b>URL:</b>			
<a href="http://BACKUP_SERVER/obs/api/SendForgotPasswordEmail.do">http://BACKUP_SERVER/obs/api/SendForgotPasswordEmail.do</a>			
<b>Parameters:</b>			
Key	Value	Descriptions	
SysUser	String	OBS's System Username	
SysPwd	String	OBS's System password	
LoginName	String	Login name of the user	
<b>Return Value:</b>			
If successful, returns <Reply><Success/></Reply> If there is an error, returns <err>%ERROR_MESSAGE%</err>			
<b>Example:</b>			
<a href="http://BACKUP_SERVER/obs/api/SendForgotPasswordEmail.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test">http://BACKUP_SERVER/obs/api/SendForgotPasswordEmail.do?SysUser=system&amp;SysPwd=system&amp;LoginName=test</a>			

## 18.24 Additional APIs

If you need additional APIs to automate your business workflow, please feel free to let us know.

## 19 Frequently Asked Questions

The chapter contains a list of frequently asked questions

### 19.1 How to backup OBS?

The best method to backup an OBS is using the replication module. It performs a near real time replication of OBS and it is not necessary to shutdown the backup services when backing up OBS.

If you want to backup the complete OBS to tape, simply backup the following directories:

- i. The program directory (default directory is shown below)
  - a. Windows – “C:\Program Files\Ahsay Offsite Backup Server”
  - b. Linux – “/usr/local/obs”
  - c. Mac OS X – “/Applications/OBS” and “/System/Library/StartupItems” or “/Library/StartupItems” (for Tiger or later)

This directory contains relatively static data. You can backup this directory easily using any CD/DVD burning software available in the market.

- ii. The [System Home] directory in OBS (this can be found in the [Manage System] -> [System Home] entry after you have logged onto the administrative interface of OBS)
- iii. All [User Homes] directories in OBS (this can be found in the [Manage System] -> [User Homes] entries after you have logged onto the administrative interface of OBS)

Both [System Home] and [User Homes] directories contains dynamic data. To ensure that you have a consistent image of all files within this directory, please shutdown the backup service (or at least make sure backup activities are not very active) when backing them up.

### 19.2 How can I rebuild an OBS server from scratch?

To rebuild an OBS from backup, please do this:

- i. Restore the program directory (the default location is shown below)
  - d. Windows – “C:\Program Files\Ahsay Offsite Backup Server”
  - e. Linux – “/usr/local/obs”
  - f. Mac OS X – “/Applications/OBS” and “/System/Library/StartupItems” or “/Library/StartupItems” (for Tiger or later)
- ii. Restore the [System Home] directory (back to its original directory if possible)
- iii. Restore all [User Homes] directories (back to their original directories if possible)
- iv. If you have restored the [System Home] directory or any of the [User Homes] directories to another directory (instead of the original directory), please open
  - g. Windows – “C:\Program Files\Ahsay Offsite Backup Server\conf\obs.xml”
  - h. Linux – “/usr/local/obs/config/obs.xml”
  - i. Mac OS X – “/Applications/OBS/config/obs.xml”

and modify the <system-home> and/or <user-home> parameters within the [obs.xml] file to

reflect the correct paths for these directories.

- v. (for Windows) Run [C:\Program Files\Ahsay Offsite Backup Server\bin\Install-Service.bat] to install OBS as Windows services.
- vi. Startup the backup services

### **19.3 How can I relocate users between different user homes?**

Assuming you want to relocate a user from an old drive to a new drive (e.g. from D:\User to E:\User)

- i. Logon to the backup server [Administration Console]
- ii. Under the [Manage System] page, enter another [User Home] (in this case, E:\User) in the [New] textbox provided and press the [Update] button
- iii. Shutdown the backup service from [Control Panel] -> [Administrative Tools] -> [Services] -> [Ahsay Offsite Backup Server]
- iv. Move the user directory to the new user home (e.g. D:\user\xxxx -> E:\User\xxxx)
- v. Startup the backup service from [Control Panel] -> [Administrative Tools] -> [Services] -> [Ahsay Offsite Backup Server]

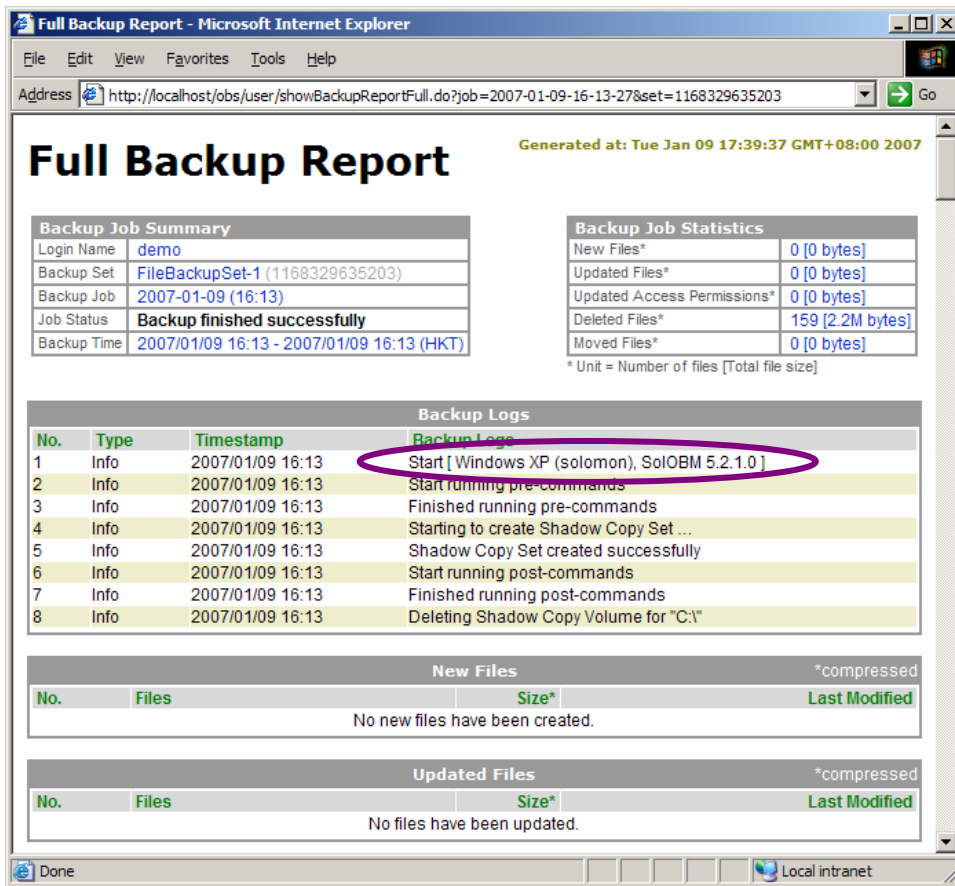
### **19.4 How do I add new storage to an existing server?**

Assuming you want to want a user to a new drive (e.g. from C:\Program Files\Ahsay Offsite Backup Server\user to E:\User)

- i. Logon to the backup server [Administration Console]
- ii. Under the [Manage System] page, enter another [User Home] (in this case, E:\User) in the [New] textbox provided and press the [Update] button
- iii. Shutdown the backup service from [Control Panel] -> [Administrative Tools] -> [Services] -> [OBS]
- iv. Move the user directory to the new user home (e.g. C:\Program Files\Ahsay Offsite Backup Server\user\xxxx -> E:\User\xxxx)
- v. 5. Startup the backup service from [Control Panel] -> [Administrative Tools] -> [Services] -> [OBS]

### **19.5 How can I tell which OBM version is being used to run a backup job?**

Starting from OBM 5.0.1.5, you can tell which OBM version is being used to run a backup job by inspecting the backup report of a backup job from the [OBS Web User Console] -> [Report] -> [Detailed Report] page.



## 19.6 How to run OBS under non-root user under Linux/Unix?

OBS contains a set of APIs (Application Programming Interface),

- i. Shutdown OBS by running \$OBS\_HOME/bin/startup.sh
- ii. Setup port forwarding using iptables

(For Linux Kernel 2.4 or above)

```
[root@backup] # iptables -t nat -A PREROUTING -p tcp --dport 80 -j REDIRECT --to-port 9080
[root@backup] # iptables -t nat -A PREROUTING -p tcp --dport 443 -j REDIRECT --to-port 9443
```

or

```
[root@backup] # iptables -t nat -A PREROUTING -p tcp -d x.x.x.x --dport 80 -j REDIRECT --to-port 9080
[root@backup] # iptables -t nat -A PREROUTING -p tcp -d x.x.x.x --dport 443 -j REDIRECT --to-port 9443
```

(For Linux Kernel 2.2)

```
[root@backup] # ipchains -I input --proto TCP --dport 80 -j REDIRECT 9080
[root@backup] # ipchains -I input --proto TCP --dport 443 -j REDIRECT 9443
```

or

```
[root@backup] # ipchains -I input --proto TCP -d x.x.x.x --dport 80 -j REDIRECT 9080
[root@backup] # ipchains -I input --proto TCP -d x.x.x.x --dport 443 -j REDIRECT 9443
```

You need to use the -d option if you have modified %INSTALL\_HOME%\conf\server.xml to listen to only a single IP address (e.g. x.x.x.x)

- iii. Save this setting by running (so you don't need to type this in again when you reboot your machine)

(For Linux Kernel 2.4 or above)

```
[root@backup] # service iptables save
```

or



(For Linux Kernel 2.2)

```
[root@backup] # service ipchains save
```

iv. Setup forward for local TCP requests from local machine

a. Create two files, named http and https, under the /etc/xinetd.d directory

```

Content of /etc/xinetd.d/http
# Redirects any requests on port 80 to port 9080
# (where OBS is listening for HTTP traffic)

service http
{
    socket_type    = stream
    protocol      = tcp
    user          = root
    wait         = no
    port         = 80
    redirect     = localhost 9080
    disable      = no
}

```

```

Content of /etc/xinetd.d/https
# Redirects any requests on port 443 to port 9443
# (where OBS is listening for HTTPS traffic)

service https
{
    socket_type    = stream
    protocol      = tcp
    user          = root
    wait         = no
    port         = 443
    redirect     = localhost 9443
    disable      = no
}

```

b. Restart the xinetd service by

```
[root@backup] # service xinetd restart
```

v. Configure OBS to listen on port 9080 and 9443 for HTTP and HTTPS traffic. Please refer to the section on [Listening to non-standard TCP/IP port](#) for more information.

vi. Create a non-root user and group (both named obs) to run OBS service

```
[root@backup] # groupadd obsgrp
[root@backup] # useradd obs -g obsgrp
```

Note: you need to ensure that "obs" has privilege to execute the "ifconfig" command.

vii. Shutdown the OBS backup service

```
(Unix / Linux) [root@backup]# /etc/init.d/obs stop
(FreeBSD)      [root@backup]# /usr/local/etc/init.d/obs stop
```

viii. Open the OBS startup script file [ /etc/rc.d/init.d ] and change the OBS\_USER environment variable line to a Linux/Unix user (e.g. obs)

```
export OBS_USER=obs
```

ix. Change the owner and group of the \$OBS\_HOME directory and all subdirectories to "obs" and "obsgrp" respectively

```
[root@backup] # chown -R obs:obsgrp $OBS_HOME
```

If the [USER\_HOMES] and [SYSTEM\_HOME] directories defined under the [Manage System] page on the web interface are not located inside the \$OBS\_HOME directory, you need to change the



ownership of these directories to "obs:obsgrp" as well. For example:

```
[root@backup] # chown -R obs:obsgrp [USER_HOME 1]
[root@backup] # chown -R obs:obsgrp [USER_HOME 2]
[root@backup] # chown -R obs:obsgrp [SYSTEM_HOME]
```

- x. Startup the OBS backup service

```
(Unix / Linux) [root@backup]# /etc/init.d/obs start
(FreeBSD) [root@backup]# /usr/local/etc/init.d/obs start
```

- xi. You can now use "netstat -a" to verify that OBS is listening on port 9080 and port 9443. Also, you can use "ps aux" to verify that OBS is started under the user "obs".

```
Sample output of verification commands above
[root@backup] # netstat -a
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address          Foreign Address        State
tcp      0      0 *:http                 *:                      LISTEN
tcp      0      0 *:https                 *:                      LISTEN
tcp      0      0 *:9080                  *:                      LISTEN
tcp      0      0 *:9443                  *:                      LISTEN
...
[root@backup] # ps aux
...
obs      894  0.3 11.1 778064 57136 ?        S    12:30   1:06
/usr/local/obs/java/bi
...
```

### 19.7 How do I start up RPS as OBS?

Assumptions:

- i. You want to kick off RPS as OBS
ii. The [Home Directory] of the receiver of OBS configured on RPS is [D:\RepHome]
iii. The [User Homes] of OBS are [E:\Users] and [F:\Users] on OBS
iv. The [System Home] of OBS is [E:\System] on OBS

Please do this on RPS:

- i. Copy "D:\RepHome\files\C%3A\Program Files\Ahsay Offsite Backup Server" to "C:\Program Files\Ahsay Offsite Backup Server"
ii. Copy "D:\RepHome\files\E%3A\Users" to "E:\Users", "D:\RepHome\files\F%3A\Users" to "F:\Users" and "D:\RepHome\files\E%3A\System" to "E:\System"

If the partitions for E:\ or F:\ are not available, just copy these directories to any locations you want but please make sure to open "C:\Program Files\Ahsay Offsite Backup Server\conf\obs.xml" and modify the entries for [user-home] and [system-home] with the correct paths)

- iii. Run "C:\Program Files\Ahsay Offsite Backup Server\bin\install-service.bat" to install OBS as windows services
iv. Shutdown the [Control Panel] -> [Administrative Tools] -> [Services] -> [Ahsay Replication Server] service
v. Startup the [Control Panel] -> [Administrative Tools] -> [Services] -> [Ahsay Offsite Backup Server] service

Please take a look at "C:\Program Files\Ahsay Offsite Backup Server\logs\obs\*.log" and "C:\Program Files\Ahsay

Offsite Backup Server\logs\cat\*.log" if you run into any problems.

## 19.8 How do I move OBS to a new IP address?

If you want to move your OBS installation to a new IP address, please do this:

- i. Update your DNS record of the hostname of your OBS to point to a new IP address (Please note that it could take up to 24 hours for this changes to propagate to all DNS servers around the world)
- ii. Move your existing OBS installation to another IP address and restart the backup services of OBS once you are on a new IP address
- iii. All existing clients installation should pick up this change and send their backup data automatically to OBS located on the new IP address
- iv. If any existing client installation doesn't run its scheduled backup, please ask the user to restart the [Online Backup Scheduler] service under [Services]

## 19.9 How do I move OBS to a new server?

To move an existing OBS installation to a new server, please do this:

- i. Copy the program directory (the default location is shown below) from your old server to your new server  
Windows – "C:\Program Files\Ahsay Offsite Backup Server"  
c. Linux – "/usr/local/obs"  
d. Mac OS X – "/Applications/OBS" and "/System/Library/StartupItems" or "/Library/StartupItems" (for Tiger or later)
- ii. Copy the [System Home] directory to the new server (back to its original directory if possible). The default location is "C:\Program Files\Ahsay Offsite Backup Server\system". If you didn't change the setting of this directory, it should have been copied over to the new server already in step (i).
- iii. Copy the [User Homes] directories to the new server (back to its original directory if possible). The default location is "C:\Program Files\Ahsay Offsite Backup Server\user". If you didn't change the setting of these directories, they should have been copied over to the new server already in step (i).
- iv. If you have restored the [System Home] directory or any of the [User Homes] directories to another directory (instead of the original directory), please open
  - a. Windows – "C:\Program Files\Ahsay Offsite Backup Server\conf\obs.xml"
  - b. Linux – "/usr/local/obs/config/obs.xml"
  - c. Mac OS X – "/Applications/OBS/config/obs.xml"and modify the <system-home> and/or <user-home> parameters within the [obs.xml] file to reflect the correct paths for these directories.
- v. (for Windows) Run [C:\Program Files\Ahsay Offsite Backup Server\bin\Install-Service.bat] to install OBS as Windows services.
- vi. Startup the backup services

Note that after moving OBS to the new server, you will need to activate your existing license key on the new OBS machine. When doing so, you would get the following error message at the top of the [Software License] page:

**Internal Error no. 1011**





This is because one license key can only be used to activate one machine at the same time. However, there is a 7-day grace period. Your new server should remain functional for 7 days after the activation. To resolve this error, you need to:

- i. Switch off the old OBS server
- ii. Submit a ticket to Technical Support, quoting "Internal Error no. 1011" and provide your licensee name and license key
- iii. We will then reset your license key on our side
- iv. You can then activate your new OBS server again and the error will be gone

## **19.10 How do I set the user home directory to a network drive?**

If you want to set the [User Home] directory to a network drive, please use UNC path instead of drive letter as your [Manage System] -> [User Homes] entry, i.e. use \\SERVER\SHARE instead of H:\.

If user authentication is required to access the network drive, please use [Control Panel] -> [Administrative Tools] -> [Services] -> [Ahsay Offsite Backup Server] -> [Log on] -> [This Account] to setup an username/password gain to access the network path. Also, please make sure the Windows account you have entered into the [This Account] section has administrative privileges on the backup server itself.

## **19.11 Can I perform an integrity check on all backup files stored under OBS?**

If you are interested in forcing an integrity check on all backup files stored under OBS, please do this:

- i. Browse to [OBS Web Administrator's Console] -> [Manage System] -> [Routine Job] -> [Rebuild User Storage]
- ii. Check the [Enable Backup File Validation] option
- iii. Uncheck the [Skip Validated Files] option
- iv. Select the [Move to retention dir] option
- v. Schedule the [Rebuild User Storage] job to a time in the near future
- vi. Check the [Manage Log] -> [System Log] page to see if OBS files any corrupted files

Please refer to the [Rebuild User Storage section](#) for more information.



## 20 Troubleshooting

The chapter contains solutions to all common error messages that can be found in OBS.

### 20.1 I am getting the message “Error getting report from all IP addresses” in my email. What can I do to correct this?

Please check if any of your disk partitions is full. Pay special attention to the OBS log directory:

- (Windows) C:\Program Files\Ahsay Offsite Backup Server\logs
- (Linux) /usr/local/obs/logs
- (Mac OS X) /Applications/OBS/logs

It is safe to delete any log files here from the system.

Also, are you using non-default TCP port for the backup server? If so, please append the port number of your HTTP (NOT HTTPS) connector to the [Manage System] -> [Host Name] entry.

E.g. backup.yourcompany.com:8080

If you are not using custom port, open a browser on the backup server and type in the value of [Manage System] -> [Host Name] as an URL. Check if you get the backup server homepage. If you don't get the webpage, try until you can reach it and put this value in the [Manage System] -> [Host Name] field. (Please omit the page name, i.e. /index.jsp, from this entry)

If you are running OBS on Linux Kernel 2.6, you could have run into the compatibility problem of running Java program on Linux Kernel 2.6 (see this [http://www.jroller.com/page/dissonance/20050630#fedora\\_core\\_4\\_and\\_jdk](http://www.jroller.com/page/dissonance/20050630#fedora_core_4_and_jdk)). Please try this to fix this problem:

- Open [\$OBS\_HOME/bin/startup.sh]
- Change the line  

```
export CATALINA_OPTS="-Xms64m -Xmx512m -client -Dsun.net.inetaddr.ttl=10800 -  
Dnetworkaddress.cache.ttl=10800 -Dsun.net.inetaddr.negative.ttl=0 -  
Dnetworkaddress.cache.negative.ttl=0"
```

to  

```
export CATALINA_OPTS="-Xms64m -Xmx512m -client -Dsun.net.inetaddr.ttl=10800 -  
Dnetworkaddress.cache.ttl=10800 -Dsun.net.inetaddr.negative.ttl=0 -  
Dnetworkaddress.cache.negative.ttl=0 -Djava.net.preferIPv4Stack=true"
```
- Restart the backup service by running [service obs stop] and then [service obs start]

### 20.2 Some of my backup accounts have disappeared. What can I do to recover them?

- Go to the log directory (C:\Program Files\Ahsay Offsite Backup Server\logs)
- Take a look at the latest obs\*.log file
- Scroll to the bottom and check if you can find a "Profile Corrupted" error message
- If there is one, open File Explorer and go to the [User Home] / [Login Name] / db directory for this user
- Check if Profile.xml is missing (or corrupted, just open to take a look)
- If it is missing, just use the backup copy (e.g. Profile.xml.1) to recreate a new one



- vii. It is not missing, check if this file is corrupted (Make sure the XML document is complete). If it is corrupted, just use the backup copy (e.g. Profile.xml to recreate a new one)
- viii. This account should now appear on the backup server.
- ix. If you are still no seeing all your users, just go back to step 2 and check if there is another corrupted profile.

### **20.3 OBS running on Linux crashes unexpectedly and randomly when Samba is being used to access user home stored on another server?**

Please use CIFS that supports large file sizes over SMB.



## 21 Appendixes

### 21.1 Contact Us

If you need any additional information, please submit your question to us using our [Helpdesk Ticketing System](#).