

Ahsay Cloud Backup Suite v7 Administrator's Guide

Ahsay Systems Corporation Limited

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Revision History

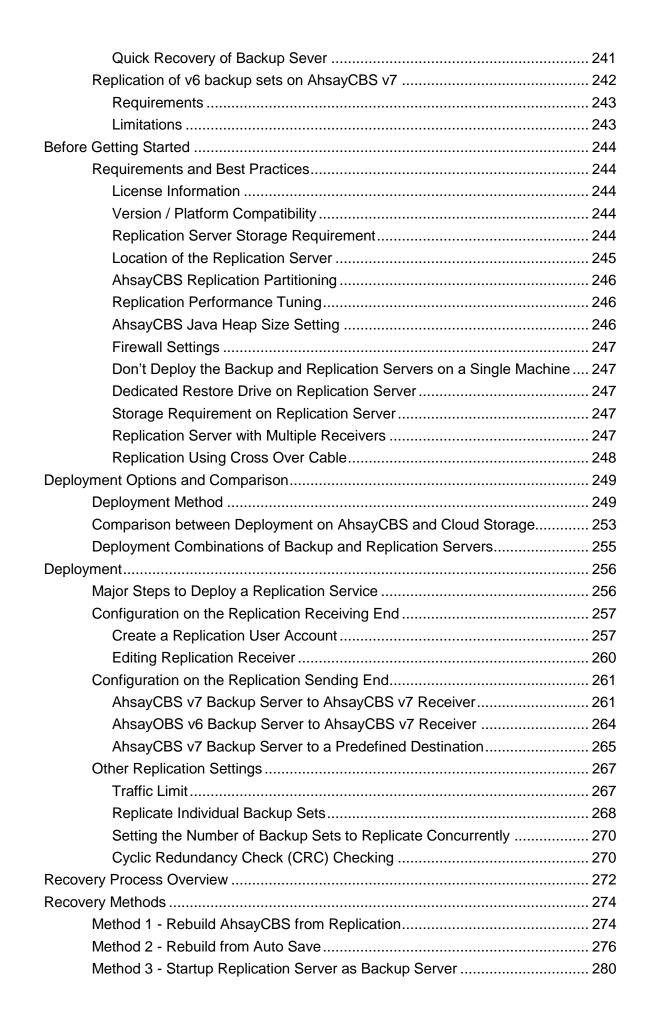
Date	Descriptions	Type of modification
26 January 2018	Added icon description for toast.ico for Appendix F	New
22 March 2018	Added information and updated screenshot for Auto Save for Ch.5.2.1; Modified %USER_HOME% for Ch.7.1.3; Added suggestion, assumption and steps for Move/ Import/ Export Users for Ch.6.2.1.7; Update the screenshot for Move/ Import/ Export Users for Ch.6.2.1.7	New/ Modification
28 May 2018	Update the screen shot for Ch.5, 6; Update the steps for Ch.6; Added Destination for Backup User Settings for Ch.5.1.4.3 Managing System User; Modified shared quota for Ch.6.4.5.2; Added User Quota for Ch.6.4.5.2; Added new quota management explanation for Ch.6.2.2.1; Updated email report screen shot for Ch.6.4.5.2	New/ Modification
11 June 2018	Added screen shot comparison for quota management between pre-v7.15.6.0 and post- v7.15.6.0 ; Add GDPR compliance for Ch.3.1; Add Cookie Banner Notification for Ch.5.1.1.9; Update screen shot for Ch.3.1, 3.3, 3.4	New/ Modification
7 August 2018	Added clarification for hostname setting for Ch.5.1.1.1 Host	New
15 August 2018	Added instruction for customization for OneDrive for Business in Ch.10.	New
14 September 2018	Added Progressive DIC for Ch.6.1.6; Updated screenshot for Ch.6.1; Added Suggestion on antivirus exclusion for Ch.1.3; Assed note and table for system sub admin for Ch.5.1.4.3; Added note for manage license key for Ch.4.2; Added note for license summary and requirement for Ch.4.3; Added Upgrade from pre-v7.17.0.0 to v7.17.0.0 and above for Ch.4.3	New/ Modification
31 July 2019	Added Email me Consolidated Report in Ch. 5.1.2	Modification

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1 Overview

What is this software?

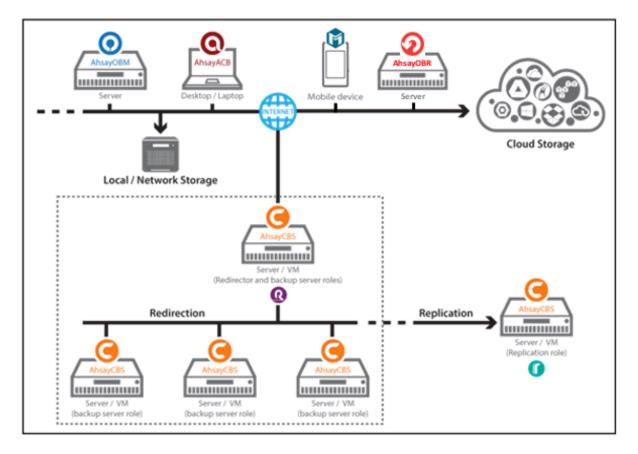
AhsayCBS is a web-based centralized management console for backup service administrators or users to manage backup and restore, and to monitor backup, restore, replication and redirection activities. Administrators can create backup user accounts, manage group policies, and keep track of system performance and health.

Administrators can create sub-admin or reseller accounts so that they can manage the backup users by themselves. In addition, non-admin operator accounts with read only permission can be created to help backup service administrator to monitor daily backup and restore jobs, as well as system activities.

To further safeguard the data hosted on the Backup Server, AhsayCBS comes with replication feature to replicate the backup data offsite to a Replication Server hosted in another site or to commercial cloud storages such as network storage, FTP/SFTP and common cloud storages (Google Drive, Dropbox, OneDrive, Amazon Drive, Box, etc.)

System Architecture

Below is a diagram illustrating the relationship among the AhsayCBS, client components and server components.



Recommendation on Antivirus Exclusion

To optimize performance of AhsayCBS on Windows, and to avoid conflict with your antivirus software, refer to the following KB article the list of processes and directory paths that should be added to all antivirus software white list / exclusion list:

FAQ: Suggestion on antivirus exclusions to improve performance of Ahsay software on Windows

NOTE

For AhsayCBS version 7.17 or above, the cbssvcX64.exe or cbssvcX86.exe processes are automatically added to Windows Defender exclusion list for Windows 10 and 2016, during installation / upgrade via installer.

AhsayCBS System Components

Client Components

Below is a brief introduction of the three client backup agents.



AhsayOBM is a versatile backup application that backup databases, applications and virtual machines to local and offsite destinations, e.g. local storage, on premise Backup Server or Backup Server located in datacenters, and common cloud storages (Google Drive, Dropbox, OneDrive, Amazon Drive, Box, etc.)

All the backup data are compressed and encrypted before uploading to the Backup Server, while the restore process would require downloading the compressed and encrypted data onto the client computer for decryption and un-compression.

AhsayOBM allows the creation of multiple backup sets, and backup file, databases and virtual machines such as VMware, Hyper-V, Microsoft Exchange Database Availability Group (DAG), Microsoft Exchange Database, Microsoft Exchange Mailbox, Microsoft SQL Server, Oracle Database, Lotus Domino/Notes, MySQL, Office365 Exchange Online, Cloud File, and Windows Bare Metal with our dedicated backup modules.

Refer to the URL below to obtain the Quick Start Guide of AhsayOBM for instructions on installing the software, running a backup job and restoring backed up data.

Windows	Click to obtain the v7 Quick Start Guide
Мас	Click to obtain the v7 Quick Start Guide
Linux (CLI)	Click to obtain the v7 Quick Start Guide
Linux (GUI)	Click to obtain the v7 Quick Start Guide
Synology	Click to obtain the v7 Quick Start Guide



AhsayACB is an advanced yet easy-to-use desktop and laptop backup software for backing up files, Cloud files, Windows System backup and IBM Lotus Notes to local and offsite destinations, e.g. local storage, on premise Backup Servers or Backup Servers located in datacenters, and common cloud storages (Google Drive, Dropbox, OneDrive, Amazon Drive, Box, etc.)

All the backup data are compressed and encrypted before uploading to the Backup Server, while the restore process would require downloading the compressed and encrypted data onto the client computer for encryption and un-compression.

Refer to the URL below to obtain the Quick Start Guide of AhsayACB for instructions on installing the software, running a backup job and restoring backed up data.

Windows	Click to obtain the v7 Quick Start Guide
Мас	Click to obtain the v7 Quick Start Guide



As a comprehensive backup solution to Android and iOS mobile devices, AhsayMOB's userfriendly interface allows users to quickly configure backup settings and easily back up important data on their smartphones, such as photos, videos and contacts.

You can choose to enable or disable the backup data encryption feature according to your preference. If you choose to disable the encryption feature, some backup data (e.g. photos or videos) backed up to the cloud storage can be viewed directly from there.

Below is a table showing the supported Cloud Backup Destinations and supported Backup Data Type on both platforms.

Supported Cloud Backup Destinations		
	iOS	Android
AhsayCBS Storage	V	V
Google Drive	V	~
Dropbox	~	V
OneDrive	V	~
Supported Backup Data Types		
	iOS	Android
Photo	V	~
Video	~	V
Contact	~	V
Voice File	X	~
Message (SMS)	X	~
WhatsApp	X	~

Refer to the URL below to obtain the User Guide of AhsayMOB for instructions on installing the software, running a backup job and restoring backed up data.

iOS	Click to obtain the User Guide	
Android	Click to obtain the User Guide	

Below is a brief introduction of the client restore agents.



AhsayOBR supports the restore of multiple backup sets; file, databases and virtual machines, such as VMware, Hyper-V, Microsoft Exchange Database Availability Group (DAG), Microsoft Exchange Database, Microsoft Exchange Mailbox, Microsoft SQL Server, Oracle Database, Lotus Domino/Notes, MySQL, Windows System, Windows System State, ShadowProtect, Synology NAS Devices, Office365 Exchange Online, Cloud File with our dedicated restore modules.

While you can still download Client Backup Agent (AhsayOBM/ AhsayACB) to restore data on computer, AhsayOBR gives a quick, direct and secure solution just for the data restore purposes. Below is a table comparing some major features of both tools, and the pros and cons of using them.

Feature	Tool	Pros	Cons
Installation	AhsayOBR	No installation requiredFaster to launch	Required to launch every time when you use
	Client Backup Agent	One-time installation	Larger installer size hence longer installation time
Run Direct AhsayOB		N/A	Run Direct restore for VMware and Hyper V servers is NOT supported. Since AhsayOBR is not a Client Backup Agent and therefore NFS is not bundled along with the software. NFS is a mandatory item for performing Run Direct restore for VMware and Hyper-V servers.
	Client Backup Agent	Support Run Direct restore for both VMware and Hyper-V servers.	N/A
OpenDirect Restore	AhsayOBR Client Backup Agent	OpenDirect restore allows you to view and download individual files from a compressed or image file, without having to restore compressed file or image file	To ensure optimal restore performance, the backup of the files in an OpenDirect file backup set will NOT be encrypted and compressed, therefore, you may have to

		first. OpenDirect restore gives you the flexibility to restore selective file(s) quickly, so it saves you time and effort to achieve your restore goal.	take these factors in consideration when selecting this restore option.
Granular Restore	AhsayOBR Client Backup Agent	In some cases, you may only need to restore a few individual file(s) from the guest VM, therefore, granular restore gives you a fast, convenient, and flexible tool to restore selected file(s) from a guest VM quickly.	
Cross platform usage	AhsayOBR Client Backup Agent	Although both tools are available for use on various platforms, e.g. Windows, Mac, Linux, etc., cross platform restore is NOT recommended. For example, files backed up on Windows are not recommended to restore on a Mac/Linux machine.	
Compatibility	AhsayOBR	Support restore of backup set created on either AhsayACB / AhsayOBM	
	Client Backup Agent	N/A	Support restore of backup set created by the same type of Client Backup Agent only. E.g. backup set created on AhsayOBM can only be restored by AhsayOBM.

Refer to the URL below to obtain the User Guide of AhsayOBR for instructions on installing the software, running a backup job and restoring backed up data.

Windows	Click to obtain the v7 User Guide	
Мас	Click to obtain the v7 User Guide	
Linux (GUI)	Click to obtain the v7 User Guide	

Server Components

There are **three** server components: Backup Server, Replication Server, and Redirector. You can manage these components by logging to AhsayCBS with an admin role account. The following screen shows the AhsayCBS server components.

Backup Server

The Backup Server is a platform for backup clients to perform backup to its local hard disk, network storage, FTP/SFTP and common cloud storages such as Google Drive, Dropbox, OneDrive, Amazon Cloud Drive, Amazon S3, MS Azure, Google Cloud Storage etc.

All the backup jobs, with the exception of File, VMware, and Hyper-V backup sets with either Run Direct and or Open Direct / Granular feature enabled, are compressed and encrypted before uploading to the Backup Server, while the restore process would require downloading the compressed and encrypted data onto the client computer for decryption and un-compression.

Replication Server

Replication Server offers close to real time replication of the Backup Server (backup server configuration files, user profiles & backup set settings, and backup data hosted on the backup server). So that when your production Backup Server is out of service, you can switch the Replication Server into Backup Server within a short period to reduce potential downtime of your backup service.

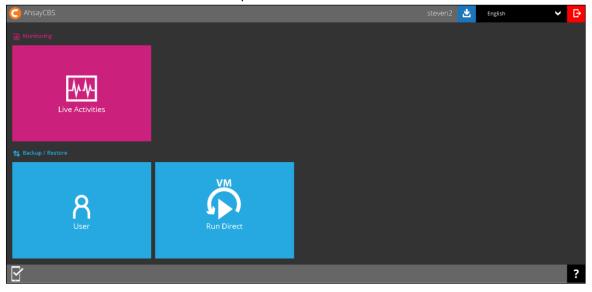
Redirector

With the use of Redirector in conjunction with multiple Backup Server machines, it forms a cloud backup architecture for servicing as many backup customers as needed with a single public URL. All backup users will use the single URL as the initial contact server, even though they reside on different Backup Servers under different URLs. Thus, an online backup provider can add new Backup Server machines to serve new customers, or relocate existing backup accounts from one Backup Server to another easily without the need for the existing users to reconfigure the backup server address in AhsayOBM or AhsayACB.

Agentless Backup / Restore

AhsayCBS v7.9.0.0 or above supports agentless backup and restore for Cloud File and Office 365 Exchange mailbox backup sets, which does not require any AhsayOBM/AhsayACB backup agents to be installed on the client machine. Instead, Cloud File and Office 365 Exchange mailbox backup or restore jobs are performed directly by the AhsayCBS server itself. For VMware ESXi/vCenter backup sets backed up to AhsayCBS, the guest VMs can be recovered using the agentless restore feature, which supports both Run Direct and Non Run Direct restores.

Below is the main user interface of the AhsayCBS (user role), also known as AhsayCBS User Web Console, where your clients login to manage their backup sets, perform the agentless backup/restore (Office 365 Exchange Online Mailbox and Cloud File backup sets), Run Direct restore for VMware ESXi/vCentre backup sets.



There are three backup sets that support agentless backup and restore in AhsayCBS v7.9.0.0 or above:

Cloud File Backup and Restore

You can now back up your data stored on Cloud storage (Google Drive, OneDrive, Dropbox, Amazon Cloud Drive, MS Azure, Google Cloud Storage, Amazon S3 etc) to the AhsayCBS or other cloud backup destination.

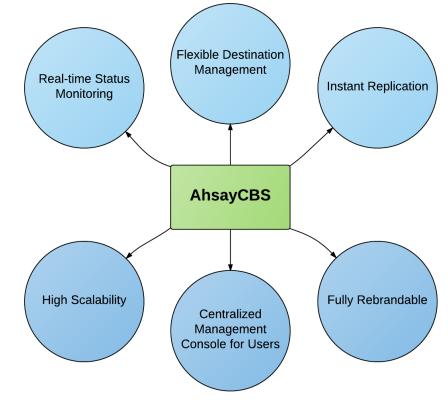
Exchange Online Mailbox Backup and Restore for Office 365

You can now back up mail objects from your Office 365 mailbox, and then restore them to your original account or another user under the same Office 365 Exchange Online account, all on the AhsayCBS without having to install a client backup agent first.

Run Direct of VMware vCenter/ESXi VM from AhsayCBS server

You can now perform a Run Direct restore of the VMware vCenter/ESXi VM directly using the AhsayCBS without the presence of a client backup agent (AhsayOBM/AhsayACB/ AhsayOBR).

Why should I use AhsayCBS to manage my backup users and system?



Real-time Status Monitoring

Monitor System Health and Backup/Restore Status, Anytime Anywhere – the AhsayCBS user interface (UI) has been designed to provide you with a user-friendly and informative view of various kinds of information you need. Highlighted features including:

- A dashboard to view the system usage and performance
- Live Activities panel to view real-time status of backup, restore, replication, redirection, etc.
- Panels to view all log files of backup, restore, replication and redirection

Flexible Destination Management

Wide range of backup destination options – to offer you with the greatest flexibility of backup destination, AhsayCBS now supports local drive, mapped network drive, FTP / SFTP server, and public cloud object storage as the backup destination for storing the backup data.

Aliyun (阿里云) *	CTYun (中国电信天翼云)*	Amazon S3	Amazon Cloud Drive
Google Cloud Storage	Google Drive	OneDrive	Microsoft OneDrive / OneDrive for Business
Rackspace	OpenStack	Microsoft Azure	Dropbox

Below is a full list of the supported cloud storage:

FTP SFTP	AWS S3 Compatible Cloud Storage
----------	---------------------------------------

* Available on computers with China or Hong Kong local settings

Cloud backup gives you two major advantages:

- Multi-destination Backup for Extra Protection you can now back up your database, files or data to both local drive and cloud destination. While local destination backup gives you the convenience of faster backup and restore as a result of the local infrastructure, you can take a further step to utilize the cloud backup to give you an extra layer of protection in the event of a local drive corruption, where you will still be able to retrieve data from the cloud destination.
- Eliminate Hardware Investment with the increasingly affordable cloud storage cost, you can deploy on cloud platform and utilize cloud storage as your centralized data repository, or simply expand your cloud storage as a backup destination without having to invest on hardware.



Instant Replication

Extra layer of data protection – the replication server provides an additional layer of data protection by providing an offsite backup store for backing up data from either a single or multiple AhsayCBS servers. The Ahsay replication process is close to real-time and hence this will reduce the probability of significant data loss in the event of an AhsayCBS outage. The synchronization process does not require stopping or interrupting any backup operations. As the replication module will be replicating the backup data using four modes, pending, resync, replay, and sleep mode.

Furthermore, you have flexibility to select specific user's backup set from the backup server to replicate instead of replicating all users and backup sets. The replication speed has been enhanced by utilizing the multiple thread replication technology.

Refer to the Replication section for further details.



High Scalability

Easy system expansion for your business growth – as your business continues to grow, you need greater storage and backup capabilities to keep all your data safe and protected. With AhsayCBS, you can always scale up your backup service. With the program's built-in redirection module, you can redirect the extra user traffic to other AhsayCBS servers to manage your growing volume of data easily.

We understand that expanding backup service could be a difficult situation when you have to deal with multiple domain servers, a high scalable backup system should make this kind of transition as seamless as possible to users. Our Redirector is designed to facilitated easy expansion of your backup service.

Refer to the <u>Configuring Redirector</u> section for further details.

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	∣ Fullv

Fully Rebrandable

Rebrand and customize to best cater your clients' needs – All graphics and wordings in AhsayCBS are rebrandable and customizable for MSPs. Thus, you can use a rebranded AhsayCBS to build your branded backup appliance for customers who preferred on-site backup solution.



Monitor and Manage Backup without Client Backup Agent – our enriched features on the centralized web console offers users a one-stop location for running and configuring backup jobs, monitoring backup and restoring activities, and initiating a Run Direct restore.

For further instructions on using the User Web Console, refer to the Ahsay CBS User Guide.

2 About this Document

What is the purpose of this document?

This document aims at providing all necessary information for you to work with the AhsayCBS server at the administrator level to manage backup and restore jobs.

What should I expect from this document?

After reading through this documentation, you can expect to have sufficient knowledge to perform all administrative tasks and manage your AhsayCBS server effectively.

Who should read this document?

This documentation is intended for IT professionals who need to work with AhsayCBS server at the administrator level.

Where can I get information about System Requirements and Settings for installing the AhsayCBS?

Before you read through this Administrator's Guide for information on managing all administrative tasks on AhsayCBS, you should have the AhsayCBS installed first. Refer to the <u>Ahsay Cloud Backup Suite Quick Start Guide</u> for instructions on software installation, system requirements, network, and firewall settings.

3 Log in to AhsayCBS Server

Log in to AhsayCBS Web Management Console

- Enter the IP address or domain name on a web browser. <u>https://<IP_Address:port_number/></u>
- 2. Enter the system login name and password. The default login credential are:

Login Name: system

Password: system

 Login Name
 username

 Username
 Password

 Forget Password
 Image: Compared to the system of the sy

NOTE

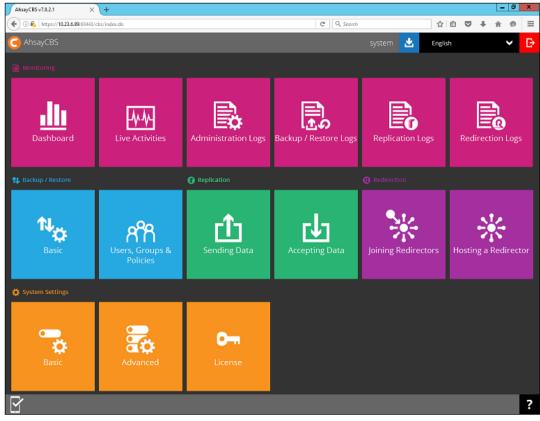
Please kindly note that to comply with the new <u>General Data Protection Regulation (GDPR)</u> requirements, there will display a banner stating the organizations cookie policy when processing to login AhsayCBS server. This will also apply to the AhsayCBS web console.

From AhsayCBS version 7.15.6.0 onwards, administrator can configure a notification banner to be displayed on the AhsayCBS web console (displayed at the login interface), and the contents of the banner can be configured on the AhsayCBS web console at "System Settings > Basic > General > Cookie Banner Notification".

Cookie I	Banner Noti	fication 🕜		
continuir can chan some fur href="htt href="htt	ng to browse the ge your cookie nctionality. Mo tp://terms_con tp://cookie_po	you the best experience re site, you are agreeing settings at any time bu re information can be fo idition.com">Terms and lifo;.com">Cookie policy pote.com">Privacy notice	t to our use of cookies. t if you do, you may los pund in our <a l conditions, <a and <a< th=""><th></th></a<></a </a 	

3. Click the green **Login** button to login.

4. The following screen appears with five sections: **Monitoring**, **Backup / Restore**, **Replication**, **Redirection**, and **System Settings**. Each of these sections are described in detail in later chapters.



Forgot your Password?

If you have forgotten your system or administrator password, please refer to the following KB article for instructions. FAQ: How to recover AhsayCBS system account password? (5122)

Download Client Backup Agents

You can choose the client software you wish to download as follows.

1. On the AhsayCBS Logon page, click the download arrow on the top right hand corner.

G AhsayCBS		English	~	≛
	Login Name			
	system			
	Password			
	Forgot Password			
	🔽 Remember my login name			

2. Click on the tab with the name of the client backup agent you wish to download.



3. Click on the **Download (Online)** or **Download (Offline)** button of the platform on which you wish to install the client backup agent.

G AhsayCBS	
AhsayOBM AhsayACB Mobile Restore	
Choose operating system.	
Windows	★ Download (Online) ★ Download (Offline)
💼 Mac OS X	 ▲ Download (Online) ▲ Download (Offline)
👃 Linux	🛓 Download (rpm) (Online) 🛓 Download (sh) (Online)
🕳 FreeBSD	➡ Download (Online) ➡ Download (Offine)
میند solaris (x86)	➡ Download (Online) ➡ Download (Offline)
Ubuntu	🛓 Download (deb) (Online) 🛓 Download (sh) (Online)
Synology Please copy and paste the following URL information into the "URL" text field during installation https://10.120.10.30.443?ownerid=43353	🛓 Download (Online)
ONAP QNAP	L Download (Online)

G AhsayCBS	
AhsayOBM AhsayACB Mobile	Restore
Choose operating system.	
Windows	🛃 Download (Online)
Mac OS X	📩 Download (Online)

Please kindly note that each time after upgrading AhsayCBS version, it is required to rebuild the installers. Otherwise, you cannot download the installer and following warning will prompt.

C AhsayCBS		
AhsayOBM AhsayAd	CB Mobile Restore	
Choose operating system.		
tindows 1		🛓 Download (Online)
🗰 Mac OS X	The installer / restorer is outdated. Please contact the System Administrator to obtain the latest version.	🛓 Download (Online)
🛆 Linux	ОК) 🛃 Download (sh) (Online)
👹 FreeBSD		📩 Download (Online)
socans Solaris (x86)		🛓 Download (Online)
OUbuntu	🛓 Download (deb) (Online	Download (sh) (Online)
Please copy and paste the https://10.120.10.30:44370	e following URL information into the "URL" text field during installation ownerid=43353	💩 Download (Online)
		📩 Download (Online)

From v7.15.0.0 onwards AhsayCBS support two installation modes, online and offline installation (except for Linux (rpm), Ubuntu (deb) and AhsayMOB which supports online installation only). User can download and run either one of the installers.

Below is the table of comparison between online installation and offline installation.

	Online Installation	Offline Installation
Internet	It cannot be started without an internet connection.	 Once the offline installer is downloaded, the client does not require an

	 Clients need to have an internet connection each time an installation is run. If the client internet connection is interrupted or is not stable the installation may be unsuccessful. Online installer size is 6KB to 3.5MB depending on operating system as it contains only the initial installation package files. 	 internet connection each time an installation is run. The offline installer size is 80MB to 140MB depending on operating system as it contains all the necessary binary and component files
Backup Server Availability	The online installer requires the backup server to be online in order to run and complete the installation.	An offline installation can be performed independently of the backup server availability.
Installation Time	 Takes more time as it needs to download the binary and component files (80MB to 140MB depending on operating system) each time the installation is run. A slow internet connection on the client machine will also result in longer installation time. 	Takes less time as all the necessary binary and component files are already available in the offline installer.
Version Control	Online installation ensures the latest version of the product is installed.	May need to update the product version after installation if an older offline installer is used.
Administrative Support	Need more time on the support for the installation as network factor might lead to unsuccessful installation.	Need less time as independent of network factor influence.
Deployments	 Suitable for single or small amount of device installations. Suitable for client sites with fast and stable internet connection. 	 Suitable for multiple or mass device installations. Suitable for client sites with metered internet connections.

For instructions regarding installation of the client backup agent, refer to the <u>Client Components</u> section for the URL to obtain the Quick Start Guide.



Change the Language

You can change the language shown on AhsayCBS web console

1. To change the display language, click on the dropdown box on the top right of the screen to select another display language.

C AhsayCBS		English 🗸	≛			
	Login Name system					
	Password					
	Forgot Password					
	🛃 Remember my login name					
We use cookies to give you the best possible experience on our website. By continuing to browse this site, you give consent for cookies to be used. For more details please read our Cookie Policy. https://www.hsbc.com.hk/personal/legal- information.html						

2. Click on the desired language from the list.

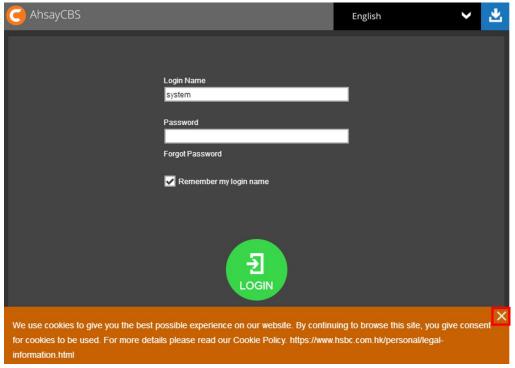
G AhsayCBS		English 🗸	₹
	English	قيببر علا قنجلاا	
	Català	Český	
Login I	Dansk	Deutsch	
syster	Ελληνική	Español	
Passw	Euskera	Suomalainen	
	Français	תיִרבָע	
Forgot	Magyar	Italiano	
Z R	日本語	한국어	
	Lietuvos	Nederlands	
	Norsk	Polski	
	Português (Brazilian)	Português (Portugal)	
	Slovenski	Svensk	
	Türk	中文(简体)	
	中文(繁體)		
We use cookies to give you the best possible	experience on our website. By continu	ing to browse this site, you give conse	ent ×

We use cookies to give you the best possible experience on our website. By continuing to browse this site, you give consent for cookies to be used. For more details please read our Cookie Policy. https://www.hsbc.com.hk/personal/legalinformation.html

Invoke Online Help

You can invoke the online help on most of the pages while navigating the AhsayCBS. The online help aims at providing instructions on operation on the corresponding page.

1. Click **X** to shut down the banner.



2. Click on the question mark at the bottom right corner.

C AhsayCBS		English	~	些
	Login Name	_		
	system			
	Password			
	Forgot Password			
	LOGIN			
				?

3. The corresponding online help page shows.

https://10	123.63/cbs/Logon.do × AhsayC	8S Help × +							-	đ	x
(4) 0 M	https://10.23.6.89:60443/cbs/help/S	howHelp.do	C	y	Q, Search	☆	Ô	÷	ŵ	⊜	≡
L0 Key	gon :										
	Field	Description									
	Login Name	System user login name.					_				
	Password	System user login password.									
	Forgot Password In case the password is forgot. Click on this link and enter your login name or registered email. The password will be sent to your email address.										
	Remember my login name If this entry is checked, the login name will be appeared in the "Login Name" field. Uncheck this box to remove the saved login name in the browser.										

4. You can print the online help by clicking the print button at the bottom right corner. To exit, click **X**.

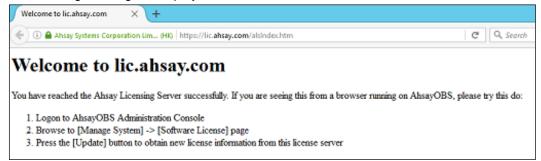
4 Managing License

Verify License Connectivity

The AhsayCBS server is required to access the Internet and to connect to the Ahsay License Server (lic.ahsay.com) using https protocol for license activation, daily license checks, and license CAL updates. Make sure your firewall settings are configured to allow outbound connections to lic.ahsay.com via port 443 using TLSv1.

To verify Ahsay license connectivity you can either:

 Open a web browser on your AhsayCBS and enter the following URL <u>https://lic.ahsay.com</u> the following message is displayed when the connection is successful.



-OR-

Use the telnet command to check the connection on your AhsayCBS server.

```
# telnet lic.ahsay.com 443
Trying 203.186.85.237...
Connected to lic.ahsay.com.
Escape character is '^]'.
```

Use the **openssl s_client** command to check whether TLSv1 is enabled.

```
# openssl s client -connect lic.ahsay.com:443 -tls1
CONNECTED (0000003)
depth=3 C = US, O = "The Go Daddy Group, Inc.", OU = Go Daddy
Class 2 Certification Authority
verify return:1
depth=2 C = US, ST = Arizona, L = Scottsdale, O = "GoDaddy.com,
Inc.", CN = Go Daddy Root Certificate Authority - G2
verify return:1
depth=1 C = US, ST = Arizona, L = Scottsdale, O = "GoDaddy.com,
Inc.", OU = http://certs.godaddy.com/repository/, CN = Go Daddy
Secure Certificate Authority - G2
verify return:1
depth=0 1.3.6.1.4.1.311.60.2.1.3 = HK, businessCategory = Private
Organization, serialNumber = 0498825, C = HK, ST = Hong Kong, L =
Kowloon, O = Ahsay Systems Corporation Limited, CN = ahsay.com
verify return:1
Certificate chain
 0 s:/1.3.6.1.4.1.311.60.2.1.3=HK/businessCategory=Private
Organization/serialNumber=0498825/C=HK/ST=Hong
Kong/L=Kowloon/O=Ahsay Systems Corporation Limited/CN=ahsay.com
```

i:/C=US/ST=Arizona/L=Scottsdale/O=GoDaddy.com, Inc./OU=http://certs.godaddy.com/repository//CN=Go Daddy Secure Certificate Authority - G2 1 s:/C=US/ST=Arizona/L=Scottsdale/O=GoDaddy.com, Inc./OU=http://certs.godaddy.com/repository//CN=Go Daddy Secure Certificate Authority - G2 i:/C=US/ST=Arizona/L=Scottsdale/O=GoDaddy.com, Inc./CN=Go Daddy Root Certificate Authority - G2 2 s:/C=US/ST=Arizona/L=Scottsdale/O=GoDaddy.com, Inc./CN=Go Daddy Root Certificate Authority - G2 i:/C=US/O=The Go Daddy Group, Inc./OU=Go Daddy Class 2 Certification Authority 3 s:/C=US/O=The Go Daddy Group, Inc./OU=Go Daddy Class 2 Certification Authority i:/C=US/O=The Go Daddy Group, Inc./OU=Go Daddy Class 2 Certification Authority Server certificate ----BEGIN CERTIFICATE----MIIIATCCBumqAwIBAqIJAPwOHyVqUxkXMA0GCSqGSIb3DQEBCwUAMIG0MQswCQYD VQQGEwJVUzEQMA4GA1UECBMHQXJpem9uYTETMBEGA1UEBxMKU2NvdHRzZGFsZTEa MBgGA1UEChMRR29EYWRkeS5jb20sIEluYy4xLTArBgNVBAsTJGh0dHA6Ly9jZXJ0 cy5nb2RhZGR5LmNvbS9yZXBvc210b3J5LzEzMDEGA1UEAxMqR28gRGFkZHkgU2Vj dXJ1IEN1cnRpZmljYXR1IEF1dGhvcml0eSAtIEcyMB4XDTE2MDQyMjAzMDAzOFoX ${\it DTE4MDQxNTAzMjMzOFowgbkxEzARBgsrBgEEAYI3PAIBAxMCSEsxHTAbBgNVBA8T}$ FFByaXZhdGUgT3JnYW5pemF0aW9uMRAwDgYDVQQFEwcwNDk40DI1MQswCQYDVQQG ${\it EwJISzESMBAGA1UECBMJSG9uZyBLb25nMRAwDgYDVQQHEwdLb3dsb29uMSowKAYD}$ VQQKEyFBaHNheSBTeXN0ZW1zIENvcnBvcmF0aW9uIExpbW10ZWQxEjAQBgNVBAMT CWFoc2F5LmNvbTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAM1cvjg+ GpaWn18IjmBCkIpDRWzL7tocrB7+reoN619nQTq7W6AlsD/UWT1doOMeQyEWY+3b kdsI4QGNB2hNwzd36+k5yxST8IPuyGE7eLHe6L7RyQxNT3BLos48i9pOl0cXKEWo 08wDFw0y2bMiTbkTTErrGk1VqR8oYKV5Pg9RYDoNg2j6I7mCz1v05KJWxTL49PAQ TmKmK3EX1esvkss9Pz3mfhm/fpJFQfhT+KSTA8b/75RbW2pCQyKW7a9NVX4Iyx60 dIDDAU568bAV6y74b9hh4ty6+0zSW+x3+CQLPXEd8NJJCtXAitb78qJENkDSxGMH sW4vuEDKX6UF3f8CAwEAAaOCBA0wggQJMAwGA1UdEwEB/wQCMAAwHQYDVR01BBYw FAYIKwYBBQUHAwEGCCsGAQUFBwMCMA4GA1UdDwEB/wQEAwIFoDA1BqNVHR8ELjAs MCqqKKAmhiRodHRwOi8vY3JsLmdvZGFkZHkuY29tL2dkaWcyczMtNC5jcmwwXAYD VR0gBFUwUzBIBgtghkgBhv1tAQcXAzA5MDcGCCsGAQUFBwIBFitodHRwOi8vY2Vy dGlmaWNhdGVzLmdvZGFkZHkuY29tL3JlcG9zaXRvcnkvMAcGBWeBDAEBMHYGCCsG AQUFBwEBBGowaDAkBqgrBgEFBQcwAYYYaHR0cDovL29jc3AuZ29kYWRkeS5jb20v MEAGCCsGAQUFBzAChjRodHRwOi8vY2VydGlmaWNhdGVzLmdvZGFkZHkuY29tL3J1 cG9zaXRvcnkvZ2RpZzIuY3J0MB8GA1UdIwQYMBaAFEDCvSe0zDSDMKIz1/tss/C0 LIDOMIH5BqNVHREEqfEwqe6CCWFoc2F5LmNvbYINd3d3LmFoc2F5LmNvbYIOc2hv cC5haHNheS5jb22CEHd3dy51ay5haHNheS5jb22CFXBhcnRuZXJzLmFoc2F5LmNv bS5jboINbG1wLmFoc2F5LmNvbYIVcGFydG51cnMtdXMuYWhzYXkuY29tgq1wY3Au YWhzYXkuY29tqhVwYXJ0bmVycy11ay5haHNheS5jb22CDW1kcC5haHNheS5jb22C DGtiLmFoc2F5LmNvbYIQd3d3LmFoc2F5LmNvbS5jboIPZm9ydW0uYWhzYXkuY29t gg1saWMuYWhzYXkuY29tMB0GA1UdDgQWBBQU/GniKbSMjgEmaqndKdtzS0DqlDCC AX8GCisGAQQB1nkCBAIEggFvBIIBawFpAHcAVhQGmi/XwuzT9eG9RLI+x0Z2ubyZ EVzA75SYVdaJ0N0AAAFUO+sXggAABAMASDBGAiEA3hPo2F1QZZX75QIRGF1MbspW n8MlmeM8k1TCYmHDie8CIQC0Eg8Z9duyg6RvYBT7ahtQ8eojA/7GsOpBoZKXDoK1 NAB1AGj2mPgfZIK+OozuuSgdTPxxUV1nk9RE0QpnrLtPT/vEAAABVDvrGT0AAAQD AEYwRAIgbj3ZWvwZL75Zx1Vd1sC4ZSZhAN1TfaIlecBS9Ie4K3ICICKTx2OTGWHO spDVowj59LSWHDG5Z9c1B/bs9sR15nUcAHcAplkJkLQYWBSHuxOizGdwCjw1mAT5Mm5+9s5JUX+oKknk5pkCIQDwDkuAEcjEM4vouxZzAtqcozWikMJoTFn++vIFbrEZ SzANBgkqhkiG9w0BAQsFAAOCAQEAcKpSovHqtpyAx5bKyXQRRh8Fyo/WTA0eBMc1 5KpgII49V6/ww1e6rmbMa3xVKqNEnjH4GaqGY2AZAx9iVr+NN+VFNroPUGqzpJ0B ih9tLl/VCV/lvy67Chs7NHv3D1AEsrKJYUqpl0sQy/QhSIRAAa3bY8i7+MOfEYJt ADa+254k6G19s99PvmBniepxuUy8x/9h7h7K4m+OIqXQaLXE6lr4LG50p/GOKx/I

```
1feC6RUCx8gW9qBoTT17M6o8Jb/SXUN6/mAVsronEG+yyqNXCcUQwNpaKJK5hMkz
0EbBq1tS/VyTtW9z0g4vA1PQrgaqCLG/ZJIvBESf8wvsgfZNpA==
----END CERTIFICATE-----
subject=/1.3.6.1.4.1.311.60.2.1.3=HK/businessCategory=Private
Organization/serialNumber=0498825/C=HK/ST=Hong
Kong/L=Kowloon/O=Ahsay Systems Corporation Limited/CN=ahsay.com
issuer=/C=US/ST=Arizona/L=Scottsdale/O=GoDaddy.com,
Inc./OU=http://certs.godaddy.com/repository//CN=Go Daddy Secure
Certificate Authority - G2
_ _ _
No client certificate CA names sent
Server Temp Key: ECDH, prime256v1, 256 bits
SSL handshake has read 6160 bytes and written 289 bytes
New, TLSv1/SSLv3, Cipher is ECDHE-RSA-AES256-SHA
Server public key is 2048 bit
Secure Renegotiation IS supported
Compression: NONE
Expansion: NONE
SSL-Session:
    Protocol : TLSv1
    Cipher
             : ECDHE-RSA-AES256-SHA
    Session-ID:
6914212983C0321AB9520FFC6E7515845D8836D7B185EF1D2363D3C7EAA85D48
    Session-ID-ctx:
   Master-Key:
79BECEF9E2C3088F4928229047A21BE9E9239C32D2F79B4DB4FC7CF66098423D0
EF0D64741E3075AEA62E9222D6DD4B2
   Key-Arg
             : None
   Krb5 Principal: None
   PSK identity: None
   PSK identity hint: None
    TLS session ticket lifetime hint: 300 (seconds)
    TLS session ticket:
    0000 - 8c 55 8e c3 19 9a 34 14-63 67 66 aa 49 7b c9
41
    .U....4.cgf.I{.A
    0010 - 3f 03 db c1 ec f9 db e1-b6 eb 4f 51 0c 3a 83
9b
    0020 - 73 20 93 c1 41 6e 5a ac-f5 65 92 4f b8 92 fb ef
s ... AnZ...e. O....
    0030 - 2b 3d f7 f3 03 c8 3a b5-1b 52 9a 5a 43 ba 0a 7d
+=....}
    0040 - 47 e8 6a 22 72 85 9d d2-f1 dd 9d 6d b5 65 8a 0a
G.j"r....m.e..
   0050 - 30 26 1b d9 55 8c 25 65-71 0b a5 1f 57 38 2b 71
0&...U.%eq...W8+q
   0060 - 81 f1 c0 4e bd 51 d3 43-b5 41 40 8f 71 3c 72
     ...N.Q.C.A@.q<r.
8d
    0070 - 5a c8 70 72 38 47 a0 b0-4a cd 8b e3 10 48 0c 2e
Z.pr8G..J....H..
    0080 - 44 a9 48 9e df 56 7a 9f-e5 00 f4 37 f2 59 ee 2f
D.H..Vz....7.Y./
    0090 - eb 3a 33 7b 1e 26 09 d9-cd a4 d8 2e 30 51 80
     .:3{.&....0Q.
1a
    00a0 - 72 78 ae 0a a8 48 bd 0a-ca 16 23 8a e9 44 db ce
rx...H....#..D..
    Start Time: 1503557290
```

```
Timeout : 7200 (sec)
Verify return code: 0 (ok)
---
closed
```

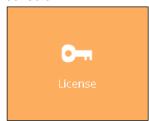
NOTE

A single license key can only be used on one machine once it has been activated. If you use the same license key to activate another installation of AhsayCBS, you will get an error message. You would be able to run this copy of AhsayCBS for another 14 days. After the 14-day grace period has expired, the AhsayCBS service will stop working completely. Please contact <u>Ahsay Support</u> for further assistance.

Manage License Key

To manage your AhsayCBS backup server and redirector license keys, do the following:

1. Click the **License** icon under **System Settings** from your AhsayCBS web management console.



 There are two tabs on the license page. The **Backup** tab is for backup server license, while the **Redirector** tab is for redirector license. You can activate the software on these tabs.

Please make sure that the AhsayCBS license key is applied on the **Backup** tab. If you have purchased a Redirector license key, you need to enter the key in the **Redirector**

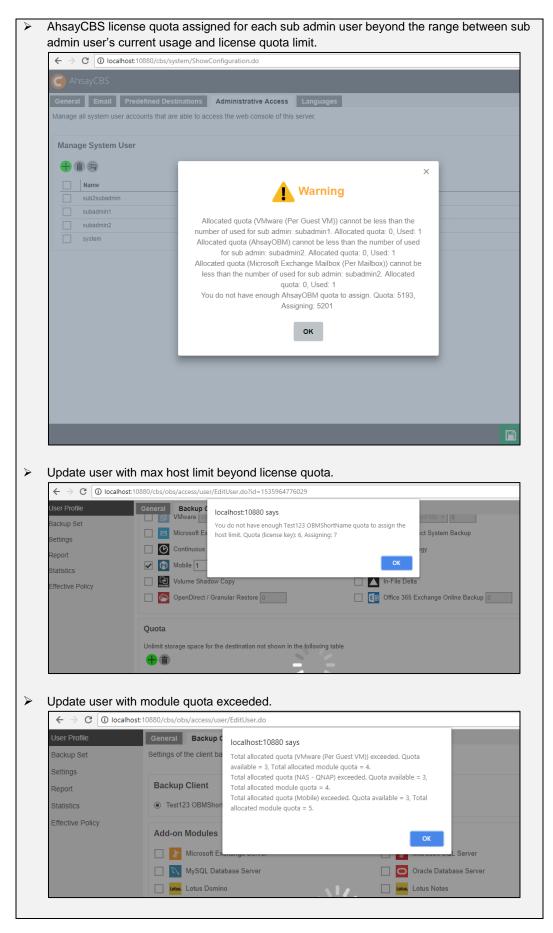
tab. Do NOT enter the AhsayCBS license key on the **Redirector** tab or vice versa.

ckup	Redirector
nse inf	ormation and license related utilities.
vervie	W
censee	Name
cense k	
Cense P	ey
Use P	тоху
onneo	tion Test
	tion Test
	tion Test
rest .	
"est	tion Test License
^{rest}	
Fest I pdate Update	License
Fest I pclate Jpdate Produc	License t Name
Fest I pclate Jpdate Produc	License
Fest I pdate Jpdate Offsite E	License t Name
Test Update Update Offsite E Produc	License t Name Backup Software, OEM Edition
Test Ipclate Update Offsite E Produc 7.9.0.0	License t Name Backup Software, OEM Edition
Test Jpdate Update Offsite E Produc 7.9.0.0 License	License I Name Jackup Software, OEM Edition It Version
Fest Ipdate Jpdate Offsite E Produc 7.9.0.0	License I Name Jackup Software, OEM Edition It Version
Test Update Produc Offsite E Produc 7.9.0.0 License OEM Li	License I Name Jackup Software, OEM Edition It Version

- 3. Enter your **Licensee Name** and **License Key** on the Backup server license page. Both fields are case sensitive. Please enter them exactly as stated in your software receipt.
 - If you are using the evaluation license, you will be able to evaluate the AhsayCBS for 60 days. Just accept the default Licensee Name and License Key on the page to activate the license.
 - If you have already purchased a license, copy and paste the licensee name and license key into the relevant fields to activate the license.
- If a proxy server is required to access the Internet from AhsayCBS, check the Use Proxy checkbox. Refer to the <u>Proxy Tab</u> section for information on how to set up the proxy server.
- 5. Press the **Test** button under **Connection Test** section to test the connection with the license server. You get a dialog box with the testing result. Click **OK**.

10.23.6. 8 9:60443 says:		×
ок		
Prevent this page from creating additional dialogs.		-
		. 1
	ОК	

		NOTE
exc Ahs Ahs	eeded will be blocked, i.e. genera ayCBS or v6/ v7 AhsayOBM/ Ahs	0.0. and above, any actions that may lead to quota te a new backup user, creating a new backup set from sayACB, importing users in AhsayCBS, updating licnese in If there is any license error, there will be email to alert abou
Belo	ow screenshot shows about block	red actions:
۶	Generate a new AhsayOBM use	г.
	← → C (③ localhost:10880/cbs/obs/access/user/E	ditUser.do?id=0
	Add New User Add contact persons information for this user. Manage Contact Information @	localhost:10880 says You do not have enough AhsayACB quota. AhsayACB Quota (license key): 1, AhsayOBM Quota (license key): 6. AhsayACB Used: 2, AhsayOBM Used: 6.
	÷ •	ОК
	Name Ema	he Linciple Linea
۶	Gnerate a new AhsayACB user. ← → C ① localhost:10880/cbs/obs/access/user/l	EditUser.do?id=0
	Add New User Add contact persons information for this user.	localhost:10880 says You do not have enough AhsayOBM quota. Quota (license key): 6, Used: 7.
	Manage Contact Information @	ОК
	Name	Email
۶	Create a new backup set from A	hsayCBS or v6/ v7 AhsayOBM/ AhsayACB.
	AnsayoeM Encryption Event lation Data Frence Lation Data Failed to set the user profile to server., Reason = "Client h	
	Contact us to increase your quota."	OK CIErt hest gute acceded Please contact us to increase your gute.
	Previous	



Below screenshot shows about email alert:	
License Error Tue Jul 17 17:32:26 CST 2018	S S om more -
from Dan to Dan <daniel.ahsay@gmail.com> + 1 more</daniel.ahsay@gmail.com>	07/17/2018 05:32 PM
License quota usage exceeded at:Tue Jul 17 17:32:26 CST 2018 .Pl usage or contact your service provider to update your license wi server will be stopped at: Wed Jul 18 05:32:26 CST 2018 IP: 192.168.22.41 Host: DAISY	

License Summary and Requirements

The **License Details** section on the Backup Server license page shows a summary of the quota used and licenses available for each of the modules you have subscribed.

Client Software	Quota	Used	Avai	lable
AhsayOBM	1	1	0	
AhsayACB	0	0	0	
Add-on Modules for AhsayOBM		Qu	ota Used	Available
Microsoft Exchange Mailbox (Per Mailbox)		1	0	1
Hyper-V (Per Guest VM)		1	0	1
VMware (Per Guest VM)		1	0	1
Hyper-V (Per Socket)		0	0	0
VMware (Per Socket)		0	0	0
NAS - Synology		0	0	0
Mobile		0	0	0
Office 365 Exchange Online Backup		1	0	1
OpenDirect / Granular Restore		1	0	1
NAS - QNAP		0	0	0
Add-on Modules for AhsayACB		Quota	Used	Available
Office 365 Exchange Online Backup		0	0	0
Server Add-on Modules		Quota	Used	Available
AhsayOBM Replication Module		0	0	0

Client Software	License quota and availability for client backup agents (AhsayOBM & AhsayACB)
Add-on Modules License quota and availability for add-on modules for AhsayOBM Click here to view a list of all available add-on modules Add-on Modules License quota and availability for add-on modules for AhsayACB	
Add-on Modules for AhsayACB	License quota and availability for add-on modules for AhsayACB <u>Click here</u> to view a list of all available add-on modules
Server Add-on Modules	License quota and availability for server add-on modules, e.g. Replication module, AhsayUBS, AhsayCBS, etc.

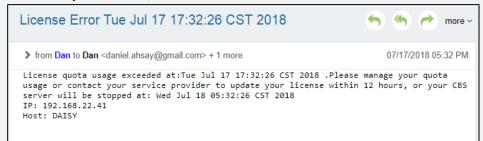
VMware Backup Module	Per Guest VM to back up or Per CPU socket
Hyper-V Backup Module	Per Guest VM to back up or Per CPU socket
Support Languages	Supported languages for UI display. The availability of support languages is subject to your license key.
	For license related inquiries, please contact the Sales team at Ahsay by email at <u>sales-kb@ahsay.com</u> or call our International Sales Hotline +852 3580 8091.

Upgrade from v6 to v7

Since the AhsayCBS license module is introduced in version 7, if you are upgrading from v6, you need to purchase one extra AhsayCBS license module for each of your existing v6 backup server license. Make sure you have valid maintenance before you perform the upgrade/migration.

NOTE
If upgrade AhsayCBS from v6 to v7 without purchasing AhsayCBS module and the quota exceeded, then there will be a grace period of 60 days to allow sufficient time to resolve the license related problems.
If upgrade AhsayCBS from v6 to v7 with purchasing AhsayCBS module and the quota exceeded, then there will be a grave period of 12 hours for you to manage the quota usage. If quota usage issue was not solved within grace period, the server will be stopped after the grace period. After login AhsayCBS system console, the web console will redirect to [To Do] page and the license error will be shown on the top.
← → C O localhost:10880/cbs/system/ShowSystem.do • ☆ :
C AhsayCBS To Dos Overview CPU Memory Storage Live Threads
A Backup Server License Error
License quota usage exceeded at Wed Jul 18 16:20:55 CST 2018 .Please manage your quota usage or contact us to update your license within 12 hours, or your CBS server will be stopped at. Thu Jul 19 04:20:55 CST 2018 Please update license in License page
AhsayCBS Redirection Module License Error Internal Error 1012. Please press the [Update] button in license page to correct this problem. If the problem persists, please contact our technical support team to resolve this problem. Not in Grace Period. Redirector is stopped. Please update license in License page
Errors and Warnings
Yesterday v
Image: Missed Backups Image: Missed Backups
0 0 193 0 76 63
View * 25 Rows/Page v Page 1 v
07/17/2018 [BackupJob record.list] Unable to list pending email, error = [UserCacheManager.NoSuchUserExpt] User 'exchange' not found. 23:45:24 [NoSuchUserExpt] [UserCacheManager.NoSuchUserExpt] User 'exchange' not found.
23.4024 [INOSUCHOSERCAD] (Deer Cachemaniager.Nosuchosercad) user exchange not found. 07/17/2018 [BackupJob.record.list] Unable to list pending email, error = [UserCacheManager.NoSuchUserExpt] User 'exchange' not found.
X ?

If there is any license error, there will be email to alert about the license error.



The server stop counter will start in the last hour of grace period. There will be log showing the process of server stop.

Server stop counter starts.

\leftarrow \rightarrow C \bigcirc localhost:1	0880/cbs/monitor/cbs/Index.do	
G AhsayCBS		
SNMP Log Message H	istory Activities Log Audit Tr	
09/05/2018 18:11:00	MigrateV6DataInfo	[Job][MigrateV6File] End: migrate v6 data.
09/05/2018 18:11:32	RoutineJobInfo	[Job][Logger] Starting to log system status
09/05/2018 18:11:32	RoutineJobInfo	[Job][Logger] Start: logging system status
09/05/2018 18:11:32	RoutineJobInfo	[Job][Logger] End: logging system status
09/05/2018 18:12:00	MigrateV6DataInfo	[Job][MigrateV6File]Start: migrate v6 data
09/05/2018 18:12:00	MigrateV6DataInfo	[Job][MigrateV6File] End: migrate v6 data.
09/05/2018 18:18:29	RoutineJobInfo	[Job][Logger] Starting to log system status
09/05/2018 18:18:29	RoutineJobInfo	[Job][Logger] Start: logging system status
09/05/2018 18:18:31	RoutineJobInfo	[ServerStopCounter] Started. Server will be stopped soon.
09/05/2018 18:18:31	RemoveMigratedV6DataInfo	[Job][HourlyJob]Start: Remove migrated v6 data
09/05/2018 18:18:31	RoutineJobInfo	[ServerStopCounter] Sleeping for 1 minute.
09/05/2018 18:18:31	RemoveMigratedV6DataInfo	[Job][HourlyJob] End: Remove migrated v6 data.
09/05/2018 18:18:36	RoutineJobInfo	[Job][Logger] End: logging system status

> Quota usage issue solved and the server stop counter stopped.

09/05/2018 18:26:19	RoutineJobInfo	[ServerStopCounter] Sleeping for 1 minute.
09/05/2018 18:26:19	RemoveMigratedV6DataInfo	[Job][HourlyJob] End: Remove migrated v6 data.
09/05/2018 18:26:23	RoutineJobInfo	[Job][Logger] End: logging system status
09/05/2018 18:26:41	SystemAuthOK	ADMIN "system" logged on to client software successfully from IP address 127.0.0.1
09/05/2018 18:27:00	MigrateV6DataInfo	[Job][MigrateV6File]Start: migrate v6 data
09/05/2018 18:27:00	MigrateV6DataInfo	[Job][MigrateV6File] End: migrate v6 data.
09/05/2018 18:27:19	RoutineJobInfo	[ServerStopCounter] License violation is resolved.
09/05/2018 18:27:32	RoutineJobInfo	[Job][Logger] Starting to log system status
09/05/2018 18:27:32	RoutineJobInfo	[Job][Logger] Start: logging system status
09/05/2018 18:27:32	RoutineJobInfo	[Job][Logger] End: logging system status
09/05/2018 18:28:00	MigrateV6DataInfo	[Job][MigrateV6File]Start: migrate v6 data
09/05/2018 18:28:00	MigrateV6DataInfo	[Job][MigrateV6File] End: migrate v6 data.

Quota issue not solved within grace period and server stopped.

	v 1	
09/05/2018 18:22:31	RoutineJobInfo	[ServerStopCounter] Sleeping for 1 minute.
09/05/2018 18:22:44	RoutineJobInfo	[Job][Logger] Starting to log system status
09/05/2018 18:22:44	RoutineJobInfo	[Job][Logger] Start: logging system status
09/05/2018 18:22:44	RoutineJobInfo	[Job][Logger] End: logging system status
09/05/2018 18:23:00	MigrateV6DataInfo	[Job][MigrateV6File]Start: migrate v6 data
09/05/2018 18:23:00	MigrateV6DataInfo	[Job][MigrateV6File] End: migrate v6 data.
09/05/2018 18:23:31	RoutineJobInfo	[ServerStopCounter] Server stopped. Grace period is ended.

≻

If you utilize only one AhsayOBM across multiple physical/virtual devices in previous v6 version, you will need to purchase supplement AhsayOBM when you upgrade to v7.

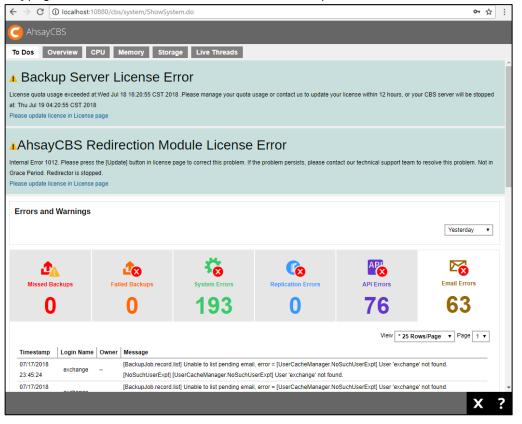
The **VMware** and **Hyper-V** license modules are charged per guest VM. Since version 7.7, there are new options for **VMware** and **Hyper-V** license module to be charged per CPU socket. Existing backup set that are charged per guest VM will not be affected.

NOTE

For license to charge by socket, the AhsayOBM has to be in v7.7 or above to work.

Upgrade from pre-v7.17.0.0 to v7.17.0.0 and Above

If upgrade AhsayCBS from pre-v7.17.0.0 to v7.17.0.0 and above with purchasing AhsayCBS module and the quota exceeded, then there will be a grave period of 12 hours for you to manage the quota usage. If quota usage issue was not solved within grace period, the server will be stopped after the grace period. After login AhsayCBS system console, the web console will redirect to [To Do] page and the license error will be shown on the top.



If there is any license error, there will be email to alert about the lice	anse error		
License Error Tue Jul 17 17:32:26 CST 2018	•	e •	nore ~
from Dan to Dan <daniel.ahsay@gmail.com> + 1 more</daniel.ahsay@gmail.com>	07/17/2	018 05:3	2 PM
License quota usage exceeded at:Tue Jul 17 17:32:26 CST 2018 .Please usage or contact your service provider to update your license within server will be stopped at: Wed Jul 18 05:32:26 CST 2018 IP: 192.168.22.41 Host: DAISY			CBS

Extra License for Replication Server

If you are going to replicate the Backup Server to another Replication Server, you need to purchase additional AhsayCBS license module for the replication server.

License for Standalone Redirector

Since the AhsayCBS Redirector license does not come with an AhsayCBS module, for a standalone AhsayCBS Redirector, you will need to purchase one extra AhsayCBS license module with a Backup Server license.

License Requirements for Software and Modules

So	ftware
AhsayCBS	Per running instance
AhsayOBM	Per device to back up
AhsayMOB	Per AhsayOBM/AhsayACB account that needs to back up mobile device
AhsayACB	Per device to back up
AhsayUBS	Per installation
М	odule
VMware Backup Module	Per Guest VM to back up & Per CPU socket
Hyper-V Backup Module	Per Guest VM to back up & Per CPU socket
Office 365 Exchange Online Individual Mailbox Backup Module New in v7.9	Per mailbox to back up
MS Exchange Individual Mailbox Backup Module	Per mailbox to back up
OpenDirect / Granular Restore	Per backup set
NAS Backup Module	Per AhsayOBM account that needs to back up NAS device
Replication Module for AhsayOBM	Per device to replicate
Replication Module for AhsayACB	Per device to replicate
Redirection module	Per device to redirect

For more information about License pricing or license requirements for different software and modules, refer to the <u>Pricing Details</u> page. To purchase license directly, visit the <u>Ahsay Shopping</u> <u>Centre</u> site.

Automatic License Renewal

If the AhsayCBS is under a monthly leasing plan (meter key), the license key will have an expiry date of 30 days from the current date, the license key is renewed automatically.

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

For meter key inquiries please contact the Sales team at Ahsay by email at <u>sales-kb@ahsay.com</u> or call our International Sales Hotline +852 3580 8091.

License Evaluation Expiry

After the evaluation period expires (60 days after activation), the AhsayCBS service will automatically stop working. Although the service is still active, the AhsayOBM and AhsayACB clients will not be able to connect to perform any backups or restores.

If you would like to continue to use AhsayCBS, please contact the Sales team at Ahsay by email at <u>sales-kb@ahsay.com</u> or call our International Sales Hotline +852 3580 8091.

Offline License Activation

Offline License Activation is used to activate the license keys on AhsayCBS servers that do not have an Internet connection.

Offline license activation is only applicable for OEM license type.

1. Open the License page of AhsayCBS. The two relevant sections are: **Offline License Request** and **Import License**.

Off-line License Request	–				
Generate					
mport License Browse No file selected.	late				
icense Details		1			
Client Software	Quota	Use	d	Available	
AhsayOBM AhsayACB	0	1		0	
· · · · · · · · · · · · · · · · · · ·					
Add-on Modules for AhsayOBM			Quota	Jsed	Available
			Quota L		Available
Add-on Modules for AhsayOBM)	
Add-on Modules for AhsayOBM Microsoft Exchange Mailbox (Per Mailbox)			1 0)	1
Add-on Modules for AhsayOBM Microsoft Exchange Mailbox (Per Mailbox) Hyper-V (Per Guest VM)			1 0 1 0)	1

- 2. Click the **Generate** button to generate an offline license request file, **req.olr**.
- 3. The **req.olr** file is an encrypted file that contains all the information required for the activation process, for example, MAC address and local IP address. The system will prompt for the location to save the offline license request file.
- 4. When the offline license request file is ready, please send it to Ahsay Support team. An offline license file, **license.olr**, will be generated and sent back to you. This file is used to offline activate the license key your AhsayCBS server.
- 5. After you have received the offline license file, you would need to import it to the AhsayCBS server to complete the offline activation process.
- 6. Click the **Choose File** button under the **Import License** section to select the offline license file (**license.olr**) from AhsayCBS system home. Click the Off-line Update button to complete the license activation process.

License Management Portal

The Ahsay License Management Portal is for partners to:

- Consolidate purchased Backup Server licenses into License Pool(s).
- Flexibly generate and update Backup Server license(s) as requirements change.
- Improve efficiency on use of Backup Server licenses by sharing CALs (Client Access License) in license pool among multiple Backup Server instances.

🗲 🕕 🔒 Ahsay Syste	ms Corporation Lim (HK)	https://imp.ahsay.com/	ils/jsp/sp/summary.jsp		C Q, Search		☆自	♥ ♠	0 ‡	-
AH Ah	say Backup S	Software					Home About Ahsa	v ^{re} Forum	is <u>Contact I</u>	Us
		ement P	ortal						- Log	gout
Pooled License							<u>Benefits</u>	Re	eadme <u>Gloss</u>	any
P OEM 54 P Standard 0 / Jusiness 0 /	21	AhsayACB (37 / 52 0 / 6 0 / 200	Used / Total)				 Split / Merge purchas easily Save money by mak existing AhsayOBS is licenses among differe 	ing more effi ienses by sha nt instances of	icient use of y aring all purcha f AhsoyCBS.	your ased
License Pools	;						 Sub-license your purch customers easily 	ased AhsayO	BS licenses to y	your
Ham	•	License Type	No. of Pool Key(s)	AhsayOBM	AhsayACB		Manage your license	more easily.	You are no lor	nder
CSV		OEM	3	8	15	Edit	required to re-distribute	e your licenses	s between diffe	erent
NTT		OEM	1	23	1	Edit	license keys every no			
888		OEM SMB	0	0	0	Ecit	the total licenses used exceed the total license			
8m		Standard	0	0	0	EOR	AhsayOBS instances			
NewCompa	w1-Pool	OEM	2	20	20	Edit	licenses violated.			
NewCompar		OEM	0	0	0	Edit				
Ronn		OEM	0	3	0	Edit	Features			
RPS-K	Y	OEM	1	0	0	Eat				
Servo-Lic	-Pool	OEM	1	0	1	Eoit	 Consolidate purchased pools and use AhsayC 			Inse
Poolable Lice	nses						Share licenses among using license pools) different Ah	isayOBS instan	nces
Licensee Nam	e Produc	t Key Lice	nse Type Free Upgrade (yyyy-MM-		avOBM Ahs	avACB	 Setup different license limits to control the ur 			

With the Ahsay License Management Portal, partners can place purchased Backup Server licenses (Poolable License) into a pool to be shared among multiple Backup Server instances. This process is called converting Poolable License into Pooled License.

Example:

If you have the following 2 licenses:

- LICENSE001 50 ACB and 80 OBM
- LICENSE002 20 ACB and 30 OBM

You can put these 2 licenses into a single license pool so that you can generate a new license with a maximum of 70 ACB and 110 OBM license CALs or any number of new licenses within these available license CALs.

For more information about the Ahsay License Management Portal, please refer to the following forum articles:

- FAQ: Ahsay License Management Portal Overview
- FAQ: How to create a Pool Key from a License Pool

If you would like to continue to use AhsayCBS, please contact the Sales team at Ahsay by email at <u>sales-kb@ahsay.com</u> or call our International Sales Hotline +852 3580 8091.

Active Pool Key

After you applied a pool key on your AhsayCBS server, please make sure your AhsayCBS server has an Internet connection and is able to connect the Ahsay License Server at

(<u>https://lic.ahsay.com</u>). If AhsayCBS service cannot connect to the Ahsay License Server after 14 days, the license key will be deactivated and the AhsayCBS service will be automatically stopped.

5 System Settings

Basic Backup Server Configuration

To manage your AhsayCBS basic backup server configurations, simply click the **Basic** icon under **System Settings** from your AhsayCBS environment.



You can perform the following basic configurations on your Backup Server:

- Manage general setup for AhsayCBS
- Manage email settings and general email reports
- Define destinations to store backup or replication data
- Manage Administrator accounts for the MSPs (Managed Service Providers)
- Customize languages available to users on AhsayCBS and User Web Console

There are 5 tabs under basic server configurations, each of which is described below.

General

The following shows the **General** tab under **System Settings > Basic**. It is used for general setup of AhsayCBS. There are several groups of settings under the **General** tab, and they are described below.

<mark>(</mark>	hsayCB:	5						
Gener Configu			efined Dest or this server		ative Access Language	5		
Host	0							
Host I	Name							
-	em Home							
	m home din ogram Files	ectory \AhsayCBS	system					
Con	nectors	0						
•	■. 	Port	Protocol	Max Connection	Connection Timeout	Max Keep Alive R	equest SSL Ce	rtificate
	P 0.0.0.0	Port 80	Protocol	Max Connection	Connection Timeout	Max Keep Alive R	equest SSL Ce	rtificate
								rtificate
SSL	0.0.0.0	80 443	HTTP HTTPS	2000	120000	1000		status

Host

Host 🖗	
Host Name	
10.23.6.69:60443	

This is the host name of your AhsayCBS. You can enter the domain name of your AhsayCBS in the format:

<www.mybackup.com:port number>

-OR-

<IP:port_number>

IMPORTANT

- The "port_number" is only needed for non-conventional ports and can be omitted for the usual ports, such as 80 and 443.
- The host name will be the access link for your users to get access to the AhsayCBS. Since the host name will be used in various locations, such as inside welcome email as a reference point for the users to access the AhsayCBS, inside email as a reference link for the users to recover password, users applying Run Direct restore feature, it is important that you ensure the host name is accessible by users from external network environment.

System Home

This is the system home location of your AhsayCBS. This path is set to your installation home by default.



Listening to non-standard TCP/IP Port

If you like to run your own web server, or some other services using port 80 and 443. On your AhsayCBS server, you can change the listening TCP/IP port of AhsayCBS from port 80 and 443 to some other port numbers such as port 8080 and 8443, you can modify the connector settings from the AhsayCBS management console -> **System Settings** -> **Basic** -> **General** -> **Connectors**, and modify your new port in the connector settings.

e	ral Emai	Pre	defined De	stinations Admi	nistrative Access La	nguages	
ifig	ure the basic	settings	for this serve	er below.			
05	t Ø						
Trin	Mama imed			Trimmed		Trimmed	Trimmed
Con	nectors 🕜 💼	Port	Protocol	Max Connection	Connection Timeout	Max Keep Alive Request	SSL Certificate
Con		Port 80	Protocol HTTP	Max Connection	Connection Timeout	Max Keep Alive Request	SSL Certificate

Listening to a single IP address

If the backup server has more than one network interface installed or has more than one IP address bind to a single network interface, you can configure AhsayCBS to use only a single IP address for backup services (by default the TCP port of all IP addresses available within the system are used and open). This has the benefits of sparing other IP addresses for other applications, e.g. Apache Web Server or Microsoft Internet Information Server (IIS). You can modify the connector setting from the AhsayCBS management console -> **System Settings** ->

	ral Email		defined De for this serv		nistrative Access La	inguages	
S	0						
:t	Mame med			Trimmed		Trimmed	Trimmed
n	nectors 🕜						
	()	Dort	Dratasal	May Connection	Connection Timesut	May Keen Alber Demuest	CCL Cartificate
	IP	Port 80	Protocol	Max Connection	Connection Timeout	Max Keep Alive Request	SSL Certificate
1	IP 10.7.0.122 10.7.0.122	Port 80 443	Protocol HTTP HTTPS	Max Connection 2000 2000	Connection Timeout	Max Keep Alive Request	SSL Certificate

Basic -> General -> Connectors, and modify the IP address in the connector settings.

WARNING Do not remove the last HTTPS connector in the AhsayCBS. If you remove the last HTTPS connector, you will not be able to login AhsayCBS again.

Restricting access to system page by IP address

For better security, you can restrict access to the AhsayCBS management console by IP addresses. To do so, please add IP restriction in your AhsayCBS management console -> **System Settings** -> **Advanced** -> **Runtime Options** -> **IP Restriction**. You can enter a range of IPs or a specific IP in the restrict IP settings.

to Save	Proxy Logging Fil	le Explorer Runtime Op	tions	
igure the r	untime options for this serve	er below.		
va Ontiou Trimmed	1e @	Trimmed	Trimmed	Trimmed
THINK &		THUR WAY	Contract of the second s	
Allowed				
	s to be allowed for accessing (Console GUI and API		
Allowed	s to be allowed for accessing (Console GUI and API		
	s to be allowed for accessing (Console GUI and API	To	

Installation of a trusted SSL certificate

Default installation of AhsayCBS enables SSL (Secure Socket Layer) support using a dummy certificate. For your own security, you are advised to replace the pre-installed dummy SSL certificate with a secure SSL certificate from a trusted CA (Certificate Authority). To replace the non-secure dummy SSL certificate with a secure SSL certificate, you need to generate a CSR (Certificate Signing Request) and submit the CSR to your CA. Please perform the following in your AhsayCBS.



SSL Certificate Installation Service

Let our professional customer service team help you with the SSL certificate purchase and installation. Click <u>here</u> to visit the Ahsay Shopping Centre for subscription.

1. Navigate to System Settings -> Basic -> General -> SSL certificate, click on

ieral Email	Predefined Destinations	Administrative Acces	s Languages		
gure the basic se	ttings for this server below.				
et Ø					
rimmed	1.00	nmed	Trimmed		rimmed
Certificate)				
L Certificate <table-cell></table-cell>					
L Certificate G)				
6L Certificate G)				

2. Enter the CSR details, then click the Next button to proceed.

General Information		
Name		
Generate Csr		
Common Name		
Organizational Unit		
Organizational Name		
Location		
State		
biale		
Country		

www.ahsay.com

t

3. Generate a CSR to apply the SSL certificate from your trusted CA.

f the ssl and ca certificate are not ready yet, please click "ok" I mported once the certificates are ready.	button. At this time, the record v
General Information	
Name	
fsd	
BEGIN CERTIFICATE REQUEST MIICmTCCAYECAQAwVDEMMAoGA1UEAwwDZnNkMQwwCgYDVQQ LDANnZGYxDDAKBqNV	•
BA0MA2ZzZDENMAsGA1UEBwwEZmZkczEMMA0GA1UECAwDZnNk MQswCQYDVQQGEwJD	
TjCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAImfKz5 KAx+Acx20EOsr	
JB+w42STWVcUUDcAmARW0aYeRqfQ0b7bnHHaRcjphYcwCaOiJrm OCIPGy3N1KtSi	
MGvhAVGZ99OipEC8DETb9lSy276HPioZA4pKgopvPyp5Hn3JQnzg+ G8Bg957f7pz	

4. You will see a **Pending** status in the SSL Certificate page.

enera	l Email Pred	efined Destinations	Administrative Acc	ess Lang	luages			
figur	e the basic settings f	or this server below.						
	0							
ost Trimn	ned	Trimi	med	Ti	immed			Trimmed
SL C	Certificate 🕜							
- (1	Certificate 🕢 D Common Name	Organization Unit	Organization Name	Location	State	Country	Expiry Date	Status
	0	Organization Unit	Organization Name	Location Windsor	State	GB	Expiry Date	Status Pending
	ii) Common Name						1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	-

5. When the SSL certificate is ready, click into the certificate entry and import the SSL certificate and CA certificate.

SSL Certificate 📀							
CA Certificate 🕢 Upload							
Subject	Issuer	Valid From	Valid Util				_
				÷	\checkmark	X	?

6. You will be able to see the status of the certificate as **Ready** and a valid **Expiry Date**.

Provide State Street	edefined Destinations	Administrative Acc	cess Lang	uages			
gure the basic setting	s for this server below.						
st Ø							
immed	Trim	med	Tr	immed			Trimmed
L Certificate 🕜							
L Certificate 🕢	Organization Unit	Organization Name	Location	State	Country	Expiry Date	Status
	Organization Unit	Organization Name	Location Windsor	State	Country GB	Expiry Date 2016-12-05	Status Ready

7. To apply the SSL certificate to your connector, click into the HTTPS entry.

) () 				Trimm	ied		Trimmed			Trimmed
) () 	ectors 🕝									
	D									
1 101	Р	Port	Protocol	Max Connec	tion Connection T	imeout	Max Keep A	live Request	t SSL C	ertificate
10	0.7.0.122	80	HTTP	2000	20000		1000			
10	0.7.0.122	443	HTTPS	2000	20000		1000		1673	
	ertificate D Common Nar		Organi	zation Unit	Organization Name	Location	State	Country	Expiry Date	Status

8. Add the **SSL certificate** to this connector as shown below.

Add New Web S	Server Setting	server.	
Web Server			
IP 10.7.0.122			
Trimmed	Trimmed	Trimmed	Trimmed
SSL Certificate			
Default SSL Certificate		×	
Default SSL Certificate C=GB, L=Windsor, O=IT Departi	ment, OU≕IT Department, CN≕www.mybacku	p.com	
			✓ X ?

9.

Click at the bottom right corner to save the settings.

											_
ene	eral Em	nail	Predefi	ined Destinatio	ns Administrat	ive Access	Langua	ages			
onfig	jure the ba	sic set	tings for t	this server below							
Hos	st 🕜										
Ť	rimmed			1	rimmed		Trin	nmed			Trimmed
	IP	Port	Protocol	Max Connection	Connection Timeout	Max Keep Aliv	re Request	SSL Cert	tificate		
	IF 2		HTTP	2000	20000	1000	entequest		uncate		
Π	1070122	80									
	10.7.0.122							C=GB_L	=Windsor C)=IT Department	
	10.7.0.122		HTTPS	2000	20000	1000)=IT Department, CN=www.myback	
		443	HTTPS								
SSI	10.7.0.122	443	HTTPS								
ssi	10.7.0.122	443 ate 🕜	HTTPS	2000	20000	1000	scation	OU=IT D	epartment, (CN=www.myback	kup.com
ssi	10.7.0.122	443 ate 🕝 Name	HTTPS		20000	1000 Iame Lo	500.000.00007				

Renew a trusted SSL certificate

When your SSL certificate is due to expire, you can renew your SSL cert via your CA's website. Your CA may ask you to use the existing CSR that you submitted previously or submit a new CSR.

- If you decided to use a new CSR, most likely the information on the old CSR is not up-todate. Most CA will not consider this as a renew process and you need to start from the beginning of a certificate process described in previous section.
- If you purchase a renew SSL certificate with the existing CSR, wait for your CA to sign the renew SSL certificate.

NOTE

The renewal process may be different for different CA. You need to follow your CA's instruction on the renewal process.

The import step of a renewed SSL certificate is similar to the installation of a SSL certificate. Please perform the following in your AhsayCBS.

1. Enter System Settings -> Basic -> General -> SSL certificate.

gure the basic settings for this server below.	Trimmed			Trimmed
st @ immed Trimmed	Trimmed			Trimmed
st @	Trimmed			Trimmed
immed Trimmed	Trimmed			Trimmed
				mining
L Certificate 🚱	Location State	Country	Expiry Date	Status

- 2. Click into the certificate entry.
- 3. Import the SSL certificate and CA certificate.

	ZMBcGA1UEAwwQd3d3Lm15Y	=		
Timmed wo	Trim		Trimmed	Trimmed
G97S0F5KSFJHxSHd9YM ikikfihK	19g3eQ0g1vXj651/5SYAg88xbbvj	J4HAID7uxa 🞽		
RINITIN .				
SSL Certificate 😡				
SSE Certificate				
Upload				
CA Certificate 🕖				
Upload				
Subject	Issuer	Valid From	Valid Util	
				_

4. You will see the date of "Expiry Date" is extended.

eral Email	Prede	efined Destinations	Administrative Acc	cess Lang	guages			
gure the basic s	ettings fo	or this server below.						
~								
st 🕜		Trimr	med	Ti	rimmed			Trimmed
L Certificate	9							
L Certificate () () () () Common Nam		Organization Unit	Organization Name	Location	State	Country	Expiry Date	Status
	e	Organization Unit	Organization Name	Location Windsor		Country GB	Expiry Date 2018-12-05	Status Ready

Wild card SSL certificate with redirector setup

In the Redirector with a number of Backup Servers setup scenario, you need to apply a wild card certificate for all your AhsayCBS servers. The application of the wild card certificate is the same as a normal certificate except the common name needs to enter *.backup.com instead. To apply a wild card certificate for all your AhsayCBS servers, please perform the following:

- 1. In the AhsayCBS with the Redirector role, enter **System Settings** -> **Basic** -> **General** > **SSL certificate**.
- 2. Generate a CSR with the common name set to, for example ***.mybackup.com**, and apply the SSL certificate from your trusted CA.

Name	
Generate Csr	
Common Name	

- 3. When the SSL certificate is ready, import the SSL certificate.
- Copy the SSL certificate, private key and the CA certificate file from your AhsayCBS_HOME/conf/cert folder and transfer to your AhsayCBS with Backup Server role. They are named similar as the following:

E.g.: 1449049185371.crt 1449049185371.key 1449049185371.ca

5. Import these 3 certificate files in one of your AhsayCBS (Backup Server role) in the **System Settings -> Basic -> General -> SSL certificate**, click on the **+** button.

6. Select the **Import SSL Certificate and Private Key** radio button. Select the **Type** and then import the SSL Private Key, SSL certificate and the CA certificate.

General Inf	ormation
Name	
Generat	e Csr
@	
Import S	SL Certificate and Private Key
Type	SL Certificate and Private Key
Туре	
Type PEM T SSL Private Ker	
Type PEM V SSL Private Ker	,

7. To apply the SSL certificate to your connector, click into the HTTPS entry.

	al Email			stinations	Administrative Ad	cess Lan	guages			
igu	re the basic :	settings	for this serv	/er below.						
st	0									
Trir	nmed			Trimm	ied		Trimmed			Trimmed
nr	nectors 🕜									
1	1									
		T.	Ē		1		1			
	IP	Port	Protocol	Max Connec	1000000000	Timeout		live Request	SSL C	ertificate
]	10.7.0.122	80	HTTP	2000	20000		1000			
1	10.7.0.122	443	HTTPS	2000	20000		1000		6578	
1										
	Certificate		Organiz	zation Unit	Organization Name	Location	State	Country	Expiry Date	Status
L)	1	ie	Organiz IT Depa		Organization Name	Location Windsor	State	Country GB	Expiry Date 2016-12-05	Status Ready

8. Add the SSL certificate to this connector.

Add New Web Set Add a new set of web server settin	erver Setting gs below for your users to access this serv	ver.	
Web Server			
Trimmed	Trimmed	Trimmed	Trimmed
SSL Certificate Default SSL Certificate Default SSL Certificate C=GB, L=Windsor, O=IT Departm	mt, OU≔IT Department, CN=*,mybackup.com	24	
			✓ X ?

- 9. Click at the bottom right corner to save the settings.

eneral	Email Pred	lefined Destinatio	ons Administrat	ive Access	Languages			_
		or this server below						
9	5							
Host 🕜								
Trimmed			Trimmed		Trimmed			Trimmed
onnecto	sØ							
🛨 👜								
	1	1	1	1	1			
+ ₪	Port Proto	col Max Connection	Connection Timeout	Max Keep Alive F	Request SSL	Certificate		
		col Max Connection	Connection Timeout	Max Keep Alive F	Request SSL	Certificate		
IP 10.7.0.1	22 80 HTTP	2000	20000	1000			O=IT Department	
IP 10.7.0.1		2000	terror strengt		 C=G	3, L=Windsor,	O=IT Department CN=*.mybackup.	
IP 10.7.0.1	22 80 HTTP	2000	20000	1000	 C=G	3, L=Windsor,		
□ IP □ 10.7.0.1 □ 10.7.0.1	22 80 HTTP 22 443 HTTP	2000	20000	1000	 C=G	3, L=Windsor,		
IP 10.7.0.1	22 80 HTTP 22 443 HTTP	2000	20000	1000	 C=G	3, L=Windsor,		
□ IP □ 10.7.0.1 □ 10.7.0.1	22 80 HTTP 22 443 HTTP	2000	20000	1000	 C=G	3, L=Windsor,		
□ IP □ 10.7.0.1 □ 10.7.0.1	22 80 HTTP 22 443 HTTP	2000	20000	1000	 C=G	3, L=Windsor,		
□ IP □ 10.7.0.1 □ 10.7.0.1 SSL Certif	22 80 HTTP 22 443 HTTP	2000	20000	1000	 C=G OU=	3, L=Windsor,		
	22 80 HTTP 22 443 HTTP cate 7	2000	20000	1000	 C=G OU= tion State	3, L=Windsor, T Department, Country	CN=*.mybackup.	com

Cookie Banner Notification

Cookie	Banner N	Votificati	on 🕜	

To comply with the new <u>General Data Protection Regulation (GDPR)</u> requirements, there will display a banner stating the organizations cookie policy when processing to login AhsayCBS server. This will also apply to the AhsayCBS web console.

C AhsayCBS English	≛
Login Name username	
Password	
Forgot Password	
Remember my login name	
We use cookies to give you the best experience on our website. By continuing to browse the site, you are agreeing to our use of cookies. You can change your cookie	×
settings at any time but if you do, you may lose some functionality. More information can be found in our Terms and conditions, Cookie policy and Privacy notice.	?

From AhsayCBS version 7.15.6.0 onwards, administrator can configure a notification banner to be displayed on the AhsayCBS web console (displayed at the login interface), and the contents of the banner can be configured on the AhsayCBS web console. Also the HTML codes can be used for content of the banner.

General	Email	Predefined Des	tinations	Administrative	Access	Languages
		0				
Cookie	Banner N	otification 🕜				
continui can char some fu href="ht href="ht	ng to brows nge your coo nctionality. ttp://terms_ ttp://cookie	ve you the best exp e the site, you are a kie settings at any t Vore information c condition.com">Ter policy.com">Cooki _note.com">Privac	greeing to ou time but if yo an be found i rms and cond e policy	ur use of cookies. u do, you may los n our <a itions, <a and <a< th=""><th></th><th></th></a<></a </a 		

Email

The following shows the **Email** tab under **System Settings > Basic**. This is used for defining the various email settings that AhsayCBS uses to generate email reports to backup system administrator and backup users.

	tion.do × +									L.	
🛈 <u> </u> https:// 10.23	. 6.69 :60443/cbs/syste	m/ShowConfiguration	.do#		C	Q, Search		☆│自		↓ i	9
AhsayCBS											
eral Email	Predefined De	stinations Adm	ninistrative Access	anguages	_		_				
			d for sending emails.	anguages							
Jure the settings	or the email serve	r(3) that will be use	a for schang chais.								
TP Server 🕜											
-											
Host Name	Port Require SI	MTP Authentication	Login Name	Use secure protocol	Sender Name		Sender Email	Sign all	outgoing	emails	Owne
smtp.gmail.com	587 Yes		ahsaycsv2007@gmail.com	Yes	BACKUP SERVIC	CE ADMIN	ahsaycsv2007@gmail.com	No			
ninistrator Cor	ntact 🖗										
ninistrator Cor		Email				Encrypt Em	ail		Owner		
	,	Email ahsaycsv2007@gmai	il.com			Encrypt Em	ail		Owner		
Name admin			il.com				oil		Owner		
Name admin			il.com				ail		Owner		
Name admin port Settings C		ahsaycsv2007@gmai	il.com				ail		Owner		
Image: Second system) Disk Space Reminde	ahsaycsv2007@gmai					ail		Owner		
Image: Second)))jsk Space Reminder wh	ahsaycsv2007@gmai er / Alert Report	is over 80 V %				28		Owner		
Name Admin Ad)))jsk Space Reminder wh	ahsaycsv2007@gmai er / Alert Report nen total used space	is over 80 V %				oil		Owner		
Image: Second system Name Image: Second system admin port Settings @ Email me Low D Send Low Disk : Send Low Disk :)))lisk Space Reminder wi Space Alert Report	ahsaycsv2007@gmai er / Alert Report nen total used space	is over 80 v % ce is over 90 v %				oil		Owner		
oport Settings Cert Settings Cert Settings Send Low Disk : Send Low Disk : Send Low Disk :)))))))))))))))))))	ahsaycsv2007@gmai er / Alert Report ren total used space when total used space teminder / Alert Repo	is over 80 v % ce is over 90 v %	%			oil		Owner		

There are several groups of settings under the **Email** tab, and they are listed below.

Section	Description
SMTP Server	Multiple SMTP servers can be setup for AhsayCBS. If the first SMTP server is unavailable, the next SMTP server will be used. To avoid your report emails being filtered by the SMTP server or mail client, you need to enter a valid report sender in the email settings. Note : If you don't have an SMTP server, you can consider using a free
	SMTP such as Gmail.
Administrator Contact	This entry defines the administrative contact of AhsayCBS. AhsayCBS will send usage, error and all critical system alerts to all email addresses defined here.
Report Settings	This setting allows the AhsayCBS administrator to define the threshold for email reminder / alert low disk space on AhsayCBS and backup destinations. The default settings are 80% and 90% respectively:
	Low Disk Space Reminder / Alert Report for AhsayCBS user home and system home drives:
	Send Low Disk Space Reminder when total used space is over 80%.

	Send Low Disk Space Alert Report when total used space is over 90%.
	A Low Disk Space Reminder email is sent to the administrator 15 minutes when the disk usage has exceeded the preset threshold.
	A Low Disk Space Alert email is sent to the administrator every 15 minutes when the disk usage has exceeded the preset threshold.
*	Low Destination Space Reminder / Alert Report for OneDrive and Google Drive destinations only:
	Send Low Destination Space Reminder when total destination space is over 80%
	Send Low Destination Alert Report when total destination space is over 90%
	A Low Destination Space Reminder email is sent to the administrator at 6:00 AM daily when the destination disk usage has exceeded the preset threshold.
	A Low Destination Alert email is sent to the administrator at 6:00 AM daily when the destination disk usage has exceeded the preset threshold.
*	Email me Consolidated Report:
	A consolidated report is sent daily at the time defined by the administrator. The report contains four types of information: problems, issues, activities and statistics. For more information please refer to the discussion regarding the <u>Daily User Report</u> .

Predefined Destinations Tab

The following shows the **Predefined Destinations** tab under **System Settings > Basic**. Predefined destination defines a list of local destinations, FTP or cloud storages in which the AhsayCBS server, users and sub admin can be used to store backup data. Predefined destination makes it easily to add extra cloud storage for current or new client and also makes the backup destination redundancy in cloud storage to double the stability. Predefined Destination can also be used to customize frequently used backup destination as visible optional destination choice for backup sets.

Predefined destination can also be used to replicate the AhsayCBS database and backup data to cloud destination which ensures single failure of AhsayCBS database won't influence the subsequent backup and restore jobs.

https://1	0.23.6onfiguration.do × +						-	0	x
(https://10.23.6.69.60443/cbs/system/ShowConfiguration	on.do#	C Q, Search	☆∣€	•	÷	ŵ	ø	\equiv
C Ah	sayCBS								
General	Email Predefined Destinations Ad	dministrative Access Languages							
Configure	e the predefined destinations that can be used by	this server below.							
									_
Predet	fined Destination 🕜								
+	Ð.								
	Name	Destination Storage	Info			Owner			
	MKT-Cloud-Storage	4	Google Account: Ahsay Backup						
	Dropbox-1	•	Dropbox Account Ahsay MOB						

You can set predefined destination on the following destination storage:

CTYun 0 Local / Mapped Drive / Removable Drive 0 Amazon Cloud Drive Amazon S3 O AWS S3 Compatible Cloud Storage **Google Cloud Storage** O 0 O Google Drive O Microsoft Azure OneDrive 0 **OneDrive for Business** O Rackspace 0 **Open Stack** O FTP Dropbox 0 O O SFTP 0 AhsayCBS AhsayCBS Receiver O 0 阿里云

NOTE

From version 7.15.6.0 onwards, Admin user can determine the predefined destination available to each Sub Admin type user. You can refer to the section on Manage System User (<u>System Settings > Basic > Administrative Access > %system user%> Backup User Settings > Destination</u>) for details.



Set up predefined destination on cloud storage

AhsayCBS allows setting a backup destination on some common cloud storage, local hard disk and FTP servers. The setup method is similar on different cloud storage. In the following example, we show you how to set up a predefined destination for **Google drive**. The steps for other destination storages are similar.

1. Click th to add a predefined destination. The following screen appears:

Add New Predefined Des	tinatio
Name	
GoogleDrive-1	
Туре	
 Single storage destination 	
O Destination pool	
Destination Storage	
Google Drive	
Test	
Sign up for Google Drive	

- 2. Enter the name of the backup destination. In our example, the name is GoogleDrive-1.
- 3. Select **Single storage destination** as the type of predefined destination.

NOTE

The option Destination pool is defined from a number of single storage destination.

- 4. Select Google Drive from the Destination Storage dropdown box.
- 5. If you do not have Google Drive, please click the link **Sign up for Google Drive** to create a Google account.
- 6. Click "Test" to continue. AhsayCBS will forward to Google Drive page.

7. Enter your login credential for Google Drive.

Google
Sign in with your Google Account
backupserver@gmail.com
Next
Find my account
One Google Account for everything Google G M 🐮 🚥 🛆 🏕 🕨 🌍

8. A browser pops up and Google asks for your permission to access the storage. Click **Allow**.

	- Ahsay would like to:	
4	View and manage the files in your Google Drive	0
with the	ng Allow, you allow this app and Google to use your information in r respective privacy policies. You can change this and other Acco	

9. On the browser, a code is displayed. Copy this code, then switch to AhsayCBS to paste the code.



10. Paste the code to the Authorization code field on the Add New Predefined

Name		
GoogleDrive-1		
Type		
Single storage destination		
Destination pool		
Destination Storage Google Drive	¥	
Authorization code		
bEPeU8WHd4Oe9aF1FB6n0Wr_X	S8LbOnOXD9iM	
eer coonning opper in ponorm_n		

Destination page in AhsayCBS. Click + to continue.

11. You can see the newly created predefined storage **GoogleDrive-1** appears under the **Predefined Destination** page.

https://10.	.23.6onfiguration.do × G Success co	de=4/YjTZ3e-P × +			
()	https://10.23.6.69.60443/cbs/system/ShowC	Configuration.do		C Q Search	
C Ahs	ayCBS				
General	Email Predefined Destinatio	Administrative Access	Languag	les	
Configure	the predefined destinations that can b	e used by this server below.			
Predefi	ned Destination 🖗				
	Name	Destination Storage	Info		
	MKT-Cloud-Storage	▲	Goo	gle Account Ahsay Backup	
	Dropbox-1	\$7	Drop	box Account: Ahsay MOB	
	GoogleDrive-1	4	Goo	gle Account: Ahsay Systems Corporation Billy	

12. Click to confirm. When you create a backup set for a user, you will be able to see the new predefined destination.

For more examples on setting up other cloud storages, refer to <u>Appendix E Setting up Cloud</u> <u>Storage</u>.

Administrative Access Tab

The following screen shot shows the **Administrative Access** tab under **System Settings > Basic**. You can manage your system user accounts on this page.

https://10.23.6onfiguration.do ×	+			-	0	x
🛞 🕄 👰 https://10.23.6.89.60443/	cbs/system/ShowConfiguration.do	C Q Search	☆ 自 ♥	∔ †	⊜	≡
G AhsayCBS						
General Email Predefi	ned Destinations Administrative Access Lan	guages				
Manage all system user accounts	s that are able to access the web console of this server.					
Manage System User						
+						
	Name	Туре	Owner			
	system	Admin	-			

On daily operation, you may need to assign your operators or administrators to work on your AhsayCBS. You may have programmers to write API for your applications with the AhsayCBS. You may also want to hire some resellers so that you can expand your business. You will need to setup different system users with different role/privileges to work on the AhsayCBS.

Add a new system user

1. Click the middle of the page to add a new system user. The following screen appears:

Add new	system user	
Profile		
Name		
operator01		
Password		
Re-type Password		
Туре		
Admin Admin Read-only Admin	~	
API	ated Report	

- 2. Enter the Name of the system user.
- 3. Enter the **Password** of the system user. Enter the same password again at the **Re-type Password** field.



 Select the system user type from the **Type** dropdown Box. There are four types of system users:

Admin

The Admin role has the same privilege as the build-in **system** account. For example, you can assign this account for your administrator(s) to configure or administer the AhsayCBS for you.

From v7.15.0.0 onwards, AhsayCBS allow Admin role user account to independently disable or enable Sub Admin user account access right to the branding pages.

Add new system user		
Profile		
Name		
Sub admin		
Password		
Re-type Password ●●●		
Type Sub Admin		
Email me Consolidated Report		
Show the rebranding pages		
	+ ×	?

Read-only Admin

The Read-only Admin role shares similar accessibility as its creator with Admin role, except with read permission only.

O API

The API role has full access right to the system; it has the same privilege as the build-in **system** account. This account is created for external application developers who can use this for API login authentication purposes.

Sub Admin

The Sub Admin role has the full access right to the users that was created under this sub admin and has the right to manage the backup and restore jobs or activities similar as the system administrator with less admin options.

Permission	Admin	Read-only Admin	API	Sub Admin
Read permission	~	V	✔*	V
Write permission	v	×	✔*	~
Login AhsayCBS	~	V	×	~
Create new system users	~	×	✓*	~
Profile page	~	~	×	~
Backup User Settings page	~	×	×	✔**
Rebrand Web Console page	~	×	×	~
Rebrand Client page	v	×	×	~
Export/Import profile	~	×	×	v

The following table provides a summary of the permissions of different system users in AhsayCBS.

* API role has full access to the AhsayCBS which is similar as the Admin role through the API call, except login to the AhsayCBS interface.

** Sub Admin role has full access to the settings (except the Backup User Settings page) and users under this sub admin user only.

5. Click to add. The newly-created system user, **System User 1**, appears on the page.

https://10.23.6onfigur	ation.do × +		_ 0
🗲 🖲 🛍 https://10.2	3.6.89:60443/cbs/system/ShowConfiguration.do	C ^e Q, Search	☆ 自 ♥ ↓ 余 ❷
🧲 AhsayCBS			
General Email	Predefined Destinations Administrative Access Language	ges	
Manage all system use	er accounts that are able to access the web console of this server.		
Manage System I	lear		
	5301		
🕂 🗐 🔁			
	Name	Туре	Owner
	Sub Admin User 1	Sub Admin	
	System User 1	Admin	
	system	Admin	

6. Click to confirm.

Sending a broadcast message

If you want to send broadcast message to other Sub Admin or Read-only Admin, do the following:



1. Select the system users to whom you need to send the broadcast message. In our example, **System User 1** is selected.

6	G AhsayCBS					
G	General Email Predefined Destinations Administrative Access Languages					
M	anage all system user ac	counts that are able to acce	ess the web console of this s	erver.		
1	Manage System User	r				
	+					
		Name			Туре	Owner
	<u> </u>	System User 1			Admin	
		system			Admin	**

2. Click the **Broadcast** icon in the middle of the page. The following appears:

Broadcast	
То	
Туре	Name
Subject	
Server maintenance Notice)
Message Server will be shutdown for In 4 hours	maintenance
● Text ○ HTML	
Attachment Browse No file selec	ted.

- 3. Enter the Subject and Message for the broadcast message.
 - You can select **Text** or **HTML** for the message body.
 - If you want to include an attachment, click Choose File and browse to the desired location to select the file you want.

Click the **Send** button at the bottom right hand corner of the page to send the broadcast message. Click **X** to exit.

Managing System User

You can modify the setting of your system user by clicking into the system user's name. You will see 4 tabs:

Profile	Backup User Settings
Rebrand Web Console	Rebrand Clients

Each of these 4 tabs are described in detail below.

Operation Profile Tab



The profile tab is available to all Admin, Read-Only Admin, and Sub Admin users after they login.

The following screen shows the Profile tab of the user used. In our example, **System User 1**, the type of the user is **Admin**. You can change the **Password** and **Type** of the user on this page.

Profile	Profile
Backup User Settings	Prolife
Rebrand Web Console	Name admin
Rebrand Clients	
	Password
	•••••••••••••••••••••••••••••••••••••••
	Re-type Password
	Type Admin

For **Sub Admin** users, the Profile page contains more settings.

Profile	Profile
Backup User Settings	Profile
Rebrand Web Console	Name
Rebrand Clients	sub1
Rebrand Gients	Password
	••••••
	Re-type Password
	Type Sub Admin 💌
	Email me Consolidated Report
	Show the rebranding pages
	Delegate setting and user management to Sub Admin
	Name
	Host Name
	backup.abc.com
	Connector 0.0.0:443

The Sub Admin profile page is different from the Admin profile page in the following 3 ways:

- Another Sub Admin is possible to be delegated for a Sub Admin user through the interface.
- The Host Name for the Sub Admin user can be modified.

NOTE

From v7.15.0.0 onwards AhsayCBS Sub Admin users (resellers) can share the same hostname as the system admin user. In our example, the host name for system admin is "sub.admin", and so is for the Sub Admin users "sub1" and "sub2".

Genera	Email	Predefine	d Destinations	Administrative Access	Languages	
Configure	e the basic se	ettings for this	server below.			
Host	3					-
Host Na	ime					
sub.adn	nin					
	m Home 🕜	v				
	ram Files\Ahs		n			
Conne					·	-
	IP	Port	Protocol	Max Connection	Connection Timeout	
	0.0.0	80	HTTP	2000	120000	
	0.0.0	443	HTTPS	2000	120000	
Backup (User Setting		Profile Name]
Backup (Rebrand	Web Cons					
Backup (Rebrand	Web Cons		Name sub1			
Backup (Rebrand	Web Cons		Name sub1 Password			
	Web Cons		Name sub1 Password	rord		
Backup (Rebrand	Web Cons		Name sub1 Password Re-type Passw Type Sub Admin v Email me C	ord		
Backup (Rebrand	Web Cons		Name sub1 Password e-type Passw Type Sub Admin v Email me C Show the re	oord] ionsolidated Report ebranding pages		
Backup (Rebrand	Web Cons		Name sub1 Password e-type Passw Type Sub Admin v Email me C Show the re	ord	ub Admin	
Backup (Rebrand	Web Cons		Name sub1 Password Password Password Sub Admin Sub Ad	oord] ionsolidated Report ebranding pages	ub Admin	
Backup (Rebrand	Web Cons		Name sub1 Password Password Password Sub Admin Sub Ad	oord] ionsolidated Report ebranding pages	ub Admin	

Profile	Profile	
Backup User Settings		
Rebrand Web Console	Name sub2	
Rebrand Clients	SUDZ	
	Password	
	••••••	
	Re-type Password	
	Туре	
	Sub Admin 👻	
	Email me Consolidated Report	
	\checkmark Show the rebranding pages	
	Delegate setting and user management to Sub Admin	
	🕂 🛍	
	Host Name sub.admin	
The hostname setup	for a Sub Admin user is important, as Ahsay	/CBS uses
-	e to determine which branding should be app	
interface.		
interface.		

• A different connector can be applied for the Sub Admin users.

The Sub Admin user has fewer privileges as the full Admin user. In our example, the Sub Admin User 1 account shows a subset of the functions available when the Sub Admin user logs onto AhsayCBS and even within each subset a sub admin user has only access to certain functions:



Available functions for Sub Admin users.

	Monitoring			
Dashboard	 To Dos CPU Memory Storage 			
Live Activities	Backup StatusRestore Status			
Administration Logs	 Audit Trails 			
Backup / Restore Logs	 Backup Jobs Restored Jobs Backup Errors Backup Set Log Activities Log 			
	Backup / Restore			
Basic	Free Trial Options			
Users, Groups, & Policies	 Backup User User Group Policy Group 			
System Settings				
Basic	 Email Predefined Destinations Administrative Access 			

Backup User Settings Tab

The Backup User Settings tab is available to admin and sub admin users after they login, although for sub admin user they have read-only access.

The following screen shot shows the Backup User Settings tab of the user used in our example, **admin**, whose type is **Admin**.

Profile	Bandwidth Control
Backup User Settings Rebrand Web Console Rebrand Clients	Limit the transfer rate when performing backup and restore tasks Max transfer rate for backup 100 Kbit/S Max transfer rate for restore 100 Kbit/S
	[↗ Ľ ✓ X ?

The following screenshot shows the Backup User Settings tab of the user used in our example, **Sub Admin User 1**, whose type is **Sub Admin**.

	1 /		, ,,	
Profile		License	User Home Bandwidth Control Destination	
Backup	User Settings	Ahsay	OBM User 10	AhsayACB User 10
Rebrand	Web Console	✔ VMwar	re Guest VM 10	Hyper-V Guest VM 10
Rebrand	d Clients	√ VMwar	re Socket 10 (this feature requires AhsayOBM v7.7 or above)	₩ Hyper-V Socket 10 (this feature requires AhsayOBM v7.7 or above)
		✓ Micros	oft Exchange Mailbox 10	NAS 10
		√ Mobile	10	✔ Office 365 Exchange Online Backup 10
		Ahsay	ACB Office 365 Exchange Online Backup 0	✓ OpenDirect / Granular Restore 10
				[ª [≝ ✓ X ?
			NOTE	
Dia	ooo kindlur	noto th	ot:	
Pie	ase kindly r	iote in	al.	
>	It uncheck	the be	ox, there is no limit for license que	ota assigned to the module.
\succ	If check th	e acco	ording box and the assigned value	e for license is less than the used ones,
	there will b	be erro	or message prompted to block the	update. For example, if check the box
			÷ · ·	admin, but it already has 20 quota
	-	-	will be error message prompted	

The administrator can assign the number of AhsayOBM/ AhsayACB CALs and add-on modules to each sub admin user.

Field	Description
AhsayOBM User	License quota for AhsayOBM users.
AhsayACB User	License quota for AhsayACB users.
VMware Guest VM	License quota for backing up VMware Guest VMs.
Hyper-V Guest VM	License quota for backing up Hyper-V Guest VMs.

VMware Socket (this feature requires AhsayOBM v7.7 or above)	License quota for VMware Socket.
Hyper-V Socket (this feature requires AhsayOBM v7.7 or above)	License quota for Hyper-V Socket.
Microsoft Exchange Mailbox	License quota for backing up Microsoft Exchange Mailboxes.
Mobile	License quota for backing up Mobile devices.
NAS - Synology	License quota for backing up Synology NAS devices.
NAS - QNAP	License quota for backing up QNAP NAS devices.
AhsayACB Office 365 Exchange Online Backup	License quota for backing up AhsayACB Office 365 Exchange Online user mailboxes.
Office 365 Exchange Online Backup	License quota for backing up Office 365 Exchange Online user mailboxes.
OpenDirect / Granular Restore	License quota for file-level restore from guest VM or compressed/image files. Applicable only to File / Hyper-V / VMware backup sets on Windows platform.

Administrator can determine the destination category(both predefined and standard destination) for the sub admin user, but the configuration will not modify any existing destination settings, e.g. policy and predefined destination.

Profile	License User Home Bandwidth Control Destination
Backup User Settings	Enable the destinations for this Sub Admin. This feature will not modify any existing destination
Rebrand Web Console	settings, e.g. policy and predefined destination.
Rebrand Clients	
	+ •
	Name Name
	Local / Mapped Drive / Removable Drive
	Amazon S3
	WS S3 Compatible Cloud Storage
	Google Cloud Storage
	Coogle Drive
	L Hicrosoft Azure
	OneDrive for Business
	Rackspace
	DenStack
	FTP FTP
	sFTP SFTP
	[Ž] [Ľ] ✓ X ?

The administrator can enable/ disable the destination by adding/ deleting the according destination. If the administrator disable the destination option, the according destination will not show in the sub admin user login interface during adding the new predefined destination or standard destination.

	NOTE
Plea	ase kindly note that:
۶	The Destination settings can be overridden by the setting under "Users, Groups & Policies > Policy Group > Backup Set Settings > Destination Visible to Users".
	For example , if "OneDrive" is hidden from a user group (Group-1). Even if it is enabled for the sub admin (Sub-1), backup users under that sub admin (Sub-1) and user group (Group-1) will not be able to use OneDrive as backup destination.
	Destination feature will not affect existing backup sets created before the upgrade.
>	All the standard destination will be displayed but only the Predefined destination visible to users configured in "Users, Groups & Policies > Policy Group > Backup Set Settings > Destination Visible to Users" can be displayed here.

For example: If only enable "Local/ Mapped Drive/ Removable Drive" and "Google Cloud Storage" for the **Sub Admin User 1** whose type is Sub Admin.

Profile	License User Home Bandwidth Control Destination
Backup User Settings Rebrand Web Console Rebrand Clients	Enable the destinations for this Sub Admin. This feature will not modify any existing destination settings, e.g. policy and predefined destination.
	[↗ Ľ ✓ X ?

Login AhsayCBS with **Sub Admin User 1**, go to System Settings > Basic > Predefined Destinations.

C Ah	sayCBS		
Email	Predefined Destinations	Administrative Access	
Configure	e the predefined destinations th	nat can be used by this server t	below.
Prede	fined Destination 🕜		
+ i	Email Predefined Destinations Administrative Access configure the predefined destinations that can be used by this server below. Predefined Destination ?		
	Name	Info	Owner

Click under Predefined Destination to add the new predefined destination. For the destination storage category, you can find that besides AhsayCBS, there are only "Local/ Mapped Drive/ Removable Drive" and "Google Cloud Storage" option available which are enabled by administrator.

lame		
Local-1		
Type		
 Single storage destination 		
 Destination pool 		
Destination Storage		
Local / Mapped Drive / Removable Drive	~	
Local / Mapped Drive / Removable Drive	·	
Google Cloud Storage AhsayCBS		

Profile	CKUP User Settings after login AhsayC	
Backup User Settings Rebrand Web Console Rebrand Clients	AhsayOBM User (Quota: Used: 0 Available:) ✓Miware Guest VM (Quota: Used: 0 Available:) ✓Miware Socket (Quota: 0 Used: 0 Available: 0) (this feature requires AhsayOBM v7.7 or above.	AhsayACB User (Quota: - Used: 0 Available:) Hyper-V Guest VM (Quota: - Used: 0 Available:) Hyper-V Socket (Quota: 0 Used: 0 Available: 0) (this feature requires AhsayOBM vor above)
	Microsoft Exchange Mailbox (Quota: Used: 0 Available:)	NAS (Quota: Used: 0 Available:)
	Mobile (Quota: Used: 0 Available:) AhsayACB Office 365 Exchange Online Backup (Quota: Used: 0 Available:)	Office 365 Exchange Online Backup (Quota: Used: 0 Available:) Granular Restore (Quota: Used: 0 Available:)
		Fa Ft t v
Policy Group but will not ir	setting determines the Standard Destin > > Backup Set Settings > Destination ofluence the Cloud File Backup Source olicy Group > Backup Set Settings" for	nation of "Users, Groups & Policies Visible to Users" for Sub admin us e Visible to Users of "Users, Group
Policy Group but will not ir Policies > Po If sub admin destination, following scr	> Backup Set Settings > Destination of luence the Cloud File Backup Source	Visible to Users" for Sub admin us e Visible to Users of "Users, Group Sub admin user. p user using the existing allowed not be disabled afterwards. The
Policy Group but will not in Policies > Po f sub admin destination, following scr category.	 b > Backup Set Settings > Destination b) Seckup Set Settings > Destination b) Seckup Set Settings > Destination c) Seckup Set Settings > for c) type user account has created backup c) the according destination category can be shot shows the error prompted if 	nation of "Users, Groups & Policies Visible to Users" for Sub admin us e Visible to Users of "Users, Group Sub admin user. p user using the existing allowed nnot be disabled afterwards. The
Policy Group but will not ir Policies > Po If sub admin destination,	 b > Backup Set Settings > Destination b) Seckup Set Settings > Destination b) Seckup Set Settings > Destination c) Seckup Set Settings > for c) type user account has created backup c) the according destination category can be shot shows the error prompted if 	nation of "Users, Groups & Policies Visible to Users" for Sub admin us e Visible to Users of "Users, Group Sub admin user. p user using the existing allowed nnot be disabled afterwards. The

Rebrand Web Console Tab

The Rebrand Web Console tab is available to admin and sub admin users after they login. Both admin and sub admin user can use this feature to rebrand the images on the AhsayCBS web console when accessed by the sub admins hostname.

The following screen shows the Rebrand Web Console tab of the user used in our example, **Sub Admin User 1**, the type of the user is **Sub Admin**.

Profile	User Interface Connector Predefined Destinations Report			
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers			
Rebrand Web Console	User Interface			
Rebrand Clients	Title			
	Product Name			
	Download link for iOS app https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=			
	Download link for Android app https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=			
	User Interface logo (ico_40_cbs_logo.png - 200 x 72 px)			
	Browse No file selected.			
	(Default file)			
	Browse No file selected.			
	AhsayCBS logo (ico_24_cbs.png - 24 x 24 px) (Default file)			
	Browse No file selected.	\checkmark	Х	?

Rebrand Clients Tab

The Rebrand Clients tab is available to admin and sub admin users after they login.

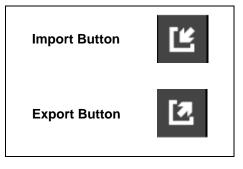
Profile	Custom Properties	Application Settings - 0	OBM Application Settings - AC	Custom Files - OBM Cu	stom Files - ACB	
Backup User Settings	Custom Files - OBC	Color Scheme Setting	s - OBM Color Scheme Setting	gs - ACB Digital Signature	Build Installers	
Rebrand Web Console	Custom Properties	8				
Rebrand Clients						
	Key		English	Catalan	Danish	
	%THIS_YEAR%		2017	2017	2017	
	%COMPANY_NAME_F	ULL%	Ahsay Systems Corporation	Ahsay Systems Corporation	Ahsay Systems Corporation	
	%COMPANY_NAME_S	HORT%	Ahsay	Ahsay	Ahsay	
	%COMPANY_NAME_S	YSTEM%	Ahsay Systems Corporation			
	%COMPANY_URL%		www.ahsay.com	www.ahsay.com	www.ahsay.com	
	%COMPANY_COPYRI	GHT%	1999-%THIS_YEAR% (C) % COMPANY_NAME_SYSTEM% All	1999-%THIS_YEAR% (C) % COMPANY_NAME_SYSTEM% All	1999-%THIS_YEAR% (C) % COMPANY_NAME_SYSTEM	
			rights reserved.	rights reserved.	rights reserved.	
	%SUPPORT_EMAIL%		support-kb@ahsay.com	support-kb@ahsay.com	support-kb@ahsay.com	
	%SUPPORT_URL%		http://kb.ahsay.com	http://kb.ahsay.com	http://kb.ahsay.com	
	%SUPPORT_TEL%					
	%SUPPORT_TEAM%		Ahsay Support Team	Ahsay Support Team	Ahsay Support Team	
	%UPDATES_URL%		http://forum.ahsay.com/viewforum.php? f=1	http://forum.ahsay.com/viewforum.php? f=1	http://forum.ahsay.com/viewfo	
	%OBS_FULL_NAME%		Ahsay Offsite Backup Server	Ahsay Offsite Backup Server	Ahsay Offsite Backup Server	
	%OBS_FULL_NAME_S	YSTEM%	Ahsay Offsite Backup Server			
	%OBS_SHORT_NAME	%	AhsayOBS	AhsayOBS	AhsayOBS	
	%OBS_SHORT_NAME	_SYSTEM%	AhsayOBS			
	%RPS_FULL_NAME%		Ahsay Replication Server	Ahsay Replication Server	Ahsay Replication Server	
	%RPS_FULL_NAME_S	YSTEM%	Ahsay Replication Server			
	%RPS_SHORT_NAME	%	AhsayRPS	AhsayRPS	AhsayRPS	
	%RPS_SHORT_NAME	SYSTEM%	AhsayRPS			

The following screen shows the Rebrand Clients tab of the user used in our example, **Sub Admin User 1**, the type of the user is **Sub Admin**.

Export/Import System Users

The export function can export the branded images, and branded properties that is set in the **Rebrand Web Console** and **Rebrand Clients** into a JSON format file. If you need to apply the branding to other sub admin users, you may import the branded JSON file back to the user.

The **Import** and **Export** buttons are available to Admin and Sub Admin users only. They are found at the bottom right corner of the screen.



Languages

The following shows the **Languages** tab under **System Settings > Basic**. You can select the language(s) available to your users.

To change the default language settings for the AhsayCBS web console, simply drag your preferred default language to the top of the list.

	+				- 1 -	0
https://10.23.6onfiguration.do ×	cbs/system/ShowConfiguration.do	C Q, Search	☆自(_	9
	cos, system, snow comgutation.ab	C C Stores	¥	• •	n	G
AhsayCBS						
eneral Email Predefin	ned Destinations Administrative Access Langu	lages				
elect the languages that you wa	int to enable for your users.					
Manage Language						
	available to your users here. The "Default" language will be use	d in all reports. Drag your preferred default language to the top of	of list.			
🕂						
	Language					
	English [Default]					
	German					≡
	French					≡
	Japanese					\equiv
	Korean					
	Chinese (Simplified)					≡
	Chinese (Traditional)					≡
	Catalan					\equiv
	Danish					\equiv
	Greek Modern					
	Spanish					≡
	Basque					≡
	Hebrew					\equiv
	Hungarian					
	Lithuanian					
	Dutch					
	Norwegian					≡
	Portuguese (Portugal)					=
	Swedish					\equiv
	Turkish					\equiv
	Arabic					

To select the language you want to make available to your users, simply click check the box next to that language.

The available languages are:

- English (default)
 Japanese
 k
- Chinese (Traditional)
- Greek Modern
- Hebrew
- Dutch
- Swedish
- Italian
- Polish

- German
- Korean
- Catalan
- Spanish
- Hungarian
- Norwegian
- Turkish

0

- Portuguese (Brazil)
- Finnish

- French
- Chinese (Simplified)
- Danish
- Basque
- Lithuanian
- Portuguese (Portugal)
- Arabic
- Slovenian
- Czech

Advanced Backup Server Configuration

To manage your AhsayCBS advanced backup server configurations, simply click the **Advanced** icon under **System Settings** from your AhsayCBS environment.



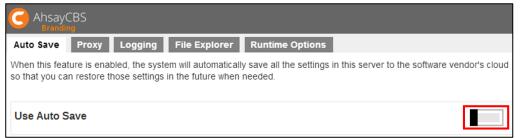
You can perform the following advanced configurations on your Backup Server:

- Restore data that has been automatically saved to Ahsay License Server.
- Configure settings for proxy connection
- Publish system and error messages to third party monitoring tools
- Retrieve system files for troubleshooting
- Configure run time options such as Java heap size, thread stack, etc.

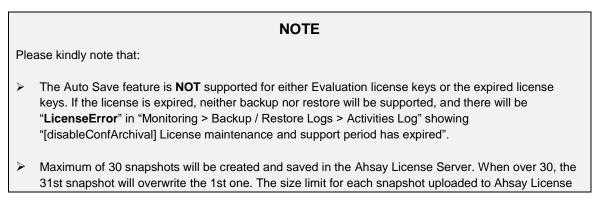
There are 5 tabs under the **Advanced** system settings section, each of which is described below.

Auto Save

The following shows the **Auto Save** tab under **System Settings > Advanced**. Default setting of Auto Save feature is disabled, you can slide the switch to right to enable it.



When this feature is enabled, the system will automatically save all the settings in this server to the Ahsay License Server daily at 6:00AM, so you can restore those settings in the future when needed.





Server is 50MB, there will be "**RoutineJobError**" of "The size of "filename" is larger than 50MB." when the snapshot exceeds the size limit.

The created snapshot will also be stored in the local drive with directory of "%AhsayCBS_INSTALL%\AhsayCBS\conf\Backup\dr-YYYY-MM-DD.zip". Maximum of 25 snapshots can be saved in the local drive, so when over 25, the 26th snapshot will overwrite the 1st one. You can check whether there is automatically delete process by searching the sentences of "[ConfigurationArchival.removeLocalBkp] Removed configuration backup file(s) [filename.zip] locally." in the AhsayCBS web console > Monitoring > Backup/ Restore Logs > Activities Log.

You can check the Auto Save daily job status by the following steps:

1. Click the Backup/ Restore Logs under Monitoring from your AhsayCBS environment.



2. Click Activities Log to find the according system log.

C AhsayCBS					
Backup Jobs R	estored Jobs	Backup Errors	Backup Set Log	Activities Log	
View all the system lo	gs of this server	below.			
List of System L	og				
				Filter Type	View Today Vage 14 V
Timestamp	Login Name O	wner Type	Message		
02/21/2018 10:30:55		RoutineJobInfo	[Job][QuarterHourlyJob]S	starting low disk space ale	int

 Search the log message of "[Job][DailyJob] Starting configuration archival" and "[Job][DailyJob] Finished configuration archival" with timestamp being around 06:00:00.

AhsayCBS			
Backup Jobs Re	estored Jobs	Backup Errors Ba	ackup Set Log Activities Log
iew all the system log	gs of this server b	elow.	
02/21/2018 06:00:58		RoutineJobInfo	User Module Job ending.
02/21/2018 06:00:59		RoutineJobInfo	[Job][DailyJob] Starting configuration archival
02/21/2018 06:00:59		RoutineJobInfo	[Job][DallyJob][copyFileAndCheck.checkSize] The size of 'C:\Program Files\AhsayCBS\temp\archiveTemp\conf is/are 75KB.
02/21/2018 06:00:59		RoutineJobInfo	[Job][HourlyJob]Start: Sending missed backup reminder report
02/21/2018 06:00:59		RoutineJobInfo	[Job][HourlyJob]End: Sending missed backup reminder report
02/21/2018 06:00:59		RoutineJobInfo	[Job][DailyJob][copyFileAndCheck.checkSize] The size of 'C:\Program Files\AhsayCBS\temp\archiveTemp\policies' is/are 616KB.
02/21/2018 06:00:59		RoutineJobInfo	[Job][HourlyJob]Starting license check
02/21/2018 06:00:59		RoutineJobInfo	[Job][HourlyJob]Start: License check
02/21/2018 06:00:59		RoutineJobInfo	[Job][HourlyJob]End: License check
02/21/2018 06:01:05		RoutineJobInfo	[Job][DailyJob][gzipFile.checkSize] The size of 'C:\Program Files\AhsayCBS\temp\dr-2018-02-21.zip.gz' is/are 88KB.
02/21/2018 06:01:05		RoutineJobInfo	[Job][DallyJob] Finished configuration archival
02/21/2018 06:01:05		RoutineJobInfo	[Job][DailyJob]Starting token refresh

4. If the job is finished with no "**RoutineJobError**", the Auto Save job is finished successfully.



The following system configuration files will be saved on the cloud daily by the auto save system job.

Server Configuration				
Description	Path			
Connector setting file	/conf/server.xml			
CBS option files	/conf/afc.opt			
	/conf/cbs.opt			
Runtime setting file	/conf/cbssvc.ini			
Default certificate files	/conf/ca.crt			
	/conf/ssl.crt			
	/conf/ssl.key			
CBS setting files	/conf/cbs.json			
Redirector configuration files	/conf/lfsConfig.xml			
0	BS Configuration			
Description	Path			
Backup Server setting files	/conf/obs.json			
License files	/conf/lic.json			
	/conf/license.xml			
CBS/OBS option files	/conf/cbs.opt			
Autoupdate index	/conf/autoUpdate.bdb			
Replication configuration files	/conf/rpsSend.xml			
R	PS Configuration			
Description Path				
Replication configuration files	/conf/rps.xml			
	/conf/rpsRecv.xml			
	/conf/rps-recv.json			
R	DR Configuration			
Description	Path			
Redirector configuration files	/conf/rdr.xml			
	/conf/rdr.json			
License files	/conf/rdr-lic.json			
	/conf/rdr-license.xml			
	OBS User Profile			
Description	Path			
Users' profile	/conf/users.xml			
	Others			
Description	Path			
Branding directory	/conf/Branding/*.*			
User group definition	/system/obs/policies/userGroup.xml			
Policy group definition	/system/obs/policies/policyList.xml			

Please note that there are no options to restore the **Others** category, however it will be restored automatically every time when you need to restore the auto save files.

Date
02/20/2018 😽 (MM/dd/yyyy)
Server configuration (server.xml)
Backup Server Configuration
Replication Module Configuration
Redirector Configuration
Backup Server User Profile

The restore process is as followed:

1. Click on the **[Restore]** button.

🥑 Ahsay	CBS			
Auto Save	Proxy	Logging	File Explorer	Runtime Options
			em will automatically when needed.	ly save all the settings in this server to the software vendor's cloud so that you
Use Auto S				

2. Select the date of the system settings backup from the drop down list.

Date
02/20/2018 👻 (MM/dd/yyyy)
Server configuration (server.xml)
Backup Server Configuration
Replication Module Configuration
Redirector Configuration
Backup Server User Profile

1	Date		
	02/20/2018	~	(MM/dd/yyyy)
	01/29/2018 02/03/2018 02/04/2018	^	ration (server.xml)
	02/04/2018 02/05/2018 02/06/2018		Configuration odule Configuration
	02/07/2018		nfiguration
	02/08/2018		User Profile
4	02/10/2018		
	02/11/2018		
	02/12/2018		
	02/14/2018		
	02/15/2018		
	02/17/2018		
	02/18/2018		
	02/19/2018		
	02/21/2018	~	
_			

- 3. Select the type of configuration that you want to restore.
 - Date

 02/10/2018
 (MM/dd/yyyy)

 Server configuration (server.xml)

 Backup Server Configuration

 Replication Module Configuration

 Redirector Configuration

 Backup Server User Profile

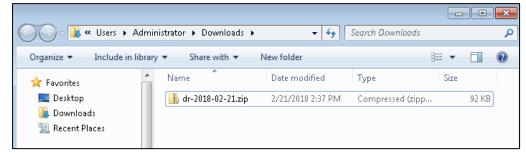
Click on to continue.

4. Choose which operation you want to make.

Download configuration files
 Overwrite existing configuration files

Click Click to start restore.

i. If click on "**Download configuration files**", the according configuration file "dr-YYYY-MM-DD.zip" will be downloaded and you can manually restore the configuration file.



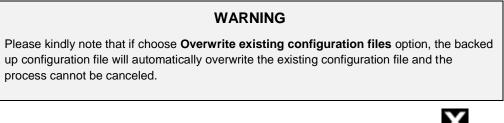
Extract the .zip configuration file.

					×
🕥 🗸 📕 🖉 🖉 🖉	dr-2018-02-21 🕨	▼ 47 Se	arch dr-2018-02	-21	Q
Organize ▼ Include in library ▼ Share with ▼ New folder 🕮 ▼ 🗍 🔞					
🔆 Favorites	Name	Date modified	Туре	Size	
🌉 Desktop	鷆 conf	2/22/2018 4:05 PM	File folder		
鷆 Downloads) policies	2/22/2018 4:05 PM	File folder		
💷 Recent Discos					

- Copy the contents of "conf" folder to "%AhsayCBS_INSTALL%\AhsayCBS\conf".
- Copy the contents of "policies" folder to "%AhsayCBS_INSTALL%\AhsayCBS\system\obs\policies".
- Restart the AhsayCBS service.

Refer to the KB article <u>FAQ</u>: How to recover my users.xml file from a previous backup on AhsayCBS v7.9.0.0 or above? (5198) for further details on this feature.

ii. If click on "**Overwrite existing configuration files**", the backed up configuration file will overwrite the existing configuration file.



- After restore process, the interface will skip back to the previous page. Click and interface will skip back to the previous page. Click and interface will skip back to the previous page.
- Click Administration Logs under Monitoring.



- Click Activities Log to find the according system log.
- Search the log message of "Starting configuration recovery" and "Finished configuration recovery" with timestamp being starting restore operation time, which means the restore process is finished successfully.

02/21/2018	AutoSouoConfigInfo	Starting configuration recovery
14:12:11	AutoSaveConliginio	Starting configuration recovery
02/21/2018	AutoSouoConfigInfo	Finished configuration recovery
14:12:11	AutoSaveConliginio	Finished conliguration recovery

• Restart the AhsayCBS service.

Proxy

The following shows the **Proxy** tab under **System Settings > Advanced**. It is used for defining whether AhsayCBS 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.

G AhsayCBS
Auto Save Proxy Logging File Explorer Runtime Options
If this server requires a proxy connection, configure the related settings below.
Proxy Server
Type HTTP V
Proxy Host Port
Proxy Usemame (optional)
Proxy Password (optional)
Test
Exclusion @
Enter the Hostname / IP address to be excluded

If you need to exclude some hostnames and IP address for proxy connection, you can add those excluded hostname and IP address at the bottom of the page.

NOTE

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

Logging

The following shows the **Logging** tab under **System Settings > Advanced**. There are two types of third party monitoring support, SNMP and Windows Event Log.

SNMP

For the SNMP, you can download the MIB definition file and import to your SNMP application by clicking the **Download** button under **Download MIB Files**.

G AhsayCBS
Auto Save Proxy Logging File Explorer Runtime Options
You can publish system and error messages of this server to third parties' monitoring tools through SNMP. If your monitoring tool supports SNMP, simply enable the SNMP feature below.
Download MIB Files Download
Enable SNMP Service
Port Number
SMMP Trap Level
Trap Address 1
Trap Address 2
Trap Address 3
Community
Test
Windows Event Log
Use Windows Event Log
Event Log Name
🖬 X ?

Windows Event Log

This feature is supported for AhsayCBS installations on Microsoft Windows platforms where the **Windows Event Log** service enabled. All AhsayCBS system log information such as errors, warnings, and information message types will also be written to the Windows event logs. The event log name is limited to eight characters.

https://10.23owAdvanced.do × +					- 0	×
€ ⊗ & https://1023.689.10443/cbs/tystem/ShawAdvanced.do	C Q, Search	☆ 白	Ø	+ -	ή Ø	≡
G AhsayCBS						
Auto Save Proxy Logging File Explorer Runtime Options						
You can publish system and error messages of this server to third parties' monitoring tools through SNMP. If your more	storing tool supports SNMP, simply enable t	he SNMP f	eature b	elaw.		
Download MIB Files						
Download						
Enable SNMP Service						
Windows Event Log						
Use Windows Event Log						
Event Log Name						
Labor 1						

The backup server's administrator can view the logs entries using the Windows event viewer.

				Event Viewer					- 0	>
Action View Help										
* 2 🖬 🖬 📩							_	-	-	_
vent Viewer (Local) Cuntom Views	CBS01 Number of e						_		ions	
Windows Logs	Level	Date and Time		Source		Task Category	^	CB	IS01	
Applications and Services Lo	Information	26/09/2016 11:00.4		CB501	257	None		6	Open Seved Log	
C8501	(i) Information	26/00/2016 11:00:4		CBS01		None		-	Create Custom View	
Hardware Events	Information	26/09/2016 11:00.4		CBS01		None		1.1	Import Custom View	
Internet Explorer	(i) Information	26/00/2016 11:00:4		CBS01		None		- I	1	
📓 Key Managament Service	(1) Information	26/09/2016 11:00.4		CBS01	257			L	Clear Log	
Microsoft	(i) Information	26/00/2016 11:00:3		CBS01	257			7	Filter Current Log	
😭 Windows PowerShell	Information	26/09/2016 11:00:3		CBS01	257				Properties	
Subscriptions	(i) Information	26/09/2016 11:00:3	3	CBS01	257	None		1.000		
	① Information	26/09/2016 11:00:3	3	CBS01	257	None		198	Find	
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None	=		Save All Events As	
	(1) Information	26/09/2016 11:00:3	3	CBS01	257	None		1	Attach a Task To this Log	
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None				
	Information	26/09/2016 11:00.3	3	CBS01	257	None			View	
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None		a	Refresh	
	Information	26/09/2016 11:00:3	3	CB501	257	None		12	Help	
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None				
	Information	26/09/2016 11:00.3	3	CBS01	257	None		Ew	ent 257, CBS01	
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None			Event Properties	7
	Information	26/09/2016 11:00.3	3	CBS01	257	None		1		
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None				
	(1) Information	26/09/2016 11:00.3	3	CB501	257	None		ы	Save Selected Events	
	(i) Information	26/00/2016 11:00:3	3	CBS01	257	None			Сору	
	(i) Information	25/09/2016 11:00.3	3	CB501	257	None			Refresh	
	(i) Information	26/00/2016 11:00:1	8	CBS01		None				
	Information	26/09/2016 11:00 1		CBS01	257	None		?	Help	
	Dinformation	26/09/2016 11:00:1		CBS01	257	None	~	L		
	Event 257, C8501						ж			
	General Details							L		
								L		
	[Job][HourlyJob]E	nd: License check								
								1		
	1							1		
	Log Name	C8501						1		
	Source:	C8501	Loggegt	26/08/2016 11:00:48						
	Event ID	257	Task Category					1		
	Level	Information		Clamic				1		
	-		Keywords:					1		
	<u>U</u> sen	N/A	Computer	w12r2x-6-89						
	OpCode:							1		
	More Information:	Event Log Online Help								

File Explorer

The following shows the **File Explorer** tab under **System Settings > Advanced**. If administrator or support staff needs to retrieve system related files on the AhsayCBS server for troubleshooting, they can make use of the **File Explorer** feature to download log or configuration files from the server without having to login remotely using RDP or SSH.

The File Explorer feature is limited to access files/folder related to AhsayCBS:

- AhsayCBS Application Home.
- AhsayCBS System Home.
- AhsayCBS User Home(s).

🧲 AhsayCBS			
Auto Save Pro:	xy Logging File Explorer Runtime C	ptions	
f you need to retriev	e system related files on this server for troublesh	ooting, you can make use of this file explorer to do so.	
System File Exp Home	olorer		
	File / Directory		Home
6	D:VAhsayCBS		Application Home
6	D:\AhsayCBS\system		System Home
6	D:\AhsayCBS\user		User Home
6	D:\AhsayCBS\user1		User Home
6	G:\AhsayCBS\user		User Home

All files download via the AhsayCBS File Explorer tab are compressed by default.

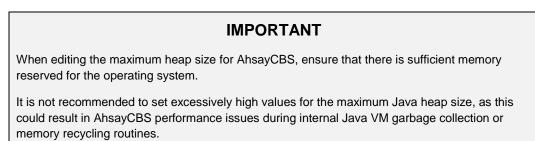
me > (
	C:\Program Files\AhsayCBS > logs				
					Page 1 🗸
	File / Directory	Download	Size	Last Modified	
	catalina_2016-08-12.log.dp	0	1k	25/08/2016 05:00:19	
	catalina_2016-08-15.log.dp	<u> </u>	4k	25/08/2016 05:00:19	
	catalina_2016-08-17.log.dp	0	1k	25/08/2016 05:00:19	
	catalina_2016-08-19.log.dp	<u> </u>	1k	25/08/2016 05:00:19	
	catalina_2016-08-22.log.dp	li I	1k	25/08/2016 05:00:19	
	catalina_2016-08-23.log.dp	li I	1k	25/08/2016 05:00:19	
	catalina_2016-08-24.log.dp	li I	1k	26/08/2016 06:00:31	
	catalina_2016-08-25.log.dp	ů –	1k	30/08/2016 06:00:05	
	catalina_2016-08-26.log.dp	ů –	402	30/08/2016 06:00:05	
	catalina_2016-08-29.log.dp	1	1k	02/09/2016 06:01:44	
	catalina_2016-09-01.log.dp	(L)	787	05/09/2016 05:00:25	
	catalina_2016-09-05.log.dp	(L)	1k	07/09/2016 06:00:43	
	catalina_2016-09-06.log.dp	1	1k	08/09/2016 06:01:09	
	catalina_2016-09-07.log.dp	ũ	2k	13/09/2016 06:00:55	
	catalina_2016-09-09.log.dp	10	3k	13/09/2016 06:00:55	
	catalina_2016-09-12.log.zip	10	1k	14/09/2016 06:01:27	
	catalina_2016-09-13.log.dp	1	1k	15/09/2016 05:01:49	
	catalina_2016-09-14.log.zip	ũ	1k	20/09/2016 06:00:49	
	catalina_2016-09-15.log.dp	ũ l	1k	20/09/2016 05:00:49	
	catalina_2016-09-19.log.dp	ũ l	1k	21/09/2016 06:00:58	

Runtime Options Tab

The following shows the **Runtime Options** tab under **System Settings > Advanced**. It allows administrators to modify Java options such as Java heap size (maximum and minimum), thread stack size and IP allowed to access the AhsayCBS management console.

By default the maximum Java heap size is 1024MB and there are no restrictions on IP address access to AhsayCBS web console.

G AhsayCBS	
Auto Save Proxy Logging File Explorer Runtime Options	
Configure the runtime options for this server below.	
-	
Java Options 🕖	
Maximum Java heap size to be used (-Xmx) 2048 MB	
kneo WD	
Minimum Java heap size to be used (-Xms)	
128 MB	
Thread stack size to be used (-Xss)	
256 KB	
Whether to disable signal handlers (-3/rs)	
 Winter to disable signal handlers (-Vs) 	
IP Allowed	
Manage the IPs to be allowed for accessing Console GUI and API	
🖶 🗑	
From From	To
From 0.0.0	256 256 256 256



For changes in Java heap size setting the AhsayCBS service needs to be restarted before it becomes effective.

6 Managing Backup/Restore

Backup / Restore Basic Configuration

To manage your AhsayCBS backup/restore basic configurations, simply click the **Basic** icon under **Backup / Restore** from your AhsayCBS environment.



You can perform the following configurations for Backup/Restore:

- Configure user home directories.
- Configure free trial settings.
- Configure backup data migration settings.
- Define maximum number of concurrent VMs permitted to be started using Run Direct on AhsayCBS.
- Configure Windows active directory integration settings.
- Configure Progressive Data Integrity Check

There are 6 tabs under basic backup/restore configurations, each of which is described below.

User Home

The following shows the **User Home** tab under **Backup / Restore > Basic**. It is used for configuring the user home directories for storing all the user data.

C Ahs	ayCBS				
User Hor	ne Free Trial Options	Backup Data Migration	Run Direct	Windows Active Directory Integration	Progressive Data Integrity Check
Configure	the user home directory(ies)	for storing all user data.			
User Ho	ome 🕝				
+ 1)				
	Directory		c	urrent QPS Ratio	Maximum QPS Ratio
	C:\Program Files\AhsayCBS\user		1	25.3% (50G / 39.9G)	Unlimited

If you want to modify the existing user home, click on the user home directory and the following screen shot will appear:

Jser Home	
Home Directory	
C:\Program Files\AhsayCBS\user	
Password protected network drive	
Current QPS Ratio	
125.3% (50G / 39.9G)	
Maximum QPS Ratio	
Unlimited 💌	

Enter the **Home Directory** path and check the box next to **Password protected network drive** if your user home drive is on a network drive.

QPS Ratio (Quota - Partition Size Ratio) is the ratio (in percentage) of the sum of all user quotas within a user home divided by the total size of the partition of the user home. You can see the Current QPS Ratio displayed in the form of a percentage. You can select the Maximum QPS Ratio from the dropdown list.

If the QPS ratio of a user home exceeds the Maximum QPS ratio after adding a user, the user will be added to the next available user home. **Unlimited** means that the QPS ratio is not checked and new users can be added to that user home. **Not Used** means that new users are never added to that user home.

After you have modified the desired information, click to exit the Home Directory details page.

Then click at the user home page to save your changes.

Free Trial Options

The following shows the **Free Trial Options** tab under **Backup / Restore > Basic**. It defines various free trial settings available in AhsayCBS.

e AhsayCBS			
User Home Free Trial Options Backup Data Migration	Run Direct W	/indows Active Directory Integration	Progressive Data Integrity Check
Configure the user home directory(ies) for storing all user data.			
Free Trial Registration			
Enable Free Trial Registration			
Quota			
	1		
Destination	Quota 50.0	Mbytes 👻	
GoogleDrive-1	100.0	Gbytes 💙	
Add-on Modules Image: Wicrosoft Exchange Server		Microsoft SQL Server	
MySQL Database Server		Oracle Database Server	
Contemportation Lotus Domino		🖌 Lotus Notes	
☑ Windows System Backup		Windows System State Backup	
VMware Guest VM 🖌 10		🖌 🔠 Hyper-V Guest VM 🔽 10]
Microsoft Exchange Mailbox 10			
NAS - Synology		🕢 🚺 ShadowProtect System Backup	
Volume Shadow Copy		Continuous Data Protection	
In-File Delta		✓ 🗊 Mobile 10	
✓ ● Office 365 Exchange Online Backup 10		🖌 🚱 OpenDirect / Granular Restore 10	
🗹 🔝 NAS - QNAP			

Trial users do not count towards the maximum number of users allowed within AhsayCBS under the paid software license, therefore it is possible to have an unlimited number of trial users within AhsayCBS. However, each trial user is limited to the quota storage settings for a period of maximum 90 days.

- To allow users to create a trial backup account from AhsayOBM or AhsayACB, please enable the Enable Free Trial Registration option at the top of the page. If this feature is unchecked, the option to register for a trial account will not be available to end users.
- From v7.15.6.0, the **Destination** and **Quota** defines the backup destination and quota for per destination of trial backup accounts upon registration. Destination includes predefined and standard destination, and the quota settings for free trial user account is independent of the quota settings in Group Policy. For the backup destinations which are not listed under Quota tab, the quota storage assigned for the destination is unlimited.

The following screen shot shows the comparison for quota management between pre-v7.15.6.0 and post-v7.15.6.0.

Pre-v7.15.6.0	The Backup Quota defines the maximum backup quota of trial backup accounts upon registration.
---------------	---

	Situation: Define the backup quota to b	be 100GB.			
	Free Trial Registration				
	🗹 Enable Free Trial Reg	gistration			
	Backup Quota 100 Gby	tes 🔽			
	After migration, there will display Abasy	CPC with quote potting being 100CP			
Post-v7.15.6.0	After migration, there will display Ahsay				
	You can configure the quota setting for predefined destination as required.	AhsayCBS and click T to add			
	Free Trial Registration				
	Theo martegistration				
	Enable Free Trial Registration				
	Quota				
	(H)				
	Destination	Quota			
	AhsayCBS	100.0 Gbytes 💌			
	L				

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

Settings for existing free trial users
User will be suspended after 90 🖌 days
🖌 Remove User 60 🔽 days after registration

- The User will be suspended after <xx> days option under Settings for existing free trial users defines the number of days after which the trial users will be suspended. In our example, the period is 30 days, and the maximum value is 90 days.
- The Remove User <xx> days after registration option under Settings for existing free trial users defines whether you want to remove trial backup users for certain number of days after registration. In our example, you can use this option to tell AhsayCBS to remove trial backup users from the system automatically after backup users have registered for 60 days, and the maximum value is 180 days.

Backup Data Migration

The data migration is designed to migrate backup sets that were created in v6 backup server to v7 backup set blocks format to take advantage of the backup/restore performance enhancement delivered by the new file storage format.

In v6 backup set, all the backup files are stored as individual files in the user home, whereas in v7 files will be handled in the following ways.

Small files (16MB or smaller)	Merge into one 16MB data block
Large files (32MB or above)	Split into multiple 32MB data blocks
NAS server	Merge/split into 8MB data black(s)
Mobile device	Remain in native format

The data migration process converts the v6 backup files into v7 backup set format, it will read small files that were stored in v6 backup set, and write a number of small files into a new data blocks. For larger files, the process will read a fixed amount of data which equals to a data block size from the selected large files, and rewrite the data block into a new 32MB data block file. The process will continue until the large file has completed to write the data into multiple new data blocks.

IMPORTANT

As the data migration process is **NOT** reversible. If you downgrade your backup server to v6, the migrated data in v7 will not be usable. All historical backup are lost and you need to start over the backup again in v6. Please communicate with your clients and check if they are comfortable with the upgrade and data migration.

Suggestion and Requirement

The data migration process will perform the backup set migration one by one. To avoid heavy I/O on the disk/CPU utilization on your backup server, we suggest you to perform the data migration in a small batch of users to test the performance on your environment. This would minimize any possible impact on the I/O usage or affect your current backup operation.

The data migration will be carried out if the following criteria are met:

- 1. Both AhsayCBS and AhsayOBM/AhsayACB are upgraded to v7.7 or later version.
- 2. More than 100GB of free space in each user home on your backup server is available.
- 3. For large backup sets that are more than 100GB of total size, please reserve more than 150% of the free space on the user home for the data migration. This is because the migration process will read the v6 backup data and write the v7 format to new location. After the migration, the reserved space will be recovered.

Free Space = Largest v6 backup set on the user home X 150%

For example: If your largest backup set is 150GB backup set, please reserve at least 225GB of free space for the migration.

If these requirements are not met, the data migration will not be started. You may find the following entry in the [Activities Log] available in your AhsayCBS, [Monitoring] -> [Administration Logs]

E.g. MigrateV6DataError [Thread][Job][MigrateV6File]Error Migrating v6 data of user ... is too big to be migrated to ...

By selecting the filter "MigrateV6DataError" from the filter drop down box, you can collect the errors related to the data migration.

REMINDERS

- If data replication has been turned on, after the v6 data migrated to the v7 format, the replication will start to replicate new v7 format backup set to the replication server or to a predefined destination
- You may notice that the storage of that user will be doubled for a short period of time. For example: the replicated v6 backup set is 10GB, after the data migration, another 10GB will be used for replicating the new v7 format backup set. After the synchronization is completed, there is a mechanism to clean up the old migrated v6 data automatically.

How to Perform the Data Migration

IMPORTANT						
While a backup set is undergoing the data migration process, the following activities pertaining to that particular backup set CANNOT be performed.						
	Data Integrity Check Space Freeing Up					
	Delete Data Delete Backup Set					

That being the case, update of the backup set, such as backup schedule, backup source, destination, etc., is still possible during the data migration process.

- 1. Upgrade both AhsayCBS and AhsayOBM/AhsayACB to version 7.7 or above.
- 2. Administrator needs to check if any backup set should be excluded in this data migration operation. For example, when we need to limit the number of migration in a small batch of backup sets, we can exclude some of the backup sets from the interface. Click the "+" icon under the Enable Data Migration section to add the user(s) you wish to exclude from the migration.

G AhsayCBS						
User Home Free Trial Options	Backup Data Migration	Run Direct	Windows Active Direct	ory Integration	Progressive Data Integrity Check	۲.
Configure the backup data migration set	ttings					
Enable Data Migration						
Migrating File:						
Number Of Migrated File: 0						
Migrate V6 backup data excluded fo	llowing backup set(s)					
÷ •						
Login Name (Alias)				Backup Set		

- 3. Click at the bottom right corner to start the migration when you are ready.
- 4. Once the backup runs on the client machine, the index migration starts on the client machine. When the index migration finished, the AhsayCBS will arrange the data migration on the backend.
- 5. Administrator can check the migration activity through the **Monitoring** > **Administration** Logs > Activities Log.

By selecting the filter "MigrateV6DataInfo" or "MigrateV6DataError" from the filter drop down box, you can collect the logs related to the data migration.

6. When the data migration completed on a client's backup set. You will see the following in the activities log.

```
MigrateV6DataInfo [Thread][Job][MigrateV6File] End: migrate v6
data.
```

7. On the next backup, that client will use the new index and new migrated data for the backup operation. This will also trigger the backup server to remove old v6 backup data.

NOTE

In case the index migration stops for any reason, on the next backup, the index migration can resume from the last recorded progress.

For backup sets such as Exchange DAG, when one of the node triggered the index migration when backup runs, all other nodes will wait for the first node to complete the index migration, and all other nodes will reload the new index file.

During the old v6 backup data removal, the performance on the user home which stores the v6 backup data could be slow down.

To add the exclusion of a v6 backup set from the data migration:

- 1. Click on under the **Migrating File** section.
- Select the login name and backup set that that you wish to exclude from the data migration.
- 3. Click to continue.

To delete an existing exclusion of a v6 backup set:

- 1. Click on the check box next to the entries you wish to delete.
- 2. Click on the icon in this section.
- 3. Click to confirm.
- 4. Click at the bottom right corner to confirm again.

Run Direct

The following shows the **Run Direct** tab under **Backup / Restore > Basic**. It defines the maximum number of virtual machines started by Run Direct on AhsayCBS. Simply enter the number of virtual

machine and click to save your changes.

For more information on Run Direct on AhsayCBS, please refer to the <u>Ahsay Cloud Backup Suite</u> <u>v7 User's Guide</u>.

C AhsayCl	BS				
User Home	Free Trial Options	Backup Data Migration	Run Direct	Windows Active Directory Integration	Progressive Data Integrity Check
Maximum nur	mber of virtual machines s	started by Run Direct: 1			

Windows Active Directory Integration

The following shows the **Windows Active Directory Integration** tab under **Backup / Restore > Users, Groups & Policies**.

G AhsayCBS				
User Home Free Trial Options	Backup Data Migration	Run Direct	Windows Active Directory Integration	Progressive Data Integrity Check
Configure the user management related	configurations below.			
Windows Active Directory Integra	ation 🚱			
Domain name				
ActiveDirectory.com				
Domain controller IP				
10.16.1.28				

When this feature is enabled and AhsayCBS fails to authenticate a user logon using its own records, a user authentication will be dispatched to Windows Active Directory automatically. This means that if an AD is presented in the network, it is only required to create a user account once in the Windows Active Directory. The same user account can also be used on the AhsayCBS server. This is because AhsayCBS will create this user account automatically after authenticating this logon using AD. The user account created will be of the type **Paid** and of backup client **AhsayACB** (unless the user logon using AhsayOBM).

To enable Windows Active Directory Integration

- 1. Click the switch on the right to turn on this feature.
- 2. Enter the Domain name and Domain controller IP of the machine where the active directory is hosted.
- 3. Click the button at the bottom of the page to confirm.

Progressive Data Integrity Check

The progressive data integrity check feature is introduced since AhsayCBS v7.17.0.0.

The Progressive Data Integrity Check tab can be accessed under **Backup / Restore > Users**, **Groups & Policies**.

Note: The feature is enabled by default after installation / upgrade to AhsayCBS version 7.17.0.0 or above.

G AhsayCBS
User Home Free Trial Options Backup Data Migration Run Direct Windows Active Directory Integration Progressive Data Integrity Check
Progressive Data Integrity Check
Progressive Data Integrity Check (DIC) is executed before running backup. It only checks the backup files that have not been checked within the specified interval. 60 Days

Below is the features of progressive data integrity check (DIC):

- Automatic Apply: When the progressive data integrity check (DIC) feature is enabled, a progressive data integrity check (DIC) job will be performed automatically before the start of each backup job to ensure that the integrity of the backup data are correct.
- **Regularly Apply**: The progressive data integrity check (DIC) will perform check for backup data regularly based on the value configured for the progressive DIC interval.
- **Centralized Control**: The progressive data integrity check (DIC)feature centralized the control of progressive DIC for all backup users and backup sets.
- Fast: The progressive data integrity check (DIC)feature will only perform check for backup files in the current data area and the latest index, so therefore, the progressive DIC process can be completed quickly.
- Efficient: The progressive data integrity check (DIC) feature will only check for backup files outside of the progressive DIC interval.

	Progressive DIC	Manual DIC
Speed & Performance	 Regular progressive DIC will be applied automatically to ensure the integrity of data. Backup time will be longer as the progressive DIC process needs to be completed before each backup job is started. Progressive DIC is faster than manual DIC, as it only performs check for backup files in current data area and the latest index, that are outside of the progress DIC interval. 	 DIC must be applied manually. Manual DIC will not influence the backup process time. Manual DIC takes longer to complete, as it performs check for all backup data in both the current and retention area, along with all indexes.

Below is the table of comparison between Progressive DIC and Manual DIC.

Checked Data & Index	Current data area.The latest index.	Current & retention data area.All indexes.
Run on Server or Run on Client	Support both Run on Server and Run on Client backup set.	Only Cloud File backup set and Office 365 Exchange Online backup set can support both Run on Server and Run on Client. Others backup types can only support Run on Client.
DIC Log	Only sentences for the start and end of the progressive DIC job and progressive DIC interval but no detailed logs.	Detailed logs about which files were checked and the whole DIC process will be shown in the manual DIC log page.
Removal Action	 If a backup file does not exist physically at the backup destination, the process will automatically remove record of the corresponding backup file from the index file. If a backup file exists, but the index file does not contain record of the backup file, no removal action will be executed. 	For both cases where a backup file does not exist physically at the backup destination, or the index file does not contain record of a backup file, the user will need to manually click to start and confirm on the data removal of the backup file, or record from the index file.
Trigger Replication	No as progressive DIC will not delete or modify any backup files.	Yes if manual DIC delete any corrupted file.
Deployments	Suitable for administrator who wants to perform regular simple data integrity check for all users automatically to ensure that the integrity of all data are correct.	Suitable for end user who wants to perform a full data integrity check manually to locate any mismatch between the backup data and index, that may cause backup failure.

To enable Progressive Data Integrity Check

- 1. Click the **switch** on the right to turn on this feature.
- 2. Enter the progressive data integrity check interval that you want to configured, in the textbox under "Progressive Data Integrity Check (DIC) is executed before running backup".

The progress data integrity check job will only perform check for backup files that have not been checked within the specified interval.

Precisely, this means that there will be a last DIC check time marked for each backup file, and the progressive data integrity check (DIC) will perform check for file if its last data integrity check (DIC) time exceeded the progressive data integrity check (DIC) interval.

Note: The default value is set to 60 days.

NOTE

Please kindly note that:

- The progressive data integrity check job will only perform check for backup files that have not been checked within the PDIC interval configured, but a manual DIC job will perform check for all backup files, in both the current and retention area, even if the file are within the progressive DIC interval.
- The minimum value that you can configure for the PDIC interval is 1 day, there is no limit to the maximum value that you can configure.
- If the Progressive DIC interval is set to a small value, the time for each backup job to complete will be longer, as data file would be checked more often (due to the small Progressive DIC interval). However, setting the Progressive DIC interval to a small value can further minimize the possibility of data corruption (e.g. backup files and index mismatch).
- On the other hand, if the PDIC interval is set to a large value, the time for each backup job to complete will be shorter (compared to if the interval is set to a small value), as data file would be checked less often (due to the larger PDIC interval). However, setting the PDIC interval to a large value may increase the possibility of data corruption (e.g. backup files and index mismatch).
- 3. Click the button at the bottom of the page to confirm.

Manage Backup Users

To manage your AhsayCBS users, groups, and policies, simply click the **Users, Groups & Policies** icon under **Backup / Restore** from your AhsayCBS environment.



There are 3 tabs under managing users, groups, and policies, each of which is described below.

Backup User Tab

A backup account contains user's account information, client type, backup modules and backup set settings, etc. A backup user account can be created by administrator or registered via the backup client application by the end user as a trial account (if this option is enabled).

The following screen shows the **Backup User** tab under **Backup / Restore > Users, Groups & Policies**. You can create a new user account on this tab.

age yo	our backup users in this se	ection.			
nage	e Backup User 🚱				
	• • • • •) 🗿 Filt	er Client Type 💌 Us	er 💌 Registration Date 💌 User Group 🔍 Auto Update 💌 User Group 🔍 View	* Default
1	Login Name (Alias)	Owner	Client Version	Add-on Modules	Status
	🔇 acb ()		-	🦹 者 🔿 📉 latas 🖬 🛃 🛤 NAS 🕑 🍹 🧿 🖓 🕼 🕼 🕼	Enable
	💽 api ()	-	7.15.0.20	🎽 🎽 🔿 📉 taus. taus. 🔺 🔛 🖂 NAS 🕑 🐺 🗿 🥥 🛷 📾 🗊 🦉	Enable
	💽 config ()	-	7.15.2.2	者 者 🔿 📉 latas latas 🔺 🔛 🛪 NAS 🕑 🖉 🗢 🧔 🕼 🎲 🕼 谷	Enable
	exch ()		7.15.0.20	者 🔁 🔿 🛝 lotes, lotes, 🔺 🖳 📨 NAS 🕐 🍞 📿 🥥 🖉 률 🗊 🔂	Enable
	💽 hyperv ()			者 🔁 🖸 📉 tass. tass. 🔺 🛃 📨 NAS 🕐 🍞 🔕 🖓 🕼 🕼 🕼 🏠	Enable
	🗿 migrate ()		7.15.0.20	👔 👔 🖸 🔪 kana, kana, 🛦 🖳 🖂 NAS 🕑 🕼 🗿 🧿 🧐 🦛 🗊 🌆 🏠	Enable
	🗿 mssql ()		7.15.0.70	🎽 🎽 🔿 🛝 lates. lates. 🔺 🔛 📨 NAS 🕑 🍞 😋 🧭 🖉 🗊 🕼 谷	Enable
	o 365 ()		7.15.0.20	🕈 者 🔿 📉 latas latas 🔺 🔛 🛪 NAS 🕑 🍹 🛇 🧔 🕼 🕼 🕼 🕼	Enable
	🧿 quota ()		7.15.6.0	🥻 🔏 🔽 🔽 Leter Leter 🔺 🔛 🛪 1445 🕐 🍹 🔿 🧭 🐙 🌐 🕼 🕼	Enable
	🧿 undelete ()		7.15.0.20	🦹 🥻 🔿 📉 latas Latas 🗛 🔛 🛪 NAS 🕐 🍞 🗿 🥥 🖉 🕼 🕼	Enable
	🧿 username ()		7.15.2.2	👔 🔁 🔼 latas. latas. 🔺 🔛 📨 NAS 🕑 🗊 🗿 🧭 🖓 🚱 🗊 🖉	Enable

If AhsayCBS is deployed for internal use, as a system administrator, you need to determine the following when you create a backup account:

- Backup client type, whether it is AhsayOBM or AhsayACB
- Backup destination



If you are a Managed Service Provider (MSP) or reseller you may require to take into consideration the following items when you create a backup user account:

- Types of users, whether it is Paid or Trial
- Backup client type, whether it is AhsayOBM or AhsayACB. Also the modules subscribed by the client.
- The backup destination and the subscribed quota

Create a New Backup User

To create a new backup user, do the following:

1. Click 🖶 as highlighted below.

C AhsayCBS			
Backup User	User Group Policy (Froup	
Manage your back	up users in this section.		
Manage Back	up User 🕜		
+ ∎ ♦ ≋	• • • • • • •	Filter Client Type 🔽	User V Registration Date V User Group V Auto Upd
		Filter Client Type 🚩	User Y Registration Date V User Group Auto Upo
Login Nar	me (Alias) Owner	Client Version	Add-on Modules
🗌 🔕 acb ()			者 者 🔿 🔍 later 🚾 🔺 🛃 🖉 NAS 🕑 🍹 🗿 🖉 🕼 🌘
📃 💿 api ()	-	7.15.0.20	👔 🔁 🔽 lotes, lotes, 🛦 🛃 🛪 NAS 🕑 ए 🗿 🖓 🕼 🗊 🗐 🖘
🗌 🧿 config	0 -	7.15.2.2	👔 👔 🔿 🔪 latar. Latar. 🔺 🔛 🖄 NAS 🕐 🐺 🔿 🖉 🕼 🕼 🕼
📃 🧿 exch ()	7.15.0.20	🔰 🔁 🔿 🛝 latar, latar, 🔺 🖳 😆 NAS 🕑 🧊 🗿 🧔 🛤 🚳 🗊 💶
hyper			👔 👔 🖸 🗽 utus utus 🔺 🛃 📨 NAS 🕑 🐺 🖸 🧔 🖉 🕼 🗊

2. The Add New User page appears.

	Add New User Enter the togin credentials required for accessing Ahsay Cloud Backup Suite, and assign this user to appropriate user groups.						
General							
Login Name	Owner						
Password							
User Group							
+							
	Name	Owner		No. of users			
	All Users	-		8	≡		

3. Enter the Login Name, Password, and select the User Group by checking the desired user group. Click to proceed.

Add New User		lackup Suite, and assign this user to ap	propriate user groups.
General			
Login Name			
John	Owner:		
Password			
•••••			
User Group 😡			
-			
Name Name		Owner	No. of users
All User	8		8

4. Enter the following information that appears on this page.

Field	Description
Alias	Another name of the backup user.
Home Directory	You can select Auto assigned or Manually assigned user home path. The user backup data will be stored here.
Subscription Type	There are 2 subscription types: Trial User and Paid User . Trial users are subject to automatic removal as defined by the <u>Free</u> <u>Trial Options</u> tab under Backup / Restore > Basic . The automatic removal option can be disabled.
Suspend At	A scheduled date to suspend this user. For trial users, the suspension date is based on the settings in the <u>Free Trial</u> <u>Options</u> tab under Backup / Restore > Basic .
Status	There are 3 types of status for a user account: Enable , Suspended , and Locked . Under normal circumstances, administrator may change the Enable or Suspended status of a user. The Locked status is referring to account lockout rules that are set inside the policy group, refer to the <u>Managing Policy</u> <u>Groups</u> section for more details. For example, if a user has 3 consecutive unsuccessful login attempts in 30 minutes, the user account will be locked out.
Upload Encryption Key	Once you enabled the encryption recovery option, the encryption key file is uploaded to the backup server. In case the user forgot the encryption key, you can still contact us to have it recovered. The recovered encryption key will be sent directly to the email address registered on the user account. Refer to the Encryption key section for further details.

Language	Preferred language for all email reports of the backup user.
Timezone	Time zone of the backup user. Since AhsayCBS v7.15.0.8, timezone information will be automatically updated when user login client backup agent, such as AhsayOBM and AhsayACB, or perform backup job to avoid the false alarm of missed backup job.
Notes	A field for administrators to add notes for the backup user.

Alias					~
Home Directory Auto Lassigned Nanualy assigned CUProgram Files/Ahrag/CBS/Laser					
Subscription Type O Trisi User Paid User					
Suspend At					
Status Ensite Supervised Looked					
Upload Encryption Key					
Language English v					
Тітезопе Бит-68.00 (СST) ^ч					
Notes	,				
	5	7	х	:	~

Click to proceed when you are done with the settings.

5. Enter the following information that appears on this page.

Field	Description
Backup Client	If the backup client machine requires to backup files only, such as a desktop computer or a notebook, then you can simply create an AhsayACB backup account. Otherwise, you will need to setup AhsayOBM , because it comes with backup modules to perform Windows system backup, database backup and virtual machine backup. By default AhsayACB backup account is selected.
Add-on Modules	You can select which add-on module to enable for the backup user. Some add-on modules has a text field after its name. For example, the number after Microsoft Exchange Mailbox defines the number of Exchange mailboxes that are allowed to be backed up under this user account.

Quota	 Backup Quota of each destinations for the user account. Refer to the <u>User Settings Tab</u> section for details. Note: Quota management for individual predefined destination is only available for AhsayCBS version 7.15.6.0 or above.
Client host limit	This is to limit the maximum number of hosts allowed in a client's backup account, i.e. the number of devices that they can install AhsayOBM/AhsayACB on. Refer to the <u>User</u> <u>Settings Tab</u> section for details.
Run Direct (For AhsayOBM only)	Set the maximum number of VMs for VM Run Direct restore on AhsayCBS for this user. Refer to the <u>Run Direct</u> section for details.

AhsayACB User Account

Select the backup client software, usable a	add-on modules and th	e availab	le quota for this user.			
Backup Client						
O AhsayOBM User						
Add-on Modules						
🗌 🧿 Windows System Backup		Lotus.	Lotus Notes			
Volume Shadow Copy		Ð	Continuous Data Protection	ı		
In-File Delta			Mobile 0			
Office 365 Exchange Online Backu	p 0	<u></u>	OpenDirect / Granular Rest	ore 0		
Quota						
Unlimit storage space for the destination not s	shown in the following tabl	e				
+ i						
Destination	Quota					
AhsayCBS	50.0	Mbyte	s 🚩			
(If preempted mode is enabled in policy setting	gs, the quota settings are	disabled)				
Client host limit						

AhsayOBM User Account

Add New User Select the backup client software, usable add-on modules and the available	quota for this user.	
Backup Client		
AhsayOBM User AhsayACB User		
Add-on Modules		
I Vicrosoft Exchange Server	Microsoft SQL Server	
MySQL Database Server	Oracle Database Server	
Lotus. Lotus Domino	Lotus Notes	
Uindows System Backup	O Windows System State Backup	
UMware Guest VM 🖌 0	📕 Hyper-V Guest VM 🖌 0	
Microsoft Exchange Mailbox	ShadowProtect System Backup	
Continuous Data Protection	NAS - Synology	
Mobile 0	NAS - QNAP	
Volume Shadow Copy	In-File Delta	
OpenDirect / Granular Restore 0	E Office 365 Exchange Online Backup 0	
Quota		
Unlimit storage space for the destination not shown in the following table		
÷ •		
Destination	Quota	
(If preempted mode is enabled in policy settings, the quota settings are disabled)		_
Client host limit		
Maximum number of host		
Run Direct		
	← → X	?

Click at the bottom of the page to proceed when you are done with the settings.

6. This page allows you to add contact person information for this user. Click \oplus to add new contact information.

Add New User						
Add contact persons information for this user.						
Manage Contact Information 📀						
+ iii						
	Name					

7. Enter the contact information such as **Name**, **Email**, **Address**, etc. In our example, the name of the contact is **john**.

Contact	
Name	
Email	
Encrypt Email	
Address	
Company	
Website	
Phone 1	
Phone 2	

Click the bottom right hand corner of the page to proceed when you are done with the settings.

8. A new contact called **john** is added.

L	Add New User Add contact persons information for this user.						
	Manage Contact Information 📀						
	+						
	Name Email Encrypt Email						
		John	john_backupsen/ce@gmail.com	No			
I							

9. Click at the bottom right corner of the page to confirm. The newly added user appears on the **Backup User** tab.

NOTE

Please kindly note that since AhsayCBS v7.17.0.0, if the license quota for backup user(AhsyaOBM/ AhsayACB) has already been fully used, adding another new backup user will be blocked.

\leftrightarrow \rightarrow C (i) localhost:10880/cbs/obs/access/user/Ed	tUser.do?id=	=0	
Add New User Add contact persons information for this user.		localhost:10880 says You do not have enough AhsayACB quota. AhsayACB Quota (license key): 1, Remaining AhsayOBM Quota: 0, Used: 3	
Manage Contact Information 🛛			
Name	Email	Encrypt Email	
← → C () localhost:10880/cbs/obs/acces		tUser.do?id=0	
Add contact persons information for this user.	You	u do not have enough Test123 OBMShortName quota as Test123	
Manage Contact Information @	OB (lice	BShortName has used over Test123 OBMShortName. Test123 MShortName Quota (iicense key): 6, Test123 ACBShortName Quota ense key): 1, Test123 ACBShortName Used: 2, Test123 MShortName Used: 6	
Name	En	ок	

Delete Backup User

To delete an existing user, select the user you want to delete, then click the **Delete** button as shown below. You will be prompted to confirm deleting the selected user, click **OK** to confirm.

G AhsayCBS							
Backup User Group Policy Group							
Manage your backup users in this	Manage your backup users in this section.						
Manage Backup User 🕜							
+ 💼 🌢 🖘 🗅 🕒 🗛	2 B F	ilter Client Type	User 🛛 Registration Date 💟 User Group 🔍 A				
Login Name (Alias)	Owner	Client Version	Add-on Modules				
🔲 🔇 acb ()		-	∦ 🁔 🔿 🔪 lotus. Lotus. 🔺 🔛 🖂 NAS 🕐 🐺 📀 🛇 🐗 🚇 🗊 🖽 谷				
🔲 🧿 api ()		7.15.0.20	👔 🔁 🔽 tous. Lous. 🔺 🔛 🖂 NAS 🕐 🐺 📿 🧔 🖉 🕼 🗊 🖽				
🔲 🧿 config ()	S	7.15.2.2	🔰 🏅 🔿 🔪 lotus. Lotus. 🔺 🔛 🖂 NAS 🕐 🐺 📿 🧔 🖉 🕼 🗊 🔩 谷				

WARNING

When you remove a backup user account, all the backup sets and backup data on CBS or predefined destinations, as well as the backup user profile on the AhsayCBS will be removed.

For the backup data residing on local destinations on the AhsayOBM/AhsayACB machine or on customers personal cloud storage accounts, SFTP/FTP servers will not be deleted.

Auto Update

The automatic upgrading of AhsayOBM/ AhsayACB clients to the latest version is performed using the Auto Update function. To perform a successful auto upgrade of the AhsayOBM/ AhsayACB clients need to connect to the AhsayCBS backup server.

The AhsayOBM/ AhsayACB client backup machine:

- Must be powered on.
- Must be connected to the internet.
- > The AhsayOBM/ AhsayACB scheduler services must be running.
- The AhsayOBM/ AhsayACB client is connecting to AhsayCBS server using the latest login credentials.
- > The AhsayOBM/ AhsayACB application GUI must be closed.

For every 720 minutes or whenever the backup client service restarts (v7) or the auto update agent service restarts (v6), AhsayOBM/ AhsayACB will check with your AhsayCBS for any available updates. If any auto update instructions were found on the AhsayCBS, the update progress will be started.

NOTE

AhsayOBM on Synology NAS does not support Auto Update feature.

To perform an auto update, select the desired user then click Auto Update as shown below.

AhsayCBS Backup User Group Policy Group								
Manage your backup users in this section.								
wanage your backup users ii	Tuns section.							
Manage Backup User 🚱								
Manage Backup User	3							
		ltor ou m						
Manage Backup User		Iter Client Type	User	Registration Date	Vser Group		~	
		Client Type	User Add-on Mo		Vser Group		×	
+ i \$ 7 4 6	₽ № 8 Fi	Choine Type	Add-on Mo				* @ 0 00	
+ 💼 😥 🛱 🛆 🕒	🂫 🗠 😩 Fi Owner	Client Version	Add-on Mo	dules	🖳 🖂 NAS 🕐 🕻		× * (* (* (* (* * * * * * * * * * * * * *	

Broadcast

After you selected a list of users for broadcast, you will be able to send broadcast message to the selected users. This is useful when you need to send announcement such as server maintenance, applied latest patch or some promotion offers to your users.

To broadcast a message to users, select the desired users then click the **Broadcast** button as shown below. Edit the broadcast message then click the **Send** button at the bottom right corner to send the message.

C Ał	G AhsayCBS						
Backup User Group Policy Group							
Manage	your backup users in this	s section.					
	Manage Backup User 🕜						
	Login Name (Alias)	Owner	Client Version	Add-on Modules			
	() acb ()		-	者 者 🔿 🔨 lotue, <mark>lotue,</mark> 🔺 🔛 🖂 NAS 🕑 🐺 🧿 🔾 🟘 🕼 🗊 🖽 🝚			
	💿 api ()		7.15.0.20	👔 🔁 🔽 Lotus, Lotus, 🔺 🔛 🖂 NAS 🕐 🐺 🗿 🕼 🕼 🕼 🚱			
	💿 config ()		7.15.2.2	🍾 🤰 🔿 📉 lotus lotus 🔺 🔛 🖂 NAS 🕑 🐺 🔿 🔕 🐙 🗐 🗊 😭			

Backup User

You can select user(s) and trigger their backup machines to run the backup set(s). Select the desired backup user then click the **Backup User** button as shown below. Select the backup set you would like to start a backup on, and then click the **Run Backup** button at the bottom right corner to trigger a backup.

The backup will start shortly and you can monitor the progress using the **Live Activities** feature. Refer to <u>Backup Status</u> for further details.

C Ał	G AhsayCBS								
Backu	Backup User Group Policy Group								
Manage	Manage your backup users in this section.								
Mana	Manage Backup User 🕜								
	Login Name (Alias)	Owner	Client Version	Add-on Modules					
	🔇 acb ()			者 者 🔿 📉 latus 🖾 🔛 🖂 NAS 🕑 🍞 🗿 🖓 📾 🕼					
	🗿 api ()		7.15.0.20	者 🖸 📉 latus. latus. 🔺 🛄 🖂 NAS 🕐 ए 🔿 🛷 🖉 🕼 🕼					
	💿 config ()		7.15.2.2	湰 🔏 🔿 📉 lotus. Lotus 🔺 🔛 🖂 NAS 🕑 🐺 🔿 🖉 🕼 🕼 😭					

Export Users' Usage Statistics to CSV File

You can export the usage of your selected user(s) to a CSV (Comma Separated Value) file. This format can be imported into spreadsheets or other program/database for further analysis or billing purpose.

To export usage of users to CSV, select the desired user then click the **Export Users' Usage Statistics to CSV** button as shown below. You will see a .csv file being downloaded.

C Ar	G AhsayCBS							
Backup	Backup User Group Policy Group							
Manage	your backup users in thi	s section.						
Mana	Manage Backup User 🕫							
	Login Name (Alias)	Owner	Client Version	Add-on Modules				
	🗿 acb ()			🁔 者 🔿 🔍 love. <mark>lotes.</mark> 🔺 🔛 📨 NAS 🕑 👎 🧿 🖉 🕼 谷				
	💽 api ()		7.15.0.20	👔 🎦 🔽 🔽 Lotus Lotus 🔺 🔛 📨 NAS 🕐 🐺 🔿 🖉 🕼 🗊 🗐 🚱				
	💿 config ()		7.15.2.2	🁔 🏅 🔿 🛝 lotus. Lotus 🔺 🔛 🖂 NAS 🕑 🍹 🔿 🧔 🖉 🕼 🗊 🗒 谷				

Move/ Import/ Export Users

This function can be used to export users to a zip file, and import users from a zip file.

You can also use this function to migrate backup users from one AhsayCBS server to another AhsayCBS server, or to migrate users from their current user home to another user home on the same server. This function is limited to system user with admin role.

Select the desired user, and then click the Move/ Import/ Export Users button as shown below.

G AhsayCBS							
Backup User User Group	Policy Gr	oup					
Manage your backup users in this section.							
Manage Backup User 🕫							
Login Name (Alias)	Owner	Client Version	Add-on Modules				
🗌 🧿 acb ()			者 者 🔿 💫 latur. <mark>latur.</mark> 🔺 🔛 🖂 NAS 🕑 🐺 🧿 🗢 🖉 🕼 🕼				
📃 💿 api ()		7.15.0.20	👔 👔 🖸 🔪 latus latus 🔺 🔛 🖂 NAS 🕑 🐺 🗿 🥥 🖉 🕼 🕼				
🗌 🧿 config ()		7.15.2.2	者 🔏 🔿 🔍 latus. latus. 🔺 🔛 🖂 NAS 🕑 🐺 🔾 🥥 🜌 🚇 🗊 🚺 谷				

The following screen appears:

Μ	ove / Im	port / E	Export Users					
۲	Move user home	to C:\Program	n Files\AhsayCBS\user 🔻					
\odot	Import users to C:\Program Files\AhsayCBS\user 🔻							
	Exported zip file	Choose File	No file chosen					
	Overwrite existing users							
\odot	Export users to f	ile						
	🗌 Include back	upfiles						

- Move user home to Export user from a user home to another user home on the same AhsayCBS server.
- Import users to Import a previously exported user to the selected user home.
- Export users to file Export user profile and backup files to a zip file format.

NOTE

- Please schedule a time with the backup user before migrating a user to another user home / to another AhsayCBS. Ensure that the AhsayOBM / ACB client interface is closed, and that no backup / restore job is performed during the migration.
- It is highly recommended to temporarily suspend the backup user during the export / import procedure.
- It is not supported to import users belong to the AhsayCBS v7.15.6.0 or above to the old version of AhsayCBS server.

Since the migration of a backup user to another user home / AhsayCBS may involve export of the user profile and backup data, for user with a large amount of backup data, the time required for the export may take a while. During the export, please do not restart the AhsayCBS service or the server. In case of power failure or server shutdown, the export of the user will fail.

Example: Case 1 -- Migrate users from one user home in D: drive to another user home in F: drive within the same AhsayCBS

Assumptions:

- The backup users to be moved only have small amount of backup files.
- These users are located in **D:\u001** to be moved to **F:\u001**.

Steps:

- 1. Login to the AhsayCBS and go to **Backup/Restore > Users, Groups & Policies**.
- 2. Select the user(s) to be migrated.

C AhsayCBS			
Backup User User Group	Policy Gro	up	
Manage your backup users in this	section.		
Manage Backup User 🕢			
Login Name (Alias)	Owner	Client Version	Add-on Modules
acb ()			者 者 🔿 🖏 lotes. Lotes. 🔺 🔛 🖂 NAS 🕑 🐺 🗿 🖉 🕼 🕼 🗊 🔩 🏵
📃 💿 api ()		7.15.0.20	👔 🔁 🔽 🔽 Latas, Latas, 🔺 🛄 23 NAS 🕐 🐺 🗿 🖉 🖉 🗊 🗐 🏵
o config ()		7.15.2.2	🔰 💦 🕞 🗽 latas. latas. 🔺 🔛 🖂 NAS 🕑 🐺 😋 🖉 🖉 🕼 🗊 🚺 谷

3. Click the **Move/ Import/ Export Users** button.

4. Make sure the radio button of **Move user home to** is turned on and select the dropdown box next to it. Choose the **F:\u001.**

Мол	Move / Import / Export Users					
۲	Move user home to D:\AhsayCBS\user 🖌					
0	Import users to D:\AhsayCBS\user 💌					
	Exported zip file Browse No file selected.					
	Overwrite existing users					
\circ	Export users to file					
	✓ Include backup files					

5. Click **t**o proceed.

Example: Case 2 -- Export a user (including data) from one AhsayCBS and import to another AhsayCBS

Suggestions:

- Perform the export and import procedure for one user at a time.
- Suspend the user during the export and import procedures to ensure that no backup / restore job is performed during the migration.
- If the exported "users.zip" file is not saved to a local destination, ensure that the network between the AhsayCBS server and the save destination remain stable throughout the export process.
- For best result (performance and stability wise), it is recommended that:
 - The export and import operation of the backup user is performed directly on the corresponding AhsayCBS server, or in the same LAN environment.
 - The exported "users.zip" files are copied directly onto the destination AhsayCBS server, or a network drive in the same LAN environment.
- For backup user with large amount of data, please
 - Perform the user data export at a time when the resource usage is low on the AhsayCBS server.

Assumptions:

- The user to be exported is located on AhsayCBS1, to be moved to AhsayCBS2.
- Before importing the user to AhsayCBS2, make sure that there is no backup user with the same username on AhsayCBS2.

- Backup data are stored on the AhsayCBS server. Data on cloud storage or pre-defined destination is not supported.
- The user should be removed on the original server (e.g. AhsayCBS1) after exporting the user to the new AhsayCBS server. This is especially important if these AhsayCBS servers are under the same Redirector setup.

NOTE

Please kindly note that the default size limit for the users.zip file (including Users.xml and backup data) to be imported to the different AhsayCBS server is 50G. If you want to change the size limit, you need to change the number of "50" in the line of "<controller maxFileSize="50G"/>" in "\$CBS_HOME/webapps/cbs/WEB-INF/struts-config.xml" to be other value.

Please refer to the following article for further details about how migration of users between different AhsayCBS under the same Rediector setup:

http://wiki.ahsay.com/doku.php?id=public:5303_how_to_move_user_in_same_ahsayrdr_setup

Steps:

1. Login to the AhsayCBS1 and go to **Backup/Restore > Users, Groups & Policies**.



2. Select the user you need to export and click the **Move/ Import/ Export Users** button.

G AhsayCBS			
Backup User User Group	Policy Grou	q	
Manage your backup users in this	section.		
Manage Backup User 7		onone type	
Login Name (Alias)	Owner	Client Version	Add-on Modules
O acb ()			1 1 0 🔪 loter. 🛤 🔺 🔛 🛪 NAS 🕐 🏹 O 🖉 🗐 🕼 😭
📃 💿 api ()		7.15.0.20	者 🔁 🔽 lates lates 🔺 🔛 🗷 NAS 🕑 🐺 🗿 🖉 🕼 🕼 🗊 💵 💬
o config ()		7.15.2.2	<mark> 🏠</mark> 🔿 🖏 lotus. Lotus. 🔺 🔛 📨 NAS 🕑 🐺 🔿 🖉 🕼 🕼 🗊 🗐 🍩

3. Click on the **Export users to file** radio button and click on the **Include backup files** check box to export the backup user data.

Μον	Move / Import / Export Users				
0	Move user home to D:\AhsayCBS\user				
0	Import users to D:\AhsayCBS\user 💌				
	Exported zip file Browse No file selected.				
	Overwrite existing users				
۲	Export users to file				
	✓ Include backup files				

- 4. Click on to proceed. The system will prompt you to save the file (users.zip) in your local machine. You need to have enough disk space to save the zip file. If the user account has large backup sets, it is expected to wait for a long time.
- 5. After exporting process, click to skip to the **Backup User Tab** page. Click afterward to save the change.
- 6. Login to the AhsayCBS2 and go to **Backup/Restore > Users, Groups & Policies**.



7. Click the Move/ Import/ Export Users button.

C AhsayCBS			
Backup User User Group	Policy Gre	oup	
Manage your backup users in this	s section.		
Manage Backup User 🕜			
+ 1 * 2 4 6 8	🗠 😩 Filt	Client Type	User V Registration Date V User Group A
Login Name (Alias)	Owner	Client Version	Add-on Modules
🗌 🔕 acb ()			2 2 O 🔍 www. Later. 🔺 🔛 🖂 NAS 🕐 🐺 🔿 🖉 🕼 🕼 🗊 🖽 🍛
🔲 🧿 api ()		7.15.0.20	🔰 💦 🔽 tatas. Latas. 🔺 🖳 🖂 NAS 🕐 🐺 🗿 🕼 🕼 🗊 🗐 分
📃 💿 config ()		7.15.2.2	👔 👔 🕞 📉 latari. 🔺 🔛 🖂 NAS 🕐 🍹 😋 🖉 🕼 🕼

8. Click on the **Import users to** radio button and select the destination user home on the AhsayCBS2 from the drop down list.

Мо	Move / Import / Export Users					
0	Move user home to C:\Program Files\AhsayCBS\user 💌					
۲	Import users to C:\Program Files\AhsayCBS\user 🐱					
	Exported zip file Browse No file selected.					
	Overwrite existing users					
0	Export users to file					
	Include backup files					

9. Click on the **Browse** button under the **Import users to** radio button. Select your previous exported zip file.

Μοι	Move / Import / Export Users						
0	Move user home to C:\Program Files\AhsayCBS\user 💌						
۲	Import users to C:\Program Files\AhsayCBS\user 💌						
	Exported zip file Browse No file selected.						
	Overwrite existing users						
0	Export users to file						
	Include backup files						

10. If the overwrite option is selected, the user account on the AhsayCBS2 which has the same user name in the users.zip will be overwritten.

Mo۱	Move / Import / Export Users					
0	Move user home to C:\Program Files\AhsayCBS\user 🐱					
۲	Import users to C:\Program Files\AhsayCBS\user 🐱					
	Exported zip file Browse No file selected.					
	✓ Overwrite existing users					
\circ	Export users to file					
	Include backup files					

11. Click on **v** to proceed.

12. Restart the AhsayCBS service and login to AhsayCBS2 to check the newly imported user in the **Backup User** page.

G AhsayCBS			
Backup User User Group	Policy G	oup	
Manage your backup users in th	is section.		
Manage Backup User 🕢	Owner	Iter Client Type	V User V Registration Date V User Group V A
📃 🧿 acb ()			🁔 🍃 🔿 📉 lotus. 🗖 🔛 🖂 NAS 🕐 🍹 🗿 🕫 👘 🗊 🛃 🌚
📃 🧿 api ()		7.15.0.20	🔰 🎦 🖸 📐 latus. 🚺 🛄 🖂 NAS 🕐 🐺 🖸 🕼 🕼 🕼 🕼
Config ()		7.15.2.2	🔰 🤰 🔿 🖏 latus. 🔺 🔛 🖂 NAS 🕐 🌾 🔾 🖉 🕼 🕼

Please refer to the following article for further details about how migration of users between different AhsayCBS under the same Rediector setup: http://wiki.ahsay.com/doku.php?id=public:5303_how_to_move_user_in_same_ahsayrdr_setup

 After the entire migration process is completed, delete the original backup account on AhsayCBS1. On the AhsayCBS web console of AhsayCBS1, under **Backup User** tab, select the migrated user account and click on the **Delete** button to delete it.

C AhsayCBS			
Backup User User Group	Policy Gro	up	
Manage your backup users in this	section.		
Manage Backup User 🕢	<mark>⊵ இ</mark> Filt	er Client Type 💌	User Registration Date V User Group Add-on Modules
🔲 🔕 acb ()			者 者 🔿 🔍 lotus <mark>lotus.</mark> 🔺 🔛 🖂 NAS 🕑 🐺 🧿 🕫 🖉 🗒 谷
🔲 💿 api ()		7.15.0.20	👔 👔 🖸 🗽 Lotus. 🔺 🔛 🖂 NAS 🕑 🐺 🔿 🖉 🕼 🕼
Config ()		7.15.2.2	者 🎽 🔿 🛴 lotus. 🔺 🔛 🖂 NAS 🕑 🐺 😋 🖉 🕼 🕼 🗊 🚺 🖗 😭

Rebuild Storage Statistics

This option can only rebuild legacy backup sets created in version 6, which have not been migrated to v7 block storage format. The option is used to enhance the accuracy of storage statistics for the backup set created in version 6.

The time taken to complete a rebuild depends on a number of factors such as the number of files / folders in the backup set(s), the number of backup sets, the hardware specifications of your AhsayCBS server such as the disk I/O and CPU performance, and if there are other resource intensive jobs running.

NOTE

Note that a backup set rebuild can only be started when there is no backup job running (of the corresponding backup set), and vice versa.



To rebuild legacy backup set click the Rebuild Storage Statistics button as shown below

e AhsayCBS						
Backup User User Group	Policy G	oup				
Manage your backup users in th	is section.					
Manage Backup User 🕢	Owner	Iter Client Type	V User V Registration Date V User Group V A			
Q acb ()			者 🔏 🔿 🕄 lotus Latus 🔺 🔛 🗠 NAS 🕑 🍹 🗿 🖉 ன 🌚			
🔲 💿 api ()		7.15.0.20	👔 🔁 🔽 Lotus, Lotus, 🔺 🔛 🖂 NAS 🕑 🐺 📀 🖉 🕼 🕼			
config ()		7.15.2.2	🏅 🔏 🔿 🛝 letus. letus. 🔺 🛄 🖂 NAS 🕑 🍹 🗘 🖸 🖉 🕼 🕼			

To check the progress or status of the Rebuild Storage Statistics job, go to [Monitoring]> [Administration Logs]>[Audit Trails], use the Filter "login Name" and select the backup user.

iew the activity I	ogs of all users on t	this server.		
Audit Trails				
Timestamp	Туре	Filler	Login Name free	Type View Today Page 4
11/20/2017 11:00:37	UserChangeLog	$\label{eq:backupSetRepairDataMigrationFlags} \cite{BackupSetDataMigrationStageChanges.log} BackupSetDataMigrationStageChanges.log} BackupSetDataMigrationStageChanges.log} BackupSetDataMigrationStageChanges.log BackupSetDataMigrationStageSetDataMigrationStageSetDataMigrationStageSetDataMigrationStageSetDataMigrationStageSetDataMigrationStageSetDataMigrationStageSetD$	gr1 gr2 John local	V 2008 R2 (GR-CBS ONLY)(1500448406767), is-data-migration-
11/20/2017 11:00:37	UserChangeLog	[RemoveMigratedV6Data,preRemoveData][BackupSetDataMigrationStageChanges.lo ('Verified" => "NotStarted")		per-V 2008 R2 (GR-CBS ONLY)(1500448406767), data-migration-statu
11/20/2017 11:00:37	UserChangeLog	$\label{eq:constraint} $$ [RemoveMigratedV6Data,preRemoveData]] BackupSetDataMigrationStageChanges.lomapping-merged-to-index ("Y" => "N") $$$	tu1 tu98 tu99	per-V 2008 R2 (GR-CBS ONLY)(1500448406767), is-data-migration-
11/20/2017 11:00:37	UserChangeLog	[BackupSet.RepairDataMigrationFlags][BackupSet.DataMigrationStageChanges.log] B "NotStarted")	x1	pSet-1(1501576924684), data-migration-status ("Verified" =>
11/20/2017 11:00:37	UserChangeLog	$eq:BackupSetRepairDataMigrationFlags][BackupSetDataMigrationStageChanges.log] B (Y^ => "N")$	ackup Set = Back	upSet-1(1501576924684), is-data-migration-mapping-merged-to-index
11/20/2017 11:00:37	UserChangeLog	[RemoveMigratedV6Data.preRemoveData][BackupSetDataMigrationStageChanges.lo "NotStarted")	g] Backup Set = B	ackupSet-1(1501576924684), data-migration-status ("Verified" =>
11/20/2017 11:00:37	UserChangeLog	[RemoveMigratedV6Data.preRemoveData][BackupSetDataMigrationStageChanges.lo to-index.(")(" => "N")	g] Backup Set = B	ackupSet-1(1501576924684), is-data-migration-mapping-merged-

Rescan all user home directories

Since version 7.15.0.20, AhsayCBS added the feature of rescanning all user home directories. The feature ensures the status of all user home is updated so that the backup sets under available user home should be shown in the selecting list for Admin user account to exclude while the backup sets under unavailable user home should not be listed during backup data migration. And also if the user home is offline, the backup and restore job cannot be run properly, so the feature helps confirm applying backup and restore job.

C Ał	G AhsayCBS								
Backu	p User User Group	Policy Gr	oup						
Manage	Manage your backup users in this section.								
	Manage Backup User ?								
	Login Name (Alias)	Owner	Client Version	Add-on Modules					
	🔇 acb ()			* * O 🔨 lotus. 🛦 🔛 🖂 NAS 🕑 🐺 🔿 O 🕷 📾 🗊 🖽 💬					
	💿 api ()		7.15.0.20	者 🖸 📉 Lotus. Lotus. 🔺 🔛 🖂 NAS 🕑 🐺 🖸 🗿 🕼 🗊 🗊 🚱					
	📀 config ()		7.15.2.2	者 💦 🔿 🛝 lotus. Lotus. 🔺 🔛 🖂 NAS 🕑 🐺 🔾 🧔 🕫 🗐 🗊 🗊 🚱					

The feature will be applied in the following 3 conditions:

- 1. Startup AhsayCBS service.
- 2. Click on the Rescan all user home directories button, as shown in screen shot.

C AhsayCBS								
Backup User User Grou	p Policy G	roup						
Manage your backup users in this section.								
Manage Backup User 🕢								
Login Name (Alias)	Owner	Client Version	Add-on Modul					
🗌 🔕 acb ()								
🔲 🧿 api ()		7.15.0.20	👔 🔏 🔿					
Config ()		7.15.2.2	* * 0					

3. Run routine job (HourlyJob)

If there is user home offline, which may be caused by disk temporary unavailable, user home directory rename, network drive disconnected or disk corrupted, a message will pop up as shown in the following screen shot.

Backu	p User User Gro	oup P	olicy Group		
Manage	e your backup users i	n this sec	tion.		
		~			
Mana	age Backup User	0			
•		8	B Filter Client	Type 💙 User 💌 Registration Date 💙 User Group 💙 Auto Update 💙 Owner 💙 View	* Default 🔽
	Login Name (Alias)	Owner	r Client Version	Ad	Status
	123 ()			The user home " for user "home" is not available	Enable
	💿 abc123 ()				Enable
	🔇 home ()				Enable
	💽 t1 ()				Enable
	🗿 user1 ()				Enable

User Profile	General Backup Client Settings Contact User Group
Backup Set	General information of this user.
Settings	
Report	Basic
Statistics	ID
Effective Policy	1511493041256
	Login Name
	user2 Owner:
	ANBTv6/OToWAu38et4QF7roFCESDUCkB9qXb+iyiayk= Hashed
	New Password
	Alias
	Home Directory

After clicking into the according user account, **Home Directory** will be blank.

Managing Backup Users

After you have created a backup user in previous section, you can perform the following operation for your users such as:

- Customize backup users profile settings
- Customize subscribed modules
- Create backup sets
- View backup/restore reports
- View usage statistics
- Manage the policies applied to a user
- Update client software via the auto update agent
- Send broadcast message to users
- Export usage to a CSV file
- Export users
- Rebuild storage statistic

Accessing the Backup User

Click the login name of the backup user account you want to manage from the **Backup User** tab.

na	ge Backup User 🕜				
•	i 4 7 4 6 8	E 🗿 Fil	ter Client Type 🍟 U	ser 💌 Registration Date 💙 User Group 🔍 Auto Update 🔍 User Group 🔍 Vi	ew * Default
]	Login Name (Alias)	Owner	Client Version	Add-on Modules	Status
]	💽 acb ()			者 👌 🔿 📉 lates 🗖 🛃 🖾 NAS 🕑 🕃 🗿 🗘 🛤 🕼 🗊 🗐	Enable
]	💽 api ()		7.15.0.20	👔 👔 🖸 💦 latas latas 🔺 💭 🖂 NAS 🕑 🐺 🖸 📿 🐙 🕼 🕼 🌘	Enable
	💿 config ()	-	7.15.2.2	者 👌 🔿 🖏 latas latas 🔺 🔛 🖂 NAS 🕑 🍹 🗘 📿 🜌 🕼 🕼 🕼 🕼	Enable
	() exch ()		7.15.0.20	者 🎓 🔿 🔪 latas latas 🔺 🔛 📨 NAS 🕑 🕃 🔿 📿 🜌 🚳 🕼 🗊 🌆	Enable
	() hyperv ()			👔 🎓 💦 latas latas 🔺 💭 🖂 NAS 🕑 🍞 📿 🖉 🕼 🍘 🗊 🌆 谷	Enable
]	🗿 migrate ()	-	7.15.0.20	👔 👔 🖸 📉 latas latas 🔺 🔛 🖂 NAS 🕑 🐺 🗿 📿 🖉 🕼	Enable
]	🗿 mssql ()	-	7.15.0.70	者 👌 🔿 🛝 latan latan 🔺 🔛 📨 INAS 🕑 🍹 🗿 🖉 🕷 🥵	Enable
]	⊙ 0365 ()		7.15.0.20	者 者 🔿 📉 latas latas 🔺 🔛 📨 NAS 🕑 🍹 🛇 🗢 🟘 🚳 🕼	Enable
]	🧿 quota ()		7.15.6.0	💦 👔 🔿 📉 latas latas 🔺 🔛 🗃 NAS 🕑 🕃 🗿 📿 🖉 🕼 🍘	Enable
]	🗿 undelete ()		7.15.0.20	han an a	Enable
]	💿 username ()	-	7.15.2.2	👔 🔁 🔼 latena latena 🔺 🔛 📨 NAS 🕑 🕃 🗿 🖉 🖉 🕼 😳	Enable

The backup user account opens. You will see 6 tabs (**User Profile**, **Backup Set**, **Settings**, **Report**, **Statistics**, **Effective Policy**), each of which is described in detail below.

lser Profile					
ackup Set	Manage Backup Set 🕜				
Settings	+				
Report	Name	Туре	Version	Timezone	Execute Job
tatistics	VMware ESXi v5.1 (GR-RD-Local-CBS)	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
ffective Policy	VMware ESXi v5.1 (GR-RD-Local Only)	þ	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	VMware ESXi 5.1 (GR-S3 ONLY)	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	Hyper-V 2008 R2 (GR-Local-CBS)	Ay.	Microsoft Hyper-V Server 2008 R2	GMT+08:00 (CST)	
	VMware ESXi v6 (GR-RD-Local)	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	Hyper-V 2008 R2 (GR-RD-Network-Q)	Ay.	Microsoft Hyper-V Server 2008 R2	GMT+08:00 (CST)	
	VMware ESXi 5.1 (GR-RD-Local Only) WinXP	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	Hyper-V 2008 R2 (GR-CBS ONLY)	£5	Microsoft Hyper-V Server 2008 R2	GMT+08:00 (CST)	
	BackupSet-1	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	File-OpenDirect			GMT+08:00 (CST)	
	BackupSet-2	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	T2	Ð	VMware ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	RunDirect Hyper-V Testing for CBS User Guide	£9	Microsoft Hyper-V Server 2016	GMT+08:00 (CST)	
	OpenDirect Testing for CBS User Guide			GMT+08:00 (CST)	
	□ b1			GMT+08:00 (CST)	
	Exchange 2016 mailbox	23	Microsoft Exchange Server 2016	GMT+08:00 (CST)	
	BackupSet-4		Microsoft Exchange Server 2010	GMT+08:00 (CST)	
	Exchange 2016	23	Microsoft Exchange Server 2016	GMT+08:00 (CST)	

User Profile

 \triangleright

The User Profile tab contains user backup account settings information, subscribed modules, backup quota, subscription type, contact information and user group information. It is located under **Users, Groups & Policies > Backup User**. It is sub divided into four tabs, as described below.

General Tab	
User Profile	General Backup Client Settings Contact User Group
Backup Set	General information of this user.
Settings	
Report	Basic
Statistics	D
Effective Policy	1525855752356
	Login Name 123 Owner: Password pmWkWSBCL51Blkhn79xPuKBKHz//H6B+mY6G9/eieuth Hashed Reset Password Alias
	Subscription Type Trial User Paid User Suspend At OBJun-2018 Status
	Enable
	O Suspended
	X?

- Reset Password Click to change or reset the password for this user, in case if they
 forgot the current password.
- Alias Update the alias for this user.
- Subscription Type Change the type from Trial User to a Paid User, for example after a user subscribes to backup service after a trial.
- Suspend At Scheduled date to suspend this user's account.
- Status Suspend or enable locked accounts
- Upload Encryption Key Enable or disable the "Upload Encryption Key" feature.
- Language Preferred language for all email reports of the backup user.

- **Timezone** Update the time zone of the backup user.
- Notes Add or update notes about this user.

User Profile	General	Backup Client Settings	Contact	User Group	
Backup Set	Settings of	the client backup agent for this	s user.		
Settings					
Report	Backup	Client			
Statistics	 Ahsay 	OBM User 🔿 AhsayACB Us	er		
Effective Policy	Add-on	Modules			
	🖌 🚺	Microsoft Exchange Server		2	Microsoft SQL Server
		MySQL Database Server			Oracle Database Server
	Lotus.	Lotus Domino		Lotus.	Lotus Notes
	Image: A start of the start	Windows System Backup			Windows System State Backup
		VMware Guest VM 💌 0		Ay Ay	Hyper-V Guest VM 💙 0
	✓	Microsoft Exchange Mailbox 0			ShadowProtect System Backup
	⊡ ℗	Continuous Data Protection		Syn NAS	NAS - Synology
		Mobile 0			NAS - QNAP
	Image: A state of the state	Volume Shadow Copy		✓ 🔺	In-File Delta
		OpenDirect / Granular Restore	D	✓ 48	Office 365 Exchange Online Backup 0
	Quota Unlimit sto	rage space for the destination no	ot shown in the	following table	
		estination	Quota		
		AhsayCBS ed mode is enabled in policy set	50.0 tings, the quota		es 🔽
	Client ho	ost limit	_		
	Maxi	mum number of host 5	[Used: 1]		

Backup Client Settings Tab

- Backup Client Type of backup user account, AhsayOBM or AhsayACB. In case you need to change the backup client type, it is better to check if there are existing backup sets in the backup account. For example, if you have an AhsayOBM user account with Exchange backup set and you change the account type to AhsayACB, the Exchange backup set will not be run due to the backup client type does not match.
- Add-on Modules Below is a short summary of the add-on modules available for both AhsayOBM and AhsayACB

Add-on Module	Reference	AhsayOBM	AhsayACB
Microsoft Exchange Server	Backup and restore of Microsoft Exchange Server. Refer to the following link for how to use Microsoft Exchange Database Server with AhsayOBM client:	V	×

	Ahsay Online Backup Manager v7 Microsoft Exchange Database Backup and Restore Guide		
Microsoft SQL Server	Backup and restore of Microsoft SQL Server. Refer to the following link for how to use Microsoft SQL Server with AhsayOBM client: <u>Ahsay Online Backup Manager v7 Microsoft</u> <u>SQL Server Backup and Restore Guide</u>	2	×
MySQL Database Server	Backup and restore of MySQL Database Server. Refer to the following link for how to use MySQL Database for the Windows platform with AhsayOBM client: <u>Ahsay Online Backup Manager v7 MySQL</u> <u>Database Backup and Restore for Windows</u> Refer to the following link for how to use MySQL Database for the Linux platform with AhsayOBM client: <u>Ahsay Online Backup Manager v7 MySQL</u> <u>Database Backup and Restore for Linux (CLI)</u>	v	×
Oracle Database Server	Backup and restore of Oracle Database Server on Windows and Linux platforms.	V	×
Lotus Domino	Backup and restore of Lotus Domino.	~	×
Lotus Notes	Backup and restore of Lotus Notes.	~	V
Windows System Backup	Backup and restore of Windows System Backup. Refer to the following link for how to use Windows System Backup with AhsayOBM and AhsayACB clients: <u>Ahsay Online Backup Manager v7 Microsoft</u> <u>System Backup and Restore Guide</u>	V	V
Windows System State Backup	Backup and restore of Windows System State Backup. Refer to the following link for how to use Windows System State Backup with AhsayOBM client: <u>Ahsay Online Backup Manager v7 Microsoft</u> <u>System State Backup and Restore Guide</u>	V	×
VMware	Backup and restore of VMware guest VMs.	~	×

Hyper-V	Refer to the following link for how to use VMware VCenter/ESXi with AhsayOBM client: <u>Ahsay Online Backup Manager v7VMware</u> <u>vCenter/ESXi Backup and Restore Guide</u> Backup and restore of Hyper-V guest		
	VMs. Refer to the following link for how to use Microsoft Hyper-V with AhsayOBM client: <u>Ahsay Online Backup Manager v7 Microsoft</u> <u>Hyper-V Backup and Restore Guide</u>	~	×
Microsoft Exchange Mailbox	Backup and restore of Microsoft Exchange Mailboxes. Refer to the following links for how to use Microsoft Exchange Mailbox with AhsayOBM client: <u>Ahsay Online Backup Manager v7 Microsoft</u> <u>Exchange 2007/2010/2013 Mail Level</u> <u>Backup and Restore Guide</u> <u>Ahsay Online Backup Manager v7 Microsoft</u> <u>Exchange 2016 Mail Level Backup and</u> <u>Restore Guide</u>	v	×
NAS - Synology	Backup and restore of file on Synology NAS devices. Refer to the following link for how to use the Synology NAS with AhsayOBM client: <u>Ahsay Online Backup Manager v7 Quick</u> <u>Start Guide for Synology NAS</u> Refer to the following link for a list of Synology hardware compatible with AhsayOBM: <u>FAQ: Ahsay Hardware Compatibility List</u> (HRL) for AhsayOBM on Synology NAS (5058)	v	×
NAS - QNAP	Backup and restore of file on QNAP NAS devices. Refer to the following link for how to use the QNAP NAS with AhsayOBM client: Ahsay Online Backup Manager v7 Quick Start Guide for QNAP NAS Refer to the following article for the list of QNAP NAS models and supported list: FAQ: Ahsay Hardware Compatibility List (HRL) for AhsayOBM on QNAP NAS	V	×

Shadow Protect System Backup	Backup and restore of Shadow Protect System image (requires Shadow Protect)	V	×
Volume Shadow Copy	Volume Shadow Copy to support open file backups on Windows platform.	V	v
Continuous Data Protection	A backup will be made whenever this is a change (between 1 min to 12 hour intervals) for Windows platform only.	~	v
In-File Delta	When enabled only the changes since the last backup job is backed up.	~	V
Mobile	Backup and restore of Mobile (iOS and Android) Refer to the following links for instructions on using the AhsayMOB for Android and iOS platforms. - <u>AhsayMOB v7 User Guide –</u> <u>Android</u> - <u>AhsayMOB v7 User Guide - iOS</u>	V	v
Office 365 Exchange Online	 Backup and restore of Office 365 Exchange mailboxes. Refer to the following link for instructions on using the Office 365 Exchange Online with AhsayOBM. <u>AhsayOBM v7 User Guide -</u> <u>Office365 Exchange Online Backup & Restore for Windows</u> <u>AhsayOBM v7 User Guide -</u> <u>Office365 Exchange Online Backup & Restore for Windows</u> <u>AhsayOBM v7 User Guide -</u> <u>Office365 Exchange Online Backup & Restore for Mac</u> 	2	r
OpenDirect / Granular Restore	 For OpenDirect and Granular Restore. Refer to the following link for instructions on using OpenDirect / Granular Restore. <u>Ahsay Online Backup Manager v7</u> <u>Quick Start Guide for Windows</u> <u>Ahsay A-Click Backup v7 Quick Start</u> <u>Guide for Windows</u> <u>Ahsay Online Backup Manager v7</u> <u>Microsoft Hyper-V Backup and Restore</u> <u>Guide</u> <u>Ahsay Online Backup Manager v7</u> <u>VMware vCenter/ESXi Backup and</u> <u>Restore Guide</u> 	v	×

Quota – list all the predefined destinations and AhsayCBS associated with the user

Quota	
Unlimit storage space for the destination no	t shown in the following table
Destination	Quota
AhsayCBS	50.0 Mbytes 🚩
(If preempted mode is enabled in policy set	tings, the quota settings are disabled)

NOTE

Please kindly note that the local destination will not be included.

Quota management for individual predefined destination is only available for AhsayCBS version 7.15.6.0 or above. For previous version before version 7.15.6.0, only a total quota storage can be set and you cannot configure individual quota for predefined destination, which is shown as following.

Quota		
5000.0 Gbytes 💙		
Per Destination		
Destination	Quota	
AhsayCBS()	0.0 Gbytes 💙	

If your AhsayCBS was upgraded from a previous version to 7.15.6.0 or above, for users with pre-existing predefined destinations and AhsayCBS, the quota settings for each predefined destination and AhsayCBS will be set according to different situation.

For example

Situation-1: the previous total quota setting is 5000Gbytes, and the quota storage setting for AhsayCBS was default setting.

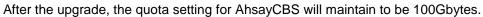
Quota			
5000.0 Gbytes 💙			
Per Destination			
Destination	Quota		
AhsayCBS()	0.0 Gbytes 🗸		

After the upgrade, the new quota setting for AhsayCBS will be 5000Gbytes.

Quota				
Unlimit storage space for the destination not shown in the following table				
	1			
Destination	Quota			
AhsayCBS	5000.0	Gbytes 💌		
(If preempted mode is enabled in po	olicy settings, the quota s	ettings are disabled)		

Situation-2: the previous total quota setting is 5000Gbytes, and the quota storage setting for AhsayCBS was 100Gbytes.

Quota			
5000.0 Gbytes 💙			
Per Destination			
Destination	Quota		
AhsayCBS()	100.0 Gbytes 🗸		



Quota			
Unlimit storage space for the destination not shown in the following table			
+ i			
Destination	Quota		
AhsayCBS	100.0 Gbytes 💌		
(If preempted mode is enabled in policy settings, the quota settings are disabled)			

For the destination not shown in the Quota table, the storage space is unlimited. If you want to limit storage space to according destination, please ensure to add the destination here and assign the quota appropriately.

NOTE
Please kindly note that only the destinations already defined by the backup sets can be shown and added to be the backup destination for the backup user.
anne ann an Anna an Anna Anna Anna Anna

If preempted mode is enabled in Backup/ Restore > Users, Groups & Policies > Policy Group > %policygroup% > User Settings > User Quota, the quota settings here will be disabled and cannot be modified.

Quota				
Unlimit storage space for the destination not shown in the following table				
Destination	Quota			
G AhsayCBS	10.0	Gbytes 🗸		
Gbytes				
(If preempted mode is enabled in policy settings, the que	ota settings are disabled)		

NOTE

The backup quota of a VMware VDDK backup set should be set to a value that is higher than the provision size. Even if the backup only upload the actual usage, if the quota is smaller than the provision size, the backup would fail with quota exceed.

- Client Host Limit Set the maximum number of host machine or devices the backup user can install AhsayOBM/AhsayACB on.
- Run Direct Set the maximum number of VMs for VM Run Direct restore on AhsayCBS for this user.

Contact Tab

User Profile	General	Backup Client	Settings Contact User Group	
Backup Set	Contact info	rmation for this u	ser.	
Settings				
Report	Manage Contact Information @			
Statistics	+			
Effective Policy		1		
		Name	Email	Encrypt Email
		Ahsay	ahsaycsv2007@gmail.com	No

You can configure the client contact here for them to receive backup or restore reports.

User Group Tab

User Profile	General Bac	kup Client Settings C	ontact User Group		^
Backup Set	Below is the list of user group this user was assigned to.				
Settings					
Report	Manage User Group 🖗				
Statistics	+ 🛍				
Effective Policy	_				
		Name	Owner	No. of users	
		All Users		8	

You can assign the user to an existing/assigned user group. When you drag the user group with the side button, it will affect the sequence of the policy rules that will apply to the user.

Backup Set

This function is used to create backup sets for this user account. In some cases, you may need to create backup sets first before you install a backup client on the client machine, or it may be an alternative option for administrator to create/modify a backup set for Linux users with no graphical interface, or there may be access restrictions for administrator to access the backup machine again after the backup client installed.

The following shows the Backup Set tab under Users, Groups & Policies > Backup User.

User Profile					
Backup Set	Manage Backup Set 🕜				
Settings					
Report	Name	Type Versi	on	Timezone	Execute Job
Statistics	VMware ESXi v5.1 (GR-RD-Local-CBS)	🗊 VMwa	re ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
Effective Policy	VMware ESXi v5.1 (GR-RD-Local Only)	🗐 VMwa	re ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	
	VMware ESXi 5.1 (GR-S3 ONLY)	🗇 VMwa	re ESXi 4 / 5 / 5.5 / 6 / 6.5	GMT+08:00 (CST)	

Timezone feature is introduced for the backup set since AhsayCBS v7.15.0.8. Timezone information will be automatically updated when user login client backup agent, such as AhsayOBM and AhsayACB, or perform backup job to avoid the false alarm of missed backup job.

Accessing the Backup Set

Click the backup set name of the user account you want to manage from the **Backup Set** tab. It is sub divided into the following tabs:

General

Continuous Backup

Retention Policy

- Source
- Destination
- Command Line Tool
- IP Allowed for Restore
- Backup Schedule
- In-File Delta
- Reminder
- Others

0	Bandwidth	Control

General		î
Source	General	
	ID	
Backup Schedule	1474532989673	
Continuous Backup		
Destination	Name	
In-File Delta	Run Direct 1	
Retention Policy	Owner	
Command Line Tool	WIN-TU41RC45MK0	
Reminder	Туре	
Bandwidth Control	VMwars Backup	
IP Allowed for Restore		
Others	VMware Host	
	Version	
	VMware ESXi 4 / 5 / 5.5 / 6	
	Usemame	
	root	
	Password	

Recovering Encryption Key via AhsayCBS Web Console

From AhsayCBS v7.9.2.0 onwards, it is possible to engage the **AhsayCBS v7 Encryption Key Recovery Service** via the AhsayCBS web console under the **Others** menu of this section. <u>Click</u> <u>here</u> for details on the scope of this professional service.

Required Permission

Only system user with **Admin** role has the right to access the Recover Encryption Key feature via AhsayCBS web console.

Required Settings

Encryption key is recoverable only if the following three settings are **ENABLED**:

- The Upload Encryption Key feature in the <u>Encryption Key</u> section under the Users, Group & Policies > Policy Group > %Policy Group Name % > User Settings menu which applies to the corresponding backup set.
- The Encryption Recovery feature under the Profile > Encryption Recovery menu in your AhsayOBM or AhsayACB.
- The Upload Encryption Key feature under the <u>Users, Group & Policies > Backup</u> <u>User > %User Name % > User Profile</u> of the backup user requesting for key recovery.

With these three features on, encryption keys will be uploaded to the backup server during the backup process, so as to make recovery possible.

Preparation before Getting Started

Make sure the following items are valid before getting started with the encryption key recovery process.

- Valid login credentials to log on to the Ahsay Shopping Centre.
- Valid maintenance. For inquiries about maintenance, please contact our Sales Team at partners-kb@ahsay.com.

Encryption Key Recovery for Branded AhsayCBS

Background

If your AhsayCBS is branded, the Recover Encryption Key feature is HIDDEN by default. This measure is enforced to prevent backup users from accessing the Ahsay Shopping Centre directly after clicking the Recover Encryption Key button under a branding environment.

What is a branded AhsayCBS

Your AhsayCBS is considered "branded" when the following criteria are met:

Under the System Settings > Basic > Administrative Access > %system user% > Rebrand Web Console > User Interface page in the web management console, if any one of the following parameters is not empty or not holding default image:

Title	Product Name	User Interface logo	Report logo
AhsayCBS logo	AhsayOBM logo	AhsayACB logo	

Force enable the Recover Encryption Key feature

The Recover Encryption Key button can be forced to show by enabling the debug option as shown below in the **cbs.opt** file under the **%CBS_INSTALL%\conf** folder. This debug option will make the Recover Encryption Key button visible to backup users even if the AhsayCBS is branded.

com.ahsay.cbs.system.config.accounts.editSysUserBean.ShowRecoveryEncryptionKeyBtn.deb ug=true

Recovery Steps

Follow the steps below to submit an encryption key recovery request.

- 1. Click on the backup set, which you wish to recover the encryption key for, under the Manage Backup Set section.
- 2. Navigate to the **Others** tab.

General	Temporary Directory	
Source		
Backup Schedule	Temporary directory for storing backup files	
Continuous Backup	C:\Users\steven.tse\temp	
Destination	Remove temporary files after backup	
In-File Delta	Follow Link	
Retention Policy		
Command Line Tool	Follow link of the backup files	
Reminder	Volume Shadow Copy	
Bandwidth Control	✓ Enable Windows' Volume Shadow Copy for	open file backup
IP Allowed for Restore		opon
Others	Compressions	
	Select compression type	
	Fast (Compressed size larger than normal) 🔻	
	Encryption	
	Encrypting key	******
	Algorithm	AES
	Method	CBC
	I/ou longth	256
	Key length Recover Encryption Key	200

3. Look for the **Encryption** sub-section on this page and click on the **Recover Encryption Key** button.

Encryption	
Encrypting key	******
Algorithm	AES
Method	CBC
Key length	256
Recover Encryption Key	

4. You will be prompted to log in to the Ahsay Shopping Centre as shown below, if you have not done so yet.

Ahsay Backup So	ftware		<u>Home</u> <u>About Ahsay™</u> <u>News</u> <u>Fo</u> r	rums
Partners Login Login as Ahsay Pa shop.ahsay.com Username: Password: Login	rtner and continue accessing	Aiready a Partner? If you do not have th registered email to reso Registered Email:	e login password, please enter your	ums
User Registration				

5. Upon successful login, you will be re-directed to the Ahsay Shopping Centre to proceed with the encryption key recovery process. You will see a page with your User ID, license information and backup set name listed as shown.

Conto	act Us						.00 🔀 Shopping Carl Last updated: 20	
📺 Delet	ete					View Nam	e * Payment Pending	Invoices •
🗋 Invi	voice No.	Company Name	Amount (HK\$)	Outstanding Amount (HK\$)	Invoice Date	Payment	Pay By Client No.	Delivery
345	15429	15169AbC123	HK\$780.00	HK\$780.00	2017-01-09	Processing	S-000-009-126	Pending
		Recovery Eng	cryption Key Optic	3 n			×	
			all the second sec	511				
		Please sele Double chee	ct the Recipient Em ck the below inform	hail Address for generating the Inv ation and confirm the information below information is/are missing.				
		Please sele Double cher Invoice will User ID Product Ke	ect the Recipient Em ck the below inform not be generated if : 114562 sy : ePo7z-axF	ail Address for generating the Inv ation and confirm the information below information is/are missing. W/-06kqP-MW3qP-/w				
		Please sele Double cher Invoice will User ID Product Ke Licensee N	ect the Recipient Em ck the below inform not be generated if : 114562 sy : ePo7z-axF	ail Address for generating the Inv ation and confirm the information below information is/are missing, W/-D6kqP-MW3qP-/w 123				
		Please sele Double cher Invoice will User ID Product Ke Licensee N	ect the Recipient Em ck the below inform not be generated if : 114562 y : ePo7z-axF larme : 15169AbC t Name : default-bac	ail Address for generating the Inv ation and confirm the information below information is/are missing, W/-D6kqP-MW3qP-/w 123				
		Please sele Double cher Invoice will User ID Product Ke Licensee N Backup Sel Recipient	ect the Recipient Em ck the below inform not be generated if : 114562 y : ePo7z-axF larme : 15169AbC t Name : default-bac	ail Address for generating the Inv ation and confirm the information below information is/are missing. W/-D6kqP-MW3qP-/w 123 ckup-set-name-4 e@ahsay.com ▼				

6. In the **Recipient** drop-down menu, the backup user's email will be selected as the primary recipient of the decrypted key by default, provided that the backup user has provided an email in his/her user profile. Otherwise, the decrypted key will be sent to you instead, where you can choose to deliver to either your Primary or Alternative Email registered under your account.

ontact Us						Log • Profile • Log	
)17-01-19 18:45:1
Delete					View Nam	e * Payment Pending	Invoices 🔻
Invoice No.	Company Name	Amount (HK\$)	Outstanding Amount (HK\$)	Invoice Date	Payment	Pay By Client No.	Delivery
345429	15169AbC123	HK\$780.00	HK\$780.00	2017-01-09	Processing	S-000-009-126	Pending
	-						
	Recovery End	cryption Key Optic	on			×	
	Please sele	ect the Recipient Em	ail Address for generating the Invo	ice.			
	Double che Invoice will	ck the below inform not be generated if	ail Address for generating the Invo ation and confirm the information below information is/are missing.				
	Double che	ck the below inform not be generated if : 114562	ation and confirm the information				
	Double che Invoice will User ID Product Ke Licensee N	ck the below inform not be generated if : 114562 ay : ePo7z-axF lame : 15169AbC	ation and confirm the information below information is/are missing. W/-D6kqP-MW3qP-/w 123				
	Double che Invoice will User ID Product Ke Licensee N	ck the below inform not be generated if : 114562 zy : ePo7z-axF lame : 15169AbC tt Name : default-bar : steven.ts; steven ts;	ation and confirm the information below information is/are missing. W/-D6kqP-MW3qP-/w 123				
	Double che Invoice will User ID Product Ke Licensee N Backup Se Recipient	ck the below inform not be generated if : 114562 zy : ePo7z-axF lame : 15169AbC tt Name : default-bar : steven.ts; steven ts;	ation and confirm the information below information is/are missing. W/-06kqP-MW3qP-/w 123 ckup-set-name-4 e@ahsay.com n@ahsay.com				

Click Generate Now when you are ready to proceed.

7. You will then be taken to the Invoice page where you can confirm the details of the Encryption Key Recovery Service and the service price. Click the **Pay Now** button when you are ready to proceed with payment.

Invoice No. : 34	5459		Invoice D	Date : 2017-01	I-19	
Client No. : S-1 Company Name : 15 Address : Ah Pay By : S-1	169AbC123		Invoice Expiry D	Date : 2017-01	1-26	Pay Now
nvoice Details	Payment	Delivery	Log			
🕂 Edit						
tems Edit Description				Qty	Unit Price (HK\$)	Amt (HK\$)
Edit Description AhsayCBS v7 Encryp	tion Key Recovery Se	invice		Qty	Unit Price (HK\$)	Amt (HK\$)
Edit Description	W/-O6kqP-MW3qP-/w AbC123 se@ahsay.com	rrvice		Qty 1	Unit Price (HK\$) HK\$390.00	Amt (HK\$) HK\$390.00

8. Select the desired payment method on this page. You are strongly recommended to pay by Credit Card so that the payment can be confirmed immediately in order to expedite the recovery process. Click **OK** when you are ready to proceed.

ake Payment	Invoice Date		
Invoice ID: Total Amount:			
Payment Method :	Credit Card Credit Card		
Credits *Purchase deposit will I	TT Bank In (Hong Kong Customers Only) Cheque (Hong Kong Customers Only) e used automatically if there are applicable items.		٦
Withdraw Item		In Stock	
Purchase Deposit		HK\$30,030.00	
Purchase Deposit		HK\$30,030.00	

- 9. Depending on the payment method you have selected, you will be taken to the corresponding page to process your payment. Follow the relevant on-screen instructions to confirm the payment.
- 10. When the payment is processed successfully, you will be re-directed to the Invoice page again with the green icon labeled **Paid** as shown.

The Encryption Key Recovery request process is now comp	leted.
---	--------

voice						
Invoice No. : 34 Client No. : S-0 Company Name : 15 Address : Ah Pay By : S-0	100-009-126 169AbC123			ice Date:2017- iry Date:2017-		Paid
Invoice Details	Payment	Delivery	Log			
Items						
Edit						
Edit Description				Oty	Unit Price (HK\$)	Amt (HK\$)
🕂 Edit	tion Key Recovery Se	nice		Qty	Unit Price (HK\$)	Amt (HK\$)
Edit Description	W/-O6kqP-MW3qP-Aw kbC123 e@ahsay.com	rvice		Qty 1	Unit Price (HK\$) HK\$390.00	Amt (HK\$) HK\$390.00
Edit Description AhsayCBS v7 Encryp Obtions: Product Key=ePo7z.axF Licensee Name=161695 Contact Email=Seven.ts	W/-O6kqP-MW3qP-Aw kbC123 e@ahsay.com	rvice		Qty 1		

11. The decrypted key will be delivered to the selected email within 15 minutes after the payment has been confirmed.

12. Below is a sample of the email with the decrypted key delivered.

From: localhost < Delivery@Servic.com >
To: 'gavin.fu@Servic.com' <gavin.fu@Servic.com>
Date: 07/04/2017 11:58 AM
Subject: Service Delivery of Encryption Key Recovery Service - Ref#393022
Dear Customer,
Thank you for your continual support.
Delivery items:
Reference #393022
Item : Encryption Key Recovery Service
Backup Set Name : Admin-BackupSet
Backup Set Encryption Key : AbC123\$%

Settings

The **Settings** tab allows user to backup client to log the optional events, besides AhsayOBM/ AhsayACB logs, to the Windows event log. This feature is supported on AhsayOBM/AhsayACB clients installed on Windows platform only.

Windows event log

https://10.23.6net/EditUser.do 🗙	+					-	٥	x
🜒 🛞 🗞 https://10/23.6.89.60443/cbs/	iobs/access/user/EditUser.do	C Q Search		☆ 白	۵	+	ŵ	≡
User Profile	Windows Front Log					_		^
Backup Set	Windows Event Log							
Settings								
Report	Log type							
Statistics	Error Warning Info							
Effective Policy	Log option							
	Profile	×	Software Update					
	Backup	\checkmark	Report					
	 Restore 	×	Utilities					
	Service (CDP & Scheduler)	\checkmark	Login / Logout					
								=

- Log type There are 3 log types: Error, Warning and Info. Select any of the 3 log types, they will be logged in the Windows event log.
- Log option Select the desired log option to be captured in the Windows event log. Currently there are 8 different log options: Profile, Backup, Restore, Service (CDP & Scheduler), Software Update, Report, Utilities, Login/ Logout.

The events are logged in the Windows event log and can be view from the Windows Event Viewer:

🛃 Event Viewer							
File Action View Help							
Event Viewer (Local)	Ahsay Online Bac	kup Manager Number of e	vents: 20	Actions			
E Gustom Views	Level	Date and Time	Source Event ID	Task C	Ahsay Online Backup Manager 🔺		
⊞	1 Information	8/18/2016 7:43:11 PM	obm 257		🧉 Open Saved Log		
Ahsay Online Backup Manager	(i) Information	8/18/2016 7:41:31 PM	obm 257				
CloudBacko Pro	1 Information	8/18/2016 7:41:30 PM	obm 257	None	Y Create Custom View		
🙀 Hardware Events	 Information 	8/18/2016 7:41:30 PM	obm 257	None	Import Custom View		
💽 Internet Explorer	 Information 	8/18/2016 7:41:30 PM	obm 257	None	Clear Log		
Key Management Service	Information	8/18/2016 7:41:22 PM	obm 257		-		
Microsoft Microsoft Microsoft	1 Information	8/18/2016 7:41:22 PM	obm 257		Filter Current Log		
ThinPrint Diagnostics	Information	8/18/2016 7-40-24 DM	ohm 253	None	Properties		
Subscriptions	Event 257, obm			×	# Find		
General Details					Save All Events As		
				Attach a Task To this Log			
	[Login Logout] "obm.test.brenda" logged off sucessfully.				View		
					Q Refresh		
	, ·				👔 Help 🕨 🕨		
	Log Name:	Ahsay Online Backup I	-		Event 257, obm		
	Source:	obm	Logged:	8/18/2016 7:43:11	Event Properties		
	Event ID:	257	Task Category				
	Level:	Information	Keywords:	Classic	Mattach Task To This Event		
	User:	N/A	Computer:	vv08r2x-1-31	📫 Copy 🕨		
	OpCode:				Save Selected Events		
	More Informat	ion: <u>Event Log Online Help</u>	1		Q Refresh		
					🛛 Help 🕨		
1	1						

Report

•	, ,	•	•	•	
User Profile	Backup Restore				
Backup Set	Backup Report for This User				
Settings					
Report				View Today v	
Statistics	Backup Set	Destination	Completion	Status	
Effective Policy	Run Direct 2(1474851837323)	CBS	26-Sep-2016-09:11	OK	
Lineonve Policy	Office365 mail boxes primary(1473842890784)	G CBS-1	26-Sep-2016 01:01	ок	
	(1474540526305)		25-Sep-2016 20:00	Missed Backup	
	(1474543279493)		25-Sep-2016 19:00	Missed Backup	

The **Report** tab allows you to check the backup report and restore report for the backup user.

Click the report to see the details. Below is an example of a backup report.

Backup Set	(1473842890784) Office365 mail boxes primary
Destination	G CBS-1
Job	26-Sep-2016 01:00:00
Time	26-Sep-2016 01:00:01 - 26-Sep-2016 01:01:12
Status	ок
New Files*	0
New Directories	0
New Links	0
Updated files*	0
Attributes Changed Files*	42774 [16.56k / 4 (0%)]
Deleted Files*	0
Deleted Directories	0
Deleted Links	0
Moved Files*	0
" Unit = No of files [Total zipped size /	Total unzipped size (compression ratio)]
Download report	

Click the **Download report** button at the bottom of the **Backup Report** page to download the complete report in PDF format. The report contains the following information in details.

- Backup Job Summary
- Backup Set Settings
- Backup Logs
- Backup Files

NOTE

The **Download report** button should be visible around 20 minutes after the backup job has completed.

OpenDirect restore of file backup sets or granular restore of files from VMware and Hyper-V backup sets performed using Windows File Explorer will NOT generate any restore reports on AhsayCBS. Restore reports are only available when the restore is performed directly through AhsayOBM/ AhsayACB/ AhsayOBR or AhsayCBS User Web Console.

Statistics

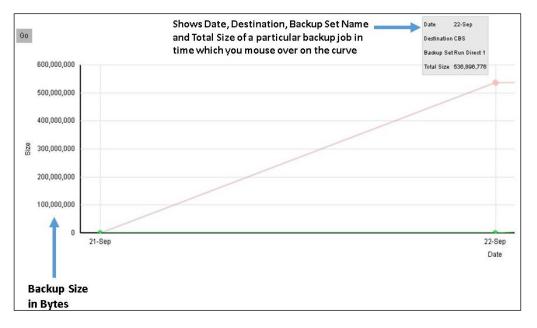
The Statistics tab allows you to generate a graph of storage statistics for the user by modifying a few factors such as the backup destination, backup set and the period of the backup. The statistics shows the storage capacity of different backup sets on different dates.

Usage

The following options are configurable for generating statistics in your desirable view.

- Select a destination select the backup destination of your choice
- Select a backup set you can choose a specific backup set or all backup sets
- Period select the period of time during which backups were performed

User Profile	Usage Summary			
Backup Set	Statistics for This User			
Settings	Select a destination			
Report	AhsayCBS ()			
Statistics				
Effective Policy	Select a backup set Exchange 2013 Server Backup Set 💌			
	Period This Week			
	Go			



Summary Tab

User Profile	Usage Summary		
Backup Set	Summary for This User		
Settings	* Unit: Compressed Size / Unci	omnressed Size (Ratio	ol (Total No. of Files)
Report	** Unit: Compressed Size [Tota		
Statistics	(^) Backup Set completely migr	rated from v6	
Effective Policy	Backup Set	Destination	Data Area*
	T1(1501661450981)	G AhsayCBS	0/0[0%][0]

There are four columns showing the following information of each backup set.

Data Area

Data Area**
0/0[0%][0]
1.18G/1.17G[0%][149]
3.98M/4.98M[20%][12]
181.01M/1.24G[86%][703]

Format:

[Compressed Size] / [Uncompressed Size] [Compression Ratio in %] [Number of files]

Example: 3.98M / 4.98M [20%] [12]

The data interpreted as the backup set has 12 files in the data area; the files compressed and uncompressed sizes are 3.98M and 4.98M respectively; the compression ratio is 20%.

Retention Area

Retention Area**
0/0[0%][0]
4.12M/4.12M[0%][12]
0/0[0%][0]
0/0[0%][0]
0/0[0%][0]
34.12M/234.07M[86%][239]

Format:

[Compressed Size] / [Uncompressed Size] [Compression Ratio in %] [Total number of files]

Example: 34.12M / 234.07M [86%] [239]

The data interpreted as the backup set has 239 files in the retention area; the files compressed and uncompressed sizes are 34.12M and 234.07M respectively; the compression ratio is 86%.

Total Upload

Total Upload*	
0[0]	
1.19G [183]	
4M[20]	
181.02M[706]	
21.06M [78]	
789.86M [683]	

Format:

[Compressed Size] [Total number of files]

Example: 4M [20]

There are a total of 20 files sized of 4M uploaded for this backup set.

Total Restore

Total Restore*	
0[0]	
612.2M[92]	
0[0]	
0[0]	
25.12M[36]	
4.48G [1044]	

Format:

[Compressed Size] [Total number of files]

Example: 612.2M [92]

There are a total of 92 files sized of 612.2M restored from this backup set.

Effective Policy

The Effective Policy tab shows the details of all policies and settings which applies to the backup user account. The **Effective Policy** tab is located under **Users**, **Groups & Policies > Backup User**. It can be hidden by unchecking the box of **View** for **Effective Policy** under **Users**, **Groups & Policies > Policy Group > Default settings > GUI Settings**.

It is subdivided into 7 tabs, each of which is described below.

User Settings Tab

You can see the effective policy on user settings for this user on the User Settings tab.

User Profile	User Settings Backup Set Settin	igs GUI Settings Default Values Pre	empted Values
Backup Set	Preempted Backup Sets Mobile	Settings	
Settings	User Settings Related Policies		
Report			
Statistics	Detail	Value	User Group Policy
Effective Policy	Share quota among assigned users > Quota limits calculation method	Compressed Size	All Users Settings
	Invalid login attempt limit > Maximum number of invalid login attempts allowed within specified period	5 times within 5 mins	All Users settings
	Invalid login attempt limit > Blocking period for IP address and user that exceed the maximum allowed invalid login attempts	f 10 Minutes	All Users Default settings
	Email Reports > Email me all alerts and reports instantly when available	Yes	Default All Users settings
	Email Reports > Email me consolidated email report only at this time daily	Yes, 1:0 (hh:mm)	All Users Settings
	Email Reports > Email me when my		Default

Backup Set Settings Tab

You can see the effective policy on backup set settings for this user on the **Backup Set Settings** tab.

User Profile Backup Set	User Settings Backup Set Settings GU Preempted Backup Sets Mobile Settings		reempted Va	lues
Settings Report	Backup Set Settings Related Policies			
Statistics	Detail	Value	User Group	Policy
Effective Policy	Destinations Visible to Users > Standard Destination	Local / Mapped Drive / Removable Drive	All Users	Default settings
	Destinations Visible to Users > Standard Destination	Amazon S3	All Users	Default settings
	Destinations Visible to Users > Standard Destination	AVVS S3 Compatible Cloud Storage	All Users	Default settings
	Destinations Visible to Users > Standard Destination	Google Cloud Storage	All Users	Default settings
	Destinations Visible to Users > Standard Destination	Google Drive	All Users	Default settings
	Destinations Visible to Users > Standard Destination	Destination pool	All Users	Default settings
	Destinations Visible to Users > Standard Destination	Microsoft Azure	All Users	Default settings
	Destinations Visible to Users > Standard Destination	OneDrive	All Users	Default settings

GUI Settings Tab

You can see the effective policy on AhsayOBM or AhsayACB GUI settings for this user on the **GUI Settings** tab.

User Profile	User Settings Backup Set Settings	GUI Settings Default Values	Preempted Values
Backup Set	Preempted Backup Sets Mobile Settin	ngs	
Settings	GUI Settings Related Policies		
Report			
Statistics	Detail	Value	User Group Policy
Effective Policy	Backup Sets > Add and Remove Backup Set (ONLY applicable to v7.3 - v7.9 client agent)	View=Yes	Default
	Backup Sets > General Tab	View=Yes	All Users settings
	Backup Sets > General Settings - Name	View=Yes, Edit=Yes	All Users settings
	Backup Sets > General Settings - IBM Domino	View=Yes, Edit=Yes	All Users settings
	Backup Sets > General Settings - IBM Notes	View=Yes, Edit=Yes	All Users settings

Default Values Tab

You can see the effective policy on default values for this user on the **Default Values** tab.

User Profile	User Settings	Backup Set Settings	SUI Settings	Default Values	Preempted Values
Backup Set	Preempted Bac	ckup Sets Mobile Setting	S		
Settings	Default Value	es Related Policies			
Report					
Statistics	Detail	Value		User Group	Policy
Effective Policy	OpenDirect	Applied Module=File Backup, Ena	ble=No	All Users	Default settings

Preempted Values Tab

You can see the effective policy on preempted values for this user on the **Preempted Values** tab.

User Profile	User Settings Backup Set Settings GUI Settings Default Values Preempted Values
Backup Set	Preempted Backup Sets Mobile Settings
Settings	Preempted Values Related Policies
Report	No policy defined
Statistics	
Effective Policy	

• Preempted Backup Sets Tab

You can see the effective policy on preempted backup sets for this user on the **Preempted Backup Sets** tab.

User Profile	User Settings Backup Set Settings GUI Settings Default Values Preempted Values
Backup Set	Preempted Backup Sets Mobile Settings
Settings	Preempted Backup Sets Related Policies
Report	No policy defined
Statistics	
Effective Policy	

Mobile Settings Tab

You can see the effective policy on mobile settings for this user on the Mobile Settings tab.

User Profile	User Settings Backup Set Settings GUI Settings Default Values Preempted Values
Backup Set	Preempted Backup Sets Mobile Settings
Settings	Mobile Settings Related Policies
Report	No policy defined
Statistics	
Effective Policy	

Manage User Groups

User Group is used in conjunction with Group Policies (see the next chapter <u>Manage Policy Groups</u> for details) for governing the behavior of client backup agent and the AhsayCBS.

The following shows the User Group tab under Backup / Restore > Users, Groups & Policies.

ackup User User Group Policy Group				
er Groups are used in conjunction with Group Policies ction.	s for governing the beh	naviour of client ba	ickup applications. Ma	anage your user groups in
Nanage User Group 🕢				
÷ •				
	Owner	No. of users	Destination	Used / Quota (%)
(1) Name	Owner	No. of users	Destination	Used / Quota (%) 1.12G / Unlimited
All Users	Owner	No. of users		
	Owner		AhsayCBS	1.12G / Unlimited
	Owner		AhsayCBS	1.12G / Unlimited

The default user group

By default, the user group named All Users has been created. All backup users will be put under the **All Users** user group by default after the user account has been created. When you click on one of the user groups, you will be able to see the followings:

User Group The following is the information of the selected user group.	
General Information Name All Users Owner	
Type Backup User	
Assigned User	
Login Name	Owner
Assigned Policy	
+ 1	
Name Default settings	Owner

- General Information It shows the information of the user group, ownership, etc.
- Assigned User A list of users assigned to the group.
- Assigned Policy It shows a list of assigned polices to the user group. As the order of the policy would affect the actual applied to the user group, i.e. the policy on the top would probably overwrite the policy at the bottom of the list. If you want to arrange the order of the policies, you can simply drag the policy up and down.

For the All Users user group, it has a predefined policy called Default settings.

To add backup user to a user group

Backup user cannot be added to a user group in this menu. To do so, you can either:

Add a user to a user group when you first create the user account, refer to <u>Create a New</u> <u>Backup User</u> for further instructions.

-OR-

You can add user a to a user group after the account has been created, refer to <u>User Profile</u> for further instructions.

To add a new policy group to a user group

Follow the steps below to either add an additional policy group to the default user group (All Users) **OR** add a policy group to a newly created user group.

1. Click the user group which you wish to add a policy group to.

User User Group Policy Group					
User Groups are used in conjunction with Group Policies for governing the behaviour of client backup applications. Manage your user groups in this section.					
Manage User Group 🖗					
Name	Owner	No. of users	Destination	Used / Quota (%)	
All Users		11	AhsayCBS	1.12G / Unlimited 0 / Unlimited 4.53G / Unlimited	
User Group - Read Only - Backup User-ACB		0	-	-	
User Group - Read Only - Backup User-OBM	-	0	-		
	ge User Group All Users User Group - Read Only - Backup User-ACB	oups are used in conjunction with Group Policies for governing the beha ge User Group Name All Users User Group - Read Only - Backup User-ACB	ge User Group Name Owner No. of users All Users 11 User Group - Read Only - Backup User-ACB 0	Owner No. of users Destination All Users 11 CBS Local User Group - Read Only - Backup User-ACB 0	

2. Click the \bigcirc button under the **Assigned Policy** section.

Assigned Policy	
<u>+</u> ₪	
	Name
	Default settings

3. You will see a list of policy groups available for selection.

Add Policies			
Add Policies			
_	L		
	Name	Owner	
	Google Drive AC		
	Policy Group 2		

4. Select the desired policy group by checking the box in of the policies, then click to add, and then click to confirm.

Manage Policy Groups

The following shows the **Policy Group** tab under **Backup / Restore > Users, Groups & Policies**.

C Al	nsayCBS		
Backu	p User User Group	Policy Group	
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.			
Manage Policy Group 🖗			
	Name		Owner
	Default settings		
	Policy Group - Read Only - Ba	ickup User-ACB-v6	
	Policy Group - Read Only - Ba	ickup User-OBM-v6	

Policy Group is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups. On a fresh AhsayCBS installation, there is a **Default settings** policy group and it is assigned to the **All users** user group.

WARNING

As all the default settings are stored inside "Default settings" policy group, if you change the settings in this policy group, it would affect all users in your AhsayCBS.

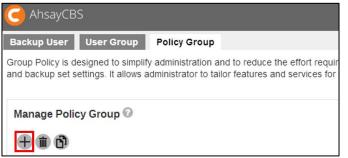
In case you need to work on the policy settings for a group of user base on the default policy group settings, you can consider the followings:

- Duplicate the **Default settings** policy group. Refer to the steps in <u>To duplicate a policy</u> group for details.
- Create a user group for your selected users and apply the duplicated policy group to this new user group. Refer to the steps in <u>To create a new policy group</u> for details.

To create a new policy group

Follow the steps below to create a new policy group.

1. Click the 🖶 button under the Manage Policy Group section.



2. Enter a name for the policy group.

Add a new policy group	
General	
Name	
subadmin	Owner
-	
Type	
Backup User	

- 3. Click to confirm.
- 4. Go back to the **Policy Group** tab under **Backup / Restore > Users, Groups & Policies**, and you should be able to see the policy group name you have just created.

G AhsayCBS				
Backup User Group Policy Group				
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.				
Manage Policy Group 🖗				
Name Name	Owner			
Default settings				
Policy Group - Read Only - Backup User-ACB-v6				
Policy Group - Read Only - Backup User-OBM-v6				
subadmin				

5. Click on the policy group for configuration. The configuration items are subdivided into 8 sections, each of which is described in the <u>To configure a policy group</u> section below.



To modify a policy group

After a policy group has been created, you can modify its settings by following the steps below.

1. Navigate to the **Policy Group** tab under **Backup / Restore > Users, Groups & Policies.**

C AhsayCBS	
Backup User Group Policy Group	
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup user and backup set settings. It allows administrator to tailor features and services for different user groups.	rs, e.g. security settings
Manage Policy Group @	
Name Name	Owner
Default settings	
Policy Group - Read Only - Backup User-ACB-v6	
Policy Group - Read Only - Backup User-OBM-v6	
subadmin	

2. Click on the policy group you wish to modify, then follow the steps in the <u>To configure a</u> <u>policy group</u> section below for further instructions on modifying the configurations.

To delete a policy group

Follow the steps below to delete a policy group.

1. Navigate to the **Policy Group** tab under **Backup / Restore > Users, Groups & Policies.**

C Ah	IsayCBS			
Backup	User User Group Policy Group			
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.				
Manage Policy Group 🖗				
	Name	Owner		
	Default settings			
	Policy Group - Read Only - Backup User-ACB-v6			
	Policy Group - Read Only - Backup User-OBM-v6			
	subadmin			

2. Check the box of the policy group you wish to delete, then click on the intervention as highlighted in the screen shot below.

G AhsayCBS				
Backup User Group Policy Group				
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.				
Manage Policy Group 🖗				
Name	Owner			
Default settings				
Policy Group - Read Only - Backup User-ACB-v6	-			
Policy Group - Read Only - Backup User-OBM-v6				
subadmin				

3. Click "OK" to confirm.

To duplicate a policy group

Follow the steps below to duplicate an existing policy group. This is useful when you wish to apply the same configurations from a policy group to a group of users.

1. Navigate to the **Policy Group** tab under **Backup / Restore > Users**, **Groups & Policies**.

C AhsayCBS				
Backup User Group Policy Group				
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.				
Manage Policy Group 🚱				
Name	Owner			
Default settings	-			
Policy Group - Read Only - Backup User-ACB-v6				
Policy Group - Read Only - Backup User-OBM-v6	-			
subadmin				

2. Check the box of the policy group you wish to duplicate, then click on the button as highlighted in the screen shot below.

C Al	hsayCBS				
Backu	p User Vser Group Policy Group				
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.					
Manage Policy Group 🖗					
Mana	age Policy Group 🧭				
Mana	age Policy Group 🧭 🗃 🔂 Name	Owner			
		Owner			
	In Internet in Int				
	Image: Section of the section of t				

3. You will immediately see the policy group is being duplicated, with the suffix "**Clone at YYYY-MM-DD HH:MM:SS**" in the duplicated group policy's name.

G AhsayCBS				
Backup User Group Policy Group				
Group Policy is designed to simplify administration and to reduce the effort required for managing groups of backup users, e.g. security settings and backup set settings. It allows administrator to tailor features and services for different user groups.				
Manage Policy Group 🚱	Owner			
Default settings	-			
Policy Group - Read Only - Backup User-ACB-v6	-			
Policy Group - Read Only - Backup User-OBM-v6				
subadmin	-			
subadmin - Cloned at 2018-05-11 11:28:57	-			

4. If you need to configure the duplicated policy group, follow the steps in the <u>To configure a</u> <u>policy group</u> section below for details.

To configure a policy group

General

This is the general settings of the policy group page, and the user group is a list of user group which is a list of user groups which has applied this policy.

General	Name and Owner	
User Settings	Name and Owner	
Backup Set Settings	Name Default settings	Owner
GUI Settings		
Default Values	Туре	
Preempted Values	Backup User	
Preempted Backup Sets	User Group	
Mobile Settings		
		_
		Owner
	All Users	-

- Name the name of the policy group. The name is configurable.
- Type predefined as Backup User
- User Group displays the user group(s) with this policy group applied.

If you have changed the policy group name, click 🔲 to confirm.

> <u>To add backup user to a policy group</u>

Backup users cannot be added to a policy group directly in this setting menu. To do so, you have to:

Step 1: Add the user to a user group first by following the steps in either case below:

Add a user to a user group when you first create the user account, refer to <u>Create a New</u> <u>Backup User</u> for further instructions.

-OR-

You can add user a to a user group after the account has been created, refer to <u>User</u> <u>Profile</u> for further instructions.

Step 2: Assign the desired policy group to the user group by following the steps in <u>To add a new</u> policy group to a user group.

User Settings

This section allows you to manage user settings such as Quota, Invalid Login Attempt Limit, Password, Email Reports, Encryption Key, Client Host limit, Run Direct VM Limit and Advertisement.

Quota

Administrators can set a group storage quota to a user group.

Quota I	Quota limits calculation method					
Mode	Mode					
 Cor 	 Compressed Size 					
O Uno	compressed Size					
Shared	l Quota					
	Destination	Quota	aximum percentage of shared size for each user			
User Q	uota					
Mode						
 Def 	ault					
O Pre	O Preempted					
•	i)					
	Destination		Quota			

The following items can be set:

- **Quota limits calculation method** this defines if the quota limit is calculated by Compressed Size or Uncompressed Size.
- Shared quota

Shared Quota			
+ m			
Destination Quota Maximum percentage of shared size for each user			
NOTE			
Please kindly note that:			
 For fresh installation user, Shared Quota default setting is disabled. 			
> For the user migrated from pre-v7.15.6.0, Shared Quota will be same with the previous setting.			
When this feature is enabled by turning on the equal switch to the right, you can click t to add the shared quota option, and the destination storage quota will be shared by all			



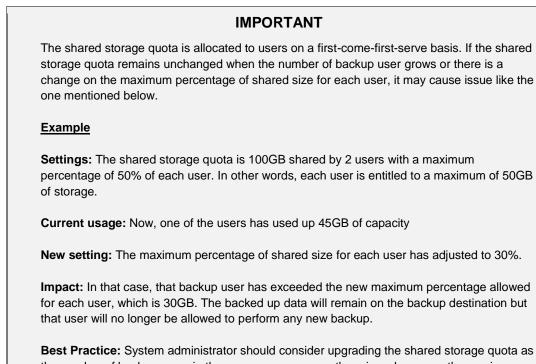
users within the user group.

Quo	ota				
	Destination	Quota		Maximum percentage o	f shared size for each user
~	G AhsayCBS	0	Gbytes 💌	50	%
	AhsayCBS	0	Gbytes 👻	50	%
	CBS Local	0	Gbytes 🖌	50	%

After adding the shared destination, you can configure the following two settings.

Shared Quota						
÷ •						
Destination	Quota	Maximum percentage o	f shared size for each user			
AhsayCBS	50.0 Gbytes 💙	50	%			

- Quota this defines the storage quota allowed for the user group.
- Maximum percentage of shared size for each user defines the maximum percentage of shared storage allowed for each user. For example, setting 50% means all users in the user group can occupy up to 50% of the assigned storage quota. If 100GB is the assigned storage, each user can store up to 50GB of the assigned storage quota. If the value is set to 100%, all users can fully utilize the storage until the assigned storage quota is full.



Best Practice: System administrator should consider upgrading the shared storage quota as the number of backup users in the user group grows or there is a change on the maximum percentage of shared size for each user.

 User Quota – the feature is used to define the destination and quota storage for the newly-added backup user.

User Quota				
Mode				
 Default 				
O Preempted				
÷				
Destination	Quota			
AhsayCBS	50.0 Mbytes 💙			

NOTE

Please kindly note that:

- For fresh installation user, User Quota will be Default mode and Destination contains AhsayCBS with default quota setting, 50MB.
- For the user migrated from pre-v7.15.6.0, User Quota will be Default mode and Destination contains AhsayCBS with default setting, 50MB. If the policy group enable quota setting, the predefined destination will also be displayed.

If the feature is disabled by turning the **I** switch to the left, the backup user quota for newly-added user will be default quota setting, AhsayCBS with 50MB, but you can configure the quota setting as required.

When this feature is enabled, this defined if the user quota mode is Default or Preempted. If you choose Preempted mode, you cannot configure the quota settings in Backup/ Restore > Users, Groups & Policies > Backup User > %backup user% > User Profile > Backup Client Settings.

You can click \oplus to add predefined destination for the user as backup destination.

Quota			
	Destination	Quota	
	P IronVaultStor	0 Mbytes 💙	
	CopperStor	0 Mbytes 💌	

User Quota				
Mode				
 Def 	ault			
O Pre	empted			
⊕ (i	-			
+ (
	Destination	Quota		
	G AhsayCBS	10.0	Gbytes 🔽	
	IronVaultStor	0.0	Mbytes 💌	
	CopperStor	0.0	Mbytes 💌	

After adding the backup destination, you can configure the quota storage setting for per destination.

Invalid Login Attempt Limit

This setting allows administrator to apply conditions for the number of invalid login attempt allowed to the user group. The following conditions can be set after you turned on the switch on the right.

Invalid login attempt limit			
Maximum number of invalid login attempts allowed within specified period 3			
Specified period (minutes) 5			
Blocking period for IP address and user that exceed the maximum allowed invalid login attempts			
● 10 ▼ Minutes			
O 24 v hours			
Forever			

- Maximum number of invalid login attempts allowed within specified period this defines the maximum number of attempt allowed for invalid login within the set period time. The backup user account will be blocked after the set number of invalid login attempts have been reached.
- **Specified period (minutes)** this defines the period of time during which the set maximum number of invalid login attempt is allowed before the invalid login counter resets.
- Blocking period for IP address and user that exceed the maximum allowed invalid login attempts this defines the period of time during when the IP address and user that has exceeded the invalid login attempts will be blocked from logging in again.

Example:

If the following settings are applied:

- > Maximum number of invalid login attempts allowed 3
- **Specific period** 5 minutes

Blocking period for IP address and user that exceed the maximum allowed invalid login attempts – 10 minutes

That means backup user can only enter a maximum of 3 times of invalid login within 5 minutes since the first attempt. If invalid login is made for the 4th time within that 5 minutes duration, the user account will be blocked for 10 minutes.

> Password

This setting allows administrator to set up the password policy. The following items can be set after you turned on the **equation** switch on the right.

Password				
Password Age				
Never expire				
● 90 ▼ days				
Enforce password history (30 passwords r	remembered)			
	ememberedy			
Complexity Requirements				
Default				
🖌 Numbers (0-9) 🛛 🔽 Uppercase	🖌 Lowercase	🖌 Minimum length 6		
☑ Special characters (?!~\$%^&*-+=:;''',.)				
Custom (Regular expression)				
^(?=.*?[a-z])(?=.*?[A-Z])(?=.*?[0-9]).{6,}\$				

- Password Age defines the period of time when the login password of a backup user account expires. When the set period of time is reached, backup users will have to change their passwords before they can continue using the CBS.
- Enforce password history (30 passwords remembered) when this feature is enabled, the last 30 login passwords of each user are recorded and cannot be used again when users are changing a new password.
- **Complexity Requirements** you can customize the complexity requirements for the password to provide better protection for the users. Under the **Default** option, the selected item(s) will be the mandatory element(s) when backup users create their passwords.

Email Reports

This menu allows administrator to select what email reports to be sent to the users of a user group. Turn on the **switch** on the right then select the desired email report(s) to send. By default, no email report is selected after you turned on this feature.

The table below lists out all types of email reports, together with explanation on what the email report is about, when it will be sent, what action backup user should take, and sample screen shot of the email and report. You can also add email recipients in the **Bcc reports to email** section so that the email reports will be sent to them as well.

NOTE

If the PDF report is too large to be sent through email (>20MB), the PDF attached in the email will only contains the first 100 pages of original backup report, with the 101st page showing "**Report truncated because it is too big to be sent in email**". Truncating the attached large report can avoid blocking from some SMTP server caused by email too big size and help save the capacity of client email box.

If the attached PDF report is truncated, the email will contain the links which point to the full PDF report download page.

Email Reports						
Backup Report						
Restore Report						
Missed scheduled backup reminder						
User settings changed alert						
Active Directory authentication failure report						
Backup Quota Reminder / Alert Send backup quota reminder to user if the backup quota is over 80 💌 %						
Trial User Reminder / Alert Send trial user reminder to user if the reminding day(s) is less than 7						
Welcome email						
Email me consolidated email report only at this time daily						
Email me inactive backup report when my backup set hasn't run for this number of days						
Bcc reports to email						
Name Email Encrypt Email						

Backup Report					
What is this email about?	When will you receive it?				
A full backup report in PDF format, showing the Backup Job Summary (backup size, backup source and destination, etc.), Backup Logs, Backup Set Settings, Backup Files, etc.)	Backup Report is generated and sent to backup user every 15 mins (every :00, :15, :30 and :45 of an hour) *Depending on the backup size and backup finish time, the actual report sending time may be longer than 15 mins.				

	What action should you take?				
Download the bac	ownload the backup report as attached with the email				
	Email / R	Report Sample			
Email sample:					
C AhsayCBS					
	ne attachment "DailyUserReg 2016. <mark>58 error(s)</mark> and <mark>83 is</mark>		-		
User	Backup Set	Backup Job	Report		
User steven	Backup Set K Drive Backup (1479792751514)	Backup Job 2016-11-24-10-24-33	Report Download		
	K Drive Backup	-	-		

Report sample:

C AhsayCBS

Full Backup report

Backup Job Summary

User	steven
Backup Set	K Drive Backup (1479792751514)
Data Size	940.28M
RetentionSize	68.26M
Backup Job	2016-11-24-10-24-33
Destination	GoogleDrive-1 (Google Drive)
Job Status	OK
Start - End	11/24/2016 10:24:33 - 11/24/2016 10:25:46
IP Address	192.168.7.105
New Files *	3 (11.3M)
New Directories	0
New Links	0
Updated Files *	3 (12.2M)
Attributes Changed Files *	0 (0)
Deleted Files *	0 (0)
Deleted Directories	0
Deleted Links	0
Moved Files *	0(0)

• No. of files (size)

Backup Set Settings

Field	Value
Backup Source	[\\LAUREL\Departments\Customer Services\Common\KMT\Steven]
Backup Schedule	[Computer Names TTEVEN-TSE][Daily Schedules [Names Daily-1, Times 18:15, Types , Durations -1, Run Retention Policys false]][Weekly Schedules [Names 24:5, Suns false, Mons true, Tues true, Wedi true, Thui true, Frii true, Sati false, Types , Durations -1, Run Retention Policys, false]][Monthly Schedules [Caston Schedules]
Continuous Data Protection	[Enabled: false]
In-File Delta	[Enabled: true, Default Typer I, Block Size: -1, Minimum delta file size = 26214400, Maximum number of delta = 100, Maximum delta ratio = 50, Wee kly variations: [], Monthly Variations: [], Day: 0, Criteria: Friday, Occurrence: First]
Retention Policy	[Types SIMPLE, Periodi 7, Uniti DAYS]
Command Line Tool	
Reminder	Log Off Reminder Computer Names STEVEN-TSE, Offline Backup Reminder Computer Names, Tolerance periods 1 Days 0 hours
Bandwidth Control	[Enabled: false, Modes independent, Bandwidth Control:]
Others	Remove Temporary Filesi true, Follow Linki true, Volume Shadow Copyi true, File Permissionsi true, Compression Typei GzipBestSpeedCompression

Backup Logs

No.	Туре	Timestamp	Log			
1	start	2016/11/24 10:24:33	tart [Windows 7 (STEVEN-TSE), AhsayOBM v7.9.0.0]			
2	info	2016/11/24 10:24:33	Saving encrypted backup set encryption keys to server			
3	info	2016/11/24 10:24:33	Using Temporary Directory Ci\Users\steven.tse\temp\1479792751514\GDrive@1479792876141			
4	info	2016/11/24 10:24:33	Start running pre-commands			
5	info	2016/11/24 10:24:33	Finished running pre-commands			
6	info	2016/11/24 10:25:45	Start running post-commands			
7	info	2016/11/24 10:25:45	Finished running post-commands			

Backup Files

No.	Type	Dirs/Files	Size	Last Modified
1	new	\\LAUREL\Departments\Customer Services\Common\KMT\Steven\AhsayCBS\AhsayCBS Administrator's Guide v7 \screen shot\User settting - Run Direct VM Limit.PNG	2k / 2k (14%)	11/23/2016 18:18
2	upd	\\LAUREL\Departments\Customer Services\Common\KMT\Steven\AhsayCBS\AhsayCBS Administrator's Guide v7 \^Side_ebs_admin_20161123.doe	106 / 162 (34%)	11/24/2016 09:19
3	new	\\LAUREL\Departments\Customer Services\Common\KMT\Steven\AhsayCBS\AhsayCBS Administrator's Guide v7 \^Side_ebs_admin_20161124.doe	106 / 162 (34%)	11/24/2016 09:49
4	upd	\\LAUREL\Departments\Customer Services\Common\KMT\Steven\AhsayCBS\AhsayCBS Administrator's Guide v7 \guide_cbs_admin_20161123.doe	11.31M / 13.75M (17%)	11/23/2016 19:11
5	upd	\\LAUREL\Departments\Customer Services\Common\KMT\Steven\AhsayCBS\AhsayCBS Administrator's Guide v7 \screen shot\Thumbs.db	907k / 1.02M (12%)	11/23/2016 18:18
6	new	\\LAUREL\Departments\Customer Services\Common\KMT\Steven\AhsayCBS\AhsayCBS Administrator's Guide v7 \guide_cbs_admin_20161124.doe	11.31M / 13.76M (17%)	11/24/2016 09:53

Restore Report						
What is this email about? When will you receive it?						
full report in PDF form howing the Restore Jol Summary, Restore Logs and Restore Files	every 15 mins (every :00, :15, :30 and :45 of an hour)					
What action should you take?						
ownload the restore re	port as attached with the email					
	Email / Report Sample					
mail sample:						
G AhsayCBS						
Dear steven, Here is the summary of the restore job "2016-11-22-16-35-51". Full restore report is also attached for your reference. Restore Job Summary						
	steven					
Backup Set K Drive Backup						
	2016-11-22-16-35-51					
Job Status						
Job Status Restore Time	DK					
Job Status Restore Time IP Address	DK 11/22/2016 16:35:51 - 11/22/2016 16:38:18					

po	rt sa	mple:						
G	Ahsa	IYCBS						
		estore	-	port				
			.ur 3					
Uwr		Backup Set		Restore Job	Restore Destination	Job Status	IP Address	Restored Files *
steven		K Drive Backs 2751514)	мр (147979	2016-11-22-16-35-51	GoogleDrive-1	ок	192.168.7.105	1966 (917.4M)
No. 1	Type star	Timestamp 11/22/2016 16:35:51	Log Start [Wi	indows 7 (STEVEN-TSE), /	AhaayOBM v7.9.0.0]			
-			2					
2	info	11/22/2016 16:35:52 11/22/2016 16:35:52		g decrypt action	a\ateven.tae\Deaktop\LAUREL	-		
4	info	11/22/2016 16:35:52			ra\ateven.tae\Deaktop\LAUREL			
5	info	11/22/2016 16:35:52			ra\ateven.tae\Deaktop\LAUREL		r Services"	
6	info	11/22/2016 16:35:52			a\ateven.tae\Deaktop\LAUREL			
7	info	11/22/2016 16:35:52			a\ateven.tas\Deaktop\LAUREL			MT"
8	info	11/22/2016 16:35:52	Creating r	new directory "C:\User	ra\ateven.tae\Deaktop\LAUREL	Departments\Custome	r Services\Common\K	MT\Steven"
9	info	11/22/2016 16:35:52	Creating r	new directory "C:\User	ra\ateven.tae\Deaktop\LAUREL	Departments\Custome	r Services\Common\K	MT\Steven\AhaayACB"
10	info	11/22/2016 16:35:52		new directory "C:\User tart Guide for Mac"	ra\ateven.tae\Deaktop\LAUREL	\Departments\Custome	r Services\Common\KI	MT\Steven\AhaayACB\AhaayA
11	info	11/22/2016 16:35:52		new directory "C:\User tart Guide for Mac\acree		\Departments\Custome	r Services\Common\KI	MT\Steven\AhaayACB\AhaayA
12	info	11/22/2016 16:35:53		g decrypt action Comp				
13	info	11/22/2016 16:35:57	B Quick St	tart Guide for Windows'				MT\Steven\AhaayACB\AhaayA
14	info	11/22/2016 16:35:57	B Quick St	tart Guide for Windows	screen shot"	•		MT\Steven\AhaayACB\AhaayA
15	info	11/22/2016 16:36:02	B User Gu	ide for Cloud File Backu	ip & Restore"			MT\Steven\AhaayACB\AhaayA
16	info	11/22/2016 16:36:02		new directory "C:\User tide for Cloud File Backu	ra\ateven.tae\Deaktop\LAUREL' 1p & Reatore\Mac"	Departments\Custome	r Services\Common\KI	MT\Steven\AhaayACB\AhaayA

	Missed scheduled backup rem	
	What is this email about?	When will you receive i
reminde ackup fa	er to alert the backup user about a scheduled ilure.	The report is generated an sent to backup users at the
chedule	ups that are failed to start 6 hours after the d backup time will be considered as missed backup.	next :00 after it's classified as missed scheduled backup (6 hours after backup failure)
	Common causes for missed schedule	d backups
backups backups	owing table highlights some of the common reasor s or scheduled backups not running according to s s can be related to either server side issues (Ahsay ues (AhsayOBM/AhsayACB client machine setup)	chedule. The cause of miss yCBS or Redirector) or clien
	Server Side Issues	
The A	nsayCBS service is unresponsive	
\succ	License error	
\succ	Out of Java memory / threads	
\succ		
	AhsayCBS service is not started	
	AhsayCBS server is powered down	
	SSL certificate expired	
The R	edirector service is unresponsive (if applicable)
8	License error	
	Out of Java memory / threads	
>	AhsayCBS system password is not updated on F	Redirection settings
>	AhsayCBS service is not started on the redirector	-
×		
>	SSL certificate expired	
set inc	ne zone on the AhsayOBM/AhsayACB account us orrectly. This will cause the scheduled backup time than the actual scheduled time but will trigger a m	e to run either later or
	is no backup schedule configured for the affected ile date and/or time is incorrect.	backup set(s) or the
	Client Side Issues	
The Ak	nsayOBM/AhsayACB client machine was switched	off, hanged or running in
	saving mode.	

A backup set and backup schedule was created on AhsayCBS but AhsayOBM/AhsayACB client was not installed on the client machine or was uninstalled.

If the AhsayOBM/AhsayACB runs on Windows machine, ensure the login credentials in the Windows User Authentication is correct or is kept updated.

What action should you take?

You may have to check for the causes for the missed scheduled backup. That could be caused by, for example, incorrect login credentials of the client backup application, Internet connection problem, time zone settings, etc.

Email / Report Sample

Email sample:

G AhsayCBS

Dear PaidUser,

Your backup job for "default-backup-set-name" was missed. Please check the client software configuration to see if everything is running correctly. Below is the detail of backup set.

Backup Set	default-backup-set-name		
	Data Area*	5[928]	
Backup Statistics	Retention Area*	1[48]	
	* Unit = No. of file[Total file size]		
Last Backup Time(Days Without Backup)	2018-05-08-17-30-00(5)	
Missed backup job	2018-05-13-20-00-00		

Sincerely

Ahsay Support Team

User settings changed alert What is this email about? When will you receive it? A summary report showing the user settings that **User Settings Changed Alert** have been changed in details, with the old values Report is generated and sent to and new values of the changed settings shown. backup user every 15 mins (every :00, :15, :30 and :45 of an hour) What action should you take? The purpose of this email is to allow user to confirm the changes that have made, and alert user for unauthorized access if they have not made those changes. In the latter case, user should change their login password and correct the settings as soon as possible. **Email / Report Sample** Email sample: AhsayCBS Dear steven, One or more of your user settings have been updated. Please confirm the information shown below is correct, and that these changes were requested by an authorized user on your contact list. If the changes were not made by an authorized user, change your password, correct your settings and see if this happens again. If this happens again, please contact us for further investigation. User steven Time Of Changes 11/22/2016 16:40:07 Ip Address 192.168.22.40 Old Value New Value Field "[Name: Steven, Email: steven.tse@ahsay.com, Changes Company: , Address: , Website: , Phone: , Phone: Contacts пп

Active Directory authentication failure report What is this email about? When will you receive it? A reminder to alert the backup user about a backup Shortly after the active failure due to the incorrect Active Directory authentication. directory authentication failure occurred What action should you take? Check if the active directory authentication is properly set. If you have changed the login credentials of the machine running the client backup application, you have to alter the authentication details as well for the backup to perform. To do so, follow the steps below. i) Log in to AhsayOBM/AhsayACB. ii) Click on the Backup Sets icon. iii) Click on the backup set you would like to alter the authentication details. iv) Click on the General section. Modify the Password under the Windows User Authentication section. V) to confirm the change. Click vi) **Email / Report Sample** Email sample: AhsayCBS Dear Windows Active Directory authentication failed at 28/11/2016 18:51:21(0). If you have changed the Windows login credentials recently, please login to backup server using the backup client. with the latest password, otherwise, your Active Directory account may be locked. If the Active Directory user has already been locked, please contact your system administrator to unlock the account. Sincerely Ahsay Support Team

Backup Quota Reminder / Alert						
What is this email about? When will you receive it?						
A reminder to alert backup users about the backup quota has exceeded the set percentage. User can configure the percentage where the reminder/alert email is triggered when it is reached.	The backup quota reminder / alert email is generated and sent to backup user at 6:00am daily.					
By default, this percentage is preset as 80% when this feature is enabled.						
What action should you t	ake?					
The backup quota is going to exceed its storage quota. provider to increase the capacity. Alternatively, consider sets that you are no longer using, or reviewing the reten	r cleaning up the existing backup					
Email / Report Sampl	e					
Email example:						
G AhsayCBS						
Dear PreStandardDest_D, Your used backup quota is over 60% for destinati Please upgrade your storage quota or modify your re more space to avoid backup failure due to full storag Sincerely, Ahsay Support Team	etention policy to free up					

Trial User Ren	Trial User Reminder / Alert		
What is this email about?	When will you receive it?		
A reminder to alert trial backup users their acc a about to expire in the set number of days. Be default, the preset value of this setting is 7 his feature is enabled.	is generated and sent to backup user at 6:00am daily.		
What action sho	ould you take?		
In order to continue using your account for backup and restore, contact your backup service provider to subscribe to the paid backup service.			
Email / Report Sample			
mail sample:			
G AhsayCBS			
Dear steventrial, Your trial account will expire in 2 days.Please contact your administrator for further action. Below is the trial information of this account.			
Your trial account will expire in 2 days.Please c	ontact your administrator for further action.		
Your trial account will expire in 2 days.Please c Below is the trial information of this account.	ontact your administrator for further action. teventrial		
Your trial account will expire in 2 days.Please of Below is the trial information of this account. User s Registration Day 1	teventrial 1/22/2016		
Your trial account will expire in 2 days.Please of Below is the trial information of this account. Image: Second seco	teventrial 1/22/2016		

Welcome Email	
What is this email about?	When will you receive it?
A welcome message generated by the AhsayCBS to confirm a backup account has been created	Shortly after a Backup User account has been created
What action should you take?	
You can click on the link in the email to download the clien have not done so.	t backup application if you

Email / Report Sample

Email sample:

AhsayCBS

Dear PaidOBM1,

Welcome to Ahsay Cloud Backup Suite

Please <u>click here</u> to download and install the AhsayOBM.

User Setting

Login Name	PaidOBM1
Alias	
Language	English
Contact	PaidOBM1 < <u>tc.ahsay@gmail.com</u> >

Quota

AhsayCBS	50M	
Aliyun-1	70M	
AmazonCloudDrive-1	70M	
AWSCompatible-1	70M	
CBS-1	70M	
DestinationPool-1	70M	
FTP-1	70M	
GoogleCloudStorage-1	70M	
GoogleDrive-1	70M	
Local-1	70M	
MicrosoftAzure-1	70M	
OneDrive-1	Unlimited	
OpenStack-1	70M	
SFTP-1	70M	

Sincerely Ahsay Support Team

(App	Daily User Report (Appears as: Email me consolidated email report only at this time daily)	
	What is this email about?	When will you receive it?
	nsolidated report in PDF format, showing the wing categories of information:	The daily user report is generated and sent to backup user at the time defined by
0	PROBLEMS – errors for System / Backup / Restore / Replication / Redirection	the system administrator in this menu
0	ISSUES – potential issues that may cause problems on System/Security, Users or Backup Sets	
0	ACTIVITIES – all Backup Jobs / Restore Jobs / Setting Changes performed	
0	STATISTICS – statistics on User Account / Data Transfer / Disk Storage Usage	
	What action should you tak	e?
The	c on the attachment in the email to get re-directed to the report is in interactive format which allows you click on esponding report data. Refer to <u>Appendix I</u> for further or further. Email / Report Sample	n different tabs/sections for the
Emo		
C	AhsayCBS	
Dear steven.tse@ahsay.com, Please download the attachment "DailyUserReport.html" to view your consolidated Daily User Report for 2016-07-12. 1680 error(s) and 1 issue(s) were found by the system. Please review and fix them as soon as possible.		
Sincerely Ahsay Support Team		
Rep	ort sample:	
Da	ily User report (steven.tse@ahsay.com)	WEB VIEW PRINT VIEW
Genera	ted at : Tue, 12 Jul 2016 01:00:01 CST	
😢 PROBLEMS 🛕 ISSUES 🛝 ACTIVITIES 🔟 STATISTICS		
Sys	tem Backup Restore Replication Redirection	
No.	Events Start Time / End Time	Total No. of Occurrence
1	ReplicateError 2016-07-11 01:00:06 / 2016-07-11 03:11:29	788

Inactive Backup Report

(Appears as: Email me inactive backup report when my backup set hasn't run for this number of days)

What is this email about?	When will you receive it?
A report showing all backup sets under this	Inactive Backup Report is generated and
backup user account that have not been run	sent to backup user every 15 mins
in the set number of day.	(every :00, :15, :30 and :45 of an hour)

What action should you take?

You may have to check for the causes for the backup sets, especially scheduled backup sets that are not running. That could be caused by, for example, incorrect login credentials of the client backup application, Internet connection problem, etc.

Email / Report Sample

Email sample:

Ahsay Support

 Dear backup_report,

 Your backup set "file-1" haven't performed any backup for 5 days.Please contact your administrator for necessary action. Below is the backup activity of this backup set.

 User
 backup_report

 Backup Set
 File-1

 Last Backup Time(Days Without Backup)
 2015-07-14 12:16:37(5 days without backup)

 Notification Days
 30

Bcc reports to email

You can add email recipients in this section so that they will receive a blind carbon copy (bcc) of the email reports as well.

1. Click the 🕂 button under the **Bcc reports to email** section.

e
ľ

2. Enter the name of the recipient, email address and other details if necessary.

Contact
Name
Email
Encrypt Email
Address
Company
Website
Phone 1
Phone 2

If you wish to encrypt the email, check the Encrypt Email box. You will be redirected to another page to upload the **Digital Certificate**. Click the Choose File button to upload the digital certificate, then click the tick button at the bottom of the page to confirm.

Upload Digita	al Certificate
Digital Certificate for abc@a Upload cert: Choose File	

- 3. Click when you are done with the settings.
- 4. Click to confirm the setting.

> Encryption Key

Once you enabled the encryption recovery option. The encryption key file will be uploaded to the Backup Server. In case user has forgotten the encryption key, you can still contact us to recover the key.

Turn on the **switch** on the right and then make sure the check box **Uploaded encryption key after running backup for recovery** is checked for this feature to work.

Encryption Key
Client Host Limit
Run Direct VM Limit
Advertisement

From AhsayCBS v7.9.2.0 onwards, it is possible to submit an encryption key recovery request via the AhsayCBS web console. Refer to the <u>Recovering Encryption Key via AhsayCBS Web</u> <u>Console</u> section for detailed instructions.

Client Host Limit

Since version 7.7, administrator is able to set the maximum number of host machine for a backup users account.

Turn on the **end** switch on the right and then enter the **Maximum number of host** as shown below.

Encryption Key
Client Host Limit Maximum number of host 1
Run Direct VM Limit

Run Direct VM Limit

Since version 7.9, administrator is able to set the maximum number of VM for Run Direct restore.

Turn on the **Inter** switch on the right and then enter the **Run Direct VM Limit** as shown below.

Encryption Key
Client Host Limit
Run Direct VM Limit Maximum number of VM 1

> Advertisement

Since version 7.7, administrator is able to customize the advertising banner on the AhsayOBM/AhsayACB interface. CBS supports both GIF and SWF formats at the size of (830 x 102 px).

1. Turn on the **ID** switch on the right to turn on this feature.

dvei	rtisement							
+	I							
	Name	Display Time (in seconds)	Туре	URL	Language	Platform	Last Uploaded Time	Size
	Default advertisement (gif)	20	gif		All	All	06/01/2016 08:52:20	35k
	Default advertisement (swf)	20	swf		All	All	06/01/2016 08:52:20	27k

2. Press \bigoplus to add the advertisement.

3. Enter details in the following fields below.

Advertisement								
Name								
Display Time (in seconds) 2 ▼								
Type 								
URL If the second secon								
Language								
Platform All								
Image (830 × 102 px) Choose File No file chosen								

- Name name of the advertisement banner.
- Display Time (in seconds) period of time for the advertisement to be shown before it rotates to the next one.
- Type format of the banner, whether it is in gif or swf format.
- URL the click through URL of the gif type banner. For flash banner, the click through URL should be coded inside the flash banner.
- Language select in which language setting in AhsayOBM/AhsayACB will the banner be shown. If All is selected, the banner shows no matter what language is selected in the AhsayOBM/AhsayACB.
- Platform select on which platform (Windows, Mac & Linux) AhsayOBM/AhsayACB is used for the banner to show. If All is selected, the banner shows no matter what platform the AhsayOBM/AhsayACB is running on.
- Image (830 x 102 px) click Choose File to upload the banner.
- 4. Click when you are done with the settings.
- 5. Click to confirm the setting.

Backup Set Settings

This section allows administrator to set up backup exclusion and backup destination visible to users. It has 3 sub-sections.

> Exclude Backup File

This menu allows you to set filter to exclude files from performing backup job. This feature is disabled by default.

Exclude Backup File	
Skip backing up files that match the followings	
✓ Files on mapped drive	
✓ Files larger than 1 Gbytes ▼	
✓ Files older than	
● 10 Years ▼ Ago	
28-Nov-2016	

- Files on mapped drive files from mapped drive will be excluded from backup (applicable only to UNC path on Windows platform). Typical UNC path is in the format of <u>\\drive or IP address\folder name</u> (e.g. <u>\\10.1.0.10\My Documents</u>).
- Files larger than files larger than the defined size will be excluded from backup
- File older than files created the set period of time ago or before a specific set date will be excluded from backup

> <u>Destinations Visible to Users</u>

There are two kinds of destinations backup users can choose from when creating a backup set, they are the Predefined Destination and Standard Destination. Only the destinations selected in this menu will be available for backup users to choose from when they are creating a backup set. This feature is disabled by default. You can enable the feature by turning on the switch to the right.

Below is a brief explanation on the differences between the Predefined Destination and Standard Destination.

Predefined Destination vs Standard Destination

- Predefined Destination The predefined destination can be a single storage destination on the local drive where CBS is installed, mapped drive, cloud storage or FTP server, or a destination pool with a mix of storage options mentioned above. Before you can select a predefined destination in this menu, it must first be configured under the System
 Settings > Backup > Predefined Destinations. Refer to Predefined Destinations Tab and Backup User Settings Tab for details on configuration.
- Standard Destination Except for the AhsayCBS storage option, all other storage options under the Standard Destination belong to the backup users, whether it could be a single storage destination on the mapped drive, cloud storage or FTP server, or a destination pool with a mix of storage options mentioned above.

To configure the Predefined Destination

- 1. Turn on the **IDE** switch on the right under the **Destinations Visible to Users** section.
- 2. Click on 🐨 under the **Predefined Destination** section.

Predefined Destination	
+ m	
Name	Run Direct

 Select the desired destination option, which has been defined in the System Settings > Backup > Predefined Destinations menu, by checking the box on the desired destination item.

Add	Predefined Destination
	Name
	CoogleDrive-1

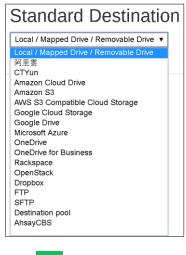
- 4. Click to confirm adding the predefined destination.
- 5. If you have multiple predefined destinations to add, repeat steps 3 -4 until all desired destinations have been selected.
- 6. Click to confirm.

To configure the Standard Destination

- 1. Turn on the **IDE** switch on the right under the **Destinations Visible to Users** section.
- 2. Click on the Standard Destination section.

Standard Destination
Customize application name
For "Run on server" backup set, only the AhsayCBS standard destination is supported regardless of this setting
Name

3. Select the desired storage option from the drop-down menu as shown below.



- 4. Click to add the selected standard destination storage.
- 5. If you have multiple destination storages to add, repeat steps 3 4 until all desired storages have been selected.
- 6. Click to confirm.
- 7. You will see the newly added destination shown on the list as shown.

Standard Destination		
Customize application r	iame	
+		
	Narr	ie
	0	Local / Mapped Drive / Removable Drive
	Û	Amazon S3
	aws	AWS S3 Compatible Cloud Storage
	0	Google Cloud Storage
		Google Drive
	⊕	Destination pool
		Microsoft Azure
	4	OneDrive
	4	OneDrive for Business
	Ø	Rackspace
		OpenStack
	÷	Dropbox
	FTP	FTP
	SFTP	SFTP
	Θ	AhsayCBS
	2	Amazon Cloud Drive
	뮲	阿里雲

Backup Set Types Visible to Users

The AhsayCBS supports a wide range of backup set types for backup and restore. This menu allows the administrator to select the backup set types to be displayed for backup users to choose from when they are creating a backup set on AhsayCBS, AhsayOBM or AhsayACB. This feature is disabled by default.

- 1. Turn on the **Internet** switch on the right under the **Backup Set Types Visible to Users** section.
- 2. Click on 🛨.



3. Select the **Backup Set Type** you wish to add from the drop-down menu as shown below.



- Click to add the selected backup set type.
- 5. If you have multiple backup set types to add, repeat steps 3 4 until all options have been selected.
- 6. Click to confirm.

> Cloud File Backup Source Visible to Users

This menu allows the administrator to select specific cloud file backup source(s) to be visible to backup users when they are creating a Cloud File Backup Set. By default, this feature is on with all cloud file backup sources pre-selected.

1. Turn on the switch on the right under the Cloud File Backup Source Visible to Users section.



2. Click on \oplus .



3. Select the **Cloud File Backup Source Visible to Users** you wish to add from the dropdown menu as shown below.

Cloud File Backu	p Source Visible to Users
阿里雲 ○ 阿里雲 CTYun Amazon Cloud Drive Amazon S3 AWS S3 Compatible Cloud Storage Google Cloud Storage Google Cloud Storage Google Drive Microsoft Azure OneDrive for Business Rackspace OpenStack Dropbox FTP SFTP	

- 4. Click + to add the selected cloud file backup source.
- 5. If you have multiple cloud file backup source to add, repeat step 3 4 until all options have been added.
- 6. Click to confirm.

GUI Settings

In this menu, administrator can configure the GUI elements to be shown on the client backup agent (AhsayOBM or AhsayACB) interface for backup users. The **View** checkbox allows administrator to decide whether to display the GUI item, and for some items, the **Edit** checkbox is available to enable backup users for changing or accessing the GUI item(s).

Policy	The GUI element on AhsayOBM/AhsayACB
Client Type	The Client Backup Type (AhsayOBM 🧿 or AhsayACB 🔕)
Apply	Check this box if you wish to configure the " View " and " Edit " option for the GUI item. If this box is not checked, the GUI item will be shown on AhsayOBM/AhsayACB by default.
View	Enable or disable backup user to view the item
Edit	Enable or disable backup user to edit the item

GUI Settings				
Policy	Client Type	Apply	View	Edit 🔄
Main Menu				
Backup	0 0	~	✓	
Restore	0 0	\checkmark	✓	
Backup Sets	0 0	~	✓	
Settings	0 0	\checkmark	✓	
Report	0 0	~	✓	
Utilities	0 0	~	✓	
Profile	0 0	\checkmark	✓	
Language	0 0	\checkmark	✓	
Information	0 0	\checkmark	✓	
Advertisement	0 0	\checkmark	✓	
Links to Social Media - Facebook	0 🖸	~	✓	http://ahsay.com/social/facebook.html
Links to Social Media - Twitter	0 0	✓	~	http://ahsay.com/social/twitter.html
Links to Social Media - Google+	0 0	✓	✓	http://ahsay.com/social/google+.html
Links to Social Media - LinkedIn	0 0	✓	✓	http://ahsay.com/social/linkedin.html
Links to Social Media - YouTube	00	~	✓	http://ahsay.com/social/youtube.html
Effective Policy	0 0	~	✓	
Help	0 0	\checkmark	✓	

Since AhsayCBS v7.11.0.0, we have added additional items under the GUI settings to give you greater flexibility for customizing the GUI elements on the client backup agent (AhsayOBM & AhsayACB). Refer to the information below for further details.

New Backup Set Wizard

There are four setting items under this new setting category to enable or disable the Destination and Encryption Key settings when creating a new backup set using the client backup agent.

Policy	Client Type	Apply	View	Edit
New Backup Set Wizard - Destination	0 0	✓	✓	
New Backup Set Wizard - Encryption	00	✓	~	
New Backup Set Wizard - Encryption - Enable / Disable	00	✓	✓	
New Backup Set Wizard - Encryption - Options	00	~	~	

New Backup Set Wizard – Destination

You can set to restrict backup users from using the default destination where they can only view the default destination but cannot change it **OR** to allow them to choose the desired backup destination on their own.

New Backup Set Wizard - Destination	0 0	\checkmark	✓	
-------------------------------------	-----	--------------	---	--

To restrict the backup destination WITHOUT letting backup user to change it, check the **View** box and left the **Edit** box unchecked. With this configuration, backup users can only view the backup destination that is predefined under the **Users, Group & Policies > Policy Group > Default Values > Destination** page, but cannot alter the backup destination when creating a new backup set using the client backup agent.

Note: If there is no destination defined in the **Default Values** menu as mentioned above, you will not be allowed to configure this setting.

New Backup Set Wizard - Destination	0 0	✓	✓		
-------------------------------------	-----	---	---	--	--

By checking both the **View** and **Edit** checkboxes, backup users can choose their desired backup destination from the choices defined under the **Users, Group & Policies > Policy Group > Backup Set Settings > Standard Destination.**

New Backup Set Wizard – Encryption

This setting is used in conjunction with the **New Backup Set Wizard – Enable/Disable** and **New Backup Set Wizard – Options** settings.

New Backup Set Wizard - Encryption	00	\checkmark	✓	
------------------------------------	----	--------------	---	--

When the **View** checkbox is checked for this option, the encryption key setting page will be shown when creating a new backup set with a client backup agent, otherwise, the relevant page will be skipped.

New Backup Set Wizard – Enable / Disable

In order for this setting to work, the View option for **New Backup Set Wizard – Encryption** setting must be turned on.

New Backup Set Wizard - Encryption - Enable / Disable	0 0	\checkmark	\checkmark		
---	-----	--------------	--------------	--	--

When you set the View option on and the Edit option off for this setting, the Encryption Key feature will be turned on by default.

New Backup Set Wizard - Encryption - Enable / Disable	0 0	\checkmark	\checkmark	✓
---	-----	--------------	--------------	---

When you set both the **View** and **Edit** options on, backup users will be able to enable or disable this feature on their own.

New Backup Set Wizard – Options

This setting allows backup users to choose the Encryption Type among **Default**, **User Password** or **Custom**.

New Backup Set Wizard - Encryption - Options	0	✓	\checkmark		
--	---	---	--------------	--	--

When you set the View option on and the Edit option off for this setting, the encryption type will not be configurable and will use the default value defined in Users, Group & Policies > Policy Group > Default Values > Others > Encryption.

New Backup Set Wizard - Encryption - Options	0	✓	\checkmark	\checkmark
--	---	---	--------------	--------------

When you set both the **View** and **Edit** options on, backup users will be able to choose their desired encryption type.

> <u>Help Page</u>

This option allows you to configure whether to show the Help button on the UI of the client backup agent. The Help button takes you to a set of online help instructions that correspond to the relevant page in the client backup agent.

Help	0 0	✓	
------	-----	---	--

> Add Contact

This option allows backup users to add Contact information, such as name, email, address, etc. under the **Profile > Contacts** page in the client backup agent.

Add Contact	0 0	\checkmark	\checkmark
au contact		¥	

By checking the View checkbox for this option, backup users can configure contact information on their own.

Remove Contact

This option allows backup users to remove contact information under the **Profile > Contacts** page in the client backup agent.

Remove Contact	0 0	

By checking the View checkbox for this option, backup users can remove contact information on their own in the client backup agent.

Add Backup Set

Add Backup Set	00	✓	>
----------------	----	---	---

By enabling the View checkbox of this option, backup users are able to add backup set using the client backup agent.



Remove Backup Set

Remove Backup Set

By enabling the View checkbox of this option, backup users are able to remove backup set using the client backup agent.

00

✓

 \checkmark

Default Values

This section allows administrator to define the default values for numerous setting items. The default values set under this setting menu will be applied to the backup sets directly. However, users can still override the default values during new backup set creation. As opposed to Preempted Values, which will be introduced later in this chapter, is a set of predefined values by the system administrator where backup users have no right to override the settings.

All setting items under the Default Values tab are disabled by default. Click the **equivalent** switch on the right of each setting item and then follow the steps below for configuration.

General	General Source Backup Schedule Continuous Backup Destination In-File Delta
User Settings	Retention Policy Command Line Tool Reminder Bandwidth Control IP Allowed for Restore Others
Backup Set Settings	Name
GUI Settings	
Default Values	Lotus Domino
Preempted Values	
Preempted Backup Sets	Lotus Notes
Mobile Settings	
	Windows System Backup
	Windows System State Backup
	MySQL Server
	Oracle Database Server
	VMware Host
	Vinware host
	Shadow Protect
	Windows User Authentication

General

This section defines the default values of some general configuration items. The following table explains each setting item under the **General** tab, with a brief description of what the setting is about and all the configurable items.

	Name
What is this setting about?	Defines the default backup set name when backup users create a backup set. Multiple settings can be created in this menu if you wish to define different default backup set names for different backup modules.

What are the configurable items?	 Name – name of the setting item Applied Modules – modules to apply this setting to Backup Set Name – default backup set name to be displayed when a backup set is created for the selected module(s).
	Lotus Domino
What is this setting about?	Defines the path to notes.ini . Please exercise extra caution when changing this setting because an accidental or incorrect change of this path may cause unpredictable impact on running the Lotus Domino. Refer to the URL below for further information on this setting. <u>http://www.ibm.com/support/knowledgecenter/SSKTMJ_9.0.1/admin/conf_e</u> ditingthenotesinifile_c.html
What are the configurable items?	 Name – name of this setting item Path to notes.ini – path name of the Path to notes.ini

	Lotus Notes	
What is this setting about?	Defines the path to notes.ini . Please exercise extra caution when changing this setting because an accidental or incorrect change of this path may cause unpredictable impact on running the Lotus Notes. Refer to the URL below for further information on this setting. <u>http://www.ibm.com/support/knowledgecenter/SSKTMJ_9.0.1/admin/conf_e</u> <u>ditingthenotesinifile_c.html</u>	
What are the configurable items?	 Name – name of this setting item Path to notes.ini – path name of the Path to notes.ini 	

Windows System Backup	
What is this setting about?	Defines the default location where you wish to store the system backup for MS Windows System Backup module
What are the configurable items?	 Name – name of this setting item Specify the location where you want to store the system backup – location path where you wish the system backup be stored

|--|

What is this setting about?	Defines the default location where you wish to store the system backup for MS Windows System State Backup module.
What are the configurable items?	 Name – name of this setting item Specify the location where you want to store the system backup – location path where you wish the system state backup be stored
MySQL Server	
What is this setting about?	Defines the default Login ID, Host name, Port and Path to mysqldump for MySQL server backup module
What are the configurable items?	 Name – name of this setting item Login ID – login ID for accessing the MySQL server Host – host name of the MySQL server Port – port number Path to mysqldump – path name to the mysqldump utility

	Oracle Database Server
What is this setting about?	Defines the default Login ID, Host name, Port and SID for Oracle Database Server module
What are the configurable items?	 Name – name of this setting item Login ID – login ID for accessing the Oracle Database server Host – host name of the Oracle server Port – port number SID – the unique identifier to the database instance

VMware Host	
What is this setting about?	Defines the default VMware version, host name, port number and SSH port for VMware backup module
What are the configurable items?	Name – name of this setting item
	Version – VMware version
	Host – host name of the VMware host

Port – port number
SSH Port – SSH port number

Shadow Protect	
What is this setting about?	Defines the default path to install the Shadow Protect and whether to encrypt the image file in temporary directory.
What are the configurable items?	 Name – name of this setting item Path to StorageCraft ShadowProtect – the path where you installed the ShadowProtect Encrypt the image file in temporary directory – to enable or disable encryption for image file in the temporary directory where the ShadowProtect image is stored.

	Windows User Authentication
What is this setting about?	Defines the default domain name/host name and user name for backup users to enter the Windows User Authentication details. Multiple settings can be created in this menu if you wish to define different default domain name/host name and user name for different modules.
What are the configurable items?	 Name – name of this setting item Applied Modules – modules you wish to apply this default setting to Domain Name (e.g. ahsay.com) / Host Name – domain name or host name of the Windows login User name – user name to log in to the backup user's Windows for backup

Source

This section defines the default backup source values. The following table explains each setting item under the **Source** tab, with a brief description of what the setting is about and all the configurable items.

	Common Folders for Windows	
What is this setting about?	Defines the default common files and folders to be selected when user are creating a backup set for File Backup.	

- > **Name** name of the setting item
- Common Files and Folders a list of common files or folders to choose from as default backup source when creating a file backup set.

 include or exclude all the files/folder matching the filtering criteria under the top directory Exclusion / Inclusion – to include (if you have chosen to exclude the matched files) or exclude (if you have chosen to include the matched files) those unmatched files/folder in the backup Match file/folder names by – you can set the following filtering rules: [Simple comparison starts with] Include/Exclude all files/directories with name starting with a certain pattern. Example: You can use B* to match all file with name starting with a B character. 		Filter
 Matching pattern - defines the pattern of the file selection, e.g., *.doc, *.png. For each of the matched files/folders under top directory – define to include or exclude all the files/folder matching the filtering criteria under the top directory Exclusion / Inclusion – to include (if you have chosen to exclude the matched files) or exclude (if you have chosen to include the matched files) those unmatched files/folder in the backup Match file/folder names by – you can set the following filtering rules: [Simple comparison starts with] Include/Exclude all files/directories with name starting with a certain pattern. Example: You can use B* to match all file with name starting with a B character. [Simple comparison ends with] 		source from performing backup. This filter applies only to File Backup on
Include / Exclude all files / directories with name ending with a certain pattern. Example: You can use *.doc to match all files with name ending with .doc (all Word Documents) [Simple comparison contain] Include/Exclude all files/directories with name containing a certain pattern. Example: You can use *B* to match all files with name containing with a B character. [Regular Expression (UNIX-style)] Include/Exclude all files/directories with name matching a regular expression. Notes: The pattern of a backup filter is case sensitive.	configurable	 Matching pattern - defines the pattern of the file selection, e.g., *.doc, *.png. For each of the matched files/folders under top directory – define to include or exclude all the files/folder matching the filtering criteria under the top directory Exclusion / Inclusion – to include (if you have chosen to exclude the matched files) or exclude (if you have chosen to include the matched files) those unmatched files/folder in the backup Match file/folder names by – you can set the following filtering rules: [Simple comparison starts with] Include/Exclude all files/directories with name starting with a certain pattern. Example: You can use B* to match all file with name starting with a B character. [Simple comparison ends with] Include / Exclude all files / directories with name ending with a certain pattern. Example: You can use *.doc to match all files with name ending with .doc (all Word Documents) [Simple comparison contain] Include/Exclude all files/directories with name containing a certain pattern. Example: You can use *B* to match all files with name containing a certain pattern. Example: You can use *B* to match all files with name containing a certain pattern. Example: You can use *B* to match all files with name containing a certain pattern.

	If multiple patterns are required, please add the pattern one by one e.g.: *.doc and then *.xls
	How to Apply This Filter – you can choose to apply this filter on "All hard disk drivers" or a selected folder of your choice.
	Apply to - apply the filter to the File and/or Folder level
	Example 1 If you want to backup only Word, Excel and PowerPoint documents in your document directory (e.g. C:\My Documents), you should setup your backup filter as follows.
	 Matching pattern = *.doc, *.xls, *.ppt For each of the matched files/folders under top directory = Include them Exclusion = Check Match file/folder names by = Simple comparison end with How to Apply This Filter = This folder only C:\My Documents Apply to = File
	Example 2 If you want to backup all files, excluding all *.exe, *.dll and *.tmp, in C:\Application, you should setup your backup filter as follows.
Use Cases	Matching pattern = *.exe, *.dll, *.tmp For each of the matched files/folders under top directory = Exclude them Inclusion = Check Match file/folder names by = Simple comparison end with How to Apply This Filter = This folder only C:\Applicaitons Apply to = File
	Example 3 If you have already chosen files (all under C:\) from the backup source setting but you want to exclude all images (e.g. *.jpg and *.gif) from your selection, you should setup your backup filter as follows.
	Matching pattern = *.jpg, *.gif For each of the matched files/folders under top directory = Exclude them Inclusion = uncheck Match file/folder names by = Simple comparison end with How to Apply This Filter = This folder only C:\ Apply to = File
	Please note that the Inclusion setting should not be checked because you have already chosen the desired files to back up and do not want to include all other files (NOT *.jpg, *.gif) under C:\ into the backup set.
	Example 4 If you want to include everything, except the "log" directory, under

C:\Applications into a backup set, you should setup your backup filter as follows.
Matching pattern = ^log\$
For each of the matched files/folders under top directory = Exclude
them Inclusion = check
Match file/folder names by = Regular Expression (UNIX-style)
How to Apply This Filter = C:\Applications
Apply to = Folder
Example 5 If you want to include all directories named "log" from the backup set files
with file name starting with "B" and ending with "*.doc" under C:\My
Documents into the backup set, you can use a regular expression of
"^B.*\.doc\$" to do your selection. The filter backup can then be setup as
follows.
Matching pattern = ^B.*\.doc\$
For each of the matched files/folders under top directory = Include
them Exclusion = check
Match file/folder names by = Regular Expression (UNIX-style)
How to Apply This Filter = C:\My Documents
Apply to = File

	Advanced		
What is this setting about?	Defines the default advanced settings, including the platform of the user's machine, the backup module, selected or deselected source for backup.		
What are the configurable items?	 Name – name of the setting item Platform – select the platform to apply this advanced filter Applied Modules – modules you wish to apply this default setting to Other Selected Source – define the path of the source, e.g. Windows: C:\My folder; Linux: /home/my folder, to include in the backup set Deselected Source - define the path of the source, e.g. Windows: C:\My folder; Linux: /home/my folder, to exclude in the backup set 		

Backup Schedule

Setting up the backup schedule allows backup sets to run automatically at the specified time. This section allows administrator to define the default backup schedule. The following table explains each setting item under the **Backup Schedule** tab, with a brief description of what the setting is about and all the configurable items.

	Schedule		
What is this setting about?	Defines the default backup schedule when backup users create a backup set. Multiple settings can be created in this menu if you wish to define different default backup schedule for different backup modules. Within a backup schedule setting, multiple schedules can be added.		
What are the configurable items?	 Backup Schedule Name – name of the setting item Applied Modules – modules to apply this setting to Run scheduled backup for this backup set – to enable or disable the scheduled backup settings you set in this menu Manage Schedule Name – name of the scheduler Type – frequency of running the scheduled backup Daily – to run the scheduled backup everyday Weekly – to run the scheduled backup on the selected days of a week Monthly – to run the scheduled backup on a specific day in a month, or on a specific day in a specific week. Custom – to run the scheduled backup on a specific day of your selection Start backup at – specify a specific time to run the scheduled backup based on the frequency set in the Type menu above. Stop – set the scheduled backup to stop either Full backup is completed regardless of how much time it takes OR After the backup has started for the set time (1-24 hr) regardless if the backup is done Run Retention Policy after backup – enable this feature if you wish the modified or deleted data after backup remains in the backup server for the set number of retention day 		

> Continuous Backup

When the Continuous Backup feature is enabled, a backup job will be triggered whenever a change is made in the backup source. This section allows administrator to define the default continuous backup settings. The following table explains each setting item under the **Continuous Backup** tab, with a brief description of the available settings and all the configurable items. **Continuous Backup is only available on Windows platform.**

IMPORTANT

When setting up the Continuous Backup feature for a backup set, you must run a manual or scheduled backup job first so that the initial files are uploaded your designated backup destination.

	Continuous Backup	
What is this setting about?	Defines whether to enable this feature, whether to exclude system files, frequency of running backup when changes are detected, configure the maximum file size allowed for backup and configure filters to exclude files from backup.	
	 Continuous Backup Name – name of the setting item 	
	 Backup whenever a change is made – enable or disable the continuous backup feature. 	
	Exclude system files – enable this feature if you do not want to back up system files. Refer to <u>Appendix J</u> for a full list of system files excluded from the backup set.	
	How often should the backup run – set the frequency of running backup when changes are detected.	
What are the configurable items?	Only apply to files smaller than – file size that is larger than the set value will not be backed up.	
	Run CDP on computers named – define the name of the computer on which continuous backup will be run.	
	Exclude Filter	
	Name - name of the filter setting item	
	Match file/folder names by – you can set the following filtering rules:	
	[Simple comparison starts with] Include/Exclude all files/directories with name starting with a certain pattern. <i>Example:</i>	

	You can use B* to match all file with name starting with a B
	character.
	[Simple comparison ends with] Include / Exclude all files / directories with name ending with a certain pattern. <i>Example:</i>
	You can use *.doc to match all files with name ending with .doc (all Word Documents)
	[Simple comparison contain] Include/Exclude all files/directories with name containing a certain pattern. <i>Example:</i> You can use *B* to match all files with name containing with a B character.
	[Regular Expression (UNIX-style)] Include/Exclude all files/directories with name matching a regular expression.
	 Notes: The pattern of a backup filter is case sensitive. If multiple patterns are required, please add the pattern one by one e.g.: *.doc and then *.xls
	Matching pattern - defines the pattern of the file selection, e.g., *.doc, *.png.
	Apply This Filter to all files/folders in – you can choose to apply this filter on "All selected sources" or a selected folder of your choice
	Apply to - apply the filter to the File and/or Folder level
	Example 1 If you want to back up all files, except all Word, Excel and PowerPoint documents, in your document directory (e.g. C:\My Documents), you should setup your backup filter as follows.
Use Cases	Match file/folder names by = Simple comparison end with Matching pattern = *.doc, *.xls, *.ppt Apply this filter to all files/folders in = This folder only C:\My Documents Apply to = File
	Example 2 If you want to include everything, except the "log" directory, under C:\Applications into a backup set, you should setup your backup filter as follows.
	Match file/folder names by = Regular Expression (UNIX-style) Matching pattern = ^log\$

Apply this filter to all files/folders in = C:\Applications Apply to = Folder
Example 3 If you want to exclude all directories named "log" from the backup set files with file name starting with "B" and ending with "*.doc" under C:\My Documents into the backup set, you can use a regular expression of "^B.*\.doc\$" to do your selection. The filter backup can then be setup as follows.
Match file/folder names by = Regular Expression (UNIX-style) Matching pattern = ^B.*\.doc\$ Apply this filter to all files/folders in = C:\My Documents Apply to = File

> <u>Destination</u>

This section allows administrator to define the default backup destination for backup set. The following table explains each setting item under the **Destination** tab, with a brief description of what the setting is about and all the configurable items.

	Destination		
What is this setting about?	Defines the default backup destination when backup users create a backup set. Multiple settings can be created in this menu if you wish to define different default destinations for different backup modules.		
What are the configurable items?	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to Backup Mode – select the files transfer method during backup Sequential – backup files are sent to the backup destination one by one, one after another. Concurrent – multiple files are sent to the backup destination at the same time Maximum concurrent backup destinations (only if you have selected Concurrent as the Backup Mode) – select the maximum number of files allowed for uploading to the backup destination Predefined Destination – select the predefined destination you have configured in the <u>Predefined Destinations Tab</u> section. 		

> In-File Delta

In-file delta technology is an advanced data block matching algorithm with the intelligence to pick up changes (delta) of file content between two files.

Using this algorithm, daily backup of large files over low-speed internet connection is made possible because it requires only the changes of information since the last backup to be sent over (assuming that the full backup of the file has been saved on the backup server already).

This section allows administrator to define the default In-File Delta type for backup set. The following table explains each setting item under the **In-File Delta** tab, with a brief description of what the setting is about and all the configurable items.

	In-File Delta		
What is this setting about?	Defines the default in-file delta setting for backup set. Multiple settings can be created in this menu if you wish to define different default in-file delta settings for different backup modules.		
What kind of in-file delta type are there?	Incremental In-file deltaIncremental Delta will facilitate ease of backup. The delta is generated by comparing with the last uploaded full or delta file. Delta generated with this method is smaller and uses the least bandwidth. However, for restoration, the full file and all deltas up to the required point-in-time are required to be restored and merged.Differential In-file delta Differential Delta will facilitate ease of restore. The delta is generated by comparing with the last uploaded full file only. Delta generated with this method will grow daily and uses more bandwidth. However, for restoration,		
	the full file and a single delta is required to be restored and merged.		
	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to 		
What are the configurable items?	 Default Type – type of backup method (Incremental or Differential) Advanced settings In-File Delta block size – defines the size of delta block used when detecting changes between last full or delta file and the file to be backed up. In-file delta backup with small block size Produce a smaller delta file due to a more precise comparison Require more processing power on the client machine 		
	 Comparison may take longer to complete Require more Java memory 		

	In-file delta backup with large block size:		
	- Produce a larger delta file due to a less precise comparison		
	- Require less processing power on the client machine		
	- Comparison will complete faster		
	- Require less Java memory		
	For most cases, the default setting Auto will select the optimal block size for each file (depending on the size of the file).		
	File size	Block size	
	Smaller than 2GB	4KB	
	2GB – 8GB	8KB	
	Larger than 8GB	16KB	
	 Only apply In-File Delta to files larger than – defines the minimum file size a file to apply the in-file delta setting. If the size of a file to be backed up is smaller than the set value, the in-file delta setting will not apply and the whole file will be uploaded to the backup server. 		
	It is not necessary to perform In-file delta backup on small files because backing up the whole file does not take long. Backing up the whole file instead reduces the time required to restore the file.		
>	Upload full file when either of these conditions is met – a backup of the full file will be perform if the following condition is met:		
	 Number of deltas is over – when the number of delta file exceeds the set value 		
	- Delta ratio (delta file size / full file size) is over – this setting is to ensure that a full file backup is performed for file with significant changes, as it is preferable to upload a full file instead to reduce the time required to restore the file		
	Weekly variations for overriding default type – override the default in-file delta setting in the Default Type field on selected day(s) of a week		
	Yearly variations for overriding default type and weekly variations – override the default in-file delta setting in the Default Type field as well as the setting in the "Weekly variations for overriding default type" section on a selected day in a week based on either of the following selection		
	day in a month	n. On this specified	ly variations - select a specific day in the month defined above g override the default value.

Retention Policy

Retention policy defines the policies of persistent data management for meeting business data archival requirements. When a backup job is performed, for data that are modified or deleted on the client computer, their existing versions on the backup server (backup records) will be moved into retention area, while newly backed up files will be placed in the current data area.

Specifically, retention policy setting defines how long are the backup records kept in the retention area before they are deleted permanently from the backup server.

This section allows administrator to define the default Retention Policy for backup set. The following table explains each setting item under the **Retention Policy** tab, with a brief description of what the setting is about and all the configurable items.

	Retention Policy		
What is this setting about?	Defines the default retention policy for backup sets when they are created. Multiple settings can be created in this menu if you wish to define different default retention policy for different backup modules.		
	Destination		
	Name – na	ame of the setting item	
	Applied N	lodules – modules to apply this setting to	
	How to retain the files in the backup set, which have been deleted in the backup source – choose between Simple and Advanced setting, which is explained in details below.		
	- Simple – enter a specific number of day or backup job number. The retained data will be removed from the backup destination permanently after the set number of day or set number of job is met.		
	 Advanced – manage advanced retention policies by applying advanced settings 		
What are the configurable items?	Deiha	The past number of days on which different versions of your files are retained	
	Daily	Set the number of day(s) on which the old version of data will be stored	
		The days within a week on which different versions of your files are retained	
		Select the day(s) in a week (Monday – Sunday) on which the old version of data will be stored	
	Weekly	The number of weeks to repeat the above selection	
		Enter the number of week(s) for the above setting to repeat	
	Monthly	The days within a month on which different versions of your files are retained	

	 Select a day in a month on which the old version of data will be stored. You can either set: An exact day (1-31) or The (First/Second/Third/Forth/Last) of (Monday - Sunday)
	The number of months to repeat the above selection
	Enter the number of month(s) for the above setting to repeat
	The day within a quarter on which different versions of your files are retained
	 Select a day within a quarter on which the old version of data will be stored. You can either set: An exact day (1-31) or The (First/Second/Third/Forth/Last) of (Monday - Sunday)
	Months of quarter
Quart	Select the desired combination of months of quarter
	- (January, April, July, October)
	- (February, May, August, November)
	- (March, June, September, December)
	The number of quarters to repeat the above selection
	Enter the number of quarter(s) for the above setting to repeat
	The day within a year on which different versions of your files are retained
	Select a day within a year on which the old version of data will be stored. You can set the day by using one of the following methods:
	 Select an exact day (1 – 31) in an exact month (January – December)
Yea	- Select the (First/Second/Third/Forth/Last) of (Monday/Tuesday/Wednesday/Thursday/ Friday/Saturday/Sunday/Weekday/Weekend) in an exact month (January – December)
	 Select a day in a week (Monday – Sunday) in an exact week of a year (Week 1 - 53)
	The number of years to repeat the above selection
	Enter the number of year(s) for the above setting to

	A specific day on which different versions of your files are retained
	Select a day on which the old version of data will be stored. You can set the day by using one of the following methods:
	 Select an exact day (1 – 31) in an exact month (January – December)
Custom	 Select the (First/Second/Third/Forth/Last) of (Monday/Tuesday/Wednesday/Thursday/ Friday/Saturday/Sunday/Weekday/Weekend) in an exact month (January – December)
	 Select a day in a week (Monday – Sunday) in an exact week of a year (Week 1 - 53)
	Year
	Enter a specific year for the day set above to execute the retention policy

> Command Line Tool

This section allows administrator to configure a Pre-Backup or Post-Backup command. Command such as batch file to stop and start an application before and after a backup job is completed, or other command such as to shut down the computer when a backup job is completed can be configured.

The following table explains each setting item under the **Retention Policy** tab, with a brief description of what the setting is about and all the configurable items.

Command Line Tool			
What is this setting about?	Defines the default command line to execute before or after a backup is performed. Multiple settings can be created in this menu if you wish to define different default command line for different backup modules.		
What are the configurable items?	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to Pre-Backup Command Line Tool – configure the pre-backup command line Name – name of this command line setting. 		
	 Working Directory – directory which the pre-backup command will run at. 		

	- Command – Enter the pre-backup command to be run
~	Post-Backup Command Line Tool – configure the post-backup command line
	- Name – name of this command line setting.
	 Working Directory – directory which the post-backup command will run at.
	- Command – enter the post-backup command to be run

> <u>Reminder</u>

This section allows administrator to enable the backup reminder feature where users will be reminded to run a backup job when they log off or shut down their computers. The reminder feature is only available on Windows platform.

The following table explains each setting item under the **Reminder** tab, with a brief description of what the setting is about and all the configurable items.

Reminder		
What is this setting about?	Defines whether the backup reminder is on for backup users when they log off or shut down their computers. Multiple settings can be created in this menu if you wish to define different settings for different backup modules.	
What are the configurable items?	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to Remind me to backup during Windows log off or shut down – turn on or off this feature Computer name – you can specify the computer's name for this 	

Bandwidth Control

This section allows administrator to limit the data transfer rate when performing backup and restore jobs.

NOTE

The actual value will be around +/- 5% of the limit value when the bandwidth control set to below 32Mb/s. When the bandwidth control set to above 64Mb/s, the gap between actual value and limit value might be over 5%.

> Network stability might influence the transfer rate fluctuation accuracy.

The following table explains each setting item under the **Bandwidth Control** tab, with a brief description of what the setting is about and all the configurable items.

Bandwidth Control			
What is this setting about?	Defines the default settings on limiting the data transfer rate when performing backup and restore jobs. Multiple settings can be created in this menu if you wish to define different settings for different backup modules.		
	Destina		
		e – name of the	-
	> Limi		nodules to apply this setting to te when performing backup and restore tasks if this feature
		Independent	Each backup and restore job has its assigned bandwidth
			All backup and restore jobs are sharing the same assigned bandwidth
What are the configurable items?		Share	Note : Share mode does not support performing backup job on multiple destinations concurrently.
	- Existing bandwidth controls – configure the bandwidth control details		
		Name	Name of the bandwidth control setting item
			Always – apply the bandwidth control settings at all times
		Туре	Only within this period – configure a specific start time and end time on a day of a week for this bandwidth control setting to take place
		Maximum transfer rate	Enter the maximum transfer rate allowed, in the unit of Kbit/s, Mbit/s or Gbit/s.

> IP Allowed for Restore

This section allows administrator to IP ranges that are allowed to perform restore. The following table explains each setting item under the **IP Allowed for Restore** tab, with a brief description of what the setting is about and all the configurable items.

IP Allowed for Restore		
What is this setting about?	Defines the default settings on IP allowed for restore. Multiple settings can be created in this menu if you wish to define different settings for different backup modules.	
What are the configurable items?	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to IP Allowed for Restore– configure the IP ranges allowed for restore From – restore allowed from this IP value 	
	- To - restore allowed up to this IP value	

> Others

This section allows administrator to configure other default settings. The following table explains each setting item under the **Others** tab, with a brief description of what the setting is about and all the configurable items.

	Temporary Directory		
What is this	The temporary directory is used for various purposes, such as storage of temporary spooled file, remote file list, local file list, temporary delta file and other files of temporary nature.		
setting about?	Administrator can define the default location of the temporary directory. Multiple settings can be created in this menu if you wish to define different temporary directory locations for different backup modules.		
	Name – name of the setting item		
	Platform – the platform on which this setting will apply on		
What are the configurable items?	Applied Modules – modules to apply this setting to		
	Temporary directory for storing backup files – location of the temporary directory you wish to set.		
	Remove temporary files after backup – the temporary files after backup if this option is selected		

Follow Link

	What is this setting about?	Administrator can define whether to turn on the Follow Link feature by default. When this feature is on, not only the symbolic link or junction point will be restored, the directories and files that the symbolic link or junction point links to will also be restored. This feature is only applicable to File Backup module.
	What are the configurable	Name – name of the setting item
items?	-	Follow link of the backup files – check the box to enable this feature

Volume Shadow Copy		
	Enabling the Volume Shadow Copy option will allow backup of local files that are exclusively opened during the backup process (e.g. Outlook PST file).	
	Some requirements of the Volume Shadow Copy option include:	
	 Volume Shadow Copy can only be applied for local drive; exclusively opened file on network shared drive cannot be backed up even with the Volume Shadow Copy option enabled. 	
	 Volume Shadow Copy is only available on Windows platforms (e.g. Vista / 2008 / 2008 R2 / 7 / 2012 / 2012 R2 / 8 /10). 	
What is this setting about?	 The user using the backup application must have administrative privileges to access the Volume Shadow Copy service on a computer. 	
	 At least one of the partitions on the machine must be in NTFS format. 	
	For more technical information on Volume Shadow Copy, please refer to the following page from Microsoft for details: <u>http://technet.microsoft.com/en-us/library/cc785914(WS.10).aspx</u>	
	Administrator can define whether to turn on the Volume Shadow Copy feature by default .This feature is only applicable to File Backup module.	
What are the	Name – name of the setting item	
configurable items?	Enable Windows' Volume Shadow Copy for open file backup – check or uncheck to enable or disable this feature	

File Permissions

What is this setting about?	By enabling this option, file permissions of the operating system files will be backed up. File permission defines, for example, the right to view or change a file by the system owner/group/individual.Administrator can define whether to turn on the backup of File Permissions by default .This feature is only applicable to File Backup module.
What are the configurable items?	 Name – name of the setting item Backup files' permissions – check the box to enable this feature

	Archived Log Deletion		
What is this setting about?	Administrator can define whether the archived log files will be deleted after backup by default .This feature is only applicable to Oracle Database Server Backup module.		
What are the configurable items?	 Name – name of the setting item Delete the archived logs after backup – turn on or off this feature Delete archived logs that are older than the following days – set the number of day(s) that the archived logs will be deleted when exceeding this number 		

OpenDirect		
What is this setting about? Administrator can enable the OpenDirect setting for Windows File backup sets on AhsayOBM and AhsayCB, to support restore of selected files/folder within a compressed or images file without the need to restore the compressed of image file first.		
What are the configurable items?	 Name – name of the setting item OpenDirect – enable or disable this feature 	

Granular Restore	
What is this setting about?	Administrator can enable the Granular Restore setting for VMware ESXi/vCenter and Hyper-V guest VM backup sets, to support restore of selected files/folder within a virtual disk of a guest VM without the need to restore the guest VM file first.

What are the configurable items?	Name – name of the setting item
	Granular Restore – enable or disable this feature
Compressions	
What is this setting about?	Compressing data before they are backed up brings faster backup and restore time and save storage space on the backup destination. Compression does not apply on Run direct backup sets for Hyper-V and VMware even this feature is on. Administrator can define the default compression type for backup set. Multiple settings can be created in this menu if you wish to define different default compression types for different backup modules.
What are the configurable items?	 Name – name of the setting item Applied Modules – modules to apply this setting to Select compression type – select the desired compression type among No Compression, Normal and Fast (Compressed size larger than normal)

	Encryption
What is this setting about? What are the configurable items?	For better security reason, backup users can choose to encrypt their backup data with an algorithm, mode and key of their choice. Encryption does not apply on Run direct backup sets for Hyper-V and VMware even this feature is on.
	Administrator can define the default encryption setting for backup set. Multiple settings can be created in this menu if you wish to define different default encryption settings for different backup modules.
	Name – name of the setting item
	Applied Modules – modules to apply this setting to
	Encrypt Backup Data – enable or disable this feature
	 Default (Machine Generated Random) – the system will randomly generate an encryption key
	 Custom – define your own algorithm, encryption key, method and key length.

Preempted Values

This section allows administrator to define the predefined values for backup users' backup sets. The preempted values set under this setting menu will be applied to the backup sets directly. Backup users can add additional values on top of the preempted values when creating a backup set but **CANNOT** remove the preempted values preset by the system administrator.

All setting items under the Preempted Values tab are disabled by default. Click the **equal** switch on the right of each setting item and then follow the steps below for configuration.

User Settings Command Line Tool Reminder Bandwidth Control IP Allowed for Restore Others Backup Set Settings GUI Settings Filter Image: Settings Image: Setings Image: Settings Image: Setings <t< th=""></t<>
GUI Settings Filter Default Values Preempted Values Preempted Backup Sets
Default Values Preempted Values Preempted Backup Sets
Preempted Values Advanced Preempted Backup Sets Image: Comparison of the set of the
Preempted Backup Sets
Mobile Settings
√ X ?

<u>Mode</u>

In all the setting items in the Preempted Values section, there is a **Mode** setting item that contains 3 options on how this preempted values are applied to user defined settings.

- Prepend the preempted values will be applied as the first user defined settings
- Append the preempted values will be applied as the last user defined settings
- Override override all user defined settings

NOTE

In some preempted value settings, "Override" mode is set as default and cannot be modified, e.g. Reminder, as administrator should take full control of the policy settings. However, prepend and append mode are available for some non-administrator related features, such as backup schedule, where users defined settings can also be considered.

> <u>Source</u>

This section defines the preempted backup source values. The following table explains each setting item under the **Source** tab, with a brief description of what the setting is about and all the configurable items.

	Filter
What is this setting about?	Defines the default filter mode, filters which used to include/exclude files in the backup source from performing backup. This filter applies only to File Backup on Windows platform. Creating multiple filter settings is possible.
What are the configurable items?	 Name – name of the filter setting Apply filters to the backup source – turn this on to configure the filters Matching pattern - defines the pattern of the file selection, e.g., *.doc, *.png. For each of the matched files/folders under top directory – define to include or exclude all the files/folder matching the filtering criteria under the top directory Exclusion / Inclusion – to include (if you have chosen to exclude the matched files) or exclude (if you have chosen to include the matched files) those unmatched files/folder in the backup Match file/folder names by – you can set the following filtering rules: [Simple comparison starts with] Include/Exclude all files/directories with name starting with a certain pattern. Example: You can use B* to match all file with name starting with a Certain pattern. Example: You can use *.doc to match all files with name ending with .doc (all Word Documents) [Simple comparison contain] Include/Exclude all files/directories with name containing a certain pattern. Example: You can use *B* to match all files with name containing with a B character.
	Include/Exclude all files/directories with name matching a regular expression.

	 Notes: The pattern of a backup filter is case sensitive. If multiple patterns are required, please add the pattern one by one e.g.: *.doc and then *.xls
	How to Apply This Filter – you can choose to apply this filter on "All hard disk drivers" or a selected folder of your choice.
	Apply to - apply the filter to the File and/or Folder level
	Example 1 If you want to backup only Word, Excel and PowerPoint documents in your document directory (e.g. C:\My Documents), you should setup your backup filter as follows.
	Matching pattern = *.doc, *.xls, *.ppt For each of the matched files/folders under top directory = Include them Exclusion = Check Match file/folder names by = Simple comparison end with How to Apply This Filter = This folder only C:\My Documents Apply to = File
	Example 2 If you want to backup all files, excluding all *.exe, *.dll and *.tmp, in C:\Application, you should setup your backup filter as follows.
Use Cases	Matching pattern = *.exe, *.dll, *.tmp For each of the matched files/folders under top directory = Exclude them Inclusion = Check Match file/folder names by = Simple comparison end with How to Apply This Filter = This folder only C:\Applications Apply to = File
	Example 3 If you have already chosen files (all under C:\) from the backup source setting but you want to exclude all images (e.g. *.jpg and *.gif) from your selection, you should setup your backup filter as follows.
	Matching pattern = *.jpg, *.gif For each of the matched files/folders under top directory = Exclude them Inclusion = uncheck Match file/folder names by = Simple comparison end with How to Apply This Filter = This folder only C:\ Apply to = File Please note that the Inclusion setting should not be checked because you
	have already chosen the desired files to back up and do not want to include all other files (NOT *.jpg, *.gif) under C:\ into the backup set.

Example 4 If you want to include everything, except the "log" directory, under C:\Applications into a backup set, you should setup your backup filter as follows.
Matching pattern = ^log\$ For each of the matched files/folders under top directory = Exclude them Inclusion = check Match file/folder names by = Regular Expression (UNIX-style) How to Apply This Filter = C:\Applications Apply to = Folder
Example 5 If you want to include all directories named "log" from the backup set files with file name starting with "B" and ending with "*.doc" under C:\My Documents into the backup set, you can use a regular expression of "^B.*\.doc\$" to do your selection. The filter backup can then be setup as follows.
Matching pattern = ^B.*\.doc\$ For each of the matched files/folders under top directory = Include them Exclusion = check Match file/folder names by = Regular Expression (UNIX-style) How to Apply This Filter = C:\My Documents Apply to = File

	Advanced
What is this setting about?	Defines the default advanced settings for backup source, including backup mode, other selected source and deselected source.
What are the configurable items?	 Name – name of the setting item Applied Module – module you wish to apply this default setting to Other Selected Source – define the path of the source, e.g. Windows: C:\My folder; Linux: /home/my folder, to include in the backup set Deselected Source - define the path of the source, e.g. Windows: C:\My folder; Linux: /home/my folder, to exclude in the backup set.

> Backup Schedule

Setting up backup schedule allows backup sets to run automatically at the specified time. This section allows administrator to pre-define default backup schedule(s) for backup users. The following table explains each setting item under the **Backup Schedule** tab, with a brief description of what the setting is about and all the configurable items.

	Schedule
What is this setting about?	Predefine backup schedule(s) for backup sets. Multiple settings can be created in this menu if you wish to pre-define different backup schedules for different backup modules. Within a backup schedule setting, multiple scheduled times can be added.
What are the configurable items?	 Backup Schedule Name – name of the setting item Applied Modules – modules to apply this setting to Run scheduled backup for this backup set – to enable or disable the scheduled backup settings you set in this menu Manage Schedule Name – name of the scheduler Type – frequency of running the scheduled backup Daily – to run the scheduled backup everyday Weekly – to run the scheduled backup on the selected days of a week Monthly – to run the scheduled backup on a specific day in a month, or on a specific day in a specific week. Custom – to run the scheduled backup on a specific day of your selection Start backup at – specify a specific time to run the scheduled backup based on the frequency set in the Type menu above. Stop – set the scheduled backup to stop either Full backup is completed regardless of how much time it takes OR After the backup has started for the set time (1-24 hr) regardless if the backup is done Run Retention Policy after backup – enable this feature if you wish the modified or deleted data after backup remains in the backup server for the set number of retention day

Continuous Backup

When the Continuous Backup feature is enabled, a backup job will be triggered whenever a change is made in the backup source. This section allows administrator to define the default continuous backup settings. The following table explains each setting item under the **Continuous Backup** tab, with a brief description of the available settings and all the configurable items. **Continuous Backup is only available on Windows platform.**

IMPORTANT

When setting up the Continuous Backup feature for a backup set, you must run a manual or scheduled backup job first so that the initial files are uploaded your designated backup destination.

	Continuous Backup
What is this setting about?	Predefine the settings and filters to trigger continuous backup, including to exclude system files, frequency of running backup when changes are detected, configure the maximum file size allowed for backup and configure filters to exclude files from backup.
What are the configurable items?	 Continuous Backup Name – name of the setting item Applied Modules – modules to apply this setting to Backup whenever a change is made – enable or disable the continuous backup feature Exclude system files – enable this feature if you do not want to back up system files. Refer to <u>Appendix J</u> for a full list of system files excluded from the backup run – set the frequency of running backup when changes are detected. Only apply to files smaller than – file size that is larger than the set value will not be backed up Exclude Filter Name - name of the filter setting item Match file/folder names by – you can set the following filtering rules: [Simple comparison starts with] Include/Exclude all files/directories with name starting with a certain pattern. <i>Example:</i> You can use B* to match all file with name starting with a B

	character.
	[Simple comparison ends with] Include / Exclude all files / directories with name ending with a certain pattern. <i>Example:</i> You can use *.doc to match all files with name ending with .doc (all Word Documents)
	[Simple comparison contain] Include/Exclude all files/directories with name containing a certain pattern. <i>Example:</i> You can use *B* to match all files with name containing with a B character.
	[Regular Expression (UNIX-style)] Include/Exclude all files/directories with name matching a regular expression.
	 Notes: The pattern of a backup filter is case sensitive. If multiple patterns are required, please add the pattern one by one e.g.: *.doc and then *.xls
	Matching pattern - defines the pattern of the file selection, e.g., *.doc, *.png.
	Apply This Filter to all files/folders in – you can choose to apply this filter on "All selected sources" or a selected folder of your choice
	Apply to - apply the filter to the File and/or Folder level
	Example 1 If you want to back up all files, except all Word, Excel and PowerPoint documents, in your document directory (e.g. C:\My Documents), you should setup your backup filter as follows.
Use Cases	Match file/folder names by = Simple comparison end with Matching pattern = *.doc, *.xls, *.ppt Apply this filter to all files/folders in = This folder only C:\My Documents Apply to = File
	Example 2 If you want to include everything, except the "log" directory, under C:\Applications into a backup set, you should setup your backup filter as follows.
	Match file/folder names by = Regular Expression (UNIX-style) Matching pattern = ^log\$

	Apply this filter to all files/folders in = This folder only C:\Applications Apply to = Folder
	Example 3 If you want to exclude all directories named "log" from the backup set files with file name starting with "B" and ending with "*.doc" under C:\My Documents into the backup set, you can use a regular expression of "^B.*\.doc\$" to do your selection. The filter backup can then be setup as follows.
	Match file/folder names by = Regular Expression (UNIX-style) Matching pattern = ^B.*\.doc\$ Apply this filter to all files/folders in = This folder only C:\My Documents Apply to = File
	Example 1 If you want to back up all files, except all Word, Excel and PowerPoint documents, in your document directory (e.g. C:\My Documents), you should setup your backup filter as follows.
	Match file/folder names by = Simple comparison end with Matching pattern = *.doc, *.xls, *.ppt Apply this filter to all files/folders in = This folder only C:\My Documents Apply to = File
	Example 2 If you want to include everything, except the "log" directory, under C:\Applications into a backup set, you should setup your backup filter as follows.
Use Cases	Match file/folder names by = Regular Expression (UNIX-style) Matching pattern = ^log\$ Apply this filter to all files/folders in = This folder only C:\Applications Apply to = Folder
	Example 3 If you want to exclude all directories named "log" from the backup set files with file name starting with "B" and ending with "*.doc" under C:\My Documents into the backup set, you can use a regular expression of "^B.*\.doc\$" to do your selection. The filter backup can then be setup as follows.
	Match file/folder names by = Regular Expression (UNIX-style) Matching pattern = ^B.*\.doc\$ Apply this filter to all files/folders in = This folder only C:\My Documents Apply to = File

> <u>Destination</u>

This section allows administrator to predefine backup destination for backup sets. The following table explains each setting item under the **Destination** tab, with a brief description of what the setting is about and all the configurable items.

Destination					
What is this setting about?	Pre-define backup destination when backup users create a backup set. Multiple settings can be created in this menu if you wish to define different default destinations for different backup modules.				
What are the configurable items?	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to Backup Mode – select the files transfer method during backup Sequential – backup files are sent to the backup destination one by one, one after another Concurrent – multiple files are sent to the backup destination at the same time Maximum concurrent backup destinations (only if you have selected Concurrent as the Backup Mode) – select the maximum number of files allowed for uploading to the backup destination Predefined Destination – select the predefined destination you have configured in the Predefined Destinations Tab section. 				

> In-File Delta

In-file delta technology is an advanced data block matching algorithm with the intelligence to pick up changes (delta) of file content between two files.

Using this algorithm, daily backup of large files over low-speed internet connection is made possible because it requires only the changes of information since the last backup to be sent over (assuming that the full backup of the file has been saved on the backup server already).

This section allows administrator to predefine the In-File Delta settings for backup set. The following table explains each setting item under the **In-File Delta** tab, with a brief description of what the setting is about and all the configurable items.

In-File Delta

What is this setting about?	Predefine In-File delta setting for backup set. Multiple settings can be created in this menu if you wish to pre-define different in-file delta settings for different backup modules.				
	Incremental In-file delta				
What kind of in-file delta	Incremental Delta will facilitate ease of backup. The delta is generated by comparing with the last uploaded full or delta file. Delta generated with this method is smaller and uses the least bandwidth. However, for restoration, the full file and all deltas up to the required point-in-time are required to be restored and merged.				
type are there?	Differential In-file delta				
	Differential Delta will facilitate ease of restore. The delta is generated by comparing with the last uploaded full file only. Delta generated with this method will grow daily and uses more bandwidth. However, for restoration, the full file and a single delta is required to be restored and merged.				
What are the configurable items?	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to Default Type – type of backup method (Incremental or Differential) Advanced settings In-File Delta block size – defines the size of block used when detecting changes between last full or delta file and the file to be backed up. In-file delta backup with small block size Produce a smaller delta file due to a more precise comparison Require more processing power on the client machine Comparison may take longer to complete Require more Java memory In-file delta backup with large block size:				
	- Require less Java memory				
	For most cases, 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				
	Smaller than 2GB 4KB				

	2GB – 8GB	8KB	
	Larger than 8GB	16KB	
►		in-file delta settin the set value, the	g. If the size of a file to be e in-file delta setting will not
	It is not necessary to perf because backing up the v whole file instead reduce	whole file does no	t take long. Backing up the
*	Upload full file when eit of the full file will be perfo		ditions is met – a backup condition is met:
	- Number of deltas exceeds the set va		e number of delta file
	is to ensure that a f	ull file backup is p , as it is preferable	size) is over – this setting performed for file with e to upload a full file p restore the file
>	Weekly variations for ov in-file delta setting in the week	-	type – override the default d on selected day(s) of a
×	Yearly variations for over variations – override the Type field as well as the overriding default type" on either of the following	default in-file delt setting in the " We section on a sele	a setting in the Default
	specific day in a mo	onth. On this spec	variations - select a ified day in the month riation setting override the

Retention Policy

Retention policy defines the policies of persistent data management for meeting business data archival requirements. When a backup job is performed, for data that are modified or deleted on the client computer, their existing versions on the backup server (backup records) will be moved into retention area, while newly backed up files will be placed in the current data area.

Specifically, retention policy setting defines how long are the backup records kept in the retention area before they are deleted permanently from the backup server.

This section allows administrator to pre-define the Retention Policy for backup set. The following table explains each setting item under the **Retention Policy** tab, with a brief description of what the setting is about and all the configurable items.

Retention Policy			
What is this setting about?	Pre-define the retention policy for backup sets when they are created. Multiple settings can be created in this menu if you wish to define different default retention policy for different backup modules.		
	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to How to retain the files in the backup set, which have been deler in the backup source – choose between Simple and Advanced setting, which is explained in details below. Simple – enter a specific number of day or backup job number. retained data will be removed from the storage destination permanently after the set number of day or set number of job is Advanced – manage advanced retention policies by applying advanced configurations 		
	jurable	Daily	The past number of days on which different versions of your files are retained Set the number of day(s) on which the old version of data will be stored
What are the configurable items?		Weekly	The days within a week on which different versions of your files are retained Select the day(s) in a week (Monday – Sunday) on which the old version of data will be stored The number of weeks to repeat the above selection
			Enter the number of week(s) for the above setting to repeat
		Monthly	The days within a month on which different versions of your files are retainedSelect a day in a month on which the old version of data will be stored. You can either set:-An exact day (1-31) or-The (First/Second/Third/Forth/Last) of (Monday -Sunday)
			The number of months to repeat the above selection
			Enter the number of month(s) for the above setting to repeat

		The day within a quarter on which different versions of your files are retained
		Select a day within a quarter on which the old version of data will be stored. You can either set: - An exact day (1-31) or - The (First/Second/Third/Forth/Last) of (Monday -Sunday)
		Months of quarter
	Quarterly	Select the desired combination of months of quarter
	·	- (January, April, July, October)
		- (February, May, August, November)
		- (March, June, September, December)
		The number of quarters to repeat the above selection
		Enter the number of quarter(s) for the above setting to repeat
	Yearly	The day within a year on which different versions of your files are retained
		Select a day within a year on which the old version of data will be stored. You can set the day by using one of the following methods:
		 Select an exact day (1 – 31) in an exact month (January – December)
		 Select the (First/Second/Third/Forth/Last) of (Monday/Tuesday/Wednesday/Thursday/ Friday/Saturday/Sunday/Weekday/Weekend) in an exact month (January – December)
		 Select a day in a week (Monday – Sunday) in an exact week of a year (Week 1 - 53)
		The number of years to repeat the above selection
		Enter the number of year(s) for the above setting to repeat
		A specific day on which different versions of your files are retained
	Custom	Select a day on which the old version of data will be stored. You can set the day by using one of the following methods:
		 Select an exact day (1 – 31) in an exact month (January – December)

 Select the (First/Second/Third/Forth/Last) of (Monday/Tuesday/Wednesday/Thursday/ Friday/Saturday/Sunday/Weekday/Weekend) in an exact month (January – December) Select a day in a week (Monday – Sunday) in an exact week of a year (Week 1 - 53)
Year
Enter a specific year for the day set above to execute the retention policy

Command Line Tool

This section allows administrator to configure a Pre-Backup or Post-Backup command. Command such as batch file to stop and start an application before and after a backup job is completed, or other command such as to shut down the computer when a backup job is completed can be configured.

The following table explains each setting item under the **Retention Policy** tab, with a brief description of what the setting is about and all the configurable items.

Command Line Tool				
What is this setting about?	Predefine command line to execute before or after a backup is performed. Multiple settings can be created in this menu if you wish to pre-define different command line for different backup modules.			
	Destination			
	Name – name of the setting item			
	Applied Modules – modules to apply this setting to			
	Pre-Backup Command Line Tool – configure the pre-backup command line			
What are the	- Name – name of this command line setting.			
configurable items?	 Working Directory – directory which the pre-backup command will run at. 			
	- Command – Enter the pre-backup command to be run			
	Post-Backup Command Line Tool – configure the post-backup command line			
	- Name – name of this command line setting.			
	 Working Directory – directory which the post-backup command will run at. 			

	-	Command – enter the post-backup command to be run

➢ <u>Reminder</u>

This section allows administrator to enable the backup reminder feature where users will be reminded to run a backup job when they log off or shut down their computers. Reminder feature is only available on Windows platform.

The following table explains each setting item under the **Reminder** tab, with a brief description of what the setting is about and all the configurable items.

	Reminder				
What is this setting about?	Pre-define to turn on the reminder so that backup users will be reminded to perform backup when they log off or shut down their computers. Multiple settings can be created in this menu if you wish to define different settings for different backup modules.				
	 Destination Name – name of the setting item 				
What are the configurable	Applied Modules – modules to apply this setting to				
items?	Remind me to backup during Windows log off or shut down – turn on or off this feature				
	 Computer name – you can specify the computer's name for this reminder to enable on 				

Bandwidth Control

This section allows administrator to pre-define the limit for data transfer when performing backup and restore jobs.

NOTE

- The actual value will be around +/- 5% of the limit value when the bandwidth control set to below 32Mb/s. When the bandwidth control set to above 64Mb/s, the gap between actual value and limit value might be over 5%.
- > Network stability might influence the transfer rate fluctuation accuracy.

The following table explains each setting item under the **Bandwidth Control** tab, with a brief description of what the setting is about and all the configurable items.

Bandwidth Control

What is this setting about?	Pre-define the settings on limiting the data transfer rate when performing backup and restore jobs. Multiple settings can be created in this menu if you wish to pre-define different settings for different backup modules.			
	 Destination Name – name of the setting item Applied Modules – modules to apply this setting to Limit the transfer rate when performing backup and restore tasks – click to turn on or off this feature Mode 			
		Independent	Each backup and restore job has its assigned bandwidth	
What are the configurable items?		Share	All backup and restore jobs are sharing the same assigned bandwidth Note : Share mode does not support performing backup job on multiple destinations concurrently.	
	 Existing bandwidth controls – configure the bandwidth control details 			
		Name	Name of the bandwidth control setting item	
		Туре	Always – apply the bandwidth control settings at all times Only within this period – configure a specific	
			start time and end time in a day of a week for this bandwidth control setting to take place	
		Maximum transfer rate	Enter the maximum transfer rate allowed, in the unit of Kbit/s, Mbit/s or Gbit/s.	

> IP Allowed for Restore

This section allows administrator to predefine IP ranges that are allowed to perform restore. The following table explains each setting item under the **IP Allowed for Restore** tab, with a brief description of what the setting is about and all the configurable items.

IP Allowed for Restore

What is this setting about?	Pre-define the IP allowed for restore. Multiple settings can be created in this menu if you wish to pre-define different settings for different backup modules.
	Destination
	Name – name of the setting item
What are the configurable items?	Applied Modules – modules to apply this setting to
	IP Allowed for Restore- configure the IP ranges allowed for restore
	 From – restore allowed from this IP value
	- To - restore allowed up to this IP value

> Others

This section allows administrator to pre-define other configurations for backup sets. The following table explains each setting item under the **Others** tab, with a brief description of what the setting is about and all the configurable items.

	Follow Link
What is this setting about?	Administrator can pre-define whether to turn on the Follow Link feature. When this feature is on, not only the symbolic link or junction point will be restored, the directories and files that the symbolic link or junction point links to will also be restored. This feature is only applicable to File Backup module.
What are the configurable items?	 Name – name of the setting item Follow link of the backup files – check the box to enable this feature

	Volume Shadow Copy			
	Enabling the Volume Shadow Copy option will allow backup of local files that are exclusively opened during the backup process (e.g. Outlook PST file).			
What is this	Some requirements of the Volume Shadow Copy option include:			
setting about?	 Volume Shadow Copy can only be applied for local drive; exclusively opened file on network shared drive cannot be backed up even with the Volume Shadow Copy option enabled. 			
	 Volume Shadow Copy is available on Windows platforms (e.g. Vista / 2008 / 2008 R2 / 2012 / 2012 R2 / 7 / 8 / 10). 			

	 The user using the backup application must have administrative privileges to access the Volume Shadow Copy service on a computer.
	 At least one of the partitions on the machine must be in NTFS format.
	For more technical information on Volume Shadow Copy, please refer to the following page from Microsoft for details: http://technet.microsoft.com/en-us/library/cc785914(WS.10).aspx
	Administrator can pre-define whether to turn on the Volume Shadow Copy feature by default . This feature is only applicable to File Backup module.
What are the configurable items?	 Name – name of the setting item Enable Windows' Volume Shadow Copy for open file backup – check or uncheck to enable or disable this feature
	File Permissions
What is this	By enabling this option, file permissions of the operating system files will be backed up. File permission defines, for example, the right to view or change a file by the system owner/group/individual.
setting about?	Administrator can pre-define whether to turn on the backup of File Permissions by default .This feature is only applicable to File Backup module.
What are the	Name – name of the setting item
configurable items?	Backup files' permissions – check or uncheck to enable or disable this feature

	Archived Log Deletion
What is this setting about?	Administrator can pre-define whether the archived log files will be deleted after backup by default .This feature is only applicable to Oracle Database Server Backup module.
What are the configurable items?	 Name – name of the setting item Delete the archived logs after backup – turn on or off this feature Delete archived logs that are older than the following days – set the number of day(s) that the archived logs will be deleted when exceeding this number

Compressions

What is this setting about?	Compressing data before they are backed up brings faster backup and restore time and save storage space on the backup destination. Compression does not apply on Run direct backup sets for Hyper-V and VMware even this feature is on. Administrator can pre-define the default compression type for backup set. Multiple settings can be created in this menu if you wish to define different default compression types for different backup modules.
What are the configurable items?	 Name – name of the setting item Applied Modules – modules to apply this setting to Select compression type – select the desired compression type among No Compression, Normal and Fast (Compressed size larger than normal)

Preempted Backup Sets

This section allows you predefine a backup set that will be run a default backup set for backup user with this policy group setting. Backup user **CANNOT** remove this preempted backup set from their backup job once it is preset by the system administrator.

General	Proomntod	Backup Sets			
General User Settings	Freempteu	Dackup Jets			
Backup Set Settings	+				
Backup Set Settings GUI Settings Default Values Preempted Values		Name	Туре	Version	Platform
Default Values					
Preempted Values					
Preempted Backup Sets					
Mobile Settings					

Create a preempted backup set

Follow the steps below to create a preempted backup set

1. Click 🖶 under the **Preempted Backup Sets** section.

General	Decomments		Coto		
User Settings	Preempte	ed Backup	Sels		
Backup Set Settings	+ 🗊				
GUI Settings		Name	Туре	Version	Platform
Default Values					
Preempted Values					
Preempted Backup Sets					
Mobile Settings					

2. Enter the **Name** of the new backup set, the **Platform** on which the backup set will run on, and select the backup set type from the **Type** dropdown box.

١dd	New Backup Set
Gene	ral
Name	
default	-backup-set-name-2
Owner	
Platforr	n
Wind	ows 🔻
Туре	
File B	ackup 🔻

The choices for Platform

- Windows
- Mac
- Linux

The choices for backup set types

- File Backup
- IBM Lotus Notes Backup
- MS Exchange Mail Level Backup
- MS Hyper-V Backup
- MySQL Backup
- Storage Craft ShadowProtect Backup
- VMware Backup

- IBM Lotus Domino Backup
- MS Exchange Server Backup
- MS SQL Server Backup
- MS Windows System Backup
- Oracle Database Server Backup
- MS Windows System State Backup

In our example, the new backup set is called **default-backup-set-name-2** which is a File Backup type that will be run on Windows.



3. Specify the backup source for the new backup set. The selection items of this page varies depending on the backup set type you have chosen. Below is an example of

creating a File Backup set.

Add New Backup Set
Backup Source
Common Files and Folders
Desktop
Documents
Favourites
Outlook
Outlook Express
Vindows Mail
Vindows Live Mail

4. You can apply filters to the backup source, select other backup source or deselect backup source. Click to get redirected to the relevant section in the previous chapter for configurations details.

Apply filters to the backup source
+ 🗊
Other Selected Source
+
Deselected Source
+

5. Click to continue.

If necessary, add a Backup Schedule for this backup set by sliding the Run scheduled backup for this backup set option to the right and clicking .

schedul	ed backup for this backup set			
Manage s	schedule			
 1				
	Name	T	vpe	
	Backup Schedule	D	aily	
	ed backup on computers named			
Run scheduli				

• Enter the information of the new backup schedule you want to add. Click H to continue.

Backup Schedule	
Details	
Name	
Backup-Schedule-1	
Type □aily ▼	
Start backup at □8 ▼ : □00 ▼	
Stop until full backup completed V	
Run Retention Policy after backup	
	+ X ?

• The new backup schedule, **Backup-Schedule-1** in our example, can be seen under the **Manage schedule** list.

	v Backup Set	
n schedul	led backup for this backup set	
Manage s	schedule	
+		
	Name	Туре
	Backup Schedule	Daily
	Backup-Schedule-1	Daily
Run schedul	led backup on computers named	
*		

7. Add a new backup destination for this backup set.

Add New	Backup	Set			
Destination					
Backup M	_				
Predefine	d Destination				
	Name	Destination Storage	Info	Quota	
				()	X ?

- From the **Backup Mode** dropdown box, select either **Sequential** or **Concurrent**. In our example, we select **Sequential**.
- Add a Predefined Destination set by your backup service provider by clicking igoplus.

Check the box next to the predefined destination you want, then click \blacksquare to continue.

	Fieueiiiid	ed Destination		
dd predefined destination to this backup set below. If there are no predefined destinations created, you need to go to "AhsayCBS > Backup Server > asic > Predefined Destination" and create the appropriate destinations first.				
	Name	Destination Storage	Info	Quota
	Name Alans Storage	Destination Storage	Info Microsoft Account:	Quota 10G

• The new predefined destination, **Group Storage** in our example, can be seen under the **Predefined Destination** list.

Add New Back	up Set		
Destination			
Backup Mode			
Sequential ▼			
Predefined Des	stination		
Name	Destination Storage	Info	Quota
Group Storage	\$ 7	Dropbox Account:	Unlimited

If you would like to choose other standard destination, you will have to configure in the client backup agent (AhsayOBM/AhsayACB) after you finish creating the backup in AhsayCBS.



- 8. Select to enable or disable to encrypt the backup data. If you choose to enable this feature, you can select either **Default** or **Custom** for the Encryption Type. Refer to <u>Others</u> section under the Default Values section for details on configuration.
- 9. Enter the Windows User Authentication information. This is needed for backup set with backup schedule and network shared drive selected as backup source. Enter the domain name and user name for AhsayOBM to access the network location.
- 10. Click 🔲 to save.

/dd	New Backup Set
Wind	lows User Authentication
Domai	in Name (e.g. ahsay.com) / Host Name
doma	in name
Usern	ame
usern	ame
Passw	vord

11. A new backup set called **default-backup-set-name-2** is created and can be seen in the Preempted Backup Sets list.

General	Preempted Backup Sets			
User Settings				
Backup Set Settings	+ ≡			
GUI Settings	Name	Туре	Version	Platform
Default Values	default-backup-set-name-2			<u>*</u>
Preempted Values				
Preempted Backup Sets				
Mobile Settings				

Mobile Settings

This section allows administrator to configure settings for AhsayMOB backup users.

General	Destinations Visible to Users			a
User Settings				<u> </u>
Backup Set Settings	Encryption Key			a
GUI Settings				<u> </u>
Default Values	Default Values			
Preempted Values	Backup Source Settings	-		1
Preempted Backup Sets	Dachup Source Securigs			
Mobile Settings	Backup Schedule Settings			1
		\checkmark	X	? 1

Destinations Visible to Users

There are two kinds of destinations backup users can choose from when creating a backup set, they are the Predefined Destination and Standard Destination. Only the destinations selected in this menu will be available for backup users to choose from when they are creating a backup set.

Below is a brief explanation on the differences between the Predefined Destination and Standard Destination.

Predefined Destination vs Standard Destination

Predefined Destination - The predefined destination can be a single storage destination on the local drive where CBS is installed, mapped drive, cloud storage or FTP server, or a destination pool with a mix of storage options mentioned above. Before you can select a predefined destination in this menu, it must first be configured under the System
 Settings > Backup > Predefined Destinations. Refer to Predefined Destinations Tab for details on configuration.

 Standard Destination - Except for the AhsayCBS storage option, all other storage options under the Standard Destination belong to the backup users, whether it could be a single storage destination on the mapped drive, cloud storage or FTP server, or a destination pool with a mix of storage options mentioned above.

To configure the Predefined Destination

- 1. Turn on the **example** switch on the right under the **Destinations Visible to Users** section.
- 2. Click on the 🛨 button under the **Predefined Destination** section.



 Select the desired destination option, which has been defined in the System Settings > Backup > Predefined Destinations menu, by checking the box on the desired destination item.

Ado	d Predefin	ed Destination	
	Name	Destination Storage	Info
	Alans Storage	۵	Microsoft Account:
	Group Storage	\$ ₽	Dropbox Account:
	My-storage	▲	Google Account:
	GoogleDrive-1	▲	Google Account:
	AC_LCD2	A	Google Account:

- 4. Click the to confirm adding the predefined destination.
- 5. If you have multiple predefined destinations to add, repeat steps 3 -4 until all desired destinations have been selected.
- 6. Click to confirm.

To configure the Standard Destination

1. Turn on the **IDE** switch on the right under the **Destinations Visible to Users** section.

2. Click on the 🛨 button under the Standard Destination section.



3. Select the desired storage option from the drop-down menu as shown below.

Standard Destination
Local / Mapped Drive / Removable Drive 🔻
Local / Mapped Drive / Removable Drive
阿里雲 CTYun
Amazon Cloud Drive
Amazon S3
AWS S3 Compatible Cloud Storage
Google Cloud Storage
Google Drive Microsoft Azure
OneDrive
OneDrive for Business
Rackspace
OpenStack
Dropbox FTP
SFTP
Destination pool
AhsayCBS

- 4. Click the button to add the selected standard destination storage.
- 5. If you have multiple destination storages to add, repeat steps 3 4 until all desired storages have been selected.
- 6. Click to confirm.

Encryption Key

Once you enabled the encryption recovery option, the encryption key file is uploaded to the backup server. In case the user forgot the encryption key, you can still contact us to have it recovered. The recovered encryption key will be sent directly to the email address registered on the user account. Refer to the Encryption key section for further details.



> Default Values

You may configure the default values of the following two options which will apply to the AhsayMOB backup sets.

Backup Source Settings				
Mode	 Read Only – backup users can only read the backup source settings set by the system administrator but CANNOT edit the settings. Editable – backup users will be able to edit the settings on their own during 			
	the backup set creation process			
	Select the backup source type from the following choices:			
	• Audio*			
Destau	Contact Distance			
Backup Source	 Photo SMS* 			
Course	• Video			
	 WhatsApp* 			
	*Only available for AhsayMOB installed on the Android platform			

Backup Schedule Settings				
Mode	 Read Only – backup users can only read the backup source settings set by the system administrator but CANNOT edit the settings. Editable – backup users will be able to edit the settings on their own during the backup set creation 			
Backup on these days of the week	 Backup on these days of the week - select the days(s) in a week when you wish to perform backup (select from Sun to Sat) Start backup at – select a specific time when backups will be performed on the days you have selected from the previous setting item 			

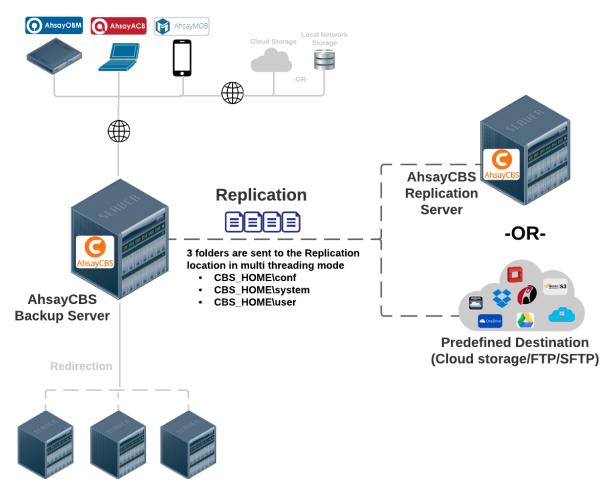
7 Replication

Overview

What is Replication?

AhsayCBS replication server provides an additional layer of data protection by providing an offsite backup store for synchronizing data from either a single or multiple AhsayCBS servers to provide high availability for your business needs. The replication feature is specially designed for replicating user home data hosted physically on AhsayCBS to either another AhsayCBS (Replication Server) or a predefined destination (e.g. cloud storage, FTP/SFTP or local/network storage) configured in the AhsayCBS backup server. The replication process is close to real-time and therefore can reduce the possibilities of significant data loss in the event of an AhsayCBS server outage. In case the AhsayCBS backup server is down, the replication server can be quickly converted into a backup server with minimal down time.

This feature is designed to provide replication services for AhsayCBS only and it does not provide general replication service for other files within the system. This means that you cannot use AhsayCBS replication to replicate your Windows/Linux/Unix system to another machine.



What technology is used for Replication?

During the **Resync** stage of the replication process (refer to <u>How does Replication Work</u> below for details), snapshot images of users' backup sets will be created and then sent to the replication server. By utilizing the snapshot image technology, the data on the backup server can be replicated in a rather short time and therefore close to real-time replication is made possible.

By utilizing the multi-threading technology, replication can now be processed faster than the traditional single thread replication. Refer to <u>Multiple Threads Replication</u> for further details.

Differences between v6 and v7 on Replication

Since AhsayCBS v7, the replication service has been revamped to empower you with a more reliable and secure replication experience. The table below explains the major feature differences between v6 and v7 on replication.

	Version 6	Version 7
Multi Threads Replication	Replication process is performed over single thread mode which takes longer time to complete.	The replication process is performed over multi threads mode where multiple backup sets are sent to the replication location concurrently. The number of threads for replication is also configurable by the backup user.
Support Replication to Cloud Storage	Only replication to AhsayRPS is possible.	Supports replication to either another AhsayCBS server or cloud storage (as defined in the predefined destination).
Replication Port	A dedicated port has to be defined for replication receiver to perform replication.	Replication is performed via the http/https (ports 80 and 443 by default) defined on AhsayCBS. No additional ports are required.
Real-time Monitoring Progress	Real-time replication progress cannot be monitored.	The real-time replication progress of each backup set can now be monitored on the AhsayCBS web console.
Replication of Individual Backup Sets Only	User Level - all backup sets from all backup users must be replicated when the replication feature is turned on.	Backup Set Level - replication of only selected backup sets is now possible.

How does Replication Work

Replication runs in 4 stages, namely **Pending**, **Resync**, **Replay** and **Sleep**. Refer to the diagram below for an overview of the replication process.

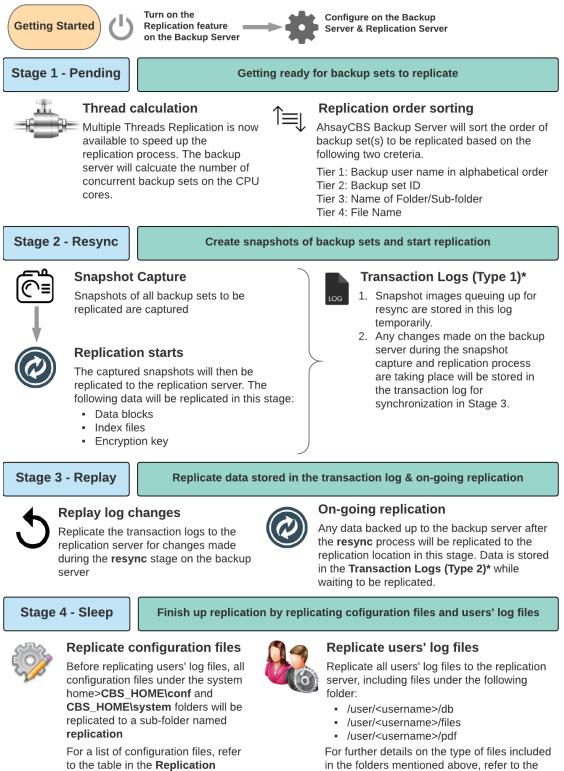


table in the **Replication Scope** section below.

* For more details on the differences between Transaction Logs Type 1 and Type 2, refer to <u>Transaction Log Location</u>.

www.ahsay.com

Scope section below.

Replication Scope

The following three folders on the local file system are included in the replication process.

IMPORTANT

- 1. Please be reminded that **ALL** 3 folders will be **CRITICAL** and **REQUIRED** if you need to rebuild AhsayCBS from scratch, or to recover system settings.
- 2. Only user data hosted physically on AhsayCBS will be replicated. Local drive includes, for example, local hard disk, mapped network drive, removable drive, external storage device connected to AhsayCBS with UNC path, etc. Certain types of external storage connection, for example FTP/SFTP, are not regarded as local drive even if it is connected through LAN, and therefore will not be included for replication.

• %CBS_INSTALL%\conf

The table below shows a list of files included in this folder.

Server Configuration		
Path	Description	
/conf/server.xml	Connector setting file	
/conf/afc.opt /conf/cbs.opt	CBS option files	
/conf/cbssvc.ini	Runtime setting file	
/conf/ca.crt /conf/ssl.crt /conf/ssl.key	Default certificate files	
/conf/cbs.json	CBS setting files	
/conf/lfsConfig.xml	Redirector configuration files	
CBS	6 Configuration	
Path	Description	
/conf/obs.json	Backup Server setting files	
/conf/lic.json /conf/license.xml	License files	
/conf/cbs.opt	CBS/OBS option files	
/conf/autoUpdate.bdb	Autoupdate index	
/conf/rpsSend.xml	Replication configuration files	
/conf/users.xml	Users' profile	

RPS Configuration		
Path	Description	
/conf/rps.xml /conf/rpsRecv.xml /conf/rps-recv.json	Replication configuration files	
RDR Configuration		
Path	Description	
/conf/rdr.xml /conf/rdr.json	Redirector configuration files	
/conf/rdr-lic.json /conf/rdr-license.xml	License files	
	Others	
Path	Description	
/conf/Branding/*.*	Branding directory	
/conf/Backup/*.*	Auto Save snapshot file	
/conf/certs	Only created after administrator importing a SSL certificate or generating a new CSR (Certificate Signing Request)	

• %CBS_INSTALL%\system

The table below shows a list of files included in this folder.

Group Policy Settings		
Path	Description	
/system/obs/policies/userGroup.xml	User group definition	
/system/obs/policies/policyList.xml	Policy group definition	

• %USER_HOME%

The table below shows a list of files included in this folder.

CBS User Profile	
Path	Description
/user/%username%/db	 This sub-folder contains files with the following info: Backup logs of all backup sets All logs and statistics records of all backup sets created on different client locations Records of email notification for backup/restore/setting change Restore logs Monthly storage record of each backup set Daily activities log

/user/%username%/files	 This sub-folder contains info files for all backup sets, with the following info: Backup set name Backup set ID Backup set type Version of the client's machine running the backup set
/user/%username%/pdf	This sub-folder contains all backup and restore reports in pdf format
/user/%username%/ %backup set ID%	 This sub-folder contains files with the following info: Data blocks and index file of all backups Encryption key file (if uploaded) Replication snapshots (if applicable)

Coexistence of v6 and v7 Formats Backup Data

When you have enabled replication for v6 backup sets on AhsayCBS v7, the backup data will be replicated to your replication destination in v6 data format. If, afterwards, a v7 upgrade of the AhsayOBM/AhsayACB is done and backup is performed for those backup sets, the backup data will be produced and replicated in v7 format. In that case, there will be two sets of backup data stored for the same backup set in separate locations under the **CBS_HOME\user**. The following illustrations show the location where the v6 and v7 format backup data stored.

> v7 format backup data

Backup set ID – unique ID for individual backup set

Name	Date modified	Туре
J490777956899	4/10/2017 10:12 AM	File folder
1490778216015	3/29/2017 6:09 PM	File folder
1490780883458	3/29/2017 6:09 PM	File folder
\mu db	4/7/2017 3:00 PM	File folder
🌗 files	3/29/2017 5:48 PM	File folder
鷆 pdf	3/29/2017 5:16 PM	File folder

Data blocks folder

Name	Date modified	Туре
퉬 blocks	4/7/2017 3:59 PM	File folder
📕 settings	4/7/2017 2:58 PM	File folder
퉬 Snapshots	4/10/2017 10:12 AM	File folder
🥮 v6Migrate.csv	4/7/2017 2:59 PM	CSV File

Name	Date modified	Туре
4 2017-03-29-17-01-07	4/7/2017 2:59 PM	File folder
4 2017-04-07-14-59-01	4/7/2017 3:00 PM	File folder
4 2017-04-07-15-55-06	4/7/2017 3:55 PM	File folder
퉬 2017-04-07-15-58-32	4/7/2017 3:58 PM	File folder
4 2017-04-07-15-59-16	4/7/2017 3:59 PM	File folder
index.b2b.91600.15b476ccefc.cgz	4/7/2017 3:59 PM	CGZ File
index.xml.3cb.15b476ccefc.cgz	4/7/2017 3:59 PM	CGZ File
index-s0.j00.100.15b476ccf0b.cgz	4/7/2017 3:59 PM	CGZ File
index-s0i0.fnl.138.15b4736bd01.cgz	4/7/2017 3:00 PM	CGZ File

A new folder created every time when a backup is run, indicated by date and time in the folder name

Data block in v7 format

Name	Date modified	Туре	Size
🗋 000000.bak	4/7/2017 2:59 PM	BAK File	4,257 KB
📄 000001.bak	4/7/2017 2:59 PM	BAK File	32,768 KB
000001_000001.bak	4/7/2017 2:59 PM	BAK File	32,768 KB
📄 000001_000002.bak	4/7/2017 2:59 PM	BAK File	32,768 KB
📄 000001_000003.bak	4/7/2017 2:59 PM	BAK File	32,768 KB
📄 000001_000004.bak	4/7/2017 2:59 PM	BAK File	32,768 KB
📄 000001_000005.bak	4/7/2017 2:59 PM	BAK File	12,960 KB
📄 000002.bak	4/7/2017 2:59 PM	BAK File	1,184 KB

> v6 format backup data

Under the files folder

Name	Date modified	Туре
J490777956899	4/10/2017 10:12 AM	File folder
J490778216015	3/29/2017 6:09 PM	File folder
1490780883458	3/29/2017 6:09 PM	File folder
\mu db	4/7/2017 3:00 PM	File folder
퉬 files	3/29/2017 5:48 PM	File folder
\mu pdf	3/29/2017 5:16 PM	File folder

Backup set ID – unique ID for individual backup set

Name	Date modified	Туре
1490777956899	4/7/2017 3:01 PM	File folder
J490778216015	4/7/2017 6:01 AM	File folder
1490780883458	4/7/2017 6:01 AM	File folder

Backup data stored under the *Current* folder

Name	Date modified	Туре
퉬 Current	3/29/2017 5:01 PM	File folder
📄 index.bdb	4/7/2017 3:01 PM	BDB File
📄 info.xml	4/7/2017 4:00 PM	XML Document
📄 r-index.bdb	4/7/2017 3:01 PM	BDB File
Name	Date modified	Туре
)} 0x00	3/29/2017 5:01 PM	File folder
\mu 0х0ь	3/29/2017 5:01 PM	File folder
🕕 0х0с	3/29/2017 5:01 PM	File folder
🐌 0x0f	3/29/2017 5:01 PM	File folder
0x01	3/29/2017 5:01 PM	File folder
🐌 0x1b	3/29/2017 5:01 PM	File folder
퉬 0x1c	3/29/2017 5:01 PM	File folder

NOTE

When data migration for v6 data is completed and AhsayCBS has replicated the v6 backup data, the v6 data will be deleted from both the backup server and replication server.

Transaction Log Location

Transaction log is a location storing backup data temporarily before they are enter the replication cycle mentioned in <u>How does Replication work</u>.

There are two different kinds of transaction logs which are located separately under the AhsayCBS folder. Refer to the information below for further elaboration.

Type 1 – transaction log stored in USER HOME

Location
%USER_HOME%/%BACKUP_SET_ID%/rps/{%DELETE_TIME%.%LOG_SEQ%}
What kind of transaction log does it store?
This folder stores the transaction log entries produced during the Stage 2 – Resync of the replication process. In specific, the transaction logs are the changes made on the backup server during the snapshot capture and replication process are taking place. This kind of data will only

Type 2 – transaction log stored in SYSTEM HOME

be replicated to the replication location in Stage 3 – Replay.

Location

%SYSTEM_HOME%/%USER_ID%/%BACKUP_SET_ID%/rps/replay-XXXXXX.log

What kind of transaction log does it store?

This folder stores the transaction log entries produced in **Stage 3 - Replay** mode where it stores data from the backup server pending for replication to the replication location in the on-going replication process.

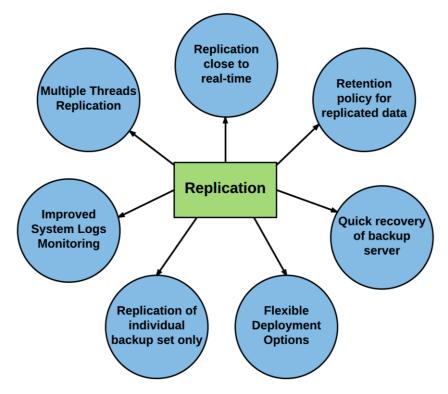
Replication Order

Replication is performed in the order of the tiers as shown in the table below.

Tier 1	Backup User Name
Tier 2	Backup Set ID
Tier 3	Name of Folder/Sub-folder
Tier 4	File Name

Within each tier, the order of replication is performed according to the standard defined by the **American Standard Code for Information Interchange (ASCII)**, refer to <u>http://www.ascii-code.com/</u> for details of the order.

Benefits of using Replication?



Multiple Threads Replication

 From version 7.5.0.0 AhsayCBS has a new feature to offer multiple threads replication. This is an enhanced feature which speeds up the replication by allocating a process thread to handle a backup set's replication and to ensure the replication did not have a negative impact on the overall performance of AhsayCBS backup server. The number of concurrent backup sets to handle will be proportional to the number of CPU cores which is calculated by the following formula.

Number of concurrent backup set to replicate = INT ((N+1)/2)

NOTE

INT is the function to calculate the integer value, while **N** is the number of cores in the CPU. For example, an AhsayCBS server with a 16 core CPU, up to 8 concurrent replication threads can be configured.

For replication of v6 backup sets on AhsayCBS v7, only single thread replication is supported.

The number of backup sets to replicate concurrently can also be configured by the backup user. Refer to <u>Setting the Number of Backup Sets to Replicate Concurrently</u> for further instructions.

 From AhsayCBS v7.13.0.6 or above, for underutilized AhsayCBS backup servers running on high performance hardware and storage configurations, with spare network bandwidth capacity, there is an option to increase the maximum number of replication threads equal to N, the total number of CPU cores. For example, an AhsayCBS server with a 16 core CPU, up to 16 concurrent replication threads can be configured.

Warning

Please consider carefully before increasing the maximum number of concurrent replication threads on your AhsayCBS backup server. As this change could have a negative impact on your AhsayCBS backup server and therefore your backup service, for example:

- > The AhsayCBS backup server could become unresponsive or sluggish.
- > Slow AhsayOBM/AhsayACB backup/restore performance.
- Your AhsayOBM/AhsayACB clients may be unable to connect to the backup server, resulting in missed backups.

The AhsayCBS replication server may become overloaded if it is unable to process the increased number of threads and data sent from the AhsayCBS backup server.

Example:

iii. Assumptions:

- AhsayCBS v7.13.0.6 or above is installed.
- AhsayCBS Java heap size setting.

Increasing the number of concurrent replication threads will result in increased Java memory usage. As a general rule of thumb, twice as many replication threads will utilize twice as the amount of Java memory. Therefore, it is highly recommended to increase your Java heap size setting before using a higher replication thread setting, if the peak Java memory usage on your AhsayCBS server is over 50% of the maximum Java heap size setting. (The peak Java memory usage can be obtained from **[Monitoring] > [Dashboard] > [Memory]**)

For example:

- If current maximum Java heap setting is 4096M and the peak Java memory usage exceeds 2048M, then you should consider increasing the maximum Java heap size up to 8192M.
- If current maximum Java heap setting is 4096M and the peak Java memory usage is only 1500M, you may not need any maximum Java heap size adjustment in the short term.

Please refer to the following link to check about the details of how to modify the Java heap size of AhsayCBS : How to modify the Java FAQheap size of AhsayCBS?

- AhsayCBS installation path: %CBS_INSTALL_PATH%
 - Windows: C:\Program Files\AhsayCBS
 - Linux/Unix: /usr/local/cbs
 - AhsayUBS: /ubs/mnt/eslsfw/obsr
- iv. Steps:
 - Shutdown the AhsayCBS service.

- Using a text editor open the %CBS_INSTALL_PATH%/conf/cbs.opt file
- Add the following setting to the end of the file and save: com.ahsay.cbs.obs.config.Index.RepMaxThreads=true
- Restart the AhsayCBS service.
- Icogin to the AhsayCBS web management console.

Go to **[Replication] > [Sending Data]** and click on the "**No. of backup sets to replicate concurrently**" and select the number of replication threads you wish to configure.

Example: An AhsayCBS backup server with 16 core CPU

G AhsayCBS		
Replication		
	o a Receiver of an AhsayCBS replication server. Configure the replication settings of the backup server below. All replication should be configured in "AhsayCBS > Backup Server > Basic > Predefined Destination" first.	
Replicate backed up data to another server	or predefined cloud storage	
To another AhsayCBS		
Host Name	Port (SSL)	
target.your-company.com	443	
Replicate User Password		
5 defined destination. Please add a destination 7 be in selected destination for storing replication 9 be in selected destination for storing replication 10 11 12 Jack 13 Jack 14 15 kup sets to replicate concurrently Auto v	to [System Setthgs] → [Basic] → [Predefined Destination] first	

Improved System Logs Monitoring

The Replication Logs section in the AhsayCBS console provides a consolidated view of all replication sending and receiving logs to allow a one-stop monitoring of the replication activities.

Replication Close to Real-Time

The synchronization process does not require stopping or interrupting any backup/restore operations. As the replication module will be replicating the backup data in 4 modes, pending, sleep, resync and replay mode. These 4 modes are used to identify the mode of the replicating backup.

- Pending backup set pending for replication
- Resync responsible to create a snapshot of the current system configuration and user backup files
- Replay replay the changes that happened during the resync mode
- Sleep Backup sets that have finished replicating the backup data

When new backup data are available on the backup server, it will arrange into the above mode of replication which will be replicated to another AhsayCBS (Replication Server) or a predefined storage immediately. Refer to the <u>How does Replication Work</u> section for further details on the 4 replication modes.

Replication of Individual Backup Set Only

Instead of replicating all backup sets from all backup users, you now have the flexibility to select specific user's backup set(s) from the Backup Server to replicate to either another Replication Server or a predefined storage.

You can select the desired backup sets for replication when you create a replication sending account, refer to <u>Configuration on the Replication Sending End</u> for further details.

Retention Policy for Replicated Data

When a snapshot of the backup data on the backup server is replicated to the replication server, the older version of the snapshot will be moved to the retention area for a set period of time before it will be deleted permanently from the replication server. This feature is useful in case if you have to recover data on the backup server from the past.

This configuration can be set when you create a replication receiver, refer to the <u>Create a</u> <u>Replication User Account</u> section for further details.

*This feature applies only to replication to CBS server.

Flexible Deployment Options

The replication service can be deployed in various options, including another AhsayCBS server, cloud storage, NAS storage connected via FTP/SFTP/local network, etc. It is also possible for multiple backup servers to replicate data to a single AhsayCBS replication server.

Since AhsayCBS v7.11.0.0, you can even replicate v6 backup sets to a receiver on a v7 replication server before the backup sets undergo the data migration process. This new deployment option gives you greater flexibility to gradually migrate the backup sets in v6 format to v7 format after the backup server is upgraded to v7, while the backup sets in v6 format will still be replicated to provide you with data protection.

For more details on deployment, refer to the <u>Deployment Options and Comparison</u> section.

Quick Recovery of Backup Sever

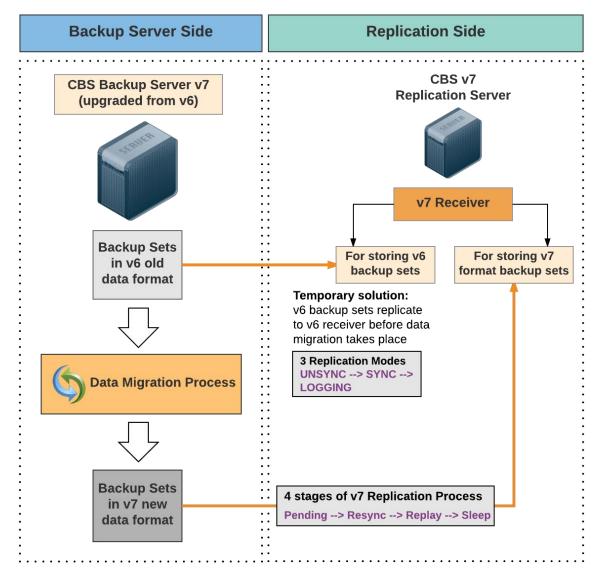
The primary purpose of replication is to provide an extra layer of protection to the data on the backup server in case of disaster like power outage or data corruption. We also understand that it is critical to keep the data recovery process fast so as to minimize interruption to your backup services to clients, that is why we have taken another step forward to simplify the transitioning between replication server and backup server to make the recovery process as fast and seamless as possible. Refer to the <u>Recovery Method</u> section for further details.

Replication of v6 backup sets on AhsayCBS v7

From v7.11.0.0 or above you can replicate v6 backup sets to a receiver on a v7 replication receiver, this feature can be set under the **[Backup / Restore] > [Sending Data] > [Replication]** page.

The v6 backup set replication feature is designed as a temporary solution to provide extra protection during data migration (conversion from v6 data format to v7 data block format) on a v7 backup server after an upgrade from v6 to v7, it is not intended to be used as a permanent replication solution. Once the data migration process is completed for all backup user accounts, the v6 replication feature should be disabled as v6 backup set data would already have been automatically removed post data migration.

Details of the v6 replication status can be viewed under [Monitoring] > [Replication Logs] > [Replication Sending].



Note: For further details and instructions on backup set data migration from v6 to v7 format, refer to the <u>Backup Data Migration</u> section.



Requirements

- 1. Both the AhsayCBS Backup Server (sender) and AhsayCBS Replication Server (receiver) must be on v7.11.0.0 or above.
- 2. v6 backup set replication must be enabled on both the backup server and replication server.
- 3. Replication license modules are required for replication of v6 backup sets.
- 4. The v7 replication on AhsayCBS must be enabled to another replication server.
- 5. A separate dedicated replication port (default port 9444) is required.

Limitations

- 1. v7 replication must be enabled to another AhsayCBS server in order to use the feature. As replication to predefined destination does not support replication of v6 backup sets.
- 2. Replication of v6 backup sets is supported using a single thread.
- Only v6 backup set data found in the %USER_HOME%\%USERNAME%\files folder will be replicated. The replication of other folders and files are handled by v7 replication process.

Before Getting Started

Requirements and Best Practices

License Information

The pricing unit of AhsayCBS Replication Server module is per device to be replicated. If you will replicate to another AhsayCBS, a CBS module license will also be required.

For inquiries please contact the Sales team at Ahsay by email at <u>sales-kb@ahsay.com</u> or call our International Sales Hotline +852 3580 8091.

Version / Platform Compatibility

While AhsayCBS can be deployed on Windows, Linux, FreeBSD, or Solaris x64 platform, it should be noted that only some of the version and platform combinations are supported as illustrated below.

E	Backup Server	Re	Replication Server	
Version	Platform	Version	Platform	Compatible?
V7	Windows	V7	Windows	Yes
V7	Linux/FreeBSD/Solaris x64	V7	Linux/FreeBSD/Solaris x64	Yes
V7	Windows	V7	Linux/FreeBSD/Solaris x64	Yes
V7	Linux/FreeBSD/Solaris x64	V7	Windows	No*
V6	Windows	V7	Linux/FreeBSD/Solaris x64	Yes
V6	Linux/FreeBSD/Solaris x64	V7	Windows	No*

* The incompatibility is a result of the limitations on Windows operating systems handling of Linux file/folder naming conventions.

Replication Server Storage Requirement

There is a possibility that after your backup data is replicated to replication server, the final data size on the replication server may be larger than the original data size on backup server. This situation could arise if there are differences in the way each respective storage device is formatted, i.e. different default block sizes or different files systems.

Your retention policy settings would also determine the storage required on the replication server. You will need to weight the advantages of using smaller **Restore Point Interval** which allows for a greater chances of recovery and or the **Retention Customization Policy** setting is configured for a large number of days against your replication server storage limitations.

Considering the factors mentioned above, the disk capacity of your replication server should by default be greater than your backup server to accommodate the replication data.



Location of the Replication Server

In terms of disaster recovery situation, the restore media should not be stored or located on the same premises, and these rules would also depend on different compliances, regulations or terms with your customers.

Here are some suggestions that you may need to consider:

 Set up the AhsayCBS Replication Server in another data center. In case you need to host the Replication Server with your Backup Server, you may consider hosting it in another server rack or another server room if possible.

Dedicated Server for Replication

Following are the pros and cons on setting up replication on a dedicated server.

Pros:

- Able to switch from Replication Server to Backup Server
- Fast in recovery hence small recovery window and short downtime
- Able to keep replicated snapshots in retention area in case recovery of data in past snapshots becomes necessary

Cons:

- Relatively more complex setup; requires datacenter hosting and maintenance cost
- Relatively expensive to expand storage
- Downtime required for regular maintenance and upgrade
- Upfront investment in hardware storage

Predefined Destination (Cloud Storage / FTP / SFTP) for Replication

Following are the pros and cons on setting up replication on a predefined destination.

Pros:

- Quick setup; low hosting and maintenance cost
- Cheaper cost for storage expansion
- No upfront hardware investment required

Cons:

- To recover the replicated data, it is required to set up new backup server and restore data from the predefined destination
- Slow in recovery hence large recovery window and longer downtime.

For more information and comparison on different replication environment setup, please refer to the <u>Appendix G</u>.

AhsayCBS Replication Partitioning

The AhsayCBS replication module makes heavy use of the **User Home** directory to process the snapshots of the backup sets during the Resync stage. During Resync stage, snapshots of backup sets will be written to the User Home in the form of transactions log files.

It is not recommended to use the O/S partition or drive as the System Home. If the System Home folder fills up, this will cause your O/S to become unstable and may even crash your AhsayCBS server. It is strongly recommended the System Home directory should be located on a dedicated local drive.

Replication Performance Tuning

The connection speed between the backup server and the replication location (whether it is an AhsayCBS server or a cloud storage) is typically the primary factor of the replication performance. However, even with a fast and stable connection between the backup server and replication location, the replication performance could be affected by the following factors:

- Poor disk I/O on the backup server when scanning and retrieving data files to be sent to the replication server.
- Poor disk I/O on the replication server when receiving and committing files to the receiver home.

Poor disk I/O can be attributed to:

- The use of network drives as AhsayCBS user and system homes on the backup server side
- The use of network drives as AhsayCBS receiver home(s) on the replication side.
- The use of a single large disk or volume for AhsayCBS user home.
- The use of a single large disk or volume for multiple AhsayCBS receiver home(s) on the replication side.
- Slow performing local hard drives or storage devices.

In order to improve overall replication performance, the following is recommended:

- A separate local drive for each AhsayCBS user home on the backup server side
- Distributing user accounts across multiple user homes to balance the I/O load
- A separate local drive for AhsayCBS system home on the backup server side
- A separate local drive for each receiver on the replication side

AhsayCBS Java Heap Size Setting

The machine with the Replication server installed may require more memory for additional feature such as retention policy to run.

- For a replication server with single receiver, a maximum Java heap size setting of at least 1024M is recommended.
- For a replication server with multiple receivers, a maximum Java heap size setting of at least 2048M is recommended.

When setting the maximum Java heap size for the replication server, please ensure this value does not exceed 50% of the RAM on the server, to allow sufficient memory for O/S processes and operations.

It is not recommended to set excessively high values for the maximum Java heap size, as this could result in performance issues on the replication server during internal Java VM garbage collection or memory recycling routines.

Firewall Settings

Since replication is performed via the http/https ports defined on the AhsayCBS backup server, after you have finished setting up your replication server, please ensure you have updated your firewall settings to allow network traffic through the those ports, which are typically **port 80** for **http** and **port 443** for **https**.

Don't Deploy the Backup and Replication Servers on a Single Machine

It is not recommend to configure and use both services on one single machine because it will completely defeat the purpose of the replication service as a backup or standby server for your backup server.

Moreover, the two services will compete for system resources, such as CPU and memory. This could affect the performance and stability of your backup service.

Dedicated Restore Drive on Replication Server

In order to facilitate a fast restore of snapshots from the retention area on the replication server, it is recommended the files are not restored to an existing receiver home drive to avoid affecting replication performance. Your replication server should be configured with a dedicated disk for restore purposes. Alternatively, an external USB drive can also be used.

Storage Requirement on Replication Server

The amount of space required to keep these replication depends on the amount of data changed on your Backup Server.

To calculate the amount of storage required for the retention settings, we can base on the following assumption and formula.

Assumption
There is a 2% data change in the backup server daily.
Formula
Total data storage required = $(1+0.02)^n \times \text{original data size}$, where \mathbf{n} = number of days of the retention customization policy
For n=30 days, it will be around 1.81 times of the original data size, and 3.28 times if n=60.
Replication Server with Multiple Receivers

If you have configured multiple receivers on your replication server to server more than one backup servers, it is recommended that each receiver is located on its own individual disk. The major advantage of this kind of setup is that it will minimize the I/O on each disk and therefore improve the replication performance.

Replication Using Cross Over Cable

It is not recommended to set up a connection between the backup server and replication server using a cross over cable. As from our experience this setup will result in connection and performance issues.

If the backup server and replication server are located on the same site, they should be connected via a switch.

Deployment Options and Comparison

There are three major methods to deploy the replication service. This chapter presents you with all the available deployment options, deployment combination and features comparison on different deployment methods, to help you decide which option to use.

Deployment Method

There are three methods to deploy the replication service as described below.

Method 1 (Recommended) – Deploy on a single AhsayCBS Backup Server replicate to another AhsayCBS Replication Server

Introduction

This is the typical deployment option, as well as the most recommended one, which features replication between a single AhsayCBS backup server and AhsayCBS replication server.

System Architecture $(\mathbf{0})$ AhsayOBM AhsavACE Serve Desktop / laptor AhsavCBS AbsavCR9<u>.....</u>.... Backup Replication Replication Server Backup Server Requirement Set up a new machine where you wish to host the replication server, and install AhsayCBS on it. In other words, you will have two AhsayCBS services running. One on the backup server, and the other on the replication server where you would like to have the backup data replicated to. Pros **Multiple Threads Replication** Multiple threads replication is supported to improve the replication speed. The actual number of threads that are available for use depends on the CPU power of the backup server. The more CPU cores the backup server Speed for has, the more threads it will have for replication. Refer to Multiple Threads Replication Replication for more details. and Restore

 High Hardware Performance for High Replication Speed

 A direct attached storage and SAN storage would provide good replicating speed.

Recovery	Fast Recovery in a Few ClicksIn case of a backup server outage, the replication server can be switchedas the backup server in a short time to minimize the system down time andinterruption to backup users.For instructions to switch a replication server to backup server, refer toMethod 3 - Startup Replication Server as Backup Server.	
Cons		
Cost	 <u>Higher Cost</u> Setup cost is higher Cost for hardware storage expansion is relatively higher Although this option involves higher setup cost, consider the higher replication/restore speed and recovery switching, it may be worth the investment. 	
Storage Provisioning	Slower Storage Provisioning Compared to cloud storage deployment, it takes more time and effort to assign the additional storage acquired when you need to expand the hardware storage.	

Method 2 – Deploy on a single AhsayCBS Backup Server replicate to a Predefined Destination

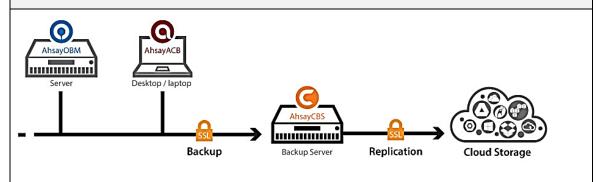
Introduction

This deployment option allows you to replicate your backup data on the backup server to a cloud storage, local/mapped drive/removable storage, or FTP/SFTP server.

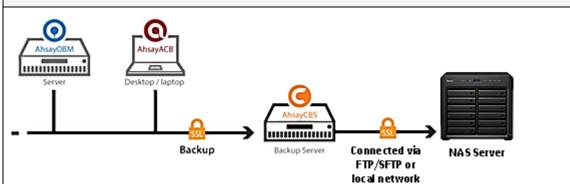
Refer to the list below for all the available redefined destination options.

System Architecture

Method 2a – Cloud Storage as Replication Destination connected via Internet



Method 2b – NAS Server as Replication Destination connected via FTP/SFTP or local network



Requirement

First, you need to have cloud storage account, a local/network/removable drive, or a FTP/SFTP server in place. Then, the predefined destination must have been set under the **System Settings** > **Predefined Destinations** menu so it can be used for the replication purpose.

Available Predefined Destinations					
Aliyun (阿里云)	CTYun (中国电信天翼云)	Amazon Cloud Drive	Amazon S3		
Amazon Compatible Cloud Storage	Google Cloud Storage	Google Drive	Microsoft Azure		
OneDrive	OneDrive for Business	Rackspace	OpenStack		
Dropbox	FTP	SFTP	Local / Mapped Drive / Removable Drive		
Pros	Pros				
Multiple Threads Replication	Multiple threads replication is supported to improve the replication speed. The actual number of threads that are available for use depends on the CPU power of the backup server. The more CPU cores the backup server has, the more threads it will have for replication. Refer to <u>Multiple Threads Replication</u> for more details.				
Cost	 Low Cost ➢ Setup cost is low ➢ Cost for storage expansion, especially on cloud storage, is relatively cheaper 				

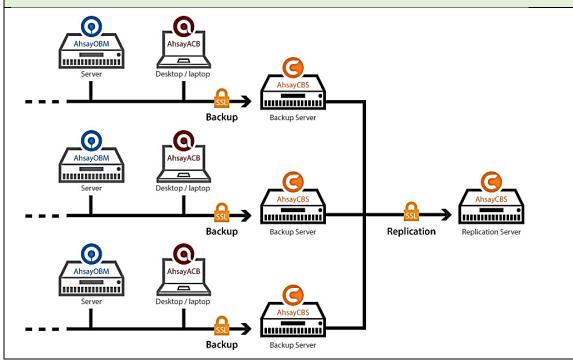
Cons			
Speed of Replication and Restore	Slower Upload Bandwidth The replication and restore speed is subject to the connection speed to the predefined destination, and administrator may not always have control over the bandwidth.		
Recovery	 Longer Recovery Process There is no quick way to restore the replicated data from the predefined destination to the backup server. To recover the replicated data on a predefined destination, you have to: Setup a new machine. Install Ahsay CBS. Download the replicated files from the predefined destination back to the Backup Server. 		

Method 3 – Deploy on multiple AhsayCBS Backup Servers replicating to another AhsayCBS Replication Server

Introduction

This deployment option allows you to replicate backup data from multiple AhsayCBS backup servers to an AhsayCBS Replication Server.





Requirement

Set up a new machine where you wish to host the replication server, and install AhsayCBS on it.

In other words, you will have multiple AhsayCBS services running. Each backup server runs on its own license, while the replication server where you would like to have the backup data replicated to requires another license as well.

Pros			
Cost	<u>Lower Setup Cost</u> You only require to have one replication server to accommodate replication from multiple backup servers, instead of one-to-one replication between backup server and replication server.		
Single Replication Point Management	With only a single replication server, this deployment option allows you to centrally manage the replication settings and view replication status on the replication server web console, As opposed to the <u>Method 1</u> deployment where you have to access multiple AhsayCBS web console pages for settings and management.		

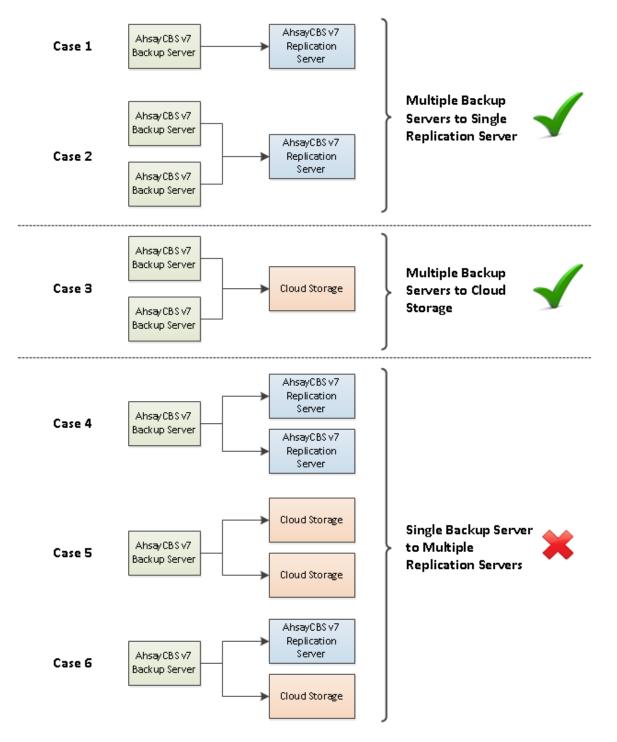
Comparison between Deployment on AhsayCBS and Cloud Storage

	Deploy on AhsayCBS Replication Server	Deploy on Cloud Storage			
Replication Retention	\checkmark	×			
The replication server creates snapshot of the replication data. Under the Replication Retention configurations, Restore Point Interval can be configured to define the number of days between each retention snapshot; Retention Customization Policy can be configured to define the number of days before an existing retention snapshot is removed from the replication server. Click <u>here</u> to see details of this configuration.					
Startup Replication Server as Backup Server	✓ ×				
This feature allows you to quickly convert your AhsayCBS replication server into AhsayCBS backup server in the event of a backup server down, so that you can keep serving the backup users to minimal impact to your business. Refer to <u>Method 3 - Startup Replication Server as</u> <u>Backup Server</u> for detailed steps to perform this recovery.					
Replicate Multiple Backup Servers	✓	1			
It is possible to replicate backup data from multiple AhsayCBS backup servers to another AhsayCBS replication server or cloud storage. This gives you the convenience of hosting backup data of multiple backup servers in one single replication server for the purposes of cost saving and easier management. Refer to <u>Deployment Combinations of Backup and Replication</u> Servers for more details.					

Support v6 Backup Set Replication	✓	×			
This feature gives you the flexibility to back up not only v7 format backup sets, but also the v6 ones to the replication server, before the v6 format backup sets undergo the data migration process. Refer to <u>Replication of v6 backup sets on AhsayCBS v7</u> for further details.					
Quick Storage ProvisioningX					
As time goes by, your replication data may fill up the capacity on your AhsayCBS replication server or cloud storage and you will have to expand the storage capacity to accommodate the replication data. Comparing to AhsayCBS deployment, cloud deployment allows a hassle-free storage upgrade where you only have to pay your cloud storage service provider to get the upgrade done.					
Upfront Hardware Investment	✓	×			
Depending on your organization's budget on deploying the replication service, it is generally more cost-saving to deploy the replication service on cloud storage instead of the AhsayCBS as you do not need to invest on hardware and hosting upfront.					

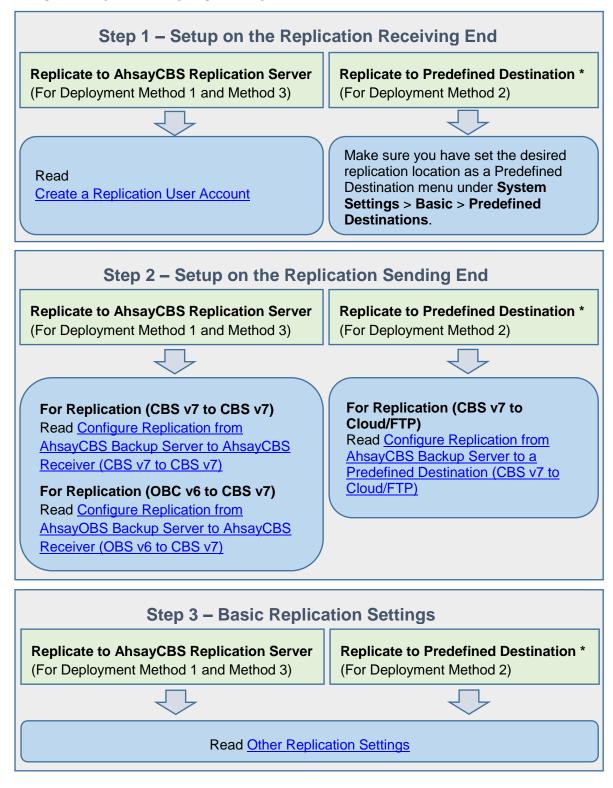
Deployment Combinations of Backup and Replication Servers

It is only possible for a single replication server or cloud storage to host replication data from multiple backup servers, but not the other way around, i.e. a single backup server replicating to multiple replication servers or cloud storage destinations. Refer to the illustration below for details on the possible deployment combinations.



Deployment

Major Steps to Deploy a Replication Service



* Replication to Predefined Destination **DOES NOT** support deployment for v6 backup sets on CBS v7

Configuration on the Replication Receiving End

Create a Replication User Account

Before an AhsayCBS/AhsayOBS backup server can replicate backup data to another AhsayCBS replication server, a receiver user account must be created on the AhsayCBS replication server first. Follow the steps below to create a replication receiver account.

1. Log in to the web console on the replication receiving end, go to **Replication > Accepting Data**.



2. Click the **Create** (+) button in the **Manage Receiver** section. The **Add New Receiver** page appears.

C Ahs	ayCBS					
Receiver						
		g data from one corresponding erver to such receiver. Manage			'ou need to add a receiver first and th	nen you can replicate c
Manage	Receiver 🕜					
+						
	ogin Name	Bind to IP address	Enable	Before V7	Enable V6 Backup Sets	Compression

3. Set the login name, password and alias of the receiver account.

Add New Receiver
Add a new receiver to receive replication data from another AhsayCBS.
Receiver User Account
Create a user account for this receiver.
Login Name
Password
Alias

4. Configure the source backup server host settings, including the http/https protocol, source backup server host name and port number.

Source Backup Serv	er		
Enter the server and user info	rmation of the source ba	kup server that will replicate the bac	kup data to this receiver.
Backup Server Host			
http V	80		
Backup Server Version			
7 •			

Backup Server Host – IP address / host name of the backup server

Backup Server Version – select the source backup server version.

If you select 7, it means the source backup server is an AhsayCBS version 7 backup server.

If you have upgraded your backup server to v7 from v6, and still wish to replicate backup sets in v6 format before they are migrated to v7 format, make sure you select **7** in this menu.

- System User the system user login of the source backup server
- System Password the system user password of the source backup server

System User	
System Password	

If you select Before 7 as the backup server version, enter the bind to IP address and the replication port. "0.0.0.0" and "9444" are the default values, you can assign a specific IP if you have multiple network cards. For multiple backup servers' replication, a unique replication port number is required to set, such as "9444".

Bind to IP address		
0.0.0.0	9444	

5. Switch the **Enable V6 Backup Sets Replication** on if you will replicate v6 backup sets to the replication server.

Enable V6 Backup Sets Replication			
Bind to IP address			
0.0.0.0	9444		

6. Configure the retention settings for the replicated data.

Retention Setting
Configure retention settings for the replicated data.
Restore Point Interval
Retention Customization Policy 60 Days

- Restore Point Interval defines the number of days before new snapshot of the replicated data will be taken and stored in the retention area. A retention snapshot will be taken only when the following two conditions are met:
 - There is data received from the backup server
 - Restore Point Interval has reached

No retention snapshot will be taken if there is no data received, even when the Restore Point Interval has reached.

- Retention Customization Policy defines the number of days the old snapshot copies to be retained in the retention area.
- 7. Click the icon at the bottom right corner to proceed when you are done with settings.

- 8. Set the default home directory for this replication, and set up the path to store the user homes.
 - The following is an example of a v7 receiver setup. In v7 receiver setup, you will be able to configure the default home directory, as well as replication home directory for individual backup server user home.

Add New Receiver	
Add a new receiver to receive replication data fro	m another AhsayCBS.
Receiver Home	
Configure the Receiver Home(s) where this receiver wi	III use to store all the data replicated from the corresponding backup server.
Default Home Directory	
C:\Program Files\AhsayCBS\system\rps\rcvshome\	
Backup Server User Home	Replication Home
D:\AhsayCBS\user	
D:\AhsayCBS\user1	

NOTE If AhsayCBS is receiving multiple backup servers, please use unique path for each receiver's "Replication Home".

In v6 receiver, you can only set up the default home directory.

NOTE

It is recommended to configure the default home directory to a non-system drive (i.e. not C:\ drive), especially when there are v6 backup sets, as the replication transaction log files may fill up the disk space and cause the operating system become unstable.

9. Click and at the bottom right corner to confirm the configuration.

Editing Replication Receiver

You can edit the configurations of the replication receiver after it has been set up.

- 1. Go to **Replication > Accepting Data** on the AhsayCBS web console on the replication receiver side.
- 2. Click on the replication receiver account under the **Manage Receiver** section which you wish to edit configurations for.
- 3. Revise the desired replication receiver item, then click and at the bottom right corner to confirm the changes.

Configuration on the Replication Sending End

Enable and configure the replication feature on the backup server side by following the corresponding sub-chapter below depending on the backup server version or replication destination.

AhsayCBS v7 Backup Server to AhsayCBS v7 Receiver

The following example is a v7 (backup server) to v7 (replication server) replication setup. For earlier version setup, please refer to <u>Configure Replication from AhsayOBS Backup Server to</u> <u>AhsayCBS Receiver (OBS v6 to CBS v7)</u> for details.

Note: If you will replicate v6 backup sets on CBS v7 server to another CBS v7 replication server, follow the steps below for setup and make sure you turn on the **Replicate v6 backup sets to v7 server** option in step 7.

- Make sure you have created a replication receiver account on the receiving end of the AhsayCBS server first. Refer to <u>Create a Replication User Account</u> for detailed instructions.
- 2. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



3. Switch the Replicate backed up data to another server or predefined cloud storage on. The Replication configuration page shows as below.

🥑 Ahsay	CBS			
Replication				
You can replicate this backup server to the cloud, or to a Receiver of an AhsayCBS replication server. Configure the replication settings of the backup server below. All replication destinations, including cloud and AhsayCBS Receiver, should be configured in "AhsayCBS > Backup Server > Basic > Predefined Destination" first.				
Replicate I	backed up data to another serv	er or predefined cloud storage		
To anothe	r AhsayCBS			
Host Nan	ne	Port (SSL)		
10.16.6.8	9	443		
Replicate	User Name			
r1				

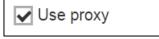
4. Select the **To another AhsayCBS** option, and then enter the **Host Name**, **Port**, **Replicate User Name**, **Replicate User Password** of the replication receiver.

Host Name	Port (SSL
target.your-company.com	443
Replicate User Name	

- Host Name IP address or host name of the replication server with AhsayCBS installed
- Replicate User Name the username of the receiver created on the AhsayCBS replication server
- Replicate User Password the password to log in to the receiver create don the AhsayCBS replication server.
- Check the Connect with SSL checkbox if you need to connect to the replication server with SSL.



6. If proxy is required to access the replication server, mark the **Use proxy** checkbox.



 If there are backup sets in v6 format to be replicated to the replication server, make sure you switch the **Replicate v6 backup sets to v7 server** on. The default port is set as "9444".

Replicate v6 backup sets to v7 server	
Port (SSL) 9444	

- 8. If you wish to configure the following replication settings, refer to <u>Other Replication</u> <u>Settings</u>.
 - Traffic limit for replication which limits the amount of bandwidth used by replication.
 - Selectable backup set for replication which allows you to choose individual backup set from selected users for replication.

- Concurrent backup set for replication which allows you to configure the maximum number of backup set allowed for replication at the same time.
- Cyclic Redundancy Check (CRC) Checking which allows you to enable this checking to run automatically for verifying the integrity of the replicated data.
- 9. Click the icon at the bottom right corner to confirm the configuration.

AhsayOBS v6 Backup Server to AhsayCBS v7 Receiver

It is suggested to upgrade your v6 backup server to v7 so that you can enjoy the latest features provided by the AhsayCBS. If you still wish to continue using the v6 backup server to replicate to a v7 receiver, follow the steps below for configuration of the v6 backup server.

- Make sure you have created a replication receiver account on the receiving end of the AhsayCBS server first. Refer to <u>Create a Replication User Account</u> for detailed instructions.
- 2. In your backup server, navigate to **Manage System** -> **Replication Config**, then enter the username, password, target host and connecting port.

Manage System <u>Mar</u>	nage Log Manage User Manage Group Policy Manage Sys
Server Configuration F	Routine Job Software License Replication Config Other O
🗹 Enable Replicati	on
Username	: v6replication
Password	:
Target Host	: 10.20.7.34 Port : 9444
	Update

3. Click **Update** to confirm the settings.

|--|

The index files stored in the v6 backup server will not be replicated to the AhsayCBS (Replication Server) nor any cloud storage.

There is no multiple threads replication.

The AhsayCBS replication server cannot be started as a v6 backup server.

AhsayCBS v7 Backup Server to a Predefined Destination

- 1. Make sure you have created a replication receiver account on the receiving end of the AhsayCBS server first. Refer to <u>Create a Replication User Account</u> for detailed instructions.
- 2. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



3. Switch the Replicate backed up data to another server or predefined cloud storage on. The Replication configuration page shows as below.

C AhsayC	BS	
Replication		
	Il replication destinations, including c	to a Receiver of an AhsayCBS replication server. Configure the replication settings of the backup loud and AhsayCBS Receiver, should be configured in "AhsayCBS > Backup Server > Basic >
Replicate ba	acked up data to another serve	er or predefined cloud storage
To another A	AhsayCBS	
Host Name		Port (SSL)
10.16.6.89		443
Replicate U	lser Name	
r1		

 Select the To a predefined destination option as shown below. You will then see a list of predefined destination you have set under the System Settings > Basic > Predefined Destinations menu.



5. You can configure the folder name in the selected predefined destination to store the replication data.

Folder name in selected destination fo	r storing replication data
replication	



6. If proxy is required to access the replication server, mark the **Use proxy** checkbox.

✓ Use proxy

- 7. If you wish to configure the following replication settings, refer to <u>Other Replication</u> <u>Settings</u>.
 - Traffic limit for replication which limits the amount of bandwidth used by replication.
 - Selectable backup set for replication which allows you to choose individual backup set from selected users for replication.
 - Concurrent backup set for replication which allows you to configure the maximum number of backup set allowed for replication at the same time.
 - Cyclic Redundancy Check (CRC) Checking which allows you to enable this checking to run automatically for verifying the integrity of the replicated data.
- 8. Click the icon at the bottom right corner to confirm the configuration.

Other Replication Settings

The following replication settings can only be set when the replication feature has been enabled on the AhsayCBS backup server.

Traffic Limit

This is an optional setting that allows you to limit the amount of bandwidth used by replication traffic between a specified periods of your choice.

1. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



2. Click the button in the **Set traffic limit** section to turn the replication feature on. You will then see the configuration menu as shown.

Set traffic limit				
+				
From From	n	То	Maximum Transfer (Kb/s)	

- 3. Click on the + icon for configuration.
- 4. You will then see the configuration page as shown.

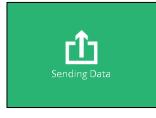
Traffic Limit
From Sun ▼ 00 ▼ : 00 ▼
To Sun ▼ 00 ▼ : 00 ▼
Maximum Transfer

- **From** set the start time to apply the traffic limit by selecting a day of the week and time in hh:mm (24-hr format)
- To set the end time to apply the traffic limit by selecting a day of the week and time in hh:mm (24-hr format)
- **Maximum Transfer** set the maximum bandwidth allowed for data transfer in the format of kbits /second.
- 5. Click the \checkmark icon then the \square icon at the bottom right corner to confirm the changes.

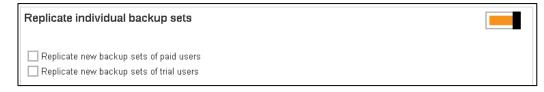
Replicate Individual Backup Sets

By default, all backup sets of all users on all use homes will be replicated to the replication location (either another AhsayCBS or a predefined destination). However, it is possible to select specific backup users and their specific backup sets for replication.

1. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



2. Click the button in the **Replicate individual backup sets** section to turn the replication feature on. You will then see the configuration menu as shown.



3. Firstly, you can set to replicate the backup data of either the paid users or trial users, or both by checking the corresponding checkbox(s).

Replicate new backup sets of paid users
Replicate new backup sets of trial users

4. Now, you can start selecting specific backup sets(s) to replicate. Click on the $m{ extsf{thm:selecting}}$ icon to

select the desired backup users first. Multiple selections is possible. Click on the icon at the bottom right corner to proceed when you are done with the selection.

Select Users		
	User	
>	💽 MSSQL1020135 (Owner:)	
✓	O TestMSSQL (Owner:)	
	TestOBM_5.63 (Owner:)	
	🗿 Test_MSSQL (Owner:)	
	🧿 Testoffice365 (Owner:)	
	🧿 dennis.test.obm (Owner:)	
	🧿 test.test (Owner:)	
	🧿 test_obm (Owner:)	
	🗿 testencrypt (Owner:)	
	🧿 testobmv6tov7 (Owner:)	
	🧿 v6client (Owner:)	

5. You will then see a page listing all the backup sets of the backup user(s) you have selected from the last step. Each individual row shows the name of the backup user, the name of the backup set, and the backup set type in the corresponding icon.

Select Backup Sets				
	User	Name	Туре	
	💿 MSSQL1020135 (Owner:)	FullRecovery-backup-set-Full	X	
	💿 MSSQL1020135 (Owner:)	FullRecovery-backup-set-Incremental	X	
	💿 MSSQL1020135 (Owner:)	Simple-backup-set-Incremental01	*	
	💿 MSSQL1020135 (Owner:)	Simple-backup-set-Incremental02	X	
	💿 TestMSSQL (Owner:)	FullRecovery-backup-Full	8	
	🗿 TestMSSQL (Owner:)	FullRecovery-backup-incremental	2	

6. Select the desired backup sets by clicking the corresponding checkbox, then click the

+	ticon at the bottom right corner to confirm the selection.				
S	ele	ct Backup Sets			
		User			
	✓	• MSSQL1020135 (Owner:)			
	✓	💿 MSSQL1020135 (Owner:)			
		💽 MSSQL1020135 (Owner:)			
		💿 MSSQL1020135 (Owner:)			
	✓	💽 TestMSSQL (Owner:)			
		O TestMSSQL (Owner:)			

7. You will then see the selected backup sets being added to the **Replicate individual backup sets** section as shown if they are added successfully. Each row of the entry shows the corresponding backup user name, backup set name and the size of the backup set.

pli	cate individual backup sets		
Re	plicate new backup sets of paid users		
Re	plicate new backup sets of trial users		
Ð	1		
-	iii Login Name (Alias)	Backup Set	Used
		Backup Set	Used 231.83M
	Login Name (Alias)		

8. Click the icon then the icon at the bottom right corner to confirm the changes.

Setting the Number of Backup Sets to Replicate Concurrently

You are able to change the number of backup sets to replicate concurrently on the AhsayCBS backup server web console under **Replication > Sending Data**.

Under the Replicate backed up data to another server or predefined cloud storage section, there is a drop-down menu for the No. of backup sets to replicate concurrently setting.



If you are running on an 8-core CPU, then the number of concurrent backup set to replicate is 4. When you use the default values **Auto**, it will allow your replication to run with 4 concurrent backup sets. In case you find the replication causing performance issues such as hard disk I/O or network bandwidth, you may adjust the concurrent backup set value from the drop- down menu as highlighted above.

NOTE

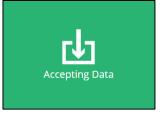
The multiple threads feature supports the backup set that is created/converted in V7 format. This feature does not support users who are still using v6 backup clients, as their backup sets are still using the legacy v6 backup set data format. Refer to the <u>Backup Data Migration</u> section for further information on converting backup set format.

Cyclic Redundancy Check (CRC) Checking

The **Cyclic Redundancy Check (CRC) Checking** job will check all new files replicated to the AhsayCBS receiver since the last CRC job. This checking can be run automatically for verifying the integrity of the replicated data.

A replication receiver must have been set before you can enable the Cyclic Redundancy Check (CRC) Checking.

1. Click on the **Accepting Data** icon under the Replication section on the AhsayCBS web console of the backup server.



2. Click on the receiver which you wish to enable the CRC checking feature.

Receive	er					
A receiver is used for receiving data from one corresponding AhsayCBS backup server. You need to add a receiver first and then you can replicate data from an AhsayCBS backup server to such receiver. Manage your receivers below.						
Mana	ge Receiver 🕜)				
 (
	Login Name	Bind to IP address	Enable	Before V7	Enable V6 Backup Sets	Compression
	r1	0.0.0.0:443, 0.0.0.0:80, 0.0.0.0:9444	true	No	true	true

- 3. Scroll to the **Cyclic Redundancy Check (CRC) Checking** section and switch on the feature by sliding the **Internet** icon on the right.
- 4. The CRC checking is set to run on the second and forth Saturdays of every month by default. You can configure the time for the checking to run on the specified dates.

Cyclic Redundancy Check (CRC) Checking
Monthly at 00 V (HH:MM)
On the 2nd and 4th Saturdays of every month

5. Click the icon then the icon at the bottom right corner to confirm the changes.

Recovery Process Overview

After you have deployed the replication server, data from the backup server will be replicated to the replication destination you have selected. In the event of a system down on your backup server, or you wish to retrieve deleted data from the replication destination, you can recover the configurations and backup data replicated from the backup server by using any one of the recovery methods below.

Method 1 – Rebuild AhsayCBS from Replication

Introduction

This recovery method rebuilds the AhsayCBS by extracting AhsayCBS configuration, system files, user profiles and backup data from the replication destination then restoring it either to the Backup Server or restoring the raw data alone using a Backup Client Agent (AhsayOBM / AhsayACB).

Steps

Step 1: Confirm Replication Status by Checking Replication Logs

Step 2: Extract Data from Replication Destination

- From <u>AhsayCBS Replication Server</u>
- From <u>a Predefined Destination Cloud storage</u>
- From <u>FTP/SFTP</u>
- From Local/Mapped Drive/Removable Drive
- ➢ From <u>v6 Replication</u>
- > From Snapshot in Retention Area

Step 3: Restore replication data extracted from the previous step using either method below

Restore Data to the Backup Server

-OR-

Restore the Raw Data Alone using a Backup Client Agent

Pros

Selective Backup Set Restore

After extracting the backed up data from the replication destination, you have the flexibility to restore only the selected backup sets from selected backup users, instead of restoring all data at once.

Restore as Raw Data

Instead of restoring the backed up data to the backup server, you can only restore the raw data by using a client backup agent (AhsayOBM / AhsayACB).

Cons

Relatively Time and Effort Consuming

As opposed to Method 3 where you can quickly convert the replication server as backup server, this recovery method takes more time and effort to rebuild the backup server.

Method 2 – Rebuild from Auto Save

Introduction

This recovery method only restores the AhsayCBS configuration, system files and user profiles but not the users' backed up data. Users' backed up data will have to be re-uploaded again to complete the recovery.

Steps

Step 1: Select the desired Auto Save snapshot by date

Step 2: Select the desired configuration and/or user profile

Step 3: Override the existing configuration files

-OR-

Manually restore the configuration files

Step 4: Restart AhsayCBS service

Refer to Method 2 - Rebuild from Auto Save section for detailed steps.

Pros

Quick Rebuild of AhsayCBS

AhsayCBS can be quickly rebuilt by applying only the configuration files and user profiles.

Cons

Longer Time to Re-upload Backup Data

Since the users' backup data is not restored and required to be re-uploaded again, it is going to take a longer time to complete the whole recovery process.

Method 3 – Start up Replication Server as Backup Server

Introduction

This recovery method allows you to quickly convert AhsayCBS in replication receiver mode to a backup server. This is a quick and direct way to access your backup data in the event of a system down on your backup server.

Steps

Refer to Method 3 - Startup Replication Server as Backup Server for detailed steps.

Pros

Fastest Recovery

This recovery method is the fastest way to turn the replication server as a backup server so as to minimize the system down time in the event of a backup server disaster.

Recovery Methods

Method 1 - Rebuild AhsayCBS from Replication

- 1. Set up a new AhsayCBS on a new machine with similar hardware specification, and sufficient hard disk space as the original backup server.
- 2. Make sure replication has been performed before you start restoring any replication data. Refer to <u>To check replication logs on the Backup Server</u>: and <u>To check the replication</u> <u>logs on the Replication Server</u>: for details.
- 3. Extract data in the 3 folders ("**conf**", "**system**" and "**user**") from the replication destination. Below are the links that can quickly direct you to the corresponding section for the detailed steps.
 - From <u>AhsayCBS Replication Server</u>
 - From <u>a Predefined Destination Cloud storage</u>
 - From <u>FTP/SFTP</u>
 - From Local/Mapped Drive/Removable Drive
 - From <u>v6 Replication</u>
 - From Snapshot in Retention Area
- 4. Stop AhsayCBS server on the new machine.
- 5. To rebuild the AhsayCBS on the new machine by restoring the extracted data, continue to read through the rest of the steps in this section.

-OR-

To restore the backup raw data alone using a Backup Client Agent, disregard the steps below and skip to <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> for further steps.

- 6. Copy all the contents in 3 folders backup to your new server as instructed below:
 - system -> CBS_HOME\system
 - user -> CBS_HOME\user
 - conf\conf.zip -> CBS_HOME\conf

Note: Expand the conf.zip first.

- 7. Start the AhsayCBS server on the new machine after copying the data instructed above.
- 8. Logon to the AhsayCBS web management console.
- 9. You will notice that there is a license error. This is because your AhsayCBS is running on the new machine with hardware and settings changed. Please contact our <u>support</u> with your licensee name and license key. We shall relax the license for you. There is a 14 days grace period before the license deactivates.

Here is a list of suggested items to check after you started up your AhsayCBS.

- Check SMTP settings in AhsayCBS web console by navigating to System Settings > Basic > Email.
- 2. Check all users' profile, backup and policy group settings in AhsayCBS web console by navigating to **Backup/Restore** > **Users, Groups & Policies**.
- 3. Check https connection to the AhsayCBS on different browsers (IE, Firefox and Chrome).
- 4. Connect AhsayOBM/AhsayACB to AhsayCBS with both http and https connections.

Method 2 - Rebuild from Auto Save

Comparing with the rebuilding from the replication server, this option can only restore the AhsayCBS configuration, system files and user profiles. Users' backed up data will not be restored and therefore users need to re-upload all backup data again on their next schedule backup.

So it is very important to configure a replication for your AhsayCBS if you need to restore everything that was originally on the Backup Server.

REMINDERS

- 1. As the system keeps only a maximum of 30 Auto Save snapshots on software vendor's cloud, if you want to keep these snapshot(s) on your server, you need to download these snapshots manually.
- 2. If you restore an earlier snapshot, all the snapshots beyond the restore date will not be able to restore again.

Example: If today is Jan 21st 2016, after you restore the snapshot on Jan 19th, 2016, the snapshot on Jan 20th and Jan 21st will not be able to select from the dropdown list.

The table below shows all the major system configuration files that are saved on the cloud daily by the Auto Save system job:

Server Configuration		
Description	Path	
Connector setting file	/conf/server.xml	
CBS option files	/conf/afc.opt	
	/conf/cbs.opt	
Runtime setting file	/conf/cbssvc.ini	
Default certificate files	/conf/ca.crt	
	/conf/ssl.crt	
	/conf/ssl.key	
CBS setting files	/conf/cbs.json	
Redirector configuration files	/conf/lfsConfig.xml	
CBS	Configuration	
Description	Path	
Backup Server setting files	/conf/obs.json	
License files	/conf/lic.json	
	/conf/license.xml	
CBS/OBS option files	/conf/cbs.opt	
Autoupdate index	/conf/autoUpdate.bdb	
Replication configuration files	/conf/rpsSend.xml	

RPS Configuration		
Description	Path	
Replication configuration files	/conf/rps.xml	
	/conf/rpsRecv.xml	
	/conf/rps-recv.json	
RDR	Configuration	
Description	Path	
Redirector configuration files	/conf/rdr.xml	
	/conf/rdr.json	
License files	/conf/rdr-lic.json	
	/conf/rdr-license.xml	
CBS	S User Profile	
Description	Path	
Users' profile	/conf/users.xml	
	Others	
Description	Path	
Branding directory	/conf/Branding/*.*	
User group definition	/system/obs/policies/userGroup.xml	
Policy group definition	/system/obs/policies/policyList.xml	

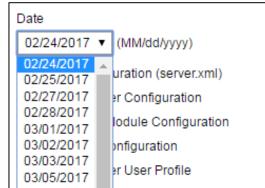
Please note that there are no options to restore the "Others" category, however it will be restored automatically every time when you need to restore the auto save files.

Steps to restore the Auto Save snapshot

- Login to AhsayCBS management console, and go to System Settings -> Advanced -> Auto Save.
- 2. Turn on the **Use Auto Save** switch, then click on the **Restore** button.

Auto Save Proxy Logging File Explorer Runtime Options	
When this feature is enabled, the system will automatically save all the settings in this server to the software vendor's cloud so that you can resto settings in the future when needed.	re those
Use Auto Save	
Use Proxy	
Restore	

3. Select the snapshot that you want to restore.



4. Select the items that you need to restore. Select all the items if you need to restore the configuration exactly on that restore point.

Date
02/24/2017 • (MM/dd/yyyy)
Server configuration (server.xml)
Backup Server Configuration
Replication Module Configuration
Redirector Configuration
Backup Server User Profile

- 5. Click on the **Next** button.
- 6. Select to download the snapshot file or to overwrite the existing configuration.
 - In this example, we have selected the Overwrite existing configuration files option.
 - Skip to the <u>Manual Restore</u> section below if you want to restore the downloaded file manually.
- 7. Click on the **Restore** button if you want to overwrite the existing configuration.
- 8. Restart the AhsayCBS service, and the configuration will be overwritten.

Manual Restore

1. Here is an example of the downloaded configuration file, it is named as dr-YYYY-MM-DD.zip date format.

 (Optional) If you need to restore the file manually, you can unzip the 2 folders "conf" and "policies" into the CBS_HOME\system\recovery. After the restart of the AhsayCBS service, the configuration will be imported to the AhsayCBS.

Method 3 - Startup Replication Server as Backup Server

Refer to the following steps to convert your AhsayCBS in replication receiver mode to a backup server.

NOTE

It is assumed that the first cycle of replication from the sender to the receiver had been completed.

- 1. Check on the Receiver's Setting by following the steps below, and make note of the **Default Home Directory** and **Replication Home** settings.
 - On the AhsayCBS in replication receiver mode, login to the AhsayCBS web console.
 - Confirm on the replication receiver's settings. Under Replication, select Accepting Data.
 - Check on the Default Home Directory setting, as well as the Replication Home setting.

Default Home Directory	
C:\Program Files\AhsayCBS\system\rps\rcvshome\receiver	
Backup Server User Home	Replication Home
C:\Program Files\AhsayCBS\user	E:\Receiver Home

Default Home Directory is where the replication sender's system home, user settings, and configuration settings are stored (in the app folder).

		receiver				×
€ ∋ - ↑	鷆 « rps 🕨 rcvshome	▶ receiver ▶	~ C	Search receiver		,c
Name	*	Date modified	Туре	Size		
퉬 арр		10/25/2016 12:08	File folder			
퉬 files		10/25/2016 12:07	File folder		-	

Replication Home is the location where users' backup data and logs are stored.

		Receiver Home		-	×
€ ∋ - ↑	퉬 « Volume 2 (E	:) ▶ Receiver Home	~ C	Search Receiver Home	<i>م</i>
Name	^	Date modified	Туре	Size	
퉬 2016-10-25-1 鷆 username	2-06-58	10/25/2016 12:07 10/25/2016 12:23	File folder File folder		

In the example above, the following settings are used:

- Default Home Directory is set to:
 C:\Program Files\AhsayCBS\system\rps\rcvshome\receiver
- Replication Home is set to:
 E:\Receiver Home

- 2. Configure the Software License by following the steps below.
 - On the AhsayCBS in replication receiver mode, login to the AhsayCBS web console.
 - Under System Settings, select Licenses, then apply the AhsayCBS license (the license from the AhsayCBS in backup server mode).

This will ensure that there are sufficient **Client Software** and **Add-on Modules** available to the backup users after the switch.

Press Update, then click

Ensure that the license information are properly applied by checking the Client Software and Add-on Modules settings under License Details.

IMPORTANT

Before continuing with the next step, ensure that the license is properly applied. Failure to do so may result in backup accounts being suspended and all backup settings being reset.

Also, ensure to shut down the AhsayCBS on the backup server, so that you are not running two servers with the same AhsayCBS license.

- Convert the AhsayCBS in Replication Receiver Mode to Backup Server Mode by following the steps below.
 - Shutdown the AhsayCBS service.

Note: For AhsayCBS version 7.9.0.0 or above, shutdown the AhsayCBS and AhsayCBS NFS services.

- Copy the replicated system config files to the corresponding location.
 - Extract the content of the conf.zip file from the Default Home Directory to the AhsayCBS installation conf folder.

Extract

%Default Home Directory%\app\conf\conf.zip

to

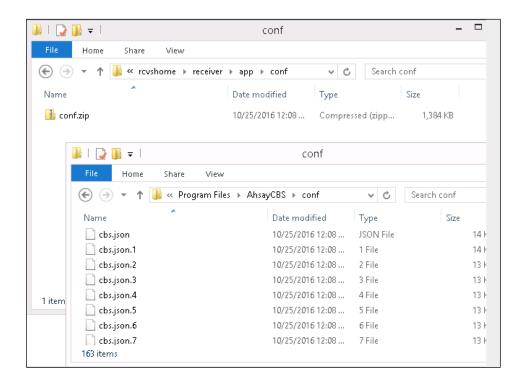
%AhsayCBS Install Home%*

Using the example in Step 1, extract content of

C:\Program Files\AhsayCBS\system\rps\rcvshome\receiver\app\conf\conf.zip

to

C:\Program Files\AhsayCBS\conf



- Copy the replicated system home to the corresponding location by following the steps below.
 - Copy the replicated system home from the **Default Home Directory** to the AhsayCBS system home folder.

Сору

%Default Home Directory%\app\system*

to

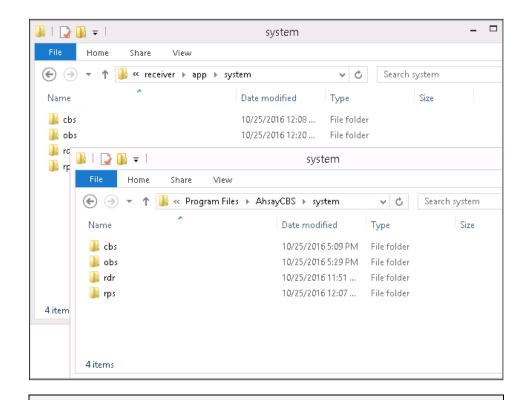
%AhsayCBS System Home%*

Using the example in Step 1, copy the content of

C:\Program Files\AhsayCBS\system\rps\rcvshome\receiver\app\system*

to

C:\Program Files\AhsayCBS\system



NOTE

If you are planning to change the system home location, copy the replicated system home to the new system home location instead.

- > Copy the replicated user home to the corresponding location.
 - Copy the replicated user home from the Replication Home to the AhsayCBS user home folder.

Сору

%Replication Home%\%username%

to

%AhsayCBS User Home%*

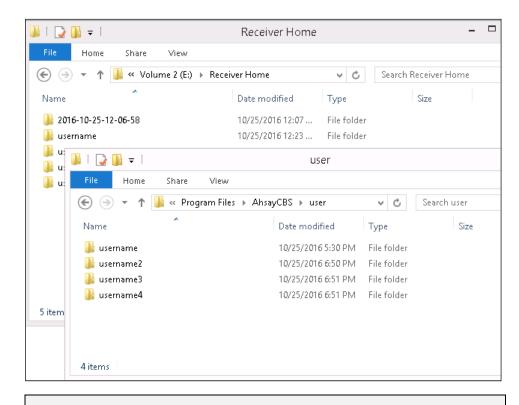
Important: Do not copy over the folder in YYYY-MM-DD-hh-mm-ss format.

Using the example in Step 1, copy the content of

E:\Receiver Home*

to

C:\Program Files\AhsayCBS\user



NOTE

If you are planning to change the user home location, copy the replicated user home to the new user home location instead.

Startup the AhsayCBS service.

Note: For AhsayCBS version 7.9.0.0 or above, startup the AhsayCBS and AhsayCBS NFS services.

- Login to the AhsayCBS web console, confirm on the settings.
 - Confirm the system settings under the System Settings > Basic and System Settings > Advanced menus.

Modify the **System Home** setting under **System Settings** > **Basic** if necessary (e.g. if you had copied the replicated system home to a new location in the previous step).

 Confirm the user and policy settings under Backup / Restore > Users, Groups & Policies menu.

Modify the **User Home** setting under **Backup / Restore > Basic** if necessary (e.g. if you had copied the replicated user home to a new location in the previous step).

NOTE

For AhsayCBS installation on Linux platforms, the conversion procedure is the same except all directory paths are in the Linux convention.

Extract Data from Replication Destination

Getting Started

If you have chosen to recover your replication data using <u>Method 1 - Rebuild AhsayCBS from</u> <u>Replication</u>, you will have to extract the replication data from the replication destination first. Before getting started, make sure replication has been performed before you start restoring any replication data by performing the following checking.

To check replication logs on the Backup Server:

Log in to the AhsayCBS web console, navigate to **Monitoring** > **Replication Logs** > **Replication Sending**.

Replicati	on Logs	
C AhsayCBS		
Replication Sendin	g Replicatio	on Receiving Activities Log
View all the logs of se	nding job from th	is server to the corresponding receiver below.
Replication Sent	Log	Filter Type View * Today *
Timestamp	Туре	Message
11/16/2016 14:21:15	ReplicateStart	Start replication (User: a1, Backup Set: MySQL Database 1)
11/16/2016 14:21:15	ReplicateStart	Start replication (User: a1, Backup Set: MySQL Daily)
11/16/2016 14:21:15	ReplicateMode	Start replication in RESYNC mode (User: a1, Backup Set: MySQL Database 1)
11/16/2016 14:21:15	ReplicateMode	Start replication in RESYNC mode (User: a1, Backup Set: MySQL Daily)
11/16/2016 14:21:19	CompareDirInfo	Comparing directory 'replication(ToDropBox4BiZ10318)userta1\1465211867978)blocks' with the one at target destination
11/16/2016 14:21:20	CompareDirInfo	Comparing directory 'replicationtToDropBox4BiZ10318\user\a1\1465203392036\blocks' with the one at target destination
11/16/2016 14:21:23	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465211867978\blocks\2016-06-06-19-18-59\0\000000.bak'
11/16/2016 14:21:23	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465203392036\blocks\2016-06-06-16-58-05\0\0000000.bak'
11/16/2016 14:21:25	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465203392036\blocks\2016-06-06-16-58-05\0\0000001.bak'
11/16/2016 14:21:25	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465211867978\blocks\2016-06-06-19-18-59\0\0000001.bak'
11/16/2016 14:21:35	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465203392036\blocks\2016-06-06-16-58-05\0\0000001_000001_bak'
11/16/2016 14:21:35	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465211867978\blocks\2016-06-06-19-18-59\0\000001_000001_bak'
11/16/2016 14:21:39	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465203392036\blocks\2016-06-06-16-58-05\0\000002.bak'
11/16/2016 14:21:40	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465211867978\blocks\2016-06-06-19-18-59\0\000002.bak'
11/16/2016 14:21:40	ReplicateFileInfo	Replicating 'D:\AhsayCBS\user\a1\1465203392036\blocks\2016-06-06-16-58-05\index-s0.j00.100.15524f01610.cgz'
11/16/2016 14:21:41	ReplicateFileInfo	Replicating 'D:AhsayCBS\user\a1\1465211867978\blocks\2016-06-06-19-18-59\index-s0.j00.100.1552570d700.cgz'

Viewing option

Use the drop-down filters at the top right corner to filter the desired replication sending logs:

Туре	e Select the desired type of replication log to display		
View	Select a specified date or range of time of the replication logs		

To check the replication logs on the Replication Server:

Log in to the AhsayCBS web console, navigate to **Monitoring > Replication Logs > Replication Receiving**.

Rep	lication Log	35
C AhsayC	BS	
Replication Se	ending Rep	lication Receiving Activities Log
View all the logs	s of receiver on	this server below.
Replication	Received Lo	ng l
		Filter steven v Type v View * This Week v Page 1 v
Timestamp	Туре	Message
20/02/2017 11:03:15	ListFilesInfo	Listing 'C:\Program Files\AhsayCBS\system\rps\rcvshome\steven\files\\'
20/02/2017 11:03:15	ReceiveFileInfo	Received 'C:\Program Files\AhsayCBS\system\rps\rcvshome\steven\files\settings\test1487559791992.dummy' (10, 2017-02-20 11:02)
20/02/2017 11:03:15	DeleteFileInfo	Deleting 'C:\Program Files\AhsayCBS\system\rps\rcvshome\steven\files\settings\test1487559791992.dummy'
20/02/2017 11:03:15	DeleteFileInfo	Deleting 'C:\Program Files\AhsayCBS\system\rps\rcvshome\steven\files\settings'
20/02/2017 11:03:21	ReplicateStart	[Start] Replication

Viewing option

Use the drop-down filters at the top right corner to filter the desired replication receiving logs:

Receiver Name Select the receiver name of whom the replication data is from			
Туре	Select the type of replication log to display		
View	Select a specified date or range of time of the replication logs		

Extract from AhsayCBS Replication Server

1. Follow the steps below to disable the replication service on both the Backup Server and the Replication Server.

To Disable on the <u>Backup Server Side</u>

v. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



vi. Click the button in the **Replicate individual backup sets** section to turn the replication feature off. You will then see the configuration menu as shown.

Replication

You can replicate this backup server to the cloud, or to a Receiver of an AhsayCBS replication server. Configure the replication setting of the backup server below. All replication destinations, including cloud and AhsayCBS Receiver, should be configured in "AhsayCBS Backup Server > Basic > Predefined Destination" first.

Replicate backed up data to another server or predefined cloud storage

To Disable on the <u>Replication Server Side</u>

i. Click On the replication receiving end, go to **Replication > Accepting Data** on the AhsayCBS web console to create a replication user account.



ii. Click on the replication receiver item under the **Manage Receiver** section which you wish to turn off.

C	Ah	sayCBS				
Red	eive	er				
			data from one corresponding Ahsa m an AhsayCBS backup server to s			
Ma H	anag	e Receiver 🕝				
		Login Name	Bind to IP address	Enable	Before V7	Compression
]	steven	0.0.0.0:443, 0.0.0.0:80	false	No	true

iii. Uncheck the Enable Replication checkbox under the Receiver User Account section.

Edit Receiver Edit the details of this receiver.				
Receiver User Account				
Enable Replication				
Login Name steven				
Password				
Alias				

Go to the Replication Server web console > Accepting Data > Manage Receiver > %receiver_name%.

C Ahsa	ayCBS				
Receiver					
		rom one corresponding AhsayCBS backup such receiver. Manage your receivers belo		d to add a receiver first	t and then you can replicate data
Manage	Receiver 🕜				
+					
	Login Name	Bind to IP address	Enable	Before V7	Compression
	steven	0.0.0.0:443, 0.0.0.0:80	true	No	true

3. Locate the **Restore** section at the bottom of the page.

Restor	e			
Snapsh	not			
Current				
2017-01	1-06-18-20-59			

4. Click on the Snapshot "**Current**", you will see all the replicated users.

5. Select the user(s) that you want to recover, select all if you want to recover all the users for the Backup Server.

Restore Path		
	User	
	a1	
	a2	
	a3	
	aaa	
	acbwin	
	emilytest	
	mini	
	mininas	
	miniwin	

6. Enter the path you want to restore the data to (e.g. D:\Restore).

Restore Path	
D:\Restore	

- 7. Click the **b**utton at the bottom right corner to start the restoration.
- 8. It will then go back to the **Edit Receiver** page and you will see the restore progress under the **Restore** section.

Restore
Restore Path
D:\Restore\Retention_Current
Restoring C:\Program Files\AhsayCBS\system\rps\rcvshome\steven\app\system\cbs\Installers\ROOT\component Stop

9. When you see the **Finished restoration !!** message, the restore is completed.



10. The data of the selected users and the server configuration are restored to the specified restore path on the Replication Server.

You will find folder structure as:

- D:\Restore\Retention_Current\system
 (It contains "CBS_HOME\conf" and "SYSTEM_HOME".)
- D:\Restore\Retention_Current\users
 (It contains user folders.)

Name	Date modified	Туре
system users	1/17/2017 4:49 PM 1/17/2017 5:17 PM	File folder File folder

- 11. Copy the whole restored folder "D:\Restore" to a free space on your Backup Server first, e.g. C:\Desktop.
- 12. After extracting the replication data, you can follow the instructions in <u>Restore Replication</u> <u>Data to the Backup Server</u> to restore the replication data to your AhsayCBS backup server.

-OR-

Refer to the <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> if you wish to recover the raw data alone without restoring them to AhsayCBS.

Extract from a Predefined Destination - Cloud storage

In this example, we use Google drive as the cloud storage. Other cloud storage should have similar capability.

Prerequisite: Google drive is installed

- 1. Disable the replication on the Backup Server by following the steps below.
 - i. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



- ii. Click the button in the **Replicate individual backup sets** section to turn the replication feature off. You will then see the configuration menu as shown.
- 2. Go to your Google drive folder or login to the Google drive web interface to access to your storage.
- You will be able to find the following path such as Google drive > Ahsay > replication.
 ('replication' is the replication profile name)

G v Msay	▶ replicationtToDropBox4BiZ ▶	- 4 € Se	earch replicationtToDro	pBox4BiZ 🔎
Organize 👻 Include	e in library 🔻 Share with 💌	Burn New fold	der 🔠 🔻	
쑦 Favorites	^ Name		Date modified	Туре
🧮 Desktop	_ 😺 conf		11/16/2016 2:23 PM	File folder
鷆 Downloads	🗐 🌛 system		11/16/2016 2:27 PM	File folder
🚹 Google Drive	💷 😺 user		11/16/2016 2:23 PM	File folder
 Recent Places Libraries Documents 				
Music				
Pictures				
😸 Videos				•
3 items				

Google drive file explorer

Google drive web interface	Google	drive	web	interface
----------------------------	--------	-------	-----	-----------

Go	o gle Drive	Q Search Drive
	NEW	My Drive > Ahsay > replicationtToDropBox4BiZ10318 -
•	My Drive	Folders
	Shared with me	conf System user
G	Recent	
-th-	Google Photos	
*	Starred	
Î	Trash	

- 4. You will see the following 3 folders.
 - conf
 - system
 - user
- 5. You may download all the 3 folders to your local drive if you need to restore all the files. Select the folder to download according to your requirement.

NOTE	
The conf and system folders are AhsayCBS configuration or system related files. The user folder contains the replicated user folders.	

 After extracting the replication data, you can follow the instructions in <u>Restore Replication</u> <u>Data to the Backup Server</u> to restore the replication data to your AhsayCBS backup server.

-OR-

Refer to the <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> if you wish to recover the raw data alone without restoring them to AhsayCBS.

Extract from the FTP/SFTP

In this example, we use SFTP server as an example, the restore method is basically the same for FTP and SFTP.

Assumption: The WinSCP is installed on the system. Other FTP tools can be used.

- 1. Disable the replication on the Backup Server by following the steps below.
 - i. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



- ii. Click the button in the **Replicate individual backup sets** section to turn the replication feature off. You will then see the configuration menu as shown.
- 2. Login to the WinSCP and locate the replication folder. If the FTP/SFTP server is on your LAN, you may map the drive on your FTP/SFTP server.
- 3. You will be able to find the following path such as /sftp_root/Ahsay/replication. ('replication' is the replication profile name)



Mapped the SFTP share folder

- 4. You will see the following 3 folders.
 - conf
 - system
 - user
- 5. You may download all the 3 folders to your local drive if you need to restore all the files. Select the folder to download according to your requirement.

NOTE

The **conf** and **system** folders are AhsayCBS configuration or system related files. The **user** folder contains the replicated user folders.

 After extracting the replication data, you can follow the instructions in <u>Restore Replication</u> <u>Data to the Backup Server</u> to restore the replication data to your AhsayCBS backup server.

-OR-

Refer to the <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> if you wish to recover the raw data alone without restoring them to AhsayCBS.

Extract from the Local/Mapped Drive/Removable Drive

In this example, we use local drive as an example, the restore method is basically the same for mapped drive and removable drive.

- 1. Disable the replication on the Backup Server by following the steps below.
 - i. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



- ii. Click the button in the **Replicate individual backup sets** section to turn the replication feature off. You will then see the configuration menu as shown.
- Open your replication home folder e.g.: E:\rpshome\replication ('replication' is the replication profile name).

- 3. You will see the following 3 folders.
 - conf
 - System
 - user
- You may copy all the 3 folders if you need to restore all the files on your AhsayCBS. Select the folder to download according to your requirement.

NOTE

The **conf** and **system** folders are AhsayCBS configuration or system related files. The **user** folder contains the replicated user folders.

 After extracting the replication data, you can follow the instructions in <u>Restore Replication</u> <u>Data to the Backup Server</u> to restore the replication data to your AhsayCBS backup server.

-OR-

Refer to the <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> if you wish to recover the raw data alone without restoring them to AhsayCBS.

Extract from v6 Replication

This section provides steps on restoring replication data in v6 format to a v6 version backup server.

IMPORTANT

Please be reminded that the steps in this section apply only if you are restoring the replication data in v6 data format back to a backup server in v6 version.

If the backup server has been upgraded to v7, the replication data in v6 data format cannot be restored in the upgraded backup server due to the fundamental differences of the system structure and data format between v6 and v7. If you have upgraded your backup server to v7, you will have to configure the replication receiver again and make sure to select the Backup Server Version as 7 during the receiver creation process. Refer to the <u>Create a Replication User Account</u> section for further details on the configuration.

- 1. Disable the replication on the Backup Server by following the steps below.
 - i. Click on the **Sending Data** icon under the Replication section on the AhsayCBS web console of the backup server.



- ii. Click the button in the **Replicate individual backup sets** section to turn the replication feature off. You will then see the configuration menu as shown.
- Go to the Replication Server web console, then navigate to Replication > Accepting Data > Manage Receiver > %receiver_name%.
- 3. Locate the **Restore** section at the bottom of the page.

Traffic Limi	it Setting						
	Name	From	То	Maximum Transfer			
Restore	ration !!						
Snapshot							
Current 2016-10-20-1	8-05-31						
					\checkmark	Х	?

- 4. Click on the Snapshot "Current", you will see all the replicated users.
- 5. Select the user(s) that you want to recover, select all if you want to recover all the users for the Backup Server.

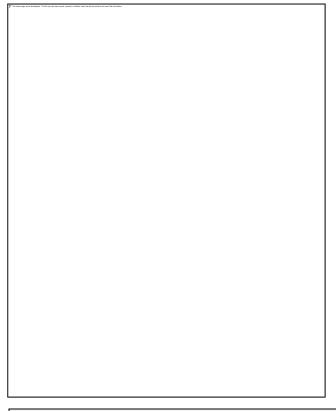
6. Enter the path you want to restore the data to (e.g. F:\v6rps).

- 7. Click the [Restore] button to start.
- 8. It will then go back to the "Edit Receiver" page and you will see the restore progress under the "Restore" section.

9. Once you see the "Finished restoration !!" message, the restore is completed.

10. The data of the selected users and the server configuration are restored to the restore path on Replication Server.

11. You will find folder structure as:



NOTE

The folder F:\v6rps\Retention_Current\ contains all the restore materials for your v6 OBS. Under the folder, F:\v6rps\Retention_Current\system, you can see the folder "C%3A" which indicate the drive letter of the installation, %3A is the URL encoding for the colon character which means "C:".

Here is a summary of the restored folders under the path "F:\v6rps\Retention_Current\system\C%3A\Program Files\AhsayOBS and AhsayRPS":

Folder name	Description
bin	It contains startup scripts.
conf	OBS server configuration files.
java	Bundled Java for the OBS.
system	System configuration and policy settings.
tomcat	Bundled Tomcat for the OBS.
webapps	OBS and RPS application folders, OBC installer files etc.
work	Cache folder.

12. Copy the whole restored folder "F:\v6rps" to your OBS machine.



13. Locate the OBS installation directory in the OBS machine, **conf** folder, **system** folder and **user** folder.

In this case, all the 3 folders are located in the same directory. If you have changed the OBS system home or user home folder, you can check this information in your **OBS Management Console > Manage System > Server Configuration** page.

14. After extracting the replication data, you can follow the instructions in <u>Restore Replication</u> <u>Data to the Backup Server</u> to restore the replication data to your AhsayCBS backup server.

-OR-

Refer to the <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> if you wish to recover the raw data alone without restoring them to AhsayCBS.

Extract Snapshot from Retention Area

A snapshot of the replicated data is taken and stored in the retention area for a certain period of time of your configuration. This gives you an extra layer of protection in case you need to retrieve the old replication data. For details of the retention policy setting, refer to the <u>Retention Setting</u> under the <u>Create a Replication User Account</u> section.

Follow the instructions below to recover replication data from the retention area.

 Go to the Replication Server web console > Accepting Data > Manage Receiver > %receiver_name%.

C Ahs	ayCBS				
Receiver					
	0	om one corresponding AhsayCBS backup such receiver. Manage your receivers below		d to add a receiver first	and then you o
Manage	Receiver 🕢				
	Login Name	Bind to IP address	Enable	Before V7	Compression
	steven	0.0.0.0:443, 0.0.0.0:80	true	No	true

2. Locate the **Restore** section at the bottom of the page and you will see the snapshots that have been captured for your replication data.

Restore	
Snapshot Current	
2017-02-24-00-00-11	
2017-02-20-11-03-15	

3. The past snapshots are named in date and time when it was captured. Click on the desired snapshot you wish to extract the replication data from.

4. Select the user(s) that you want to recover, select all if you want to recover all the users for the Backup Server.

Restore Path		
	User	
	a1	
	a2	
	a3	
	aaa	
	acbwin	
	emilytest	
	mini	
	mininas	
	miniwin	

5. Enter the path you want to restore the data in the retention area (e.g. E:\Retention).

Restore Path	
E:\Retention	

NOTE

Do not restore the retention data to the same folder where you normally store the extracted replication data so as to avoid any possible confusion.

- 6. Click the button at the bottom right corner to start the restoration.
- 7. It will then go back to the **Edit Receiver** page and you will see the restore progress under the **Restore** section.



8. When you see the **Finished restoration !!** message, the restore is completed.



9. The data of the selected users and the server configuration are restored to the specified restore path on the Replication Server.

You will find folder structure as:

- E:\Retention\Retention_YYYY-MM-DD-HH-MM-SS\system (It contains "CBS_HOME\conf" and "SYSTEM_HOME".)
- E:\Retention\Retention_YYYY-MM-DD-HH-MM-SS\users (It contains user folders.)

Name	Date modified	Туре
system users	1/17/2017 4:49 PM 1/17/2017 5:17 PM	

- 10. Copy the whole restored folder "E:\Retention" to a free space on your Backup Server first, e.g. C:\Desktop.
- 11. After extracting the replication data, you can follow the instructions in <u>Restore Replication</u> <u>Data to the Backup Server</u> to restore the replication data to your AhsayCBS backup server.

-OR-

Refer to the <u>Restore Raw Data Using AhsayOBM / AhsayACB</u> if you wish to recover the raw data alone without restoring them to the backup server.

Restore Replication Data

Restore Replication Data to the Backup Server

IMPORTANT

Make sure you have extracted the replication data from the replication destination before you start with the restore. Refer to the instructions in the <u>Extract Data from the Replication</u> <u>Destination</u> for details.

Follow the instructions below to restore replication data to your AhsayCBS backup server.

1. Stop the AhsayCBS service on the Backup Server by going to the **Services** console, click on Ahsay Cloud Backup Suite then click the **Stop** button on the left.

		Services		
Help				
Services (Local)				
Ahsay Cloud Backup Suite	Name	A	Description	Status
	🔍 🔍 Ahsay Clou	d Backup Suite		Running
Stop the service	🔍 Ahsay Onlir	ie Backup Manager Services	Continuous	Running
Restart the service	🔍 App Readiness Gets apps re			
	🔍 Application	Experience	Processes a	

 If you want to recover the user data, copy the %user_name% folder from the "%Restored_folder%\Retention_Current\users" folder, then paste it to the User Home folder located in "\AhsayCBS\user\" on your backup server machine.

🔄 🅣 👻 ↑ 👪 → This PC → Local Disk (C:) → Program Files → AhsayCBS →				
🖉 🚖 Favorites	Name	Date modified	Туре	
📃 Desktop	퉬 bin	2/7/2017 5:05 PM	File folder	
🚺 Downloads	퉬 build	2/2/2017 9:23 AM	File folder	
📃 Recent places	퉬 conf	2/22/2017 5:35 PM	File folder	
	퉬 download	2/7/2017 5:05 PM	File folder	
4 🌉 This PC	퉬 font	2/7/2017 5:05 PM	File folder	
🗅 隆 Desktop	퉬 icons	2/7/2017 5:05 PM	File folder	
🛛 📗 Documents	퉬 java	2/7/2017 5:06 PM	File folder	
🛛 鷆 Downloads	퉬 lib	2/7/2017 5:05 PM	File folder	
🖻 🚺 Music	퉬 licenses	2/7/2017 5:05 PM	File folder	
🖻 崖 Pictures	퉬 logs	2/22/2017 6:00 AM	File folder	
🗅 📑 Videos	퉬 migration	2/3/2017 4:46 PM	File folder	
🛛 📥 Local Disk (C:)	퉬 nfs	2/7/2017 5:06 PM	File folder	
▷ 雬 testcases (\\192.168.22	퉬 system	2/2/2017 9:25 AM	File folder	
	鷆 temp	2/22/2017 6:00 AM	File folder	
🛛 📬 Network	鷆 termsofuse	2/7/2017 5:05 PM	File folder	
🗅 🌉 tsclient	鷆 tomcat	2/7/2017 5:04 PM	File folder	
⊳ 🖳 W12R2X-6-89	퉬 user	2/2/2017 9:28 AM	File folder	
⊳ 🖳 W12R2X-6-91	퉬 util	2/7/2017 4:42 PM	File folder	

▶ Local Disk (C:) ▶ Program Files ▶ AhsayCBS ▶ user ▶			
Name Date modified Type			
퉬 backup user 1	2/20/2017 4:28 PM	File folder	
퉬 backup user 2	2/3/2017 5:35 PM	File folder	
퉬 backup user 3	2/22/2017 5:40 PM	File folder	

 If you want to recover the server configuration, extract the "%Restored_folder%\Retention_Current\system\conf\conf.zip", then unzip the file and replace all the unzipped files with those located on "\AhsayCBS\conf\".

This PC 🔸 Local Disk (C:) 🔸 Program Files 🔸 A	hsayCBS 🕨	
Name	Date modified	Туре
퉬 bin	2/7/2017 5:05 PM	File folder
🐌 build	2/2/2017 9:23 AM	File folder
鷆 conf	2/22/2017 5:43 PM	File folder
🌗 download	2/7/2017 5:05 PM	File folder
퉬 font	2/7/2017 5:05 PM	File folder

) ← () → ↑ 🎩 → This PC → Local Disk (C:) → Program Files → AhsayCBS → conf				
🔆 Favorites	Name	Date modified	Туре	
🛄 Desktop	鷆 Backup	2/22/2017 6:00 AM	File folder	
〕 Downloads	📄 acb-config.xml	2/20/2017 11:08 AM	XML Document	
📃 Recent places	📄 afc.opt	2/20/2017 11:08 AM	OPT File	
	📄 autoDiscovery.xml	2/20/2017 11:08 AM	XML Document	
🜉 This PC	📄 autoUpdate.bdb	2/20/2017 11:08 AM	BDB File	
隆 Desktop	🔄 ca.crt	2/20/2017 11:08 AM	Security Certificate	
📗 Documents	📄 Catalina	2/20/2017 11:08 AM	File	
〕 Downloads	📄 catalina.policy	2/20/2017 11:08 AM	POLICY File	
🜗 Music	📄 catalina.properties	2/20/2017 11:08 AM	PROPERTIES File	
📔 Pictures	📄 cbs.json	2/22/2017 6:00 AM	JSON File	
📔 Videos	📄 cbs.json.1	2/21/2017 6:01 AM	1 File	
📥 Local Disk (C:)	📄 cbs.json.2	2/20/2017 11:08 AM	2 File	

4. If you want to recover the system home, copy the content of the "%Restored_folder%\Retention_Current\system\system" folder in the restored folder, then paste it in the system folder located in "AhsayCBS\system\"on your backup service machine.

🔆 Favorites	Name	Date modified	Туре	
Desktop	鷆 bin	2/7/2017 5:05 PM	vl File folder	
🐌 Downloads	🌗 build	2/2/2017 9:23 AI	VI File folder	
🔛 Recent places	鷆 conf	2/22/2017 5:51 F	M File folder	
	🌗 download	2/7/2017 5:05 PM	√l File folder	
👰 This PC	퉬 font	2/7/2017 5:05 PM	vi File folder	
膧 Desktop	퉬 icons	2/7/2017 5:05 PM	√l File folder	
📗 Documents	퉬 java	2/7/2017 5:06 PM	v1 File folder	
〕 Downloads	鷆 lib	2/7/2017 5:05 PM	√l File folder	
🌗 Music	퉬 licenses	2/7/2017 5:05 PM	√l File folder	
崖 Pictures	퉬 logs	2/22/2017 6:00 A	M File folder	
📑 Videos) migration	2/3/2017 4:46 PM	√l File folder	
📥 Local Disk (C:)	鷆 nfs	2/7/2017 5:06 PM	√l File folder	
雬 testcases (\\192.168.22	퉬 system	2/2/2017 9:25 AI	VI File folder	
	퉬 temp	2/22/2017 6:00 /	AM File folder	
► Local Disk (C:) ►	Program Files 🕨 Al	hsayCBS 🕨 system 🕨		
Name	•	Date modified	Туре	
퉬 cbs		2/3/2017 6:00 AM	File folder	
퉬 obs		2/22/2017 3:39 PM	File folder	
鷆 rdr		2/2/2017 9:25 AM	File folder	
鷆 rps		2/17/2017 5:15 PM	File folder	

5. Restart the AhsayCBS service on the Backup Server by going to the **Services** console, click on Ahsay Cloud Backup Suite then click the **Start** button on the left.

	Services		
Help			
i 🗟 🚺 🖬 🕨 🖬 🗤			
Services (Local)			
Ahsay Cloud Backup Suite	Name	Description	Status
	🤹 Ahsay Cloud Backup Suite		
Start the service	🔍 Ahsay Online Backup Manager Services	Continuous	Running
	🔍 App Readiness	Gets apps re	
	🔍 Application Experience	Processes a	

Restore Raw Data Using AhsayOBM / AhsayACB

Besides restoring the replication data back to the backup server, you can also restore the raw data alone using either of the client backup agent (AhsayOBM / AhsayACB).

Make sure you have extracted the replication data from the replication destination before you start with the restore. Refer to the instructions in the <u>Extract Data from the Replication Destination</u>. Once you have extracted the replication data, follow the steps below to restore the raw data.

AhsayOBM is used in the following instructions for decrypting the data. The procedures work basically the same for AhsayACB.

1. Log in to the AhsayOBM client backup agent, then navigate to the **Utilities** icon on the main interface, then go to the **Decrypt Backup Data** section.



2. Click Browse to locate the backup set you wish to decrypt replication data you have extracted, then navigate to the **[%backup set ID%/blocks]** level of the backup set you wish to restore data from.

Utilities	Decrypt Backup Data
Data Integrity Check Space Freeing Up Delete Backup Data Decrypt Backup Data	Please enter the path to the [<backup id="" set="">/blocks] folder which contains the backup files that you want to decrypt. Browse Temporary directory for storing restore files C:\Users\steven.tse\.obm\temp Decrypt Browse</backup>
• Change path to decrypt	
Look <u>i</u> n : 1487829	651429 🔹 🔂 📸 📰 🗸
Recent Items	

3. Click **Decrypt** to proceed.

Utilities	Decrypt Backup Data
Data Integrity Check	Please enter the path to the [<backup id="" set="">/blocks] folder which contains the backup files that you want to decrypt.</backup>
Space Freeing Up	C:\Users\steven.tse\Desktop\1487829651429-20170223T061107Z-001\' Browse Temporary directory for storing restore files
Delete Backup Data	C:\Users\steven.tse\.obm\temp Browse
Decrypt Backup Data	Decrypt

4. Select the file(s)/folder(s) you wish to restore from the selected source, then click Next to proceed.

Select Yo	ur Files To Be	Re	estored
Select what to restore			
Choose from files as of job	✓ 23/02/2017 ✓ Latest ✓		
Show filter			
Folders	Name	Size	Date modified
decrypt_destination decrypt_destination			

5. Select to restore to the Original location or an alternate location of your choice. Click **Restore** to start the decryption process when you have done with the settings.

Choose Wł	here The Files To Be Restored
Restore files to Original location Alternate location 	Browse
Show advanced option	

8 Configuring Redirector

As your business keeps growing, the capacity of an AhsayCBS machine may reach its physical limit such as the I/O, disk space, etc. In that case, you may consider adding a machine to solve the problem.

A common practice for server administrator will name their server in the following way when a new server is added for backup service, for example:

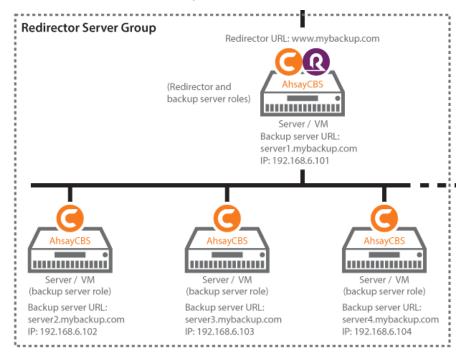
server1.mybackup.com server2.mybackup.com server3.mybackup.com

With mybackup.com being the domain name of the backup service in the above example. This is only a solution to resolve physical limit of a server but is not flexible to apply into a high scalable backup system. This is because if a user has hosted in, for example, server1.mybackup.com and later on wants to add more backup quota, however, only server2.mybackup.com has enough storage for expansion. In that case, you will need to migrate the user to server2 and your backup users will need to change the backup server URL from server1 to server2 in the login screen of the client interface to get access to the new server.

A high scalable backup system should make this kind of transition seamless to users, for example, you can set up a domain name <u>www.mybackup.com</u> for your client to connect which is able to redirect users to the correct backup server to backup. Our Redirector is exactly designed to work for this solution.

By setting up a Redirector Server:

- 1. All new clients can use the backup URL e.g.: <u>www.mybackup.com</u> when they set up the backup client interface.
- 2. Administrator can add backup machines to the Redirector as the number of user grows.



The dotted area shows the redirector server group.

server1.mybackup.com server2.mybackup.com server3.mybackup.com :

As the CPU utilization for a Redirector Server is low, you can dedicate one of the AhsayCBS as the redirector host. In the above example, server1.mybackup.com also serves as a redirector host. The domain name www.mybackup.com is also pointed to this server.

Name	Туре	Value
www.mybackup.com.	CNAME	server1.mybackup.com.
server1.mybackup.com.	A record	192.168.6.101
server2.mybackup.com.	A record	192.168.6.102
server3.mybackup.com.	A record	192.168.6.103
server4.mybackup.com.	A record	192.168.6.104

Administrator will require setting up the following in the DNS, for example:

Notes:

- 1. The IP address of server1 to server4 are ranged from 192.168.6.101 to 192.168.6.104.
- 2. The Redirector Server is hosted on the server1.mybackup.com machine.

In the following chapters, we shall guide you to set up a Redirector host, and how to join your existing servers to this Redirector host.

Limitation

- Existing users can continue to back up to their existing server, for example, server2.mybackup.com in the above example. However if they want to use the redirector feature, they are required to change the connecting host name to e.g.: <u>www.mybackup.com</u>. The redirector setup can only benefit new users as you will distribute the URL, i.e. <u>www.mybackup.com</u> to new users, you may not want to bother the existing users on applying the settings immediately.
- Administrators need to ensure the same user name (case sensitive) has not been used within the backup servers in the same redirector group. This limitation includes all the users created by the resellers.

License information

The pricing unit of AhsayCBS Redirection Server module is per device to be redirected.

For meter key inquiries please contact the Sales team at Ahsay by email at <u>sales-kb@ahsay.com</u> or call our International Sales Hotline +852 3580 8091.



Hosting a Redirector

First of all, you need to assign an AhsayCBS to be set up as a Redirector role. In our example, server1.mybackup.com also serves as a redirector host. The domain name <u>www.mybackup.com</u> is also pointed to this server.

In the following steps, we will set up the connection channel between the redirector host and the backup servers. In the AhsayCBS of server1, you need to register your Backup Server(s) with the Redirector in AhsayCBS management console under **Redirection** -> **Hosting a Redirector**.

ana	age Target	Backup Serve	r				
•							
	Enabled	Login Name	Hostname	Enable SSL	SSL Port	Enable Http	Http Port
	true	system	server1.mybackup.com	true	443	false	0
	true	system	server2.mybackup.com	true	443	false	0
	true	system	server3.mybackup.com	true	443	false	0
ch	le Eree Tri	al Settings					

- 1. Add a Backup Server in the Redirector by clicking the **Create** button, then entering the login credentials and host name, and the ports of that Backup Server.
- 2. Repeat the above steps until all the Backup Servers in your environment are registered with the AhsayCBS with the Redirector role.

Option: You can dedicate one of the AhsayCBS (Backup Server) to host free trial users, by enabling this feature and assign one of your Backup Servers in the list.

Joining Redirector

In the following steps, we will set up the connection channel between the redirector host and the backup servers.

Limitation:

Administrators need to ensure the same user name (case sensitive) has not been used within the backup servers in the same redirector group, this limitation includes all the users created by the resellers.

To join your Backup Servers to a Redirector, please enter your AhsayCBS management console under **Redirection** -> **Joining Redirectors**.

Note: Even your redirector is hosted in server1, you still need to perform the following setup.

C AhsayCBS			
High Scalability			
You are able to build a highly scalable backup system by enabling the High Scalability feature below. With the feature enab to use multiple backup servers with a single URL. All your backup client software will be connected to Ahsay Redirector with then the Redirector will direct the users to the appropriate backup servers.			
Enable high scalability feature Protocol https			
Hostname www.mybackup.com Port 443 Login Name system			
Password			
Test			
	P	Χ	?

- 1. Turn on the Enable high scalability feature button.
- 2. Enter the protocol, host name, and port number of the Redirector machine.
- 3. Enter the login credentials to the Redirector machine.
- 4. Repeat the above steps on all other backup server that needs to join the redirector server.

Advanced Setup

Setup Wild Card Certificate

In the Redirector with a number of Backup Servers setup scenario, you need to apply a wild card certificate for all your AhsayCBS servers. When you add a new backup server or Redirector into the redirector server group, you need to apply the wild card certificate to the new server. This is cost efficient and do not require to purchase a new certificate for a new server.

Setup Replication in Redirector Server Group

Since the user profile and local user data are hosted on individual Backup Servers, if you need to setup replication in this environment, you need to setup a dedicated replication profile for each Backup Server. In our example, 4 dedicated replication profiles are required to setup.

Note: The replication can be replicated to another replication server or predefined storage.

For more information about the replication setup, please refer to the <u>CONFIGURING</u> <u>REPLICATION</u> section for details.

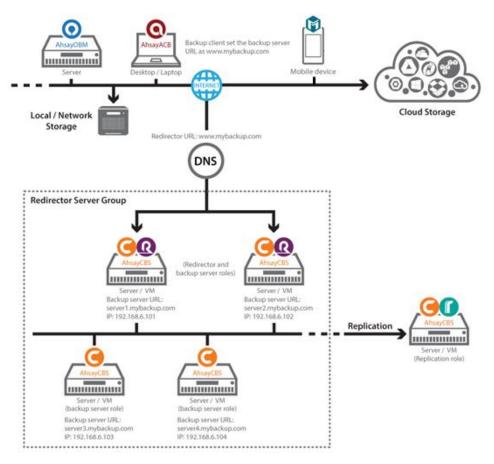
Multiple Redirector Setup

The following is an example on setting up a multiple redirector server group. The main reason is to maintain a high availability redirector.

Assumption and requirement:

In this example, we assumed that you are using a DNS round robin setup, when there is a request from the Internet, e.g.: <u>www.mybackup.com</u>, it will be able to redirect either to the first redirector (e.g.: server1.mybackup.com) or second redirector (e.g.: server2.mybackup.com).

For each Redirector Server, it is required to have its own redirector license key. If you setup 2 Redirector Servers, you will need 2 times of your redirector licenses.



Administrator will require setting up the following in the DNS, for example:

Name	Туре	Value
www.mybackup.com.	A record	192.168.6.101
www.mybackup.com.	A record	192.168.6.102
server1.mybackup.com.	A record	192.168.6.101
server2.mybackup.com.	A record	192.168.6.102
server3.mybackup.com.	A record	192.168.6.103
server4.mybackup.com.	A record	192.168.6.104

Notes:

- 1. The round robin setting is required to redirect the traffic to either server1.mybackup.com (192.168.6.101) or server2.mybackup.com (192.168.6.102).
- 2. The IP address of server1 to server4 are ranged from 192.168.6.101 to 192.168.6.104.
- 3. The Redirector Servers are hosted on the server1.mybackup.com and server2.mybackup.com machine.

When you configure the redirector hosting on the first redirector, which we have described in the <u>Hosting a Redirector</u> section, same configuration is required to apply on the second redirector.

Example:

ana	age Target	t Backup Servei	r				
•	ii)						
	Enabled	Login Name	Hostname	Enable SSL	SSL Port	Enable Http	Http Port
	true	system	server1.mybackup.com	true	443	false	0
	true	system	server2.mybackup.com	true	443	false	0
	true	system	server3.mybackup.com	true	443	false	0

On other backup servers, you need to join the redirector.

Example:

G AhsayCBS	
High Scalability	
You are able to build a highly scalable backup system by enabling the High Scalability feature below. With the feature enal to use multiple backup servers with a single URL. All your backup client software will be connected to Ahsay Redirector wit then the Redirector will direct the users to the appropriate backup servers.	
Enable high scalability feature Protocol Inttps v	
Hostname www.mybackup.com Port 443 Login Name system	
Password ••••••	
Use Proxy Test	
	:

9 Monitoring Activities

Set up a Read-only Admin Account for Operators

For daily monitoring on the AhsayCBS management console, you can assign your staff/operators with a read-only admin role account. This read-only admin role system account shares similar accessibility as its creator, except it has read-only permission. This feature is designed to help you with monitoring on the backup and restore jobs, Live Activities on the AhsayCBS server, Administration logs and Reporting etc.

Follow the steps below to create a system user with read-only admin role:

1. Click on the **Basic** icon under the **System Settings** section on the CBS main page.



2. Navigate to the **Administrative Access** tab, then click on the \bigoplus button under Manage System User to create a new system user.

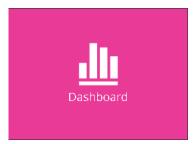
C Ahsa	yCBS							
General	Email P	redefined Destinations	Administrative Access	Languages				
Manage all s	ystem user a	ccounts that are able to acce	ess the web console of this s	server.				
Manage	System Use	ər						
	R							
	Name		Туре		Owner			
	c2		Sub Admin					
	ro_adm	in	Read-only Admin					
	steven		Admin					
	system		Admin					
	yuk		Sub Admin					
						P	X	?

3. Fill in the details of the system user profile on the page as shown below. Make sure you have selected **Read-only Admin** under the **Type** field.

Add new system user
Profile
Name
username
Password
Re-type Password
Type Read-only Admin ▼
Email me Consolidated Report

4. Click the + button then the button at the bottom of the page to confirm. The system user with read-only admin role has been added.

Dashboard



The dashboard is a one-stop overview providing important information that the system administrator should have attention to, for example, system errors/warnings, the system health conditions and real-time activities of the system. With this information, system administrator can quickly identify the potential issues that might pose thread to the CBS system and therefore can react accordingly to fix the issues. Below is a summary of the information that the dashboard section provides.

To Dos

It contains system announcement, errors and warning such as "**Missed Backups**", "**Failed Backups**", "**System Errors**", "**Replication Errors**", "**API Errors**" and "**Email Errors**". Administrator or operators can base on these messages to take corresponding actions.

Dos Overview CP	U Memory	Storage Live	Threads			
rors and Warnings						
g-						
						Yesterday 🔻
₫ ∆		20		(Co	AP	≥
Missed Backups			*⊗	-		
Missed Backups	Faile	ed Backups	System Errors	Replication Errors	API Errors	Email Errors
16		2	63	0	0	0
		-		• •	•	•
						View * 25 Rows/Page •
ogin Name	Owner	Backup Set		Destination	Job	Status
) nas		b 1		G CBS	2016-12-07-17-00-00	Missed Backup
) miniwin		File Backup		G CBS	2016-12-07-13-00-00	Missed Backup
acbwin		File Backup		G CBS	2016-12-07-13-00-00	Missed Backup
steven4		🚑 Hyper V Testing	g 05	Local-1	2016-12-07-12-08-00	Missed Backup
t1		📉 MySQL Databa	ise	G CBS	2016-12-07-12-07-00	Missed Backup
				• • • • •		

Viewing options

Selectable Logs Period

You can select to display the log entries of the errors and warnings from a period of time you selected. Click the drop-down menu on the right under the **Errors and Warnings** section to select the desired period of time.

AhsayCBS					
o Dos Overvie	w CPU Memory	Storage Live Threads			
Errors and Warı	nings				
	0				
					Today T oday
					Yesterday This Week
2	20		Co Co	A 🔁	Last Week This Month
37	3	42	0	0	Last Month
					Last 7 Days Last 14 Days
					View * 25 Last 30 Days
					Last 60 Days
Login Name	Owner Backup	Set	Destination	Job	Stati
() steven3	🄊 MS	SQL Server Backup Set Name	CBS	2016-12-07-23-00-00	Missed Backup

Besides selecting **Today** and **Yesterday** from the above mentioned drop-down menu, you will see a chart illustrating the number of errors for different types of errors/warning within the selected period of time.

In the chart below, for example, the **vertical axis** denotes the number of errors/warnings while the **horizontal axis** denotes the date. The lines on the chart in different colors correspond to the different types of errors/warnings as shown in the number counter below the chart in their respective colors.



Selectable Number of Row per Page

You can also select the number of rows (i.e. the number of entries) to display on each page. Click on the drop-down menu as shown in the screen shot below to select the desired setting.

🚽 AhsayCBS					
To Dos Overview	CPU Memory	Storage Live Thread	ds		
1	∆ ⊗	233	6		
	ŭ	255	Ŭ	View * 25 Rov	vs/Page ▼ Page 1 ▼
Login Name	Owner Backup	Set	Destination	* 25 Row * 50 Row * 100 Row	
💿 steven3	🔭 MS :	SQL Server Backup Set Name	G CBS	2016-12-07-23-1 * 200 Ro	ws/Page lackup
💽 a1	💦 Mys	QL Daily	G CBS	2016-12-07-22-00 Ro	ws/Page

Missed Backups



This page shows all details on all missed backups from all backup users using this CBS server. Missed backup refers to backup jobs that were failed to perform according to the set backup schedules. Any backup jobs failed to perform backup 6 hours after the scheduled backup time is considered as missed backup.

To Dos Overviev	v CPU	Memory Storage Live Threads			
				View * 25 Row	s/Page ▼ Page 1 ▼
Login Name	Owner	Backup Set	Destination	Job	Status
() steven3	-	MS SQL Server Backup Set Name	G CBS	2016-12-07-23-00-00	Missed Backup
() a1	-	NySQL Daily	G CBS	2016-12-07-22-00-00	Missed Backup
() aaa		D b1		2016-12-07-20-00-00	Missed Backup

Login Name	Login name of the backup user
Owner	Ownership of the backup account
Backup Set	Name of the backup set that has missed the scheduled backup
Destination	Backup destination of the missed backup
Job	Date and time when the backup job was classified as a missed backup
Status	Status of the missed backup job

Failed Backups



This page shows all details on all failed backups from all backup users using this CBS server. Failed backup refers to backup jobs that are not performed successfully. The backup failure could be caused by various reasons, such as storage capacity on the backup destination, Internet connection between the client backup agent and the CBS server/backup destination, user interruption during backup, etc.

To Dos Overv	view CP	U Memory Storage Live Threa	lds		
				View * 25 I	Rows/Page ▼ Page 1 ▼
Login Name	Owner	Backup Set	Destination	Job	Status
💽 ron		default-backup-set-name-ronnie	G CBS	2016-12-07-20-00-00	Error
💿 mini		File Backup	G CBS	2016-12-07-20-00-00	Warn
💽 ron		default-backup-set-name-ronnie	G CBS	2016-12-06-20-00-00	Error

Login Name	Login name of the backup user
Owner	Ownership of the backup account
Backup Set	Name of the backup set that failed to back up
Destination	Backup destination of the failed backup
Job	Date and time when the backup job failed to back up
Status	Status of the failed backup job

System Errors



This page shows all details of system errors related to backup/restore for this CBS server. System errors include, for example, fail login attempt, login authentication failed, etc.

To Dos	0	verview	CPU	Memory	Storage	Live Threads
Timesta	mp	Login Nam	e Owner	Message		
12/08/20 17:02:19		steven		Failed login a	attempt from IP	address 192.168.7.105
12/08/20 16:52:16		steven		Failed login a	attempt from IP	address 192.168.7.105
12/08/20 16:42:13		steven		Failed login a	attempt from IP	address 192.168.7.105

Timestamp	Date and time when the system error recorded
Login Name	Name of backup user in relation to the system error
Owner	Ownership of the backup account
Message	Message showing the system errors in details

Replication Errors



This page shows all details of replication error for this CBS server.

Timestamp	Message
12/08/2016 16:33:38	Error replaying '1457105878860\files\2016-06-14-23-30-00\retention.xml.187.158d6598cac.gz' to target destination
12/08/2016 16:33:38	Failed to replicate 'E\ahsay01\Telco_PC\1457105878860\Snapshots\1481152470048.313'. Error=[LocalDiskManager.getOutputStream] Fail to open 'X:\replicate/Ahsay_nortec/user/Telco_PC/1457105878860/files/2016-06-14-23-30-00/retention.xml.187.158d6598cac.gz' X.\replicate/Ahsay_nortec/user/Telco_PC/1457105878860/files/2016-06-14-23-30-00/retention.xml.187.158d6598cac.gz
12/08/2016 16:33:32	Error replaying '1464621030883\files\2016-07-01-20-00-00\vetention.xml.187.158d5840493.gz' to target destination
12/08/2016 16:33:32	Failed to replicate 'E\ahsay01\Eidem_DC01_NY\1464621030883\Snapshots\1481137128205.107'. Error=[LocalDiskManager.getOutputStream] Fail to open 'X\'replicate/Ahsay_nortec/user/Eidem_DC01_NY/1464621030883/files/2016-07-01-20-00-00/retention.xml.187.158d5840493.gz'. Error='Fail to set file attributes: X\'replicate/Ahsay_nortec/user/Eidem_DC01_NY/1464621030883/files/2016-07-01-20-00-00/retention.xml.187.158d5840493.gz'

Timestamp	Date and time when the replication error recorded
Message	Message showing the replication errors in details

API Errors



This page shows all details of API errors for this CBS server.

To Dos	Overview	CPU	Memory Storage Live Threads
Timestan	np Login Name	Owner	Message
			[Apij[RunDirect]com ahsay obs.ccne dbs.c. Incorrect backup username/password at com ahsay obs.api ApiStructsAction.check8kpUserPwd(Unknown Source) at com ahsay obs.api ApiStructsAction.check8kp
			at com ahsay obs.api json JSONApi execute(Unknown Source) at org apache struts chain commands servlet ExecuteAction.execute(ExecuteAction java:58) at
			org apache struts chain commands AbstractExecuteAction execute(AbstractExecuteAction java 67) at org apache struts chain.commands ActionCommandBase.execute(ActionCommandBase java 51) at
			org.apache commons chain.impl. ChainBase.execute(ChainBase java: 191) at org.apache.commons chain.generic.LookupCommand.execute(LookupCommand.java: 305) at
			org apache commons chain impl ChainBase execute(ChainBase java: 191) at org apache struts chain. ComposableRequestProcessor.process(ComposableRequestProcessor java: 283) at
			org apache struts action ActionServlet process(ActionServlet java: 1913) at org apache struts action ActionServlet doPost(ActionServlet java: 462) at java: servlet. http: HttpServlet.service(HttpServlet.java: 646) at
			javax.ser/let.http.HttpSer/let.service(HttpSer/let.java.727) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java.303) at
			org.apache catalina core ApplicationFilterChain doFilter(ApplicationFilterChain java: 208) at org.apache.tomcat.websocket.server.WsFilter.doFilter(WsFilter.java: 52) at
		ong	org.apache catalina.core ApplicationFilterChain internalDoFilter(ApplicationFilterChain java:241) at org.apache.catalina.core ApplicationFilterChain.doFilter(ApplicationFilterChain java:208) at
11/24/201	6 mwana		com ahsay obs.www.EncodingFilter.doFilter(Unknown Source) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:241) at
17:21:39			org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java.208) at com.ahsay.obs.www.IPFilter.doFilter(Unknown Source) at
			org apache catalina.core ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:241) at org apache catalina.core ApplicationFilterChain.doFilter(ApplicationFilterChain.java:208) at
			org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.java:220) at org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.java:122) at
			org apache catalina authenticator AuthenticatorBase invoke(AuthenticatorBase java 504) at org apache catalina.valves AccessLogValve invoke(AccessLogValve java 950) at
			org apache catalina.core.StandardHostValve.invoke(StandardHostValve java:170) at org apache catalina.valves ErrorReportValve.invoke(ErrorReportValve java:103) at
			org.apache catalina.core.StandardEngineValve.invoke(StandardEngineValve java:116) at org.apache catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:421) at
			org apache coyote http11 AbstractHttp11Processor.process(AbstractHttp11Processor.java: 1074) at org.apache.coyote AbstractProtocol\$AbstractConnectionHandler.process(AbstractProtocol.java.611) at
			org. apache tomcat util net AprEndpoint\$SocketProcessor doRun(AprEndpoint java:2466) at org. apache tomcat util net AprEndpoint\$SocketProcessor.run(AprEndpoint java:2455) at
			java util.concurrent.ThreadPoolExecutor.runWorker(Unknown Source) at java util.concurrent.ThreadPoolExecutor\$Worker.run(Unknown Source) at org.apache.tomcat.util.thread\$WrappingRunnab
			at java Jang Thread run(Unknown Source)

Timestamp	Date and time when the API error recorded
Login Name	Name of backup user in relation to the API error
Owner	Ownership of the backup account
Message	Message displaying the API errors in details

Email Errors



This page shows all details of email errors for this CBS server. Email errors could be caused by invalid email entered by the backup users, storage capacity of the backup user's email account, etc.

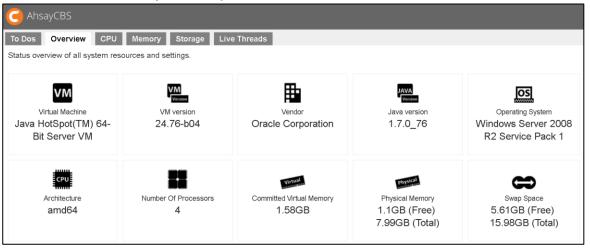
To Dos 0	verview	CPU	Memory Storage Live Threads
Timestamp	Login Name	Owner	Message
			[SMTPMailer.sendHtmlWilhAttach] Failed to send email to 'abc@abc.com' with subject 'Scheduled backup, steven2 > Exchange Mail Level Backup (2010) > 2016-11-20-22-00-00.
			was missed java.io.IOException: [SMTPMailer.sendHtmiWithAttach] Failed to send email to 'abc@abc.com' with subject 'Scheduled backup, steven2 > Exchange Mail Level Backup
			(2010) > 2016-11-20-22-00-00, was missed' at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at
			com.ahsay.obs.core.ers.a.a(Unknown Source) at com.ahsay.obs.core.ers.a.run(Unknown Source) at java.lang.Thread.run(Unknown Source) Caused by:
			com.sun.mail.util.MailConnectException: Couldn't connect to host, port: smtp.gmail.com, 587; timeout -1; nested exception is; java.net.ConnectException: Connection timed out:
			connect at com.sun.mail.smtp.SMTPTransport.openServer(SMTPTransport.java:2053) at com.sun.mail.smtp.SMTPTransport.protocolConnect(SMTPTransport.java:697) at
			javax.mail.Service.connect(Service.java:386) at javax.mail.Service.connect(Service.java:245) at javax.mail.Service.connect(Service.java:194) at
			com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) 5 more
			Caused by: java.net.ConnectException: Connection timed out: connect at java.net.TwoStacksPlainSocketImpl.socketConnect(Native Method) at
			java.net.AbstractPlainSocketImpl.doConnect(Unknown Source) at java.net.AbstractPlainSocketImpl.connectToAddress(Unknown Source) at
			java.net.AbstractPlainSocketImpl.connect(Unknown Source) at java.net.PlainSocketImpl.connect(Unknown Source) at java.net.SocksSocketImpl.connect(Unknown Source) at
			java.net.Socket.connect(Unknown Source) at java.net.Socket.connect(Unknown Source) at com.sun.mail.util.SocketFetcher.createSocket(SocketFetcher.java:312) at
			com.sun.mail.util.SocketFetcher.getSocket(SocketFetcher.java:236) at com.sun.mail.smtp.SMTPTransport.openServer(SMTPTransport.java:2019) 12 more
11/21/2016			com.sun.mail.util.MailConnectException: Couldn't connect to host, port: smtp.gmail.com, 587; timeout -1; nested exception is; java.net.ConnectException: Connection timed out:
			connect at com.sun.mail.smtp.SMTPTransport.openServer(SMTPTransport.java:2053) at com.sun.mail.smtp.SMTPTransport.protocolConnect(SMTPTransport.java:697) at
			javax.mail.Service.connect(Service.java:386) at javax.mail.Service.connect(Service.java:245) at javax.mail.Service.connect(Service.java:194) at
04:03:21	steven2		com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at
04.00.21			com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.afc.mail.SMTPMailer.a(Unknown Source) at com.ahsay.obs.core.ers.a.a(Unknown Source) at
			com.ahsay.obs.core.ers.a.run(Unknown Source) at java.lang.Thread.run(Unknown Source) Caused by: java.net.ConnectException: Connection timed out: connect at
			java.net.TwoStacksPlainSockellmpl.socketConnect(Native Method) at java.net.AbstractPlainSocketImpl.doConnect(Unknown Source) at

Timestamp	Date and time when the Email error recorded
Login Name	Name of backup user in relation to the Email error
Owner	Ownership of the backup account
Message	Message displaying the Email errors in details

Overview

This is an overview of the system resource and system settings. These are useful information for administrator or support staff to collect machine information. This information include "Java virtual machine", "Java VM version", "vendor of the Java", "Java version", "Operating System", "CPU Architecture", "Number of Processors", "Committed Virtual Memory", "Physical Memory", and "Swap Space".

In addition, a list of system settings such as "VM Arguments", "Class Path", "Library Path", "Boot Class Path" and "System Properties" are shown for reference.



CPU

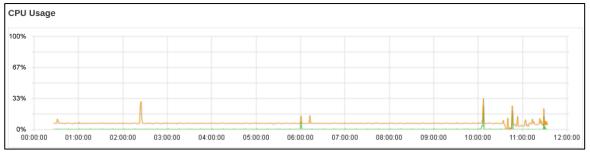
In the CPU page, you can see the current CPU utilization, the percentage that system and application occupied

PU Usage	
33% 0%	
0% / / / / / / /	
01:00:00 02:00:00 03:00:00 04:00:00 05:00:00 06:00:00 07:00:00 08:00:00 09:00:00 10:00:00 11:00:00	12:00
Type Usage Percentage	

There are two parts of information from this page.

CPU Usage Chart

The CPU Usage shows the daily usage of the machine's CPU where the AhsayCBS is installed, with the vertical axis denotes and CPU utilization rate while the Y axis denotes the time.



Usage Distribution

This chart shows the CPU usage distribution in percentage on System and Application.

Туре	Usage	Percentage
System		6.96%
Application		0%

Memory

This is a graphical view of the memory pool/managers usage on this machine.



Heap memory	The heap memory is the runtime data area from which the Java VM allocates memory for all class instances and arrays.	
Non-heap memory	Non-heap memory includes a method area shared among all threads and memory required for the internal processing or optimization for the Java VM.	
Par Eden Space	The pool from which memory is initially allocated for most objects.	
Par Survivor Space	The pool containing objects that have survived the garbage collection of the Eden space.	
CMS Old Gen	The pool containing objects that have existed for some time in the survivor space.	
Code Cache	The HotSpot Java VM also includes a code cache, containing memory that is used for compilation and storage of native code.	
CMS Perm Gen	The pool containing all the reflective data of the virtual machine itself, such as class and method objects. With Java VMs that use class data sharing, this generation is divided into read-only and read-write areas.	
Reference	Oracle JConsole documentation	

Storage

This is a local storage and predefined destination usage overview.

Disk Usage

Under the Disk Usage section, it shows all the drives on the machine where the AhsayCBS is installed. You can see the capacity used (**Used**) and capacity remain (**Free**) for each drive.

Disk Usage	
Drive	
(C:)	
New Volume (D:)	
(E:)	
New Volume (F:)	
New Volume (G:)	

You can select to view the entries in the Disk Usage section by sorting the Drive Letter or Free Storage

View	* Sort by [Orive Lette 🔻
	* Sort by D	rive Letter
	* Sort by F	ree Storage
	55.66GB	12.61GB
	192.45GB	738.94GB

Predefined Destination Usage

Under the Predefined Destination Usage section, it shows all the predefined destinations that you have added under the **System Settings** > **Basics** > **Predefined Destination**.

Predefined Destination	on Usage
Destination	
Local-1	
G CBS-Test-Destination	

You can select to view the predefined destination entries by sorting the **Destination Name** or **Free Storage**.

View	* Sort by Destination Nan 🔻
	* Sort by Destination Name
	* Sort by Free Storage
	0B 0B

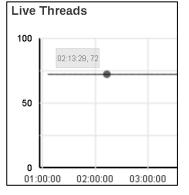
Live Threads

This page shows all live threads that are running on this machine.

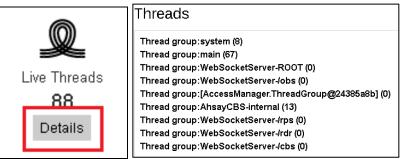


Live Threads	Active process threads		
Peak	The largest number of live threads record in the above period		
Daemon Threads Threads that are handled in the background			
Total Threads Started	The total number of started threads		

You can use mouse over at aby point of the curve to obtain the number of live threads at the particular time.



If you click on the Details button below the Live Threads icon, you will see a breakdown of all live threads that are running on this machine. It is shown as thread groups for developers or administrators reference.



Live Activities



You can check on recent backup and restore status with the progress monitor in percentage, replication (both send and receive) and redirection status.

Backup Status

Available Backup Jobs Can Be Monitored by Live Activities								
Backup Type	AhsayOBM	AhsayACB	AhsayMOB					
File Backup	~	1	✓					
Cloud File Backup	~	√	NA					
IBM Lotus Domino Backup	√	NA	NA					
IBM Lotus Notes Backup	✓	√	NA					
MS Exchange Server Backup	✓	NA	NA					
MS Exchange Mail Level Backup	✓	NA	NA					
MS SQL Server Backup	~	NA	NA					
MS Windows System Backup	✓	√	NA					
MS Windows System State Backup	~	NA	NA					
MS Hyper-V Backup	~	NA	NA					
MySQL Backup	√	NA	NA					

Office 365 Exchange Online Backup	\checkmark	\checkmark	NA
Oracle Database Server	\checkmark	NA	NA
ShadowProtect System Backup	✓	NA	NA
VMware Backup	✓	NA	NA

This section shows a list of backup job(s) that is currently running or has finished within the past 1 hour.

kup Status	Restor	e Status	Replication	Receiver	Redirection		
kup jobs that an	e current	ly running or	finished within	n 1 hour.			
ackup Status				Filter Client	Type 💙 User:	Registration Date 🔻 User Gro	oup
ogin Name (Alias)	Owner	Backup Set	Destination	Progress	Estimated Time Le	eft Current File	Transfer Rate
🧿 andrew (name)		D file backup	🕒 СВЗ	100%	0 sec	C:\Users\Administrator \Documents\My Videos	6Kibit/s
🕤 andrew (name)		D mybackup	🕒 свз	100%	O sec	C:\Users\Administrator\Favorites \desktop.ini	20Kibit/s

Restore Status

Available Restore Jobs Can Be Monitored by Live Activities								
F	Restore Type	AhsayOBM	AhsayACB	AhsayOBR	AhsayMOB			
File	Normal Restore	√	√	√	√			
	OpenDirect Restore	X	X	X	NA			
Cloud Fil	e Backup	√	√	√	NA			
IBM Lotu	s Domino Backup	√	NA	√	NA			
IBM Lotu	s Notes Backup	√	√	√	NA			
MS Excha	ange Server Backup	√	NA	√	NA			

MS Exch Backup	ange Mail Level	√	NA	~	NA
MS SQL	Server Backup	√	NA	√	NA
MS Wind	ows System Backup	√	✓	✓	NA
MS Wind Backup	ows System State	√	NA	~	NA
MS Hyper-	Normal Restore	√	NA	√	NA
v	Run Direct Restore	√	NA	√	NA
	Granular Restore with AhsayOBM File Explorer	1	NA	1	NA
	Granular Restore with Windows File Explorer	X	NA	×	NA
MS SQL	Server Backup	√	NA	√	NA
MySQL E	Backup	\checkmark	NA	√	NA
Office 36 Backup	5 Exchange Online	√	✓	1	NA
Oracle D	atabase Server	√	NA	√	NA
ShadowF Backup	Protect System	V	NA	1	NA
VMware	Normal Restore	\checkmark	NA	√	NA
	Run Direct Restore	√	NA	√	NA
	Granular Restore with AhsayOBM File Explorer		NA	~	NA

Granular Restore with Windows File	X	NA	×	NA
Explorer				

This section shows a list of restore job(s) that is currently running or has finished within the past 1 hour.

C AhsayCBS							
Backup Status	Restor	e Status	Replication	Receiver	Redirection		
All restore jobs that	are curre	ently running	or finished with	nin 1 hour.			
Restore Status Login Name (Alias		Backup Set	Destination	Filter Client T Progress	ype 💙 User: Estimated Time L		r Group
💿 a (name)		D file backup	Свз	0%	0 sec	E:\C_\Users\Administrator \Documents\desktop.ini	Obit/s
							× ?

NOTE

OpenDirect restore of file backup sets or granular restore from VMware and Hyper-V backup sets performed using Windows File Explorer will not show up on the [Restore Status] tab in Live Activities. This only applies to restores performed directly through AhsayOBM/AhsayACB/AhsayOBR/ AhsayMOB or AhsayCBS User Web Console.

Replication

Here is the replication jobs status from the backup server to the corresponding receiver.

C AhsayCBS								
Backup Status	Restore	Status	Replicatior	Receiver	Re	edirection		
List of all replication jobs from this server to the corresponding receiver that are current running.								
Replication Sta	atus						Filter M	ode 💌 Status 🗸
Login Name (Alias) Owner	Backup Set	Mode	Status		Current Job	Start Time	Estimated Time Left
🗿 b ()		D bset	RESYNC		0%	G:\obs6\system\obs\temp\conf.zip	14:46:17	
								Х?

Receiver

In this menu, you will see all the replication jobs that the receiver on this server is currently running.



(AhsayCBS							
в	ackup Status	Restore Stat	tus Repl	ication Receive	r Redirection			
Li	st of all replication	jobs that the r	eceiver on tr	nis server is currently	receiving.			
	Receiver Status	6						
						Filter Mode	Y Status	
	Receiver	Mode	Status	Current Job	Start Time	Estimated Time Left		
	replication	REPLAY	18%	1449727753291 /2015-12-11-14-5 /0\000001_0000	56-10 15:01:37			-
							X	?

Redirection

You can see a list of all redirection jobs that are currently running.

(AhsayCBS									
Е	ackup Status Resto	re Status	Replication	Receiver	Redirection					
Li	st of all redirection jobs th	at are current	running.							
	Redirection Status	Host	From		Target	Туре	Filter User: 💌 Type	Number		~
	system	most	10.7.0.130		-		ckupServers	4		-
									X	7
									Λ	• .:

Administration Logs



You can check on the SNMP logs, list of notifications/announcements/alerts, and activities log (system logs) and audit trails.

SNMP Log

You can see a list of SNMP log message in this page. You need to enable the SNMP log in **Settings** -> **Advanced** -> **Logging** -> **Enable SNMP Service**, and need to download the MIB definition file and pass to your SNMP machine.

Message History

This page contains a list of notifications, announcements and alerts.

0	AhsayC	BS			
S	NMP Log	Message Histor	Activities Log Audit Trails		
Lis	st of system i	notifications, annoui	ncements from software vendor, and system alerts received.		
I	Latest Noti	fications / Annou	incements / Alerts	Filter Notification	
	Date	Туре	Notification		
	2015-12-07	🚹 Announcement	Ahsay Backup Software version 7.5 released		
	2015-12-03	🚹 Announcement	Ahsay server maintenance to prepare for new release		
	2015-11-25	🚹 Announcement	Pre-release of v7.5 available for testing now		
	2015-11-16	🚹 Announcement	Ahsay Shopping Centre updated with new version 7 pricing		

Activities Log

In this page, you will see a list of activities/system logs generated by the system events, v6 migration or other user activities.

G AhsayCBS		
SNMP Log Message Histor	y Activities Log Audi	t Trails
View all the system logs of this ser	ver below.	
List of System Log		
		Filter Type View Yow Page 29 View
Timestamp	Туре	Message
2015-12-11 15:29:56	RoutineJobInfo	[Logger] Starting to log system status
2015-12-11 15:29:56	RoutineJobInfo	[Logger] Start: logging system status
2015-12-11 15:29:56	RoutineJobInfo	[Logger] End: logging system status
2015-12-11 15:30:56	RoutineJobInfo	[Logger] Starting to log system status
2015-12-11 15:30:56	RoutineJobInfo	[Logger] Start: logging system status

Audit Trails

In this page, you can see the activity logs of all users on this server.

(Ahsay	BS								
s	NMP Log	Message Hi	story Acti	ivities Log	Audit Trails					
Vi	ew the activit	ty logs of all use	ers on this ser	ver.						
	Audit Trails	5		Filter	alex	у Туре	View	* Last Month 💌	• Page 133 🗸	
	Timestamp		Туре	Messag	e					
	2015-11-28 1	2:48:04	ReplicateFile	Replicati	ing 'G:\obs6\user\;	a\db\RestoreLog\2015	-11-10-14-57-00.log	g'		
	2015-11-28 1	2:48:04	ReplicateFile	Replicati	ing 'G:\obs6\user\;	a\db\StorageLog\1443	756149292\2015-1	0.log'		
	2015-11-28 1	2:48:04	ReplicateFile	Replicati	ing 'G:\obs6\user\;	a\db\StorageLog\1443	773502459\2015-1	0.log'		
	2015-11-28 1	2:48:04	ReplicateFile	Replicati	ing 'G:\obs6\user\;	a\db\StorageLog\1443	774664557\2015-1	0.log'		*

Backup / Restore Logs



You can check on a list of backup and restore jobs, backup errors, backup set logs, and activities logs.

Backup Jobs

Here is summary of the backup jobs.

🧲 AhsayCE	3S								
Backup Jobs	Restored Jobs	Backup Erro	ors Backup Set	Log Activ	vities Log				
√iew all the bac⊦	kup jobs by all backup	users below.							
List of Backup Job									
Login Name (Owner Backup Set	Destination	Backup Job	Backup Time	End Time	Client Version	Upload Size	Job Status	Report
User1	default-backup- set-name-1 (144902735137	CBS)	2015-12-09-20-00-00	09/12 08:00 PM	09/12 08:00 PM	OBM 7.5.0.0	5.36G	ок	Down
andrew	File (144887559674	CBS 3)	2015-12-09-21-00-00	09/12 09:00 PM	09/12 09:00 PM	OBM 7.5.0.0	329.67M	ок	Down
alex	119_machine (144885239639	CBS 1)	2015-12-09-21-00-00			OBM	0	Missed Backup	
									Х?

Restored Jobs

Here is a summary of the restored jobs.

G AhsayCB	3S									
Backup Jobs	Rest	ored Jobs Backup Erro	rs Backup	Set Log Act	tivities Log					
View all the resto	ored files	by all backup users below.								
List of Resto	ored File	e								
					Filter Use	r Group	×	View *1	oday 🔤	~
Login Name	Owner	Backup Set	Destination	Start Time	End Time	Size	IP	Status	Report	
andrew		file backup (1449727753291)	CBS	11/12 02:38 PM	11/12 02:38 PM	880	10.20.7.34	ОК	Download	
_	_		_		_	_	_	_	-	
									X	?

Backup Errors

Here is a summary of the backup errors encountered by all backup users.

AhsayCB	S			
ackup Jobs	Restored Jo	bs	Backup Errors Backup Set Log Activities Log	
ew all the back	up errors encou	ntered b	y all backup users below.	
∟ist of Backu	ıp Error		Filter User Group View * Last Month 💌	
Timestamp	Login Name	Owner	Message	
2015-11-09			The In-File Delta Backup feature is not enabled on this account. Please be aware that files are being backed up	
21:05:12	terry-obm		in their entirety in this backup job.	
2015-11-09			Deslam semalated with werming (a)	
21:05:26	terry-obm		Backup completed with warning(s)	
2045 44 42				~

Backup Set Log

Here is a summary of backup set logs of all the backup users.

ackup Jobs	Restored Jol	bs Backup	DErrors Ba	ckup Se	et Log Activities Log		
w all the back.	up set logs of all	backup users	below.				
List of Backu	p Set Log						
						Filter	User Group 👻
Backup Time	End Time	Job Status	Login Name	Owner	Backup Set	Filter Client Version	User Group
Backup Time	End Time	Job Status	Login Name	Owner	Backup Set	1	
Backup Time 01/12 02:01 PM	End Time	Job Status	-		-	1	
	1		b		bset	Client Version	Last Successful Backup

Activities Log

Here is a list of user backup/restore related system activities logs.

G AhsayCB	S				
Backup Jobs	Restored Jo	obs	Backup Erro	ors Backup Set Log Activities Log	
View all the system	n logs of this s	erver be	elow.		
List of Syster	n Log				
			Filter	Type View 'Today Page 56 V	
Timestamp	Login Name	Owner	Туре	Message	
2015-12-11 15:30:54			RoutineJobInfo	fo [QuarterHourlyJob] Finished checking run backup.	
2015-12-11 15:30:54			RoutineJobInfo	fo [QuarterHourlyJob]Starting trial user reminder	
204.5 42 44					*



Replication Log



You can check on both send and receiver logs, and activities logs.

Sent to Receiver

You can see a list of sending job from the AhsayCBS to the corresponding receiver.

nt to Receiver	Received from Othe	er Backup Servers Activities Log
v all the logs of sendi	ng job from this serve	r to the corresponding receiver below.
eplication Sent Lo	og	
		Filter Type View * Today Vege 34 V
Timestamp	Туре	Message
2015-12-10 14:13:20	ReplicateFileInfo	Replicating 'G:\obs6\user\a\db\RestoreLog\2015-11-06-17-35-27.log'
2015-12-10 14:13:20	ReplicateFileInfo	Replicating 'G:\obs6\user\a\db\RestoreLog\2015-11-06-17-40-34.log'
2015-12-10 14:13:20	ReplicateFileInfo	Replicating 'G:\obs6\user\a\db\RestoreLog\2015-11-06-17-41-41.log'
	ReplicateFileInfo	Replicating 'G:\obs6\user\a\db\RestoreLog\2015-11-06-17-43-38.log'

Received from Other Backup Servers

Here is the log of receiver on the AhsayCBS.

🧲 AhsayCBS			
Sent to Receiver	Received from Othe	er Backup Servers Activities Log	
View all the logs of receiv	ver on this server bel	.WC	
Replication Receiv	ed Log		
		Filter rps-1(rps-1) View 'Last Month View	
Timestamp	Туре	Message	
2015-12-11 15:07:07	ReceiveFileInfo	Receiving 'G:\obs6\user\a\db\StorageLog\1445235725972\2015-11.log'	
2015-12-11 15:07:07	ReceiveFileInfo	Receiving 'G:\obs6\user\a\db\StorageLog\1445236313228\2015-10.log'	
2015-12-11 15:07:07	ReceiveFileInfo	Receiving 'G:\obs6\user\a\db\StorageLog\1445236313228\2015-11.log'	
2015-12-11 15:07:07	ReceiveFileInfo	Receiving 'G:\obs6\user\a\db\StorageLog\1445321787577\2015-10.log'	
		×	?

Activities Log

Here is the page to view all the replication activities log, such as retention policy job.

ent to Receiver R	leceived from Other B	ackup Servers Activities Log
w all the replication ac	tivities log below.	
ctivities Log		
		Filter Type View Today V
Timestamp	Туре	Message
2015-12-11 06:00:13	RetentionPolicyInfo	[DailyJob] Starting retention policy
2015-12-11 06:00:13	RetentionPolicyInfo	[DailyJob] Start removing retained files
2015-12-11 06:00:13	RetentionPolicyInfo	Cleaning retention area for 'G:\obs6\rps-system\rcvshome\files'
2015-12-11 06:00:13	RetentionPolicyInfo	Cleaning retention area for 'G:\obs6\system\rps\rcvshome\rps-1\files'

Redirection Logs



You can check on the redirection activities logs in this menu.

(AhsayCBS			
4	ctivities Log			
V	iew all the redirection a	activities below.		
				^
	Activities Log			
			Filter Type View * Today V Page 6 V	
	Timestamp	Туре	Message	
	2015-12-10 14:00:21	RoutineJobInfo	[HourlyJob]Starting license check	
	2015-12-10 14:00:21	RoutineJobInfo	[HourlyJob]Start: License check	
	2015-12-10 14:00:21	RoutineJobInfo	[HourlyJob]End: License check	
	2015-12-10 14:00:28	V6LocateOBSRInfo	[obc.LocateObsr] Login name = 'User1' does not exist. IP = '192.168.6.115'	
	2015-12-10 14:03:28	LocateBackupServerInfo	[LocateBackupServer] Loαin name = 'andrewtest2' does not exist. IP = '192.168.8.105'	v
			X ?	

Enable Third Party Monitoring Tools

You can set up third party monitoring tools such as SNMP and Windows Event Log (Windows only) in **System Settings -> Advanced -> Logging**.

G AhsayCBS
Auto Save Proxy Logging File Explorer Runtime Options
You can publish system and error messages of this server to third parties' monitoring tools through SNMP. If your monitoring tool supports SNMP, simply enable the SNMP feature below.
Download MIB Files
Enable SNMP Service
Windows Event Log
Use Windows Event Log
Event Log Name
🗎 X ?

10 Branding the AhsayCBS

This chapter describes the steps to brand the AhsayCBS/AhsayUBS.

Since version 7.7, you can brand the AhsayCBS and generate new AhsayCBS installers and AhsayUBS image files from the AhsayCBS interface.

Prerequisite

A Rebranding license is required for this feature to work. Evaluation license does not support this feature. If you do not have a license yet, visit the <u>Ahsay Shopping Centre – Rebranding</u> page to purchase one.

Before Getting Started

Here are the suggested steps for you to complete the process.

- Prepare the logos, properties, application settings and digital signature to be applied in the **Rebrand Clients** section, which will be reflected in the Client Backup Agents (AhsayACB/AhsayOBM).
- 2. Generate the AhsayOBM/AhsayACB installers for testing.
- 3. Prepare the logos, properties, cascade style sheet, connector/SSL certificate settings and customized report templates to be applied in the **Rebrand Web Console** section, which will be reflected in the AhsayCBS web console.
- 4. Generate the AhsayCBS installer for testing.
- 5. **Optional:** AhsayUBS image file generation. Select either 'ISO' or 'IMG' as the format for image file generation. The image file will be the installation file for the AhsayUBS.

AhsayUp Upgrade Service and AhsayUp+ Upgrade Service

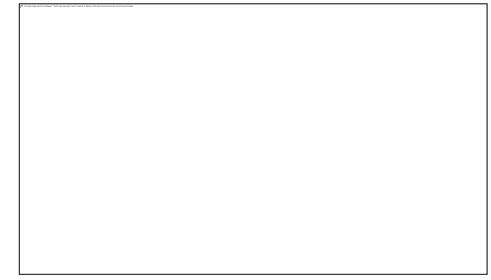
Subscribe our premium upgrade service to enjoy a smooth and effortless upgrade experience. Click <u>here</u> to learn more about the differences between the AhsayUp Upgrade Service and AhsayUp+ Upgrade Service, or visit the <u>Ahsay Shopping Centre</u> directly to subscribe the service.

For the images specifications, please refer to the Appendix F.

Prepare Branding for AhsayCBS Interface

After you have installed the AhsayCBS, you can upload the graphics and customize the properties.

- 1. Login to the AhsayCBS management console as "system" user.
- 2. Click in System Settings -> Basic -> Administrative Access.



3. Click on the "**system**" user to brand the AhsayCBS.

If you are testing this feature, please create a sub admin user and test the following steps, this is because when new installers are generated, the existing installers will be overwritten with the new ones.

4. Click on the **Rebrand Web Console** section on the left.

Profile	User Interface Connector Predefined Destinations Report
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers
Rebrand Web Console	User Interface
Rebrand Clients	Title Product Name
	Download link for iOS app https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey= Download link for Android app https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=

- 5. Enter the following fields under the **User Interface** tab.
- 6. **Title** The name to be displayed on the title bar of the browser.
- 7. **Product Name** The name to be displayed in the software license page.
- 8. **Download link for iOS app –** The URL link directs users to iOS App Store to download AhsayMOB.

9. **Download link for Android app –** The URL directs users to Android Google Play to download AhsayMOB.

NOTE

Although it is possible to define the URLs to download the AhsayMOB application from iOS and Android platforms, please kindly note that AhsayMOB is not brandable.

- 10. Upload the branding image for the AhsayCBS interface. Please refer to the branding image specifications listed on <u>Appendix F</u>, you can download the default logo/icon for reference.
- 11. At the bottom of this page, you can upload the Cascade Style Sheet (CSS) for the AhsayCBS interface.
- 12. Click on the **Connector** tab if you need to change the connector settings and SSL settings. These settings will be applied to your new installers.

Profile	User Interfa	e Connecto	Predefined D	estinations Repor	t			
Backup User Settings	Custom Prop	erties Custo	om Files 🛛 Digital	Signature Build II	nstallers			
Rebrand Web Console	Connector							
Rebrand Clients								
	D IP	Port Protocol	Max Connection	Connection Timeout	Max Keep A	live Request	SSL Cert	ificate
	0.0.0.0	80 HTTP	2000	120000	1000			
	0.0.0.0	443 HTTPS	2000	120000	1000			
	+	Common Name	Organization Unit	Organization Name	Location Stat	e Country	Expiry Date	Status
	Name		1	-				status
	Name		-					Status
	Name		1	1				Sidius
	Name		-					Status
	Name Name		-					Status

If you will generate the AhsayUBS installer, please reserve the port 8080 for the AhsayUBS web admin interface.

13. Click on the **Predefined Destinations** tab if you need to customize the application name for standard destinations or the credentials for Cloud storage. Please refer to the <u>Customize Application Name on Cloud Storages</u> for instruction.

Note: OpenStack, Dropbox, Local, AhsayCBS, Destination Pool and OneDrive destinations cannot be customized.

Profile	User Interface Connector Predefined Destinations Report
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers
Rebrand Web Console	Customize application name
Rebrand Clients	
	Customize credentials for OneDrive
	Customize credentials for OneDrive for Business
	Customize credentials for Google Drive
	Customize credentials for Dropbox
	Customize credentials for Amazon Cloud Drive
	⊡ ≝ ✓ X ?

14. Click on the **Report** tab if you want to modify the HTML template. These templates will be applied to your new installers.

Profile	User Interface Connector Predefined Destinations Report
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers
Rebrand Web Console Rebrand Clients	Report
Rebrand Clients	Active Directory authentication failure report (ad_authentication_failure.html)
	No preview (Default file)
	Browse No file selected.
	Backup quota alert (backup_quota_alert.html)
	No preview (Default file)
	Browse No file selected.
	Backup quota reminder (backup_quota_reminder.html)
	preview (Default file)
	Browse No file selected.
	[↗ [≝ ✓ X ?

15. Click into the **Custom Properties** tab if you want to modify the properties on the AhsayCBS. These properties will be applied to your new installers.

Profile	User Interface Connec				
Backup User Settings	Custom Properties Cus	stom Files Digital Signati	ure Build Installers		
Rebrand Web Console	Custom Properties				
Rebrand Clients					
	Key	English	Catalan	Danish	Dutch
	CBS	√	1	√	V
	cbs.deploy.win.install.location	. {pf}			
	Terms Of Use	Terms of Use	Condicions d'ús	Brugsbetingelser	Gebruiksvoorwaar
	Rule1	1. All softwares provided by %COMPANY_NAME_FULL% is on an "as is" basis with no warranties of any kind and %COMPANY_NAME_FULL% will not be liable for any damages of any kind arising from the use.%COMPANY_NAME_FULL% further disclaims all warranties, express and implied, including without limitation, any implied warranties of merchantability or	1. Tots els softwars proporcionats per %COMPANY_NAME_FULL% són "as is"sense cap mena de garanties i %COMPANY_NAME_FULL% no es fa responsable de qualsevol-dany ocasionat per l'ús. L'empresa declina totes les garanties, expresses i implícites, incloent sense limitació, qualsevol garantia implícita per una	=	1. Alle software die %COMPANY_NAM verstrekt, is op een zonder garanties v. dan ook en %COMPANY_NAM niet aansprakelijk van welke aard de woortvloeit uit het gi wijst %COMPANY_ alle garanties af, e impliciet, inclusief beperkt tot, implicie

16. Click into the **Custom Files** tab. Upload the branding image for the AhsayCBS installer/AhsayUBS image file. Please refer to the branding image specifications listed on the <u>Appendix F</u>, you can download the default logo/icon for reference.

Profile	User Interface Connector Predefined Destinations Report
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers
Rebrand Web Console	Images for Windows
Rebrand Clients	aboutBG.bmp (164 x 337 px)
	(Default file)
	Browse No file selected.
	desktop.ico (256 x 256 px - Truecolor plus alpha channel transparency)
	(Default file)
	Browse No file selected.
	installer.ico (256 x 256 px - Truecolor plus alpha channel transparency)
	Oefault file)
	Browse No file selected.
	splash.bmp (340 x 240 px)
	[↗ [≝ ✓ Х ?

17. If you have uploaded the digital signature in **Rebrand Clients** > **Digital Signature**, it will be applied to your new Windows installer.

Profile	User Interface Connector Predefined Destinations Report
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers
Rebrand Web Console	Digital Signature
Rebrand Clients	Please refer to [Rebrand Clients] > [Digital Signature]

18. Click on the **Build Installer** tab.

Note: The new AhsayOBM/AhsayACB will be generated and overwrite your existing installers.

19. Select the installer(s) or image file(s) to generate. You can also select the AhsayUBS image file generation. Before you use this option, you may test the AhsayCBS installer generation first, this can save the generation time and download time before you can finalize your branding work.

Profile	User Interface Connector Predefined Destinations Report
Backup User Settings	Custom Properties Custom Files Digital Signature Build Installers
Rebrand Web Console	Building Targets
Rebrand Clients	 ✓ Windows (cbs-win.exe) ✓ Unix (cbs-nix.tar.gz) ☐ ISO (cbs-ubs.iso) ☐ IMG (cbs-ubs.img)

20. If you wish to rebrand the AhsayCBS to resellers using your own branding and to prevent resellers from knowing the software is from Ahsay and changing the branding, you can check the **Disable branding feature on customized web management console** checkbox. With this feature enabled, the **Rebrand Web Console** and **Rebrand Clients** sections in the web management console of the CBS installer to be generated will be disabled. In that case, backup users will not see any Rebrand parameters with Ahsay wording.



- 21. Click and to save all the settings before generating the installer.
- 22. Go back to the **Build Installers** tab, click on the **Build Branded Server** button to generate new AhsayCBS installer or AhsayUBS image file.

Important! If you have changed the rebranding settings, please save them first before pressing this button. (Last update time : --)
Build Branded Server

Please be patient, the installer generation process should take around 10 to 15 minutes for each installer/image. The generation time would depend on the traffic condition on the customization portal.

- 23. You can download branded AhsayCBS installer from the download page.
- 24. In case there are any problems when building the installer, you will be able to see the logs by clicking on the **Download Log** button.

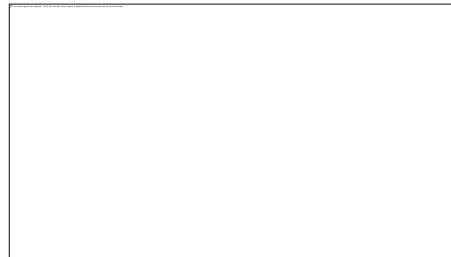


By clicking on the **Download Log** button, you can download the branding log file "**cbs-log.zip**" and you can take a look into the log for troubleshooting the branding issue.

Prepare Branding for AhsayOBM/AhsayACB

Follow the steps below to brand the AhsayOBM/AhsayACB.

- 1. Login to the AhsayCBS management console with "system" account.
- 2. Click in System Settings -> Basic -> Administrative Access.



- 3. Click on the "system" user to brand the client. If you are testing this feature, please create a sub admin user and test the following steps, this is because when new installers are generated, the existing installers will be overwritten with the new ones.
- 4. Click on the **Branding Clients** where you can customize the properties, apply the OBM, ACB settings, and upload OBM and ACB branding images.

Profile	Custom Properties Application Setting	s - OBM Application Se	ttings - ACB Custom F	iles - OBM Custom File	is - ACB
Backup User Settings	Custom Files - OBC Color Scheme Sett	ings - OBM Color Sche	me Settings - ACB Dig	ital Signature Build Ins	tallers
Rebrand Web Console	Custom Properties				
Rebrand Clients					
	E Key	English	Catalan	Danish	Dutch
	SCOMPANY_NAME_FULL%	Ahsay Systems Corporation	Ahsay Systems Corporation	Ahsay Systems Corporation	Ahsay S
	SCOMPANY_NAME_SHORT%	Ahsay	Ahsay	Ahsay	Ahsay
	SCOMPANY_NAME_SYSTEM%	Ahsay Systems Corporation			
Branding information group	SCOMPANY_URL%	www.ahsay.com	www.ahsay.com	www.ahsay.com	www.ah
		1999-2015	1999-2015	1999-2015	1999-20
Trimmed	SCOMPANY COPYRIGHTS	%COMPANY NAME FULLS	%COMPANY NAME FULL %	SCOMPANY NAME FULLS	SCOME
		Ahsay A-Click Backup	Ahsay A-Click Backup	Ahsay A-Click Backup	Ahsay A
	%ACB_SCHEDULER%	Scheduler	Scheduler	Scheduler	Schedul
	%OBM_SYNOLOGY_APP_ID_SYSTEM%	com.ahsay.obm			
		%OBM_SHORT_NAME% is	%OBM_SHORT_NAME% is	%OBM_SHORT_NAME% is	%OBM_
		a versatile backup	a versatile backup	a versatile backup	a versat
		application that backs up	application that backs up	application that backs up	applicat
		databases, applications and	databases, applications and	databases, applications and	
	%OBM_SYNOLOGY_COMMENTS%	virtual machines to local and	virtual machines to local and	virtual machines to local and	
		offsite destinations, e.g.	offsite destinations, e.g.	offsite destinations, e.g.	offsite da
		local hard disk,	local hard disk,	local hard disk,	local ha
		on-premises backup appliance, and backup	on-premises backup appliance, and backup	on-premises backup appliance, and backup	on-premi appliance
		server located in datacenter.	server located in datacenter.	server located in datacenter.	server lo
	ACB	~	v	~	~
Installer - Configuration	OBM	v	V	v	~
group		- -	v	- -	v
			<u></u>	*	
		(pf)			
	obm.deploy.win.install.location	(pf)			

5. First, click on the **Custom Properties** tab.

Profile	Custom Properties	Application Settings - (OBM Application Settings - AG	CB Custom Files - OBM Cu	stom Files - ACB
Backup User Settings	Custom Files - OBC	Color Scheme Setting	s - OBM Color Scheme Settin	gs - ACB Digital Signature	Build Installers
Rebrand Web Console	Custom Properties	2			
Rebrand Clients	Custom Properties	2			
	Key		English	Catalan	Danish
	%THIS_YEAR%		2017	2017	2017
	%COMPANY_NAME_F	ULL%	Ahsay Systems Corporation	Ahsay Systems Corporation	Ahsay Systems Corporation
	%COMPANY_NAME_S	HORT%	Ahsay	Ahsay	Ahsay
	%COMPANY_NAME_S	YSTEM%	Ahsay Systems Corporation		
	%COMPANY_URL%		www.ahsay.com	www.ahsay.com	www.ahsay.com
	%COMPANY_COPYRIC	GHT%	1999-%THIS_YEAR% (C) % COMPANY_NAME_SYSTEM% All rights reserved.	1999-%THIS_YEAR% (C) % COMPANY_NAME_SYSTEM% All rights reserved.	1999-%THIS_YEAR% (C) % COMPANY_NAME_SYSTEM9 rights reserved.
	%SUPPORT EMAIL%		support-kb@ahsay.com	support-kb@ahsay.com	support-kb@ahsay.com
	%SUPPORT_URL%		http://kb.ahsay.com	http://kb.ahsay.com	http://kb.ahsay.com
	%SUPPORT_TEL%				
	%SUPPORT_TEAM%		Ahsay Support Team	Ahsay Support Team	Ahsay Support Team
	%UPDATES_URL%		http://forum.ahsay.com/viewforum.php? f=1	http://forum.ahsay.com/viewforum.php? f=1	http://forum.ahsay.com/viewfor f=1
	%OBS_FULL_NAME%		Ahsay Offsite Backup Server	Ahsay Offsite Backup Server	Ahsay Offsite Backup Server
	%OBS_FULL_NAME_S	YSTEM%	Ahsay Offsite Backup Server		
	%OBS_SHORT_NAME	%	AhsayOBS	AhsayOBS	AhsayOBS
	%OBS_SHORT_NAME	_SYSTEM%	AhsayOBS		
	%RPS_FULL_NAME%		Ahsay Replication Server	Ahsay Replication Server	Ahsay Replication Server
	%RPS_FULL_NAME_S	YSTEM%	Ahsay Replication Server		
	%RPS_SHORT_NAME	%	AhsayRPS	AhsayRPS	AhsayRPS
	%RPS_SHORT_NAME_	SYSTEM%	AhsayRPS		
				ĺ2.	Ľ √ X

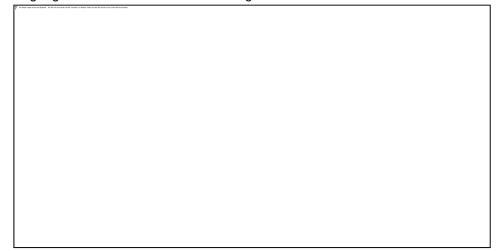
i. There are three categories of branding properties on this page, they are "**Branding** information", "Installer – Configuration" and "Installer - Terms of Use". By default, you will be able to branding properties of all categories, you can also select the desired category by using the filter on the right hand side of the page.

Filter	Group	•	Region •
ese (Br	Group Branding Information Installer - Configuration Installer - Terms Of U	n	nian
vstems	Corporation	Ahsa	y Systems Corporation
		Ahsa	У

ii. You can also filter the language displayed on this page by using the **Region** dropdown menu.

Filter Group 🔻		Region 🔹	
ed)	Chinese (Tradi	Region Western Europe	
	2016	Northern Europe Eastern Europe	
prporation	Ahsay Systems		
	Ahsay	Asia Pacific	

iii. By clicking into each item, you can modify the name of each property in different languages. Click on the bottom right corner to continue.



iv. You will be able to see the modified branding properties as shown.

Profile Backup User Settings	Custom Properties Custom Files - OBC	Application Settings - OBM Color Scheme Settings - O	and the second s		
Rebrand Web Console	Custom Properties				
Rebrand Clients					
	E Key	Englisi	h Catalan	Danisi	h Dutch
	%COMPANY_NA	ME_FULL% My Cor	npany My Com	npany My Co	mpany My Co
	%COMPANY_NA	ME_SHORT% My Cor	npany My Com	npany My Co	mpany My Co
	SCOMPANY_NA	ME_SYSTEM% My Cor	npany		
	SCOMPANY_UR	L% www.n	www.m	ycompany.com www.n	nycompany.com www.
	SCOMPANY_CO		PANY_NAME_FULL% %COMP	PANY_NAME_FULL% %COM	2015 1999- IPANY_NAME_FULL% %COI its reserved. All rigi
	SUPPORT_EM	All_% suppo			nt- suppo nycompany.com kb@n
	%SUPPORT_UR	L% http://s	upport.mybackup.com http://su	pport.mybackup.com http://s	upport.mybackup.com http://

NOTE

From v7.15.0.0, AhsayCBS makes some constraints for the system properties, which are defined as follow:

Short System Property (%XXX_SHORT_NAME_SYSTEM%)

Accepts alphabet and/or numeric character(s)

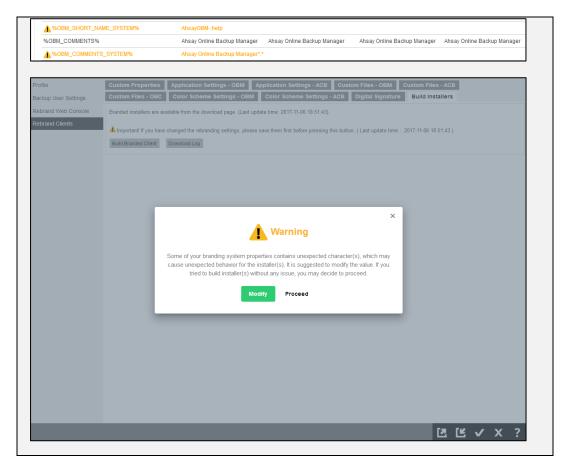
General System Property (%XXX_SYSTEM%, except for Short System Property, %OBM_SYNOLOGY_APP_ID_SYSTEM% and %SOCIAL_MEDIA_LINK_XXX_SYSTEM%)

Only accept alphabet, numeric and/or space character(s)

%OBM_SYNOLOGY_APP_ID_SYSTEM%

- Accepts alphabet, numeric and/or dot character(s)
- The length cannot exceed 128 characters

	eploy.win.install.location)
۶	Cannot be empty
n orde	to meet the above constraints, some default values of system properties are modified
ACB	FULL_NAME_SYSTEM%
۶	From "Ahsay A-Click Backup" to "Ahsay AClick Backup"
OBS	R_SHORT_NAME_SYSTEM%
≻	From "AhsayOBS and AhsayRPS" to "AhsayOBSR"
ACB	_COMMENTS_SYSTEM%
۶	From "Ahsay A-Click Backup" to "Ahsay AClick Backup"
here v	vill be warning shown if the character is incorrect.
	say.obm- plication ID must be within 128 characters.Furthermore,The application ID can contain only characters, numbers and dot.
Brandin Customize the Branding Ir Key Stoom_SYNOI Value com.ahsay.obr	allowed to save the incorrect value as the warning Error will pop out. g Information normation correct value as the warning Error will pop out.



6. After you completed properties, you can click into the **Application Settings – OBM** tab.

Profile	Custom Properties	Application Settings - OBM	Application Settings - ACB	Custom Files - OBM	Custom Files - ACB
Backup User Settings	Custom Files - OBC	Color Scheme Settings - OB	M Color Scheme Settings -	ACB Digital Signature	e Build Installers
Rebrand Web Console	Backup Server Sett	ing			
Rebrand Clients	Backup Server @ Backup Protocol @ http https Backup Port @ @ 80 443 Others				
	Language Support Languages Arabic Catalan Czech Danish German Greek Modern	_			
				2	≰ ∨ X ?

You can customize the default connection settings, supported languages, and GUI features such as show backup server URL or select language drop down list.



7. Click into the **Application Settings – ACB** tab.

Profile	Custom Properties	Application Settings - OBM	Application Settings - ACB	Custom Files - OBM	Custom Files - ACB
Backup User Settings	Custom Files - OBC	Color Scheme Settings - OBN	Color Scheme Settings -	ACB Digital Signature	e Build Installers
Rebrand Web Console	Backup Server Set	ting			
Rebrand Clients	Backup Server 🕜				
	Backup Protocol 3				
	http				
	O https				
	Backup Port 🕝				
	● 80				
	0 443				
	O Others				
	Language				
	Support Languages				
	Arabic				
	Catalan				
	Czech				
	Danish				
	German				
	Greek Modern				
					≰ ∨ X ?
				Anne	

Similar to the previous step, you can customize the default connection settings, supported languages, and GUI features such as show backup server URL or select language drop down list.

8. Click on the **Custom Files – OBM** tab.

Profile	Custom Properties Application Settings - OBM Application Settings - ACB Custom Files - OBM Custom Files - ACB
Backup User Settings	Custom Files - OBC Color Scheme Settings - OBM Color Scheme Settings - ACB Digital Signature Build Installers
Rebrand Web Console	Images for all platforms
Rebrand Clients	about_logo.png (144 x 33 px)
	Orault image)
	Browse No file selected.
	login_bg.png (1024 x 1024 px)
	(Default image) 🕑
	Browse No file selected.
	login_logo.png (200 x 60 px)
	503
	[] [≝ ✔ X ?

You can upload the branded images for your OBM installer/application. Please refer to the branding image specifications listed on <u>Appendix F</u>, you can download the default logo/icon for reference.

9. Click on the **Custom Files – ACB** tab.

Profile	
Profile	Custom Properties Application Settings - OBM Application Settings - ACB Custom Files - OBM Custom Files - ACB
Backup User Settings	Custom Files - OBC Color Scheme Settings - OBM Color Scheme Settings - ACB Digital Signature Build Installers
Rebrand Web Console	Images for all platforms
Rebrand Clients	about_logo.png (144 x 33 px)
	(Default file)
	Choose File No file chosen
	login_bg.png (1016 x 734 px)
	(Default file)
	Choose File No file chosen
	login_logo.png (200 x 60 px)

You can upload the branded images for your ACB installer/application. Please refer to the branding image specifications listed on Appendix F, you can download the default logo/icon for reference.

10. Click on the **Custom Files – OBC** tab.

Profile	Custom Properties	Application Settings - OBM	Application Settings - ACB	Custom Files - OBM	Custom Files - ACE
Backup User Settings	Custom Files - OBC	Color Scheme Settings - O	BM Color Scheme Settings	- ACB Digital Signatur	e Build Installers
Rebrand Web Console	Images for Wind	ows			
Rebrand Clients	acb-splash.bmp (340	x 240 px)			
		mage) 🛃			
	Browse No file	selected.			
	installer.ico (256 x 25	6 px)			
	(Default in	mage) 📥			
	Browse No file	selected.			
	obc-background.bmp	(340 × 240 p×)			
	87.0				
					✓ X ?

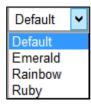
You can upload the branded images for your OBC installer. Please refer to the branding image specifications listed on Appendix F, you can download the default logo/icon for reference.

Profile	Custom Properties	Application Settings - OBM	Application Settings - ACB	Custom F	iles - OBM	Custom Files -	ACB
Backup User Settings	Custom Files - OBC	Color Scheme Settings - OBM	Color Scheme Settings	- ACB Dig	jital Signature	Build Instal	lers
Rebrand Web Console	Color Scheme Sett	ings					
Rebrand Clients	Select one of the scheme	es					
	Predefined Scheme	Default 🗸					
	O Custom Scheme						
		trigitori 🗸 🗸	Cardine Trial Version		est123 🛔 mem	• •	
	ជ					3	
	Login		<u>1</u>	¢	all Report	88. In	
	Ligh na		Bernar	Backup Sets	Report	_	
		penword	ച	*	يو ا		
			Restore	Settings	Utilities		
			Don't	now how	o use?		
	Strom advant						

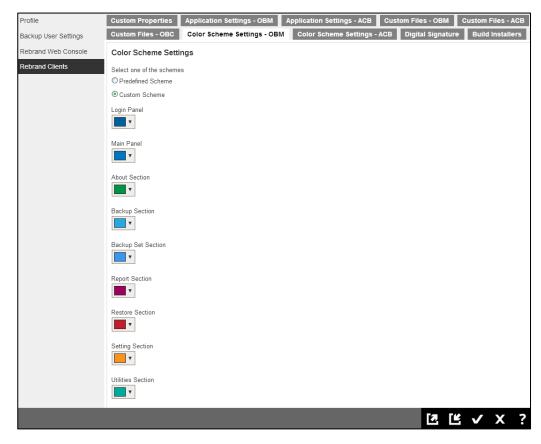
11. Click on the **Color Scheme Settings – OBM** tab.

From v7.15.0.0 onwards AhsayCBS supports changing the color scheme for backup clients. You can select the color scheme settings from "Predefined Scheme" or "Custom Scheme".

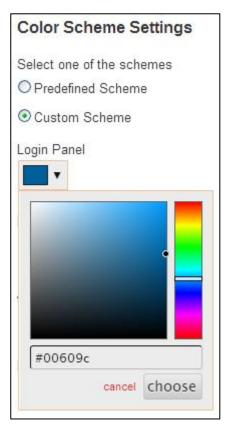
i. For **Predefined Scheme**, you can click on the dropbox to choose from the predefined options.



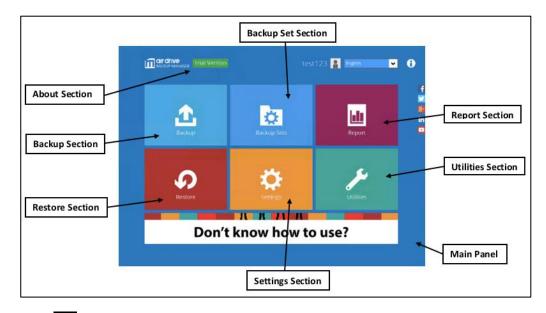
ii. For **Custom Scheme**, you can choose color for each section.



The color setting is based on hex color codes and you can either select the color using the palette or just input the hex color code. Please refer to the following link for details of hex color code: <u>http://www.color-hex.com/</u>



1			nglish	~
	Login Login name			
	Password			
~~~	Sove password	~		P
			Log	gin Panel
	Show advanced aption	ОК		



Click on at the bottom right corner to continue.

### NOTE

After changing and saving the configuration of **Color Scheme Settings – OBM**, administrator can provide available online/ offline installer with according color scheme for client user to download and run after finishing **[Build Installers]** > **[Build Branded Client]** successfully.

AhsayOBR will follow the same color scheme settings with AhsayOBM.

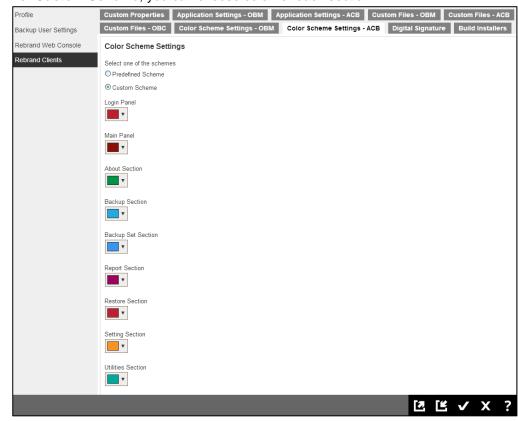
Profile	Custom Properties	Application Settings - OBM	pplication Settings - ACB	Custom F	iles - OBM C	ustom Files - ACB
Backup User Settings	Custom Files - OBC	Color Scheme Settings - OBM	Color Scheme Settings	- ACB Dig	ital Signature	Build Installers
Rebrand Web Console	Color Scheme Sett	ings				
Rebrand Clients	Select one of the schem Predefined Scheme [ Custom Scheme					
		Ergian	in archive	t	est123 🛓 🚌	2 0
			et e	Backup Sets	Report	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Passwor	a parameter annualet	Restore	¢.	Juiities	
	Show advant	ist space	Ju	st click He	lp	

#### 12. Click on the **Color Scheme Settings – ACB** tab.

From v7.15.0.0 onwards AhsayCBS supports changing the color scheme for backup clients. You can select the color scheme settings from "Predefined Scheme" or "Custom Scheme".

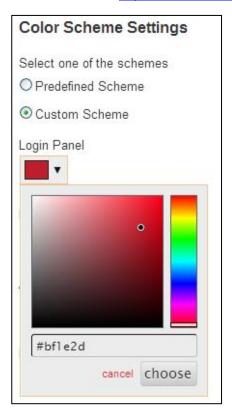
i. For **Predefined Scheme**, you can click on the dropbox to choose from the predefined options.

Default	<
Default	
Emerald	
Rainbow	
Ruby	

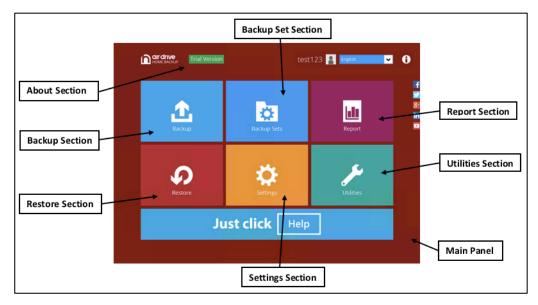


ii. For **Custom Scheme**, you can choose color for each section.

The color setting is based on hex color codes and you can either select the color using the palette or just input the hex color code. Please refer to the following link for details of hex color code: <u>http://www.color-hex.com/</u>



	English
	The second
Login name test123	
Password	and the second
Save password	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Login Panel
Show advanced option	ОК



Click on the bottom right corner to continue.

#### NOTE

After changing and saving the configuration of **Color Scheme Settings – ACB**, administrator cannot provide available online/ offline installer with according color scheme for client user to download and run until finish [**Build Installers**] > [**Build Branded Client**] successfully.

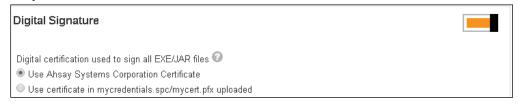
13. **Optional:** Click on the **Digital Signature** tab if you need to generate the installers with your digital certificate

Profile	Custom Properties	Application Settings - OBM	Application Settings - ACB	Custom Files - OBM	Custom Files - ACB
Backup User Settings	Custom Files - OBC	Color Scheme Settings - OBM	A Color Scheme Settings - A	CB Digital Signature	Build Installers
Rebrand Web Console	Digital Signature				
Rebrand Clients	Use Ahsay Systems	redentials.spc/mycert.pfx uploaded ord cate type 🕜			
	_				
					✓ X ?

#### i. Switch on the **Digital Signature** button.

Profile	Custom Properties	Application Settings - OBM	Application Settings - ACB	Custom Files - OBM	Custom Files - ACB
Backup User Settings	Custom Files - OBC	Color Scheme Settings - OB	M Color Scheme Settings -	ACB Digital Signature	Build Installers
Rebrand Web Console	Digital Signature				
Debased Oliverte					

ii. You can use our default digital certificate by selecting the **Use Ahsay Systems Corporation Certificate**.



-OR-

If you prefer to use your own digital certificate, you can select **Use certificate in mycredentials.spc/mycert.pfx upload** option.

Digital Signature	
Digital certification used to sign all EXE/JAR files	
Digitial Certificate Password ● Use existing ● New	
Please select your certificate type 🕢	
mycredentials.spc Choose File No file chosen	
myprivatekey, pvk Choose File No file chosen	

Enter the digital certificate password and select the whether you are uploading a "SPC and PVK" or "PFX" digital certificate, then you can upload your digital certificate file.

- 14. Click and to save all the settings.
- 15. Go back to the **Build Installers** tab and click on the **Build Branded Client** button. AhsayCBS will request our customization portal to generate new installers.

Profile	Custom Properties Application Settings - OBM Application Settings - ACB Custom Files - OBM Custom Files - ACB
Backup User Settings	Custom Files - OBC Color Scheme Settings - OBM Color Scheme Settings - ACB Digital Signature Build Installers
Rebrand Web Console	
Rebrand Clients	🛦 Important! If you have changed the rebranding settings, please save them first before pressing this button. ( Last update time : 2017-09-06 16:10:56 )
	Build Branded Client

Please be patient as the installer generation process should take around 5 to 10 minutes. The generation time depends on the traffic condition on the customization portal. The option will be greyed-out. You will be able to see the following message when the installer generation is completed.

Profile	Custom Properties Application Settings - OBM Application Settings - ACB Custom Files - OBM Custom Files - ACB
Backup User Settings	Custom Files - OBC Color Scheme Settings - OBM Color Scheme Settings - ACB Digital Signature Build Installers
Rebrand Web Console	Branded installers are available from the download page. (Last update time: 2017-09-20 16:15:53)
Rebrand Clients	Important! If you have changed the rebranding settings, please save them first before pressing this button. ( Last update time : 2017-09-20 15:40:13 ) Build Branded Client

You will be able to find the installers under the following path, CBS_HOME\system\cbs\Installers\ROOT

ixample:							
<ul> <li>Computer &gt; Local Disk (C:)</li> </ul>	<ul> <li>Program Files          <ul> <li>Ah:</li> </ul> </li> </ul>	sayCBS ► system ► i	cbs 🕨 Installers	▶ ROOT ▶			
Include in library 🔻 Share with 👻 New folder							
Name	Date modified	Туре	Size				
퉬 component	9/20/2017 4:15 PM	File folder					
퉬 jvm	9/20/2017 4:15 PM	File folder					
📄 acb.dmg	9/20/2017 4:15 PM	DMG File	112 KB				
🌗 obc-log	9/20/2017 4:15 PM	Compressed (zipp	1,417 KB				
oo obc-win	9/20/2017 4:15 PM	Application	3,074 KB				
📄 obm.dmg	9/20/2017 4:15 PM	DMG File	116 KB				
📄 obm.spk	9/20/2017 4:15 PM	SPK File	260 KB				
📄 obm-debian-noarch.deb	9/20/2017 4:15 PM	DEB File	7 KB				
📄 obm-linux-noarch.rpm	9/20/2017 4:15 PM	RPM File	9 KB				
📄 obm-nix.sh	9/20/2017 4:15 PM	SH File	22 KB				
📄 obr-mac.sh	9/20/2017 4:15 PM	SH File	10 KB				
📄 obr-nix.sh	9/20/2017 4:15 PM	SH File	14 KB				
oo obr-win	9/20/2017 4:15 PM	Application	1,939 KB				

- 16. Please leave them inside this folder and it is forbidden to move them to other folders. When your customers access the web console by the system account's hostname, AhsayCBS will arrange the corresponding branded installers for users to download.
- 17. Download new installers from the installer download page in your AhsayCBS.
- 18. After you tested your installers, you can enable the client auto-update or update your client manually.
- 19. In case of any problems when the installer is being built, you will see the **Download Log** button.

Profile	Custom Properties Application Settings - OBM Application Settings - ACB Custom Files - OBM Custom Files - ACB
Backup User Settings	Custom Files - OBC Color Scheme Settings - OBM Color Scheme Settings - ACB Digital Signature Build Installers
Rebrand Web Console	
Rebrand Clients	A Important! If you have changed the rebranding settings, please save them first before pressing this button. (Last update time : 2017-09-20 16:19:37 )
	Build Branded Client Download Log

Click on the **Download Log** button and you can download the branding log file **obc-log.zip** and you can take a look into the log for troubleshooting the branding issue.

# Brand the AhsayCBS Interface and AhsayOBM/AhsayACB Installers for your Resellers

- 1. Click in System Settings > Basic > Administrative Access.
- 2. Click into the sub admin account that you want to apply the branding.

3. Make sure there is a correct hostname in sub admin **Profile** page.

4. Please follow the steps in previous chapters to brand their own web console, and rebrand the AhsayOBM/AhsayACB installers. The branded installers is stored in CBS_HOME\system\cbs\Installer\%Reseller_ID%

Example:		
🚰 Technik maya amad kedapatat. Yacha yap ban bare munot, watakati wishini ikuli kataka indapatah kata amad katan bara katakat		

Please leave them inside this folder and it is forbidden to move them to other folders. When your reseller's customer access to the web console by the system account's hostname, AhsayCBS will arrange the corresponding branded installers for users to download.

# **Customize Application Name on Cloud Storages**

# **Request for Permission Pages**

When your client set up the cloud storage on

- 1. Amazon Cloud Drive
- 2. Dropbox
- 3. Google Drive
- 4. OneDrive
- 5. OneDrive for Business

AhsayOBM / ACB would forward an URL through the browser to the cloud storage. The cloud storage would require your client to login and/or prompt the following page to get client's approval for the AhsayOBM / ACB to access the cloud storage.

#### For example:

#### **Google Drive**

#### One Drive

In these request for permission pages, you can see the "Ahsay" logo and the "Ahsay" wording. You can setup the destination settings in the policy group in your AhsayCBS to customize the branding.

#### **Preparation**

Before you customize the logo and application name on the request for permission page, you need to collect the following details:

#### **Amazon Cloud Drive**

- Client ID
- Client Secret
- Native application redirect URI

#### Dropbox

- Application key
- Application secret

#### **Google Drive**

- Client ID
- Client Secret

#### OneDrive

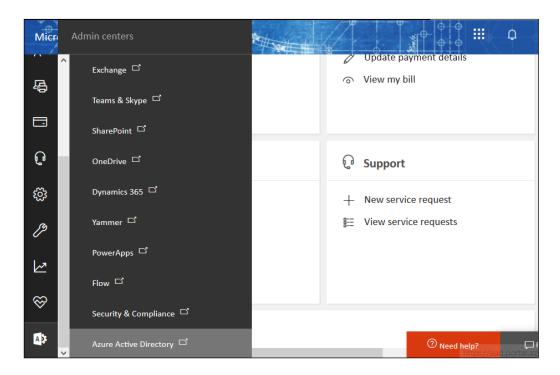
- Client ID
- Client Secret
- Native application redirect URI

#### **OneDrive for Business**

Client ID

To retrieve the Client ID:

- 1. Login to the OneDrive for Business portal (Microsoft 365 Admin Center): http://portal.office.com
- 2. Select Admin Centers at the bottom of the left panel, then select Azure Active Directory.



3. Click on Azure Active Directory from the left panel, then App registrations.

Azure Active Directory adn	nin center		ф \$	:	?	ahsay.qa@cloudbacko.biz AHSAY SYSTEMS CORPORATION L
≪ i ⊒ All services	Home > ahsay systems corporation limited - A ahsay systems corporation lim Azure Active Directory			stratio	ns	
	Search (Ctrl+/)	«	+ New a	pplicatio	n registratio	Endpoints 🗙 Troublesh
🛅 Dashboard	MANAGE		To view ar Console.	id manag	e your regist	rations for converged applications, ple
Azure Active Directory	Sers			y name o	r AppID	My apps
🔓 Users	Groups		DISPLAY	IAME		APPLICATION TYPE
Enterprise applications	Roles and administrators					
	Enterprise applications				You're	e not the owner of any applications in
	Devices					View all applications
	App registrations					
	Application proxy					
	Licenses 🗸					

4. Select New application registration, then enter the following:

Azure Active Directory adr	nin center	Q	ۍ کې	
«	Home > ahsay systems corporation limited - App	registrations	> Crea	ate
All services	Create	□ ×		
— 🗙 favorites ———	* Name 🚯 Backup App	~		
🖪 Dashboard	Application type <b>()</b>	•		
Azure Active Directory	Native	$\sim$		
Lusers	* Redirect URI <b>1</b> https://%hostname%/oauth2-office365-sam	ple.jsp		
Enterprise applications				
	Create			

- **Name**: Enter a name for your customized application.
- Application type: Select Native.
- **Redirect URI**: Enter the path to the corresponding .jsp file on the AhsayCBS server (obtained from the next step), for example:

https://%hostname%/oauth2-office365-sample.jsp

- 5. Click Create afterward.
- 6. The **Application ID** will be displayed, which is the **Client ID** required for the OneDrive for Business customization

Home > ahsay systems corporation limited - App	pregistrations > KMT_Test > Settings
Test Registered app	* ×
🔅 Settings 💉 Manifest 📋 Delete	
Display name Test	Application ID 1940cddf-dca3-42ee-859b-0482c1a19319
Application type Native	Object ID a2f929c2-1834-47c6-9a62-e85601bcf2f3
Home page	Managed application in local directory Test
	*

- 7. Finally, configure the permission required, select **Settings**.
- 8. Under **API ACCESS**, select **Required permission**. Enable the following API settings:

Windows Azure Active Directory

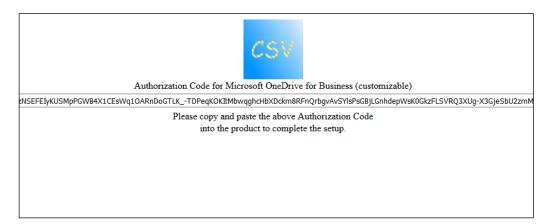
- Sign in and read user profile
- Access the directory as the signed-in user

#### Office 365 SharePoint Online

- Read and write user files
- 9. Save the changes afterward.
- Native application redirect URI

To retrieve the Native application redirect URI:

1. Create a web page (.jsp) for request of the Authorization Code.



#### A sample format of the page:

<html></html>
<head></head>
<title>Authorization Code for Office 365</title>
<body></body>
<img src="ahsay-120px-oauth.gif"/>
Authorization Code for Microsoft OneDrive for Business
<input %="" code")="" id="authcode" onclick="this.select()" size="30" type="text" value="&lt;%=&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;request.getParameter("/> ">
Please copy and paste the above Authorization Code into the

product to complete the setup.
</dr>

</body></html>

You can obtain a sample jsp file by <u>Clicking Here</u>.

#### Important:

The line value="<%= request.getParameter("code") %> are used for retrieving / displaying the authorization code, you must include this on the page.

It is expected that you have basic HTML knowledge to create the authorization code request page.

2. Once you have created the customized page, copy and place the jsp file to the AhsayCBS server at:

For CBS on Windows: %CBS_Install_Home%\webapps\ROOT

For CBS on Linux: %CBS_Install_Home%/webapps/ROOT

3. The Native application redirect URI will be:

https://%CBS_hostname%/%customized_page_name%.jsp

Where CBS_hostname is the hostname or IP address of your AhsayCBS server and customized_page_name is the name of the jsp file.

For example:

https://backup.server.com/oauth2-office365-sample.jsp

The Client ID and Native application redirect URI can now be entered in

OneDrive for Business			
Customize credentials for application			
Client ID			
ce2cb6e1-280e-4d45-8078-ca99fbea389f			
Native application redirect URI			
https://CBS_hostname/customized_oauth2-office365.jsp			

For other cloud vendors, refer to the following websites for information on how to collect the required information.

#### **Reference**

#### Dropbox https://www.dropbox.com/developers/support

### Google Drive

https://developers.google.com/drive/v3/web/enable-sdk#enable_the_drive_api https://auth0.com/docs/connections/social/google

#### **OneDrive and OneDrive for Business**

https://dev.onedrive.com/app-registration.htm

### Configure the storage

After you have collected the above information from your cloud / developer account, you can put the relevant information in the policy settings of your AhsayCBS.

 Navigate to Backup / Restore > Users, Group & Policies, then select the Policy Group tab.

2. Select the policy group that you want to apply the setting.

neral	Exclude Backup	File		
er Settings				
kup Set Settings	Files on mapped	s that match the followings drive		
I Settings	Files larger than	1 Gbytes 🔻		
ault Values	✓ Files older than ● 10 Yea			
empted Values		rs 🔻 Ago		
empted Backup Sets	O 17-Nov-2016			
ile Settings	Destinations Visi	ible to Users		
Ŭ				
	Predefined De	stination		
	+			
		la n'n av lea		Run Direct
	Name	Destination Storage Info	Quota	Run Direct
	Group		Quota 500.0	Run Direct
		Destination Storage         Info           Image: Comparison of the storage         Dropbox Account: Yuk Cheng		
	Group		500.0	
	Group Storage	Cropbox Account Yuk Cheng	500.0 Gbytes V	
	Group Storage	Dropbox Account: Yuk Cheng     Microsoft Account: CloudBacko	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage	Image: Comparison of	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage	Dropbox Account Yuk Cheng      Microsoft Account: CloudBacko     Corp.@9161be4d902076af  ination	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage Alans Storage Standard Dest	Dropbox Account Yuk Cheng      Microsoft Account: CloudBacko     Corp.@9161be4d902076af  ination	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage Alans Storage	Dropbox Account Yuk Cheng      Microsoft Account: CloudBacko     Corp.@9161be4d902076af  ination	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage Alans Storage Standard Desti Customize ap	Dropbox Account Yuk Cheng      Microsoft Account: CloudBacko     Corp.@9161be4d902076af  ination	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage Alans Storage Standard Desti Customize ap	DropboxAccount: Yuk Cheng Microsoft Account: CloudBacko Corp.@3161be4d902076af  ination plication name	□ 500.0 Gbytes ▼ □ 10.0	
	Group Storage Alans Storage Standard Dest Customize ap	DropboxAccount Yuk Cheng      Microsoft Account: CloudBacko     Corp.@9161be4d902076ar  ination plication name	□ 500.0 Gbytes ▼ □ 10.0	
	Croup Storage	DropboxAccount Yuk Cheng      Microsoft Account: CloudBacko     Corp.@9161be4d902078ar  ination plication name  Local / Mapped Drive / Removable Drive	□ 500.0 Gbytes ▼ □ 10.0	

- 4. Turn on the switch "Destinations Visible to Users"
- 5. Scroll to the bottom part of "Destinations Visible to Users"

You can select one of the following cloud storage to customize

- ⊳ Amazon Cloud Drive
- $\triangleright$ Dropbox

3.

- Google Drive  $\triangleright$
- OneDrive  $\triangleright$
- $\triangleright$ OneDrive for Business

#### Amazon Cloud Drive

1. Click into Amazon Cloud Drive

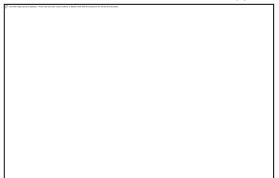
2. Enable the "Customize credentials for application"

 7

- 3. Enter the "Client ID"
- 4. Enter the "Client Secret"
- 5. Enter the "Native application redirect URI"
- 6. Click **v** to continue.

### **Dropbox**

- 1. Click into Dropbox
- 2. Enable the "Customize credentials for application" option.



- 3. Enter the "Application Key"
- 4. Enter the "Application Secret"
- 5. Click to continue.

#### **Google Drive**

- 1. Click into Google Drive
- 2. Enable the "Customize credentials for application"

- 3. Enter the "Client ID"
- 4. Enter the "Client Secret"
- 5. Click to continue.

### **OneDrive**

- 1. Click into OneDrive
- 2. Enable the "Customize credentials for application"

- 3. Enter the "Client ID"
- 4. Enter the "Client Secret"
- 5. Enter the "Native application redirect URI"
- 6. Click to continue.

#### **OneDrive for Business**

- 1. Click into OneDrive for Business
- 2. Enable the "Customize credentials for application"

- 3. Enter the "Client ID"
- 4. Enter the "Native application redirect URI"
- 5. Click to continue.

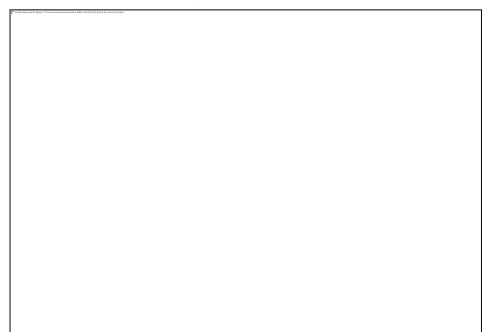
# Customize the Folder/Bucket name in Standard Destination

Navigate to **Backup/Restore** -> **Users, Group & Policies**, then select the **Policy Group** tab. Click on the desired Policy Group, then select the **Backup Set Settings** section on the left. You can customize the application name (folder/bucket name) in different storages from there.

In the following example, we set the "Customize application name" as "mybackup", when backup to the cloud storage (e.g.: Google Drive), the folder name "mybackup" will be created.

#### E.g.: Google Drive

**Customize the Storage in Predefined Destination** 



Navigate to **Backup / Restore > Users, Group & Policies**, then select the **Policy Group** tab. Click on the desired Policy Group, then select the **Backup Set Settings** section on the left. You can add a predefined destination for your clients, and your clients will be able to select the predefined destination when they create a new backup set.

Example:

NOTE

You need to add a predefined destination in advance, after that you can set the predefined destination visible to your user group.



# 11 API

In this release, new APIs (now in JSON format) are introduced in the AhsayCBS, if you have written API in previous version, please test and modify your API calls on AhsayCBS v7 in your testing environment first, so that it will not affect your current CRM, billing systems etc. when new AhsayCBS is upgraded. Please download the <u>AhsayCBS API guide</u> from our website for reference.

# **12 Contacting Ahsay**

# **Technical Assistance**

To contact Ahsay support representatives for technical assistance, visit the following website: <u>https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp</u>

Also use the Ahsay Wikipedia for resource such as Hardware Compatibility List, Software Compatibility List, and other product information: <u>https://wiki.ahsay.com</u>

# **Documentation**

Documentations for all Ahsay products are available at: <u>https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_documentation_quides</u>

You can send us suggestions for improvements or report on issues in the documentation, by contacting us at:

https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Please specify the specific document title as well as the change required/suggestion when contacting us.

# Appendix

Appendix A S	upported Language Code
Language Code	Language
ar	Arabic
са	Catalan
cs	Czech
da	Danish
de	German
el	Greek Modern
en	English
es	Spanish
eu	Euskara/Basque
fr	French
iw	Hebrew
hu	Hungarian
it	Italian
ја	Japanese
ko	Korean
lt	Lithuanian
nl	Dutch
no	Norwegian
pl	Polish
pt_BR	Portuguese (Brazil)
pt_PT	Portuguese (Portugal)
sl	Slovenian
sv	Swedish
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 Error Code 1011 and 1012

# Internal Error 1011

This error could occur when one of the following conditions is true:

- > The license key has been used on more than one machine.
- Change of network card of the server machine or moving the AhsayCBS system to a new server.

#### Solution:

In the cases where the license key was used on a second server for testing purposes, please use an evaluation key instead.

Alternatively, please shutdown the AhsayCBS service on the second server, and then contact our Support Engineer with your "License Name" and "License Key", and we shall update the license server to allow your key to be used again.

In the cases where the network card of the server machine is changed, or an AhsayCBS relocation has been performed. Please also contact our Support Engineer with your "License Name" and "License Key", and we shall update the license server to allow your key to be used again.

If the problem still persists, please ensure that there are no connectivity issues from the AhsayCBS server to the Internet and that you can connect to lic.ahsay.com with HTTPS from the AhsayCBS backup server. 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.

Please also verify if the machine in concern contain any software that would create virtual MAC address, for example, VPN software. If yes, please disable them such software, and notify us again.

#### Internal Error 1012

Internal Error 1012 can occurs when one of the following conditions is true:

- > The license key has been used on more than one machine.
- Change of the MAC address, local / remote IP address, or local port that AhsayCBS is installed on.

#### Solution:

Persistent 1012 license errors can occur if your AhsayCBS server is operating in a network environment where network traffic is routed to the Internet via multiple external IP addresses. For example, network load balancing is implemented using, i.e. a dual WAN router, Round Robin routing, or network card with multiple external IP.

For these cases, we would suggest setting up a static route for the server's connection to lic.ahsay.com, so that the remote IP address on the server will remain the same every time a connection to lic.ahsay.com is established.

# Appendix D Differences between AhsayOBS v6 vs AhsayCBS v7

AhsayCBS has been totally re-designed from the ground upwards to provide the best cloud backup solution with changes to core functions, such as file storage system, indexing, backup set features, replication, group policy, system user and branding. To understand the differences between AhsayCBS and previous version of our product, please visit our website for details.

For a list of key differences between the AhsayOBS v6 and AhsayCBS v7, refer to <u>Differences</u> Between v6 & v7.

# Appendix E Setting up Cloud Storage

In the following examples, we are demonstrating how to setup cloud storage in predefined destinations.

Add a predefined destination in **System Settings** -> **Basic** -> **Predefined Destinations**, click on the **Add** button.

# <u>Aliyun (阿里云)</u>

This storage option is available on computers with China or Hong Kong locale settings.

- 1. If you do not have the Aliyun (阿里云), please click on the link 'Sign up for 阿里云' to create an account.
- 2. Select '阿里云' from the **Destination storage** drop down box.
- 3. Enter name of the backup destination.

4. Select Single storage destination.

Note: The option Destination Pool is defined from a number of single storage destination.

5. Enter the Access Key ID.

- 6. Enter the Access Key Secret.
- 7. Select the region from the dropdown box.
- 8. Click **Add** to continue the setup.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the "**Default settings**", all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

10. Add the newly created predefined storage "Aliyun-1" into the **Backup Set Settings** -> **Destinations Visible to Users** -> **Predefined Destinations**.

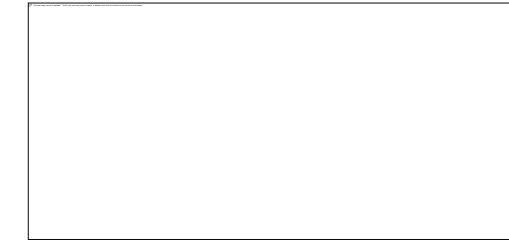
- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

#### CTYun (中国电信天翼云)

This storage option is available on computers with China or Hong Kong locale settings.

- 1. If you do not have the CTYun (中国电信天翼云), please click on the link 'Sign up for 中国 电信天翼云' to create an account.
- 2. Select '中国电信天翼云' from the [Destination storage] drop down box.

3. Enter name of the backup destination.



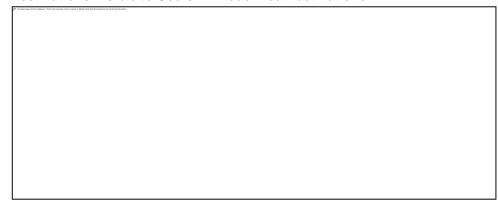
4. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 5. Enter the Access Key ID.
- 6. Enter the Secret Access Key.
- 7. Click [Add] to continue the setup.
- 8. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

9. Add the newly created predefined storage "CTYun-1" into the **Backup Set Settings** -> **Destinations Visible to Users** -> **Predefined Destinations**.



- 10. Enable the quota and apply the quota.
- 11. When you create a backup set for a user, you will be able to see the new predefined destination.



#### Amazon Cloud Drive

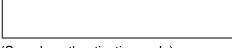
- 1. If you do not have the Amazon Cloud Drive, please click on the link **Sign up for Amazon Cloud Drive** to create an account.
- 2. Select 'Amazon Cloud Drive' from the [Destination storage] drop down box.
- 3. Enter name of the backup destination.

4. Select "Single storage destination".

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

5. Click [Add] to continue the setup.

On the browser, a code is displayed, copy it and paste into the "**create predefined destination**" page in the AhsayCBS.



(Sample authentication code)

- 6. Click **Add** to continue.
- 7. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.
- 8. (By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)
- 9. Add the newly created predefined storage "AmazonCloudDrive-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 10. Enable the quota and apply the quota.
- 11. When you create a backup set for a user, you will be able to see the new predefined destination.

#### Amazon S3

- 1. If you do not have the Amazon S3, please click on the link **Sign up for Amazon S3** to create an account.
- 2. Select Amazon S3 from the [Destination storage] drop down box.
- 3. Enter name of the backup destination

# www.ahsay.com

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4. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 5. Select the "**Location**" from the drop down box.
- 6. Enter the Access Key ID.
- 7. Enter the Secret Access Key.
- 8. Click [Add] to continue the setup.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.
- 10. (By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)
- 11. Add the newly created predefined storage "AmazonS3-1" into the [Backup Set Settings] > [Destinations Visible to Users] -> [Predefined Destinations].

General User Settings	Exclude Backup	File			
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	Name	Destination Storage	Info	Quota	Run Direct
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- 12. Enable the quota and apply the quota.
- 13. When you create a backup set for a user, you will be able to see the new predefined destination.

#### AWS S3 Compatible Cloud Storage

- 1. Select AWS S3 Compatible Cloud Storage from the Destination storage drop down box.
- 2. Enter name of the backup destination.

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3. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 4. Enter the Host and Port number.
- 5. Enter the Access Key ID.
- 6. Enter the Secret Access Key.
- 7. Enter the **Bucket Name** for the storage. (You need to create this bucket manually first).
- 8. Click [Add] to continue the setup.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

10. Add the newly created predefined storage "AWSCompatible-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

#### **Dropbox**

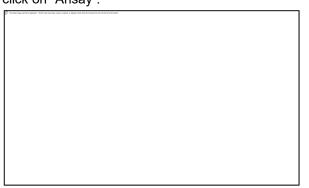
- 1. If you do not have the Dropbox, please click on the link 'Sign up for Dropbox' to create an account.
- 2. Select 'Dropbox' from the [Destination storage] drop down box.
- 3. Enter name of the backup destination.

4. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

5. Click [Add] to continue the setup.

6. A browser will pop up and Dropbox will ask for your permission to access the storage, click on "Ahsay".



7. On the browser, a code is displayed, copy it and paste into the "create predefined destination" page in the AhsayCBS.

(Sample authentication code)

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- 8. Click **Add** to continue the setup.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the "**Default settings**", all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

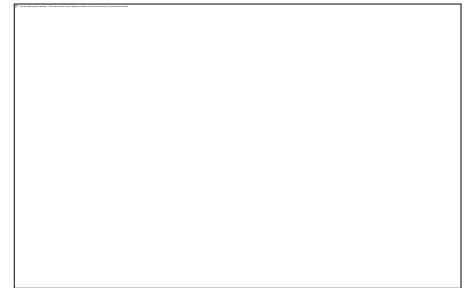
- 10. Add the newly created predefined storage "Dropbox-1" into the **Backup Set Settings** -> **Destinations Visible to Users** -> **Predefined Destinations**.
- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

#### **Google Cloud Storage**

** Before you set up the storage for Google Cloud Storage, please collect the Access Key and Secret Key from your Google Cloud Storage account first.

- 1. Go to the Google Developers Console.
- 2. Click the name of the project you would like to use as your default project.
- 3. In the left sidebar, click APIs & auth.
- 4. Find Google Cloud Storage JSON API and make sure it is enabled. When the JSON API is enabled, the Status will display "ON".
- 5. Next to the Google Cloud Storage JSON API service, click the settings gear icon.
- 6. Click Interoperable Access in the left sidebar.
- 7. Click Generate new key.
- 8. The access key part of the new developer key is displayed.
- Click Show to show the secret part of the new developer key.
   Now, you can go back to add your predefined destination.
- 10. If you do not have the Google Cloud Storage, please click on the link **Sign up for Google Cloud Storage** to create an account.
- 11. Select Google Cloud Storage from the Destination storage drop down box.

12. Enter name of the backup destination.



13. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 14. Click [Add] to continue the setup.
- 15. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

16. Add the newly created predefined storage "GoogleCloudStorage-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 17. Enable the quota and apply the quota.
- 18. When you create a backup set for a user, you will be able to see the new predefined destination.



#### **Google Drive**

- 1. If you do not have the Google Drive, please click on the link **'Sign up for Google Drive'** to create an account.
- 2. Select 'Google Drive' from the [**Destination storage**] drop down box.
- 3. Enter name of the backup destination.

4. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 5. Click [Add] to continue the setup.
- A browser will pop up and Google will ask for your permission to access the storage, click on "Allow".



7. On the browser, a code is displayed, copy it and paste into the "create predefined destination" page in the AhsayCBS.

(Sample authentication code)

- 8. Click [**Add**] to continue.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

10. Add the newly created predefined storage "GoogleDrive-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

#### Microsoft Azure

** Before you setup the storage for Microsoft Azure, please collect the Storage Account Name and Access Key from your Microsoft Azure account first.

- 1. Go to the Microsoft Azure web page.
- 2. Click the "portal" link at the top of the page.
- 3. Login to the portal.
- 4. Click on the "MANAGE ACCESS KEYS" link at the bottom of the page.
- 5. The "**STORAGE ACCOUNT NAME**" and "**PRIMARY ACCESS KEY**" are displayed. The Storage account name is the same as the node name when you create this Windows Azure account.
- 6. Copy the "**STORAGE ACCOUNT NAME**" and "**PRIMARY ACCESS KEY**" to your AhsayOBM application.

(Suggested to copy and paste the name and key to avoid typographical errors.) Now, you can go back to add your predefined destination.

- 7. Select 'Microsoft Azure' from the [Destination storage] drop down box.
- 8. Enter name of the backup destination.

9. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

10. Enter the Storage Account Name.

- 11. Enter the Access Key.
- 12. Click [Add] to continue the setup.
- 13. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

14. Add the newly created predefined storage "MicrosoftAzure-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 15. Enable the quota and apply the quota.
- 16. When you create a backup set for a user, you will be able to see the new predefined destination.

#### **OneDrive**

- 1. If you do not have the OneDrive, please click on the link 'Sign up for OneDrive' to create an account.
- 2. Select 'OneDrive' from the [**Destination storage**] drop down box.
- 3. Enter name of the backup destination.

4. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 5. Click [**Add**] to continue the setup.
- 6. A browser will popup and a code is displayed, copy it and paste into the "**create predefined destination**" page in the AhsayCBS.



(Sample authentication code)

- 7. Click [**Add**] to continue the setup.
- 8. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

- 9. Add the newly created predefined storage "OneDrive-1" into the [Backup Set Settings] > [Destinations Visible to Users] -> [Predefined Destinations].
- 10. Enable the quota and apply the quota.
- 11. When you create a backup set for a user, you will be able to see the new predefined destination.

#### **OneDrive for Business**

- 1. If you do not have the OneDrive for Business, please click on the link 'Sign up for OneDrive for Business' to create an account.
- 2. Select 'OneDrive' from the [Destination storage] drop down box.
- 3. Enter name of the backup destination.

4. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

5. Click [Add] to continue the setup.

- 6. A browser will pop up and Microsoft will ask for your permission to access the storage, click on "Accept".
- 7. On the browser, a code is displayed, copy it and paste into the "create predefined destination" page in the AhsayCBS.

(Sample authentication code)

- 8. Click [Add] to continue.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

10. Add the newly created predefined storage "OneDriveForBusiness-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

#### **Rackspace**

- 1. If you do not have the Rackspace, please click on the link 'Sign up for Rackspace' to create an account.
- 2. Select 'Rackspace' from the [**Destination storage**] drop down box.
- 3. Enter name of the backup destination.

4. Select Single storage destination.

**Note:** The option **Destination Pool** is defined from a number of single storage destination.

- 5. Enter the User Name.
- 6. Enter the API Key.

- 7. Click [Add] to continue the setup.
- 8. It will prompt for the "Region", select the "Region" from the dropdown box.
- 9. Click [Add] to continue the setup.
- 10. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

11. Add the newly created predefined storage "Rackspace-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 12. Enable the quota and apply the quota.
- 13. When you create a backup set for a user, you will be able to see the new predefined destination.

#### **OpenStack**

- 1. Select 'OpenStack' from the [**Destination storage**] drop down box.
- 2. Enter name of the backup destination.

3. Select Single storage destination.

**Note:** The option **Destination Pool** is defined from a number of single storage destination.

- 4. Enter the Host and Port number.
- 5. Enter the Username.
- 6. Enter the Password.
- 7. Option: Click on the check box "Connect with SSL" if necessary.
- 8. Click [Add] to continue the setup.
- 9. The page will request to enter more information after the initial connection.

- 10. Select the "**Project**" in the dropdown box.
- 11. Select the "**Region**" in the dropdown box.
- 12. Enter the container name.
- 13. Click [Add] to continue the setup.
- 14. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

15. Add the newly created predefined storage "OpenStack-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 16. Enable the quota and apply the quota.
- 17. When you create a backup set for a user, you will be able to see the new predefined destination.

#### <u>FTP</u>

- 1. Select 'FTP' from the [**Destination storage**] drop down box.
- 2. Enter name of the backup destination.

3. Select Single storage destination.

**Note:** The option **Destination Pool** is defined from a number of single storage destination.

- 4. Enter the Host and Port number.
- 5. Enter the Username.

- 6. Enter the Password.
- 7. Option: Enter the FTP directory if you have one.
- 8. Click [Add] to continue the setup.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

10. Add the newly created predefined storage "FTP-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

#### <u>SFTP</u>

- 1. Select 'SFTP' from the [Destination storage] drop down box.
- 2. Enter name of the backup destination.

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3. Select Single storage destination.

*Note:* The option *Destination Pool* is defined from a number of single storage destination.

- 4. Enter the Host and Port number.
- 5. Enter the Username.
- 6. Enter the Password.
- 7. Option: Enter the SFTP directory if you have one.
- 8. Click [Add] to continue the setup.
- 9. Enter to the Backup/Restore -> Users, Groups & Policies -> Policy Group -> Manage Policy Group, edit the Default settings policy.

(By applying the changes to the **Default settings**, all the users will be able to see and use the settings by default. If you need to create a predefined destination for a particular group of users, you need to create a new policy group and user group for this.)

10. Add the newly created predefined storage "SFTP-1" into the [Backup Set Settings] -> [Destinations Visible to Users] -> [Predefined Destinations].

- 11. Enable the quota and apply the quota.
- 12. When you create a backup set for a user, you will be able to see the new predefined destination.

# Appendix F Image Specifications

You can use common graphics editing tools that able to edit 32bit graphic files to generate these png format files with transparent background.

#### Example:

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For those ico (Windows icon) and icns (Mac icon) files, you can use icon editing tools (available to download from Internet). Most of the icon files have multiple sizes of images. Please refer to the original icon format to replace your product logo into the files.

# Image specifications for AhsayCBS (web interface, pdf and email report)

File name: ico_40_cbs_logo.png	Format: png Width: 200 px
This logo has transparent background (checkered squares) with white text.	Height: 72 px

File name: default.large.gif	Format: gif Width: 129 px	
This logo has transparent background (checkered squares).	Height: 40 px	
C AhsayCBS		

File name: ico_24_cbs.png	Format: png	
This logo has transparent background (checkered squares).	Width: 24 px Height: 24 px	
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File name: ico_obm_16.png	Format: png
This logo has transparent background (checkered squares).	Width: 18 px Height: 18 px
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File name: ico_acb_16.png	Format: png	
This logo has transparent background (checkered squares).	Width: 18 px Height: 18 px	
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# Image specifications for AhsayCBS (Installation graphics)

Images for Windows (Installation graphics)

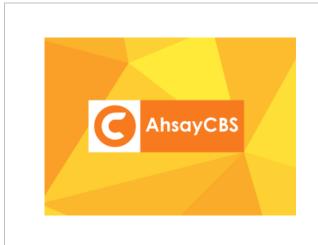
File name: aboutBG.bmp	Format: Bitmap Width: 164 px Height: 337 px	
C Ahsay CBS		
(The size of this graphic is reduced to fit into this document.)		

File name: desktop.ico	Format: Windows Icon	
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px	
	(True color plus alpha channel transparency)	



File name: installer.ico This logo has transparent background (checkered squares).	Format: Windows Icon Width: 256,128,48,32,16px Height: 256,128,48,32,16px (True color plus alpha channel transparency)
(The sizes of these logos are reduced to fit into this of	document.)

File name: splash.bmp	Format: Bitmap
	Width: 340 px Height: 240 px



(The size of this graphic is reduced to fit into this document.)

File name: restart.ico This logo has transparent background (checkered squares).	Format: Windows Icon Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)
Transparency)	
File name: small.bmp	

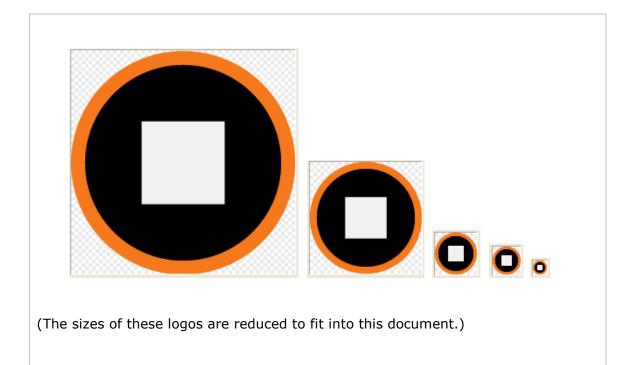
	Format: Bitmap Width: 55 px Height: 58 px
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File name: start.ico	Format: Windows Icon
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)

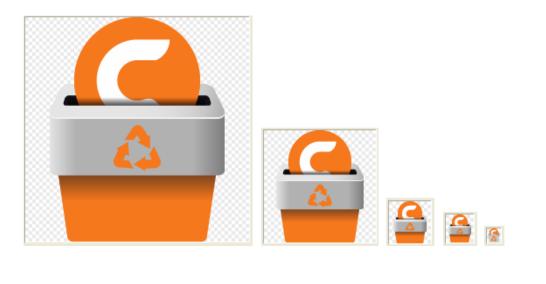


(The sizes of these logos are reduced to fit into this document.)

File name: stop.ico	Format: Windows Icon
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)

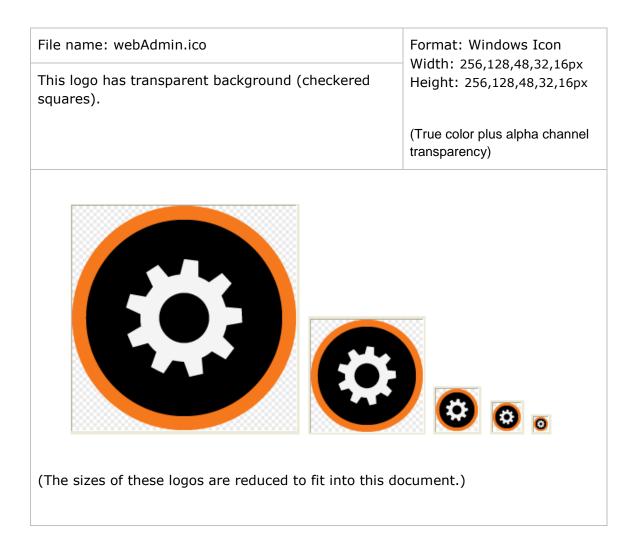


File name: uninstall.ico	Format: Windows Icon
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)



(The sizes of these logos are reduced to fit into this document.)





# Images for AhsayUBS (Installation graphics)

File name: favicon.ico	Format: Website Icon Width: 16 px Height: 16 px
This logo has transparent background (checkered squares).	
	or
	Width: 32 px Height: 32 px
	(True color plus alpha channel transparency)

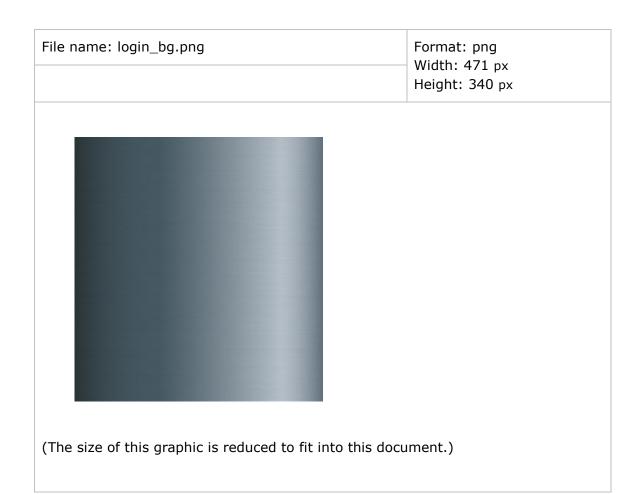
	Format: png Width: 127 px Height: 42 px
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File name: header_bg.png	Format: png Width: 2400 px Height: 143 px

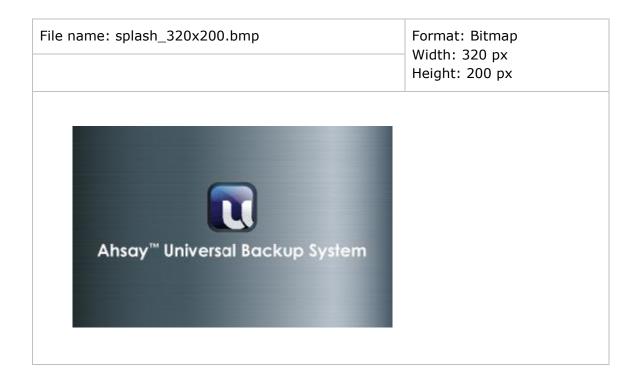
(The size of this graphic is reduced to fit into this document.)

File name: header_logo.png	Format: png
This logo has transparent background (checkered	Width: 524 px
squares) with white text.	Height: 143 px

(The size of this graphic is reduced to fit into this document.)



File name: login_logo.png	Format: png Width: 353 px	
This logo has transparent background (checkered squares) with white text.	Height: 140 px	
	8	
	3	
000000000000000000000000000000000000000	00	



File name: splash_1024x768.bmp	Format: Bitmap Width: 1024 px Height: 768 px
Thsay [™] Universal Backup System	
(The size of this graphic is reduced to fit into th	is document.)

#### Image specifications for AhsayOBM (Application graphics)

#### Images for all platforms

File name: about_logo.png	Format: png Width: 144 px
This logo has transparent background (checkered squares).	Height: 33 px
<b>O</b> AhsayOBM	

File name: login_bg.png	Format: png Width: 1016 px
	Height: 734 px



(The size of this graphic is reduced to fit into this document.)

File name: login_logo.png	Format: png Width: 200 px Height: 60 px	
This logo has transparent background (checkered squares) with white text.		
F10000000000		

File name: logo.png	Format: png
This logo has transparent background (checkered	Width: 32 px
squares).	Height: 32 px
$\bigcirc$	

File name: main_logo.png	Format: png
This logo has transparent background (checkered squares) with white text.	Width: 148 px Height: 33 px

File name: splash.png	Format: png Width: 420 px Height: 240 px
AhsayOBM	
(The size of this graphic is reduced to fit int	o this document.)

File name: dstn_CBS_24.png	Format: png Width: 24 px
This logo has transparent background (checkered squares) with white text.	Height: 24 px

File name: dstn_CBS_32.png	Format: png
This logo has transparent background (checkered squares) with white text.	Width: 32 px Height: 32 px

File name: dstn_CBS_48.png	Format: png Width: 48 px
This logo has transparent background (checkered squares) with white text.	Height: 48 px
0	

File name: fs16_root_CBS.png	Format: png Width: 16 px
This logo has transparent background (checkered squares) with white text.	Height: 16 px
3	

#### Images for Linux, FreeBSD and Solaris (Application graphics)

File name: desktop.png	Format: png
This logo has transparent background (checkered	Width: 128 px
squares).	Height: 128 px

#### Images for Synology (Application graphics)

File name: logo_16.png	Format: png Width: 16 px
This logo has transparent background (checkered squares).	Height: 16 px

File name: logo_32.png	Format: png Width: 32 px
This logo has transparent background (checkered squares).	Height: 32 px
$\bigcirc$	

File name: logo_72.png	Format: png	
This logo has transparent background (checkered squares).	Width: 72 px Height: 72 px	

#### Images for QNAP (Application graphics)

File name: logo_72.png	Format: png Width: 72 px
This logo has transparent background (checkered squares).	Height: 72 px

#### Images for Windows (System tray)

The following icons icon1.ico, icon2.ico, icon3.ico and icon4.ico will be used in the Windows system tray. Please arrange them in an animated sequence. The application will arrange the animation sequence when the backup job is run.

File name: icon1.ico	Format: Windows Icon Width: 16 px
This logo has transparent background (checkered squares).	Height: 16 px
	(True color plus alpha channel transparency)

Original	lmage enlarged for easy reference
0	$\odot$

 File name: icon2.ico
 Format: Windows Icon

 This logo has transparent background (checkered squares).
 Width: 16 px

 Height: 16 px
 (True color plus alpha channel transparency)

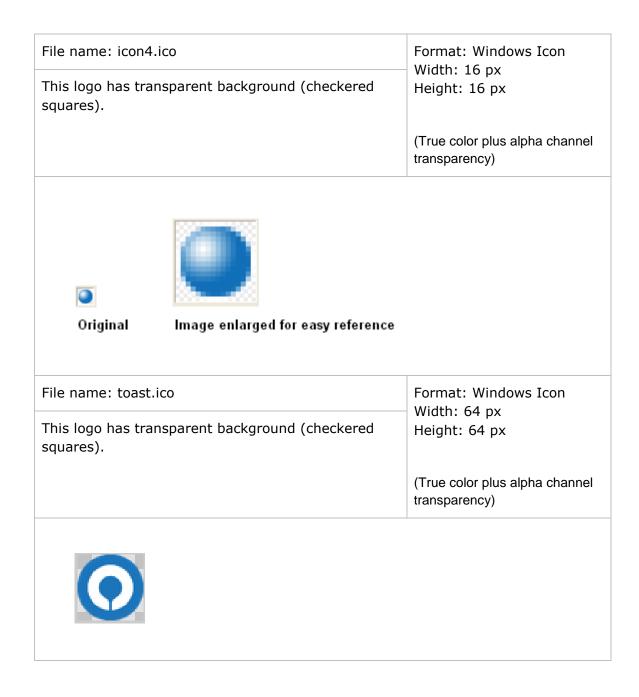


Original

0

Image enlarged for easy reference

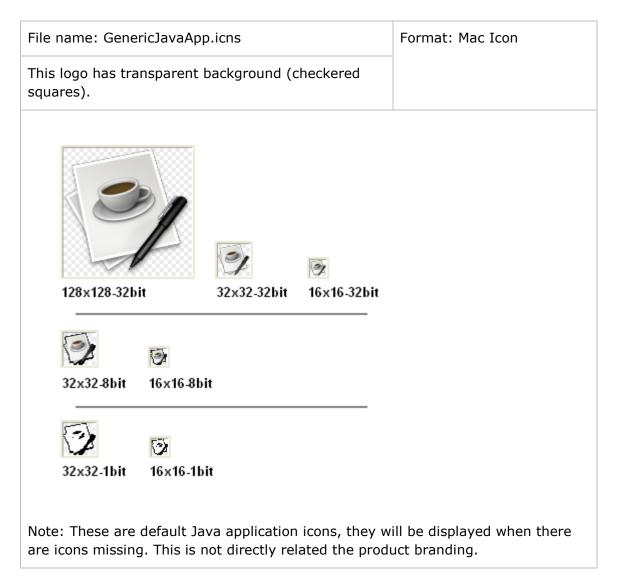
File name: icon3.ico This logo has transparent backgroun squares).	Format: Windows Icon Width: 16 px (checkered Height: 16 px
	(True color plus alpha channel transparency)
Original       Image enlarged for	easy reference



#### Images for Mac (Application and installation graphics)

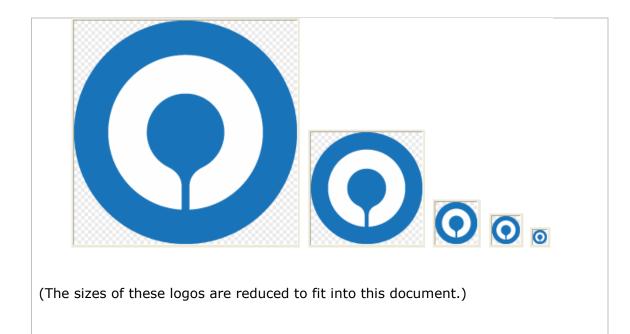
File name: desktop.icns	Format: Mac Icon Width: 256,128,48,32,16px
This logo has transparent background (checkered squares).	Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)







File name: Logo.icns	Format: Mac Icon
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)



File name: uninstall.icns This logo has transparent background (checkered squares).	Format: Mac Icon Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)
(The sizes of these logos are reduced to fit into this do	ocument.)

File name: OBMLogo.icns



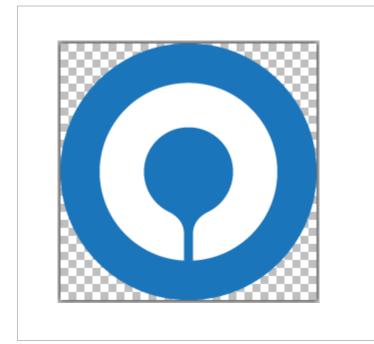
File name: background.jpg	Format: JPEG Width: 622 px Height: 420 px
AhsayOBM	
(The size of this graphic is reduced to fit	into this document.)

File name: logo.png	Format: png Width: 128 px Height: 128 px
$\bigcirc$	
(The size of this graphic is reduced to fit into this document.)	

#### Images for Synology (Installation graphics)

File name: PACKAGE_ICON.PNG	Format: png
This logo has transparent background (checkered squares).	Width: 72 px Height: 72 px

File name: PACKAGE_ICON_120.PNG	Format: png Width: 120 px
This logo has transparent background (checkered squares).	Height: 120 px
File name: PACKAGE_ICON_256.PNG	Format: png Width: 256 px
This logo has transparent background (checkered squares).	Width: 256 px Height: 256 px



#### Images for Synology (Installation graphics)

File name: PACKAGE_ICON_64.GIF	Format: png Width: 64 px Height: 64 px	

File name: PACKAGE_ICON_64_GRAY.GIF	Format: png Width: 64 px Height: 64 px

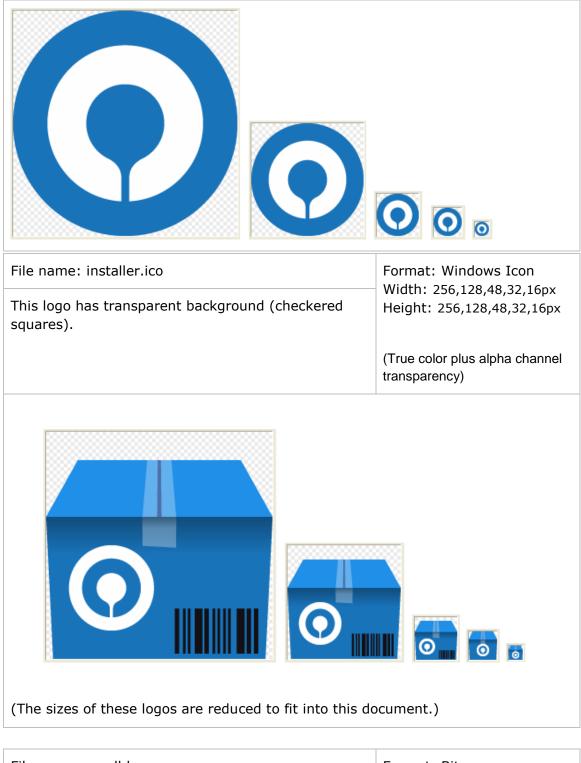
File name: PACKAGE_ICON_80.GIF	Format: png Width: 80 px Height: 80 px
--------------------------------	----------------------------------------------



#### Images for Windows (Installation graphics)

File name: aboutBG.bmp	Format: Bitmap Width: 164 px Height: 337 px
<b>O</b> AhsayOBM	
(The size of this graphic is reduced to fi	t into this document.)

File name: desktop.ico	Format: Windows Icon Width: 256,128,48,32,16px
This logo has transparent background (checkered	Height: 256,128,48,32,16px
squares).	(True color plus alpha channel transparency)



File name: small.bmp	Format: Bitmap Width: 55 px Height: 58 px



File name: uninstall.ico	Format: Windows Icon Width: 256,128,48,32,16px
This logo has transparent background (checkered squares).	Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)
(The sizes of these logos are reduced to fit into this defined to the second se	ocument.)

#### Image specifications for AhsayACB (Application graphics)

#### Images for all platforms

File name: about_logo.png	Format: png
This logo has transparent background (checkered squares).	Width: 144 px Height: 33 px
AhsayACB	

File name: login_bg.png	Format: png
	Width: 1016 px Height: 734 px



(The size of this logo is reduced to fit into this document.)

File name: login_logo.png	Format: png
This logo has transparent background (checkered squares) with white text.	Width: 200 px Height: 60 px

File name: logo.png	Format: png
This logo has transparent background (checkered squares).	Width: 32 px Height: 32 px
0	

File name: main_logo.png	Format: png Width: 148 px
This logo has transparent background (checkered squares) with white text.	Height: 33 px

File name: splash.png	Format: png Width: 420 px Height: 240 px
AhsayACB	
(The size of this graphic is reduced to fit in	to this document.)

File name: dstn_CBS_24.png	Format: png Width: 24 px
This logo has transparent background (checkered squares) with white text.	Height: 24 px

File name: dstn_CBS_32.png	Format: png Width: 32 px Height: 32 px
This logo has transparent background (checkered squares) with white text.	

File name: dstn_CBS_48.png	Format: png Width: 48 px
This logo has transparent background (checkered squares) with white text.	Height: 48 px
C	

File name: fs16_root_CBS.png	Format: png Width: 16 px
This logo has transparent background (checkered squares) with white text.	Height: 16 px
3	

#### Images for Windows (System tray)

The following icons icon1.ico, icon2.ico, icon3.ico and icon4.ico will be used in the Windows system tray. Please arrange them in an animated sequence. The application will arrange the animation sequence when the backup job is run.

File name: icon1.ico This logo has transparent background (checkered squares).	Format: Windows Icon Width: 16 px Height: 16 px
	(True color plus alpha channel transparency)
Original       Image enlarged for easy reference	

File name: icon2.ico This logo has transparent background (checkered squares).	Format: Windows Icon Width: 16 px Height: 16 px
	(True color plus alpha channel transparency)
Image enlarged for easy reference	

File name: icon3	.ico	Format: Windows Icon Width: 16 px Height: 16 px
This logo has tra squares).	nsparent background (checkered	
		(True color plus alpha channel transparency)
<b>O</b> riginal	Image enlarged for easy reference	1

File name: icon4.ico	Format: Windows Icon Width: 16 px
This logo has transparent background (checkered squares).	Height: 16 px
	(True color plus alpha channel transparency)
Image enlarged for easy reference	

File name: toast.ico	Format: Windows Icon
This logo has transparent background (checkered squares).	— Width: 64 px Height: 64 px
	(True color plus alpha channel transparency)

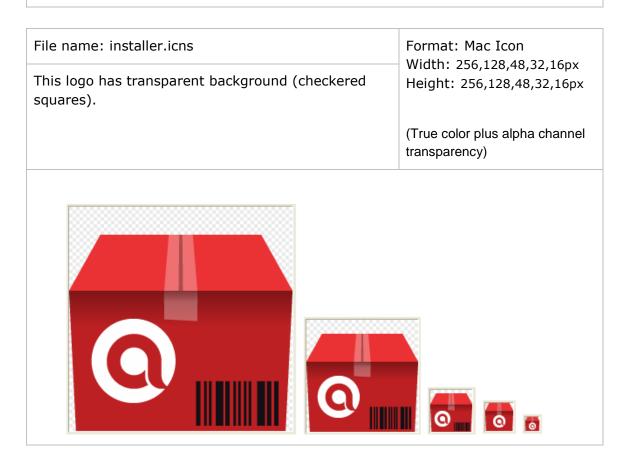


#### Images for Mac (Application and installation graphics)

File name: desktop.icns	Format: Mac Icon Width: 256,128,48,32,16px
This logo has transparent background (checkered squares).	Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)
(The sizes of these logos are reduced to fit into this d	

File name: GenericJavaApp.icns	Format: Mac Icon
This logo has transparent background (checkered squares).	

128×128-32bit       32×32-32bit       16×16-32bit
Image: Signal and Sig
32x32-1bit 16x16-1bit
Note: These are default Java application icons, they will be displayed when there are icons missing. This is not directly related the product branding.



(The sizes of these logos are reduced to fit into this document.)

File name: Logo.icns	Format: Mac Icon
This logo has transparent background (checkered squares).	<ul> <li>Width: 256,128,48,32,16px</li> <li>Height: 256,128,48,32,16px</li> </ul>
	(True color plus alpha channel transparency)



(The sizes of these logos are reduced to fit into this document.)

File name: uninstall.icns	Format: Mac Icon
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)



File name: ACBLogo.icns This logo has transparent background (checkered squares).	Format: Mac Icon Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)
(The sizes of these logos are reduced to fit into this	

Height: 420 px

AhsayACB	
(The size of this graphic is reduced to fit into this docu File name: logo.png	Format: png
	Width: 128 px Height: 128 px
(The size of this graphic is reduced to fit into this docu	iment.)

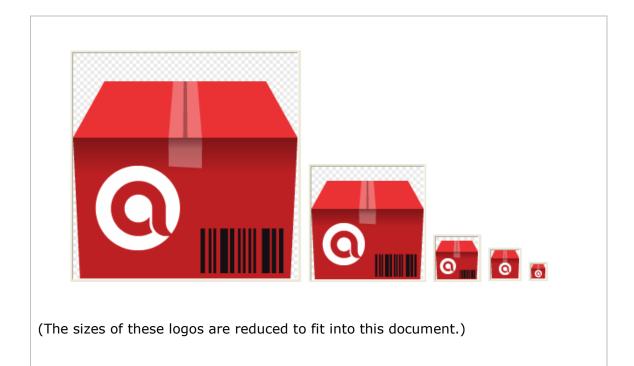
#### Images for Windows (Installation graphics)

File name: aboutBG.bmp	Format: Bitmap Width: 164 px Height: 337 px



(The size of this graphic is reduced to fit into this document.)

File name: desktop.ico This logo has transparent background (checkered squares).	Format: Windows Icon Width: 256,128,48,32,16px Height: 256,128,48,32,16px			
	(True color plus alpha channel transparency)			
(The sizes of these logos are reduced to fit into this d	locument.)			
File name: installer.ico	Format: Windows Icon Width: 256,128,48,32,16px			
This logo has transparent background (checkered squares).	Height: 256,128,48,32,16px			
	(True color plus alpha channel transparency)			



File name: small.bmp	Format: Bitmap Width: 55 px Height: 58 px			

File name: uninstall.ico	Format: Windows Icon
This logo has transparent background (checkered squares).	Width: 256,128,48,32,16px Height: 256,128,48,32,16px
	(True color plus alpha channel transparency)

(9)

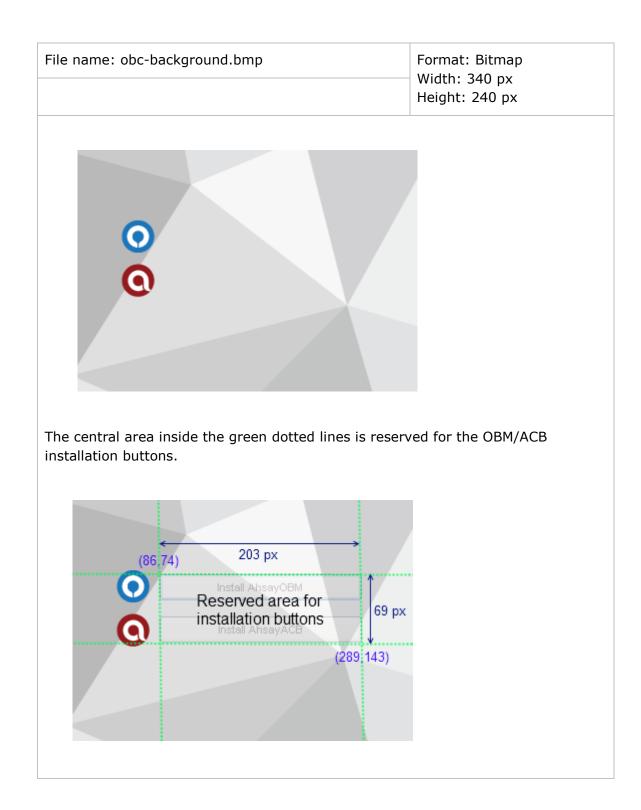


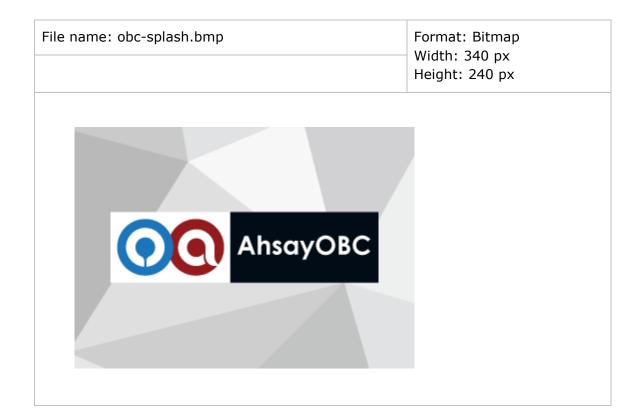
#### Image specifications for AhsayOBC (Installation graphics)

#### Images for Windows

File name: acb-splash.bmp	Format: Bitmap Width: 340 px Height: 240 px
AhsayACB	

File name: installer.ico	Format: Windows Icon Width: 256,128,48,32,16px			
This logo has transparent background (checkered squares).	Height: 256,128,48,32,16px			
	(True color plus alpha channel transparency)			
(The sizes of these logos are reduced to fit into this do	ocument.)			





File name: obm-splash.bmp	Format: Bitmap Width: 340 px Height: 240 px
AhsayOBM	

# Appendix G Environments

### Here is a comparison table of the setup concerns on different replication environment.

	Ahsay CBS (Physical machine/Cloud)	Ahsay CBS (Existing VM)	Cloud (Storage)	FTP/ SFTP	Ahsay CBS (Physical machine/Cloud )	(Existing VM)	Local FTP/ SFTP	Mapped Drive	Local/ Removable Drive
Type of connection	Internet				LAN				N/A
	This is the type of connection with the Backup Server, for Internet connection, you may aware on the download speed which may affect the restore performance. N/A refers to a direct connection with the Backup Server and the replication storage is not located on the same dis of the user home.								
Cost	High	Medium	Medium*	Low	High	Medium	Low	Low	Low
		The cost is measured in terms of setup, hosting, storage media type and maintenance. * The cost would be affected if the cloud storage is charged base on bandwidth or amount of access.							
Replication Speed	Medium	Medium	Medium	Medium	Fast	Fast	Fast	Fast	Fast
	The replication speed over the Internet would mainly depend on the upload bandwidth. The replication speed is similar as file copying between 2 devices and the number of backup set to replicate. If fast replication is required, you can consider using the <u>multiple threads replication</u> (v7.7 onwards)								
Recovery Speed	Fast	Fast	Slow	Slow	Fast	Fast	Fast	Fast	Fast
	This is measured in terms of the Backup Server downtime. The bottleneck is mainly on the Internet bandwidth.								
Switch to Backup Server	Yes	Yes	No	No	Yes	Yes	No	No	No
Time to switch	Slow **	Slow **	N/A	N/A	Fast	Fast	N/A	N/A	N/A
	** The speed would depend on the DNS propagation time. N/A refers to the device has no such capability and not applicable for the DNS switch over.								
Time to switch over by IP address	Fast	Fast	N/A	N/A	Fast	Fast	N/A	N/A	N/A
	Switch the IP address of the Replication Server to the IP address of the Backup Server, provided that the Backup Server is down and the IP address will not be used on the Backup Server again.								
	N/A refers to the device has no such capability and not applicable for the IP switch over.								
Offsite eplication	Yes	Yes	Yes	Yes	No	No	No	No	No
Replication snapshot	By Ahsay CBS	By Ahsay CBS	Depends ***	No	By Ahsay CBS	By Ahsay CBS	No	No	No
	*** Depends of	n the cloud s	service provid	er/setup.					

# Appendix H System Job

Here is a summary of the system jobs on the AhsayCBS. For the daily job, it is scheduled at 06:00, while others will be performed hourly and quarter-hourly.

#### Quarter-hourly Job

Job Name	Description	Email
Low Disk Space Alert	When the disk space of the user home or system home is over 80%, email will be sent to administrator. Once the alert email is sent, email will not be sent within the next hour.	~
Inactive Backup Set Report	Email users when backup set has not been run for a number of days. (The number of days can be set in policy group.)	~
Settings Change Report	When user's profile or backup set settings is changed, Email will be sent to user.	~
Restore Job Report	Send restore job report to user.	~
Backup Job Report	Send backup job report to user.	~
Remove Deleted Backup Set	This job scans removed backup sets from the storage.	×

### Hourly Job

Job Name	Description	Email
Missed Backup Report	Email will be sent if scheduled backup job has not been started after 6 hours.	~
Remove Migrated v6 Data	(Version 7.7 or later) When v6 backup data has completely migrated to v7 format, this job will remove the old v6 backup data.	×
License Check	License validation check.	×

### Daily Job

Job Name	Description	Email
Backup Quota Reminder Report	It will send report to user when the backup quota is over 80% or backup quota is full.	~
Trial User Reminder Job	It will send report to trial users when trial users are going to expire or to those expired trial users.	<
Low Destination Space Reminder	It will send disk space reminder email to administrator. It monitors the local and cloud storages such as Amazon Cloud Drive, Google Drive, OneDrive and OneDrive for Business.	<

Configuration Archival	Perform AhsayCBS system configuration, user profile, and runtime settings to our cloud.	×
Remove Trial User	Expired trial users will be removed by this job.	×
Logs Removal	This job removes expired log entries such as backup error, backup job, CDP backup job, replication log, advertisement log and system logs etc.	×
Meter license usage	Upload meter license usage to our cloud.	×

Appendix I Daily User Report

If the user group your account belongs to has the Daily User Report selected in the Policy Group setting, you will receive a daily user report generated by the CBS system.

The daily user report is an interactive report to provide you with detailed information activities, statistics, problems or issues that your account is associated with.

There are two major types of reports you can find from the email, the **Backup/Restore Report** and the **Daily User Report**.

#### To access the Backup/Restore report

#### > Download individual Backup or Restore report

1. The content in the email shows a list of Backup and Restore jobs performed associated with your user. Simply click on the **Download** link in the individual backup or restore job item as highlighted in the screen shot below.

Report for 11/2	@ahsay.com, l the attachment "DailyUserR 5/2016. <mark>95 error(s)</mark> and <mark>89</mark> ; soon as possible.			-
User	Backup Set	Backup Job	Report	
steven	K Drive Backup (1479792751514)	2016-11-25-12-45-00	Download	
steven	K Drive Backup (1479792751514)	2016-11-25-18-15-00	Download	
Restore Job User	Backup Set	Backup Job	Report	
	- K Drive Backup (1479792751514)	2016-11-24-19-28-08	Download	

2. You will be prompted to enter the password of your backup user account as shown below. Click on the **Download** button after entering the password.

G AhsayCBS	
	Login Name stoven
	Password
	Download

3. The Backup or Restore report in .zip format will be download.

#### > Download Backup and Restore reports at once

1. All backup reports and restore reports are grouped separate **.zip** attachments and are named as **BackupReports.zip** and **RestoreReports.zip** respectively.

C AhsayCBS	
	DailyUserReport.html" to view your consolidated Daily User s) and <mark>89 issue(s)</mark> were found by the system. Please review and
Attachments     BackupReports.zip (29 KB)     RestoreReports.zip (17 KB)     DailyUserReport.itmit (72 KB)	📩 Download zip file (total 118 KB)

2. Unzip the downloaded file and you will find all the backup or restore reports.

#### To access the Consolidated Report

1. Click on the attachment DailyUserReport.html from the email to download the file.

G AhsayCBS	
	t "DailyUserReport.html" to view your consolidated Daily <mark>5 error(s)</mark> and <mark>89 issue(s)</mark> were found by the system. Please s possible.
✓ 3 Attachments     BackupReports.zip (29 KB)     RestoreReports.zip (17 KB)     DailyUserReport.html (72 KB)	📥 Download zip file (total 118 KB)

2. Launch the file with your Internet browser and you will see a screen similar to this.

Dai	ly User repo	ort (steven.tse	e@ahsay.com)	
_	d at : Friday, November 25, 201			
🔀 PR		📬 ACTIVITIES 📗 STA	TISTICS	
Systen	n Backup Restore I	Replication Redirection		
No.	Events	Start Time	End Time	Total No. of Occurrence
1	MissedBackup	2016-11-24-09-33-00	2016-11-25-09-33-00	16
2	UserAuthFailed	11/24/2016 19:06:48	11/25/2016 18:37:05	63

#### About the Daily User Report

The daily user report has 4 major sections which are **PROBLEMS**, **ISSUES**, **ACTIVITIES** and **STATISTICS**.



All unsuccessful activities including system jobs, backup jobs, restore, replication and redirection are recorded under the PROBLEMS section. There are 5 tabs under this category.

#### System

This page shows the consolidated data for system job errors with the following details. All same type of system job error will be grouped as one entry.

Dai	ly User repo	ort (steven.tse@	ahsay.com)	📾 WEB VIEW 🕒 PRINT VIEV
enerated	d at : Friday, November 25, 2016	5 19:00:04 CST		
🔀 PR		1 ACTIVITIES	cs	
System	m Backup Restore R	eplication Redirection		
No.	Events	Start Time	End Time	Total No. of Occurrence
1	MissedBackup	2016-11-24-09-33-00	2016-11-25-09-33-00	16
2	UserAuthFailed	11/24/2016 19:06:48	11/25/2016 18:37:05	63

No.	Sequential number of report item
Events	Type of system job error
Start Time	Start time of the first occurrence of the particular type of system job error
End Time	End time of the last occurrence of the particular type of system job error
Total No. of Occurrence	Number of occurrence of the particular type of system job error

### Backup

This page shows all the unsuccessful backup jobs with the following details.

	y User repo	× ·	en.tse@	ahsay	.com)	le wee	VIEW 🕒 PRINT VIEV
🔀 PRC	DBLEMS 🛕 ISSUES	🔱 ACTIVITIES		s			
System	Backup Restore Re	plication Redi	rection				
User	Backup Sets	Start Time	End Time	Job Status	Jobs@Destinations	Total No. of Errors	Last Successful Backup
steven2	Backup Set Name (DAG)	11/25/2016 04:00:47	11/25/2016 04:00:47	Missed Backup	2016-11-24-22-00- 00@[Pre-v7]	1	2016-11-10-22-00-00
steven2	default-backup-set-name-1	11/25/2016 02:00:24	11/25/2016 02:00:24	Missed Backup	2016-11-24-20-00- 00@[Pre-v7]	1	
steven2	default-backup-set-name-3	11/25/2016 05:00:58	11/25/2016 05:00:58	Missed Backup	2016-11-24-23-00- 00@[Pre-v7]	1	2016-07-29-23-00-00

User	Name of the backup user
Backup Sets	Name of the failed backup set
Start Time	Start time of the failed backup job (in backup server's time zone)
End Time	End time of the failed backup job (in backup server's time zone)
Job Status	Status of the failed backup job, e.g. Missed Backup
Job@Destinations	Backup time in client time zone
Total No. of Errors	Total number of backup error for the particular backup set
Last Successful Backup	Time of the last successful backup job for the particular backup set

#### > Restore

This page shows all the unsuccessful restore jobs with the following details.

Generated	Daily User report (steven.tse@ahsay.com)								
System	Backup Res	store Replication	Redirection						
User	Backup Sets	Start Time	End Time	Job Status	Jobs@Destinations	Total No. of Errors			
steven	K Drive Backup	11/24/2016 19:28:08	11/24/2016 19:28:22	User interrupted	2016-11-24-19-28-08@GoogleDrive-1	1			
	User Name of the backup user								
Back	kup Sets		Name of the failed backup set						
Start	t Time		Start time of the failed restore job (in backup server's time zone)						

End Time	End time of the failed restore job (in backup server's time zone)
Job Status	Status of the failed restore job, e.g. User interrupted
Job@Destinations	Restore time in client backup agent's time zone
Total No. of Errors	Total number of restore error for the particular backup set

## > Replication

This page shows all the unsuccessful replication jobs with the following details.

Daily User report (steven.tse@ahsay.com)										
Generated	at : Tue, 12 Jul 2016 (	01:00:01 CST								
🚫 PR	OBLEMS 🛕 IS:	SUES 🔃 ACTIVIT	ies 📙 statist	ICS						
System	Backup Rest	ore Replication R	Redirection							
User	Backup Sets	Timestamp	Туре	Messages						
steven	Backup Set Name	2016-07-11 01:00:06	ReplicateFileError	[Resync] Top dir:D:\AhsayCBS\user\steven, backup set: 1465540337727, null						
steven	Backup Set Name	2016-07-11 01:00:16	ReplicateFileError	[Resync] Top dir:D:\AhsayCBS\user\steven, backup set: 1465540337727, null						
steven	Backup Set Name	2016-07-11 01:00:26	ReplicateFileError	[Resync] Top dir:D:\AhsayCBS\user\steven, backup set: 1465540337727, null						
			1							

User	Name of the backup user
Backup Sets	Name of the backup set failed for replication
Timestamp	Recorded time of the replication error
Туре	Type of the replication error
Messages	Error message showing details of the replication error

#### Redirection

This page shows all the unsuccessful redirection jobs with the following details.

Timestamp         Recorded time of the redirection error			
Events	Type of the redirection error		
Users	Name of user failed for the redirection job		
Total No. of Errors	Total number of redirection error for the particular user		



This section shows issues in regard to system jobs, backup user account and backup sets that backup user should be aware of. There are 3 tabs under this category.

#### > System / Security

This page shows the consolidated data for system or security issues with the following details.

Daily User report (steven.tse@ahsay.com)								
Generated at : Friday, N	lovember 2	25, 2016 19:	00:04 CST					
8 PROBLEMS	🛕 issi	JES 🐧	ACTIVITIES					
System / Security	Users	Backup \$	Sets					
Events	Users	Start Tir	me	End Time	No. of Occurrence	Remote IP Address	User Agent	
UserAuthFailed	steven	11/24/20	16 19:06:48	11/25/2016 18:37:05	63	192.168.7.105	OBM	
Event			Type of	system / secur	ity issues			
Users			Name of the backup user for the particular type of system/security issue					
Start Time				ne of the first oc security issue	currence of the	particular type c	f	
End Time			End time of the last occurrence of the particular type of system/security issue					
No. of OccurrenceNumber of occurre backup user					of the particular	type of system/	security of a	
Remote IP Address         IP address where Client Agent Application is installed								
User Agent			Type of the Client Agent Application (AhsayOBM/AhsayACB)					

#### > Users

This page shows a list of backup users whose account's storage quota is 90% or above full.

Daily User report (steven.tse@ahsay.com)								
ጰ problems 🛕 issues	📬 AC	TIVITIES	s 📙 STATISTICS	3				
System / Security Users B	ackup Sets							
Events	Туре	User	Used/Quota (%)	Last Login	Registration Date	Last Backup	Days left	
Used Quota > 90%[Simple Quota]	PAID	steven	985.02M/1G(96%)	11/23/2016 18:30:45	11/22/2016 12:17:44	11/23/2016 18:15:10	28	
Event Type								
User Name of the backup user								

Used/Quota (%)	Storage used / Storage Quota (Utilization rate)				
Last Login	Last login time of user				
Registration Date	Backup account's registration date and time				
Last Backup	Date and time of the last backup job performed				
Days Left	<ul> <li>Trial account – number of days left before the trial account expires</li> <li>Paid account – number of days left before the account suspension date set by the system administrator</li> </ul>				

## Backup Sets

This page shows a list of missed scheduled backup and backup sets that have not been backed up for 14 days or more.

Daily User report (steven.tse@ahsay.com)									
Generated at : Friday, Novemb	er 25, 2016	3 19:00:04 CST							
	SSUES	1 ACTIVITIES	ICS						
System / Security User	s Back	up Sets							
Events	Users	Backup Set	Destinations	Creation Date	Last Backup Job	Last Successful Backup			
Inactive > 14 days	steven2	MS SQL Server Backup Set Name							
Inactive > 14 days	steven2	Cloud Testing							
Inactive > 14 days	steven2	testing2			101 Days				

Events	Type of the issue
Users	Name of the backup user
Backup Set	Name of the backup set
Destination	Location of the backup destination
Creation Date	Date and time when the backup set was created
Last Backup Job	Number of day when a backup job was last performed
Last Successful Backup	Time of the last successful backup job for the particular backup set

## 👠 activities

This section shows activities of all backup and restore jobs, both successful and unsuccessful ones, as well as all setting changes made. There are 3 tabs under this category.

#### Backup Jobs

This page shows a list of all backup jobs activities.

Daily User report (S Generated at : Friday, November 25, 2016 19:00:04 C PROBLEMS ACT	ST	e@ahsa	ay.com)		⊕ WEB VI	ew 🕒 Print View		
Backup Jobs         Restore Jobs         Setting Changes           Users         Backup Set         Destinations IP Address         Start Time         End Time         Backup         Backup         Backup Size *								
steven K Drive Backup Goog	eDrive- 192.168.7.10	5 11/25/2016 12:45:07	11/25/2016	Duration 1 min(s) 14 sec(s)	Status OK	8 [ 33.34M/39.79M ]		
steven K Drive Backup Goog 1	eDrive- 192.168.7.10	5 11/25/2016 18:15:06	11/25/2016 18:18:10	3 min(s) 4 sec(s)	ок	5 [ 18.9M/21.19M ]		
steven2 Backup Set Name (DAG) [Pre-v	7]	11/25/2016 04:00:47	11/25/2016 04:00:47	0 sec(s)	Missed Backup	0 [ 0/0 ]		
Users	Name of th	Name of the backup user						
Backup Set	Name of the backup set							
Destinations	Location of the backup destination							
IP Address	IP address where User Agent Application is installed							
Backup Duration	Start time / End time of the backup and duration of the backup							
Backup Status	Status of the backup job							
Backup Size	No. of files	[Compre	ssed size /	Uncompre	essed siz	e]		

#### Restore Jobs

**Backup Set** 

This page shows a list of all restore jobs activities.

	y User	1		n.tse@ał	nsay.com)	)	I WEB VIEW	
•		ISSUES						
Backup	Jobs Restore	e Jobs Setting	g Changes					
Users	Backup Set	Destinations	IP Address	Start Time	End Time	Restore Duration	Restore Status	Restore Size*
steven	K Drive Backup	GoogleDrive-1	192.168.7.105	11/24/2016 19:28:08	11/24/2016 19:28:22	14 sec(s)	User interrupted	32(52.2M)
steven	K Drive Backup	GoogleDrive-1	192.168.7.105	11/24/2016 17:36:19	11/24/2016 17:36:35	16 sec(s)	OK	14(34.73M)
Unit =N	lo. of files (Downlo	aded size)						
Usei	rs		Nar	me of the bac	kup user			

Name of the backup set

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Destinations	Location of the restore destination			
IP Address	IP address where User Agent Application is installed			
Start Time	Start time of the restore job			
End Time	End time of the restore job			
Restore Duration	Duration of the restore job			
Restore Status	Status of the restore job			
Restore Size	Number of files restored (Downloaded size)			

# > Setting Changes

This page shows a list of the settings changed by backup users.

Generated	ly User rej	24, 2016 19:00:04			VEB VIEW	PRINT VIEW			
Backu		Setting Chang	es						
Users	sers Field Old Value			New Value	Time of Changes	IP Address			
steven	Contacts		Email: steven.tse@ahsay.com, ress: , Website: , Phone: ,	"[Name: Steven, Email: steven.tse@ahsay.com, Company: , Address: abcabc, Website: , Phone: , Phone: "	11/24/2016 16:34:00	192.168.22.40			
steven	Quota	"1073741824"		"536870912000"	11/24/2016 16:34:00	192.168.22.40			
steven	steven [Add-on Modules] "10" Microsoft Exchange Mailbox Quota			"50"	11/24/2016 16:34:00	192.168.22.40			
Use	rs		Name of the backup user						
Fiel	d		The field that has been changed						
Old	Value		Old Value before	Old Value before the change					
New	/ Value		New Value after	the change					
Tim	e of Changes		Time of the chan	ges made					
IP A	ddress		IP Address of the	e machine which initiated the	changes	6			



This section shows statistics data of backup users, data transfer and disk storage usage.

#### > Users

This page shows a list of statistics data regarding the backup user account.

nerated at :	Thursday, I	November 24, 2	2016 19:00	:04 CST						
			🚹 AC	TIVITIES	STATIS	TICS				
Users	Data Transfe	er Disk Stor	rage Usag	le						
Username	Alias	Registration Date	Last Backup	Last Login	Data Size*	Retention Size*	Yesterday's Upload	Standard Quota	Total Backup (No. of Files/Size)**	Total Restore (No. of Files/Size)**
steven	Steven (K drive)	11/22/2016 12:17:44		11/24/2016 18:30:20	940.42M / 1.08G	92.71M / 112.4M	1.02M	500G	2096 [1.01G / 1.19G]	1982 [963.02M / 1.11G
steven2	steven OBM	06/07/2016 13:32:20	12 Day(s)	11/11/2016 22:15:39	7.31G / 14.52G	60.33M / 481.85M	0	100G	8760 [7.45G / 15.45G]	1585 [5.18G / 9.4G]
steventrial	-	11/22/2016 18:59:38			0/0	0/0	0	50M	0 [0 / 0]	0 [0 / 0]
testing		11/24/2016 10:53:39			0/0	0/0	0	500G	0 [0 / 0]	0 [0 / 0]

Users	Name of the backup user				
Alias	Another name of the backup user				
Registration Date	Date and time when the backup account was registered				
Last Backup	Number of day when a backup job was last performed with the particular user account				
Last Login	Date and time when user logged in to the particular account				
Data Size	Total size of backup data (Compressed size/Uncompressed size)				
Retention Size	Total size of data in retention area (Compressed size/Uncompressed size)				
Yesterday's Upload	Total size of backup uploaded by the particular backup user yesterday				
Standard Quota	Storage quota set for the particular backup user				
Total Backup (No. of Files/Size)	Total backup performed by this user [No. of files [Compressed size / Uncompressed size]				
Total Restore (No. of Files/Size)	Total restore performed by this user [No. of files [Compressed size / Uncompressed size]				

### > Data Transfer

This page shows a list of statistics data regarding data transfer for backup jobs and restore jobs.

Dail	v User r	eport (s	teven.ts	se@ahsay.	com)		I WE	B VIEW 😑 PRINT VIE
	5	-1(-						
enerated	at : Thursday, Novemb	er 24, 2016 19:00:0	4 CST					
🔀 PRO	OBLEMS 🛕 ISS	UES 🚺 ACTI	VITIES 🚹 ST	ATISTICS				
Users	Data Transfer Di	isk Storage Usage						
Packu	p Jobs							
	•							
User	Backup Set	Destinations	IP Address	Start Time	End Time	Backup Duration	Backup Status	Backup Size*
	K Drive Backup	GoogleDrive-1	192,168,7,105	11/24/2016 10:25:46	11/24/2016 10:24:33	1 min(s) 13 sec(s)	OK	6 [23.51M / 28.53M]
steven	к Биле Васкир	Googlebiive-i						
	K Drive Backup	GoogleDrive-1	192.168.7.105	11/24/2016 12:46:33	11/24/2016 12:45:07	1 min(s) 26 sec(s)	ок	5 [12.29M / 14.92M]
ste∨en		•	192.168.7.105 192.168.7.105	11/24/2016 12:46:33 11/24/2016 18:17:56	11/24/2016 12:45:07 11/24/2016 18:15:06	1 min(s) 26 sec(s) 2 min(s) 50 sec(s)	ок ок	5 [12.29M / 14.92M] 7 [12.31M / 14.98M]
ste∨en ste∨en	K Drive Backup	GoogleDrive-1						
steven steven steven steven2	K Drive Backup K Drive Backup File backup testing	GoogleDrive-1 GoogleDrive-1	192.168.7.105	11/24/2016 18:17:56	11/24/2016 18:15:06	2 min(s) 50 sec(s)	ок	7 [12.31M / 14.98M]
steven steven steven2	K Drive Backup K Drive Backup	GoogleDrive-1 GoogleDrive-1	192.168.7.105	11/24/2016 18:17:56	11/24/2016 18:15:06	2 min(s) 50 sec(s)	ок	7 [12.31M / 14.98M]
steven steven steven2	K Drive Backup K Drive Backup File backup testing	GoogleDrive-1 GoogleDrive-1	192.168.7.105	11/24/2016 18:17:56	11/24/2016 18:15:06	2 min(s) 50 sec(s)	ок	7 [12.31M / 14.98M] 0 [0 / 0]

Users	Name of the backup user				
Backup Set	Name of the backup set				
Destinations	Backup Destination of the particular backup set				
IP Address	IP address of the client backup agent running the backup / restore				
Start Time	Start time of the particular backup / restore				
End Time	End time of the particular backup / restore				
Backup Duration / Restore Duration	Duration of the backup / restore for the particular backup / restore				
Backup Status / Restore Status	Status of the particular backup / restore job				
Backup Size / Restore Size	Backup size / Restore size No. of files [Compressed size / Uncompressed size]				

#### > Disk Storage Usage

This page shows a list of statistics data regarding disk storage usage.

Daily User	report (st	teven.tse@a	ahsay.com)	🕮 web view 🎦 print viev
enerated at : Friday, Nover	nber 25, 2016 19:00:04 CS	ST		
🗴 PROBLEMS	ISSUES 11 ACTIV	VITIES		
Users Data Transfer	Disk Storage Usage			
Destination	Data Size	Retention Size	No. of Backup Sets	Since
CBS	14.52G	481.85M	29	06/21/2016 14:10:44
CBS DestinationPool-1	14.52G 0	481.85M	29 1	06/21/2016 14:10:44 08/15/2016 09:33:48

Destination	Backup destination used by the backup user			
Data Size	Size of data backed up to the particular backup destination			
Retention Size	Size of retention area on the particular backup destination			
No. of Backup Sets	Number of backup set(s) on the particular backup destination			
Since	The data and time when the particular backup destination was created			

#### **Daily Report Viewing Option**

There are two viewing options for the daily report, namely the WEB VIEW and PRINT VIEW, which can be altered by click the corresponding icon at the top right corner.

# Daily User report (steven.tse@ahsay.com)

🕮 WEB VIEW 🕒 PRINT VIEW

The **WEB VIEW** is an interactive style report where data is presented under different categories while user navigates through the report.

Daily	User	report	t (ster	ven.tse	ahs	ay.cor	n)		۲	WEB VIEW 📄 PRINT VIE
nerated at :	Wednesday, I	November 23, 20	16 19:00:05 (	CST						
🗴 PROBLI	EMS 🛕	ISSUES 1	ACTIVITIES	tatis	STICS					
Users D	ata Transfer	Disk Storage	Usage							
Username	Alias	Registration Date	Last Backup	Last Login	Data Size*	Retention Size*	Yesterday's Upload	Standard Quota	Total Backup (No. of Files/Size)**	Total Restore (No. of Files/Size)**
steven	Steven (K drive)	11/22/2016 12:17:44	-	11/23/2016 18:30:45	928.96M/ 1.07G	56.07M/ 67.99M	0	10	2078 [985.02M / 1.14G]	1968 (928.29M / 1.07G)
steven2	steven OBM	06/07/2016 13:32:20	11 Day(s)	11/11/2016 22:15:39	7.31G <i>1</i> 14.52G	60.33M/ 481.85M	0	100G	8760 [7.45G / 15.45G]	1585 [5.18G / 9.4G]
steventrial		11/22/2016 18:59:38			0/0	0/0	0	50M	0 [0 / 0]	0 [0 / 0]



The **PRINT VIEW** is a one-page report listing all the data from the different categories from the **WEB VIEW** report.

enerated	y User repo at : Friday, November 25, 2016 ems > System	× ×	en.tse@	<i>i</i> )ahsay	.com)		3 VIEW 🕒 PRINT VIEV	
No.	Events	Start Time		End Time		Total No. of Occurr	ence	
1	MissedBackup	2016-11-24-09-33-	2016-11-24-09-33-00 2016-11-25-09-33-00			16		
2	UserAuthFailed	11/24/2016 19:06:	48	11/25/2016 18	37:05	63		
Proble	ems > Backup Backup Sets	Start Time	End Time	Job Status	Jobs@Destinations	Total No. of Errors	Last Successful Backup	
steven2	Backup Set Name (DAG)	11/25/2016 04:00:47	11/25/2016 04:00:47	Missed Backup	2016-11-24-22-00- 00@[Pre-v7]	1	2016-11-10-22-00-00	
steven2	default-backup-set-name-1	11/25/2016 02:00:24	11/25/2016 02:00:24	Missed Backup	2016-11-24-20-00- 00@[Pre-v7]	1	-	
steven2	default-backup-set-name-3	11/25/2016	11/25/2016	Missed	2016-11-24-23-00-	1	2016-07-29-23-00-00	

## Appendix J System Files for Continuous Backup Exclusion

Below is a full list of system files you choose to exclude from performing the continuous backup.

- C:\Program Files
- C:\Windows
- Pagefile.sys
- hiberfil.sys
- > *.tmp
- > *.part
- System Volume Information
- \$Recycle.Bin (Vista, 2008/R2, Win7)
- RECYCLER(2000, XP, 2003)
- RECYCLED
- C:\Documents and Settings\All Users\Application Data\Microsoft, C:\ProgramData\Microsoft
- C:\Documents and Settings\All Users\Application Data\Kaspersky Lab
- C:\Documents and Settings\All Users\Application Data\Symantec
- C:\Documents and Settings\All Users\Application Data\Avg7
- C:\Documents and Settings\All Users\Application Data\Avg8
- C:\Documents and Settings\All Users\Application Data\McAfee
- C:\Documents and Settings\All Users\Application Data\McAfee.com
- C:\Documents and Settings\All Users\Application Data\Sophos
- ntuser.dat ntuser.dat.log
- *\AppData\Local\Microsoft*
- *\AppData\Local\Temp*
- *\AppData\Roaming Data\Microsoft*
- *\Local Settings\Application Data\Microsoft*
- *\Local Settings\Temporary Internet Files
- *\Local Settings\Temp
- *\Local Settings\History
- *\LOCALS~1\Temp
- *\LOCALS~1\Tempor~1
- *\LOCALS~1\History
- ➤ ~\$*.doc
- ➤ ~\$*.ppt
- ➤ ~\$*.xls
- ➤ ~\$*.dot

Appendix KComparison Screen Shot for QuotaManagement between Pre-v7.15.6.0 and Post- v7.15.6.0

Backup/ Restore > Users, Groups & Policies > Backup User > %username% > User Profile > Backup Client Settings - Quota					
Pre-v7.15.6.0	Example-1: Total quota is 20000GB and AhsayCBS is default quota setting.				
	Destination       Quota         AhsayCBS()       0.0				
Post- v7.15.6.0	AhsayCBS will be same value with total quota setting, 20000GB. Quota Unlimit storage space for the destination not shown in the following table				
	Destination     Quota       AhsayCBS     20000.0       (If preempted mode is enabled in policy settings, the quota settings are disabled)				
Pre-v7.15.6.0	Example-2: Total quota is 500GB and AhsayCBS is 200GB. Quota F00 Gbytes  Per Destination				
	Destination     Quota       GathsayCBS(-)     200.0				

Post- v7.15.6.0	AhsayCBS will maintain to be 200GB.				
	Quota				
	Lulimit starses anals for the destination	n not about in the following table			
	Unlimit storage space for the destinatio	n not snown in the following table			
	TW				
	Destination Qu	ota			
	AhsayCBS 20	0.0 Gbytes 🎽			
	(If preempted mode is enabled in policy	settings, the quota settings are	disabled)		
Pre-v7.15.6.0	<b>Example -3</b> : Total quota is 1000GB and AhsayCBS is default quota setting while				
	predefined destination of Google Drive is 500GB.				
	1000.0 Gbytes V				
	Per Destination				
	Destination  AhsayCBS()	Quota	Gbytes 🗸		
	Google Drive(Google Account: ASCL ASCL)	500.0	Gbytes 🗸		
Post- v7.15.6.0	AhsayCBS will be same value with	otal quota setting, 1000GB, a	and predefined		
	destination of Google Drive will maintain to be 500GB.				
	Quota				
	Unlimit storage space for the destination not shown in the following table				
	+ ·				
	Destination	Quota			
	AhsayCBS		Gbytes 💌		
	Google Drive(Google Account: ASCI (If preempted mode is enabled in policy setting:		Sbytes 💌		
	In preempted mode is enabled in policy setting:	s, me quota settings are disabled)	]		
Pre-v7.15.6.0	<b>Example -4</b> . Total quota is 1000GB	and AbsavCBS and predefin	ed destination of		
	<b>Example -4</b> : Total quota is 1000GB and AhsayCBS and predefined destination of Google Drive is default quota setting.				
	Quota				
	1000.0 Gbytes 💌				
	Per Destination				
	Destination	Quota			
	AhsayCBS()	0.0	Gbytes 👻		
	Google Drive(Google Account: ASCL ASCL)	0.0	Gbytes 💙		

Post- v7.15.6.0	Both AhsayCBS and predefined destination of Google Drive will be same value with total quota setting, 1000GB. Quota Unlimit storage space for the destination not shown in the following table				
	Destination	Quota			
	AhsayCBS	1000.0	Gbytes 💌		
	Google Drive(Google Account: ASCL ASCL)	1000.0	Gbytes 💌		
	(If preempted mode is enabled in policy settings, the quot	a settings are disabled)			