

AdaCopy Offsite Backup Server

v6

**Administrator's
Guide**

Adanova Sistemas S.L.L.

29 November 2012

Offsite Backup Server

Administrator's Guide

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Revision History

Date	Description
8 April 2011	First revision for OBS v6.3 Release
30 May 2011	<p>New:</p> <p>4.17 Use Windows Event Log 15 Multiple Thread Support 16 Create a "Read Only" or Non Admin System User</p> <p>Updated:</p> <p>9.1 My Profile / Edit System User</p>
30 June 2011	<p>Updated:</p> <p>1.3 System Requirements 4.8 Windows Active Directory (AD) Authentication Setting 4.9 Redirector 5.3 Evaluation Expiry and Free Edition 16.5 AutoUpdate Limitations 24 External API References 25 Further Information</p>
30 July 2011	<p>New:</p> <p>3.19 OBS Service on UBS Server with ZFS 16.6 AutoUpdate Changes 16.6.1 Attributes Changes 16.6.2 Multiple OBM/ACB Versions Selection 16.6.3 Multiple Host Values 16.6.4 Backup User Account Selection</p> <p>Updated:</p> <p>3.18 OBS Reseller Panel and RDR 12.4 Delta Merge Queue 19.1 Installing a trusted SSL certificate 24.35 Get Backup Job Progress 24.37 List User Groups 24.38 Modify User Group 24.43 List Backup Job Mode 24.5 Adding User 24.8 Listing Users 25 Further Information</p>
30 September 2011	<p>New:</p> <p>4.18 Configuration Recovery 4.18.1 Setup 4.18.2 Backup Process 4.18.3 Configuration Archival File Limits 4.18.4 Configuration Archival Storage Retention</p>

	<p>4.18.5 Restoring Configuration Files 6.18 Configuration Archival 9.3.1 Customize Reseller Reports 9.6 Recovering a System User/Non-admin Password 9.7 Reseller Backup User Account Restrictions</p> <p>Updated: 3.18 OBS Reseller Panel and RDR 4.9 Redirector 8.4 Delta Merge 9 Manage System User (Reseller Panel) 9.3 Customize Interface 10.4 Managing User Profile 12.1 Introduction 12.2 Delta Merge Policy 12.3 Delta Merge Process 12.4 Delta Merge Queue 12.5 Limitations 12.6 Delta Merge Examples 16.1 How it works 16.2 Using AutoUpdate 16.4 Forcing an extra AutoUpdate 16.5 AutoUpdate Limitations 16.6 AutoUpdate Changes 16.6.4 Backup User Account Selection 24.8 Listing Users 24.13 Get Backup Set 24.16 Listing Backup Job Status 24.38 Modify User Group</p>
<p>15 November 2011</p>	<p>New: 3.21 Maximum Number of Backup Sets for a Backup User Account 9.9 Auto Update 16.7 Enable AutoUpdate on UBS Appendix E How can I rebuild an OBS server from scratch Appendix F How to start up RPS as OBS</p> <p>Updated: 3.3 OBS Java Heap Size Setting 3.9 OBS Server Scaling 3.18 OBS Reseller Panel and RDR 3.20 OBS and RDR and Wild Card SSL Certificates 4.9 Redirector 9.1 My Profile / Edit System User 9.6 Recovering a System User/Non-admin Password 11.3 Group Policy Limitations and Restrictions 16.6.4 Backup User Account Selection</p>

	24.26 Add Advertisement
17 January 2012	<p>New:</p> <ul style="list-style-type: none"> 9.10 Change Ownership 9.10.1 Migrating users from administrator to reseller 9.10.2 Matched host transfer 9.10.3 Mismatched host transfer 9.10.4 Reminder email 9.10.5 Suggestions and Best Practice 9.10.6 Common error messages <p>Updated:</p> <ul style="list-style-type: none"> 4 Server Configuration 8 Managing Other Options 12.3 Delta Merge Process 12.6 Delta Merge Examples 24.4 User Authorization 24.5 Adding User 24.6 Modifying User Profile 24.7 Deleting User 24.8 Listing Users 24.9 Getting User Information 24.10 Adding a Backup Set 24.11 Deleting a Backup Set 24.12 Listing Backup Sets 24.13 Get Backup Set 24.14 Updating a Backup Set 24.15 Listing Backup Jobs 24.16 Listing Backup Job Status 24.17 Getting Backup Job Report 24.18 Getting Backup Job Report Summary 24.19 Listing Backup Files 24.20 Getting User Storage Statistics 24.21 Listing User Storage 24.22 Get License 24.23 Get Replication Mode 24.24 Send Forgot Password Email 24.25 Delete Backup File 24.26 Add Advertisement 24.27 List Advertisements 24.28 Modify Advertisement 24.29 Delete Advertisement 24.30 Add AdGroup 24.31 List AdGroups 24.32 Modify AdGroup 24.33 Delete AdGroup 24.34 Run Backup 24.35 Get Backup Job Progress 24.36 Add User Group

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13 February 2012	Updated: 4 Server Configuration 4.1 User Languages Setting 4.11 Features Setting 9 Manage System User (Reseller Panel) 9.3.1 Customize Reseller Reports 10.1 Create Backup User 19.1 Installing a trusted SSL certificate

Date	Descriptions	Type of modification
23 Apr 2012	24.3 IP Restrictions	Modified
	4.18.3 Configuration Archival File Limits	Modified
26 Apr 2012	4.9 Redirector	Modified
	6.13 Retention Policy	Modified
04 May 2012	9.1 My Profile / Edit System User	Modified
07 May 2012	19.1 Installing a trusted SSL certificate	Modified
15 May 2012	19 Secure connection with OBS	Modified
	19.3 Install code signing cert with the restorer applet	New
25 Jun 2012	3.14 Restricting Access on Administration Panel	Modified
	3.16 OBS File System Tuning	Typo
10 Jul 2012	12.6 Delta Merge Examples	Modified
17 Jul 2012	12.3 Delta Merge Process	Modified
30 Jul 2012	13.2 Account Lockout Rules	Modified
17 Aug 2012	24.6 Modifying User Profile	Modified
29 Aug 2012	2.1 Setting started	Modified
	3.14 Restricting Access on Administration Panel	Modified
	4.6 Email System Setting	Modified
	5.1 Licensee Name and License Key	Modified
	9 Managing System Diagnosis	New
	10.2 SMTP Settings	Modified
	25.6 Modifying User Profile	Modified

	25.13 Get Backup Set	Typo, modified
	Appendix D Error Code 1011 and 1012	Typo, modified
30 Aug 2012	10 Manage System User (Reseller Panel)	Modified
	10.1 My Profile / Edit System User	Modified
	10.3 Customize Interface	Typo
	10.4 Add System User	Modified
	10.5 List / Remove System User	Typo
	10.6 Recovering a System User/Non-admin Password	Modified
	10.7 Reseller Backup User Account Restrictions	Modified
25 Sep 2012	25.8 Listing Users	Modified
	25.9 Getting User Information	Modified
	25.21 Listing Users Storage	Modified
	25.22 Get License	Modified
04 Oct 2012	Copyright Notice	Modified
22 Oct 2012	25.1 Overview	Modified
	25.5 - 25.44 (API)	Modified
02 Nov 2012	5 Software License	Modified

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1 Overview

1.1 Conventions

A list of notations that are used throughout this document.

Convention	Descriptions	Example
Bold	Important Information	WARNING: You must check the timestamp of obrA.jar before proceeding to step2.
<i>Italic</i>	Folder Path or File Path	<i>/usr/local/obs/conf</i>
[]	Graphical Interface Elements	[Manage Log]
%o%	Filepath in Windows format	%OBSR_HOME%
\$	Filepath in Linux/Unix/BSD format	\$OBSR_HOME
<i>italic</i>	Command	<i>mkdir /usr/local/obs</i>

Notation that are used specifically for API section:

Convention	Descriptions
<Text Inside angle brackets>	Placeholder for which you must supply a value.
[Text inside square brackets]	Optional items.
{Text insides braces}	Set of required items; choose one.
Vertical bar ()	Separator for mutually exclusive items; choose one.
Ellipsis (...)	Items that can be repeated.

1.2 Definitions, Acronyms and Abbreviation

Term/Abbreviation	Definition
OBS	™ Offsite Backup Server
RPS	™ Replication Server
RDR	™ Redirector Server
OBM	™ Online Backup Manager
ACB	™ 1-Click Backup

OBSR_HOME	<p>The install location of OBS & RPS.</p> <p><u>Windows</u> <i>C:\Program Files\OBS and RPS</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>/usr/local/obs/</i></p>
OBSR_HOME_BAK	<p>The backup location of OBS & RPS. It is used temporary during the install/upgrade process.</p> <p><u>Windows</u> <i>C:\Program Files\OBS and RPS.bak\</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>/usr/local/obs.bak/</i></p>
CONF_HOME	<p>The backup location of OBS & RPS. It is used temporary during the install/upgrade process.</p> <p><u>Windows</u> <i>%OBSR_HOME%\conf</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>\$OBSR_HOME/conf</i></p>
USER_HOMES	<p>The directories where OBS and RPS store the OBM & ACB users accounts.</p> <p>The default location is: <i>%OBSR_HOME%\users</i></p>
POLICY_HOME	<p>The directory where OBS and RPS store its system users and group policy information.</p> <p><u>Windows</u> <i>%OBSR_HOME%\system\policy</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>\$OBSR_HOME\system\policy</i></p>
SYSTEM_HOME	<p>The directory where OBS and RPS store its system information.</p> <p><u>Windows</u> <i>%OBSR_HOME%\system\</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>\$OBSR_HOME\system\</i></p>

WEBAPPS_HOME	<p>Location of the webapps directory inside the installation directory of OBS & RPS.</p> <p><u>Windows</u> <i>%OBSR_HOME%\webapps.</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>\$OBSR_HOME\webapps</i></p>
WEBAPP_HOME_BAK	<p>A backup of the webapps directory inside OBS and RPS.</p> <p><u>Windows</u> <i>%OBSR_HOME%\webapps.bak</i></p> <p><u>Linux/FreeBSD/Solaris</u> <i>\$OBSR_HOME\webapps.bak</i></p>
RECEIVER_HOME	<p>The location where the replicated data is stored for a particular replication receiver.</p>
JAVA_HOME	<p>The location where JAVA is installed</p>

2 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.

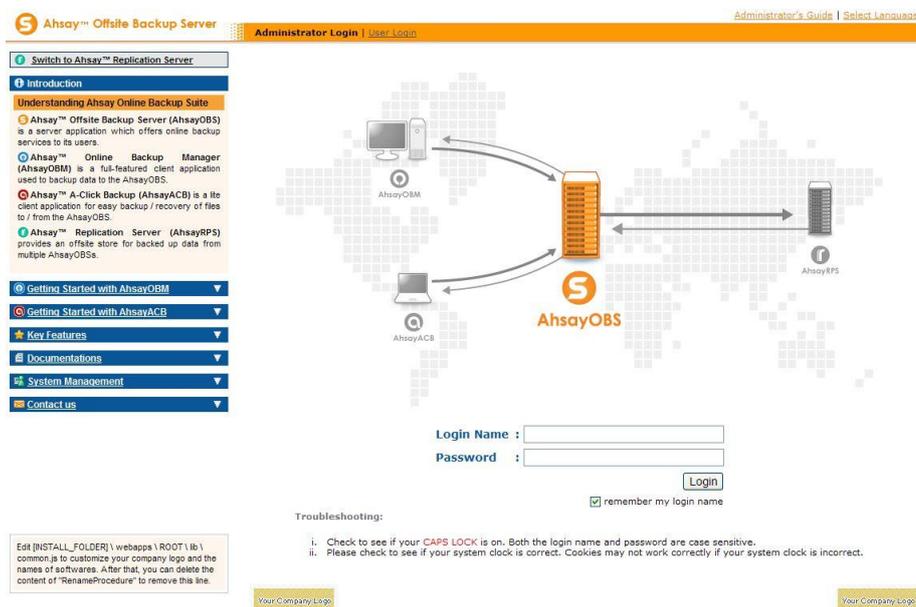
2.1 Getting started

To setup your OBS, please do the followings:

Setup Your Backup Server

1. Point your browser to `http://<your-obs-server>`.
2. Login as OBS administrator.

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



Ahsay™ Offsite Backup Server Administrator Login | User Login

Switch to Ahsay™ Replication Server

Introduction

Understanding Ahsay Online Backup Suite

- Ahsay™ Offsite Backup Server (AhsayOBS) is a server application which offers online backup services to its users.
- Ahsay™ Online Backup Manager (AhsayOBM) is a full-featured client application used to backup data to the AhsayOBS.
- Ahsay™ A-Click Backup (AhsayACB) is a file client application for easy backup / recovery of files to / from the AhsayOBS.
- Ahsay™ Replication Server (AhsayRPS) provides an offsite store for backed up data from multiple AhsayOBSs.

Getting Started with AhsayOBM

Getting Started with AhsayACB

Key Features

Documentations

System Management

Contact Us

Diagram illustrating the AhsayOBS architecture:

- AhsayOBM (Client)
- AhsayACB (Client)
- AhsayOBS (Server)
- AhsayRPS (Replication Server)

Login Name :

Password :

remember my login name

Troubleshooting:

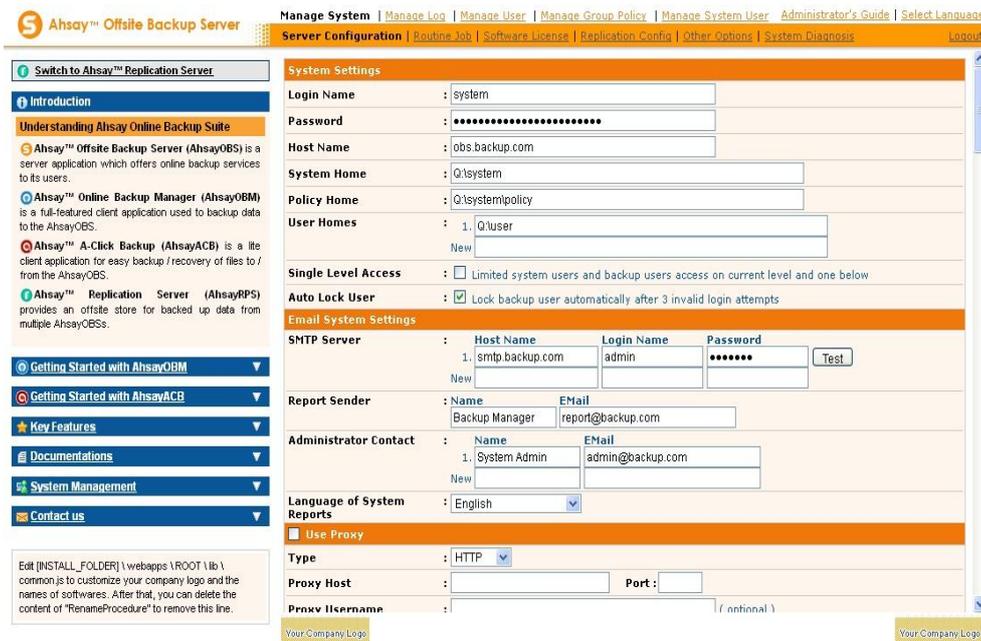
- Check to see if your CAPS LOCK is on. Both the login name and password are case sensitive.
- Please check to see if your system clock is correct. Cookies may not work correctly if your system clock is incorrect.

ERR_INSTALL_FOLDER | webapps | ROOT | lib | common.js to customize your company logo and the names of softwares. After that, you can delete the content of "RenameProcedure" to remove this line.

Your Company Logo

Your Company Logo

3. Set your hostname.



The screenshot shows the 'System Settings' and 'Email System Settings' sections of the Ahsay Offsite Backup Server configuration interface. The 'System Settings' section includes fields for Login Name, Password, Host Name, System Home, Policy Home, and User Homes. The 'Email System Settings' section includes SMTP Server configuration with fields for Host Name, Login Name, and Password, as well as Report Sender and Administrator Contact information.

Enter a resolvable hostname for 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 hostname instead.

If you are using custom TCP port for HTTP/HTTPS connection (i.e. non 80 or 443), you need to append the custom port number to the [Host Name] field.

e.g. backup.yourcompany.com:8080

If you are not using custom TCP port, open a browser on the backup server and type in the value of [Host Name] as an URL and check if you get the backup server homepage. If you are not able to connect to the webpage, please try until you can reach it and put this value in the [Host Name] field.

4. 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.

5. Set your SMTP Server.

Enter a resolvable hostname (or an IP address) of your SMTP server into the [SMTP Server] text field. There is a test button at the end of each SMTP settings to test the connection. The testing result will be displayed next to the test button.

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] if your SMTP server enquires user authentication when sending emails.

Note:

SMTP server with Transport Layer Security (TLS) is not supported.

6. Press the [Update] button.
7. Enter your license key (You can skip this step if you are evaluating this software). There is a connection test button underneath the license field entry box to test the connection to our license server. The testing result will be displayed next to the test button.

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.

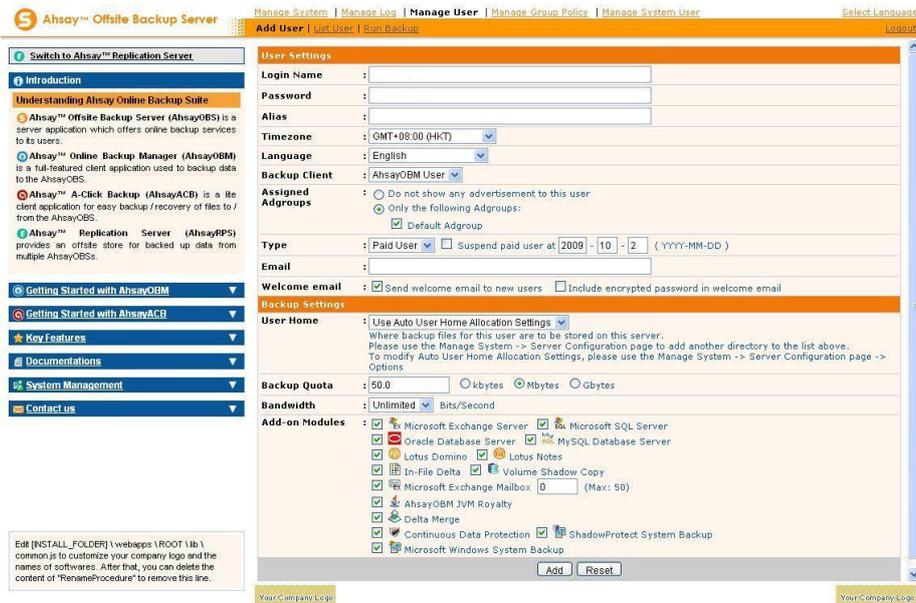
Note:

By default OBS service listens to port 80 for http and port 443 for https. Please make sure your servers firewall is configured to allow incoming access via these ports.

Add Backup User

You need to add 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:

1. Click the [Manage User] link available at the top menu and choose [Add user].
2. 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	Choose whether advertisements are displayed at the bottom of the OBM/ACB client
Type	<p>Trial User – Account of this type will be deleted from the system after an inactivity period of 30 days by default.</p> <p>Paid User – Account of this type will stay within the system until it is removed from the system by administrator.</p>
Email	Email address of the new account.
Welcome email	Check this option to send a welcome email to the user.
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.

3. Press the [Add] button to create the user.
4. The account is now ready.

Login and Run Backup

1. Point your browser to <http://<your-obs-server>/>.
2. Click the [User Login] link at the top.
3. Login with the login name and password you have created in previous section.
4. Follow the [Quick Start] information available in the User's Guide to install the OBM or ACB onto users computer to start backing up data.

3 Best Practices and Recommendations

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

3.1 OBS QPS Settings

To ensure user accounts are evenly distributed across your user home drives. It is recommended you configure your QPS settings, this can be under via your OBS web console under [Manage System] -> [Server Configuration] -> [Auto User Home Allocation]. The QPS settings for each user home drives should not be set to "unlimited" or "Not Used".

For OBS servers with multiple user homes, you should consider a QPS setting of 50% to 70% for each user home drive. This will prevent user accounts being concentrated onto one drive, which may cause the drive to run out of disk space very easily. This could result in data corruption on the affected user home(s).

Also, an even distribution of user accounts across your OBS user homes will improve backup performance, by spreading the disk I/O load.

3.2 Scheduling of Backup Jobs on OBS

To improve overall backup performance we recommend that scheduled backup jobs (by default starts at 09:00pm) should not be confined to a few start times.

The start times of scheduled backup jobs should be evenly distributed throughout the day to avoid potential performance bottlenecks on your OBS server.

3.3 Enable CRC Checking

It is strongly recommended the CRC checking on OBS is enabled to ensure the integrity of the backup files.

3.4 Maximum Number of Backup Sets for a Backup User Account

Although there are no restrictions on the maximum number of backup sets that can be created on a backup user account. For administration purposes it is recommended that each backup user account have no more than 10 backup sets.

4 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.

Manage System | Manage Log | Manage User | Manage Group Policy | Manage System User | Administrator's Guide | Select Language

Server Configuration | Routine Job | Software License | Replication Config | Other Options | Logout

System Settings

Login Name : system

Password : [masked]

Host Name : localhost

System Home : C:\Program Files\Ahsay\OBS and Ahsay\RPS\system

Policy Home : C:\Program Files\Ahsay\OBS and Ahsay\RPS\system\policy

User Homes : 1. C:\Program Files\Ahsay\OBS and Ahsay\RPS\user

Single Level Access : Limited system users and backup users access on current level and one below

Auto Lock User : Lock backup user automatically after 3 invalid login attempts

Email System Settings

SMT Server : Host Name Login Name Password

Report Sender : Name Email
Backup Manager report@back-up.com

Administrator Contact : Name Email
System Admin admin@back-up.com

Language of System Reports : English

Use Proxy

Type : HTTP

Proxy Host : Port :

Proxy Username : (optional)

Proxy Password : (optional)

Use Windows Active Directory (AD) Authentication

Domain Name : *

Domain Controller IP :

Remove AhsayOBS Account : After a user account has been deleted from AD for 30 days, AhsayOBS will delete this user account automatically.
 After a user account has been disabled from AD for 30 days, AhsayOBS will delete this user account automatically.

Use Redirector (RDR)

Protocol : http

Hostname : Port :

Login Name :

Password :

Administrator Hostname :

Use Windows Event Log

Event Log Name :

Options

Language Settings

<input checked="" type="checkbox"/> Bulgarian	<input checked="" type="checkbox"/> Catalan	<input checked="" type="checkbox"/> Czech
<input checked="" type="checkbox"/> Danish	<input checked="" type="checkbox"/> German	<input checked="" type="checkbox"/> Greek Modern
<input checked="" type="checkbox"/> English	<input checked="" type="checkbox"/> Spanish	<input checked="" type="checkbox"/> Basque
<input checked="" type="checkbox"/> Finnish	<input checked="" type="checkbox"/> French	<input checked="" type="checkbox"/> Hebrew
<input checked="" type="checkbox"/> Hungarian	<input checked="" type="checkbox"/> Icelandic	<input checked="" type="checkbox"/> Italian
<input checked="" type="checkbox"/> Japanese	<input checked="" type="checkbox"/> Korean	<input checked="" type="checkbox"/> Lithuanian
<input checked="" type="checkbox"/> Dutch	<input checked="" type="checkbox"/> Norwegian	<input checked="" type="checkbox"/> Polish
<input checked="" type="checkbox"/> Portuguese (Brazil)	<input checked="" type="checkbox"/> Portuguese (Portugal)	<input checked="" type="checkbox"/> Romanian
<input checked="" type="checkbox"/> Russian	<input checked="" type="checkbox"/> Slovenian	<input checked="" type="checkbox"/> Swedish
<input checked="" type="checkbox"/> Thai (Western digits)	<input checked="" type="checkbox"/> Turkish	<input checked="" type="checkbox"/> Ukrainian
<input checked="" type="checkbox"/> Chinese (Simplified)	<input checked="" type="checkbox"/> Chinese (Traditional)	

Features Settings

Show Help link Show Install Link

Show Restore Link

Permission Updated Files : Keep a copy of all files with old permissions in the retention area

Moved Files : Keep a copy of all files under old file paths in the retention area

Auto User Home Allocation

<input checked="" type="checkbox"/> User Home	Current QPS Ratio	Maximum QPS Ratio
1. C:\Program Files\Ahsay\OBS and Ahsay\RPS\user	0.4% (200M / 50.21G)	Unlimited %

Welcome email : Send welcome email to new users Include encrypted password in welcome email

Enable Free Trial Registration

Backup Quota : 50 Mbytes

Quota will be reset to 50 Mbytes after 30 Days

User will be suspended after 30 Days

Add-on Modules

<input checked="" type="checkbox"/> Microsoft Exchange Server	<input checked="" type="checkbox"/> Microsoft SQL Server
<input checked="" type="checkbox"/> MySQL Database Server	<input checked="" type="checkbox"/> Oracle Database Server
<input checked="" type="checkbox"/> Lotus Domino	<input checked="" type="checkbox"/> Lotus Notes
<input checked="" type="checkbox"/> In-File Delta	<input checked="" type="checkbox"/> Volume Shadow Copy
<input checked="" type="checkbox"/> Microsoft Exchange Mailbox	10
<input checked="" type="checkbox"/> Delta Merge	
<input checked="" type="checkbox"/> Continuous Data Protection	<input checked="" type="checkbox"/> ShadowProtect System Backup
<input checked="" type="checkbox"/> Microsoft Windows System Backup	
<input checked="" type="checkbox"/> Microsoft Windows Virtualization	10
<input checked="" type="checkbox"/> VMware VM Backup	10

Remove User : 60 Days after registration

Configuration Recovery

Date : (YYYY-MM-DD) Refresh Restore

Path : C:\Program Files\Ahsay\OBS and Ahsay\RPS\system\dir

Mode : Auto Manual

Update Reset

Key	Description
Login Name/Password	Username and password of the 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 %OBSR_HOME%\system. Normally, you do not need to modify the value of this setting unless you want to store this information elsewhere.
Policy Home	The directory where OBS stores its system user and group policy information. The default directory for [Policy Home] is %OBSR_HOME%\system\policy. Normally you do not need to modify the value of this setting unless you want to store this information elsewhere.
User Homes	The directories where OBS store the backup files and backup log for all its users. You should set [User Homes] to partition where there is lots of free space.
Single Level Access	It determines whether system user has been restricted access to own created system users and backup users.
Auto Lock User	The backup user will be locked automatically after 3 consecutive invalid login attempts via OBS web console, Redirector web console and backup client console.
SMTP Server	The SMTP server that OBS will use to deliver its email reports.
Report Sender	The name of 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.
Language of System Reports	The language which will be used in all system reports.

Use Proxy	Whether to use proxy to access the internet.
Type	The type of proxy to be used (HTTP / SOCKS).
Proxy Host/Port	Proxy server host and port number.
Proxy Username/Password	Proxy user name and password if user authentication is used.
Use Windows Active Directory (AD) Authentication	Whether to use Windows Active Directory Authentication.
Domain Name	The domain name to be used for AD authentication.
Domain Controller IP	The IP address of the domain controller.
Remove OBS account	Whether to delete OBS user account when AD user account is disabled/deleted.
Use Redirectory(RDR)	Whether to use redirector.
Protocol	The type of protocol to be used (HTTP/HTTPS)
Hostname/Port	Redirector host and port number.
Login Name/Password	System username and password for the redirector.
Administrator Hostname	The host name/IP address that backup users created by administrator will be used to contact this server via redirector (e.g. redirector.company.com)
Use Windows Event Log	When this option is enabled, this backup server writes the system log message to Windows Event Log. This feature is only valid in Windows platform.
Language Settings	It determines whether different languages are enabled.
Feature Settings	It determines whether the [HELP], restore link and install link should be available to users.
Permission updated files	It determines whether the existing files are copied to retention area before updating the permission settings.

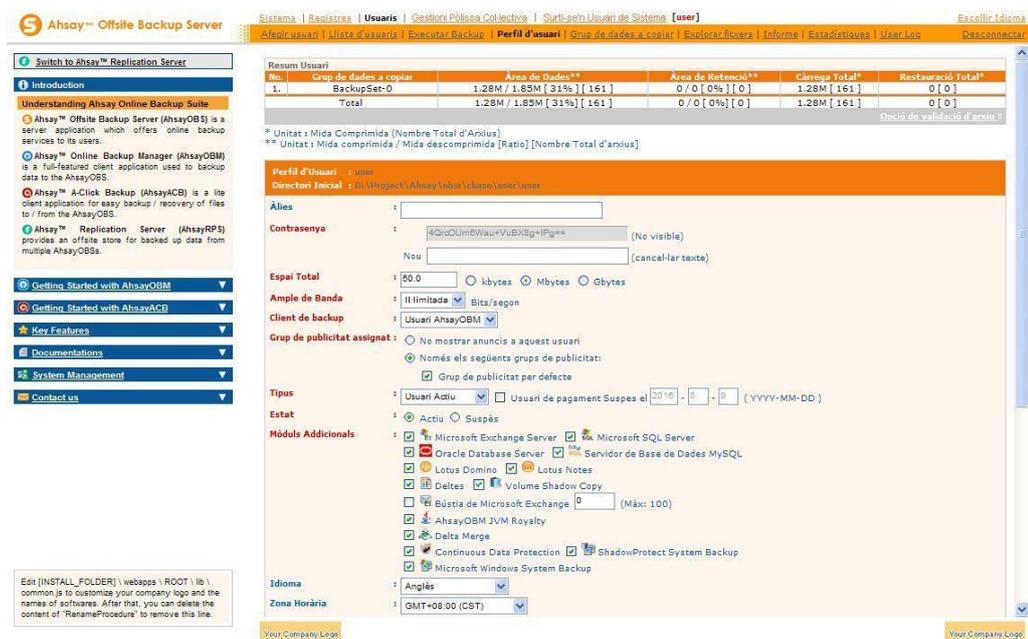
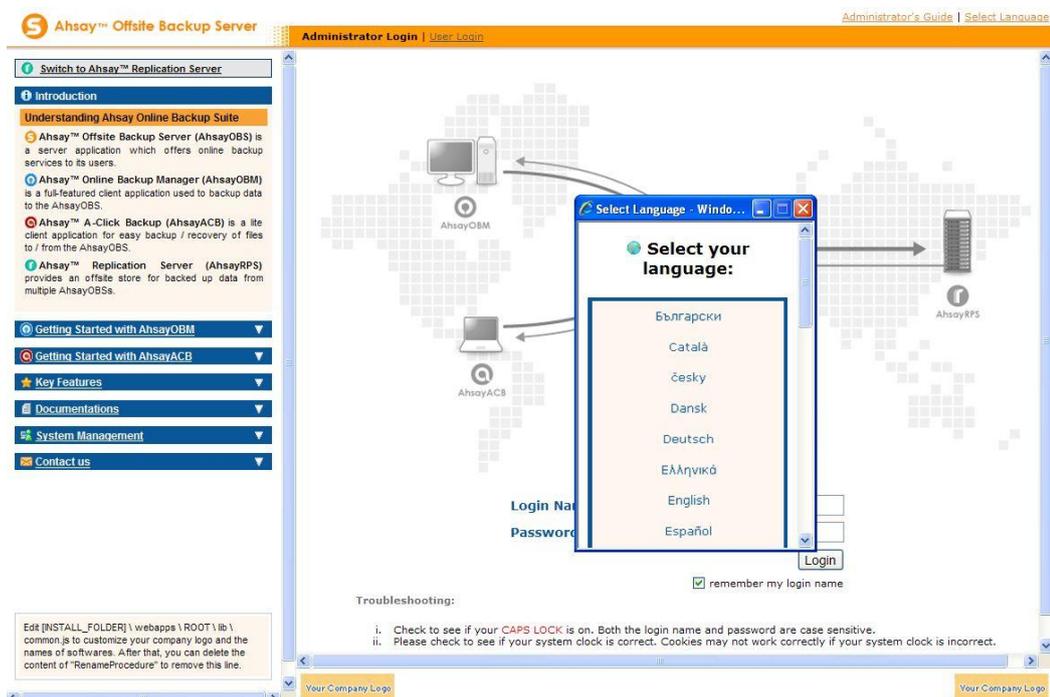
Moved Files	It determines whether the existing files are copied to retention are before updating the file paths.
Auto User Home Allocation	Maximum QPS Ratio can be changed.
Welcome Email	It determines if welcome email will be sent to new users and other options on welcome emails.
Enable Free Trial Registration	Whether to enable free trial user registration.
Backup Quota	The default backup quota of trial users
Add-on Modules	The default modules available to trial users
Remove User	Whether to remove trial users and the length of trial period.
Configuration Recovery	System settings, policies and user profiles of a preferable date can be recovered.
Date	Dates of configuration can be recovered. At most 30 copies of configuration will be archived.
Path	Destination of recovered configuration.
Mode	Mode of configuration recovery. If "Auto" is selected and OBS user home is empty, the configuration including system settings, policies and user profiles will be decrypted and downloaded to their original locations. If "Manual" is selected, the configuration will be decrypted and downloaded to destination path.
Refresh	Reload archival dates
Restore	Download configuration to the destination path and perform configuration recovery in either "Auto" or "Manual" mode.

4.1 User Languages Setting

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

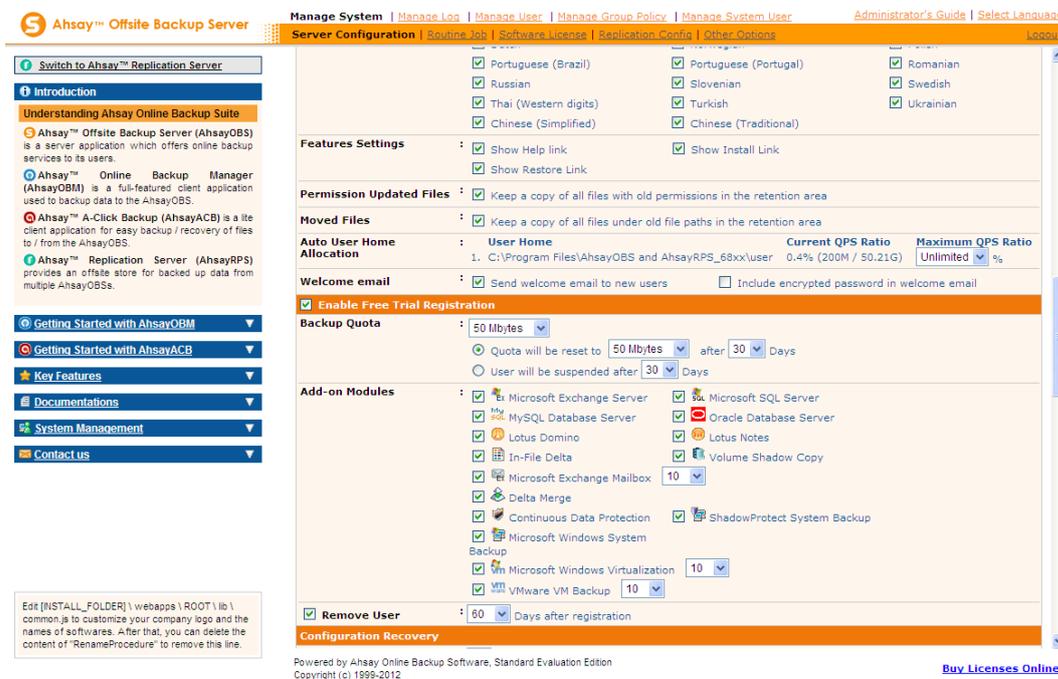
1. Click the [Select Language] link available on the top right hand corner of the web interface.

2. Select the language of your choice.
3. 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 are listed in Appendix A. You can limit the list of languages available to users by using the [Manage System] -> [Server Configuration] -> [Language Setting] options.

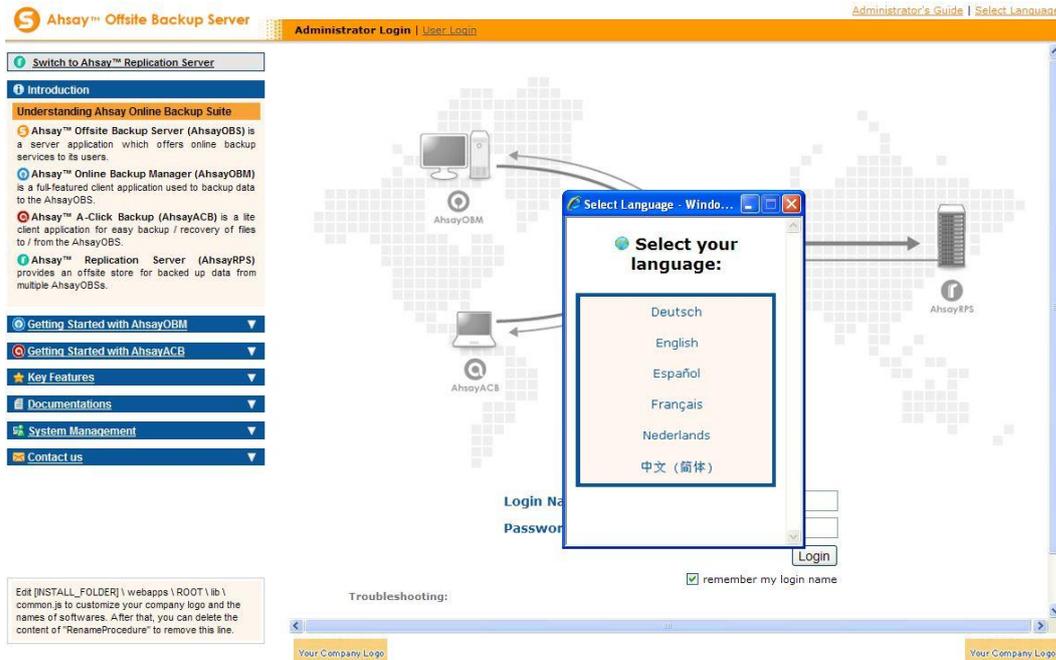
If you uncheck all checkboxes for all languages available in [Manage System] -> [Server Configuration] -> [Language Setting], the [Select Language] will no longer be available on the top right hand corner of the web interface (you need to refresh the top menu bar to see the change). Users will not be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



The screenshot shows the 'Server Configuration' page of the Ahsay Offsite Backup Server. The page is divided into several sections:

- Language Settings:** A grid of checkboxes for various languages including Portuguese (Brazil), Russian, Thai, Chinese (Simplified), Portuguese (Portugal), Slovenian, Turkish, Chinese (Traditional), Romanian, Swedish, and Ukrainian.
- Features Settings:** Checkboxes for 'Show Help Link' and 'Show Install Link'.
- Permission Updated Files:** A checkbox for 'Keep a copy of all files with old permissions in the retention area'.
- Moved Files:** A checkbox for 'Keep a copy of all files under old file paths in the retention area'.
- Auto User Home Allocation:** A table showing user home paths, current QPS ratio, and maximum QPS ratio.
- Welcome email:** Checkboxes for 'Send welcome email to new users' and 'Include encrypted password in welcome email'.
- Enable Free Trial Registration:** A checked checkbox.
- Backup Quota:** Settings for quota size (50 Mbytes), reset frequency (30 Days), and suspension rules.
- Add-on Modules:** A list of modules with checkboxes, including Microsoft Exchange Server, MySQL Database Server, Lotus Domino, In-File Delta, Microsoft Exchange Mailbox, Delta Merge, Continuous Data Protection, Microsoft Windows System Backup, Microsoft Windows Virtualization, VMware VM Backup, Microsoft SQL Server, Oracle Database Server, Lotus Notes, Volume Shadow Copy, and ShadowProtect System Backup.
- Remove User:** A checkbox and a dropdown menu for 'Days after registration' (set to 60).
- Configuration Recovery:** A section at the bottom of the configuration area.

At the bottom of the page, there is a footer: 'Powered by Ahsay Online Backup Software, Standard Evaluation Edition Copyright (c) 1999-2012' and a link to 'Buy Licenses Online!'.



4.2 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 is system password is system) that you would use to logon the system administration console. **Users are strongly recommended to change both the login name and password to something other than the default setting to reduce the possibility of unauthorized access to the OBS.**

4.3 Host Name

The [Host Name] setting under the [Manager 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 request originating from the internet).

Please make sure the [Host Name] entry is resolvable from the backup server itself. This means that if you enter "backup.yourcompany.com" into the [Host Name] entry, you can access the backup system welcome page via <http://backup.yourcompany.com>.

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 customer TCP Port for HTTPS, e.g. 8443, into the [Host Name] field as it will not work).

4.4 System Home, Policy Home and User Home Directories

The [System Home], [Policy Home] and [User Homes] setting under the [Manage System] -> [Server Configuration] page sets the system home directory, policy home directory and user home directories for OBS (the default values are %OBSR_HOME%\system, %OBSR_HOME%\system\policy and %OBSR_HOME%\user).

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

The policy home directory for OBS defines a directory in which OBS will store all its system users and group policy 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.

OBS can be configured with multiple user home directories, this allows for the distribution of user accounts across different hard disk partitions or different hard disks. This enables server administrator's to easily distribute the I/O loading across multiple drives, which helps to improve overall backup server performance. Also, the support of multiple user homes will allow for easy expansion of the server storage. For example, if you want to add more storage to OBS, you can simply add another hard disk 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 drive.

Backup users created by the OBM or ACB "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.

4.5 Single Level Access

The [Single Level Access] settings under the [Manage System] -> [Server Configuration] page defines system user access restriction to own created system users, backup users and backup users of system users. This restriction does not apply to system administrator. If you uncheck [Single

Level Access] checkbox, system user can access all descendant system users and backup users.

4.6 Email System Setting

The [Email System Setting] settings under the [Manage System] -> [Server Configuration] page defines the various email setting that 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 (port25), please append your customer 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. There is a test button at the end of each SMTP settings to test the connection. The testing result will be displayed next to the test button.

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 alerts to all email addresses defined here.

Note:

SMTP server with Transport Layer Security (TLS) is not supported.

4.7 Proxy Setting

The [User 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.

Note:

Please make sure there are no traffic restrictions on the proxy server, which could affect backup/restore performance.

4.8 Windows Active Directory (AD) Authentication Setting

When Windows Active Directory Authentication is enabled, user authentication will be dispatched to Windows Active Directory (AD) automatically if OBS fails to authenticate a user logon using its own records. This means that if an AD is presented in the network, it is only required to create a user account once in AD and the same user account can also be used in OBS, because OBS will create this user account automatically after authenticating this logon using AD. When this user logs on to OBS, OBS will use Free Trial Registration settings above (even if it is not enabled) as the template of user profile (i.e. backup quota and add-on modules settings, but not Microsoft Exchange Mailbox which will be disabled by default) to be created. The user account created will be of "Paid" type and of "ACB" backup client (unless the user logs on using "OBM").

To enable this feature, simply check the box of [Use Windows Active Directory (AD) Authentication] under the [Manage System] -> [Server Configuration] page (by default it is enabled).

To synchronize OBS and AD, removal of users can be configured. If you want to delete/disable OBS user account when the user is removed from AD, you can check the boxes in the section of [Remove OBS Account]. You can have both options checked and create your own standard. For example, setting [After a user account has been deleted from AD for 20 days, OBS will delete this user account automatically] and [After a user account has been deleted from AD for 10 days, OBS will disable this user account automatically], can results that when the user account is removed from AD after 10 days, the user account will be disabled and after 10 more days, the user account will be deleted.

WARNING:

OBS servers with Windows Active Directory Authentication enabled are not supported in an RDR environment.

4.9 Redirector

The [Use Redirector (RDR)] settings under the [Manage System] -> [Server Configuration] page defines whether the current OBS is used behind a redirector. If OBS is a member machine of an RDR setup, you must specify the RDR settings

In order to setup OBS v6 in an RDR environment, you must use RDR v6.

Note: For users' connection to the OBS user console or connection to the OBM/ACB client agent through RDR, the hostname must be configured exactly as the RDR hostname configured in the "Use Redirector (RDR)" > "Hostname" setting.

WARNING:

Please make sure on the RDR server the "UserConsole" filter in the %RDR_HOME%\webapps\rdr\WEB-INF\web.xml" file is amended to include the IP address range of all member OBS servers, as by default the range setting is 127.0.0.1-127.0.0.1

Otherwise the affected OBS member servers will not be able to connect to RDR.

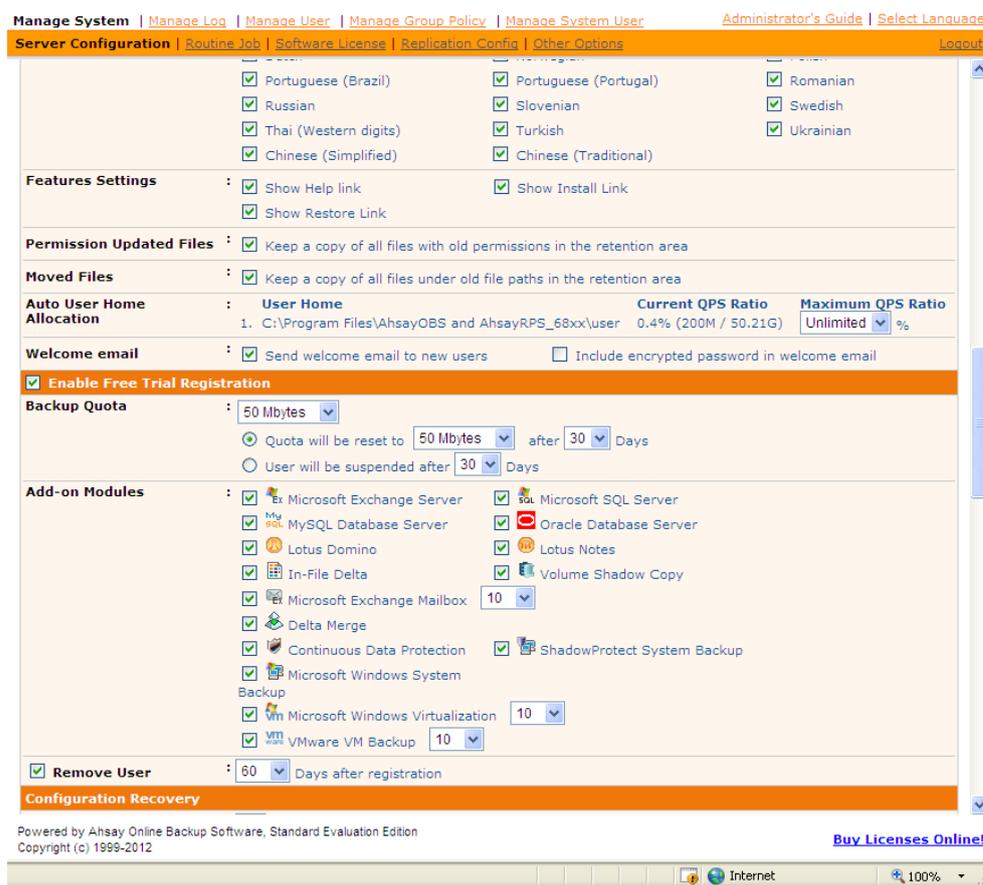
```
<filter-name>UserConsole</filter-name>
<filter-class>com..rdr.www.IPFilter</filter-class>
<init-param>
<param-name>Range1</param-name>
<param-value>localhost</param-value>
</init-param>
<init-param>
<param-name>Range2</param-name>
<param-value>127.0.0.1-127.0.0.1</param-value>
</init-param>
</filter>
```

4.10 Language Setting

The [Language Setting] settings under the [Manage System] -> [Server Configuration] page defines the list of available languages on the web interface.

4.11 Features Setting

The [Feature 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 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).

4.12 Permission Updated Files

The [Permission Updated Files] 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 backup file directly. No copies of the previous version(s) will be available for restore.

4.13 Moved Files

The [Moved Files] 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 path is updated, i.e. the files is moved to another location. When this option is set, all backup accounts will use more retention space but allows the users to restore the same file with the correct location. When this option is not set, the file path changes are updated to the backed up file directly. No copies of the previous version(s) will be available for restore.

4.14 Auto User Home Allocation

The [Auto User Home Allocation] settings under the [Manage System] -> [Server Configuration] page defines the quota ratio for each user home. OBS will automatically select the user home to be used for auto user allocation and trial user registration based on the quota ratio. OBS will always use the first user home with a QPS ratio smaller than the value defined by the system user.

4.15 Welcome Email

The [Send welcome email to new users] settings under the [Manage System] -> [Server Configuration] page defines whether OBS should send a welcome email to new users. If this option is checked, it will send an email to the new users.

The [Include encrypted password in welcome email] settings under the [Manage System] -> [Server Configuration] page defines whether OBS should include the encrypted password in the welcome email. When this option is checked, the encrypted password will send with the welcome email to the new users.

4.16 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 users to create a trial backup account from OBM or ACB, please enable the [Enable Free Trial Registration] option. If this feature is unchecked, the option to register for a trial account (see below) will not be available to end users.



The screenshot shows the 'Trial Registration' dialog box with the 'Proxy Setting' section active. The 'Language' is set to 'English'. The 'Backup Server' section shows a protocol dropdown set to 'http'. The 'Proxy Setting' section includes a checkbox for 'Use proxy to access the backup server', which is currently unchecked. Below this, there are radio buttons for 'Proxy' (selected) and 'Sock'. There are also input fields for 'Address', 'Port', 'User Name', and 'Password'. At the bottom right, there are 'Next' and 'Cancel' buttons.



The screenshot shows the 'Trial Registration' dialog box with the 'User Information' section active. The 'Language' is set to 'English'. The 'User Information' section includes input fields for 'Login Name', 'Password', and 'Confirm Password'. Below this is a 'Contact' section with an 'Email' input field. A note at the bottom states '*ALL fields are required'. At the bottom left, there is a link that says 'Already a user?'. At the bottom right, there are 'Submit' and 'Cancel' buttons.

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.

4.17 Use Windows Event Log

For OBS installations on Microsoft Windows platform which have the "Windows Event Log" service enabled. When this feature is selected all OBS system log information, i.e. error, warning, and information message types will be also be written to the Windows event logs. The backup server

administrators can view the logs entirely using the Windows event viewer. The event log name is limited to 8 characters.

After a user account has been disabled from AD for days, AhsayOBS will delete this user account automatically.

Use Redirector (RDR)

Protocol :

Hostname : Port :

Login Name :

Password :

Use Windows Event Log

Event Log Name :

Options

Language Settings

<input checked="" type="checkbox"/> Bulgarian	<input checked="" type="checkbox"/> Catalan	<input checked="" type="checkbox"/> Czech
<input checked="" type="checkbox"/> Danish	<input checked="" type="checkbox"/> German	<input checked="" type="checkbox"/> Greek Modern
<input checked="" type="checkbox"/> English	<input checked="" type="checkbox"/> Spanish	<input checked="" type="checkbox"/> Basque
<input checked="" type="checkbox"/> Finnish	<input checked="" type="checkbox"/> French	<input type="checkbox"/> Hebrew
<input checked="" type="checkbox"/> Hungarian	<input checked="" type="checkbox"/> Icelandic	<input checked="" type="checkbox"/> Italian
<input checked="" type="checkbox"/> Japanese	<input checked="" type="checkbox"/> Korean	<input checked="" type="checkbox"/> Lithuanian
<input checked="" type="checkbox"/> Dutch	<input checked="" type="checkbox"/> Norwegian	<input checked="" type="checkbox"/> Polish
<input checked="" type="checkbox"/> Portuguese (Brazil)	<input checked="" type="checkbox"/> Portuguese (Portugal)	<input checked="" type="checkbox"/> Romanian
<input checked="" type="checkbox"/> Russian	<input checked="" type="checkbox"/> Slovenian	<input checked="" type="checkbox"/> Swedish
<input checked="" type="checkbox"/> Thai (Thai digits)	<input checked="" type="checkbox"/> Turkish	<input type="checkbox"/> Ukrainian
<input checked="" type="checkbox"/> Chinese (Simplified)	<input checked="" type="checkbox"/> Chinese (Traditional)	

The ID for each message type is shown in the following table.

Type	ID
Information	201
Warning	305
Error	409

4.18 Configuration Recovery

OBS Configuration Recovery feature available from OBS v6.7.0.0 onwards. It is designed to facilitate a quick and simple recovery of an OBS server after an outage, to ensure minimum down time of backup service. By allowing the backup server administrator to install a new OBS instance on another machine, using the backed up OBS server configuration downloaded from the License Server (ALS).

In order to backup OBS server configuration files the backup server administrator, can schedule daily Configuration Archival backups of critical OBS server configuration files to the ALS, e.g. system configuration files in the %OBS_HOME%\CONF folder, Policy Home and User Home folders.

The Configuration Archival feature is available to OBS servers using paid license keys (including keys generated from License Management Portal) and with a valid "Free Upgrade Until" date. **This feature is disabled for OBS servers using evaluation license keys.**

4.18.1 Setup

The OBS Configuration Recovery feature is disabled by default. To enable this feature go to the server configuration page [Manage System] -> [Routine Job] -> [System Job] -> [Configuration Archival] and select "Enable" and press the [Update] button. The default OBS configuration backup time is at 12:30 PM.

Cyclic Redundancy Check (CRC) Checking	: <input checked="" type="radio"/> Enable <input type="radio"/> Disable	Monthly at 00 : 00 (HH:MM) At the 2nd and 4th Saturdays of every month <input type="checkbox"/> Force to check all backup files
Configuration Archival	: <input checked="" type="radio"/> Enable <input type="radio"/> Disable	Daily at 12 : 30 (HH:MM)
<input type="button" value="Update"/> <input type="button" value="Reset"/>		

For OBS servers using evaluation license keys or where the "Free Upgrade Until" date has already expired, this option will be automatically disabled until license key maintenance is renewed.

Cyclic Redundancy Check (CRC) Checking	: <input checked="" type="radio"/> Enable <input type="radio"/> Disable	Monthly at 00 : 00 (HH:MM) At the 2nd and 4th Saturdays of every month <input type="checkbox"/> Force to check all backup files
Configuration Archival	: <input type="radio"/> Enable <input checked="" type="radio"/> Disable	Daily at 12 : 30 (HH:MM)
<input type="button" value="Update"/> <input type="button" value="Reset"/>		

For license keys where the "Free Upgrade Until" has expired, the configuration files which have been previously uploaded to ALS are still available for restore via the Configuration Recovery feature.

4.18.2 OBS Configuration Files

The following is a list of critical OBS configuration files which are backed up to the ALS by the daily Configuration Archival backup job.

CONF folder	\\%OBS_HOME%\conf\	acb-config.xml, autoUpdate.bdb, debug.props, keystore, lfsConfig.xml, license.xml, obs.xml, rps.xml, rpsLicense.xml, rpsRecv.xml, rpsSend.xml, server.xml
-------------	--------------------	--

POLICY HOME	\\%PolicyHome%\	policyGroup.xml, sysUser.xml, userGroup.xml, AcbGlobalFilter\db\Profile.xml, defaultAcbUser\db\Profile.xml, defaultUser\db\Profile.xml, ObmGlobalFilter\db\Profile.xml
USER HOME %userhome1% %userhome2% . .	\\%User Home%\	The home folder and Profile.xml for all backup user accounts: %Userhome%\test1 %Userhome%\test1\db %Userhome%\test1\db\Profile.xml %Userhome%\test2#12345 %Userhome%\ test2#12345\db %Userhome%\ test2#12345\db\Profile.xml

4.18.3 Configuration Archival File Limits

Each Configuration Archive file is limited to 2MB after compression per an upload.

File Size Restrictions

The following table shows the file size restrictions for each configuration file folder:

Directory	Uncompressed(MB)	Compressed(KB)
Temporary storage for CONF folder	1	149
Temporary storage for Policy Home	45	1716
Temporary storage for User Home(s)	30	183
Total	76	2048

Number of Files

Only the %OBS_HOME%\conf folder has an enforced maximum number files limit.

Directory	Number of files (max)
Temporary storage for CONF folder	50
Temporary storage for Policy Home	No limit
Temporary storage for User Home(s)	No limit

For example, a 2MB compressed file can contain configurations files from an OBS server with the following setup:

Number of backup user = 600

Number of system user = 80
Number of user group = 300
Number of policy group = 150
Average number of backup sets per backup user = 10

If after the configuration file is compressed, the file size exceeds 2MB, the Configuration Archival job will not upload the file to ALS. The exact nature of the error will be shown in the OBS system log.

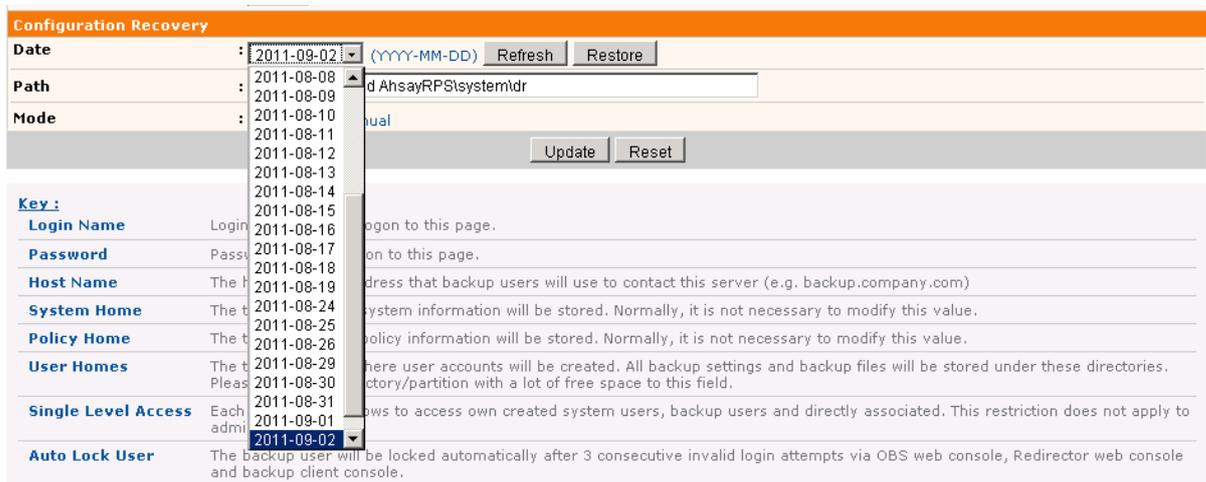
The following example is where the files in the %OBS_HOME%\conf folder exceed 1MB *BEFORE* they have been compressed.

```
[info][system][Thread][Job][ConfigurationArchival] Starting configuration archival
[error][system][Thread][Job][ConfigurationArchival] [copyFile.checkSize] The size of 'D:\AhsayOBS and AhsayRPS\temp\archiveTemp\conf' is too large.
[copyFile.checkSize] The size of 'D:\AhsayOBS and AhsayRPS\temp\archiveTemp\conf' is too large.
[info][system][Thread][Job][ConfigurationArchival] Finished configuration archival
[info][system][Thread][Job][SystemCleanup]Starting system cleanup
[info][system][Thread][Job][SystemCleanup]Start: System Cleanup
```

4.18.4 Configuration Archival Storage Retention

The ALS allows each license key to store a maximum of 30 days of configuration file backups at any one time. When the Configuration Archival backup job uploads the configuration file on the 31st day, the ALS will immediately delete the existing configuration file uploaded on the 1st day and so forth.

To check how many backup “snapshots” are available on the ALS, on the OBS web console go to [Manage System] -> [Server Configuration] -> [Configuration Recovery]. Click on the [Refresh] button and select the “Date” combo box.



Configuration Recovery

Date: 2011-09-02 (YYYY-MM-DD) Refresh Restore

Path: D:\AhsayRPS\systemldr

Mode: Actual

Update Reset

Key:

- Login Name**: Login
- Password**: Passw
- Host Name**: The h
- System Home**: The t
- Policy Home**: The t
- User Homes**: The t
- Single Level Access**: Each adm
- Auto Lock User**: The backup user will be locked automatically after 3 consecutive invalid login attempts via OBS web console, Redirector web console and backup client console.

WARNING:

ALS will only keep one snapshot of the Configuration Archive backup file per day. If there are more than one Configuration Archive backup jobs are run within a 24 hour period, ALS will only keep a copy of the latest snapshot.

4.18.5 Backup Process

Once the Configuration Archival system job is enabled and the daily backup time configured. OBS will automatically perform a backup of the configurations files to the ALS.

For each Configuration Archival backup job:

1. The OBS configuration files are copied to the %OBS_HOME%\temp folder.
2. The files are compressed and encrypted using an AES 256bit encryption algorithm.
3. The compressed file is renamed according to the following format **dr-YYYY-MM-DD.zip.gz** and OBS uploads the file to ALS using https protocol.
4. After a successful backup the **dr-YYYY-MM-DD.zip.gz** file is then removed from the %OBS_HOME%\temp folder.

WARNING:

The encryption key used by OBS to encrypt the configuration file is a secret key and cannot be changed by the backup server administrator.

Once the OBS configuration files are uploaded to ALS, the backup server administrator cannot manually remove these files from ALS. The Configuration Archival backup job statuses are recorded in the OBS system log.

When a Configuration Archival backup job has completed successfully, the following messages will be shown in the OBS system log:

```
[info][system] User Module Job ending.
[info][system][Thread][Job][ConfigurationArchival] Starting configuration archival
[info][system][Thread][Job][ConfigurationArchival] Finished configuration archival
[info][system][Thread][Job][SystemCleanup]Starting system cleanup
[info][system][Thread][Job][SystemCleanup]Start: System Cleanup
[info][system][Thread][Job][SystemCleanup][PendingEmailCacheCleaning]Start: System Cleanup:
Removing obsolete pending backup job report
```

To verify the current backup of configuration files are available on the ALS, on the OBS web console go to [Manage System] -> [Server Configuration] -> [Configuration Recovery]. Click on the [Refresh] button to show the latest snapshot available on the ALS.

Configuration Recovery	
Date	: [2011-09-02] (YYYY-MM-DD) Refresh Restore
Path	: D:\AhsayOBS and AhsayRPS\systemldr
Mode	: <input checked="" type="radio"/> Auto <input type="radio"/> Manual
Update Reset	

Backup Error Handling

If the Configuration Archival backup job encounters any connection issues to the ALS, OBS will attempt to reconnect to the ALS again upload the configurations file after 15 minutes.

The following messages will be shown in the OBS system log:

```
[info][system][Thread][Job][ConfigurationArchival] Starting configuration archival
[error][system][Thread][Job][ConfigurationArchival] [Http.UnableToConnectExpt]
[Http.SocketPack.getNewSocket] Unable to connect to sHostname='lic.ahsay.com'
sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort="" sProxyUser="" sProxyPwd=""
[Http.UnableToConnectExpt] [Http.SocketPack.getNewSocket] Unable to connect to
sHostname='lic.ahsay.com' sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort=""
sProxyUser="" sProxyPwd=""
```

In total OBS will retry three times in 15 minute intervals to establish a connection to ALS before the backup job is aborted.

First Retry

```
[info][system]main Starting update LDAP user
[info][system][Thread][Job][ConfigurationArchival] Connect to license server 1 time(s) (1 out of 3
retry )
[error][system][Thread][Job][ConfigurationArchival] [Http.UnableToConnectExpt]
[Http.SocketPack.getNewSocket] Unable to connect to sHostname='lic.ahsay.com'
sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort="" sProxyUser="" sProxyPwd=""
[Http.UnableToConnectExpt] [Http.SocketPack.getNewSocket] Unable to connect to
sHostname='lic.ahsay.com' sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort=""
sProxyUser="" sProxyPwd=""
```

Second Retry

```
[info][system][Thread][Job][SettingChangeReport]End: Sending setting change report job
[info][system][Thread][Job][ConfigurationArchival] Connect to license server 2 time(s) (2 out of 3
retry )
[info][system][Thread][Job][SystemCleanup]Starting system cleanup
[info][system][Thread][Job][SystemCleanup]Start: System Cleanup
[info][system][Thread][Job][SystemCleanup][PendingEmailCacheCleaning]Start: System Cleanup;
Removing obsolete pending backup job report
[info][system][Thread][Job][SystemCleanup][PendingEmailCacheCleaning]End: System Cleanup;
Removing obsolete pending backup job report
[info][system][Thread][Job][SystemCleanup]End: System Cleanup
[error][system][Thread][Job][ConfigurationArchival] [Http.UnableToConnectExpt]
[Http.SocketPack.getNewSocket] Unable to connect to sHostname='lic.ahsay.com'
sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort="" sProxyUser="" sProxyPwd=""
[Http.UnableToConnectExpt] [Http.SocketPack.getNewSocket] Unable to connect to
sHostname='lic.ahsay.com' sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort=""
sProxyUser="" sProxyPwd=""
```

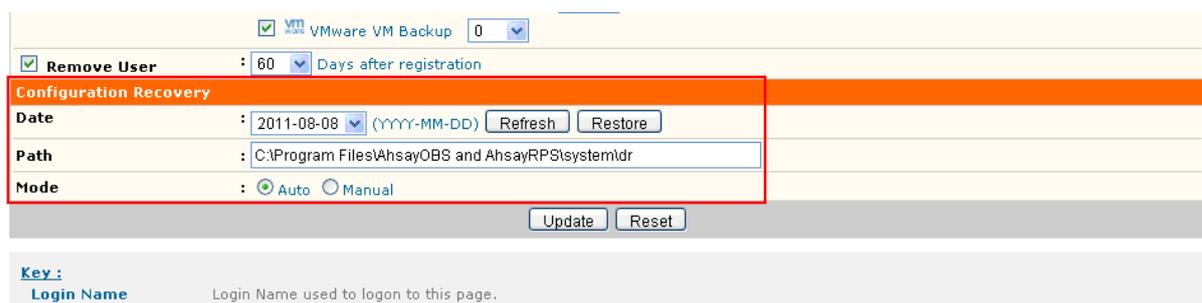
Third Retry

```
[info][system][Thread][Job][SystemCleanup]End: System Cleanup
[info][system][Thread][Job][ConfigurationArchival] Connect to license server 3 time(s) (3 out of 3
retry )
[error][system][Thread][Job][ConfigurationArchival] [Http.UnableToConnectExpt]
[Http.SocketPack.getNewSocket] Unable to connect to sHostname='lic.ahsay.com'
sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort="" sProxyUser="" sProxyPwd=""
[Http.UnableToConnectExpt] [Http.SocketPack.getNewSocket] Unable to connect to
sHostname='lic.ahsay.com' sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort=""
sProxyUser="" sProxyPwd=""
[error][system][Thread][Job][ConfigurationArchival] [RefreshArchivalDateList.getArchivalDates]
[Http.UnableToConnectExpt] [Http.SocketPack.getNewSocket] Unable to connect to
sHostname='lic.ahsay.com' sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort=""
sProxyUser="" sProxyPwd=""
[RefreshArchivalDateList.getArchivalDates] [Http.UnableToConnectExpt]
[Http.SocketPack.getNewSocket] Unable to connect to sHostname='lic.ahsay.com'
sHostIP='44.44.44.44' port='443' type='NS' sProxyHost="" sProxyPort="" sProxyUser="" sProxyPwd=""
[info][system][Thread][Job][ConfigurationArchival] Finished configuration archival
```

If the Configuration Archival backup job does not successfully upload the configuration file to ALS after the third retry, the backup job for the current day will end. OBS will run the Configuration Archival backup job again on the following day at the scheduled time

4.18.6 Restoring Configuration Files

To restore the configurations files from ALS to OBS, open the web management console and go to the server configuration page [Manage System] -> [Server Configuration] -> [Configuration Recovery].



The [Path] is the destination path where the restored configuration files will be saved on the OBS server. After the configuration file is restored from the ALS, when Configuration Recovery is performed using "Manual" mode. The default setting for the [Path] is %OBS_HOME%\SYSTEM_HOME\dr.

The OBS server configuration can be restored from ALS by:

1. Clicking the [Refresh] button to obtain a list of the configuration file snapshots stored on the ALS.
2. Use the [Date] option, to select the configuration file snapshot to be restored.

3. Select the recovery mode in the [Mode] option.
 - i. If "Auto" mode is selected, OBS will download the selected configuration file snapshot from ALS. It will be automatically decrypted and copied to their original locations, only if the OBS user home(s) are empty.
 - ii. If "Manual" mode is selected, the configuration files will be decrypted and downloaded to the destination path. The restored files will have to be manually copied to new OBS user home(s).
4. Click [Restore] button to execute the configuration recovery process.
5. The restored OBS configuration settings will take effect after the OBS service is restarted.

When a Configuration Recovery has been performed successfully, the following messages will be shown in the OBS system log:

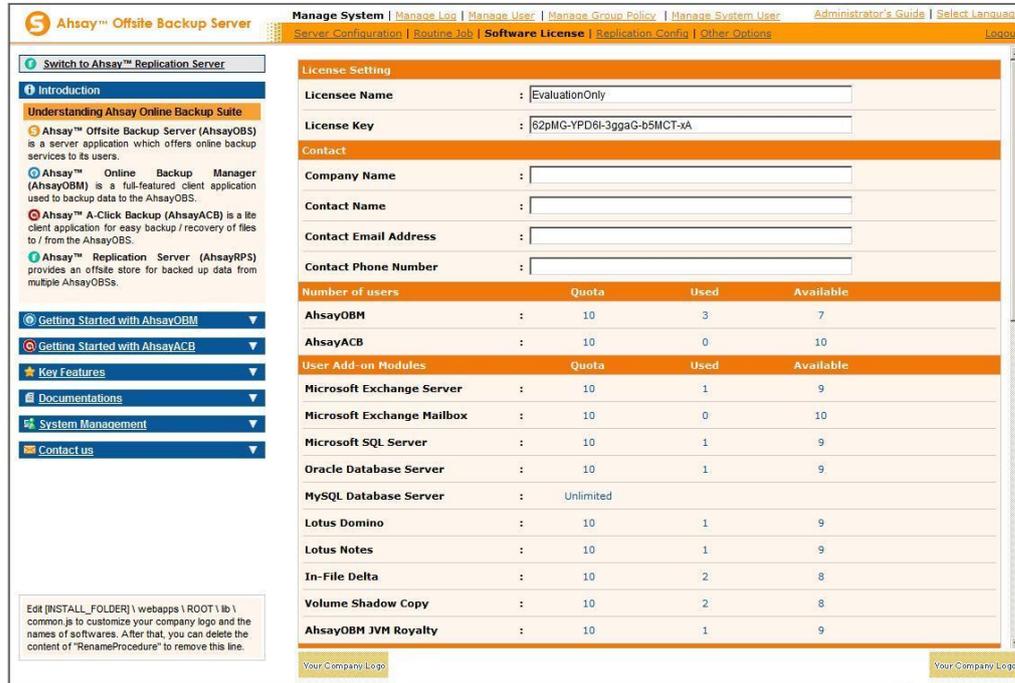
```
[info][www][System][Logon] admin "system" logged on successfully. IP=127.0.0.1  
session=04C9D6148379DFF7354EC57B6973118D  
[info][system] Starting configuration recovery  
[info][system] Finished configuration recovery
```

WARNING:

- i. The Configuration Recovery feature does not support recovery of OBS system configuration on a cross O/S platform environment, i.e. configuration files from a Windows OBS cannot be recovered to a Linux/FreeBSD/Solaris OBS vice versa.**
- ii. To perform a Configuration Recovery to a new OBS installation the license key from the original OBS server must be applied.**
- iii. The new OBS server must be able to connect to the License Server (ALS) in order to perform a Configuration Recovery.**

5 Software License

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



License Setting

Licensee Name : EvaluationOnly

License Key : 62pMG-YPD6l-3ggaG-b5MCT-xA

Contact

Company Name :

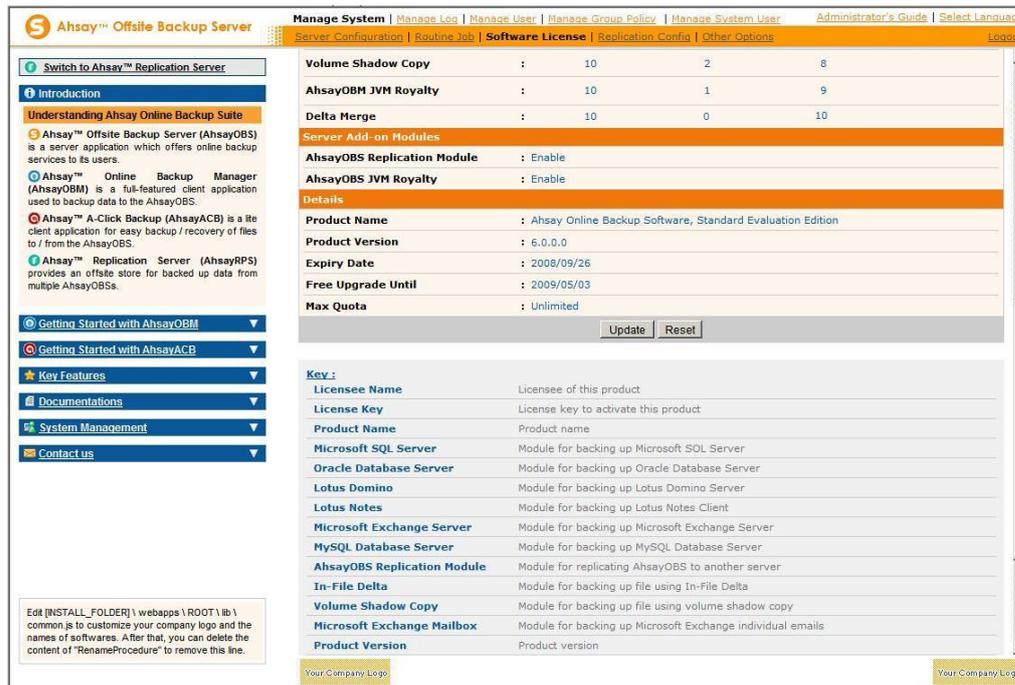
Contact Name :

Contact Email Address :

Contact Phone Number :

Number of users	Quota	Used	Available
AhsayOBM	10	3	7
AhsayACB	10	0	10

User Add-on Modules	Quota	Used	Available
Microsoft Exchange Server	10	1	9
Microsoft Exchange Mailbox	10	0	10
Microsoft SQL Server	10	1	9
Oracle Database Server	10	1	9
MySQL Database Server	Unlimited		
Lotus Domino	10	1	9
Lotus Notes	10	1	9
In-File Delta	10	2	8
Volume Shadow Copy	10	2	8
AhsayOBM JVM Royalty	10	1	9



Volume Shadow Copy : 10 / 2 / 8

AhsayOBM JVM Royalty : 10 / 1 / 9

Delta Merge : 10 / 0 / 10

Server Add-on Modules

AhsayOBS Replication Module : Enable

AhsayOBS JVM Royalty : Enable

Details

Product Name : Ahsay Online Backup Software, Standard Evaluation Edition

Product Version : 6.0.0.0

Expiry Date : 2008/09/26

Free Upgrade Until : 2009/05/03

Max Quota : Unlimited

Key :

Key	Description
Licensee Name	Licensee of this product
License Key	License key to activate this product
Product Name	Product name
Microsoft SQL Server	Module for backing up Microsoft SQL Server
Oracle Database Server	Module for backing up Oracle Database Server
Lotus Domino	Module for backing up Lotus Domino Server
Lotus Notes	Module for backing up Lotus Notes Client
Microsoft Exchange Server	Module for backing up Microsoft Exchange Server
MySQL Database Server	Module for backing up MySQL Database Server
AhsayOBS Replication Module	Module for replicating AhsayOBS to another server
In-File Delta	Module for backing up file using In-File Delta
Volume Shadow Copy	Module for backing up file using volume shadow copy
Microsoft Exchange Mailbox	Module for backing up Microsoft Exchange individual emails
Product Version	Product version

Key	Description
License Name	Business name of the licensee
License Key	License Key to activate this software. Please enter [License Key] as a printed on the [Software License Agreement] into the text field provided.
Connection Test	Test the connection between OBS and license server.
Company Name	The company name used for contact.
Contact Name	The name of the contact person.
Contact Email	The email address of the contact person.
Contact Number	The phone number of the contact person.
OBM	<p>The maximum number of the OBM backup account allowed.</p> <p>The following may be displayed when there are some special arrangement on your OBM license CAL:</p> <p>( number) - The number in the round bracket is the quota of OBM used by the ACB.</p> <p>( number) - The number in the round bracket is the quota used by Microsoft Exchange Server Database Availability Group</p>
ACB	The maximum number of the ACB backup accounts allowed.
User Add-on Modules	<p>It shows whether different client side add-on modules are enabled for OBM/ACB. You need to have a new license key to enable these modules.</p> <p>Quota – the total number of licenses of a particular module available.</p> <p>Used – the total number of licenses of a particular module assigned to users.</p> <p>Available – the total number of license of a particular module available for future use.</p>
Server Add-on Modules	It shows whether different server side add-on modules are enabled for OBS/RPS. You need to have a new license key to enable these modules.
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 after 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 any software release after this date with your current license key.
Max Quota	The maximum quota for each backup user supported.

5.1 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.
- There is a connection test button underneath the license field entry box to test the connection to our license server. The testing result will be displayed next to the test button.
- If a proxy server is required to access the Internet from OBS, please setup the [proxy setting] in the [Manager Server] page. Access to the Internet is required because the license key must be activated by our license server before it is usable.
- If internet connection is not available in your environment, you can use the offline activation method to activate your license.
- 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" or "Internal Error 1012" 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.

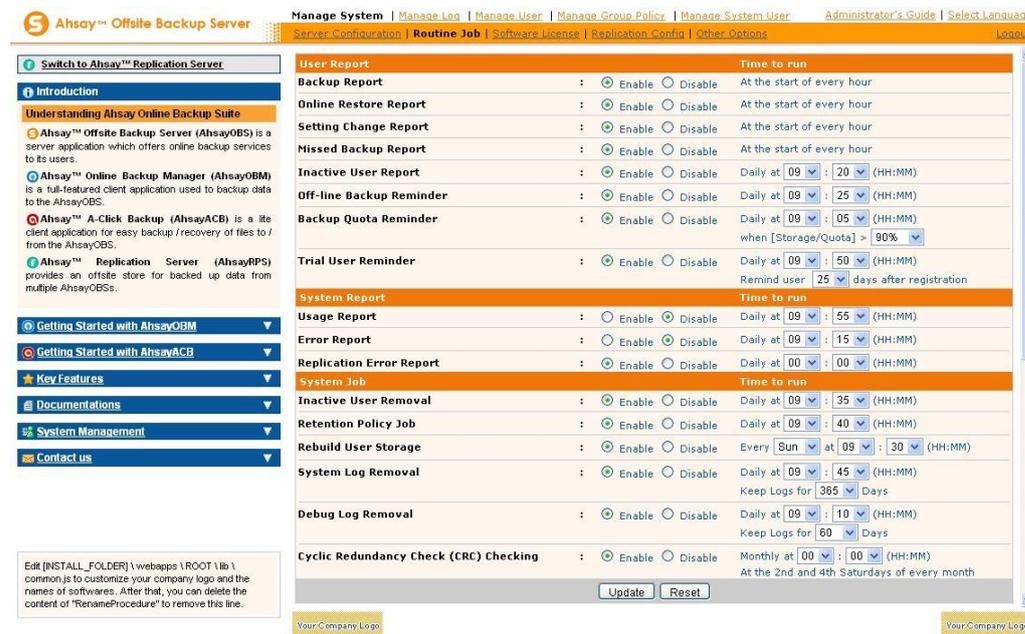
5.2 Automatic License Renewal

If OBS is under a monthly leasing plan, the license key will have an expiry date of 30 days. Upon expiration, the license key will be renewed automatically.

In the event of any problems during the license renewal process, i.e. OBS is not able to connect to the License server. The expired license key will have a grace period of 14 days. OBS can still function normally using the expired license for an extra 14 days before the service is automatically shutdown. The 14 day grace period is to allow sufficient time to resolve any license related problems.

6 Managing Routine Job

This chapter describes how you can use the [Manage System] -> [Routine Job] page (shown below) to manage 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.



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.
Replication Error Report	Daily job sending replication 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.
Cyclic Redundancy Check (CRC) Checking	Routine job that will run at 2nd and 4th Saturdays of every month. It will verify the CRC of the files backed up to the server.
Force to check all backup files	If selected the CRC job will check all backup files regardless of last checked date.

Configuration Archival	Daily job sending system settings, policies and user profiles to a secure remote storage.
-------------------------------	--

Note:

It is strongly recommended you enable the CRC checking so that regular file integrity checks are made on the backup data files.

6.1 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. The backup report is scheduled to run every 57 minutes past the hour.

If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

6.2 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. The online restore report is scheduled to run every 58 minutes past the hour.

If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

6.3 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 set within the last hour. The setting change report is scheduled to run every 59 minutes past the hour.

If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

6.4 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. The missed report is scheduled to run every 56 minutes past the hour.

If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

6.5 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, the default start time is 09:20 AM. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

6.6 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, the default start time is 09:25 AM. If you want your users to receive these reports, please select the [Enable] option. Otherwise, select the [Disable] option.

6.7 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, the default quota usage setting is more than 90%.

This job will run daily as defined by the [Daily at] setting, the default start time is 09:05 AM. 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 divided by quota that will trigger this reminder.

6.8 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 that their account will expire. The default setting is to send reminder reports 25 days after trial account registration.

This job will run daily as defined by the [Daily at] setting, the default start time is 09:50 AM. 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.

6.9 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, the default start time is 09:55 AM. If you want the administrative contacts of OBS to receive the usage report, please select the [Enable] option. Otherwise, select the [Disable] option.

6.10 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, the default start time is 09:15 AM. If you want the administrative contacts of OBS to receive the error report, please select the [Enable] option. Otherwise, select the [Disable] option.

6.11 Replication Error Report

The [System Job] -> [Replication Error Report] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Replication Error Report] routine job. The role of the [Replication Error Report] routine job is to send the replication error report, which contains the list of errors appear during the replication process.

This job will run daily as defined by the [Daily at] setting, the default start time is 00:00 AM. If replication is enabled on OBS and you want the administrative contacts of OBS to receive the replication error report, please select the [Enable] option. Otherwise, select the [Disable] option.

6.12 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, the default start time is 09:35 AM. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

6.13 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, the default start time is 09:40 AM. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

Note:

The retention policy job would retain data in accordance to the retention policy configured for the corresponding backup set. A formula is used to determine which file should be "retained" in "Days" unit, at "00:00" of each day (NOT the system routine job execution time). For a backup set with a 7 'days' retention policy, the system routine job would retain modified / deleted data of the past 7 days (oldest data being uploaded after 00:00, 7 days ago).

WARNING:

Disabling the Retention Policy job could result in:

- i. User accounts exceeding their quota limits and therefore interrupting normal backup operations.**
- ii. OBS user home(s) drives running out of space, which could result in your OBS becoming unstable and or cause data corruption.**

6.14 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.

The job is designed to run weekly and will run at the time defined by the [Every WEEKDAY at] setting, the default start time is every Sunday at 09:30 AM. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

Note:

- i. As the Rebuild User Storage job is relatively I/O intensive job, it is recommended to schedule this job to run during off peak periods.**
- ii. When a rebuild user storage is run on a user account with active backupsets, the calculations for the storages statistics may not reflect the actual storage used as all active backupsets are skipped.**

6.15 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, the default start time is 09:45 AM. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

6.16 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, the default start time is 09:10 AM. If you want this job to run, please select the [Enable] option. Otherwise, select the [Disable] option.

6.17 Cyclic Redundancy Check (CRC) Checking

The [System Job] -> [Cyclic Redundancy Check (CRC) Checking] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Cyclic Redundancy Check (CRC) Checking] routine job.

The role of this routine job is to check the CRC of the backup files on every 2nd and 4th Saturdays every month, the default start time is 12:00 AM.

The "Cyclic Redundancy Check (CRC) Checking" job will check all new files on OBS. When the CRC job checks a file it will update the file header with an 'OBS CRC next check date'. This is calculated as 180 + (random number of 0 to 60) days, so for existing files which have been checked previously. The next CRC check on the file will be performed after 180 to 240 days.

During this checking, it will check the followings things:

- The file size of the backup file with the size stored in the header of backup file.
- The CRC value of the backup file with the checksum value stored in the header of the backup file.

If a file is found to be invalid or corrupted it will be deleted, if the file is in the retention area or retained if the file is in the "Current" folder.

To configure the "Cyclic Redundancy Check (CRC) Checking" job to validate all files regardless of the last checked date, please check the [Force to check all backup files] option.

WARNING:

Using the [Force to check all backup files] option could result in performance issues with your OBS server. This option may impact on backup and restore performance.

6.18 Configuration Archival

The [System Job] -> [Configuration Archival] setting under the [Manage System] -> [Routine Job] page defines the setting of the [Configuration Archival] routine job. The role of the [Configuration Archival] routine job is to backup critical OBS configuration files (e.g. CONF folder, Policy Home and User Home) and upload them to the License Server (ALS). At most 30 days of configuration files will be kept on the ALS.

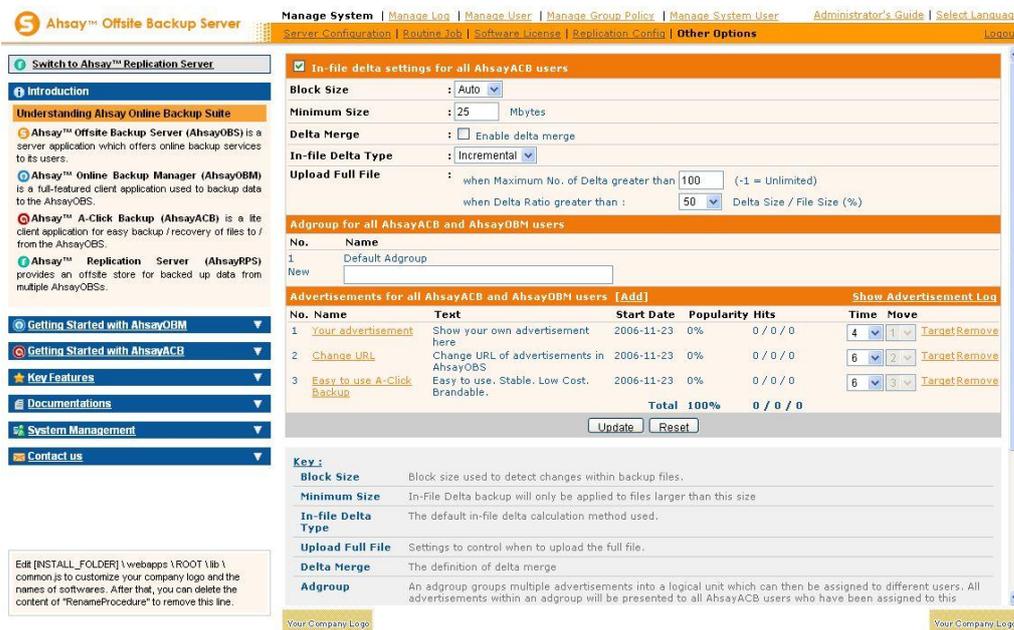
This job is designed to run daily and will run at the time defined by the [Daily at] setting, the default start time is 12:30 PM. This job is disabled by default.

7 Managing Replication

The replication module is managed by the [Manage System] -> [Replication Config] page. For more information about this feature, please contact support.

8 Managing Other Options

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



Key	Description
In-file delta setting	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.
Delta Merge	To enable delta merging on all users.
In-File Delta Type	<p>The In-File delta type to use for calculating the delta file:</p> <ul style="list-style-type: none"> Incremental – this option uses the previous uploaded full or incremental file to calculate the delta. It produces the smallest

	<p>delta for upload but requires the most time and processor power to restore.</p> <ul style="list-style-type: none"> • 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. •
Upload Full File	<p>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:</p> <ul style="list-style-type: none"> • Maximum No. of Delta – the total number of deltas uploaded since the last full file. The default setting is 100 deltas. • Delta Ratio – the ratio of the Delta Size divided by the Full file size. The default setting is 50%.
Adgroup for all ACB and OBM users	<p>An adgroup groups multiple advertisements into a logical unit which can then be assigned to different users. All advertisements within an adgroup will be presented to all users who have been assigned to this adgroup.</p>
Advertisements	<p>Click the [Add] link to add new advertisements.</p>

Note: The compression type option for ACB is not configurable, new ACB users created with OBS version 6.9 or above will use the "Fast" compression setting for default. Fast compression has less compression ratio, the size of the backup should be larger than those pre-existing ACB users with same amount of backup data. Pre-existing ACB customers will use normal compression settings.

8.1 In-File Delta Settings for all ACB users

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

8.2 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 will 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.

The default setting [Auto] will select the optimal block size for each file depending on the size of the file. The [Auto] setting will set the block size according the following criteria:

File Size	Block Size
< 2 GB	4 KB
2 GB to 8 GB	8 KB
> 8 GB	16 KB

8.3 Minimum Size

The [Minimum Size] setting defines the smallest file size a file (the default value is 25 MB) must have before the use and application of in-file delta backup technology.

If the size of a file 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. For backupsets which contain relatively small files, the [Minimum Size] should be increased. As it is not necessary to perform in-file delta backup on small files because backing up the full file doesn't take too long anyway. The advantage of backing up the full file is it will reduce the amount of time required to restore, i.e. the restore of one small full file is much quicker than the restore a small file with associated incremental delta's.

8.4 Delta Merge

The [Delta Merge] setting under the [Manage System] -> [Other Options] page defines a global setting of delta merging for all ACB clients. This setting is disabled by default. If delta merge is enabled, it is recommended to use the in-file delta type "Incremental".

WARNING:

When the delta merge option is enabled and the in-file delta type "Differential" is selected. The Delta merge feature will not merge differential delta files with the full file. Delta merge will only work if there are pre-existing incremental delta files in the delta chain. Once the incremental delta's are merged, the delta merge feature will no longer merge files in the delta chain.

8.5 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

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 related 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 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. But for backupsets with delta merge enabled, the retention policy setting is also used by the delta merge feature to determine when OBS will merge the full and incremental delta files into a new full file.

Differential In-File Delta

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

The advantage of a differential In-File delta backup is that a corrupted differential delta file would only make one particular snapshot of a backup file non-recoverable. All other snapshots can still be recovered using the remaining differential delta files.

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.

8.6 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 this [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 set to 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 file size of a delta file (the file size of the delta file generated by OBM on the client computer) and divided by the file size of its full backup file (the file size of the backup file on the disk of client computer), 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.

It is recommended for backupsets where the full file size(s) are relatively small:

1. The [No. of delta] settings be kept to a low value
2. The [Delta Ratio] setting should be less than 50%
3. The [Minimum Size] setting should be increased to more than 25 MB

This will minimize the probability of future restore problems caused by invalid or corrupted delta files.

8.7 Adgroups

An adgroup groups multiple advertisements into a logical unit which can then be assigned to different users. All advertisements within an adgroup will be presented to all users who have been assigned to this adgroup.

To add a new adgroup, type the name of the adgroup in the empty field located under [Adgroup for all ACB and OBM users] and next to the [New] text. Press the [Update] button at the bottom and a new adgroup will be created.

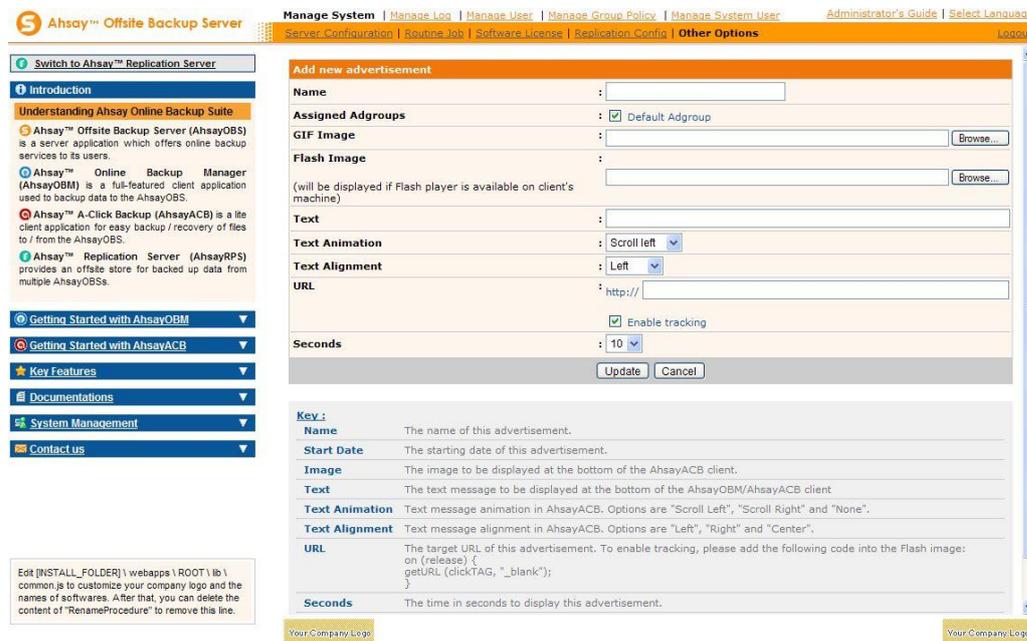
8.8 Advertisements

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 ad.
Text	The text to be displayed at the bottom of the OBM/ACB client.
Start Date	The data when this ad was created.
Popularity	Calculated value to indicate which ad. Is the most popular. The value is calculated as the percentage of [Hit for this ad.] divided by [Total Hits].
Hits	The "Hits" counter indicates the number of times this ad. 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 ad.
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 ad.

[Add New Advertisement](#)

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



Key	Description
Name	The name of the advertisement.
Assigned Adgroups	It determines if the advertisement should be included in the adgroup(s).
GIF Image	The full pathname of the image file to be displayed at the bottom of the OBM / ACB client. The image size should be 468 x 60, and the format should be in GIF.
Flash Image	The full pathname of the flash image file to be displayed at the bottom of the OBM / ACB client. The image size should be 468 x 60. Flash player must be available on the client's machine in order to display the image.
Text	The text to be displayed at the bottom of the OBM / ACB client.
Text Animation	Setting to define whether the text should scroll. <ul style="list-style-type: none"> Scroll Left – text scrolls from right to left. Scroll Right – text scrolls from left to right.

	<ul style="list-style-type: none">• None – do not scroll text.
Text Alignment	Setting to define the text alignment. <ul style="list-style-type: none">• Left – text is aligned left.• Center – text is centered.• Right – text is aligned right.
URL	The URL of the ad. If the user clicks the ad. in OBM / ACB, a browser will open and displays this web page.
Enable Tracking	When selected, every time the user clicks the advert in the OBM / ACB client, a “Hits” counter is incremented.
Seconds	The number of seconds to display the ad.

9 Managing System Diagnosis

This chapter describes how to manage the function in the [Manage System] - > [System Diagnosis] page.

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | [Manage System User](#) | [Administrator's Guide](#) | [Select Language](#)
[Server Configuration](#) | [Routine Job](#) | [Software License](#) | [Replication Config](#) | [Other Options](#) | **System Diagnosis** | [Logout](#)

Inspection : System Information System Files

System Information				
Operating System	: Operating System	Windows XP	Total Physical Memory	1.99G
	: Architecture	x86	Free Physical Memory	660.61M
	: Number Of Processors	2	Total Swap Space	3.32G
	: Committed Virtual Memory	598.61M	Free Swap Space	1.27G
Memory	: Current Heap Size	495.19M	Maximum Heap Size	742.44M
	Threads	: Live Threads	63	Daemon Threads
	: Peak	66	Total Threads Started	84

Key :

Operating System	The software manages computer hardware resources and provides common services for computer programs.
Architecture	An instruction set architecture (ISA) series for computer processors.
Number Of Processors	Number of independent actual processors in a single computing component.
Committed Virtual Memory	Amount of virtual memory guaranteed to be available to the running process.
Total Physical Memory	Amount of random-access memory (RAM) the operating system has.
Free Physical Memory	Amount of free RAM available to the operating system.
Total Swap Space	Maximum space in a portion of a hard disk drive (HDD) that is used for virtual memory.
Free Swap Space	Free space in a portion of a hard disk drive (HDD) that is used for virtual memory.
Current Heap Size	Memory currently occupied by the heap.
Maximum Heap Size	Maximum memory occupied by the heap.
Live Threads	Current number of live daemon threads plus non-daemon threads.
Peak	Highest number of live threads since Java Virtual Machine (VM) started.
Daemon Threads	Current number of live daemon threads.
Total Threads Started	Total number of threads started since Java VM started, including daemon, non-daemon, and associated threads.

Your Company Logo

The default inspection type on this page is the showing the System Information, such as operating system, physical memory, heap size usage and number of threads on the server. This information is useful for administrator to check on the current health status of the OBS server and it is also useful for troubleshooting purpose.

Key	Description
Operating System	The version of the operating system that the OBS hosted on. Eg: Windows 2003, Windows XP.
Architecture	The CPU architecture (ISA) series for computer processors.
Number Of	Number of independent actual processors in a

Processors	single computing component.
Committed Virtual Memory	Amount of virtual memory guaranteed to be available to the running process.
Total Physical Memory	Total amount of random-access memory (RAM).
Free Physical Memory	Amount of free RAM available on the operating system.
Total Swap Space	Total amount of storage space in the hard disk drive that is used for virtual memory.
Free Swap Space	The amount of free space in the hard disk drive that is used for virtual memory.
Current Heap Size	Amount of memory currently occupied by the Java heap.
Maximum Heap Size	The maximum limit of Java heap size.
Live Threads	Current number of live daemon and non-daemon threads.
Peak	The highest number of live threads since Java Virtual Machine (VM) started.
Daemon Threads	Current number of live daemon threads.
Total Threads Started	Total number of threads started since Java VM started, including daemon, non-daemon, and terminated threads.

When the [System Files] inspection is selected, the following screen will be shown.

Inspection : System Information System Files
 Compression Type : Zip No Compression

Rows/Page: 50

Home > D:\HomeDevWork\HomeProducts\HOME_OBX\HOME_6.10.2.x\obs\core\cbase\system

File / Directory	Download	Size	Last Modified
..			
AdvertisementLog			
BackupErrorLog			
BackupJob			
CdpBackupJob			
PendingEmail			
policy			
SystemLog			
temp			
TrafficLog			
info.bdb		3k	2012-10-15 11:48:25

Key :

Size The length of a file.
Last Modified The date at which the file was last modified.

You can click into the folder path to navigate on your OBS server and you can click on the download icon to download the file/folder. You have the option to download the file in Zip format or no compression format. For example, if your file that you need to open is only several hundred Kbytes, you can use the no compression option. If the file size is several Mbytes, or even Gbytes in size, or you are going to download the whole folder, you should use the Zip option. The download file will be renamed as *.zip and you need to unzip it by eg: Winzip. Also if the download file is in Zip format, the download speed will be much faster than no compression format.

Key	Description
Size	Size of the file (unzip).
Last Modified	The last modified date of the file.

10 Manage System User (Reseller Panel)

This chapter describes how you can use different function under the [Manage System User] menu to manage the system users or resellers within OBS.

The [Manage System User] feature allows backup server administrators to create three types of system users, "Admin", "Sub Admin" and "Non-Admin". System users with the "Admin" role have full control to manage all the system systems, policy settings and backup user accounts. System users with the "Sub Admin" role have full control to managing their own backup user accounts. While "Non-Admin" system users only have read only access to the backup user accounts created by the "Sub Admin" system user. System users or resellers can independently manage their own group policy settings. Please refer to the chapter [Group Policy Management](#) for further details.

The backup server administrator can utilize system user accounts depending on the environment where the OBS server is deployed.

1. If OBS is deployed as an internal company backup service. The backup server administrator can create system user account with "Sub Admin" role for each department to manage their own backup users.
2. If OBS is deployed as a commercial backup service. The backup server administrator can create a system user account with "Sub Admin" role for each of their resellers to manage their own clients.

Each system user (Sub Admin) or reseller account on OBS supports the following customization features.

1. The look and feel of OBS web console along with the customized logos.
2. Customized logo for the reports sent to backup users.
3. Customized user guide.
4. Report can be sent via a system users own SMTP server. Each backup client type, i.e. OBM, ACB can have its own designated report sender and reply email address.
5. Each system user or reseller can install their own web SSL certificate.

From OBS v6.7.0.0 onwards each system user (Sub Admin) or reseller account has full control in deploying client side upgrades for each backup user account under their control.

10.1 My Profile / Edit System User

When you click the [Manage System User] - > [My Profile] link available at the top menu, the [My Profile] form will be shown. You can then update system user profile to the system by submitting this form to OBS. The panel will display differently depending on the role of current login system user.

Admin Role

The build-in "system" account is defined as "Admin" role. "Admin" role user has the highest authorization level, all the OBS settings, backup users settings can be accessed or modified by "Admin" role users at all times.

Manage System	Manage Log	Manage User	Manage Group Policy	Manag
My Profile	Add System User	List System User		
System User Settings				
Login Name	:	system		
Role	:	Admin		
Password	:	*****		
Key :				
Login Name			Login Name used to logon to web interface.	
Role			Role of system user	
Password			Password used to logon to web interface.	

From 6.11.0.0, new "Admin" role user can be added via the OBS management console > Manage System User > Add System User

The above user has the "Admin" role and it has the same privilege as the build-in "system" account. For example, you can assign this account for your administrator(s) to configure/administrate the OBS for you.

Non Admin Role

“Non Admin” role system user shares the similar accessibility as its creator except with read permission only (Descendant system users and backup users of its creator could be accessed). If “Non Admin” role system user needs to have the same User Control Policy Settings as its creator, remember to add the “Non Admin” role system user in the same user group as its creators.

Manage System Manage Log Manage User Manage Group Policy Manage System User	
My Profile Add System User List System User	
System User Settings	
Login Name	: non-admin
Role	: Non Admin
Password	: ●●●●●●●●●●●●●●●●
<input type="button" value="Update"/> <input type="button" value="Reset"/>	
Key :	
Login Name	Login Name used to logon to web interface.
Role	Role of system user
Password	Password used to logon to web interface.

For example, you may assign your operators to login the OBS to check on the backup reports and OBS system logs etc, without worrying that they will modify any settings on the OBS accidentally.

Sub Admin Role

“Sub Admin” role system user can access all descendant system users and backup users. When Single Level Access is enabled, system users are restricted to only accessing their own created system users, backup users of system users. Please refer to the chapter [Single Level Access](#) for further details.

Manage Log | Manage User | Manage Group Policy | **Manage System User** Administ

My Profile | Add System User | List System User

System User Settings

Login Name : sub-admin

Role : Sub Admin

Password : [REDACTED]

Name : []

Email : subadmin@yourcompany.com

Host Name : backup.yourcompany.com

SMTP Settings

SMTP Server : New

Host Name	mail2.yourcompany.com	Login Name	Password
------------------	-----------------------	-------------------	-----------------

Report Sender : New

Name	Backup Report	Email	Backup Client
		@yourcompany.com	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

Customize Interface

Upload Customization File : []

Note:

1. Backup user accounts created by "sub admin" system users are only supported by OBM and ACB v6.3.0.0 or above clients.
2. Backup user accounts created by "sub admin" system users running in an RDR setup, are only supported by OBM and ACB v6.7.0.0 or above clients.
3. For sub admin with a different hostname setting than the default system account, all backup accounts created by that sub admin must use the corresponding hostname when logging into the OBM/ACB client or web interface.
4. If your domain name has already mapped with the port name
eg. 192.168.1.123:8080 → backup.backupvault.com
the port number 8080 is not required in the client connection settings.

10.2 SMTP Settings

[SMTP Settings] is available for "Sub Admin" role system user only. When [SMTP Settings] is enabled, user reports and system reports for current "Sub Admin" role system user and the associated backup users will be sent through system user defined SMTP server instead of default SMTP server defined at [Manage System] -> [Server Configuration] panel. The report sender contact information can be separated for OBM and ACB backup clients.

A maximum of one report sender contact information can be defined for each backup client type.

Note:

SMTP server with Transport Layer Security (TLS) is not supported.

10.3 Customize Interface

[Customize Interface] is available for "Sub Admin" role system users only. This option allows "Sub Admin" role system users to customize their OBS web interface, documentation and company logo in email report with their own branding.

The default customization files are compressed into custom.zip file and can be downloaded from the key section (circled in RED). It consists of three folders for different customization formats:

1. "css" for web style sheets.
2. "gif" for OBS web interface logos.
3. "pdf" for documentation.

When updating the contents of the custom.zip file, please be careful not to change the folder structure or the folder names otherwise the customization cannot be applied to OBS. The custom.zip should only contain the following folders:

```
-->css  
-->gif  
-->pdf
```

The language code is enforced on .css and .pdf customization files. Please specify language code and appended it to the end of the file (e.g. jsp_en.css, jsp_da.css, obs-admin-guide_en.pdf, obs-admin-guide_da.pdf), system default settings will be used if language code cannot be found from uploaded files. Previous uploaded customized file can be downloaded again for further modification (circled in BLUE).

OBS reseller customization will be effective once "custom.zip" is uploaded from [Manage System] -> [Manage System User] -> [%system_user%] -> [Upload Customization File].

Manage Log | Manage User | Manage Group Policy | **Manage System User** | Administrator's Guide | Select Language

My Profile | Add System User | List System User | Log

SMTP Settings

SMTP Server : Host Name: 192.168.101.198, Login Name: root, Password: ...

Report Sender : Name: Report Sender, EMail: jason@bml.168.101, Backup Client: [checkbox] [checkbox] [checkbox] [checkbox]

Customize Interface

Download Customization File

Upload Customization File : [Browse...] [Update] [Reset]

Key :

Login Name	Login Name used to logon to web interface.
Role	Role of system user
Password	Password used to logon to web interface.
Name	Contact name of system user shown in the system email report
Email	Contact email of system user. Once this setting is set, the system email report will send to this email address.
Host Name	The host name/IP address that backup users will use to contact this server (e.g. backup.company.com). The backup user login name cannot be duplicated under the same host name.
SMTP Server	List of SMTP servers that will be used to deliver all email reports.
Report Sender	The email address that will be used to deliver backup reports and system reports.
Download Customization File	Previous uploaded customization file is preserved and can be downloaded for further modification.
Upload Customization File	Please download <u>default customization file</u> , modify and upload for interface customization. Customization file "custom.zip" consists of three folders for different customization formats: "css" for web style sheets; "pdf" for documentations and "gif" for logos. Customization will be effective once uploaded. Language code is enforced on "css" and "pdf". Please specify language code and append to end of file (i.e. jsp_en.css and obs-admin-guide_en.pdf), system default setting will be used if language code cannot be found.

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

Key	Description
Login Name	Login Name of current system user.
Role	Role of the current system user.
Password	Password of the current system user used to logon to web interface.
Name	Email report contact name of the current system user.
Email	Email address of the current system user.
Host Name	A resolvable hostname of dedicated for the current system user. (e.g. backup.company.com). Although you can supply an IP address here, Login name cannot be duplicated under the same host name.
SMTP Server	The SMTP server that OBS will use to deliver its email reports to current system user and backup users of current system user.
Report Sender	The name and email address that will be used as a sender for all outgoing mails to backup users of current system user. A maximum of two different report senders can be defined for OBM and ACB users separately.
Upload Customization File	Upload OBS web customization file 'custom.zip' to the system.

--	--

Once the "custom.zip" file has been successfully uploaded to the reseller or "system user" account, the files will be uncompressed and saved in a server folder along with a copy of the "custom.zip" file.

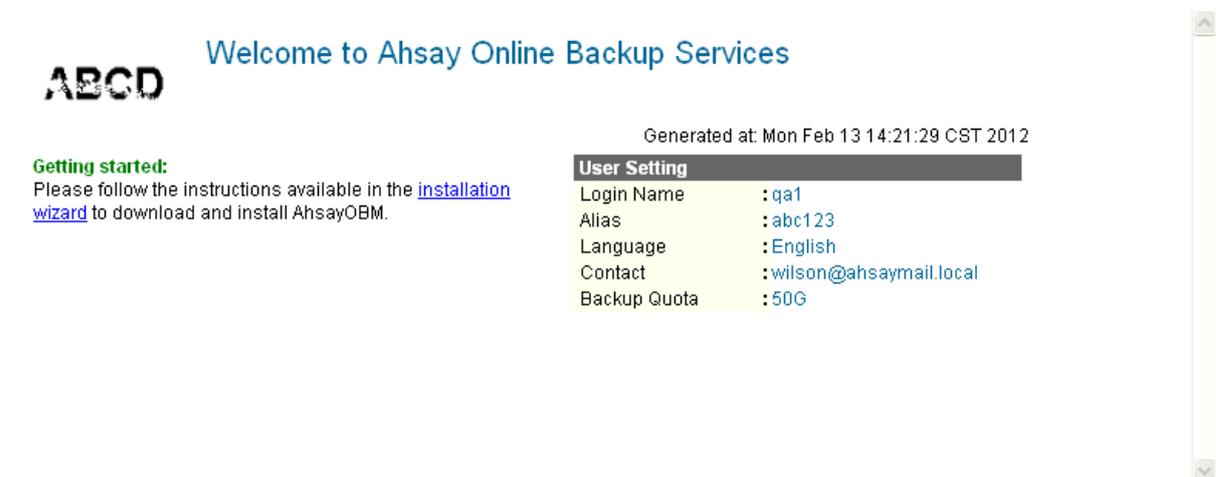
10.3.1 Customize Reseller Reports

In addition to modifying the look and feel of the OBS web console, each reseller can customize "logo" and "home page link" for the following email reports:

1. Backup Job Reminder Report
2. Backup Quota Reminder Report
3. Backup Report
4. Error report
5. Forgotten Password Report
6. Inactive User Report
7. New User Report
8. Offline Backup Reminder Report
9. Setting Change Report
10. Trial User Reminder Report

In order to customize the email reports, please replace the "default.large.gif" found in the "gif" folder of the custom.zip file, with the reseller customized logo and rename it to "default.large.gif"

The following is an example of a customized reseller New User report:



The customized reseller logo will appear on the top left hand corner of each report.

1. The logo is linked to the IP Address/URL of particular resellers OBS web console, when the logo is double clicked the resellers OBS web console will be loaded on the machines default web browser.
2. The "installation wizard" link will load the OBM/ACB installation page using the resellers IP Address/URL.

10.4 Add System User

When you click the [Manage System User] -> [Add System User] link available at the top menu, the [Add System User] panel will be shown. This panel allows "Admin" role user to add an "Admin", "Sub Admin" and "Non Admin" role user to the OBS. A "Sub Admin" role user can also create "Sub Admin" and "Non Admin" role user using this panel. This panel is similar to the [My Profile] page under [Manage User] setting, except that user has the choice to select the [Role] on this page. The SMTP settings will be inherited to its associated users.

10.5 List / Remove System User

When you click the [Manage System User] -> [List System User] link located at the top menu, the [List System User] panel will appear. This panel allows you to list and access all other system users within your authority. You can use the alphabet categories at the top of the user listing to filter the listing to show those users whose login name starting with a certain alphabet. You can also use the [ALL] function to list all system users.

When you click the [Login Name] link available on the system user list, the [System User Settings] panel will appear for system user profile editing. When you click the [Role] link available on the system user list, the system user list will be filtered again by the selected system user. When you click the chain of system user list link under the alphabet categories (circled in RED), the system user list will be filtered again by the selected system user.



No.	Login Name	Role	Name	Email	Host Name	Backup User	
1	Non Admin User2	Non Admin	--	--	--	--	
2	Sub Admin User3	Sub Admin	--	--	192.168.6.129		
3	Sub Admin User4	Sub Admin	--	--	192.168.6.129	--	

Some definitions of the fields related are shown in the following table:

Key	Description
Chain of System User	It is shown by click on the role column in the [Manage System Users] Page.

Login Names	You can filter a list of accessible system users of the selected system user by clicking on the login name link on the chain.
Login Name	Login Name of the system user. Clicking [Login Name] link to access system user profile.
Role	Role of the system user. Select system user by clicking [Role] link to filter accessible system users of selected system user.
Name	Email report contact name of the system user.
Email	Email address of the system user.
Host Name	Host name/IP address assigned to the system user.
Backup User	Display in OBM and ACB icons to indicate system user has one or more backup users. Clicking on the icon to view the list of backup users owned by the selected system user.
Owner	The owner of the corresponding system user.
Remove	To remove a system user from the system, just press the  link next to the system user that you would like to remove. The recycling bin disappears when the system user has created one or more system users or backup users.

For sub admin accounts the  link will only be visible if there are no existing dependencies for the sub admin accounts, i.e. system and backup users created by this account. If you wish remove a sub admin account, you will need to remove all system and backup users accounts by this particular sub admin account.

10.6 Recovering a System User/Non-admin Password

The "Admin Role" user can reset any "Admin" (except the build-in "system" user), "Sub Admin" and "Non Admin" role user's password via the OBS web console [Manage System] -> [Manage System User] -> [List System User] -> [%system_user%] -> [System User Settings] -> [Password], then enter a new password and press the [Update] button.

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | [Manage System User](#)
[Administrator's Guide](#) | [Select Language](#)

[My Profile](#) | [Add System User](#) | [List System User](#) [Logout](#)

System User Settings

ID : 15454
Login Name : level1
Role : Sub Admin
Password :
Name :
Email :
Host Name :

SMTP Settings

SMTP Server :
Report Sender :

Customize Interface

Upload Customization File :

Alternatively, the server administrator can reset any "Admin" (except the build-in "system" user), "Sub Admin" and "Non Admin" role user password using the following procedure:

1. Open the %OBS_HOME%\system\policy\sysUser.xml file in a text editor.
2. Locate the entry for the affect system user or non admin account:

```

<user name="reseller1"
password="6ZoYxCjLONXyYIU2eJIuAw==" role="reseller"
hashed-pwd="Y" contact-name="Reseller 1" contact-
email="reseller@mail.local" host-name="10.10.1.98" uid="13512"
enable-smtp-setting="Y">
<smtp-server host-name="10.1.0.110" login-name=""
password=""/>
<report-sender name="Reseller 1 Manager"
email="reseller@mail.local" obm="Y" acb="Y"/>
<interface-customization enable="Y"/>

```

3. Change the hashed-pwd="Y" to hashed-pwd="N"
4. Change the password="6ZoYxCjLONXyYIU2eJIuAw==" to password="%New_Password%"

The %New_Password% must be in clear text.

5. Restart your OBS service for the changes to take effect.

10.7 Reseller Backup User Account Restrictions

Each "Admin" role user or reseller is allowed to create their own backup user accounts. However, "Admin" role users or resellers on an OBS server which **share the same hostname**, they cannot create backup user accounts with identical user names.

If an "Admin" role user or reseller tries to create a backup user account whose username already exists under another reseller, the account creation will not be permitted.

The example shows a system user "reseller2" creating a backup user account "test2", which has already been created by another system user "reseller1". The following error will be shown on the OBS web console:

Manage Log | Manage User | Manage Group Policy | Manage System User Select Language

Add User | List User | Run Backup | Auto Update Logout

The backup user, test2, already exists in the system user, reseller1.

User Settings	
Login Name	: test2
Password	: <input type="password"/>
Alias	: <input type="text"/>
Timezone	: GMT+08:00 (CST)
Language	: English
Backup Client	: AhsayOBM User
Assigned Adgroups	: <input type="radio"/> Do not show any advertisement to this user <input checked="" type="radio"/> Only the following Adgroups: <input checked="" type="checkbox"/> Default Adgroup
Type	: Paid User <input type="checkbox"/> Suspend paid user at 2011 - 9 - 21 (YYYY-MM-DD)
Email	: reseller@ahsaymail.local
Welcome email	: <input checked="" type="checkbox"/> Send welcome email to new users <input type="checkbox"/> Include encrypted password in welcome email

10.8 Reseller Web SSL Certificate Installation

It is possible to install an individual web SSL certificate for each reseller on OBS. In order to install a web SSL cert for a reseller, each reseller must be assigned an individual IP address.

10.9 Auto Update

Each reseller can manage the Auto Update of their own backup users and those of their own sub resellers from the OBS web console under the [Manage User] -> [Auto Update] page. The backup users accounts displayed include account created by the reseller and sub resellers, by default all backup users are selected for auto update.

In addition to displaying the list of backup users, when Auto Update is enabled on OBS. Both the latest available upgrade versions for ACB and OBM are shown.

[Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | [Manage System User](#) [Select Language](#)
[Add User](#) | [List User](#) | [Run Backup](#) | **Auto Update** [Logout](#)

Search by : Login Name Alias

[[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

level2		6.7.0.0		6.7.0.0	
No.	Login Name (Alias)	Owner	Registration Date	Trial Expiry Date	
1	<input checked="" type="checkbox"/> acbtest1 (abc123)	level2	2011-11-24 (Today)	Never Expire	
2	<input checked="" type="checkbox"/> acbtest2 (abc123)	level2	2011-11-24 (Today)	Never Expire	
3	<input checked="" type="checkbox"/> acbtest3 (abc123)	level2	2011-11-24 (Today)	Never Expire	
4	<input checked="" type="checkbox"/> test1 (abc123)	level2	2011-11-24 (Today)	Never Expire	
5	<input checked="" type="checkbox"/> test2 (abc123)	level2	2011-11-24 (Today)	Never Expire	

If the Auto Update feature is disabled on OBS the [Manage User] -> [Auto Update] page, will display the status "Auto Update is disabled". Both the latest available upgrade versions for ACB and OBM will not be shown.

[Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | [Manage System User](#) [Select Language](#)
[Add User](#) | [List User](#) | [Run Backup](#) | **Auto Update** [Logout](#)

Auto Update is disabled

Search by : Login Name Alias

[[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

level2					
No.	Login Name (Alias)	Owner	Registration Date	Trial Expiry Date	
1	<input checked="" type="checkbox"/> acbtest1 (abc123)	level2	2011-11-24 (Today)	Never Expire	
2	<input checked="" type="checkbox"/> acbtest2 (abc123)	level2	2011-11-24 (Today)	Never Expire	
3	<input checked="" type="checkbox"/> acbtest3 (abc123)	level2	2011-11-24 (Today)	Never Expire	
4	<input checked="" type="checkbox"/> test1 (abc123)	level2	2011-11-24 (Today)	Never Expire	
5	<input checked="" type="checkbox"/> test2 (abc123)	level2	2011-11-24 (Today)	Never Expire	

Note:

If the Auto Update feature is disabled on OBS, the reseller(s) will have to contact the OBS server administrator to enable this feature.

10.10 Change Ownership

Users can be relocated between different system administrator and reseller, or relocate between reseller and reseller on the OBS management console > [Manage System User] > [Change Ownership] page

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** [Logout](#)

Show Matched Hosts Show All Hosts
 Transferor : Administrator (Administrator)
 Transferee :
 Search by : Login Name Alias
[\[A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | Trial | Paid | Suspended | Locked | All \]](#)

No.		Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input type="checkbox"/>	John (user)	third.back-up.com	--	<input type="checkbox"/>
2	<input type="checkbox"/>	Mary (user)	third.back-up.com	--	<input type="checkbox"/>
3	<input type="checkbox"/>	Peter (user)	third.back-up.com	--	<input type="checkbox"/>
4	<input type="checkbox"/>	Tim (user)	third.back-up.com	--	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

10.10.1 Migrating users from administrator to reseller

To transfer users from administrator to reseller, please try the following steps:

1. Select the 'Transferor' from the dropdown list to Administrator

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** [Logout](#)

Show Matched Hosts Show All Hosts
 Transferor : Administrator (Administrator)
 Transferee : -Adam
 Search by : -Albert Alias
[\[A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | Trial | Paid | Suspended | Locked | All \]](#)

No.		Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input type="checkbox"/>	John (user)	third.back-up.com	--	<input type="checkbox"/>
2	<input type="checkbox"/>	Mary (user)	third.back-up.com	--	<input type="checkbox"/>
3	<input type="checkbox"/>	Peter (user)	third.back-up.com	--	<input type="checkbox"/>
4	<input type="checkbox"/>	Tim (user)	third.back-up.com	--	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

2. Select the reseller from the 'Transferee' dropdown list (eg: Bob)

Show Matched Hosts Show All Hosts
 Transferor : Administrator (Administrator)
 Transferee :
 Search by : Name Alias
 [A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | Trial | Paid | Suspended | Locked | All]

No.	<input type="checkbox"/>	Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input type="checkbox"/>	John (user)	third.back-up.com	--	<input type="checkbox"/>
2	<input type="checkbox"/>	Mary (user)	third.back-up.com	--	<input type="checkbox"/>
3	<input type="checkbox"/>	Peter (user)	third.back-up.com	--	<input type="checkbox"/>
4	<input type="checkbox"/>	Tim (user)	third.back-up.com	--	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

3. Select the user to transfer by checking the check box next to the user. (eg: John) and press the [Update] button.

Show Matched Hosts Show All Hosts
 Transferor : Administrator (Administrator)
 Transferee : -Bob (Administrator > Bob)
 Search by : Login Name Alias
 [A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | Trial | Paid | Suspended | Locked | All]

No.	<input type="checkbox"/>	Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input checked="" type="checkbox"/>	John (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>
2	<input type="checkbox"/>	Mary (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>
3	<input type="checkbox"/>	Peter (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>
4	<input type="checkbox"/>	Tim (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

4. User John disappeared because it is no longer under the Administrator's user list. Transfer completed.

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** | [Logout](#)

Show Matched Hosts Show All Hosts

Transferor : (Administrator)

Transferee : (Administrator > Bob)

Search by : Login Name Alias

[\[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

No.		Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input type="checkbox"/>	<input checked="" type="radio"/> Mary (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>
2	<input type="checkbox"/>	<input checked="" type="radio"/> Peter (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>
3	<input type="checkbox"/>	<input checked="" type="radio"/> Tim (user)	third.back-up.com	third.back-up.com	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

Note:

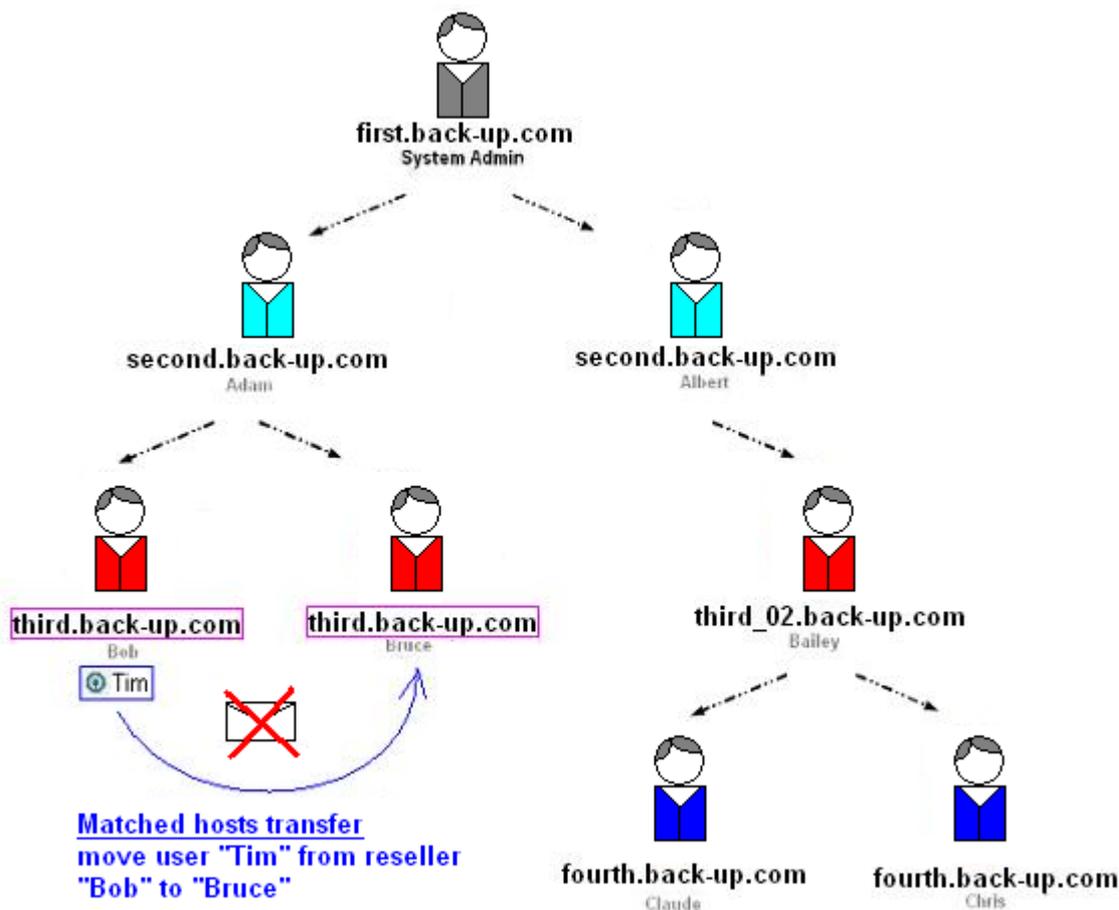
1. Email notification will not be turned on, as the user transfer is within the same host.
2. Backup users can be transferred between the same or different hosts. [Section 9.10.2](#) shows you how the user is transferred within the same host, while [section 9.10.3](#) shows you how the user is transferred between hosts.

10.10.2 Matched host transfer

The above example in [section 9.10.1](#) demonstrates how to transfer a user between matched hosts. They are all in the same host name eg: third.back-up.com . You need to select the radio button 'Show Matched Hosts' and you can transfer users within the same host name.

Show Matched Hosts Show All Hosts

Matched host transfer has less impact to backup user (ie, user does not require to change the connection host). Below is a diagram to illustrate how the user's ownership is transferred under a matched host.



Backup user ownership can be transferred to the same hosts without email notification.

10.10.3 Mismatched host transfer

When a user is required to transfer between a different host name, eg: third.back-up.com to fourth.back-up.com

1. In OBS management console > [Manage System User] > [Change Ownership] page

2. Select the radio button 'Show All Hosts'

Show Matched Hosts Show All Hosts

3. Select the 'Transferor' from the dropdown list to 'Bob'

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** | [Logout](#)

Show Matched Hosts Show All Hosts
 Transferor : **Administrator** (Administrator)
 Transferee : **Administrator**
 Search by : Login Name Alias
[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

No.	🗨	🔒	Login Name (Alias)	Original Backup Server	New Backup Server	Notify 🗨
No users defined in this category (Add User)						

Key :
Notify Notify backup user for changing ownership

In this example, 'Bob' has a few users and wants to transfer user 'Tim' to reseller 'Claude'.

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** | [Logout](#)

Show Matched Hosts Show All Hosts
 Transferor : **-Bob** (Administrator > Bob)
 Transferee : **-Claude**
 Search by : Login Name Alias
[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

No.	🗨	🔒	Login Name (Alias)	Original Backup Server	New Backup Server	Notify 🗨
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	John (user)	third.back-up.com	--	<input type="checkbox"/>
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mary (user)	third.back-up.com	--	<input type="checkbox"/>
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Peter (user)	third.back-up.com	--	<input type="checkbox"/>
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Tim (user)	third.back-up.com	--	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

4. Select the reseller from the 'Transferee' dropdown list to 'Claude'

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** | [Logout](#)

Show Matched Hosts Show All Hosts
 Transferor : (Administrator > Bob)
 Transferee : (Administrator > Claude)
 Search by : Login Name Alias
[\[A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | Trial | Paid | Suspended | Locked | All \]](#)

No.	<input type="checkbox"/>	Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input type="checkbox"/>	John (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
2	<input type="checkbox"/>	Mary (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
3	<input type="checkbox"/>	Peter (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
4	<input type="checkbox"/>	Tim (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

5. Select the user to transfer by checking the check box next to the user. (eg: Tim) , you can see the 'Notify' check box on the right hand side is also checked.

[Manage System](#) | [Manage Log](#) | [Manage User](#) | [Manage Group Policy](#) | **Manage System User** | [Administrator's Guide](#) | [Select Language](#)
[My Profile](#) | [Add System User](#) | [List System User](#) | **Change Ownership** | [Logout](#)

Show Matched Hosts Show All Hosts
 Transferor : (Administrator > Bob)
 Transferee : (Administrator > Claude)
 Search by : Login Name Alias
[\[A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | Trial | Paid | Suspended | Locked | All \]](#)

No.	<input type="checkbox"/>	Login Name (Alias)	Original Backup Server	New Backup Server	Notify
1	<input type="checkbox"/>	John (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
2	<input type="checkbox"/>	Mary (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
3	<input type="checkbox"/>	Peter (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
4	<input checked="" type="checkbox"/>	Tim (user)	third.back-up.com	fourth.back-up.com	<input checked="" type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

6. Click on the [Update] button.
 (A notification email will be sent to backup user 'Tim' to remind using a new connection host. All services will resume normal only after backup user re-login with new connection host.)

7. User 'Tim' disappeared because it is no longer under the Bob's user list.
 Transfer completed.

Show Matched Hosts Show All Hosts

Transferor : (Administrator > Bob)

Transferee : (Administrator > Claude)

Search by : Login Name Alias

[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)

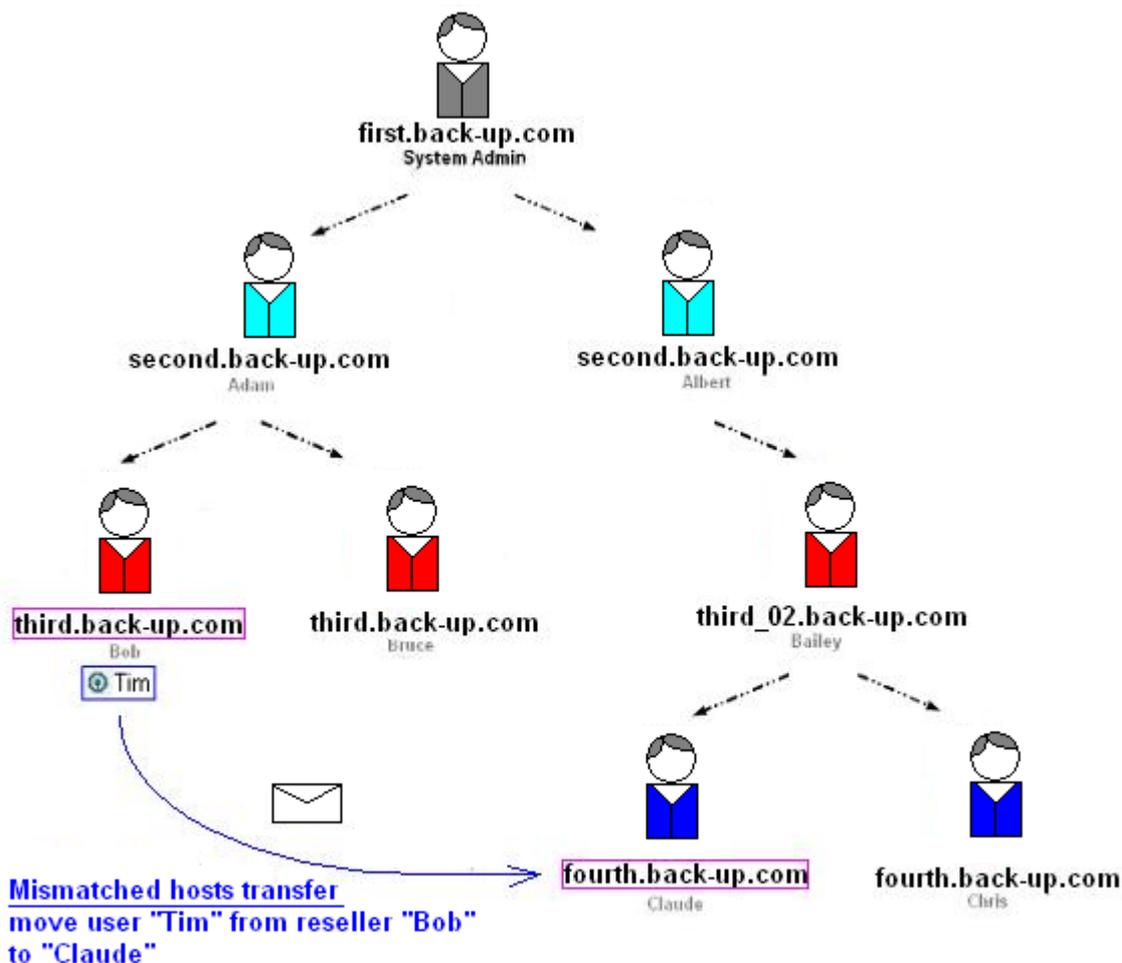
No.	<input type="checkbox"/>	Login Name (Alias)	Original Backup Server	New Backup Server	Notify 
1	<input type="checkbox"/>	 John (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
2	<input type="checkbox"/>	 Mary (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>
3	<input type="checkbox"/>	 Peter (user)	third.back-up.com	fourth.back-up.com	<input type="checkbox"/>

Key :
Notify Notify backup user for changing ownership

Note:

Email notification can be disabled by unchecking the notify check box, user cannot connect to the backup server until the hostname setting is changed on the OBM/ACB on the user machine.

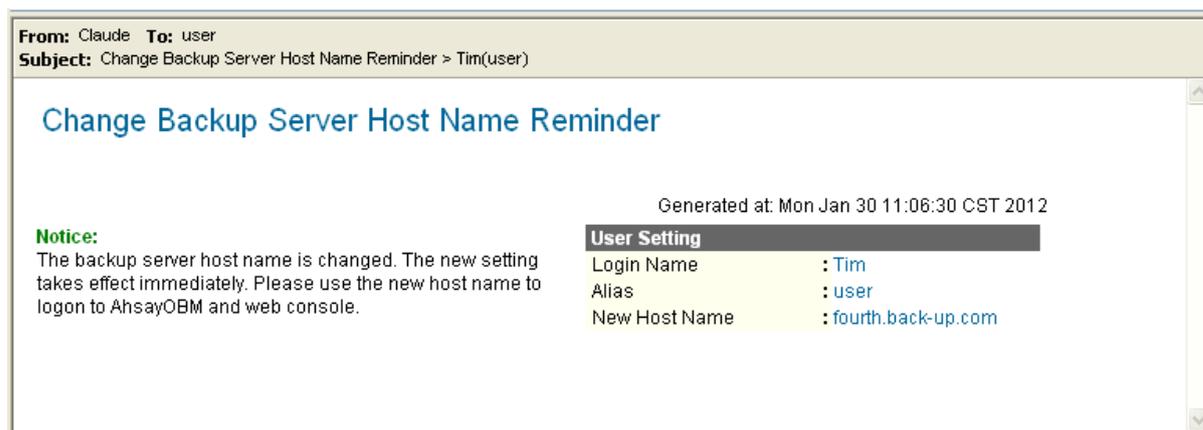
Below is a diagram to illustrate how the user's ownership is transferred under a mismatched host.



Backup user's ownership can be transferred even when hosts are mismatched. The above example shows reseller 'Bob' and 'Claude' are under two different hosts, user 'Tim' will receive email notification and must re-login OBM/ACB to allow the changes effective.

10.10.4 Reminder email

A notification email will be sent to backup user when 'Notify' option is selected. This email reminds backup user to change their current backup connection settings to new connection settings on the OBM/ACB. The reminder email will only be sent when backup account is transferred successfully.



The message "[ChangeOwnership.sendEmail]" will be logged in the system log and user log when the email is sent to "Tim".

140	11:06:30 AM	Tim	Claude	[info][system][changeOwnership] Changed the owner from 'Bob' to 'Claude' of user 'Tim'
141	11:06:30 AM	Tim	Claude	[info][system][ChangeOwnership.sendEmail] The email is sent to Tim (user)

10.10.5 Suggestions and Best Practice

- When the system is running other process simultaneously on the backup user account, such as the following list of operations, change of ownership cannot be performed.
 - Backup (including server initiated backup jobs)
 - Restore
 - Rebuild (including on the fly rebuild, single user rebuild or weekly storage rebuild)
 - Delta merge
 - Delete files or backup set using OBM/ACB or restore applet
 - Undelete
 - Retention policy
 - CRC job
 - Configuration archival
 - Delete backup file using API
 - Delete backup set using API
 - Delete backup data using API
 - Modify backup user using API
- If a user is using CDP, user should disable the CDP before the ownership transfer. After the change ownership process, user must re-login to the OBM/ ACB to enable the CDP.
- Backup user account cannot be transferred if a duplicated account already exists on the transferee (reseller).

4. Backup user cannot be transferred if the user home is locked by external factor eg: file level access to the original user home.
5. If the transferred user has been replicated to the the RPS server, after the change ownership process, the replicated user will be moved to the retention area on the RPS and the whole user folder of the newly ownership changed user will be replicated to the RPS again. This will affect users when the replication is running in UNSYNC and SYNC mode. If it is already in LOGGING mode, only the changes (e.g. folder rename, cloned policies) will be replicated to RPS. Please reserve enough disk space on the RPS.
6. When a user is transferred, all associated user groups and policy groups will be cloned under transferee to preserve the settings and uploaded data.

Due to the current limitation, when another user under the same policy group is transferred, a new policy group will be cloned again on the reseller's policy group and this will end up duplicated policy groups. If you move the users one by one, it could end up with many duplicated policy groups, administrator or resellers are required to manually re-apply users to the dedicated policy group after user transfer and remove all those duplicated policy groups.

10.10.6 Common error messages

Error	Description
Transferee cannot be empty	No Transferee is selected.
The host name of transferee cannot be empty	Transferee has no host name entry in the reseller's setting.
User 'xxx' is running 'Backup' operation. Ownership transfer cannot be proceed until the operation finished.	Backup user cannot be transferred when user is running a backup operation.
User 'xxx' is running some operations. Ownership transfer cannot be proceed until all operations finished.	Backup user cannot be transferred when running multiple operations. Actual reason can refer to the OBS system log.
User 'xxx' ownership transfer cannot be proceeded.	Backup user cannot be transferred when user home is locked by external factor, eg file system is locked.
The backup user, 'xxx', already exists in the system user, yyy	A system administrator cannot transfer a backup user to a reseller because a duplicate user name already exists.

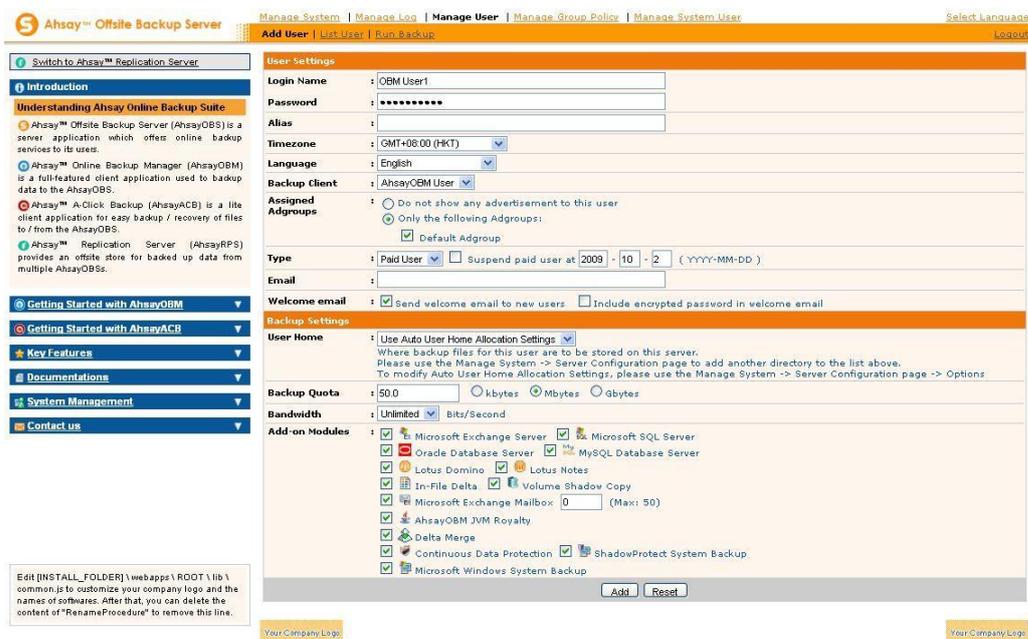
<p>E409 - 12345 The backup user, xxx, has been reserved. Please contact the System Administrator for assistance.</p>	<p>Backup user cannot be transferred because transferee (reseller) is holding a backup client with the same login name.</p> <p>Note: 12345 is the reseller's ID.</p>
<p>Login Name 'xxx' is used</p>	<p>Backup user cannot be transferred because transferee (System Administrator) is holding a backup client with the same login name.</p>
<p>User 'xxx' ownership transfer is in progress.</p>	<p>Backup users can only be transferred at most one transferee at a time.</p>

11 Managing Backup Users

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

11.1 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.



The screenshot shows the 'Add User' form in the Ahsay Offsite Backup Server interface. The form is divided into several sections:

- User Settings:** Includes fields for Login Name (OEM User1), Password (masked), Alias, Timezone (GMT+08:00 (HKT)), Language (English), Backup Client (AhsayOEM User), and Assigned Adgroups (Default Adgroup).
- Backup Settings:** Includes fields for Type (Paid User), Email, Welcome email (Send welcome email to new users), User Home (Use Auto User Home Allocation Settings), Backup Quota (50.0), and Bandwidth (Unlimited).
- Add-on Modules:** A list of software modules to be backed up, including Microsoft Exchange Server, Oracle Database Server, Lotus Domino, In-File Delta, Microsoft Exchange Mailbox, AhsayOBM JVM Royalty, Delta Merge, Continuous Data Protection, Microsoft SQL Server, MySQL Database Server, Lotus Notes, and Volume Shadow Copy.

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.

Assigned Adgroups	Choose whether advertisements are displayed at the bottom of the backup client.
Type	<p>Either [Trial] or [Paid] type. Trial accounts and paid users differ in the following ways:</p> <ol style="list-style-type: none"> 1. Trial users can only have a maximum backup quota of 500MB within the trial period. 2. Trial users subject to automatic removal as defined by the [Free Trial Registration] setting (though automatic removal can be disabled). <p>Other than the differences listed above, both trial and paid users are the same in all other areas.</p>
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	<p>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.</p> <p>If you want to setup your user home directories to a network drive, please do refer to Help Centre for more information.</p>
Backup Quota	Backup Quota of the new account.
Bandwidth	Bandwidth allowed for the new account.
Add-on Modules	<p>Whether to enable any of the add-on modules to the new backup user.</p> <p>The [Microsoft Exchange Mailbox] text field defines the number of exchange mailboxes that is allowed to be backed up under this user account.</p>

11.2 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  link next to the user you would like to remove.



The screenshot shows the 'List User' interface. At the top, there are navigation links: Manage System, Manage Log, Manage User, Manage Group Policy, Manage System User, Add User, List User, Run Backup, and Logout. A search bar is present with options for 'Login Name' and 'Alias'. Below the search bar is a table with the following data:

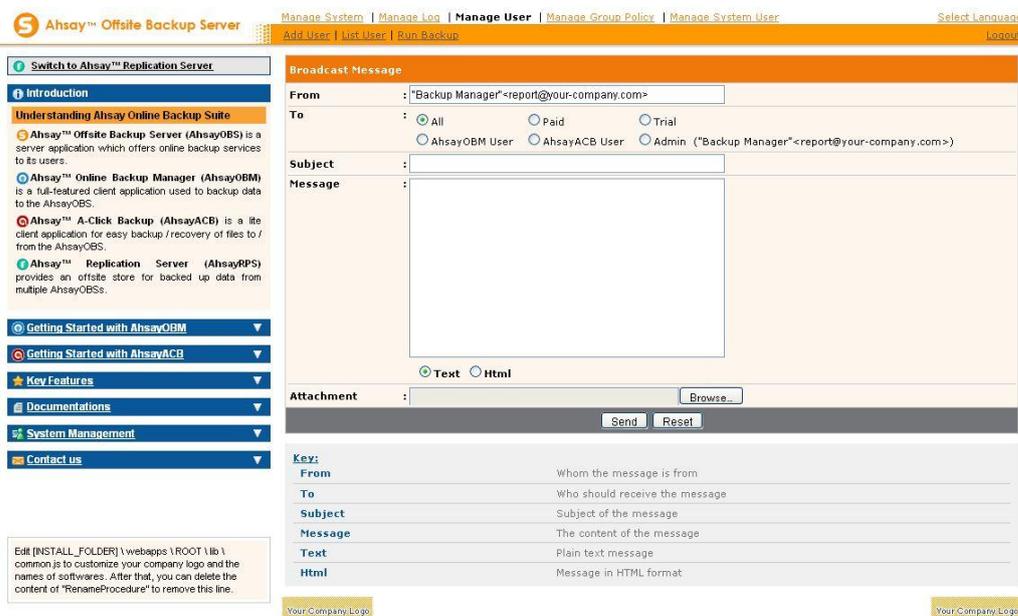
No.	User Add-on Modules	Login Name (Alias)	Registration Date	Trial Expiry Date	Used / Quota (%)	Owner	
1	My [Icons]	OBM User1 ()	2009-10-02 (Today)	Never Expire	8.38M / 50M (16%)	--	
2	My [Icons]	OBM User2 ()	2009-10-02 (Today)	Never Expire	0 / 50M (0%)	Sub Admin User2	
3	My [Icons]	OBM User3 ()	2009-10-02 (Today)	Never Expire	0 / 50M (0%)	Sub Admin User3	

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.
Login Name (Alias)	Login Name of this account. Click the link to see account details. The name in blankets is the alias, and the icon indicates the client type (OBM or ACB).
Registration Date	Date when this account was created.

Trial Expiry Date	The expiry date of trial users. If it expires, the user account will be suspended. Paid users will show "Never Expire" in this field.
Used/Quota (%)	The used/allocated quota (and the quota usage percentage) of this backup user.
Owner	Owner of this backup user.
Remove	Remove this backup user.
Export Users' Usage Statistics to CSV	Export all users' usage statistics to a .csv file.
Broadcast Message	Use this option if you want to broadcast messages to backup users.

11.3 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.

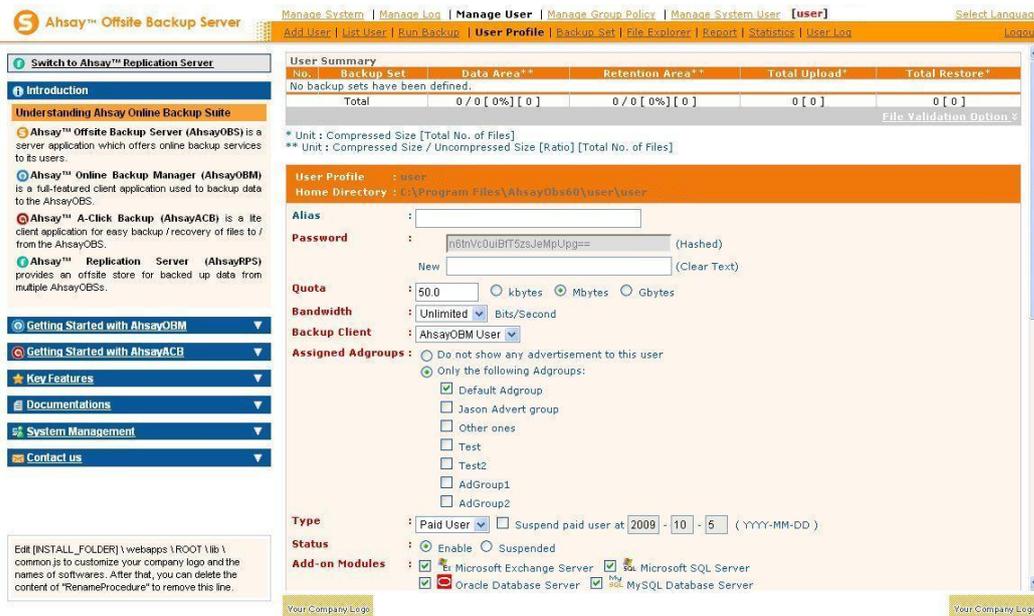


Key	Description
From	Sender of this message
To	Broadcast message to the following users types:

	<ul style="list-style-type: none"> • All – all backup users • Paid – backup users of [Paid] user type • Trial – backup users of [Trial] user type • OBM User - backup users of OBM client type • ACB User – backup users of ACB client type • Admin – backup administrator, i.e. email address defined on the [Manage System] -> [System Configuration] -> [Administrator Contact] list (useful if you want to test the broadcast feature before sending the message out to all users).
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.

11.4 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] for this particular user. You can use this panel to update the profile of this user.



User Summary

Now Backup Set	Data Area**	Retention Area**	Total Upload*	Total Restore*
No backup sets have been defined.				
Total	0 / 0 [0%] [0]	0 / 0 [0%] [0]	0 [0]	0 [0]

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

User Profile : user
Home Directory : C:\Program Files\AhsayOBS60\user\user

Alias :

Password : (Hashed)
New (Clear Text)

Quota : 50.0 kbytes Mbytes Gbytes

Bandwidth : Unlimited Bits/Second

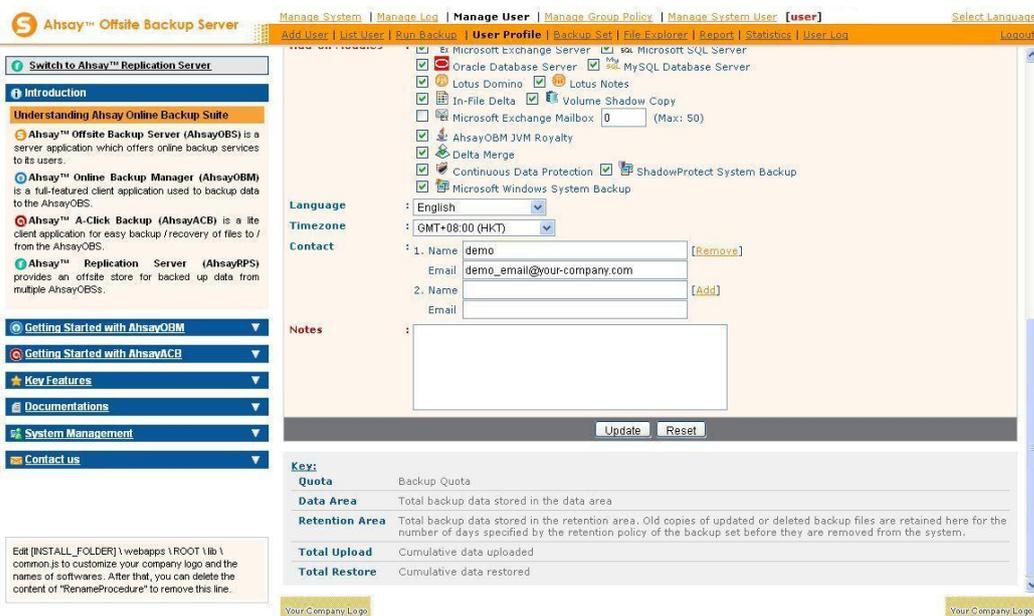
Backup Client : AhsayOBM User

Assigned Adgroups : Do not show any advertisement to this user
 Only the following Adgroups:
 Default Adgroup
 Jason Advert group
 Other ones
 Test
 Test2
 AdGroup1
 AdGroup2

Type : Paid User Suspend paid user at 2009 - 10 - 5 (YYYY-MM-DD)

Status : Enable Suspended

Add-on Modules : Microsoft Exchange Server Microsoft SQL Server
 Oracle Database Server MySQL Database Server



Add-on Modules : Microsoft Exchange Server Microsoft SQL Server
 Oracle Database Server MySQL Database Server
 Lotus Domino Lotus Notes
 In-File Delta Volume Shadow Copy
 Microsoft Exchange Mailbox 0 (Max: 50)
 AhsayOBM JVM Royalty
 Delta Merge
 Continuous Data Protection ShadowProtect System Backup
 Microsoft Windows System Backup

Language : English

Timezone : GMT+08:00 (HKT)

Contact : 1. Name demo [Remove]
Email demo_email@your-company.com
2. Name [Add]
Email [Add]

Notes :

[Update] [Reset]

Key:
Quota Backup Quota
Data Area Total backup data stored in the data area
Retention Area Total backup data stored in the retention area. Old copies of updated or deleted backup files are retained here for the number of days specified by the retention policy of the backup set before they are removed from the system.
Total Upload Cumulative data uploaded
Total Restore Cumulative data restored

This panel is no different to the [User Profile] panel that users will see when they logon to the user areas 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. When a rebuild user jobs is started, OBS will check if there is an active job running on the backupset before a rebuild is performed on the backupsets. If a backup job is active, the rebuild user storage job will skip rebuilding the active backupset, this will be recorded in the OBS system log.

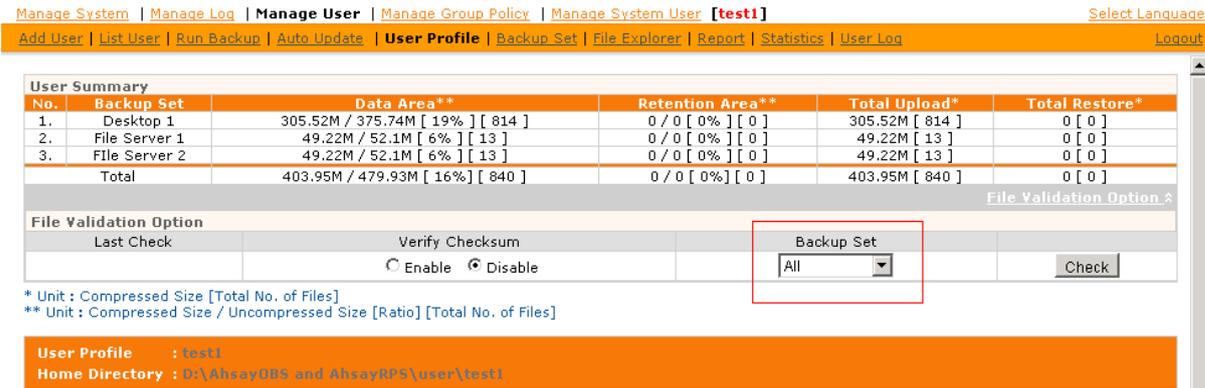
2249	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1300766064953' Job='2011-03-22-21-00-01'
2250	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1300766064953' Job='Current'
2251	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildIndexDir] Rebuilding User='test1' BSet='1300766064953' Job='Current' Directory='/data/user/test1/files/1300766064953/Current/root'
2252	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1300785135934' Job='2011-03-22-17-13-28'
2253	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1300785135934' Job='2011-03-22-17-13-55'
2254	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1300785135934' Job='Current'
2255	09:47:18 PM	test1	--	[info][system][BackupSetBFS.rebuildIndexDir] Rebuilding User='test1' BSet='1300785135934' Job='Current' Directory='/data/user/test1/files/1300785135934/Current/root'
2256	09:47:45 PM	test1	--	[info][system][BfsManager.rebuildUserBFS] The rebuild is skipped on the running backup set ESXi4(1300930261358) of user test1
2257	09:47:45 PM	test1	--	[info][system]Thread-40 [SingleUserRebuild] Finished single user rebuild. User='test1' Owner="" DataSize(compressed)=3.02G DataSize=14.09G DataFileNo=60 RetentionSize(compressed)=3.73M RetentionSize=24.12M RetentionFileNo=65

The information message "[info][system][BfsManager.rebuildUserBFS] The rebuild is skipped on the running backup set ESXi4(1300930261358) of user test1" is recorded when a backupset is skipped.

From OBS v6.7.0.0 onwards, for the single user rebuild feature backup users or backup server administrators will have the option of selecting either:

- i. Rebuilding all backup sets under the backup user account or
- ii. Rebuilding a single backup set under the backup user account

By default the single user rebuild will rebuild all backup sets under a backup user account.



Manage System | Manage Log | **Manage User** | Manage Group Policy | Manage System User [test1] Select Language

Add User | List User | Run Backup | Auto Update | **User Profile** | Backup Set | File Explorer | Report | Statistics | User Log Logout

No.	Backup Set	Data Area**	Retention Area**	Total Upload*	Total Restore*
1.	Desktop 1	305.52M / 375.74M [19%] [814]	0 / 0 [0%] [0]	305.52M [814]	0 [0]
2.	File Server 1	49.22M / 52.1M [6%] [13]	0 / 0 [0%] [0]	49.22M [13]	0 [0]
3.	File Server 2	49.22M / 52.1M [6%] [13]	0 / 0 [0%] [0]	49.22M [13]	0 [0]
Total		403.95M / 479.93M [16%] [840]	0 / 0 [0%] [0]	403.95M [840]	0 [0]

File Validation Option

Last Check: Verify Checksum Enable Disable

Backup Set: All

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

User Profile : test1
 Home Directory : D:\AhsayOBS and AhsayRPS\User\test1

To perform a single user rebuild of a specific backup set, click on the "Backup Set" combo box and select the desired backup set.

Manage System | Manage Log | Manage User | Manage Group Policy | Manage System User [test1] [Select Language](#)

Add User | List User | Run Backup | Auto Update | User Profile | Backup Set | File Explorer | Report | Statistics | User Log [Logout](#)

User Summary					
No.	Backup Set	Data Area**	Retention Area**	Total Upload*	Total Restore*
1.	Desktop 1	305.52M / 375.74M [19%] [814]	0 / 0 [0%] [0]	305.52M [814]	0 [0]
2.	File Server 1	49.22M / 52.1M [6%] [13]	0 / 0 [0%] [0]	49.22M [13]	0 [0]
3.	File Server 2	49.22M / 52.1M [6%] [13]	0 / 0 [0%] [0]	49.22M [13]	0 [0]
Total		403.95M / 479.93M [16%] [840]	0 / 0 [0%] [0]	403.95M [840]	0 [0]

File Validation Option ^

File Validation Option			
Last Check	Verify Checksum	Backup Set	
	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	All	<input type="button" value="Check"/>

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

User Profile : test1
Home Directory : D:\AhsayOBS and AhsayRPS\user\test1

When a rebuild of a single backup set is completed, the following message will be shown in the OBS system log:

```
[info][system]Thread-17Starting single user rebuild
[info][system]Thread-17 [SingleUserRebuild] User='test1' Home='D:\AhsayOBS and AhsayRPS\user\test1'
[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1315378631421' Job='2011-09-07-14-58-16'
[info][system][BackupSetBFS.rebuildBFS] Rebuilding User='test1' BSet='1315378631421' Job='Current'
[info][system][BackupSetBFS.rebuildIndexDir] Rebuilding User='test1' BSet='1315378631421' Job='Current' Directory='D:\AhsayOBS and AhsayRPS\user\test1\files\1315378631421\Current\0x04\0xac\0x6b\0xd8'
[info][system]Thread-17 [SingleBackupSetRebuild] Finished single backup set rebuild. User='test1' Owner="" Backup Set='Desktop 1 (1315378631421)' DataSize(compressed)=305.51M DataSize=375.74M DataFileNo=809 RetentionSize(compressed)=0 RetentionSize=0 RetentionFileNo=0
```

The system log entries will specify that OBS has “Finished single backup set rebuild.”

Note:

- i. **When a rebuild user storage is run on a user account with active backupsets, the calculations for the storages statistics may not reflect the actual storage used as all active backupsets are skipped.**
- ii. **For issues relating to incorrect storage statistics, please make sure the rebuild user storage job is run when no backup jobs are active.**
- iii. **If all backup sets under a user accounts need to be rebuilt, it is recommended that a single rebuild user storage job is started at least 45 minutes after the completion of the last backup job.**
- iv. **If a single user rebuild is run for a single backup set, the “Last Check” date and time will also be updated.**

You can reset a user password by entering a new password in [User Profile] - > [Password] -> [New] entry and press the [Update] button. Even though the user password has been updated, both old and new passwords will be temporarily valid, until the user connects to OBS via OBM/ACB with the new password. This is because a copy of the user’s old password is still saved on the client machine. It’s required by OBM/ACB scheduler service to connect to OBS in order to run scheduled backups in the interim period.

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 of 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/second.

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

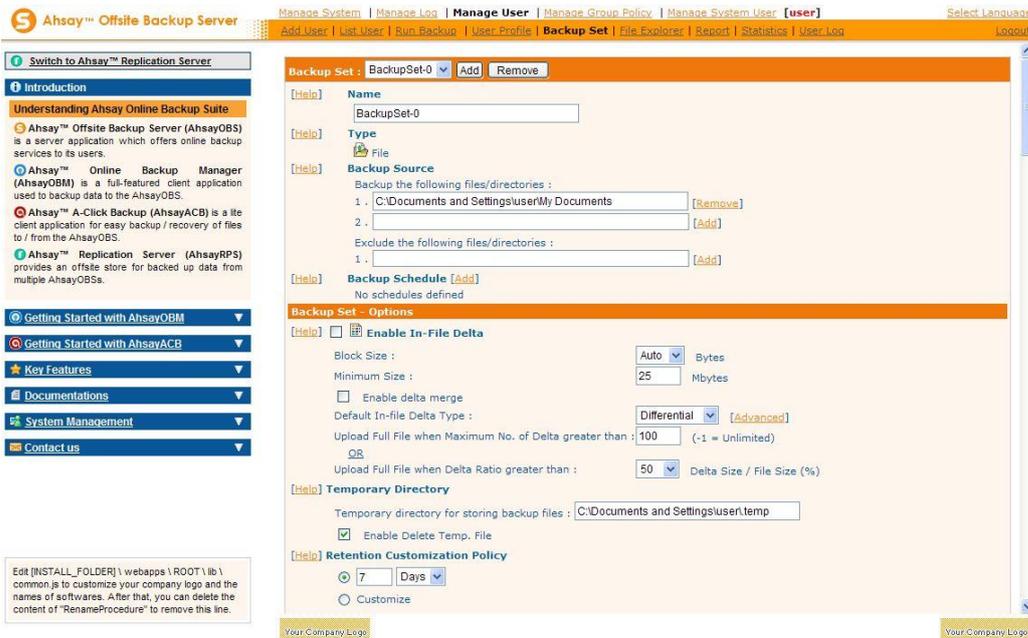
Any updates made to the user profile will trigger:

- i.** A "Settings Change Report" will be sent to the user (if the routine job is enabled).
- ii.** A log entry of the change will be recorded in the [Manage System] -> [Manage Log] -> [System Log]
- iii.** A log entry of the change will be recorded in the [Manage System] -> [Manage User] -> [%USERNAME%] -> [User Log]

11.5 Managing Backup Set

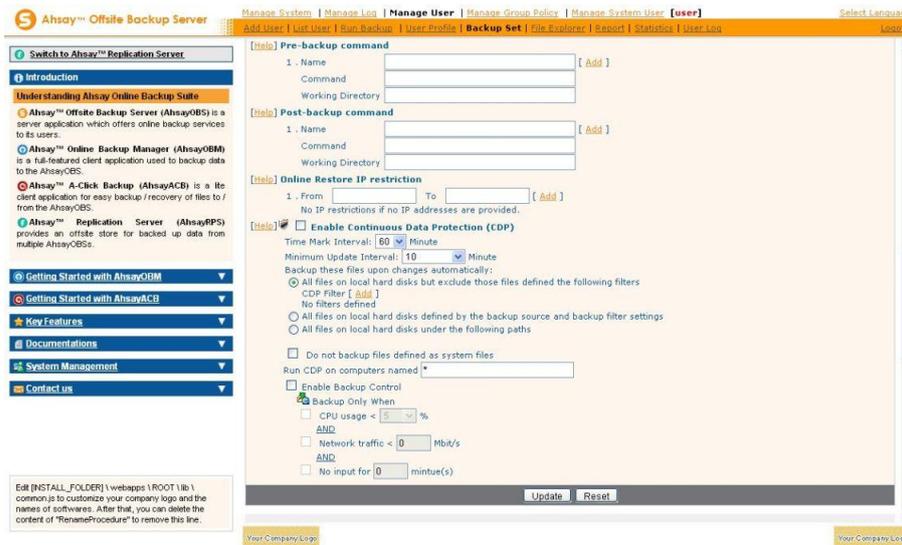
After pressing on the link of the selected user on the [Manage User] -> [List User] panel, a [Backup Set] link is now available in the extended user menu. You can review the backup sets setting of this particular user by clicking the [Backup Set] link.

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



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 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).



Global Backup Set Values

The following values are only valid for Group Policy enforcement and default backupsets only, do not use these values in normal backupsets.

Value :	
<code>\${lotus.notesini}</code>	Notes INI path
<code>\${mac.desktop}</code>	Desktop directory in Mac OS
<code>\${mac.documents}</code>	Documents directory in Mac OS
<code>\${mac.movies}</code>	Movies directory in Mac OS
<code>\${mac.music}</code>	Music directory in Mac OS
<code>\${mac.pictures}</code>	Pictures directory in Mac OS
<code>\${mysql.mysqlidump}</code>	MySQL dump path
<code>\${sys.KEY}</code>	KEY is the name of the System Property e.g. <code>\${sys.user.home}</code> is the home directory of the user
<code>\${win.desktop}</code>	Desktop directory in Windows
<code>\${win.favorites}</code>	Favorites directory in Windows
<code>\${win.mail}</code>	User data of Outlook Express or Windows Mail (Windows Vista / Windows 7 / Windows Server 2008 / Windows Server 2008 R2) in Windows
<code>\${win.mydocuments}</code>	My Documents directory in Windows
<code>\${win.outlook}</code>	User data of Outlook in Windows
<code>\${winenv.KEY}</code>	KEY is the name of the Windows Environment Variable e.g. <code>\${winenv.SYSTEMDRIVE}</code> is the drive containing the Windows root directory (C: by default)
<code>\${winreg.KEY}</code>	KEY is the name of the Windows Registry Key e.g. <code>\${winreg.HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\ShadowProtectSvc\ImagePath}</code> is the value of ShadowProtect installation path

11.6 Initiating Backup from OBS

While end users can initiate backup jobs from their computers by using manual or scheduled backup jobs from OBM or ACB. The OBS server administrator can initiate a backup job from OBS web console. In order to initiate a backup job go to the [Manage User] -> [Run Backup], and you will have something similar in the following screenshot:



The screenshot shows the Ahsay Offsite Backup Server web console. The main content area displays a table for the user 'Sub Admin User2' with the following data:

No.	Login Name (Alias) -> Backup Set	Backup is pending	Backup Type	Used / Quota (%)	Last Backup	Owner
1	ACB User2 (↓)	No		0 / 50M (0%)	No backup has been run	Sub Admin User2
2	OBM User2 (↓)			0 / 50M (0%)		Sub Admin User2

Below the table are two buttons: 'Run Backup' and 'Cancel Backup'. The left sidebar contains navigation links such as 'Introduction', 'Understanding Ahsay Online Backup Suite', 'Getting Started with AhsayOBM', 'Getting Started with AhsayACB', 'Key Features', 'Documentations', 'System Management', and 'Contact us'. At the bottom, there are two placeholder boxes for 'Your Company Logo'.

Some definitions of the fields related are shown in the following table:

Key	Description
No.	Number count of user.
Login Name (Alias) -> Backup Set	The login name of the user with the alias bracketed behind. If there is any backup set, the name of the backup set will be shown under the user login name.
Backup pending is	"Yes" if the backup job is pending after pressing [Run Backup]; Otherwise "No".
Backup Type	Type of backup. For files only backup, the backup type will be empty.
Used / Quota (%)	The used data size of the user on the server and the total quota of data size that the user can use. The percentage of used size over quota is bracketed behind.
Owner	Owner of this backup user.
Last Backup	The creation time of the latest backup.

In order to use this feature:

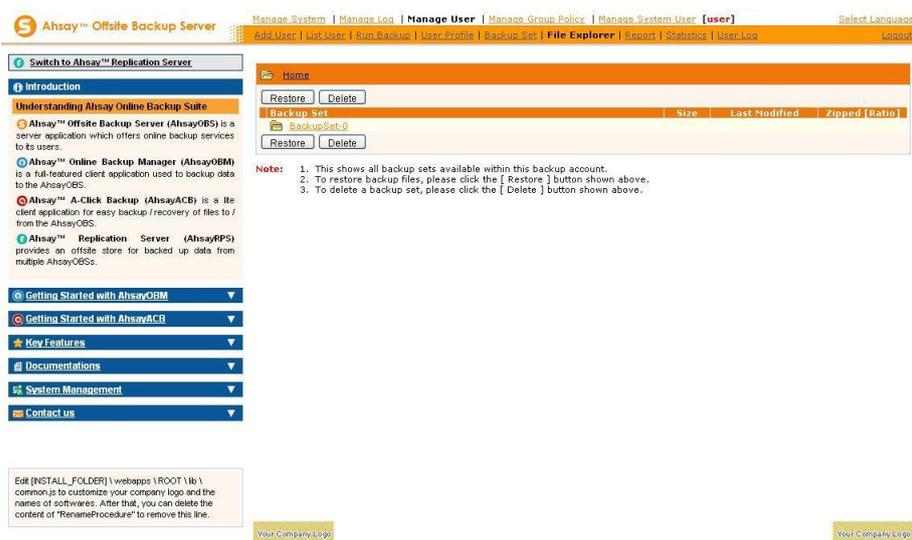
- The OBM/ACB scheduler service must be running on the client machine and can connect to the OBS server.
- The "Run scheduled backup on computers named" field on the backupset must be filled in with the correct computer name of the client machine.

To initiate a backup job from OBS, check the box next to each of the required backupsets. Then press the [Run Backup] button at the bottom of the page. The status of [Backup is pending] of the chosen backup sets will be changed to "Yes", and after a short time OBM/ ACB will start backing up the data sources from the specific machine.

When the backup is finished, the status of [Backup is pending] will become "No", and the [Last backup] will be update with date and time of the last backup job.

11.7 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 users' backup files.



11.8 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 [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.



Backup Job Statistics

New Files*	59 [8.11M bytes]
Updated Files*	0 [0 bytes]
Updated Access Permissions*	0 [0 bytes]
Deleted Files*	0 [0 bytes]
Moved Files*	0 [0 bytes]

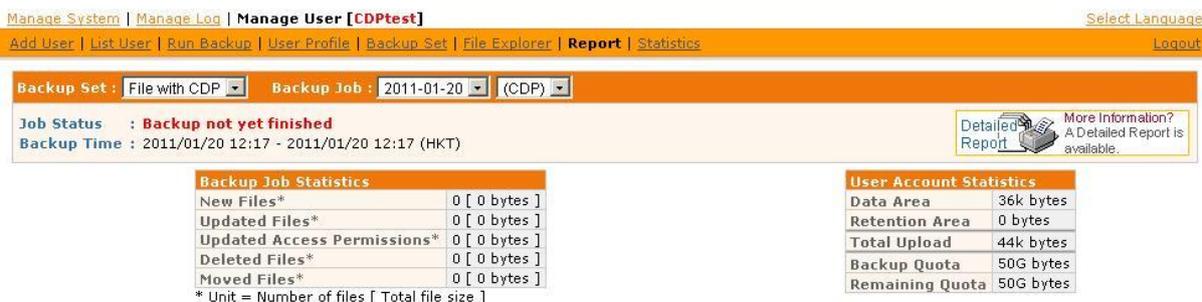
* Unit = Number of files [Total file size]

User Account Statistics

Data Area**	8.11M bytes / 36.74M bytes
Retention Area**	0 bytes / 0 bytes
Total Upload	8.11M bytes
Backup Quota	50M bytes
Remaining Quota	41.89M bytes

** Unit = Compressed Size / Uncompressed Size

To review CDP backup reports instead of selecting the backup time, select "(CDP)", as CDP backup jobs are constantly active the job status prior to the daily cut off at 12:00 AM is "Backup not yet finished"



Backup Job Statistics

New Files*	0 [0 bytes]
Updated Files*	0 [0 bytes]
Updated Access Permissions*	0 [0 bytes]
Deleted Files*	0 [0 bytes]
Moved Files*	0 [0 bytes]

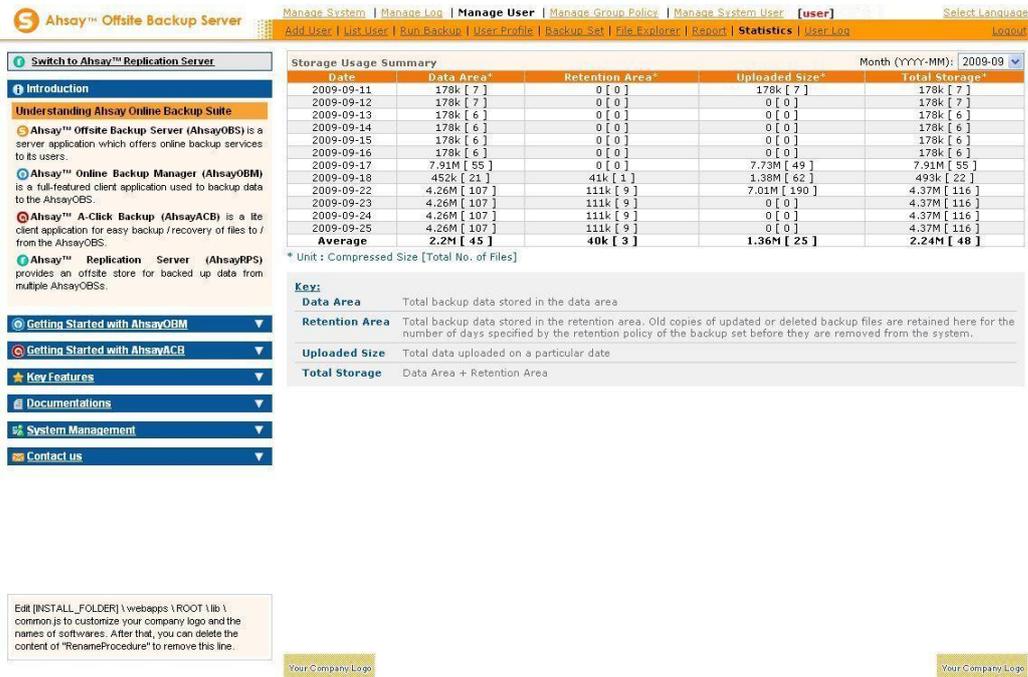
* Unit = Number of files [Total file size]

User Account Statistics

Data Area	36k bytes
Retention Area	0 bytes
Total Upload	44k bytes
Backup Quota	50G bytes
Remaining Quota	50G bytes

11.9 Reviewing User Storage Statistics

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 as the [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 user' storage statistics.



Storage Usage Summary Month (YYYY-MM): 2009-09

Date	Data Area*	Retention Area*	Uploaded Size*	Total Storage*
2009-09-11	178k [7]	0 [0]	178k [7]	178k [7]
2009-09-12	178k [7]	0 [0]	0 [0]	178k [7]
2009-09-13	178k [6]	0 [0]	0 [0]	178k [6]
2009-09-14	178k [6]	0 [0]	0 [0]	178k [6]
2009-09-15	178k [6]	0 [0]	0 [0]	178k [6]
2009-09-16	178k [6]	0 [0]	0 [0]	178k [6]
2009-09-17	7.91M [55]	0 [0]	7.73M [49]	7.91M [55]
2009-09-18	452k [21]	41k [1]	1.38M [62]	493k [22]
2009-09-22	4.26M [107]	111k [9]	7.01M [190]	4.37M [116]
2009-09-23	4.26M [107]	111k [9]	0 [0]	4.37M [116]
2009-09-24	4.26M [107]	111k [9]	0 [0]	4.37M [116]
2009-09-25	4.26M [107]	111k [9]	0 [0]	4.37M [116]
Average	2.2M [45]	40k [3]	1.36M [25]	2.24M [48]

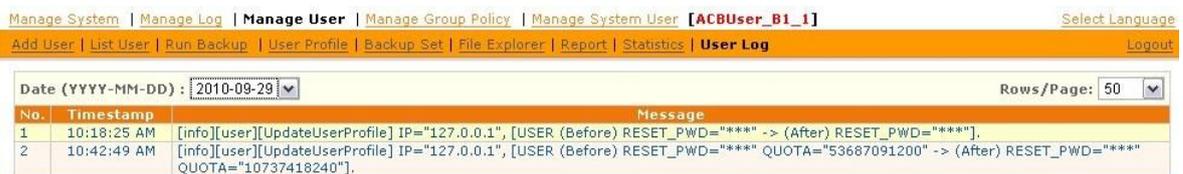
* Unit : Compressed Size [Total No. of Files]

Key:
Data Area Total backup data stored in the data area
Retention Area Total backup data stored in the retention area. Old copies of updated or deleted backup files are retained here for the number of days specified by the retention policy of the backup set before they are removed from the system.
Uploaded Size Total data uploaded on a particular date
Total Storage Data Area + Retention Area

User statistics are calculated on a daily basis by the "Usage Report" system job. If the "Usage Report" is disabled or if your OBS service is offline when the "Usage Report" system job is due to run, no user statistics will be calculated for those days. OBS cannot calculate user statistics for past days which have been missed.

11.10 User Log

You can click the [Statistics] link available at the extended [Manage User] menu to invoke the [User Log] panel. You can use this panel to review the user specific activities on the OBS server.



Date (YYYY-MM-DD) : 2010-09-29 Rows/Page: 50

No.	Timestamp	Message
1	10:18:25 AM	[info][user][UpdateUserProfile] IP="127.0.0.1", [USER (Before) RESET_PWD="****" -> (After) RESET_PWD="****"].
2	10:42:49 AM	[info][user][UpdateUserProfile] IP="127.0.0.1", [USER (Before) RESET_PWD="****" QUOTA="53687091200" -> (After) RESET_PWD="****" QUOTA="10737418240"].

A copy of user related activities can also be seen in the OBS system log, under [Manage System] -> [Manage Log] -> [System Log].

12 Group Policy Management

This chapter describes how you can use the [Manager Group Policy] menu to manage your user groups on OBS.

Term	Descriptions
Policy Control	Areas that are affected by group policy
Policy Group	A group of preset policy control objects
User Group	A group of users.

12.1 About Group Policy

The Group Policy feature is designed to simplify administration and to reduce the effort required for managing backup users, e.g. security settings and backup set settings. It allows backup server administrator a greater degree of flexibility in tailoring features and services to target specific customer segments.

User Groups

When Group Policy is implemented on OBS, the backup user accounts will be consolidated into common user groups. Each user group will have its own set of policy groups which govern behaviour of the backup clients. The types of features that can be configured from a policy group are restricting or hiding certain functions or features on OBM/ACB user interface or the OBS web console.

For example, a backup service provider wishes to offer customers a cut rate service plan, i.e. "OBM Basic Plan", which consists of fixed quota limit and where customer cannot change backupset settings. The service provider will create a user group on OBS called "OBM Basic Plan". To customize the features for each group, a policy group will need to be created called "OBM Basic Plan Policy", which will contain a group share quota setting and a Policy Control Setting for OBM to disable access to some OBM controls.

[OBM Basic Plan Policy] → [OBM Basic Plan]

Once the policy group "OBM Basic Plan Policy" is assigned to user group "OBM Basic Plan", it will be effective immediately. Any OBM users that are assigned to the "OBM Basic Plan" group will be governed by the "OBM Basic Plan Policy" settings.

Policy Controls

The policy controls which can be customized for each user group are:

1. Shared Quota Settings

A maximum quota or "Shared Size" can be specified for each user group via a policy group setting, each backup user assigned to the user group will automatically be allocated a portion of this quota, according to the "Maximum percentage of shared size for each user" value.

2. Backupset Configuration

- Define a default backupset for OBM/ACB users who belong to the group.
- Define an enforcement backupset for OBM/ACB users who belong to the group. When an Enforcement backupset is configured for a backupset type, it will overwrite all settings on any pre-existing backupset types.

3. Policy Control Setting

The Policy Control Setting allows the backup server administrator to customize the user interface for OBM/ACB and OBS user web console interface according to each user group.

4. Global Filter Setting

This setting defines a global file filter for OBM and ACB backupsets which belong to the user group. The backupsets which can be configured with global filtering on OBM are restricted to File, CDP, Lotus Domino, and Lotus Notes backupsets. When a global filter is applied to a user group, any the pre-existing backupset filters will be overwritten by the global filter.

12.2 Best Practices for using Group Policy

In order to avoid any confusion and for better OBS server administration, it is recommended to keep the group policy design as simple as possible:

1. One-to-One relationship between policy and user group. Each policy group should only be applied to one user group.
2. One-to-One relationship between user account and user group. Each user should only belong to one user group.
3. Active user accounts should not be transferred between user groups.
4. New user groups and policies should be thoroughly tested before they are implemented on a production server.
5. A separate policy should be created for each type of policy type.

E.g. A policy name "OBS – Read-only Main Menu" for policies that restrict the users to have Read-Only access on main menu.

E.g. a user group named "OBS – System User Read-Only Main Menu" for a user group with "OBS – Read-only Main Menu" policy assigned.

6. The naming conventions for user groups and policies should be meaningful and easily distinguishable. Example: For a new user group called "ACB Premium" group which has some restrictions to the ACB UI interface control and features. The associated policy group would be called "ACB_Premium_UI".
7. Once a user group is operational, i.e. user accounts have been assigned and backups are running according to the policy settings, there should be no further policy changes.
8. For user groups defined with shared quota policy, please make sure the sum of the individual user backup quota does not exceed the shared size. For example, a group with a shared quota policy defined as, shared size of 500GB and maximum percentage of shared size for each user of 25% (125GB). Should only have a maximum of four backup users assigned to it (125GB x 4 users = 500GB).
9. Extreme caution must be exercised when assigning policies to user groups. As a policy will be effective and enforced as soon as it is assigned to a group, any errors in policy assignments could result in unforeseen problems for all members of the affected user group.

10. Any backup user accounts which are using v5.5 OBM/ACB clients on OBS v6 should not belong to any user groups. As they are not compatible with group policy features.

12.3 Group Policy Limitations and Restrictions

1. Each user group is restricted to only one shared quota policy.
2. Each user group is restricted to only one set of Default and Enforcement backupsets for each backupset type.
3. Each backup user account is permitted to have one Default Backup Set and one Enforcement Backup Set for each available Backup Set Type.
4. Only one Global Filter is allowed for each backupset type.
5. A backup user cannot be a member of more than one user group with shared quota policy enabled.
6. Only OBM and ACB v6 or above clients support group policy.

12.3.1 List Policy Control

There are three main categories for policy control objects OBS, OBM, and ACB. Each control object allows the backup server administrator to configure the controls or features which can be accessible or visible to the end user.

All policy control objects can be found in the [Manage Group Policy] -> [Policy Control] Page.



No.	Policy Control	Permissions
1	Manage System Menu	R
2	Manage Log Menu	R
3	Manage User Menu	R
4	Manage Group Policy Menu	R
5	Manage System User Menu	R

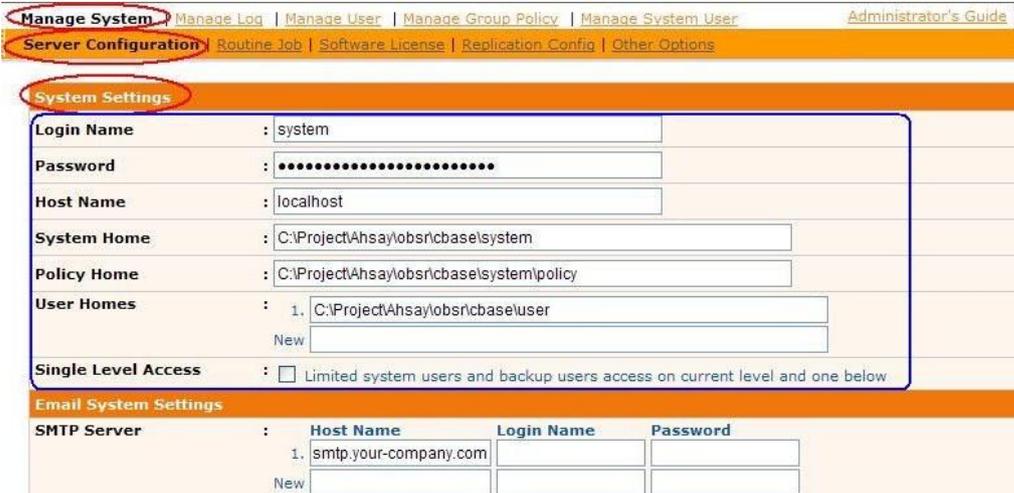
OBS

A group of policy control objects used to control the behaviour of OBS. The control area defined on OBS policy control group is in the format of:

[Menu Name] – [Page Name] – [Section Name] – [Section Detail] (if any)

E.g. The name of the policy to control the System Settings section on Server Configuration page under the [Manage System] menu is:

“Manage System – Server Configuration – System Settings”



The screenshot shows a web interface with a navigation menu at the top. The menu items are: Manage System, Manage Log, Manage User, Manage Group Policy, Manage System User, and Administrator's Guide. The 'Manage System' item is circled in red. Below the menu is a sub-menu for 'Server Configuration' with items: Routine Job, Software License, Replication Config, and Other Options. The 'Server Configuration' item is also circled in red. Underneath is the 'System Settings' section, which is circled in red and highlighted with a blue border. This section contains the following fields:

- Login Name: system
- Password: [masked]
- Host Name: localhost
- System Home: C:\ProjectAhsay\obsr\cbaselsystem
- Policy Home: C:\ProjectAhsay\obsr\cbaselsystem\policy
- User Homes: 1. C:\ProjectAhsay\obsr\cbaseluser
- Single Level Access: Limited system users and backup users access on current level and one below

Below the System Settings section is the 'Email System Settings' section, which contains an SMTP Server configuration table:

SMTP Server	Host Name	Login Name	Password
1.	smtp.your-company.com		
New			

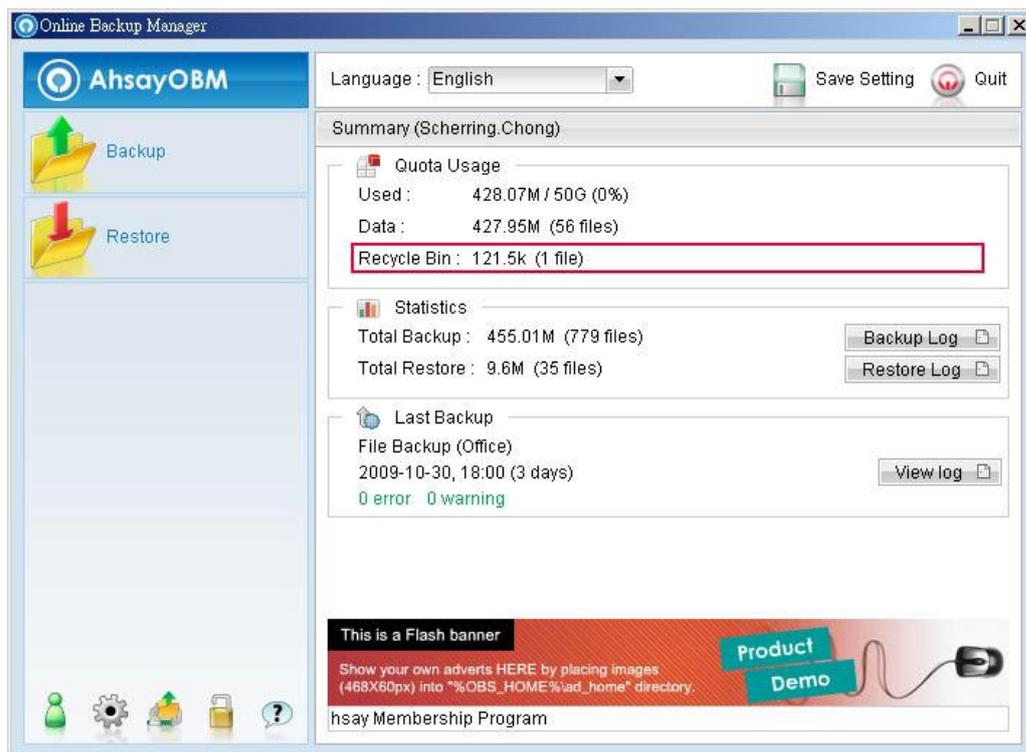
OBM

A group of policy control objects used to control the behaviour of OBM. The control area defined on OBM policy control group is in the format of:

[Section Name] – [Section Details] (if any)

E.g. To restrict access to the Recycle Bin under Quota Usage section on the Main Frame, you should edit the settings in this policy:

“Quota Usage – Recycle Bin”



ACB

A group of policy control objects used to control the behaviour of ACB. The control area defined on ACB policy control group is in the format of:

[Section Name] – [Section Details] (if any)

E.g. To restrict access to the Recycle Bin under Quota Usage section on the Main Frame, you should edit the settings in this policy:

“Quota Usage – Recycle Bin”

12.4 User Group

12.4.1 List User

When you click the [Manage Group Policy] -> [List User] Link available at the top menu, the [List User] panel will appear. An overview of user groups and owner on backup can be listed by default backup users are only shown.

Manage System | Manage Log | Manage User | **Manage Group Policy** | Manage System User | Administrator's Guide | Select Language

Policy Control | **List User** | User Group | Policy Group | Policy Assignment | [Logout](#)

Type : Backup user System user

Search by : Login Name Alias

[[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [All](#)]

No.	Login Name (Alias)	Owner	User Group
system			
1	a (a)	--	--
2	A1 Backup User (A1 Backup User)	A1	--
3	acb.user.duplicate ()	Duplicate.02	--
4	acb.user.duplicate ()	Duplicate.01	--
5	acb_tester1 (acb_tester1)	--	--
6	acb_tester2 (acb_tester2)	--	--
7	acbee ()	--	--
8	AdgroupTest ()	--	--
9	admin_ab.obm.user.01 (admin_ab.obm.user.01)	--	--
10	admin_abcd.obm.user.01 (admin_abcd.obm.user.01)	--	--
11	admin_abcd.obm.user.02 (admin_abcd.obm.user.02)	--	--
12	Assigned Adgroups ()	--	--
13	Assigned Adgroups ACB ()	--	--
14	b ()	--	--
15	B1 Backup User (B1 Backup User)	B1	--
16	BackupUser01@SA0 ()	SA0	--
17	BackupUser01@SA1 ()	SA1	--
18	BackupUser01@SA2 ()	SA2	--
19	BackupUser01@SA3 ()	SA3	--
20	BackupUser01@SA5 ()	SA5	--
21	BackupUser01@SA6 ()	SA6	--

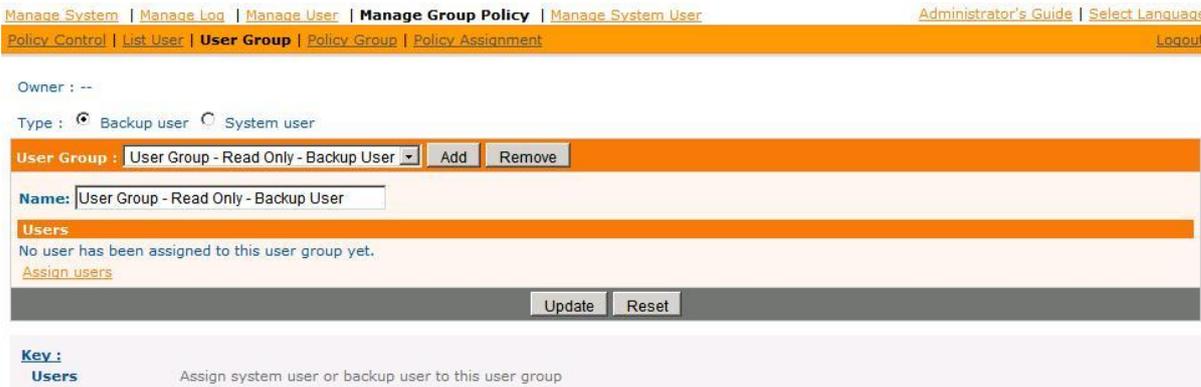
The system user list can also be listed by selecting the "System user" radio button near the top menu.

Press the [Login Name] link to show the details of policy groups, user groups and owner on selected backup user. The system user detail can also be viewed by similar way.

12.4.2 Manage User Group

[User Group] panel is used to manage the user group's for both backup users and system users. Please click the [Manage Group Policy] -> [User Group] link to enter the [User Group] panel.

The default view shows the available user groups for "backup user". The user group list for "system user" can also be listed by selecting the "System user" radio button near the top menu.



Owner : --

Type : Backup user System user

User Group : User Group - Read Only - Backup User Add Remove

Name: User Group - Read Only - Backup User

Users

No user has been assigned to this user group yet.
[Assign users](#)

Update Reset

Key :
Users Assign system user or backup user to this user group

The user group feature can be used obtain information on how many users accounts have been assign to a user group.



Owner : --

Type : Backup user System user

User Group : LimitQuota Add Remove

Name: LimitQ

Users

acb-quota_restrict_1GB
User Group - 4

Users assign

No.	LimitQuota	Owner
1	quota (abc123)	--

Update Reset

Key :
Users assigned to this user group Shows backup users assigned to this user group.

You can use the combo box to list the number of existing user groups defined. After selecting the desired user group all user accounts assigned to this group will be displayed.

[Manage System](#) | [Manage Log](#) | [Manage User](#) | **Manage Group Policy** | [Manage System User](#)
[Administrator's Guide](#) | [Select Language](#)

[Policy Control](#) | [List User](#) | **User Group** | [Policy Group](#) | [Policy Assignment](#)
[Logout](#)

Owner : --

Type : Backup user System user

User Group :

Name:

Users

Users assigned to this user group [[Edit](#)]

No.	Login Name (Alias)	Owner	
1	quota (abc123)	--	
2	test1 ()	--	
3	test2 ()	--	
4	test3 ()	--	

Key :
Users assigned to this user group Shows backup users assigned to this user group.

Create user group

[Manage System](#) | [Manage Log](#) | [Manage User](#) | **Manage Group Policy** | [Manage System User](#)

[Policy Control](#) | [List User](#) | **User Group** | [Policy Group](#) | [Policy Assignment](#)

Owner : --

Type : Backup user System user

User Group :

Name:

Users

No user has been assigned to this user group yet.
[Assign users](#)

Key :
Users Assign system user or backup user to this user group.

Please follow the instructions below to create a user group:

1. Go to the [User Group] panel.
2. Select the user group type, i.e. Backup user or System user.
3. Press the [Add] button.
4. Change the default name to a more descriptive user group name.
5. Press the [Updated] button to complete the process.

Remove an existing user group

Manage System | Manage Log | Manage User | **Manage Group Policy** | Manage System User | Administrator's Guide | Select Language

Policy Control | List User | **User Group** | Policy Group | Policy Assignment | Logout

Owner : --

Type : Backup user System user

User Group : User Group - Backup User

Name: User Group - Backup User

Users

Users assigned to this user group [Edit]

No.	Login Name (Alias)	Owner	
1	BackupUser01@SA1 ()	SA1	

Key :
Users assigned to this user group Shows backup users assigned to this user group.

To remove a user group, please do the followings:

1. Go to the [User Group] panel.
2. Select the user group from the drop down list.
3. Press the [Remove] button to remove the user group.

WARNING:

The remove user group feature will remove the selected user group from OBS even if:

- i. **There are active user accounts assigned to the group**
- ii. **There are active policies assigned to the group**

All member user accounts upon removal of the user group will be automatically unassigned. Once unassigned, the user accounts will retain the policy restrictions of the removed user group.

It is strongly recommended prior to removing a user group, to ensure that all member user accounts are re-assigned first.

Assign Users to a user group

Manage System | Manage Log | Manage User | **Manage Group Policy** | Manage System User Administrator's Guide | Select Language

Policy Control | List User | **User Group** | Policy Group | Policy Assignment Logout

User Group : User Group - Read Only - Backup User
 Owner : --
 Type : Backup user
 Search by : Login Name Alias
 [[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [All](#)]

No.	<input type="checkbox"/>	Login Name (Alias)	Owner
1	<input type="checkbox"/>	a (a)	--
2	<input type="checkbox"/>	A1 Backup User (A1 Backup User)	A1
3	<input type="checkbox"/>	acb.user.duplicate ()	Duplicate.02
4	<input type="checkbox"/>	acb.user.duplicate ()	Duplicate.01
5	<input type="checkbox"/>	acb_tester1 (acb_tester1)	--
6	<input type="checkbox"/>	acb_tester2 (acb_tester2)	--
7	<input type="checkbox"/>	acbee ()	--
8	<input type="checkbox"/>	AdgroupTest ()	--
9	<input type="checkbox"/>	admin ab.obm.user.01 (admin ab.obm.user.01)	--
10	<input type="checkbox"/>	admin abcd.obm.user.01 (admin abcd.obm.user.01)	--
11	<input type="checkbox"/>	admin abcd.obm.user.02 (admin abcd.obm.user.02)	--
12	<input type="checkbox"/>	Assigned Adgroups ()	--
13	<input type="checkbox"/>	Assigned Adgroups ACB ()	--
14	<input type="checkbox"/>	b ()	--
15	<input type="checkbox"/>	B1 Backup User (B1 Backup User)	B1
16	<input type="checkbox"/>	[Suspended] BackupUser01@SA0 ()	SA0
17	<input type="checkbox"/>	BackupUser01@SA1 ()	SA1
18	<input type="checkbox"/>	BackupUser01@SA2 ()	SA2
19	<input type="checkbox"/>	BackupUser01@SA3 ()	SA3
20	<input type="checkbox"/>	BackupUser01@SA5 ()	SA5
21	<input type="checkbox"/>	BackupUser01@SA6 ()	SA6

Please follow the instructions below to assign users to a specific user group:

1. Go to the [User Group] panel.
2. Select a user group from the dropdown box.
3. Click the [Assign users] link located in the [Users] section to go to the user list. This option is only shown when the list is empty.
4. If the list is not empty, please click on the [Edit] link in the [User] section.
5. Select users from the user list by checking the checkboxes and vice versa.
6. Press the [Update] button to add selected backup users to backup user group.

Remove Users from a user group

To remove users from a user group, please do the followings:

1. Go to the [User Group] panel.
2. Select a user group from the dropdown box.
3. Press the  link next to the backup user you would like to remove or press the [Edit] link located in the [Users] section to enter the user list section.

Note:

You can use the alphabet categories at the top of the backup user list to limit the list to show only those backup users whose login name starting with a certain alphabet. You can also use the [Owner] link to limit the listing to show backup users belong to the selected owner.

12.5 Policy Group

12.5.1 Manage Policy Group

When you click the [Manage Group Policy] -> [Policy Group] link available at the top menu, the [Policy Group] form will appear. This is used to define policies for backup users or system users.

The default view shows the available Policy Groups for "backup user". The Policy Groups list for "system user" can also be listed by selecting the "System user" radio button near the top menu.



Owner : --

Type : Backup user System user

Policy Group : Policy Group - Backup User Policy

Name : Policy Group - Backup User Policy

Shared Quota Setting

Backup Set Setting

Policy Control Setting

Global Filter Setting

Key :

Shared Quota Setting	The disk quota shared by all users. If it is enabled, backup is stopped if the total disk usage of users in this group exceeds the specified quota or the total disk space of this user group. A user can only be assigned to one group with this feature enabled.
Backup Set Setting	Each user group can have one backup set type and one operations system of default backupset for AhsayOBM and AhsayACB users. Each user group can have one backup set type of enforcement backupset for AhsayOBM and AhsayACB users. When enforcement backup set is used, the existing backup set of AhsayACB user will be overwritten by the enforcement backup set.
Policy Control Setting	the policy control assigned to users
Global Filter Setting	Each user group can have one backup set type and one operations system of global filter for AhsayOBM and AhsayACB users. When global filter is used, the existing filters in the backup sets will be overwritten by the global filter.

Create a policy group

To create a new policy group, please do the followings:

1. Go to the [Policy Group] form.
2. Select the backup user type, i.e. Backup user or system user
3. Change the name to a more descriptive policy group name.
4. Press the [Update] button to save the changes.

Remove an existing policy group

Please do the followings to remove a policy group:

1. Go to the [Policy Group] form.

2. Select the policy group from the drop down list.
3. Press the [Remove] button to remove the policy.

Below is a table showing the available policy types that can be assigned to a policy group.

Policy Group Type	Available Policy Types
Backup User	<ul style="list-style-type: none"> - Shared Quota Policy Control - Backup Set Setting Policy Control - Backup User Policy Control - Global Filter Policy Control
System User	<ul style="list-style-type: none"> - Share Backup Users Policy Control - System User Policy Control

12.5.2 Shared Quota Policy

Shared Quota Policy is available for Backup User Policy Group only. It is used to define a maximum storage limit for a particular group, which is evenly allocated to each individual backup user within the group. Each backup user is allocated a fixed percentage of the total storage limit.

The advantage of using a share quota policy is it will simplify user home storage management. For example, if users for a group where assigned an individual user home drive, this setting will ensure the backup users cannot user more disk space than is physically available on the drive.



The screenshot shows a 'Shared Quota Setting' section with an orange header and a 'Show Options' link. Below the header, there is a '[Help]' link, a checked checkbox for 'Disk quota share', a 'Shared Size' input field with '100' and 'GB' units, and a 'Maximum percentage of shared size for each user' input field with '10' and '%' units.

Assign Shared Quota Policy to a policy group

1. Go to the [Policy Group] form.
2. Select a Backup User Policy Group from the drop down list.
3. Click the [Show Options] link at the right side of the [Shared Quota Setting] section. The information of shared quota policy will be shown.
4. Check the checkbox next to the [Disk quota share].
5. Fill in the [Shared Size] and [Maximum percentage of shared size for each user] field.
6. Press [Update] button to save the changes.

Reset Disk quota share

1. Go to the [Policy Group] form.
2. Select a Backup User Policy Group from the drop down list.
3. Click the [Show Options] link at the right side of the [Shared Quota Setting] section. The information of shared quota policy will be shown.
4. Uncheck the checkbox next to the [Disk quota share] to reset it to default.
5. Press [Update] button to update the changes.

When implementing a shared quota policy, you need to take into account any additional users assigned to the group will result in the reduction of backup quota for existing users and therefore impact on the backups operation of these users. So the "shared size" will have to be adjusted in order to ensure sufficient space for the additional users.

For example, if "Group VIP" was assigned a shared size of 100GB, with a maximum percentage of 20% for each user in the group. Initially 5 OBM users are assigned to Group VIP, the backup quota for each individual user will be 20GB. For this setup each user can fully utilize their individual backup quotas without affecting others in the group.

But if another 5 users were assigned to Group VIP, they too will be allocated 20GB each of backup quota. This will mean if all users fully utilize their backup quota's (10 users X 20GB = 200GB), it will exceed the shared size of 100GB. In this scenario, the first 5 backup users to who fully utilize their backup quotas, will cause the other 5 users backup jobs to fail with a "*Group Quota Exceeded. Please contact us to increase your quota.*" error.

12.5.3 Backup Set Setting Policy

Backup Set Setting Policy is available for Backup User Policy Group only. It is used to pre-define the backup settings for backup users. This helps to pre-fill backup settings when backup users creates a new backup set (called "Default Backup Set") whereas other helps to enforce backup setting to backup users. This is known as an "Enforcement Backup Set".

Default Backup Set



The screenshot shows the 'Backup Set Setting' page for 'Default Backup Set'. It features a header with 'Backup Set Setting' and a 'Show Options' link. Below the header, there are two user selection options: 'AhsayOBM Users [Edit]' and 'AhsayACB Users [Edit]'. The main content area is divided into two columns. The left column lists backup set types: File, Windows, Mac OS X, Linux, Microsoft SQL Server, and Microsoft Exchange Server. The right column contains two columns of dropdown menus, one for each user type, corresponding to the backup set types listed on the left.

Note:

User cannot assign a higher level default backup set to a lower level policy group, i.e. If a user (User1) is created by a sub-admin role system user, and there is a default backup set policy (Policy 1) created by a admin role system user. "Policy 1" cannot be assigned to User1.

Enforcement Backup Set



The screenshot shows the 'Enforcement Backup Set' page. It has a similar layout to the 'Default Backup Set' page, with a header, user selection options, and a list of backup set types with corresponding dropdown menus for user assignment.

Create a Pre-defined Backup Setting Policy

1. Go to the [Policy Group] form.
2. Select a Backup User Policy Group from the drop down list.
3. Click the [Show Options] link at the right side of [Backup Set Setting] section to show the information of [Default Backup Set] and [Enforcement Backup Set] sub-sections.
4. If you are going to create a "Default Backup Set", click the [Edit] link next to [OBM Users] or [ACB Users] in the [Default Backup Set] sub-section to show the default backup set form. Otherwise, click the [Edit] link next to the [OBM Users] or [ACB Users] in the [Enforcement Backup Set] sub-section to show the enforcement backup set form.
5. Click the [Add] button to create a new backup set.
6. Fill in the necessary field(s) in the backup set form and click the [Update] button to save the changes.

Remove a Pre-defined Backup Setting Policy

1. Go to the [Policy Group] form.
2. Click the [Show Options] link at the right side of [Backup Set Setting] section to show the information of [Default Backup Set] and [Enforcement Backup Set] sub-sections.
3. To delete a "Default Backup Set" setting, click the [Edit] link next to [OBM Users] or [ACB Users] in the [Default Backup Set] sub-section. Otherwise, click the [Edit] link next to [OBM Users] or [ACB Users] in the [Enforcement Backup Set] sub-section.
4. Select the backup set from the drop down list.
5. Click the [Remove] button to remove it from the system.

Assign a Pre-defined Backup Set to a Default Backup Setting policy

6. Go to the [Policy Group] form.
7. Click the [Show Options] link at the right side of [Backup Set Setting] section to show the information of [Default Backup Set] and [Enforcement Backup Set] sub-sections.
8. Select the pre-defined backup set from drop down.
9. Click the [Update] button to save the changes.

12.5.4 Backup User Policy Control

Backup User Policy Control is available to Backup User Policy Group only. It is used to restrict the backup users' access privileges on OBS, OBM and ACB. By default, full access privilege is granted. A summary of access permission is listed below:



The screenshot shows the 'Policy Control Setting' interface with three sections for different products:

- Product: AhsayOBS**
Group: User-User Profile [Edit]
- Product: AhsayOBM**
Group: Main Frame [Edit]
- Product: AhsayACB**
Group: Main Frame [Edit]

Each section includes a table with columns 'No.', 'Policy Control', and 'Permissions'. The first row in each table contains the text 'No policy control in this group'.

Permission	Meanings
R	Read
W	Write
E	Execute
D	Delete

Edit Policy Control

1. Go to the [Policy Control] form.
2. Click the [Show Options] link at the right side of [Policy Control Setting] section to show the permission information on [OBS], [OBM] and [ACB] sub-sections.
3. Click the [Edit] link next to the [Group] drop down list to go to the policy control selection.
4. Select the Policy Control that you would like to edit by checking the checkbox on the left side of the Policy Control ID, and the corresponding RWXD checkboxes will be enabled.
5. To assign access permission to a Policy Control, select/de-select the checkbox under the RWXD section.

Policy Type	Permission
Read-only	R
Editable	RW
Editable and Executable	RWE
Modifiable	RWD
Full	RWED
Hidden	All checkboxes are unchecked

6. Click the [Update] button to save the changes.

Remove Policy Control



Manage System | Manage Log | Manage User | **Manage Group Policy** | Manage System User | Administrator's Guide | Select Language

Policy Control | List User | User Group | **Policy Group** | Policy Assignment | Logout

Policy Group: Policy Group - Backup User Policy

Owner: --

Type: Backup user

Product: AhsayOBS

Group: User-User Profile

<input type="checkbox"/>	No.	Policy Control	R	W	X	D
<input type="checkbox"/>	1	Manage User-User-User Profile Menu				
<input type="checkbox"/>	2	Manage User-User-User Profile-User Summary				
<input type="checkbox"/>	3	Manage User-User-User Profile-Alias				
<input type="checkbox"/>	4	Manage User-User-User Profile-Language				
<input type="checkbox"/>	5	Manage User-User-User Profile-Timezone				
<input type="checkbox"/>	6	Manage User-User-User Profile-Contact				
<input type="checkbox"/>	7	Manage User-User-User Profile-Add-on Modules				
<input type="checkbox"/>	8	Manage User-User-User Profile-Quota				
<input type="checkbox"/>	9	Manage User-User-User Profile-Update Reset Button				

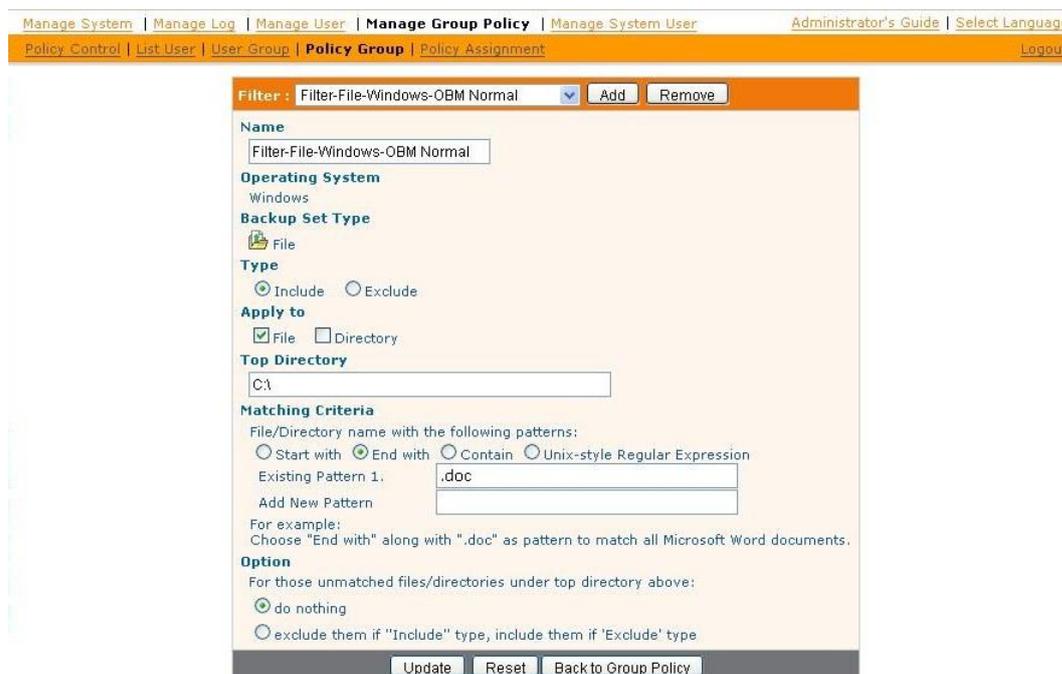
Update Back

1. Go to the [Policy Control] form.

2. Click the [Show Options] link at the right side of [Policy Control Setting] section to show the permission information on [OBS], [OBM] and [ACB] sub-sections.
3. Press the  link next to the policy control that you would like to remove.
4. The Policy Control is now removed from the system.

12.5.5 Global Filter Policy

Global Filter Policy is applied to system users only. It is used to set pre-defined backup filter to backup users.



The screenshot shows the 'Manage Group Policy' section of the web interface. The breadcrumb trail includes: Manage System | Manage Log | Manage User | **Manage Group Policy** | Manage System User | Administrator's Guide | Select Language. Below this, there are links for Policy Control, List User, User Group, **Policy Group**, and Policy Assignment, along with a Logout button.

The main form is titled 'Filter : Filter-File-Windows-OBM Normal' and includes 'Add' and 'Remove' buttons. The form fields are as follows:

- Name:** Filter-File-Windows-OBM Normal
- Operating System:** Windows
- Backup Set Type:** File
- Type:** Include Exclude
- Apply to:** File Directory
- Top Directory:** C:\
- Matching Criteria:** File/Directory name with the following patterns:
 - Start with End with Contain Unix-style Regular Expression
 - Existing Pattern 1: .doc
 - Add New Pattern: [Text Input]
 - For example: Choose "End with" along with ".doc" as pattern to match all Microsoft Word documents.
- Option:** For those unmatched files/directories under top directory above:
 - do nothing
 - exclude them if "Include" type, include them if 'Exclude' type

At the bottom of the form are buttons for 'Update', 'Reset', and 'Back to Group Policy'.

Create global filter policy

1. Go to the [Policy Control] form.
2. Click on the [Show Options] link in the [Global Filter] section.
3. Click the [Edit] link next to [OBM Users], [CDP Filter for OBM Users] or [ACB Users].
4. Click the [Add] button to create a new policy.
5. Select the [Operating System] and [Type], then press the [Update] button.

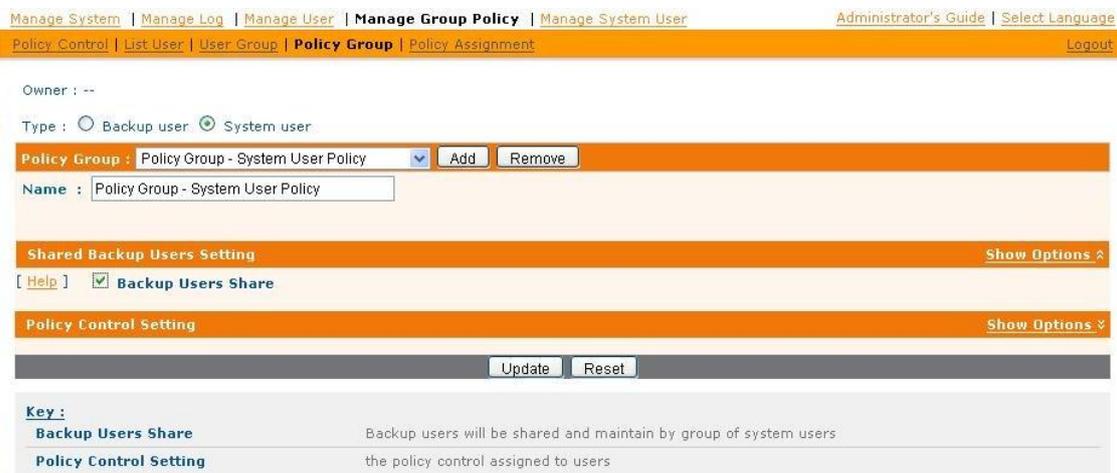
6. Fill in the required information shown in the page.
7. Press the [Update] button to save the changes.

Delete global filter policy

1. Go to the [Policy Group] panel.
2. Click the [Edit] link next to [OBM Users], [CDP Filter for OBM Users] or [ACB Users].
3. Select the policy from the drop down box.
4. Press [Remove] button to remove it from the system.

12.5.6 Shared Backup User Policy

Shared Backup User Policy is only available to System Users Policy Group. It helps Sub Admin role system users to share their backup users provided they are under the same creator.



The screenshot shows the 'Manage Group Policy' page. At the top, there are navigation links: Manage System, Manage Log, Manage User, Manage Group Policy (active), and Manage System User. On the right, there are links for Administrator's Guide and Select Language, and a Logout button. Below the navigation is a breadcrumb trail: Policy Control | List User | User Group | Policy Group | Policy Assignment. The main content area shows the 'Owner' as '--'. The 'Type' is set to 'System user' (selected). The 'Policy Group' is 'Policy Group - System User Policy', with 'Add' and 'Remove' buttons. The 'Name' field contains 'Policy Group - System User Policy'. There are three main sections: 'Shared Backup Users Setting' with a 'Show Options' link and a checked 'Backup Users Share' checkbox; 'Policy Control Setting' with a 'Show Options' link; and a 'Key' section with two entries: 'Backup Users Share' (Backup users will be shared and maintain by group of system users) and 'Policy Control Setting' (the policy control assigned to users). At the bottom, there are 'Update' and 'Reset' buttons.

Edit Shared Backup User Policy

1. Go to the [Policy Group] panel.
2. Select the system user radio button for the user type.
3. Click the [Show Options] link in the [Shared Backup Users Setting] section to show the information of shared backup user policy.
4. Check the [Backup User Share] checkbox to share the backup users, uncheck it to reset to default.
5. Press the [Update] button to update the change.

12.5.7 System Users Policy Control

The System User Policy Control is available to System User Policy Group only. It is used to restrict the system users' access privileges on OBS. By default, full access privilege is granted. A summary of access permission is listed below:

Permission	Meanings
R	Read
W	Write
E	Execute
D	Delete

Edit Policy Control

1. Go to the [Policy Control] form.
2. Select [System User] radio button.
3. Click the [Show Options] link at the right side of [Policy Control Setting] section to show the permission information on [OBS] sub-sections.
4. Click the [Edit] link next to the [Group] drop down list to go to the policy control selection.
5. Select the Policy Control that you would like to edit by checking the checkbox on the left side of the Policy Control ID, and the corresponding RWXD checkboxes will be enabled.
6. To assign access permission to a Policy Control, select/de-select the checkbox under the RWXD section.

Policy Type	Permission
Read-only	R
Editable	RW
Editable and Executable	RWE
Modifiable	RWD
Full	RWED
Hidden	All checkboxes are unchecked

7. Click the [Update] button to save the changes.

Remove Policy Control

1. Go to the [Policy Control] form.
2. Select the [System User] radio button.
3. Click the [Show Options] link at the right side of [Policy Control Setting] section to show the permission information on [OBS] sub-sections.
4. Press the  link next to the policy control that you would like to remove.
5. The Policy Control is now removed from the system.

13 Delta Merge Technology

13.1 Introduction

The delta merge feature combines the full, differential, and incremental delta files on OBS into a single full file. The advantage of using delta merge is it will speed up the restore of files. As a single (merged) file full can be restored faster than a file consisting of full plus related incremental files, which will require a lengthy merging process after restoring to a client machine.

Delta merge applies to full, differential, and incremental delta files which reside in the **data area only**. The criteria for file merging is governed by the retention policy setting for the backupset, delta merge will not work if there is more than one encryption key in use for a backup set. It is supported by OBM/ACB v6.3 or above clients, there is no delta merging feature for Local Copy backups.

The delta merge of differential delta with the full file, will only apply if there are incremental delta files present in the delta chain.

13.2 Delta Merge Policy

The delta merge process relies on the retention policy setting to decide when to merge delta files with the full file. But delta merge does not apply to files in the retention area. Any backup sets configured with advanced or customized retention policy settings cannot use the delta merge feature.

Any reference to retention policy in the context of delta merge implies delta merge policy. As backupsets enabled with delta merge share a single setting, any changes in retention policy will impact on the availability of snapshots that can be restored from both data and retention area. Before enabling the delta merge feature please review your data restore requirements carefully.

13.3 Delta Merge Process

A delta merge will take place after a backup job is completed, OBM/ACB will only initiate a delta merge request at the end of a backup job. As part of the request, OBM/ACB will upload a copy of the backupset encryption key to OBS which is hashed for security purposes. Once a merge request is received by OBS it will be placed in the "delta merge queue", the information in the delta merge queue only exists in memory for security purposes.

A background job will scan all the files in the backup set. If the file is an incompleted file, the file will be skipped and the file will not be merged. OBS will not change or delete the file. The file will not be marked as bad. The process will also identify any delta files that are out of retention period and

merge them with the full file, this process handles one merge operation at a time.

When OBS processes a file merge request, the merge process will be carried according to the retention policy. Each delta merge operation is recorded in the OBS system logs. The following is an example of delta merge activity which is recorded under [Manage System] -> [Manage Log] -> [System Log].

```
[info][system][Thread][Job][MergeDelta] Start merging delta files in backup set 'b1' of user 'test0914'.  
[info][system][Thread][Job][MergeDelta] Merging delta file 'C:\TestDM0914.txt' in backup set 'b1' of user 'test0914' , Backup  
Job='2011-09-14-17-13-50', DataSize(compressed)='2k'  
[info][system][Thread][Job][MergeDelta] Merged delta files in backup set 'b1' of user 'test0914' successfully.  
[info][system][Thread][Job][MergeDelta] Finished merging delta files in backup set 'b1' of user 'test0914'.
```

Although, delta merge requests are submitted to OBS immediately after the completion of a backup job. In some situations it could take a few days before a merge request is finally processed. The actual execution of the merge requests is dependent factors such as:

- i. The number of backupsets with delta merge enabled.
- ii. The number of requests pending in the merge queue.
- iii. The type and size of full and delta files which are pending to be merged, i.e. ESXi, Hyper-V, Shadow Protect backupsets which may take longer to merge.
- iv. Performance of your OBS server

13.4 Delta Merge Queue

The delta merge queue stores the details of each merge request made by OBM/ACB client at the end of each backup job. In order to enhance security, from OBS v6.5.4.0 onwards, the delta merge queue will be held in memory only.

Each delta merge queue record includes the following information:

- i. backup user account
- ii. backup set ID
- iii. hashed encryption key
- iv. owner (the sub admin account which created the backup user if applicable)

Once a job in the delta merge queue is completed, the request will be immediately removed from the merge queue. OBS will then process the next request in the queue.

WARNING:

As the delta merge queue is only held in memory, if the OBS service is restarted or stopped, any pending delta merge requests will be lost. These delta merge jobs for the affected backup sets will only be

processed on the next backup job, when OBM/ACB submits a new delta merge request.

13.5 Limitations

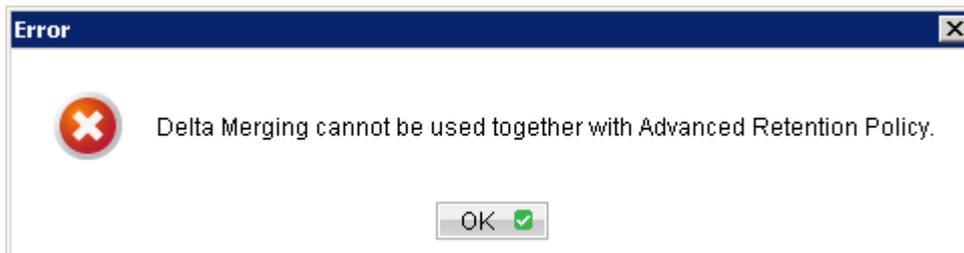
Differential Delta File Merge

The delta merge of differential delta files with the full file, will only apply if there are incremental delta files present in the delta chain. Therefore, no delta merge will take place for backup sets with delta merge enabled and in-file delta set to "Differential".

Advanced or Customized Retention Policy

Any backup sets which are configured with advanced or customized retention policy settings cannot use the delta merge feature.

This restriction is enforced on OBM, if delta merge is enabled on a backup set with advanced retention policy already configured or if you attempt to apply an advanced retention policy setting to a backup set with delta merge enabled. The following error messages will be displayed by OBM:



ACB

For ACB user accounts the in-file delta and delta merge features are still dependent on OBS global settings, under [Manage System] -> [Other Options] -> [In-file delta settings for all ACB users]. Therefore, all ACB users are limited to either using delta merge or traditional incremental/differential delta model.

When the delta merge option is enabled and the in-file delta type "Differential" is selected. **The Delta merge feature will not merge differential delta files with the full file.**

Delta merge will only work if there are pre-existing incremental delta files in the delta chain. Once the incremental delta files are merged, the delta merge feature will no longer merge the remaining differential delta files with the full file.

It is recommended to set the in-file delta type as "Incremental" for ACB users.

OBS Storage

Even though the delta merge job processes one backupset at a time. For delta merge enabled backupsets which contain very large files, i.e. Exchange, MS SQL, Domino, Oracle , MS System backup, Windows 2008 SystemState, ShadowProtect, ESXi, and Hyper-V. **It is strongly recommended user home drives containing these backup sets should maintain at least 30% to 40% free disk space. As the delta merge needs to generate a temporary merged full file on the user home drive during this process. If the user home runs out of disk space, it could result in corruption temporary merged file, in the worse case the data of any other active backup sets could also be compromised.**

13.6 Delta Merge Examples

The following is some simple examples to demonstrate the functionality of the delta merge feature:

Example 1:

The example below shows how delta files are merged into full file using a retention policy (delta merge policy) setting defined as 4 jobs for this backup set.

A full backup file is stored into data area (F) uploaded by Job 1, followed by incremental delta files I₁, I₂, I₃, and I₄. On the completion Job 5 (I₄), OBM/ACB will trigger a delta merge background job to execute the file merging. When the OBS delta merge job runs F + I₁ will be merged to become a "merged" full file. The data area now contains 4 snapshots including merged full file after file merging.

Retention Policy = 4 Jobs (Delta Merge Policy)

Job 1 = F

Job 2 = I₁

Job 3 = I₂

Job 4 = I₃

Job 5 = I₄ (delta merge initiated)

After job 5 OBM/ACB will initiate a delta merge for Job 1 & Job 2 files.

F (F + I₁) merged full file

I₂

I₃

I₄

Example 2:

The example below shows how delta files are merged into full file using a retention policy (delta merge policy) setting defined as 7 days for this backup set.

A full backup file is stored into data area (F) uploaded on Day 1, followed by incremental delta files I₁, I₂, I₃, I₄, I₅, I₆, I₇, and I₈. On the completion of the backup job on Day 9 (I₈), OBM/ACB will trigger a delta merge background job to execute the file merging. When the OBS delta merge job runs F + I₁ will be merged to become a "merged" full file. The data area now contains 8 snapshots including merged full file after file merging.

Retention Policy = 7 Days (Delta Merge Policy):

Day 1 = F
Day 2 = I₁
Day 3 = I₂
Day 4 = I₃
Day 5 = I₄
Day 6 = I₅
Day 7 = I₆
Day 8 = I₇
Day 9 = I₈ (delta merge initiated)

After job on day 9 OBM/ACB will initiate a delta merge for Day 1 & Day 2 files. As the incremental file I₁ has exceeded the 7 day retention policy setting.

F (F + I₁) merged full file
I₂
I₃
I₄
I₅
I₆
I₇
I₈

Example 3:

The example below shows how differential and incremental delta files are merged into full file using a retention policy (delta merge policy) setting defined as 4 jobs for this backup set.

A full backup file is stored into data area (F) uploaded by Job 1, followed by incremental and differential delta files I₁, I₂ I₃ and D₁.

Retention Policy = 4 Jobs (Delta Merge Policy)

Job 1 = F

Job 2 = I₁
Job 3 = I₂
Job 4 = I₃
Job 5 = D₁ (delta merge initiated)

After Job 5 OBM/ACB will initiate a delta merge for Job 1 & Job 2. Unfortunately, differential delta D₁ is found in delta chain, this creates delta merge stoppage, the files in Job 1 and Job 2 will not be merged.

The backup job continues with subsequent incremental backups (I₄, I₅ and I₆).

Job 1 = F
Job 2 = I₁
Job 3 = I₂
Job 4 = I₃
Job 5 = D₁ (delta merge is initiated and stopped)
Job 6 = I₄ (delta merge is initiated and stopped)
Job 7 = I₅ (delta merge is initiated and stopped)
Job 8 = I₆ (delta merge is initiated)

After Job 8 OBM/ACB will initiate a delta merge, OBS will merge the full file (F) uploaded in Job 1 with the differential delta D₁ uploaded in Job 5 to form the new full file (As the D₁ differential includes changes in I₁ + I₂ + I₃). The incremental files I₁ + I₂ + I₃ will be moved to the retention area, as they have already exceeded the retention policy of 4 jobs. These files will be purged on the next retention policy job.

After the delta merge has completed the follow files will be available for restore.

F (F + D₁)
I₄
I₅
I₆

Example 4:

The example below shows how delta merge handles multiple differential delta files using a retention policy (delta merge policy) setting defined as 4 jobs for this backup set.

A full backup file is stored into data area (F) uploaded by Job 1, followed by incremental and differential delta files I₁, I₂ I₃ and D₁.

Retention Policy = 4 Jobs (Delta Merge Policy)

Job 1 = F
Job 2 = I₁
Job 3 = I₂
Job 4 = I₃

Job 5 = D₁ (delta merge initiated)

After Job 5 OBM/ACB will initiate a delta merge for Job 1 & Job 2. Unfortunately, diferential delta D₁ is found in delta chain, this creates delta merge stoppage, the files in Job 1 and Job 2 will not be merged.

The backup job continues with subsequent differential delta backups (D₂ and D₃) and incremental delta backups (I₄, I₅, and I₆).

Job 1 = F

Job 2 = I₁

Job 3 = I₂

Job 4 = I₃

Job 5 = D₁ (delta merge is initiated and stopped)

Job 6 = D₂ (delta merge is initiated and stopped)

Job 7 = D₃ (delta merge is initiated and stopped)

Job 8 = I₄ (delta merge is initiated and stopped)

Job 9 = I₅ (delta merge is initiated and stopped)

Job 10 = I₆ (delta merge is initiated)

After Job 10 OBM/ACB will initiate a delta merge, OBS will merge the full file (F) uploaded in Job 1 with the latest differential delta D₃ uploaded in Job 7 to form the new full file (As the D₃ differential includes changes in I₁ + I₂ + I₃ + D₁ + D₂). The files I₁ + I₂ + I₃ + D₁ + D₂ will be moved to the retention area, as they have already exceeded the retention policy of 4 jobs. These files will be purged on the next retention policy job.

After the delta merge has completed the follow files will be available for restore.

F (F + D₃)

I₄

I₅

I₆

Example 5:

The example below shows how delta merge handles multiple differential delta files with different compression type.

A full backup file is stored into data area (F) uploaded by Job 1, followed by incremental and differential delta files I₁, and I₂.

Retention Policy = 3 Jobs (Delta Merge Policy)

Job 1 = F (Fast Compression)

Job 2 = I₁ (Normal Compression)

Job 3 = I₂ (No Compression)

Job 4 = I₃ (Fast Compression, delta merge initiated)

After Job 4 the backup application will initiate a delta merge for Job 1 & Job 2.

When F merged with I_1 , the new merged file $F + I_1$ will be using Normal Compression,

On the next backup, a new delta file is uploaded and delta merge initiated for Job 2 & Job 3.

Job 2 = $(F + I_1)$ (Normal Compression)

Job 3 = I_2 (No Compression)

Job 4 = I_3 (Fast Compression)

Job 5 = I_4 (Normal Compression, delta merge initiated)

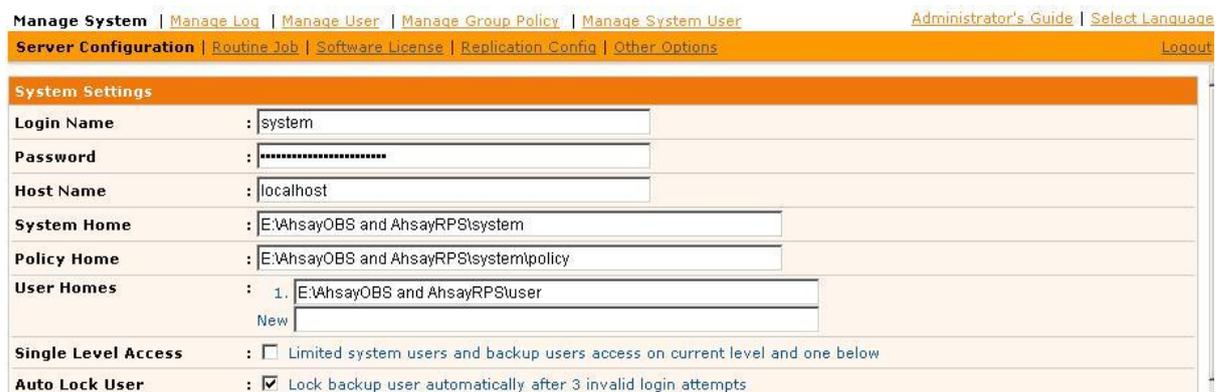
The new merged file $F + I_1 + I_2$ will not use any compression. In conclusion, the compression type will be updated to the last incremental file in the merge list.

14 Account Lockout

When the account lockout feature is enabled, a backup user account will be locked after three consecutive failed login attempts. The account lockout restriction applies unsuccessful logins via OBS web console, OBM, ACB, and RDR web console. The account lockout restrictions do not apply to "system", "sub admin", and "non admin" account types. **To enhance security on OBS, the account lockout feature is enabled by default.**

14.1 Configuration

The status of the account lockout feature is shown in the OBS web console under the [Manage System] -> [Server Configuration] -> [Auto Lock User].



The screenshot shows the 'System Settings' page in the OBS web console. The 'Auto Lock User' setting is checked, indicating that the account lockout feature is enabled. The settings are as follows:

System Settings	
Login Name	: system
Password	:
Host Name	: localhost
System Home	: E:\AhsayOBS and AhsayRPS\system
Policy Home	: E:\AhsayOBS and AhsayRPS\system\policy
User Homes	: 1. E:\AhsayOBS and AhsayRPS\user New
Single Level Access	: <input type="checkbox"/> Limited system users and backup users access on current level and one below
Auto Lock User	: <input checked="" type="checkbox"/> Lock backup user automatically after 3 invalid login attempts

To disable the OBS account lockout feature, simply uncheck the "Auto Lock User" setting and press the [Update] button. This setting will be effective immediately.



The screenshot shows the 'System Settings' page in the OBS web console. The 'Auto Lock User' setting is unchecked, indicating that the account lockout feature is disabled. The settings are as follows:

System Settings	
Login Name	: system
Password	:
Host Name	: localhost
System Home	: E:\AhsayOBS and AhsayRPS\system
Policy Home	: E:\AhsayOBS and AhsayRPS\system\policy
User Homes	: 1. E:\AhsayOBS and AhsayRPS\user New
Single Level Access	: <input type="checkbox"/> Limited system users and backup users access on current level and one below
Auto Lock User	: <input type="checkbox"/> Lock backup user automatically after 3 invalid login attempts

Even though the account lockout feature is disabled, any backup user accounts which were locked prior to the disabling of this feature will still remain locked. These backup user accounts will have to be enabled by either a "system" or "sub admin" user.

Note:

For RDR implementations, the account lockout configuration must be aligned on all member OBS servers.

14.2 Account Lockout Rules

For each unsuccessful login attempt via OBS web console, RDR web console, OBM, or ACB. The account lockout counter will increase by 1. After three consecutive unsuccessful login attempts the backup user account will be locked.

The account lockout counter will reset to zero if one of the following conditions are met:

- User logs on successfully via OBS web console, OBM/ACB or RDR web console.
- Change the user [Status] from "Locked" to "Enabled" or "Suspended" in [Manage User] -> [User Profile] page.

The "system" or "sub admin" users cannot manually lock a backup user account. An account lockout can only be triggered by consecutive failed login attempts.

Once an account is locked, all AhayOBM/ACB client scheduler(s) and CDP service(s) connecting to OBS using the locked account will automatically be stopped, they will not re-connect to OBS again until after another six hours, even if the affected account is enabled immediately.

WARNING:

If there are any backup jobs which are scheduled to start within this six hour period they will not be run, these jobs will be classified as a missed backups.

If you wish to minimize the problem of missed backups, you can consider restarting the OBM/ACB scheduler and CDP services on all affected client machines after affected user account is unlocked.

When a user account is locked after 3 unsuccessful login requests or if the account is suspended by the OBS administrator. All active backup job under the user account will be stopped immediately.

14.3 Unlocking Accounts

Once a backup user account is locked it can only be enabled by either a "system" or "sub admin" user.

To reset the status of a "Locked" backup user, please do the following:

1. Login to OBS Web Administration Console using a "system" or "sub admin" user account.
2. Go to [Manage Users] -> [List User] page.
3. Find the backup user from the user list and click on the username to view [User Profile].
4. Change the [Status] by checking the [Enable] radio button.
5. Click [Update] to apply the change.



Alias : abc123

Password : 6ZoYxCjLONXyYIU2eJluAw== (Hashed)
New (Clear Text)

Quota : 50.0 kbytes Mbytes Gbytes

Bandwidth : Unlimited Bits/Second

Backup Client : AhsayOBM User

Assigned Adgroups : Do not show any advertisement to this user
 Only the following Adgroups:
 Default Adgroup

Type : Paid User Suspend paid user at 2011 - 12 - 11 (YYYY-MM-DD)

Status : Enable Suspended Locked

Add-on Modules : Microsoft Exchange Server Microsoft SQL Server
 Oracle Database Server MySQL Database Server
 Lotus Domino Lotus Notes
 In-File Delta Volume Shadow Copy
 Microsoft Exchange Mailbox 10 (Max: 2000)
 AhsayOBM JVM Royalty
 Delta Merge
 Continuous Data Protection
 ShadowProtect System Backup
 Microsoft Windows System Backup
 Microsoft Windows Virtualization 10 (Max: 2000)
 VMware VM Backup 10 (Max: 2000)

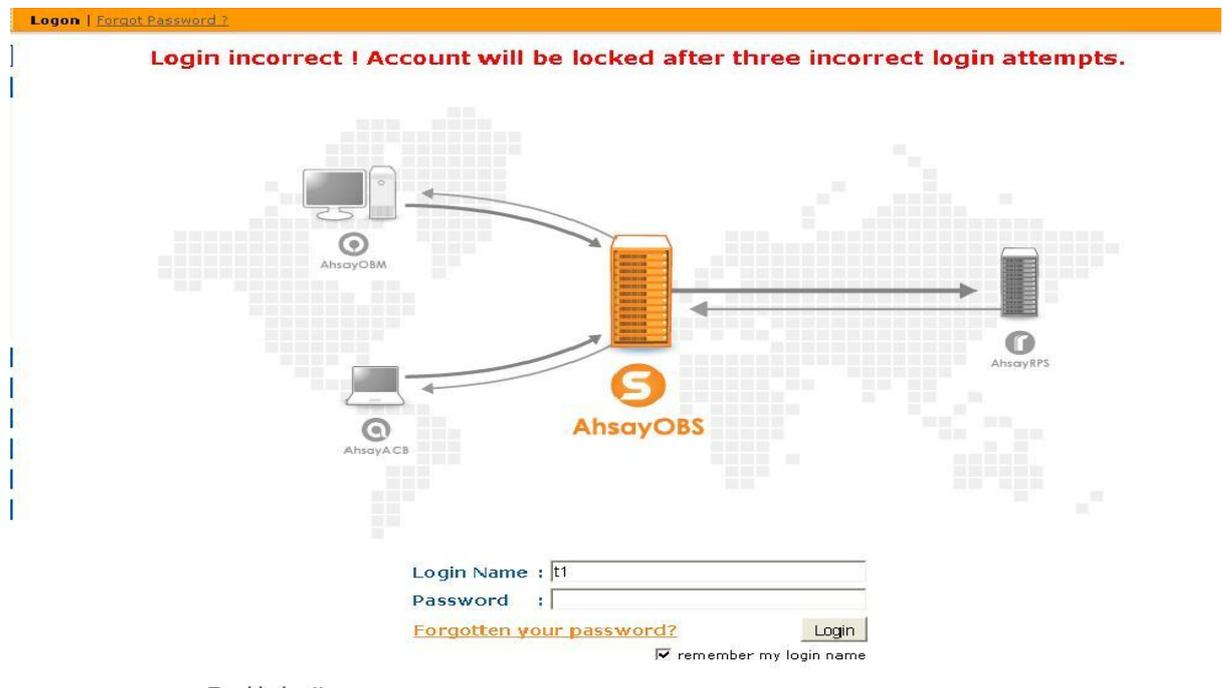
Language : English

Timezone : GMT+08:00 (HKT)

Contact : 1. Name abc123 [Remove]
Email support@qa.ahsay.com.local
2. Name [Add]

14.4 Account Lockout on OBS/RDR

The following is an example of what is displayed when there is an incorrect user login attempt via OBS web console.



After three consecutive incorrect login attempts the user account will be automatically locked.

[Logon](#) | [Forgot Password ?](#)

Account locked.



Login Name :
 Password :
[Forgotten your password?](#)
 remember my login name

14.5 Account Lockout on OBM/ACB

The following is an example of what is displayed when there is an incorrect user login attempt via OBM or ACB client.



After three consecutive incorrect login attempts the user account will be automatically locked. The following dialog box will be displayed on the client machine.



OBM/ACB scheduler logs (debug.log) will show the following error "[error] Account locked. Please contact your backup service provider. Retry in 6 hours ..."

debug.log

```
[2011/01/28 20:04:32][info] Loading configuration file ...
[2011/01/28 20:04:32][info] Loading configuration file ... Completed
[2011/01/28 20:04:32][info] Loading profile from server ...
[2011/01/28 20:04:33][error] Account locked. Please contact your backup
service provider. Retry in 6 hours ...
```

14.6 Account Lockout Auditing

Information relating to incorrect logins attempts will be recorded in the OBS system log, as well as the OBS logs located in %OBS_HOME%\logs.

The following is an example of what is recorded in the system log, when there is an incorrect user login attempt via the OBS web console

Login attempts via OBS web console are identified as "[www][Logon] '%user_account%'"

948	11:00:00 AM	t1	--	[info][www][Logon] 't1' logon failed. IP='10.10.0.1'. Login Failure Count=1 . Reason=[UserCacheManager.PasswordIncorrectExpt] Incorrect password for user 't1'.
949	11:00:02 AM	t1	--	[info][www][Logon] 't1' logon failed. IP='10.10.0.1'. Login Failure Count=2 . Reason=[UserCacheManager.PasswordIncorrectExpt] Incorrect password for user 't1'.
950	11:00:05 AM	t1	--	[info][www][Logon] 't1' logon failed. IP='10.10.0.1'. Login Failure Count=3 . Reason=[UserCacheManager.PasswordIncorrectExpt] Incorrect password for user 't1'.
951	11:00:07 AM	t1	--	[info][www][Logon] 't1' logon failed. IP='10.10.0.1'. Reason=[UserCacheManager.UserLockedExpt] User 't1' is locked.

The following is an example of what is recorded in the system log, when there is an incorrect user login attempts from an OBM/ACB client.

Login attempts via OBM/ACB are identified as "[system] [getProfileRqt] '%user_account%'"

149	04:55:30 AM	t1	--	[info][system][GetUserProfileRqt][UserCacheManager.PasswordIncorrectExpt] Incorrect password for user 't1', IP = '10.10.0.1'. Login Failure Count = 1
150	04:55:32 AM	t1	--	[info][system][GetUserProfileRqt][UserCacheManager.PasswordIncorrectExpt] Incorrect password for user 't1', IP = '10.10.0.1'. Login Failure Count = 2
151	04:55:34 AM	t1	--	[info][system][GetUserProfileRqt][UserCacheManager.PasswordIncorrectExpt] Incorrect password for user 't1', IP = '10.10.0.1'. Login Failure Count = 3
152	04:55:36 AM	t1	--	[info][system][GetUserProfileRqt][UserCacheManager.UserLockedExpt] User 't1' is locked.

15 Multiple Thread Support

Multiple thread support is available for the following OBM/ACB functions; backup, restore, local copy, seed load, and file decrypt for all backup sets. In order to utilize this feature OBM and ACB need to be on version v6.3.0.0 or above. In addition, the web restore applet also supports multiple thread file restores for OBS v6.3.0.0 or above.

Multiple thread support is enabled by default and cannot be disabled. The maximum number of threads supported is automatically determined by the number of logical CPU's on a client machine:

Maximum number of threads = Number of Logical CPU x 2 (up to a maximum of 8 threads)

Multiple threading will result in increased memory and CPU usage on the OBM/ACB client machine, the level of resource usage will be proportion to the number of active threads. In order to fully leverage this feature, it is recommended a client machine should be installed with multiple core processors and sufficient free memory.

WARNING:

Multiple thread backup and restore operations can result in increase loading on your OBS server and could lead to OBS performance problems. It is strongly recommended a review of OBS hardware and configuration requirements is undertaken, to determine server suitability before mass deployment of v6 clients.

16 Create a "Read Only" or Non Admin System User

To create a read only admin user or non admin user account, go to the [Manage System] -> [Manage System User] page and click on "Add System User" link.

Manage System | Manage Log | Manage User | Manage Group Policy | **Manage System User** | Administrator's Guide | Select Language

My Profile | **Add System User** | List System User | Logout

System User Settings

Login Name :

Role : Non Admin ▾

Password :

Key :

Login Name : Login Name used to logon to web interface.

Role : Role of system user

Password : Password used to logon to web interface.

Enter the login name for the new system user account, the password must be at least six characters long, and the role must be "Non Admin".

Manage System | Manage Log | Manage User | Manage Group Policy | **Manage System User** | Administrator's Guide | Select Language

My Profile | **Add System User** | List System User | Logout

System User Settings

Login Name : readonly

Role : Non Admin ▾

Password : ●●●●●●

Key :

Login Name : Login Name used to logon to web interface.

Role : Role of system user

Password : Password used to logon to web interface.

To confirm the creation of the new user press the "Add" button. The account will be created and OBS will list the new and existing non admin accounts.

Manage System | Manage Log | Manage User | Manage Group Policy | **Manage System User** | Administrator's Guide | Select Language

My Profile | Add System User | **List System User** | Logout

[A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z | Others | All]

Administrator									
No.	Login Name	Role	Name	Email	Host Name	Backup User	User Group	Policy Group	Owner
1	readonly	Non Admin	--	--	--	--	--	--	--
2	readonly1	Non Admin	--	--	--	--	--	--	--
3	readonly2	Non Admin	--	--	--	--	--	--	--
4	readonly3	Non Admin	--	--	--	--	--	--	--
5	readonly4	Non Admin	--	--	--	--	--	--	--

17 AutoUpdate

This chapter describes how you can use the AutoUpdate feature to automatically update OBM and ACB on all running instances:

17.1 How it works

The AutoUpdate operation relies on AutoUpdate Agent (AUA) to function properly. It is a service bundled with OBM/ACB. No new updates will be delivered to a machine running OBM or ACB if AutoUpdate Agent service is stopped.

During each Auto Update cycle, AutoUpdate works in the following sequences:

1. The AutoUpdate Agent running on the client machine will download the index file (%OBSR_HOME%\webapps\obs\liveUpdate\index.xml) which contains the information of the latest client software available from OBS.
2. If the AutoUpdate Agent finds that OBS contains a patch for OBM or ACB which is newer than the current version, it will download and install the patch from OBS automatically (%OBSR_HOME%\webapps\obs\liveUpdate\obm?????.zip).
3. After the OBM or ACB client is updated. The scheduled backup job will run using latest version of OBM/ACB.

Note:

In order for AutoUpdate to work, the "index.xml" file must be renamed from the file "index.xml.disable" inside the directory "%OBSR_HOME%\webapps\obs\liveUpdate".

17.2 Using AutoUpdate

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

17.3 AutoUpdate Limitations

AutoUpdate is officially supported for OBM & ACB v5.5.1.0 or above to v6.7.0.0.

AutoUpdate of OBM & ACB to v6 is officially supported for O/S platforms specified in OBM user guide.

AutoUpdate Agent does not support OBM/ACB upgrade from v5 to v6 on the following O/S platforms:

- i. FreeBSD
- ii. Solaris
- iii. Mac OSX

AutoUpdate Agent may update details on bundled Java that is packaged with OBM/ACB installation. Due to this reason, AutoUpdate Agent will not support upgrades on these platforms as propriety Java are in use.

17.3.1 Backup User Account Selection

The Auto Update of OBM/ACB clients can be managed directly from the OBS web console. The OBS system administrator or system users will be able to select backup clients to upgrade via the [Manage System] -> [Manage User] -> [Auto Update] page. By default all backup user accounts are selected. This information is then saved to the %OBS_HOME%\conf\ autoUpdate.bdb file. The "autoUpdate,bdb" file will be automatically created when OBS is installed or when upgraded to v6.7.0.0 or above during OBS service startup.

Once selected for Auto Update the OBM/ACB clients connecting to the backup account will be updated. The OBM/ACB clients will be updated regardless of the status of the backup account, i.e. enabled, suspended, or locked.

The following example is from the [Manage System] -> [Manage User] -> [Auto Update] page for the "system" user. By default all backup user accounts are selected for Auto Update. In addition to displaying the list of backup users, when Auto Update is enabled on OBS. Both the latest available upgrade versions for ACB and OBM are shown.

The "system" user can view and change the auto update status for all OBM/ACB user accounts on the OBS server including those created by resellers. The reseller owned backup user accounts are identified with the "Owner" name.

Search by : Login Name Alias

[[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

Administrator					
<input checked="" type="radio"/> 6.7.0.0 <input type="radio"/> 6.7.0.0					
No.	<input type="checkbox"/>	Login Name (Alias)	Owner	Registration Date	Trial Expiry Date
1	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> acb1 ()	--	2011-11-11 (13 days ago)	Never Expire
2	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> acbtest1 (abc123)	level2	2011-11-24 (Today)	Never Expire
3	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> acbtest2 (abc123)	level2	2011-11-24 (Today)	Never Expire
4	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> acbtest3 (abc123)	level2	2011-11-24 (Today)	Never Expire
5	<input checked="" type="checkbox"/>	<input type="radio"/> s1 ()	--	2011-11-01 (23 days ago)	Never Expire
6	<input checked="" type="checkbox"/>	<input type="radio"/> tl ()	--	2011-10-31 (24 days ago)	Never Expire
7	<input checked="" type="checkbox"/>	<input type="radio"/> t2 ()	--	2011-10-31 (24 days ago)	Never Expire
8	<input checked="" type="checkbox"/>	<input type="radio"/> test1 (abc123)	level2	2011-11-24 (Today)	Never Expire
9	<input checked="" type="checkbox"/>	<input type="radio"/> test2 (abc123)	level2	2011-11-24 (Today)	Never Expire
10	<input checked="" type="checkbox"/>	<input type="radio"/> tr (abc123)	--	2011-11-24 (Today)	Never Expire

Some definitions of the fields related are shown in the following table:

Key	Description
No.	Number count of the backup user.
Login Name (Alias)	The login name of the user with the alias bracketed behind.
Owner	Owner of this backup user.
Registration Date	The creation time of user.
Trial Expiry Date	The expiry date of trial user.

If the Auto Update feature is disabled on OBS the [Manage System] -> [Manage User] -> [Auto Update] page, will display the status "Auto Update is disabled". Both the latest available upgrade versions for ACB and OBM will not be shown.

Auto Update is disabled

Search by : Login Name Alias

[[A-B](#) | [C-D](#) | [E-F](#) | [G-H](#) | [I-J](#) | [K-L](#) | [M-N](#) | [O-P](#) | [Q-R](#) | [S-T](#) | [U-V](#) | [W-X](#) | [Y-Z](#) | [Others](#) | [Trial](#) | [Paid](#) | [Suspended](#) | [Locked](#) | [All](#)]

Administrator					
No.	<input type="checkbox"/>	Login Name (Alias)	Owner	Registration Date	Trial Expiry Date
1	<input checked="" type="checkbox"/>	acb1 ()	--	2011-11-11 (13 days ago)	Never Expire
2	<input checked="" type="checkbox"/>	acbtest1 (abc123)	level2	2011-11-24 (Today)	Never Expire
3	<input checked="" type="checkbox"/>	acbtest2 (abc123)	level2	2011-11-24 (Today)	Never Expire
4	<input checked="" type="checkbox"/>	acbtest3 (abc123)	level2	2011-11-24 (Today)	Never Expire
5	<input checked="" type="checkbox"/>	s1 ()	--	2011-11-01 (23 days ago)	Never Expire
6	<input checked="" type="checkbox"/>	t1 ()	--	2011-10-31 (24 days ago)	Never Expire
7	<input checked="" type="checkbox"/>	t2 ()	--	2011-10-31 (24 days ago)	Never Expire
8	<input checked="" type="checkbox"/>	test1 (abc123)	level2	2011-11-24 (Today)	Never Expire
9	<input checked="" type="checkbox"/>	test2 (abc123)	level2	2011-11-24 (Today)	Never Expire
10	<input checked="" type="checkbox"/>	tr (abc123)	--	2011-11-24 (Today)	Never Expire

WARNING:

Please **DO NOT** modify the attributes "include-users" and "exclude-users" inside the <patch> tag in the file "index.xml" as the values inside the attributes will be replaced by the settings in this page.

18 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 off-line media (e.g. removable USB hard disk) to the backup server. Once the first full backup is loaded onto the backup server through off-line 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 file 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.

18.1 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 OBM 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:

1. 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\OBS and RPS\user". If the login name of the backup account is "john", the home directory of user "john" should be "C:\Program Files\OBS and RPS\user\john".

2. 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\OBS and RPS\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).

3. 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.

4. 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). Administrator should run the "File Validation Option" ([OBS web admin console] -> [Manage User] -> [User Profile] -> [File Validation Option]) for the corresponding user with the option "Verify Checksum" enabled to ensure that all backup files are seed loaded to OBS correctly.

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.

18.2 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:

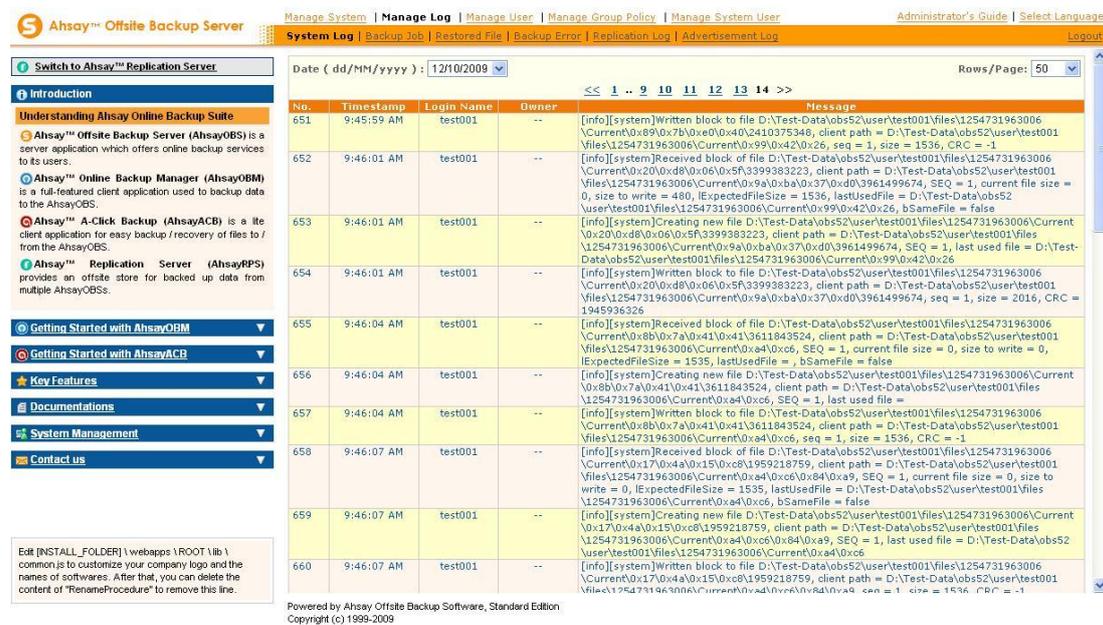
1. Locate the home directory of the backup user.
2. Copy the complete home directory of this backup user to an offline media.
3. Once the offline media is shipped to the user, the user can then use the [Decrypt File Wizard] available in OBM to decrypt and restore the backup files available in the offline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

19 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.

19.1 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 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.
Login Name	The login name of the related user.
Owner	The owner of this user.
Message	The system log message.

19.2 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.



No.	Backup Time	Login Name > Backup Set > Job Number	Owner	Client Version	Upload Size	Job Status
1	02/10 03:27PM - 02/10 03:28PM	OBM User1 > BackupSet-0 > 2009-10-02 (15:27)	--	6.0.0.0	8.11M	OK
2	02/10 04:12PM - 02/10 04:13PM	OBM User1 > BackupSet-0 > 2009-10-02 (16:12)	--	6.0.0.0	114k	OK
3	02/10 04:13PM - 02/10 04:13PM	OBM User1 > BackupSet-0 > 2009-10-02 (16:13)	--	6.0.0.0	50k	OK
4	02/10 04:13PM - 02/10 04:13PM	OBM User1 > BackupSet-0 > 2009-10-02 (16:13)	--	6.0.0.0	52k	OK
5	02/10 04:13PM - 02/10 04:13PM	OBM User1 > BackupSet-0 > 2009-10-02 (16:13)	--	6.0.0.0	55k	OK
6	02/10 05:23PM - 02/10 05:23PM	OBM User1 > BackupSet-0 > 2009-10-02 (17:23)	--	6.0.0.0	0	User interrupted

Key	Description
Date	The date when all backup jobs listed below were run.
Backup Time	Start and end time of this backup job.
Login Name > Backup Set > Job Number	Backup Account that ran this backup job.
Owner	Owner of this backup user.
Client Version	The OBM/ACB version number that this backup user is using.
Upload Size	Size of backup data uploaded.
Status	Overall status of the backup job.

19.3 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.

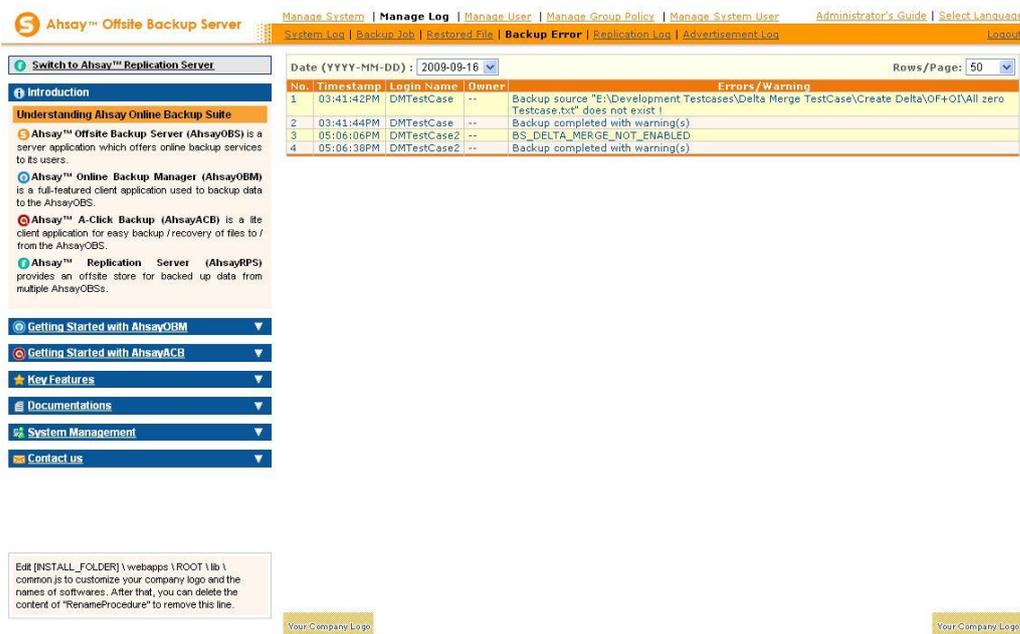


No.	Restore Time	Login Name	Owner	Size	IP
1	2009/09/24 10:59:07AM - 2009/09/24 10:59:09AM	DMTestCase3	--	80k	192.168.6.185
2	2009/09/24 11:00:48AM - 2009/09/24 11:00:49AM	DMTestCase3	--	45k	192.168.6.185
3	2009/09/24 11:00:03AM - 2009/09/24 11:00:03AM	DMTestCase3	--	38k	192.168.6.185
4	2009/09/24 11:02:48AM - 2009/09/24 11:02:48AM	DMTestCase3	--	55k	192.168.6.185
5	2009/09/24 11:05:52AM - 2009/09/24 11:06:12AM	DMTestCase3	--	382k	192.168.6.185
6	2009/09/24 11:05:34AM - 2009/09/24 11:05:34AM	DMTestCase3	--	65k	192.168.6.185
7	2009/09/24 11:08:53AM - 2009/09/24 11:08:56AM	DMTestCase3	--	92k	192.168.6.185
8	2009/09/24 11:13:29AM - 2009/09/24 11:13:29AM	DMTestCase3	--	135k	192.168.6.185
9	2009/09/24 11:19:57AM - 2009/09/24 11:20:05AM	DMTestCase3	--	192k	192.168.6.185
10	2009/09/24 11:19:26AM - 2009/09/24 11:19:33AM	DMTestCase3	--	125k	192.168.6.185
11	2009/09/24 11:19:14AM - 2009/09/24 11:19:16AM	DMTestCase3	--	80k	192.168.6.185
12	2009/09/24 11:20:28AM - 2009/09/24 11:20:39AM	DMTestCase3	--	366k	192.168.6.185
13	2009/09/24 11:20:12AM - 2009/09/24 11:20:20AM	DMTestCase3	--	274k	192.168.6.185
14	2009/09/24 11:27:06AM - 2009/09/24 11:27:17AM	DMTestCase3	--	274k	192.168.6.185
15	2009/09/24 11:34:57AM - 2009/09/24 11:34:59AM	DMTestCase3	--	91k	192.168.6.185
16	2009/09/24 11:37:10AM - 2009/09/24 11:37:12AM	DMTestCase3	--	135k	192.168.6.185
17	2009/09/24 02:48:53PM - 2009/09/24 02:49:07PM	DMTestCase3	--	255k	192.168.6.185
18	2009/09/24 02:48:22PM - 2009/09/24 02:48:36PM	DMTestCase3	--	255k	192.168.6.185
19	2009/09/24 02:50:45PM - 2009/09/24 02:50:59PM	DMTestCase3	--	255k	192.168.6.185
20	2009/09/24 02:50:10PM - 2009/09/24 02:50:10PM	DMTestCase3	--	83k	192.168.6.185
21	2009/09/24 02:51:59PM - 2009/09/24 02:52:00PM	DMTestCase3	--	83k	192.168.6.185
22	2009/09/24 03:17:20PM - 2009/09/24 03:17:21PM	DMTestCase3	--	83k	192.168.6.187
23	2009/09/24 03:19:56PM - 2009/09/24 03:20:14PM	DMTestCase3	--	83k	192.168.6.187
24	2009/09/24 03:31:30PM - 2009/09/24 03:31:30PM	DMTestCase3	--	0	192.168.6.187
25	2009/09/24 03:33:47PM - 2009/09/24 03:33:47PM	DMTestCase3	--	0	192.168.6.187
26	2009/09/24 03:33:02PM - 2009/09/24 03:33:02PM	DMTestCase3	--	0	192.168.6.187
27	2009/09/24 05:48:25PM - 2009/09/24 05:48:29PM	alan	--	80k	192.168.6.184

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

19.4 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 dropdown list.



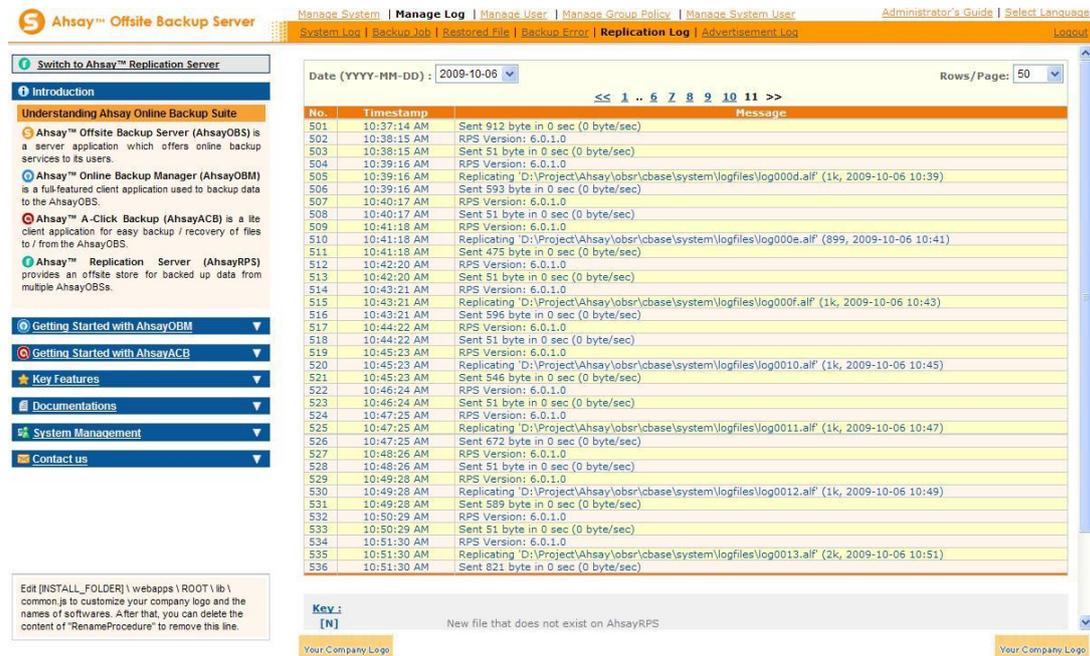
The screenshot shows the Ahsay Offsite Backup Server interface. The top navigation bar includes links for Manage System, Manage Log, Manage User, Manage Group Policy, Manage System User, Administrator's Guide, and Select Language. The main content area displays the Backup Error log for the date 2009-09-16. The log table has the following data:

No.	Timestamp	Login Name	Owner	Errors /Warning
1	03:41:42PM	DMTestCase	--	Backup source "E:\Development Testcases\Delta Merge TestCase\Create Delta\OF+O1\All zero Testcase.txt" does not exist !
2	03:41:44PM	DMTestCase	--	Backup completed with warning(s)
3	05:06:06PM	DMTestCase2	--	BS_DELTA_MERGE_NOT_ENABLED
4	05:06:38PM	DMTestCase2	--	Backup completed with warning(s)

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.
Owner	The owner of this backup user.
Errors/Warnings	Details of the error or warning recorded.

19.5 Reviewing Replication Log

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



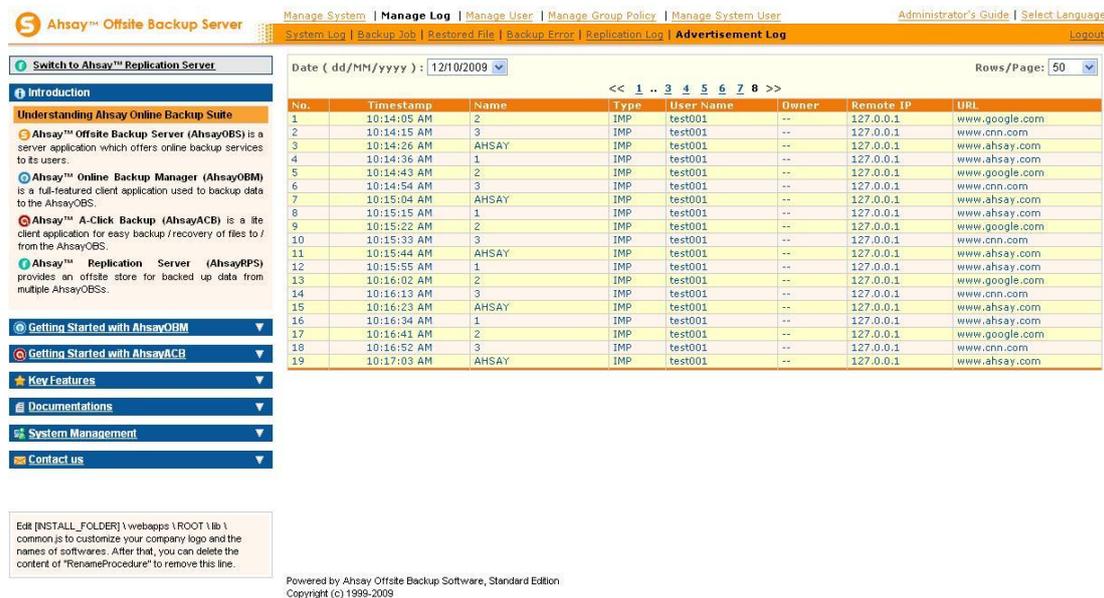
The screenshot shows the Ahsay Offsite Backup Server interface. The top navigation bar includes links for Manage System, Manage Log, Manage User, Manage Group Policy, Manage System User, Administrator's Guide, and Select Language. The main content area is titled 'Replication Log' and shows a table of replication activities for the date 2009-10-06. The table has three columns: No., Timestamp, and Message. The messages describe replication activities for various files, including log files and system files.

No.	Timestamp	Message
501	10:37:14 AM	Sent 912 byte in 0 sec (0 byte/sec)
502	10:38:15 AM	RPS Version: 6.0.1.0
503	10:38:15 AM	Sent 51 byte in 0 sec (0 byte/sec)
504	10:39:16 AM	RPS Version: 6.0.1.0
505	10:39:16 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log000d.alf' (1k, 2009-10-06 10:39)
506	10:39:16 AM	Sent 593 byte in 0 sec (0 byte/sec)
507	10:40:17 AM	RPS Version: 6.0.1.0
508	10:40:17 AM	Sent 51 byte in 0 sec (0 byte/sec)
509	10:41:18 AM	RPS Version: 6.0.1.0
510	10:41:18 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log000e.alf' (899, 2009-10-06 10:41)
511	10:41:19 AM	Sent 473 byte in 0 sec (0 byte/sec)
512	10:42:20 AM	RPS Version: 6.0.1.0
513	10:42:20 AM	Sent 51 byte in 0 sec (0 byte/sec)
514	10:43:21 AM	RPS Version: 6.0.1.0
515	10:43:21 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log000f.alf' (1k, 2009-10-06 10:43)
516	10:43:21 AM	Sent 595 byte in 0 sec (0 byte/sec)
517	10:44:22 AM	RPS Version: 6.0.1.0
518	10:44:22 AM	Sent 51 byte in 0 sec (0 byte/sec)
519	10:45:23 AM	RPS Version: 6.0.1.0
520	10:45:23 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log0010.alf' (1k, 2009-10-06 10:45)
521	10:45:23 AM	Sent 546 byte in 0 sec (0 byte/sec)
522	10:46:24 AM	RPS Version: 6.0.1.0
523	10:46:24 AM	Sent 51 byte in 0 sec (0 byte/sec)
524	10:47:25 AM	RPS Version: 6.0.1.0
525	10:47:25 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log0011.alf' (1k, 2009-10-06 10:47)
526	10:47:25 AM	Sent 672 byte in 0 sec (0 byte/sec)
527	10:48:26 AM	RPS Version: 6.0.1.0
528	10:48:26 AM	Sent 51 byte in 0 sec (0 byte/sec)
529	10:49:28 AM	RPS Version: 6.0.1.0
530	10:49:28 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log0012.alf' (1k, 2009-10-06 10:49)
531	10:49:28 AM	Sent 589 byte in 0 sec (0 byte/sec)
532	10:50:29 AM	RPS Version: 6.0.1.0
533	10:50:29 AM	Sent 51 byte in 0 sec (0 byte/sec)
534	10:51:30 AM	RPS Version: 6.0.1.0
535	10:51:30 AM	Replicating 'D:\Project\Ahsay\obsr\cbase\system\logfiles\log0013.alf' (2k, 2009-10-06 10:51)
536	10:51:30 AM	Sent 821 byte in 0 sec (0 byte/sec)

Key	Description
Date	The date when the replication activities were logged.
Rows/Page	The number of rows to display per page.
Timestamp	The time when the replication was displayed.
Message	Details of the activities.

19.6 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 OBM/ACB clients for a particular date. You can review displayed adverts on any particular date by selecting the required date from the dropdown list.



No.	Timestamp	Name	Type	User Name	Owner	Remote IP	URL
1	10:14:03 AM	2	IMP	test001	--	127.0.0.1	www.google.com
2	10:14:15 AM	3	IMP	test001	--	127.0.0.1	www.cnn.com
3	10:14:26 AM	AHSAY	IMP	test001	--	127.0.0.1	www.ahsay.com
4	10:14:36 AM	1	IMP	test001	--	127.0.0.1	www.ahsay.com
5	10:14:43 AM	2	IMP	test001	--	127.0.0.1	www.google.com
6	10:14:54 AM	3	IMP	test001	--	127.0.0.1	www.cnn.com
7	10:15:04 AM	AHSAY	IMP	test001	--	127.0.0.1	www.ahsay.com
8	10:15:15 AM	1	IMP	test001	--	127.0.0.1	www.ahsay.com
9	10:15:22 AM	2	IMP	test001	--	127.0.0.1	www.google.com
10	10:15:33 AM	3	IMP	test001	--	127.0.0.1	www.cnn.com
11	10:15:44 AM	AHSAY	IMP	test001	--	127.0.0.1	www.ahsay.com
12	10:15:55 AM	1	IMP	test001	--	127.0.0.1	www.ahsay.com
13	10:16:02 AM	2	IMP	test001	--	127.0.0.1	www.google.com
14	10:16:13 AM	3	IMP	test001	--	127.0.0.1	www.cnn.com
15	10:16:23 AM	AHSAY	IMP	test001	--	127.0.0.1	www.ahsay.com
16	10:16:34 AM	1	IMP	test001	--	127.0.0.1	www.ahsay.com
17	10:16:41 AM	2	IMP	test001	--	127.0.0.1	www.google.com
18	10:16:52 AM	3	IMP	test001	--	127.0.0.1	www.cnn.com
19	10:17:03 AM	AHSAY	IMP	test001	--	127.0.0.1	www.ahsay.com

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 advertisement was displayed.
Name	The name of the advertisement.
Type	Advertisement display types: <ul style="list-style-type: none"> 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 OBM/ACB client.
Owner	The owner of this backup user.
Remote IP	The remote IP address of the OBM/ACB client.

URL	The target URL associated with this ad.
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20 Further Information

If you have any question or suggestion about this document, please send an email to our support team.

Appendix

Appendix A Supported Language Code

Language Code	Language
bg	Bulgarian
ca	Catalan
cs	Czech
da	Danish
de	German
el	Greek
en	English
es	Spanish
eu	Basque
fi	Finnish
fr	French
hu	Hungarian
is	Icelandic
it	Italian
iw	Hebrew
ja	Japanese
ko	Korean
lt	Lithuanian
nl	Dutch
no	Norwegian
po	Polish
pt_BR	Portuguese (Brazil)
pt_PT	Portuguese (Portugal)
ro	Romanian
ru	Russian
sl	Slovenian
sv	Swedish
th_th	Thai (Thai Digit)
tr	Turkish
zh_CN	Chinese (Simplified)
zh_TW	Chinese (Traditional)

Appendix B Supported Time zone

Timezone String	Timezone Name
GMT-11:00 (WST)	Western Standard Time
GMT-11:00 (NUT)	Niue Time
GMT-11:00 (SST)	Samoa Standard Time
GMT-10:00 (HADT)	Hawaii-Aleutian Daylight Time
GMT-10:00 (HST)	Hawaiian Standard Time
GMT-10:00 (TKT)	Tokelau Time
GMT-10:00 (HST)	Hawaiian Standard Time
GMT-10:00 (CKT)	Cook Islands Time
GMT-10:00 (THAT)	Tahiti Time
GMT-09:00 (AKST)	Alaska Standard Time
GMT-09:00 (GAMT)	Gambier Time
GMT-08:00 (PST)	Pacific Standard Time (North America)
GMT-07:00 (PDT)	Pacific Daylight Time (North America)
GMT-07:00 (MST)	Mountain Standard Time
GMT-07:00 (MDT)	Mountain Day Time
GMT-06:00 (CST)	Central Standard Time
GMT-06:00 (CDT)	Central Daylight Time
GMT-06:00 (EAST)	Easter Island Time
GMT-06:00 (GALT)	Galapagos Time
GMT-05:00 (EST)	Eastern Standard Time (North America)
GMT-05:00 (EDT)	Eastern Daylight Time (North America)
GMT-05:00 (COT)	Colombia Time
GMT-05:00 (ECT)	Ecuador Time
GMT-05:00 (CDT)	Central Daylight Time (North America)
GMT-05:00 (PET)	Peru Time
GMT-05:00 (ACT)	Atlantic/Proto Acre
GMT-05:00 (GMT-05:00)	GMT -05:00
GMT-04:00 (AST)	Atlantic Standard Time
GMT-04:00 (PYT)	Paraguay Time
GMT-04:00 (VET)	Venezuela Time
GMT-04:00 (GYT)	Guyana Time
GMT-04:00 (ADT)	Acre Daylight Time
GMT-04:00 (BOT)	Bolivia Time
GMT-04:00 (AMT)	Armenia Time
GMT-04:00 (CLT)	Chile Time
GMT-04:00 (FKT)	Falkland Islands
GMT-03:00 (ART)	Argentina Time
GMT-03:00 (GFT)	French Guiana Time
GMT-03:00 (BRT)	Brasilia Time
GMT-03:00 (WGST)	West Greenland Summer Time
GMT-03:00 (PMDT)	Pierre & Miquelon Daylight Time
GMT-03:00 (UYT)	Uruguay Time
GMT-03:00 (SRT)	Suriname Time

GMT-02:00 (FNT)	Fernando de Noronha Time
GMT-02:00 (GST)	Gulf Standard Time
GMT-01:00 (EGST)	East Greenland Summer Time
GMT+00:00 (GMT)	Greenwich Mean Time
GMT+00:00 (WET)	Western European Time
GMT+00:00 (WEST)	Western European Summer Time
GMT+00:00 (IST)	Israel Standard Time
GMT+00:00 (BST)	Brazil Standard Time
GMT+00:00 (UTC)	Coordinate Universal Time
GMT+01:00 (CET)	Central European Time
GMT+01:00 (WAT)	West Africa Time
GMT+01:00 (CEST)	Central European Summer Time
GMT+02:00 (EEST)	Eastern European Summer Time
GMT+02:00 (CAT)	Central Africa Time
GMT+02:00 (SAST)	Soft Africa Standard Time
GMT+02:00 (EET)	Eastern European Time
GMT+02:00 (IDT)	Israel Daylight Time
GMT+03:00 (EAT)	East Africa Time
GMT+03:00 (AST)	Acre Standard Time
GMT+03:00 (ADT)	Acre Daylight Time
GMT+03:00 (MSD)	Moscow Daylight Time
GMT+04:00 (AQTST)	Aqtau Time
GMT+04:00 (AZST)	Azerbaijan Summer Time
GMT+04:00 (GST)	Gulf Standard Time
GMT+04:00 (GEST)	Georgia Time
GMT+04:00 (AMST)	Armenia Summer Time
GMT+04:00 (SAMST)	Samara Time
GMT+04:00 (SCT)	Seychelles Time
GMT+04:00 (MUT)	Mauritius Time
GMT+04:00 (RET)	Reunion Time
GMT+05:00 (TMT)	Turkmenistan Time
GMT+05:00 (KGST)	Kirgizstan Time
GMT+05:00 (TJT)	Tajikistan Time
GMT+05:00 (PKT)	Pakistan Time
GMT+05:00 (UZT)	Uzbekistan Time
GMT+05:00 (YEKST)	Yekaterinburg Time
GMT+05:00 (IDT)	Indian Standard Time
GMT+05:00 (TFT)	French Southern & Antarctic Lands Time
GMT+05:00 (MVT)	Maldives Time
GMT+06:00 (MAWT)	Mawson Time
GMT+06:00 (LKT)	Lanka Time
GMT+06:00 (BDT)	Bangladesh Time
GMT+06:00 (NOVST)	Novosibirsk Time
GMT+06:00 (BTT)	Bhutan Time
GMT+07:00 (ICT)	Indochina Time
GMT+07:00 (JAVT)	Java Time, Indonesia Time
GMT+07:00 (KRAST)	Krasnoyarsk Time

GMT+07:00 (CXT)	Christmas Island Time
GMT+08:00 (HKT)	Hong Kong Time
GMT+08:00 (CST)	Cuba Standard Time
GMT+08:00 (BNST)	Brunei Time
GMT+08:00 (WST)	West Samoa Time
GMT+08:00 (IRKST)	Irkutsk Time
GMT+08:00 (MYT)	Malaysia Time
GMT+08:00 (PHT)	Philippine Time
GMT+08:00 (SGT)	Singapore Time
GMT+08:00 (BORT)	Borneo Time
GMT+08:00 (ULAT)	Ulan Bator Time
GMT+08:00 (JAYT)	Jayapura Time
GMT+09:00 (KST)	Korean Standard Time
GMT+09:00 (JST)	Japan Standard Time
GMT+09:00 (YAKST)	Yakutsk Time
GMT+09:00 (PWT)	Palau Time
GMT+10:00 (EST)	Eastern Standard Time (Australia)
GMT+10:00 (DDUT)	Dumont-d'Urville Time
GMT+10:00 (VLAST)	Vladivostok Time
GMT+10:00 (ChST)	Chamorro Standard Time
GMT+10:00 (PGT)	Papua New Guinea Time
GMT+10:00 (TRUST)	Truk Time
GMT+11:00 (MAGST)	Magadan Time
GMT+11:00 (VUT)	Vanuatu Time
GMT+11:00 (KOSST)	Kosrae Time
GMT+11:00 (NCT)	New Caledonia Time
GMT+11:00 (PONT)	Ponape Time (Micronesia)
GMT+12:00 (NZST)	New Zealand Standard Time
GMT+12:00 (ANAST)	Anadyr Time
GMT+12:00 (PETST)	Petropavlovsk-Kamchatski Time
GMT+12:00 (FJT)	Fiji Time
GMT+12:00 (TVT)	Tuvalu Time
GMT+12:00 (MHT)	Marshall Islands Time
GMT+12:00 (NRT)	Nauru Time
GMT+12:00 (GILT)	Gilbert Island Time
GMT+12:00 (WAKT)	Wake Time
GMT+12:00 (WFT)	Wallis and Futuna Time

Appendix C Product Documentations

Please visit <http://backup.microlabhard.es> for the documentations.