

Ahsay Online Backup Manager v8 Quick Start Guide for Synology NAS

Ahsay Systems Corporation Limited

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www.ahsay.com

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Revision History

Date	Descriptions	Type of modification
7 April 2021	Updated Ch. 8; added sub-chapters for the detailed process diagrams in Ch. 8.1, 8.2, 8.2.1, 8.2.2 and 8.3	Modification
30 April 2021	Updated description of Data Integrity Check in Ch. 6.10.1; Updated description of Delete Backup Data in Ch. 6.10.2; Added notes for Periodic Data Integrity Check (PDIC) in Ch. 8.1	New / Modifications
25 May 2021	Added requirement in Ch. 2.11; Updated Ch. 4.1, and Ch. 4.2	New / Modifications
18 June 2021	Added note on save password in Ch. 5.2 and 6.1; Updated 2FA screenshots in Ch. 5.2	New / Modifications

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1 Overview

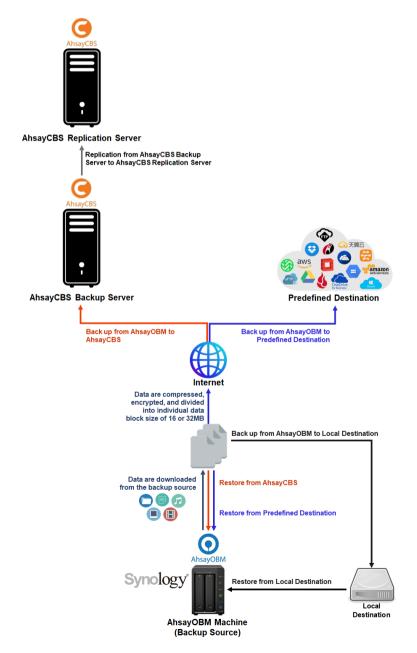
1.1 What is this software?

Ahsay brings you specialized client backup software, namely AhsayOBM, to provide a comprehensive backup solution for protecting file(s) / folder(s) on your machine, with a wide variety of backup destinations (major cloud storage service providers, FTP/SFTP, local drive, etc.) of your choice.

1.2 System Architecture

Below is the system architecture diagram illustrating the major elements involved in the backup process among the backup machine, AhsayOBM and AhsayCBS.

In this user guide, we will focus on the software installation, as well as the end-to-end backup and restore process using the AhsayOBM as a client backup software.



2 Requirements for AhsayOBM on Synology NAS

2.1 Hardware Requirements

Refer to the following article for the list of supported Synology NAS models:

FAQ: Ahsay Hardware Compatibility List (HRL) for AhsayOBM on Synology NAS

2.2 Software Requirements

Refer to the following article on the supported DiskStation Manager (DSM) versions for Synology NAS:

FAQ: Ahsay Hardware Compatibility List (HRL) for AhsayOBM on Synology NAS

2.3 AhsayOBM Installation

The latest version of AhsayOBM must be installed on the Synology NAS.

2.4 NAS-Synology Add-on Module

Make sure the NAS-Synology add-on module in your AhsayOBM user account covers the backup of your Synology NAS.

NOTE						
The NAS-Synology add-on module allows for the backup of unlimited number of Synology NAS						
devices. However, each new AhsayOBM installation on a Synology NAS device will require an						
additional AhsayOBM device license. Please contact your backup service provider for more details.						
General Backup Client Settings Contact User Group Authentication						
Backup Client						
AhsayOBM User AhsayACB User						
Add-on Modules						
Microsoft Exchange Server	2	Microsoft SQL Server				
MySQL Database Server		Oracle Database Server				
Lotus Lotus Domino	Lotus.	Lotus Notes				
Windows System Backup	0	Windows System State Backup				
UMware Guest VM ~ 0		Hyper-V Guest VM 🗸 0				
Microsoft Exchange Mailbox	I	ShadowProtect System Backup				
NAS - QNAP	Syn NAS	NAS - Synology				
Mobile (max. 10)	ľ	Continuous Data Protection				
Volume Shadow Copy	✓ 🛆	In-File Delta				
OpenDirect / Granular Restore	0	Office 365 Backup				
MariaDB Database Server						

2.5 Backup Quota Storage

Please ensure there is sufficient storage quota allocated on your AhsayOBM user account to accommodate the data from the Synology NAS device.

Please contact your backup service provider for more details.

2.6 Java Requirement

In v8, the Oracle Java JDK files are already included and deployed as part of the AhsayOBM installation.

2.7 Memory Requirement

The default Java heap size of AhsayOBM installation on Synology NAS is 256 MB. It is recommended that 1 GB RAM or more is installed for stability and better backup / restore performance.

2.8 TCP Port Requirement

By default, the Synology NAS machine uses TCP port 32168 for the WuiService.

TCP port 32168 must be free on the machine. Otherwise, the AhsayOBM client will not start and its backup and/or restore functions will not work.

2.9 Synology NAS User Account Permission

The Synology NAS user account used for the AhsayOBM installation and application must be a member of "administrators" user group.

Search	Create Edit Delete Edit Members	Y Search
∧ File Sharing	Name •	Description
Shared Folder	administrators	System default admin group
	http	System default group for Web services
🕁 File Services	users	System default group
2 User		
2 Group		

2.10 Synology NAS Trust Level

In the General tab, modify the Trust Level setting by choosing Any publisher.

Settings					
General Beta Auto Updates Package Sources Certificate					
Notification					
An email or desktop notification will be sent or displayed when updates are available.					
Enable email notification					
Enable desktop notification					
Trust Level					
Allow installation of packages published by:					
O Synology Inc.					
 Synology Inc. and trusted publishers 					
Any publisher					

2.11 Network Bandwidth

10 Mbps or above connection speed.



2.12 Limitations

These are the unsupported features of AhsayOBM on Synology NAS devices.

- Auto Upgrade
- Backup of Network Drives
- Decrypt Backup Data
- OpenDirect
- Restore Filter
- Space Freeing Up

2.13 Best Practices and Recommendations

Periodic Backup Schedule

The periodic backup schedule should be reviewed regularly to ensure the interval is sufficient to handle the data volume on the machine. Over the time, data usage pattern may change on a production server, i.e., the number of new files created, the number of files which are updated/delete, new users may be added etc.

When using periodic backup schedules with small backup intervals such as backup every 1 minute, 2 minutes, 3 minutes etc. although the increased backup frequently does ensure that changes to files are captured regularly which allows greater flexibility in recovery to a point in time.

Consider the following key points to efficiently handle backup sets with periodic backup schedule.

- Hardware to achieve optimal performance, compatible hardware requirements is a must. Ensure you have the backup machine's appropriate hardware specifications to accommodate frequency of backups,
 - o so that the data is always backed up within the periodic backup interval
 - so that the backup frequency does not affect the performance of the production server
- Storage ensure you have enough storage quota allocated based on the amount of new data and changed data you will back up.
- Retention Policy also make sure to consider the retention policy settings and retention area storage management which can grow because of the changes in the backup data for each backup job.

2.14 Supported Features from AhsayCBS Web Console

The following features of AhsayOBM on Synology NAS devices but not displayed on the AhsayOBM GUI. These features can only be accessed or configured using AhsayCBS Web Console:

- Backup Source Filter
- In-File Delta
- Advanced Retention Policy Type
- Command Line Tool
- Bandwidth Control
- Follow Link
- Compression
- Usage Statistics Report

3 Get started with AhsayOBM

This quick start guide will walk you through the following 5 major parts to get you started with using AhsayOBM.

Download and Install Download and install AhsayOBM on your Synology NAS

> Launch the App Launch and log in to AhsayOBM

> > **Create a Backup Set** Create a backup set according to your preferences

> > > Run Backup Jobs Run a backup job to back up your data

> > > > **Restore Data** Restore your backed-up data

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4 Download and Install AhsayOBM

4.1 Download AhsayOBM

1. In a web browser, click the blue icon on the top right corner to open the download page for the AhsayOBM installation package file from your backup service provider's website.



2. In the **Synology** section under the **AhsayOBM** tab of the download page, download the AhsayOBM **SPK online installer**.



4.2 Install AhsayOBM using SPK online installer

 Sign in to DiskStation Manager (DSM) with the admin account. In a web browser, enter the Synology NAS device IP address, followed by 5000 <u>https://nas_hostname:5000</u>

NOTE: Refer to the following Synology article for information on how to sign into DSM: <u>https://www.synology.com/en-us/knowledgebase/DSM/help/DSM/MainMenu/get_started</u>

2. To install AhsayOBM on Synology NAS, click the Package Center icon from the desktop.



3. When the Package Center window appears, select Manual Install.

	? — E X	
₽- Search	Manual Install Refresh Settings	Ξŧ
👤 Installed	Installed	
 Update Explore 	HiDrive Backup Running Feedback HiDrive Backup provides a quick and fi way to back up DiskStation shared fol to STRATO HiDrive online storage, whi serve as your contingency site for dat	ders ch can
Recommended	Java Manager Running Feedback C++ but has a simpler object model a fewer low-level facilities than either C C++	nd
Backup	Note Station Note Station helps you fully enjoy writive wing, managing, and sharing content-rich notes. It is very easy to content with rich text editing, media	
🐼 Multimedia 📓 Business		
Security		
🔀 Utilities		
M Community		

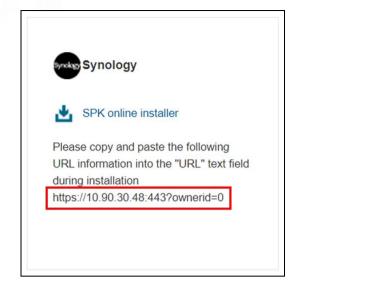
 When the Manual Install window appears, click Browse to select the AhsayOBM SPK file which you have downloaded (e.g., obm-synology-443-10.90.30.48-https-0O). Then, click Next to proceed.

	Manual Install	×
Upload a package Please select a file.		
File:	obm-synology-443-10.90.30.48	Browse
		Next Cancel

5. After reading the License Agreement carefully, tick the checkbox next to **I accept the terms of the license agreement**. Then, click **Next** to proceed.

Ahsay Online Backup Manager - Install	×			
License Agreement Please read the following license agreement before continuing.				
1999-2021 © Ahsay Systems Corporation All rights reserved.				
1999 2021 (Childry Gyatellis Colporation All rights reserved.				
✓ I accept the terms of the license agreement.				
	-			
Back Cancel				

6. From the download page of your backup service provider's website, copy and paste the URL on the Ahsay Online Backup Manager – Install window, then click **Next** to proceed.



	Ahsay Online Backup Manager - Install	Х
Please provide t	he URL of the CBS	
Specify the URL		
URL:	https://10.90.30.48:443?ownerid=0	
Back	Next Ca	ncel

7. Review the following information on the screen, then click **Apply** to start the installation of AhsayOBM.

Confirm settin The wizard will apply	gs • the following settings and start updating the package.	
Item	Value	
Package name	Ahsay Online Backup Manager	
Version	8.5.2.11	
Developer	Ahsay Systems Corporation	
Description	AhsayOBM is a versatile backup application that backs up databases, applications and virtual machines to local and offsite destinations, e.g. local hard disk, on-premises backup appliance, and backup server located in datacenter.	
Back	Apply Cancel	
Back	Apply Cancel Absay Online Backup Manager - Install	
Confirm settin	Ahsay Online Backup Manager - Install	
Confirm settin	Ahsay Online Backup Manager - Install	
C onfirm settin The wizard will apply	Ahsay Online Backup Manager - Install Igs y the following settings and start updating the package.	
Confirm settin The wizard will apply Item	Ahsay Online Backup Manager - Install Ahsay Online Backup Manager - Install Value Ahsay Online Backup Manager 8.5.2.1	
Confirm settin The wizard will apply Item Package name	Ahsay Online Backup Manager - Install Ahsay Online Backup Manager - Install Value Ahsay Online Backup Manager	

8. After a successful installation, AhsayOBM will be listed in the Installed packages.

2	Pack	age Center	? - 🗉 X
₽ - Search	Manual Install Refresh Setting	15	Ξ4
🛃 Installed	Installed		
 Update Explore 	Running	AhsayOBM is a versatile backup application that backs up databases, applications and virtual machines to local and offsite destinations, e.g. local hard disk, on-premises backup appliance, and backup server located in datacenter.	
Recommended		MariaDB is a community-developed fork of MySQL and is one of the most widely used open-source relational database management system (RDBMS). It is highly compatible with MySQL and allows users to effortlessly migrate databases from MySQL to	
Backup	WordPress Running	WordPress is an open source blog tool and publishing platform powered by PHP and MySQL. The package enables you to host a WordPress blog on your DiskStation.	
🛞 Multimedia	Feedback		
Business			
Security			
Vtilities			
Community			

9. Click the Main Menu icon on the top left corner of your desktop.



10. You can click the AhsayOBM icon to launch the application.



- 11. Revert the Trust Level to the previous setting in Package Center afterward.
- 12. Refer to Pre-install Requirement for instructions.

4.3 AhsayOBM Scheduler Service Check

This option is used to kick automated or scheduled backup jobs. To start, login to Synology NAS device using ssh client, i.e., putty.

Go to the /volume1/@appstore/AhsayOBM/obm/bin directory.

To check if the AhsayOBM scheduler service is running, use the ps command.

Scheduler service is running, highlighted in red.

```
login as: admin
admin@10.3.0.116's password:
admin@dev-ds215j:~$ cd /volume1/@appstore/AhsayOBM/obm/bin
admin@dev-ds215j:/volume1/@appstore/AhsayOBM/obm/bin$ ps -ef|grep java
root 15083 1 0 May14 ? 00:03:05
/volume1/@appstore/AhsayOBM/obm/jvm/bin/java -Xrs -Xms64m -Xmx373m -
Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=. -cp .:./cb.jar
WuiService /volume1/@appstore/AhsayOBM/obm/volume1/@appstore/AhsayOBM/.obm
--port=32168
admin 16343 15411 0 08:56 pts/3 00:00:00 grep --color=auto java
admin 20925 1 1 May14 ? 00:11:46
/volume1/@appstore/AhsayOBM/obm/jvm/bin/java -Xms64m -Xmx256m -
Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=. -cp .:./cbs.jar
cbs /volume1/@appstore/AhsayOBM/obm
```

To manually **stop** the scheduler service, use the **touch** /volume1/@appstore/AhsayOBM/obm/ipc/Scheduler/stop script.

Use the **ps** command again.

```
admin@dev-ds215j:/volume1/@appstore/AhsayOBM/obm/bin$ touch
/volume1/@appstore/AhsayOBM/obm/ipc/Scheduler/stop
admin@dev-ds215j:/volume1/@appstore/AhsayOBM/obm/bin$ ps -ef|grep java
root 15083 1 0 May14 ? 00:03:05
/volume1/@appstore/AhsayOBM/obm/jvm/bin/java -Xrs -Xms64m -Xmx373m -
Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=. -cp .:./cb.jar
WuiService /volume1/@appstore/AhsayOBM/obm
/volume1/@appstore/AhsayOBM/.obm --port=32168
admin 16479 15411 0 08:58 pts/3 00:00:00 grep --color=auto java
```

To manually **start** the scheduler service, use **/volume1/@appstore/AhsayOBM/bin/Scheduler.sh** script and use the **ps** command.

Scheduler service is running, highlighted in red.

```
admin@dev-ds215j:/volume1/@appstore/AhsayOBM/obm/bin$
/volume1/@appstore/AhsayOBM/obm/bin/Scheduler.sh
admin@dev-ds215j:/volume1/@appstore/AhsayOBM/obm/bin$ ps -ef|grep java
root 15083 1 0 May14 ? 00:03:05
/volume1/@appstore/AhsayOBM/obm/jvm/bin/java -Xrs -Xms64m -Xmx373m -
Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=. -cp .:./cb.jar
WuiService /volume1/@appstore/AhsayOBM/obm
/volume1/@appstore/AhsayOBM/.obm --port=32168
admin 16583 1 8 08:58 pts/3 00:00:16
/volume1/@appstore/AhsayOBM/obm/jvm/bin/java -Xms64m -Xmx256m -
Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=. -cp .:./cbs.jar
cbs /volume1/@appstore/AhsayOBM/obm/jvm/bin/java -Xms64m -Xmx256m -
admin 16962 15411 0 09:02 pts/3 00:00:00 grep --color=auto java
```

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5 Start AhsayOBM

5.1 Add an AhsayOBM Shortcut Icon to the Desktop

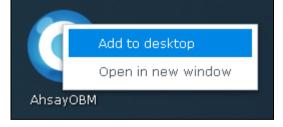
1. In the DiskStation Manager (DSM) console, click the **Main Menu** icon on the top left corner of the desktop to open it.



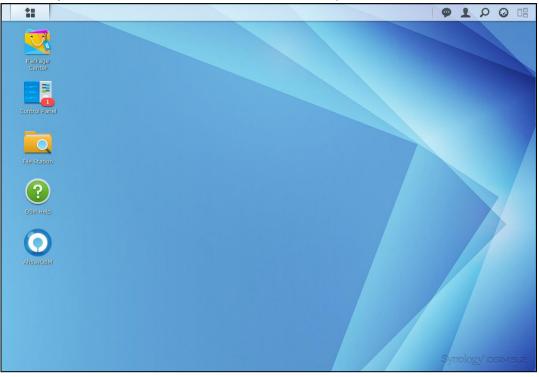
2. All application icons will be shown. Look for the **AhsayOBM** icon.

1						P Bearch	
Ø							
					?		
Control Panel	Control Panel	File Station	Backup & Replication	EZ-Internet	DSM Help	Package Center	
		-	T				
File Station	Resource Monitor	Storage Manager	Text Editor	High Availability Manager	Log Center	MyDS Center	
			- 🤹 -				
	Security Advisor	Storage Analyzer	Support Center	Java Manager	HiDrive Backup	Note Station	
AnsayOBM							
	AhsayOBM						

3. Right-click the AhsayOBM icon and select Add to desktop.



4. The AhsayOBM shortcut icon will be added to the desktop.

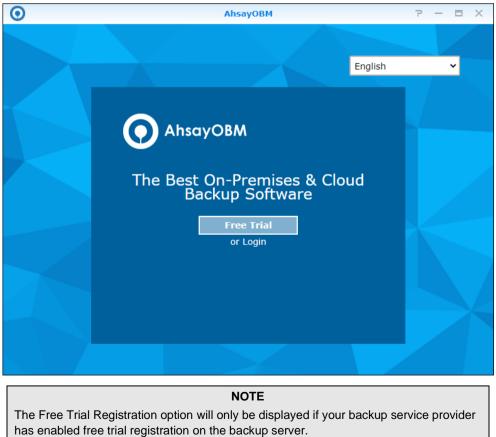


5.2 Login to AhsayOBM

1. Click the AhsayOBM icon on the desktop to launch the application.

** (Ģ	1	Q	
Package Center				
Control Panel				
File Station				
DSM Help				
0				
0				
AhsayOBM				

The Free Trial Registration menu may be displayed when you login for the first time. Click
 Login if you already have an AhsayOBM account or click Free Trial to register for a trial backup
 account.



3. In case you want to enter the backup, server setting provided by your backup service provider, click **Show advanced option**.

0		AhsayOBM	? — E X
	Backup Server http v 10.90.10.14 Proxy (HTTP) Use proxy to access the Internet off		
			OK Cancel

4. Enter the Login Name and Password of your AhsayOBM account provided by your backup service provider. Then, click **OK** to login.

0	AhsayOBM	? — E X
		English 🗸
	O AhsayOBM	
	Login	
	Login name	
	testaccount	
	Password	
	Save password Forgot password	
	Show advanced option	ок
	NOTE	
The Save nase	word ontion may not be available. This de	pends on the settings of your

The Save password option may not be available. This depends on the settings of your backup service provider. Please contact your backup service provider for more details.

 If Two-Factor Authentication is enabled the following screen will appear. If not, skip to Step 7. For first time log in this will be the screen displayed. Select your country code and enter your phone number. Also enter your email address. Click **Send** to receive the passcode.

Please provide a phone number to set	l for helping safeguard access to your account. up in the first-time login.
You will receive a passcode in the SMS	5 message
United States, Canada (+1)	~
address for account recovery.	defined in your account. Please enter an email

For succeeding login this will be the screen displayed. Select your phone number.

	ion is enabled for helping safeguard access to your account. number to setup in the first-time login.
Please select phone nu	mber to receive passcode via SMS message to continue login.
Philippines (+6	3) - *****36123
📞 Austria (+43) -	****5814
🤇 Georgia (+995)	- ****3685

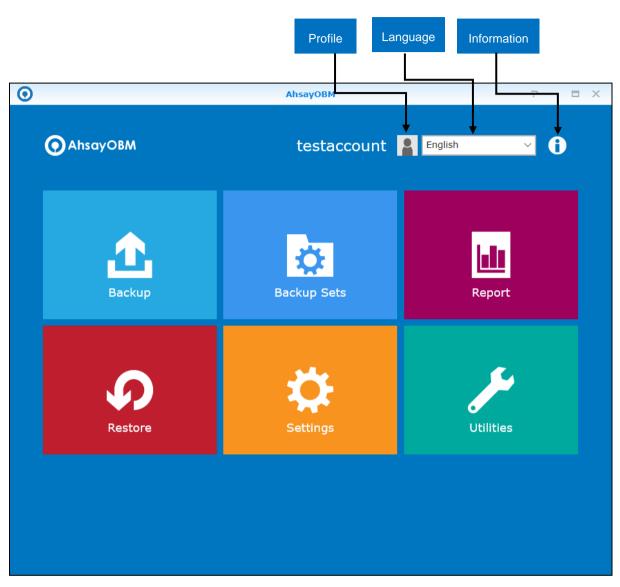
6. Enter the passcode and click **Verify** to login.

(00:04:52)

7. Upon successful login, the following screen will be displayed.

0	AhsayOBM	? — E X
AhsayOBM	testaccount	English 🗸 🚹
Backup	Backup Sets	Report
Restore	Settings	Utilities

6 AhsayOBM Overview



AhsayOBM main interface has nine (9) icons that can be accessed by the user, namely:

- Profile
- Language
- Information
- Backup
- Backup Sets
- Report
- Restore
- Settings
- Utilities

6.1 Profile

The **profile** icon shows the profile settings that can be modified by the user.



Profile has five (5) features:

- General
- Contacts
- Time Zone
- Encryption Recovery
- Password
- Security Settings

The General tab displays the user information.

0	AhsayOl	зм		? - 0	Х
Profile	User Info	rmation			
General	Login name	testaccount]
Contacts	Display name				
Time Zone					
Encryption Recovery					
Password					
Security Settings					
			Save Can	icel He	lp

- The login name is the name of your backup account.
- The **display name** is the display name of your backup account as you log on to the AhsayCBS management console.



You can add or modify the email address of the **contact person** here. Having this filled in will help us to know where to send the **backup** and **daily reports**, and the **recovered backup set encryption key** in case it was forgotten or lost.

Ο	AhsayOBM	? — E X
Duchile		
Profile	Contacts	
General	Existing contacts	
	Add	
Contacts		
Time Zone		
Encryption Recovery		
Password		
Security Settings		
		Save Cancel Help
0	AhsayOBM	? — E X
Profile		
PINIE		
New Contact		
Name		
Name sampleuser		
sampleuser E-mail samplemail@mail.com		
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI	 ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany Website samplewebsite	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany Website	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany Website samplewebsite Phone 1	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany Website samplewebsite Phone 1 12345678	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany Website samplewebsite Phone 1 12345678 Phone 2	ME)	
sampleuser E-mail samplemail@mail.com Send me encrypted email (S/MI Address sampleaddress Company samplecompany Website samplewebsite Phone 1 12345678 Phone 2	ME)	OK Cancel

0	AhsayOBM ? — 🗖 >			
Profile	Contacts			
General	Existing contacts sampleuser samplemail@mail.com			
Contacts	Add			
Time Zone				
Encryption Recovery				
Password				
Security Settings				
	Save Cancel Help			
NOTE				

This is the **time zone** of the machine where the AhsayOBM is installed. To ensure that the backup will run accurately at your specified time, setup the correct time.

\odot	AhsayOBM P - E X
Profile	Time Zone
General	GMT+08:00 (CST) ~
Contacts	
Time Zone	
Encryption Recovery	
Password	
Security Settings	
	Save Cancel Help

0	AhsayOBM P - E X
Profile	Encryption Recovery
General	With this option enabled, you can recover your backup set encryption keys by sending a request to us.
Contacts	On and a second se
Time Zone	
Encryption Recovery	
Password	
Security Settings	
	Save Cancel Help
	NOTE

Backup set encryption key can be recovered by turning this feature on.

This option may not be available. Please contact your backup service provider for details.

Login password can be modified anytime. You can also tick the **save password** box to bypass the password entry when opening the AhsayOBM interface.

\odot	AhsayOBM	ы
Profile	Password	
General Contacts	Change Password	
Time Zone		
Encryption Recovery		
Password		
Security Settings		
	Save	Cancel Help

NOTE

The Save password option may not be available. This depends on the settings of your backup service provider. Please contact your backup service provider for more details.

Security Settings will only be visible if multi-factor authentication is enabled. Phone numbers that will be used for sending SMS authentication will be listed here and will show the status if it is verified or not. You can also add phone numbers here that can be used for sending the SMS authentication.

\odot	AhsayOBM	? — 🗆 X
Profile	Security Settings	
General Contacts Time Zone Encryption Recovery Password	Phone numbers for SMS authentication Hong Kong (+852) - 95590771, Verified Add	X
Security Settings		
	Save	Cancel Help

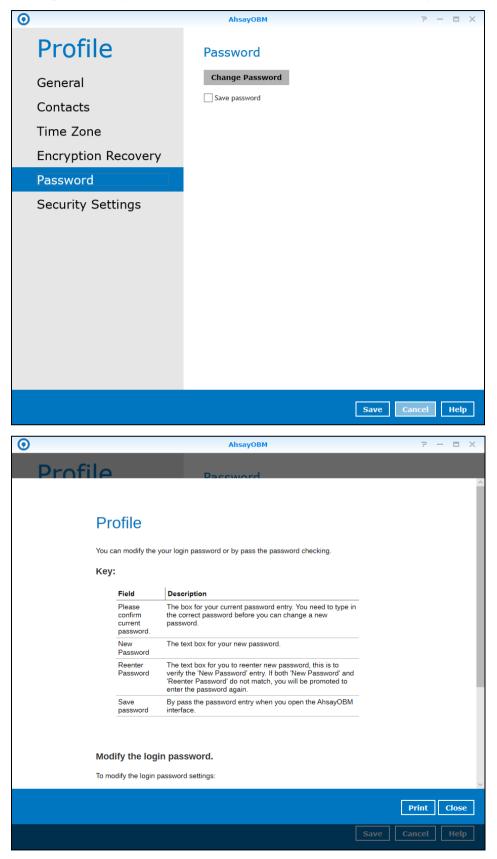
Select the country and enter the phone number, then click Add.

0	AhsayOBM	7 — d X
Profile		
Prome		
Security Settir	igs	
Multi-Factor Authenticat phone number to setup i	ion is enabled for helping safeguard access to your account. Pl in the first-time login.	ease provide a
Hong Kong (+852)	∽ 96620673	
		Add Cancel
	Save	Cancel Help



6.2 Online Help

Clicking on the help tab will show you the information and instructions you may need.



6.3 Language

This option is used to change the language of the user interface. The list of available languages depends on the backup service provider.

OAhsayOBM testaccount English	
---------------------------------------	--

Once the language is set, it will reflect on the AhsayOBM interface right away.

6.4 Information

The **information** icon displays the product version and system information of the machine where the AhsayOBM is installed.

○ AhsayOBM	testaccount 🎴 English 🔹	0
	AhsayOBM	
Version	8.3.4.2	
Virtual Machine Vendor	OpenJDK Client VM Version 25.232-b00 Oracle Corporation	
Live Threads Daemon Threads Total Threads Started	8 (Current) / 8 (Peak) 5 44	
Heap Size	11.498 MB (Current) / 989.875 MB (Maximum)	
Operating System Architecture Number of Processors Committed Virtual Memory Physical Memory Swap Space	DSM 5.2-5592 arm 1 1.113 GB 501.438 MB (Free) / 1.989 GB (Total) 3.195 GB (Free) / 3.195 GB (Total)	
VM Arguments Class Path	-Xrs -Xms64m -Xmx1024m -Dsun.nio.PageAlignDirectMemory= true -Djava.library.path=. .:./cb.jar	
		Clos

6.5 Backup

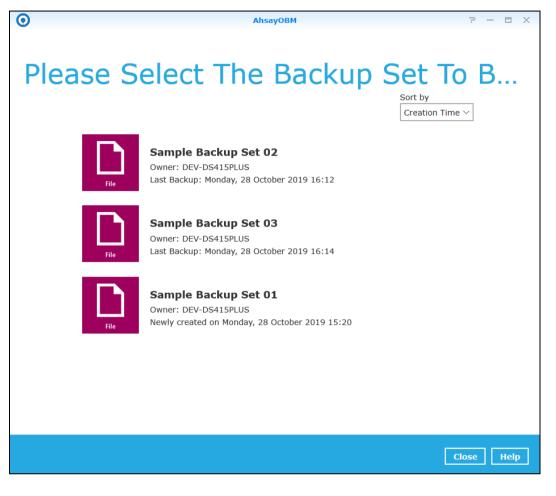
This feature is used to run your backup set(s).



When using AhsayOBM for the first time, you will be asked to create a new backup set first.

0		AhsayOBM	? — E X
	Please Select The	Backup Set To B	ackup
	Backup has not been set up.		Create Backup Set Cancel
			Close Help

If there is an existing backup set or after a backup set is created, choose the backup set you want to backup.



)	AhsayOBM P - E >
	Choose Your Backup Options
	Sample Backup Set 01
	In-File Delta type
	Full Differential
	Destinations
	Retention Policy
	Previous Backup Close Help

There are three (3) options in the In-File Delta type section:

- Full this type of backup will capture all the data that you want to secure. When you run a backup job for the first time, AhsayOBM will run a full backup regardless of the in-file delta setting.
- **Differential** this type of backup captures only the changes made as compared with the last uploaded full file only and not since the last differential backup.
- Incremental this type of backup captures only the changes compared with the last uploaded full or delta file.

The **destination** depends on the selected destination storage(s) during the creation of backup set.

Enabling the **retention policy** will help you save hard disk quota in the long run.

Click **backup** to start the backup job.

6.6 Backup Sets

A backup set is a place for files and/or folders of your backed-up data. This feature allows the user to select files individually or an entire folder to backup. It is also used to delete backup set/s.



To create or modify a backup set, follow the instructions on Chapter 7 Creating a File Backup Set.

Backup Set Settings

Below is the list of configurable items under the Backup Sets:

- <u>General</u>
- <u>Source</u>
- Backup Schedule
- Destination
- <u>Others</u>

General

This allows the user to modify the name of the backup set and displays the Owner which is the name of the machine where the backup set was created on.

\odot	AhsayOBM	? — 🗆 X
Sample Backu	General	
General	Name Sample Backup Set 01	1
Source Backup Schedule Destination Others	Owner DS715	1
Delete this backup set	Save	e Cancel Help

To modify the backup set name, follow the instructions below:

- 1. Select [General].
- 2. Enter the new backup set name on the Name field.
- 3. Click the [Save] button to save the new backup set name.

Source

This allows the user to select from the available files and/or folders to back up from NAS device.

\odot	AhsayOBM P - E X
Sample Backu	Backup Source
General	Select the files and folders that you want to backup
Source	 ✓ TestDocuments
	AlertMessage0001.jpg AlertMessage0002.jpg AlertMessage0002.jpg
Backup Schedule	AlertMessage0003.jpg
Destination	AlertMessage0004.jpg
Others	AlertMessage0005.jpg
	Attendance_2014.doc
	Attendance_2015.doc
	Attendance_2016.doc
	Attendance_2017.doc
	Attendance_2018.doc
	ManualABC.pdf
	ManualDEF.pdf
	ManualGHI.pdf
	ManualJKL.pdf ManualMNL.pdf
	▼
	✓ Show files
Delete this backup set	Save Cancel Help

To add backup source, follow the instructions below:

- 1. Select [Source].
- 2. On the right side of the screen, select files and/or folders you want to backup.
- 3. Tick the [Show files] checkbox to show the files under a specific folder.
- 4. Click the [Save] button to save the settings made.

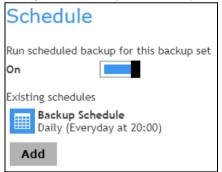
Backup Schedule

This allows the user to assign a backup schedule for the backup job to run automatically.

BackupSet-1	Schedule
General Source Backup Schedule Destination Others	Im Dim Dim
Delete this backup set	Save Cancel Help

To configure a backup schedule, follow the steps below:

1. Swipe the lever to the right to turn on the backup schedule setting. The backup schedule is configured as "Daily at 20:00" by default.



2. Select an existing backup schedule to modify or click the **[Add]** button to create a new one.

Existing schedules		
	kup Schedule ly (Everyday at 20:00)	
Add		

- 3. In the New Backup Schedule window, configure the following backup schedule settings.
 - Name the name of the backup schedule.
 - **Type** the type of the backup schedule. There are four (4) different types of backup schedule: Daily, Weekly, Monthly and Custom.

• **Daily** – the time of the day when the backup job will run.

Backup Schedule
Name
Daily-1
Type Daily *
Start backup
Stop
until full backup completed ▼ ✓ Run Retention Policy after backup

 Weekly – the day of the week and the time of the day when the backup job will run.

Backup Schedule	
Name	
Weekly-1	
Type Weekly v	
Backup on these days of the week	Sat
Start backup at • 19 • : 00 •	
Stop	
until full backup completed 🔻	
Run Retention Policy after backup	

• **Monthly** – the day of the month and the time of the day when the backup job will run.

Backup Schedule
Name
Monthly-1
Type Monthly Backup on the following day every month Day 1 Last Sunday
Start backup at 20 ▼ : 00 ▼ on the selected days
Stop until full backup completed 🔻
Run Retention Policy after backup

• **Custom** – a specific date and the time when the backup job will run.

Backup Schedule		
Name		
Custom-1		
Type Custom *		
Backup on the following day once		
2020 December • 31 •		
Start backup at		
Stop until full backup completed 🔻		
Run Retention Policy after backup		

- Start backup the start time of the backup job.
 - at this option will start a backup job at a specific time.
- Stop the stop time of the backup job.
 - until full backup completed this option will stop a backup job once it is complete. This is the configured stop time of the backup job by default.
 - after (defined no. of hrs.) this option will stop a backup job after a certain number of hours regardless of whether the backup job has completed or not. This can range from 1 to 24 hrs.

The number of hours must be enough to complete a backup of all files in the backup set. For small files in a backup, if the number of hours is not enough to back up all files, then the outstanding files will be backed up in the next backup job. However, if the backup set contains large files, this may result in partially backed up files.

For example, if a backup has 100GB file size which will take approximately 15 hours to complete on your environment, but you set the "stop" after 10 hours, the file will be partially backed up and cannot be restored. The next backup will upload the files from scratch again.

The partially backed up data will have to be removed by running the <u>data</u> integrity check.

As a general rule, it is recommended to review this setting regularly as the data size on the backup machine may grow over time.

- Run Retention Policy after backup if enabled, the AhsayOBM will run a retention policy job to remove files from the backup destination(s) which have exceeded the retention policy after performing a backup job.
- 5. Click the **[OK]** button to save the configured backup schedule settings.
- 6. Click the [Save] button to save settings.
- 7. Multiple backup schedules can be created.

Schedule		
Run scheduled backup for this backup set		
On		
Existing schedules		
Daily-1 Daily (Everyday at 18:00)		
Weekly-1 Weekly - Saturday (Every week at 19:00)		
Monthly-1 Monthly - The Last Sunday (Every month at 20:00)		
Custom (31/12/2020 at 21:00)		
Add		

NOTE

For more details on the scenario for Backup Schedule under Backup Set Settings, refer to <u>Appendix</u> <u>C: Scheduler Scenarios</u>.

Destination

This allows the user to view the current backup mode and existing storages and add additional storage destinations.

\odot	AhsayOBM	? — 🗆 X
General Source Backup Schedule	Destination Backup mode Sequential • Existing storage destinations AhsayCBS Host: 10.90.10.14:443	
Destination	Add	
Others	 V 	
Delete this backup set		Save Cancel Help

To add a destination, follow the instructions below:

- 1. Select [Destination].
- 2. Click the [Add] button.
- 3. Complete the following fields:
 - Name
 - Destination Storage
- 4. Click the [OK] button to add the new schedule.
- 5. Click the [Save] button to save the changes made.

Others

These are the list of other backup set settings that can be configured.

- Retention Policy
- <u>Temporary Directory</u>
- File Permissions
- Encryption

Ο	AhsayOBM	? — E X
Sample Backu	Retention Policy	Â
General Source	Keep the deleted files for 7 Day(s) •	
Backup Schedule	Temporary Directory	
Destination	Temporary directory for storing backup files	
Others	/root/temp ✓ Remove temporary files after backup	Change
	File Permissions Backup files' permissions On	
	Encryption	
	Encryption key ***** Unmask Encryption key	
	Algorithm AES	
	Method CBC Keylength 256 bits	Ţ
Delete this backup set	s	ave Cancel Help

Retention Policy

This allows the user to retain the deleted files based on the selected retention type policy.

Retentio	n Policy
Keep the delete	d files for
7	Day(s) ▼

To modify the retention policy, follow the instructions below:

- 1. Select [Others].
- 2. On the right side of the screen, select from the two (2) options: Day(s) or Job(s).

Retentio	n Policy
Keep the delete	d files for
7	Day(s) 🔻
	Day(s) Job(s)
	(-/

- 3. Input a valid number for the Day(s) or Job(s).
- 4. Click the [Save] button to save the settings made.

Temporary Directory

This allows the user to configure the temporary directory of spooled files, remote file list, and other temporary backup files.

Temporary Directory Temporary directory for storing backup files	
/root/temp	Change
 Remove temporary files after backup 	

To configure the temporary directory, follow the instructions below:

- 1. Click the [Change] button to select a directory path for storing the temporary data.
- 2. You also have an option to check or uncheck the [Remove temporary files after backup].
- 3. Click the [Save] button to save the settings.

File Permissions

This allows the user to enable or disable the backup file permission which backups the operating system file permission of the data selected as backup source.

Backup files' permissions	

- 1. Slide the lever to the right to turn on the File Permissions option. Otherwise, slide to the left to turn it off.
- 2. Click the [Save] button to save the settings.

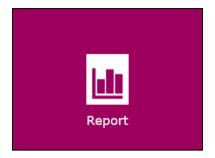
Encryption

This allows the user to view the current encryption settings. For more details about the encryption, check <u>Chapter 7 Creating a File Backup Set</u>.

Encryptio	n
Encryption key	****
Unmask Encrypt	ion key
Algorithm	AES
Method	CBC
Key length	256 bits

6.7 Report

This feature allows user to run and view **backup** and **restore reports**.



There are two (2) option available for this feature:

- Backup
- Restore

6.7.1 Backup

This feature is used for viewing backup report(s). There are four (4) filters that can be applied on this feature, namely:

- Time
- Backup set
- Destination
- Status

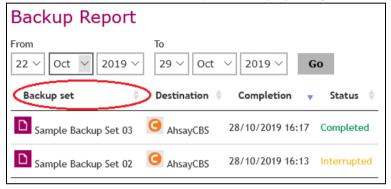
0	AhsayOBM P - E X
Report	Backup Report
Backup	FromTo $22 \lor$ Oct \lor $2019 \lor$ $29 \lor$ Oct \lor $2019 \lor$ Go
Restore	Backup set 🔶 Destination 🔶 Completion 👻 Status 🔶
	Sample Backup Set 03 AhsayCBS 28/10/2019 16:17 Completed
	Sample Backup Set 02 AhsayCBS 28/10/2019 16:13 Interrupted
	Close Help



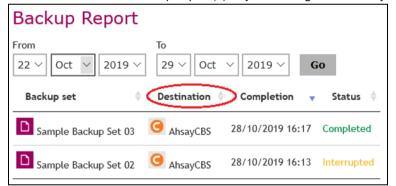
By setting the time, you will see the list of all backup report(s) within that period.

			,
Backup Report			
From 22 \colored Oct \colored 2019 \colored 2019 \colored	To 29 V Oct V	2019 ~	60
Backup set	Destination	Completion 🔻	Status
Sample Backup Set 03	G AhsayCBS	28/10/2019 16:17	Completed
Sample Backup Set 02	G AhsayCBS	28/10/2019 16:13	Interrupted

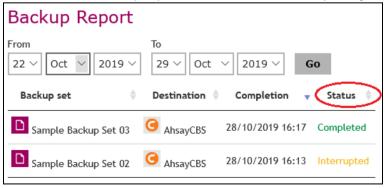
Backup report(s) can be sorted alphabetically by using the **backup up set** filter.



You can view all the backup report(s) in your storage location by sorting the destination filter



You can sort all backup reports with the same status by using the status filter.



In order to view a backup report in detail, select a backup set.

Backup Report			
From 22 \colored Oct \colored 2019 \colored	To 29 V Oct V	2019 ~	Go
Backup set 🔶	Destination	Completion	🔻 Status 🍦
Sample Backup Set 03	G AhsayCBS	28/10/2019 16:1	7 Completed
Sample Backup Set 02	G AhsayCBS	28/10/2019 16:1	3 Interrupted

Click **view log** to display the event log during a backup job.

Backup Report	
Backup set	Sample Backup Set 03
Destination	G AhsayCBS
Job	28/10/2019 16:14
Time	28/10/2019 16:14 - 16:17 (CST)
Status	 Completed successfully
New files *	2002 [1.1 GB / 1.1 GB (0%)]
Updated files *	0
Updated access permissions *	0
Moved files *	0
Deleted files *	0
* Unit = No of files [Total zipped size /	Total unzipped size (compression ratio)]
View log Close	

RF	Phort Backup Peport	
		Show All \sim
Туре	Log	Time
0	Start [AhsayOBM v8.3.0.30]	28/10/2019 16:14:30
0	Saving encrypted backup set encryption keys to server	28/10/2019 16:14:30
0	Start Backup [In-File Delta: Full]	28/10/2019 16:14:31
0	Using Temporary Directory /root/temp/1572250178351/OBS@1572250195445	28/10/2019 16:14:31
0	Start running pre-commands	28/10/2019 16:14:33
0	Finished running pre-commands	28/10/2019 16:14:33
0	Downloading server file list	28/10/2019 16:14:33
0	Downloading server file list Completed	28/10/2019 16:14:35
0	Reading backup source from hard disk	28/10/2019 16:14:36
0	[New Directory] /	28/10/2019 16:14:36
0	[New Directory] /volume1	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles/#recycle	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles/1000x100K1	28/10/2019 16:14:36
0	[New File] 100% of "/volume1/Manyfiles/#recycle/desktop.ini"	28/10/2019 16:14:36
0	[New File] 24% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 40% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 56% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 72% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
		С



You can apply filter on the status of the event by clicking the drop-down list.

		Show All
Туре	Log	Information Warning
0	Start [AhsayOBM v8.3.0.30]	28/10/ Error
0	Saving encrypted backup set encryption keys to server	28/10/2019 16:14:30
0	Start Backup [In-File Delta: Full]	28/10/2019 16:14:31
0	Using Temporary Directory /root/temp/1572250178351/OBS@1572250195445	28/10/2019 16:14:31
0	Start running pre-commands	28/10/2019 16:14:33
0	Finished running pre-commands	28/10/2019 16:14:33
0	Downloading server file list	28/10/2019 16:14:33
0	Downloading server file list Completed	28/10/2019 16:14:35
0	Reading backup source from hard disk	28/10/2019 16:14:36
0	[New Directory] /	28/10/2019 16:14:36
0	[New Directory] /volume1	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles/#recycle	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles/1000x100K1	28/10/2019 16:14:36
0	[New File] 100% of "/volume1/Manyfiles/#recycle/desktop.ini"	28/10/2019 16:14:36
0	[New File] 24% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 40% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 56% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 72% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37

You can choose to view the number of logs per page by clicking the drop-down list.

0	[New File] 56% of "/volume1/Man	Rackup Do				28/10	/2019 16:	.14.37
ŏ	[New File] 72% of "/volume1/Man						/2019 16:	
Õ	[New File] 88% of "/volume1/Man						/2019 16:	
ŏ	[New File] 100% of "/volume1/Ma							
ŏ	[New File] 24% of "/volume1/Man	=				28/10/2019 16:14:37 28/10/2019 16:14:37		
Õ	[New File] 40% of "/volume1/Man					28/10/2019 16:14:37		
0	[New File] 56% of "/volume1/Man						/2019 16:	
ŏ	[New File] 72% of "/volume1/Man						/2019 16:	
Õ	[New File] 88% of "/volume1/Man	=					/2019 16:	
0	[New File] 100% of "/volume1/Ma						/2019 16:	
0	[New File] 24% of "/volume1/Man						/2019 16:	
0						28/10/2019 16:14:37		
0	Energy in the second seco					28/10/2019 16:14:37		
0	[New File] 72% of "/volume1/Man	vfiles/1000x100K1/100KB_10	000"			28/10/2019 16:14:37		
0								
0	[New File] 100% of "/volume1/Ma	anyfiles/1000x100K1/100KB_1	1000"			28/10	/2019 16:	:14:37
Image: Instant and the second secon								
0					:14:37			
0	[New File] 56% of "/volume1/Man	vfiles/1000x100K1/100KB_10	02"			28/10/2019 16:14:37		
0	[New File] 72% of "/volume1/Man	vfiles/1000x100K1/100KB_10	02"			28/10	/2019 16:	:14:37
0	[New File] 88% of "/volume1/Man	yfiles/1000x100K1/100KB_10	02"			28/10	/2019 16:	:14:37
		Previous	1 2	3 4	1 5		324	Next
ogs p	per page 50 🗸	Flevious	1 2	5.	+ 5		524	NEXL

6.7.2 Restore

This feature is used for viewing restore report(s). You can also apply filter on **time**, **backup set**, **destination** and **status** here.

\odot	AhsayOBM ? - E X
Report	Restore Report
Backup	From To 22 × Oct × 2019 × 29 × Oct × 2019 × Go
Restore	Backup set 🔶 Destination 🔶 Job 🔻 Status 🔶
	Sample Backup Set 03 AhsayCBS 28/10/2019 16:28 Completed
	Sample Backup Set 03 G AhsayCBS 28/10/2019 16:27 Completed
	Close Help

6.8 Restore

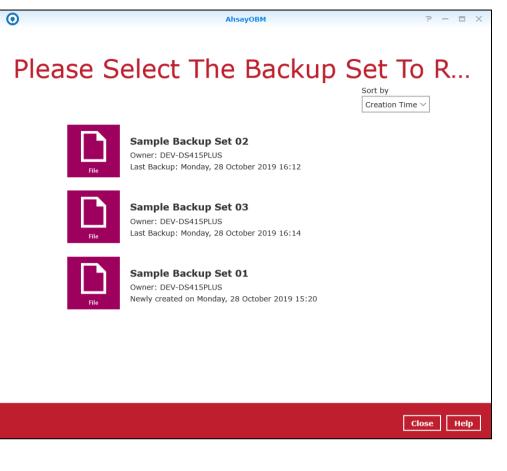
This feature is used to copy the backed-up file(s) from the backup set and restoring it to its original location or new location.



If using AhsayOBM for the first time, you will be asked to create a backup set first. A restore cannot be performed unless you already run a backup.

0	AhsayO	вм	P − ⊟ X
	Please Select The Bad	ckup Set To R	estore
	Backup has not been set up.		
			Create Backup Set Cancel
			Close Help

After a backup job has been performed, select a backup set you wish to restore.



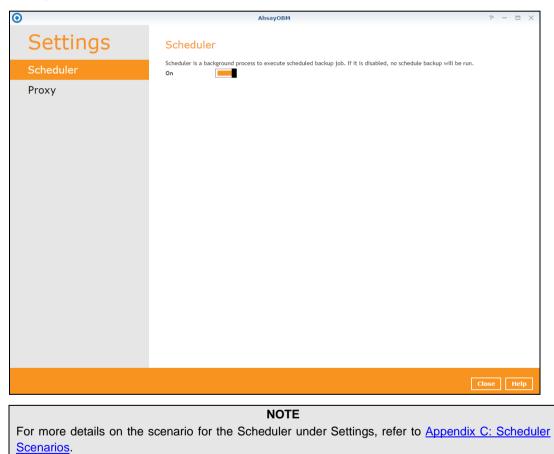
6.9 Settings

This feature allows user to enable the Scheduler and Proxy Settings.



6.9.1 Scheduler

When this feature is on, the user can execute a **scheduled backup** job. Otherwise, no scheduled backup will run.



6.9.2 Proxy

This feature is used to allow AhsayOBM to gain access to the internet.

Ο	AhsayOBM		? — = ×
Settings Scheduler	Proxy (HTTP) Use proxy to access the Internet		
	IP address	Port	
Proxy	10.90.30.22	443	
	Login ID	1	
	NASsample		
	Password		
	•••••		
	Test connection		
		[Save Cancel Help

6.10Utilities

This allows the user to perform quality check on the backed up data and delete backed up data.



There are two (2) options available for this feature:

- Data Integrity Check
- Delete Backup Data

6.10.1 Data Integrity Check

The Data Integrity Check (DIC) is used to identify the data in the backup set that has index-related issues, remove any corrupted file(s) from the backup destination(s) to ensure the integrity of the backup data and its restorability, and update the storage statistics.

For an efficient management of overall storage size of the backup destination(s), the data integrity check job will perform check for the backup destination(s) to remove old index files that are more than ninety (90) days old in the backup job folder(s).

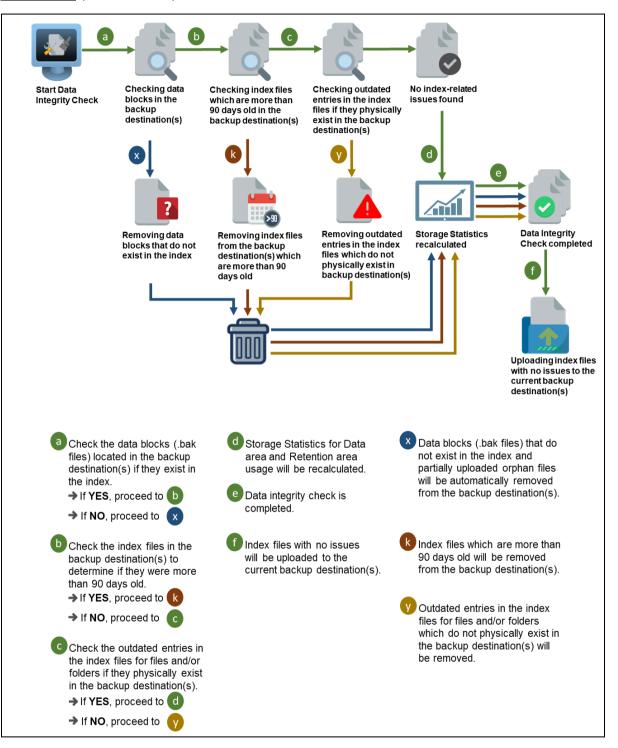
There are two (2) options in performing the Data Integrity Check:

Option 1	
Run Cyclic Redundancy Check (CRC) during data integrity check	For checking of index and data.
Start	
Option 2 Run Cyclic Redundancy Check (CRC) during data integrity check Start	For checking of index and integrity of files against the checksum file generated at the time of the backup job.

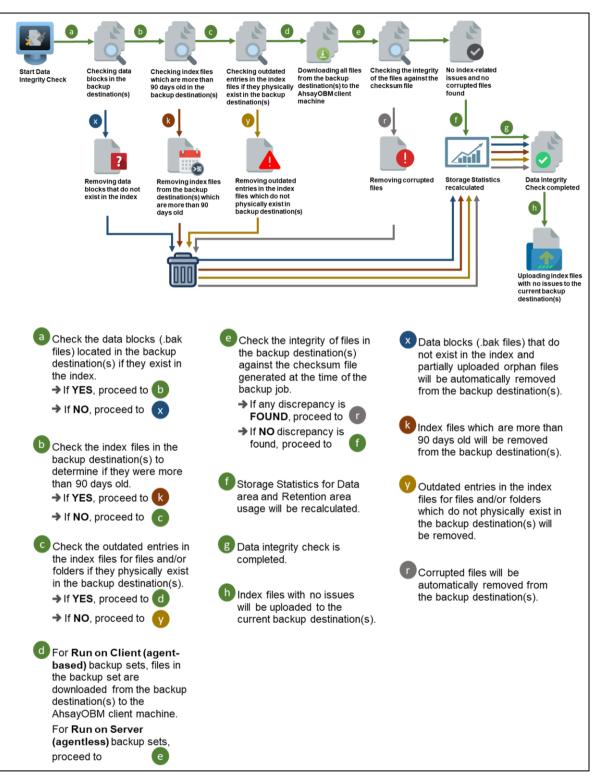
The following diagrams show the detailed process of the Data Integrity Check (DIC) in two (2) modes:

- Option 1
 <u>Disabled</u> Run Cyclic Redundancy Check (CRC) (Default mode)
- Option 2
 <u>Enabled</u> Run Cyclic Redundancy Check (CRC)

Option 1 - Data Integrity Check (DIC) Process with Run Cylic Redundancy Check (CRC) **DISABLED** (Default mode)



Option 2 - Data Integrity Check (DIC) Process with Run Cylic Redundancy Check (CRC) **ENABLED**



0	AhsayOBM P -	- 🗆	Х
 Utilities Data Integrity Check Delete Backup Data 	AhsayOBM P -]
	Close	Не	lp

NOTES

- 1. Data Integrity Check CANNOT fix or repair files that are already corrupted.
- 2. Data Integrity Check can only be started if there is NO active backup or restore job(s) running on the backup set selected for the DIC job. As the **backup**, **restore** and **data integrity check** are using the same index for read and write operations. Otherwise, an error message will be displayed in the post-DIC to indicate that the data integrity check is completed with error(s) and had skipped a backup set with an active backup job.

The following screenshot is an example of a Data Integrity Check completed with error(s). A Data Integrity Check is run on a backup set with an active backup job running which resulted the Data Integrity Check to stop with error(s). Clicking the **View log** button will display the details of the Data Integrity Check job error(s).

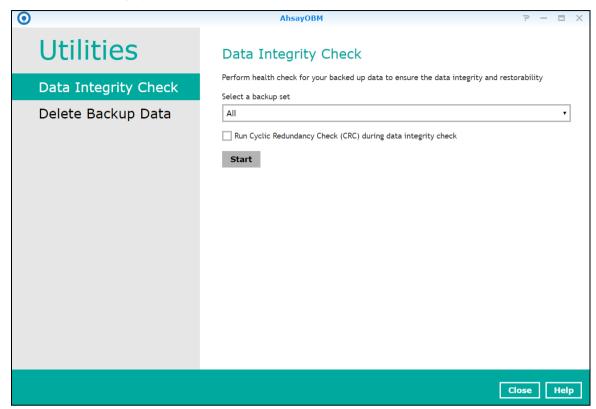
	AhsayOBM	? — 🗆 X
Utilities	Data Integrity Check	
Data Integrity Check	Perform health check for your backed up data to ensure the da	ta integrity and restorability
	Select a backup set	
Delete Backup Data	Scheduled	۲
	Select a destination	
	AhsayCBS	•
	Run Cyclic Redundancy Check (CRC) during data integrity cl	neck
	Data Integrity Check is completed with error(s)	
	View log	
		Close Help
	AhsayOBM	? — E X
Iltilities		
UTITIES	Data Integrity Check	
Log 16/01/2020 16:56 •		Show All 🔻
Туре	Log	Time
 Start [AhsayOBM v8.3.1.0] Start data integrity check on backup 	set "Scheduled(1570164710136)	16/01/2020 16:56:01
<u> </u>	Reason = "Scheduled backup set "Scheduled" is still running."	16/01/2020 16:56:01 16/01/2020 16:56:07
	or on backup set "Scheduled (1579164710136)	16/01/2020 16:56:07

 Log
 16/01/2020 16:56 •
 Show
 All
 •

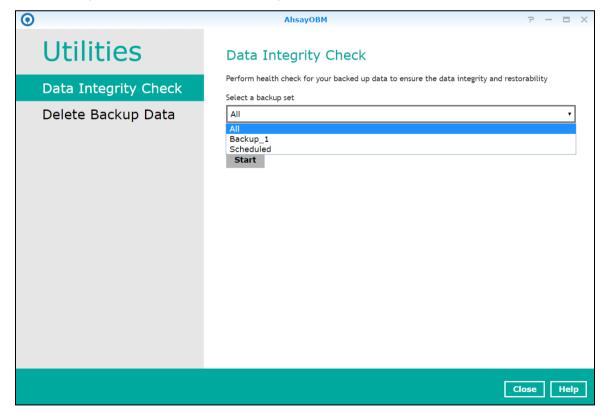
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 Log
 Time
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To perform a Data Integrity Check, follow the instructions below:

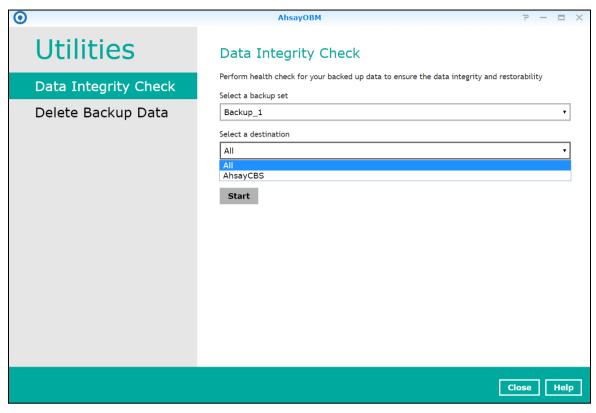
1. Go to the Data Integrity Check tab in the Utilities menu.



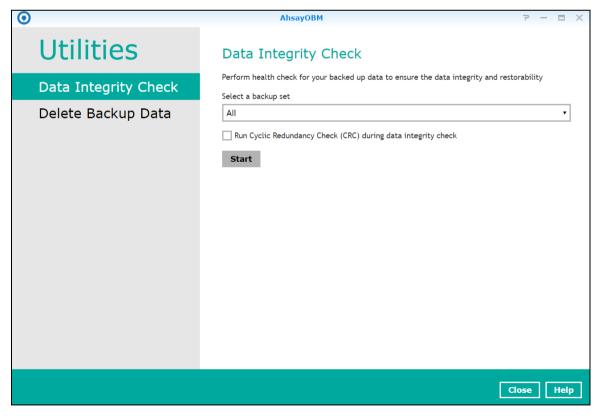
2. Click the drop-down button to select a backup set.



3. Click the drop-down button to select a backup destination.



4. Unchecked Run Cyclic Redundancy Check (CRC) option is the default setting of data integrity check.



Run Cyclic Redundancy Check (CRC)

When this option is enabled, the DIC will perform check on the integrity of the files on the backup destination(s) against the checksum file generated at the time of the backup job.

If there is a discrepancy, this indicates that the files on the backup destination(s) are corrupted and will be removed from the backup destination(s). If these files still exist on the client machine on the next backup job, the AhsayOBM will upload the latest copy of the files.

However, if the corrupted files are in the retention area, they will not be backed up again as the source file has already been deleted from the client machine.

The time required to complete a data integrity check depends on the number of factors such as:

- number of files and/or folders in the backup set(s)
- bandwidth available on the client computer
- hardware specifications of the client computer such as, the disk I/O and CPU performance

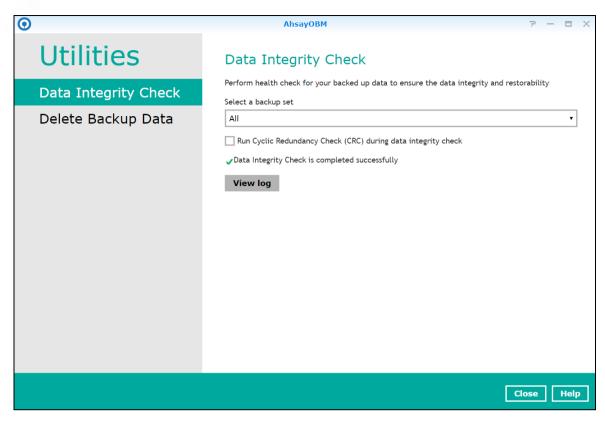
NOTE

For user(s) with metered internet connection, additional data charges may be incurred if the Cyclic Redundancy Check (CRC) is enabled. As the Cyclic Redundancy Check data involves downloading the data from the backup destination(s) to the client machine in order to perform this check.

- 5. Click the [Start] button to begin the Data Integrity Check.
- 6. Data Integrity Check will start running on the selected backup set(s) and backup destination(s).

\odot	AhsayOBM P - E X
Utilities	Data Integrity Check
Data Integrity Check	Perform health check for your backed up data to ensure the data integrity and restorability Select a backup set
Delete Backup Data	All * Run Cyclic Redundancy Check (CRC) during data integrity check Start processing data integrity check on backup set= "Backup_1" destination= "AhsayCBS" Stop
	Close Help

7. Once the DIC is completed, click the **View log** button to check the detailed process of the data integrity check.



8. The detailed log of data integrity check process will be displayed.

og 1	6/01/2020 17:35 •	Show All 🔻
Туре	Log	Time
0	Start [AhsayOBM v8.3.1.0]	16/01/2020 17:35:59
ŏ	Start data integrity check on all backup se	16/01/2020 17:35:59
ŏ	Start processing data integrity check on backup set= "Backup_1" destination= "AhsayCBS"	16/01/2020 17:36:05
0	Download valid index files from backup job "Current" to "/root/temp/1579163131556/OBS@1579163254992/index".	16/01/2020 17:36:07
0	Existing statistics of backup set= "Backup_1" destination= "AhsayCBS": Data area compressed size:	16/01/2020 17:36:11
0	Recalculated statistics of backup set= "Backup_1" destination= "AhsayCBS": Data area compressed size:	16/01/2020 17:36:11
0	The statistics of backup set= "Backup_1" destination= "AhsayCBS" is correct.	16/01/2020 17:36:11
0	Saving encrypted backup file index to 1579163131556/blocks at destination AhsayCBS	16/01/2020 17:36:14
0	Data integrity check on backup set= "Backup_1" destination= "AhsayCBS" is completed	16/01/2020 17:36:18
0	Start processing data integrity check on backup set= "Scheduled" destination= "AhsayCBS"	16/01/2020 17:36:24
0	Download valid index files from backup job "Current" to "/root/temp/1579164710136/OBS@1579164858793/index".	16/01/2020 17:36:26
0	Existing statistics of backup set= "Scheduled" destination= "AhsayCBS": Data area compressed size: 132.58	16/01/2020 17:36:30
0	Recalculated statistics of backup set= "Scheduled" destination= "AhsayCBS": Data area compressed size: 132.58	16/01/2020 17:36:30
0	The statistics of backup set= "Scheduled" destination= "AhsayCBS" is correct.	16/01/2020 17:36:30
0	Saving encrypted backup file index to 1579164710136/blocks at destination AhsayCBS	16/01/2020 17:36:33
0	Data integrity check on backup set= "Scheduled" destination= "AhsayCBS" is completed	16/01/2020 17:36:37
A	Finished data integrity check on all backup se	16/01/2020 17:36:38

The following options can be used for further viewing of the detailed DIC log:

- Log filter
- Show filter
- Logs per page
- Page

0	AhsayOBM	? — E X
Ut	ilities Data Integrity Check	
Log 1	6/01/2020 17:35 •	Show All •
Туре	Log	Time
0	Start [AhsayOBM v8.3.1.0]	16/01/2020 17:35:27
0	Start data integrity check on backup set "Backup_1(1579163131556)	16/01/2020 17:35:27
0	Start processing data integrity check on backup set= "Backup_1" destination= "AhsayCBS"	16/01/2020 17:35:33
0	Download valid index files from backup job "Current" to "/root/temp/1579163131556/OBS@1579163254992/index".	16/01/2020 17:35:35
0	Existing statistics of backup set= "Backup_1" destination= "AhsayCBS": Data area compressed size:	16/01/2020 17:35:39
0	Recalculated statistics of backup set= "Backup_1" destination= "AhsayCBS": Data area compressed size:	16/01/2020 17:35:39
0	The statistics of backup set= "Backup_1" destination= "AhsayCBS" is correct.	16/01/2020 17:35:39
0	Saving encrypted backup file index to 1579163131556/blocks at destination AhsayCBS	16/01/2020 17:35:42
0	Data integrity check on backup set= "Backup_1" destination= "AhsayCBS" is completed	16/01/2020 17:35:46
0	Finished data integrity check on backup set "Backup_1(1579163131556)	16/01/2020 17:35:46
0	Completed data integrity check on backup set "Backup_1(1579163131556)	16/01/2020 17:35:46
Logs p	er page 50 •	Previous 1 Next
		Close
		Close Help

Control	Screenshot	Description
Log filter	Log 16/01/2020 17:35 • Typ 16/01/2020 16:56 16/01/2020 17:35 16/01/2020 17:35	This option can be used to display logs of the previous data integrity check jobs.
Show filter	Show All All All Information Uarning Error	This option can be used to sort the data integrity check log by its status (i.e., All, Information, Warning, and Error). With this filter, it will be easier to sort the DIC logs by its status especially for longer data integrity check logs.

Logs per page	Logs per page 50 50 10 20 50 10	0 0 0	This option allows user to control the displayed number of logs per page.
Page	Previous 1	Next	This option allows user to navigate the logs to the next page(s).

Data Integrity Check Result

There are two possible outcomes after the completion of a data integrity check:

- Data Integrity Check is completed successfully with no data corruption/issues detected;
- Corrupted data (e.g. index files, checksum files and/or broken data blocks) has been detected

The screenshot below shows an example of a data integrity check log with NO data corruption/issues detected.

	AhsayOBM	2 - 5
Ut	ilities Data Integrity Check	
Log 1	5/01/2020 17:50 •	Show All 🔹
Туре	Log	Time
0	Start [AhsayOBM v8.3.1.0]	16/01/2020 17:50:49
0	Start data integrity check on backup set "Scheduled(1579164710136)" all destinati	16/01/2020 17:50:49
0	Start processing data integrity check on backup set= "Scheduled" destination= "AhsayCBS"	16/01/2020 17:50:55
0	Download valid index files from backup job "Current" to "/root/temp/1579164710136/OBS@1579164858793/index".	16/01/2020 17:50:58
0	Existing statistics of backup set= "Scheduled" destination= "AhsayCBS": Data area compressed size: 132.58	16/01/2020 17:51:02
0	Recalculated statistics of backup set= "Scheduled" destination= "AhsayCBS": Data area compressed size: 132.58	16/01/2020 17:51:02
0	The statistics of backup set= "Scheduled" destination= "AhsayCBS" is correct.	16/01/2020 17:51:02
0	Saving encrypted backup file index to 1579164710136/blocks at destination AhsayCBS	16/01/2020 17:51:04
0	Data integrity check on backup set= "Scheduled" destination= "AhsayCBS" is completed	16/01/2020 17:51:08
0	Finished data integrity check on backup set "Scheduled(1579164710136)" all destinati	16/01/2020 17:51:09
0	Completed data integrity check on backup set "Scheduled(1579164710136)" all destinati	16/01/2020 17:51:09
Logs pe	er page 50 V	Previous 1 Next
		Close
		Close Hel

The screenshot below shows an example of a data integrity check log when corrupted data has been detected. If any corrupted data is found, these corrupted files are automatically removed from the backup destination(s).

	Data Integrity Check	
0	Saving encrypted backup file index to 1579232082042/blocks at destination AhsayCBS	17/01/2020 12:08:40
0	Data integrity check on backup set= "default-backup-set-name-1" destination= "AhsayCBS" is completed	17/01/2020 12:08:45
0	Start processing data integrity check on backup set= "Backup_Set" destination= "AhsayCBS"	17/01/2020 12:08:54
0	Download valid index files from backup job "Current" to "/root/temp/1579233278636/OBS@1579233315654/index".	17/01/2020 12:08:57
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_BandwidthControl.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_CDP.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_CDP_Filter.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_CommandLineTool.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_Create_CloudFile.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_Create_CloudFile_Dest.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_Create_CloudFile_Encryption.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_Create_CloudFile_Schedule.html	17/01/2020 12:08:58
0	Removing backup file "/volume1/@appstore/AhsayOBM/obm/bin/help/en/BS_Create_CloudFile_Source.html	17/01/2020 12:08:58
0	Removing backup file	17/01/2020 12:08:58

NOTE

When running a data integrity check on other platforms such as Windows, Mac, or Linux (GUI), a (TEST MODE) confirmation screen will prompt if either of the **criteria** below matches the backup data during the data integrity check process:

- deleted number of backup files is over 1,000
- deleted number of backup file size is over 512 MB (in total)
- deleted number of backup files is over 10% of the total backup files

The (TEST MODE) confirmation screen is not supported on Synology NAS. During the data integrity check job, corrective actions will be taken automatically if the DIC has detected the following:

- Index-related issues
- Broken data blocks
- Discrepancy against checksum file (when the Cyclic Redundancy Check is enabled)

This means that the DIC will automatically remove any corrupted file(s) from the backup destination(s), and will update storage statistics without requiring user confirmation.

Aside from viewing the Data Integrity Check logs directly on the AhsayOBM client, they can be viewed on the file system of the AhsayOBM client machine. For AhsayOBM on Synology NAS, the DIC logs are located in the following directory:

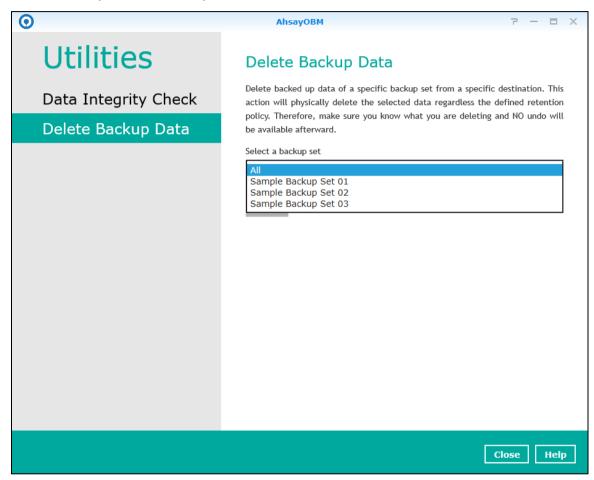
/volume_id/@appstore/product_name/.obm/system/IntegrityCheck

6.10.2 Delete Backup Data

This feature is used to permanently delete backed up data from a backup set(s), destination(s), backup job, or delete all backed up data. After the data is deleted, the storage statistics of the backup set(s) are updated.

To perform deletion of backup data, follow the instructions below:

1. Select a backup set from the drop-down list.



NOTE: This will only delete the backed up files in a backup set(s) and destination(s), but the backup set and destination will remain.

If you select a specific backup set, then you will also have to select a specific destination or all destinations.

\odot	AhsayOBM ? — 🗆 🗙
Utilities	Delete Backup Data
Data Integrity Check	Delete backed up data of a specific backup set from a specific destination. This action will physically delete the selected data regardless the defined retention
Delete Backup Data	policy. Therefore, make sure you know what you are deleting and NO undo will be available afterward.
	Select a backup set
	Sample Backup Set 01 🗸 🗸
	Select a destination
	AhsayCBS ~
	All AhsayCBS
	Start
	Close Help

If you select All backup sets, then there is no need to select a destination.

0	AhsayOBM P - E X	
Utilities	Delete Backup Data	
Data Integrity Check	Delete backed up data of a specific backup set from a specific destination. This action will physically delete the selected data regardless the defined retention policy. Therefore, make sure you know what you are deleting and NO undo will be available afterward.	
Delete Backup Data		
	Select a backup set	
	All ~	
	Start	
	Close Help	

2. Click the [Start] button, then click [Yes] to proceed. This process will delete backed up data on the selected backup set(s) and destination(s).

\odot	AhsayOBM	? — E X
Utilities	Delete Backup Data	
Data Integrity Check	Delete backed up data of a specific backup set from a action will physically delete the selected data regardle policy. Therefore, make sure you know what you are d	ess the defined retention
Delete Backup Data	be available afterward.	
	Select a backup set	
	Sample Backup Set 01	~
	Select a destination	
	All	Ŷ
	Start	
		Close Help
0	AhsayOBM	? — E X
O Utilities O	AhsayOBM Delete Backup Data	? — E X
Utilities	Delete Backup Data Delete backed up data of a specific backup set from a s	pecific destination. This
Utilities Data Integrity Check	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardler policy. Therefore, make sure you know what you are de	pecific destination. This ss the defined retention
Utilities	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward.	pecific destination. This ss the defined retention
Utilities Data Integrity Check	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set	pecific destination. This ss the defined retention
Utilities Data Integrity Check	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward.	pecific destination. This ss the defined retention
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set	pecific destination. This ss the defined retention
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	pecific destination. This ss the defined retention
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	pecific destination. This ss the defined retention
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	specific destination. This ss the defined retention eleting and NO undo will
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	pecific destination. This ss the defined retention
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	specific destination. This ss the defined retention eleting and NO undo will
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	specific destination. This ss the defined retention eleting and NO undo will
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	specific destination. This ss the defined retention eleting and NO undo will
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	specific destination. This ss the defined retention eleting and NO undo will
Utilities Data Integrity Check Delete Backup Data	Delete Backup Data Delete backed up data of a specific backup set from a s action will physically delete the selected data regardle policy. Therefore, make sure you know what you are de be available afterward. Select a backup set Sample Backup Set 01	specific destination. This ss the defined retention eleting and NO undo will

3. Files are successfully deleted.

0	AhsayOBM P - E X
Utilities	Delete Backup Data
Data Integrity Check	Delete backed up data of a specific backup set from a specific destination. This action will physically delete the selected data regardless the defined retention policy. Therefore, make sure you know what you are deleting and NO undo will
Delete Backup Data	be available afterward.
	Select a backup set
	Sample Backup Set 01 ~
	Select a destination
	All 🗸
	✓Files deleted successfully
	Start
	Close Help

7 Create a Backup Set

1. Click the Backup Sets icon on the main interface of AhsayOBM.



2. Create a backup set by clicking "+ Add new backup set".



3. When the Create Backup Set window appears, name your new backup set, then click **Next** to proceed.

	Create Backup Set
Name	
File Backup	

4. In the Backup Source window, you can select the source files and folders for backup.

	Backup Source	
Select the files and	folders that you want to backup	
4	🗅 admin	^
⊳	🔲 🗀 Restore1	
⊳	Restore2	
Þ	Restore3	
Þ	Restore4	
Þ	🔲 🗀 TestFolder	
4	👻 🗀 UserNAS	
	🖻 🖻 Document folder 01	≡
	🔲 🗀 temp	
Þ	📄 💼 इंग्राइ	
⊳	🗅 guest	
✓ Show files	← - ++++	~
Show nies		

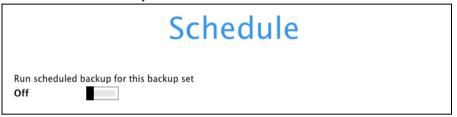
5. Click the **Show files** checkbox if you want to select individual file(s) for backup.

		Backup Source	
Select the files and	folder	s that you want to backup	
⊿ 📄		admin	^
⊳		C Restore1	
⊳		C Restore2	
Þ		C Restore3	
⊳		C Restore4	
Þ		🗀 TestFolder	H.
4	V	🗋 UserNAS	
		🗹 🗋 Document folder 01	≡
		💌 📄 Text 1.txt	
		💌 📄 Text 2.txt	
		💌 📄 Text 3.txt	
		🗅 temp	~
 Show files 			

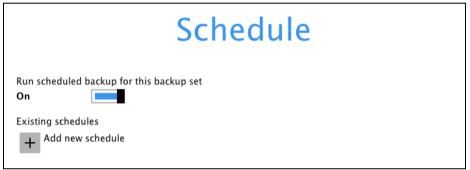
NOTE: AhsayOBM can only back up files or folders displayed under the File Station on the DiskStation Manager.

For more details, refer to the following Wiki article: <u>http://wiki.ahsay.com/doku.php?id=public:8019_fag:fag_about_synologyobm</u>

- 6. In the Backup Source window, click **Next** to proceed.
- 7. When the Schedule window appears, you can configure a backup schedule to automatically run a backup job at your specified time interval.
 - In the Schedule window, the Run scheduled backup for this backup set is **Off** by default. You can leave it as is if you want to add a schedule later.



If you want to add a schedule now, switch on **Run scheduled backup for this backup set**. Then, click "+" next to Add New schedule.



When the **New Backup Schedule** window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.

Schedule-1		
Туре		
Daily 🗸		
Start backup		
at 🗸 08 🖌 : 57 🗸		
Stop		
until full backup completed 🗸		
Run Retention Policy after backup		

NOTE: For details about the options from the dropdown menus, please refer to Configure Backup Schedule for Automated Backup.



8. In case you have added a schedule, it will be shown in the Schedule window. Click **Next** to proceed when you are done with the settings.

Schedule	
Run scheduled backup for this backup set	
Existing schedules Schedule-1 Daily (Everyday at 08:57) Add	

9. The Destination window will appear.

Destinatio	n
Backup mode Sequential 👻	
Existing storage destinations Add new storage destination / destination pool	

Select the appropriate option from the **Backup mode** drop down menu.

- Sequential (default value) run backup jobs to each backup destination one by one
- Concurrent run backup jobs to all backup destinations at the same time

To select a backup destination for the backup data storage, click the "+" icon next to Add new storage destination / destination pool.

10. In the New Storage Destination / Destination Pool window, select the destination type and destination storage. Then, click **OK** to confirm your selection.

N I a sea a		tion Pool	
Name AhsayCBS			
Destination storage			
G AhsayCBS	~		

NOTE: For more details on configuration of cloud storage as backup destination, refer to <u>Appendix A</u> in this guide.

11. In the Destination window, your selected storage destination will be shown. Click **Next** to proceed.

	Destination	
Backup mode Sequential 🗸		
Existing storage destinations AhsayCBS Host: 10.3.1.8:443		
Add		

12. In the Encryption window, the default **Encrypt Backup Data** option is enabled with an encryption key preset by the system which provides the most secure protection.

	Encryption	
Encrypt Backup Data On		
Encryption Type		
Default Default		
User password Custom		

You can choose from one of the following three Encryption Type options:

- Default an encryption key with 44 alpha numeric characters will be randomly generated by the system.
- User password the encryption key will be the same as the login password of your AhsayOBM at the time when this backup is created. Please be reminded that if you change the AhsayOBM login password later, the encryption keys of the backup sets previously created with this encryption type will remain unchanged.
- Custom you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length.

Encryption			
Encrypt Backup Data			
Encryption Type			
Algorithm AES			
Encryption key	••••••		
Re-enter encryption key	•••••		
Method CBCB OCBC			
Key length 🔵 128-bit 💿 256-bit			

NOTE: For best practice on managing your encryption key, refer to the following Wiki article. <u>http://wiki.ahsay.com/doku.php?id=public:8015_faq:best_practices_for_managing_encryption_k</u> <u>ey</u>

Click Save when you are done with the settings.

13. If you have enabled the Encryption Key feature in the previous step, the following pop-up window shows, no matter which encryption key you have selected.

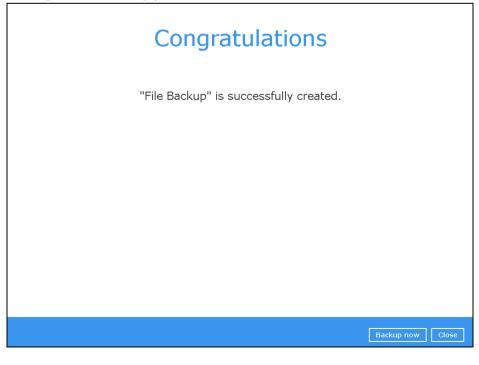
Encryption	
Encrypt Backup Data	
You are advised to write this encryption key down on paper and keep it in safe place. You will need it when you need to restore your files later. Please confirm that you have done so.	a
••••••	
Mask Encryption key Copy to clip	board Confirm

The pop-up window has the following three options to choose from:

Unmask encryption key – The encryption key is masked by default. Click this option to show the encryption key.



- Copy to clipboard Click to copy the encryption key, then you can paste it in another location of your choice.
- > Confirm Click to exit this pop-up window and proceed to the next step.
- 14. Upon successful creation of the backup set, the following screen will appear. You can click **Backup now** to back up your data or click **Close** to exit.





15. It is highly recommended to change the <u>Temporary Directory</u>. Select another location with sufficient free disk space other than /root/temp.

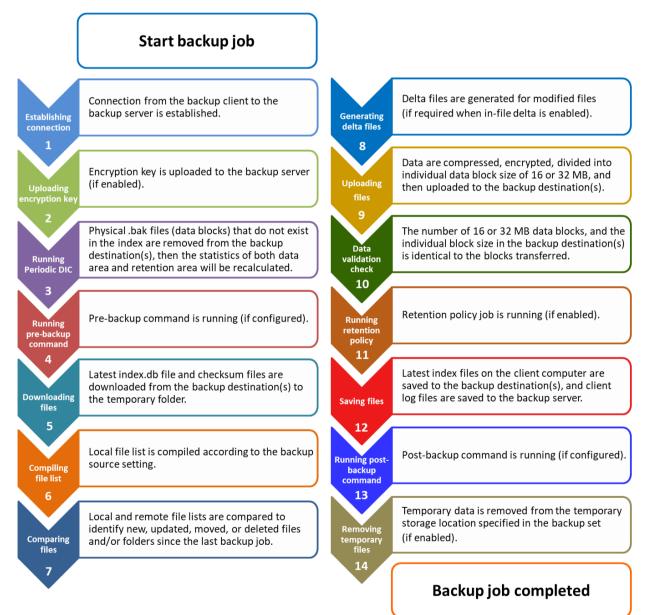
File Backup	Retention Policy	*
General	Keep the deleted files for	
Source	/ Day(s) •	
Backup Schedule	Temporary Directory	
Destination	Temporary directory for storing backup files	
Others	/root/temp	Change
	File Permissions Backup files' permissions On Encryption Encryption key ***** Unmask Encryption key Aleorithm AFS	
Delete this backup set	Save	Cancel Help

Go to Others > Temporary Directory. Click Change to browse for another location.

8 Overview on the Backup Process

The following steps are performed during a backup job. For an overview of the detailed process for Steps **3**, **5**, **10** and **12**, please refer to the following chapters.

- Periodic Data Integrity Check (PDIC) Process (Step 3)
- Backup Set Index Handling Process
 - Start Backup Job (Step 5)
 - Completed Backup Job (Step 12)
- Data Validation Check Process (Step 10)



8.1 Periodic Data Integrity Check (PDIC) Process

For AhsayOBM v8.3.6.0 (or above), the PDIC will run on the first backup job that falls on the corresponding day of the week from **Monday to Friday**.

To minimize the impact of the potential load of large number of PDIC jobs running at the same time on the AhsayCBS server, the schedule of a PDIC job for each backup set is automatically determined by the result of the following formula:

PDIC schedule = %BackupSetID% modulo 5 or %BackupSetID% mod 5

The calculated **result** will map to the corresponding day of the week (i.e., from Monday to Friday).

0	Monday
1	Tuesday
2	Wednesday
3	Thursday
4	Friday

NOTE: The PDIC schedule cannot be changed.

Example:

Backup set ID: 1594627447932

Calculation: 1594627447932 mod 5 = 2

2 Wednesday

In this example:

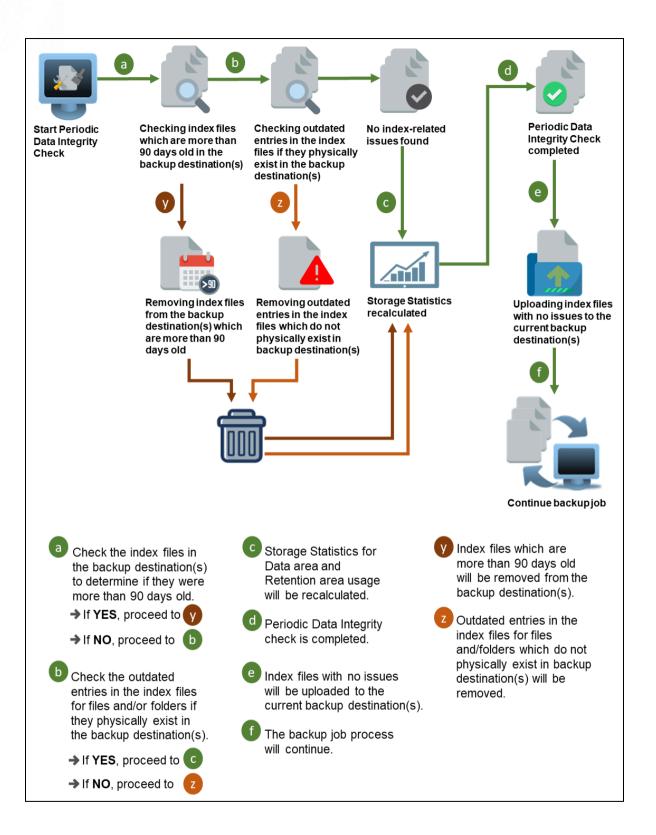
- the PDIC will run on the first backup job that falls on Wednesday; or
- if there is no active backup job(s) running from Monday to Friday, then the PDIC will run on the next available backup job.

NOTE

Although according to the PDIC formula for determining the schedule is **%BackupSetID% mod 5**, this schedule only applies if the previous PDIC job was actually run more than 7 days prior.

Under certain conditions, the PDIC may not run strictly according to this formula. For example:

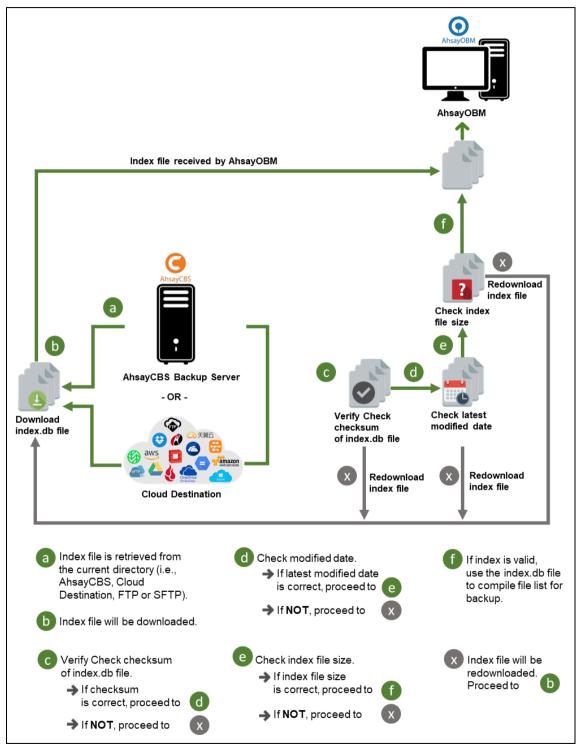
- 1. If AhsayOBM was upgraded to v8.5 (or above) from an older version v6, v7, or pre-8.3.6.0 version. In this case, the PDIC job will run on the first backup job after upgrade.
- If backup jobs for a backup set are not run on a regular daily backup schedule (for example: on a weekly or monthly schedule), then the PDIC job will run if it detects that the previous PDIC job was run more than 7 days ago.
- 3. Every time a data integrity check (DIC) is run, the latest PDIC run date is reset, the next PDIC job will run after 7 days.
- 4. The PDIC job will not run if there are no files in both the data and retention areas. For example: a newly created backup set with no backup job history or a backup set where all the data has been deleted using the <u>Delete Backup Data</u> feature.
- 5. The PDIC job will not run on a backup set that contains any data which still in v6 format. It will only run if all v6 data format on a backup set has undergone data migration to v8 block format.



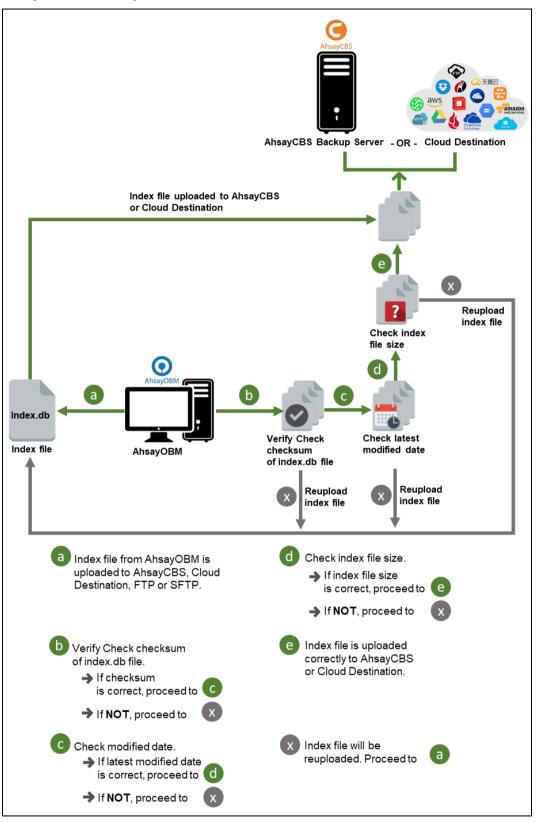
8.2 Backup Set Index Handling Process

To minimize the possibility of index related issues affecting backups, each time index files are downloaded from and uploaded to backup destination(s); the file size, last modified date, and checksum is verified to ensure index file integrity.

8.2.1 Start Backup Job

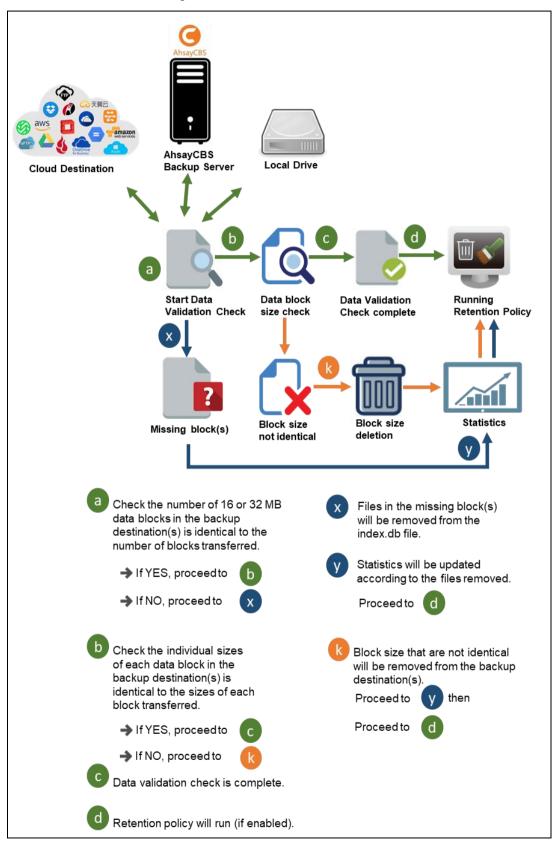


8.2.2 Completed Backup Job



8.3 Data Validation Check Process

As an additional measure to ensure that all files transferred to the backup destination(s) are received and saved correctly, both the number of 16 or 32 MB data block files and the size of each block file are checked again after the files are transferred.



9 Run Backup Jobs

9.1 Login to AhsayOBM

Login to the AhsayOBM application with the instructions provided in Login to AhsayOBM.

9.2 Start a Manual Backup

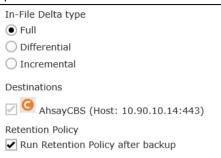
1. Click **Backup** on the main interface of AhsayOBM.



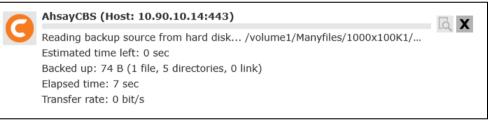
2. Select the backup set that you would like to start a backup job with.

0	AhsayOBM	? — E X
Please So	elect The Backup	Set To B sort by Creation Time ~
File	Sample Backup Set 02 Owner: DEV-DS415PLUS Newly created on Monday, 28 October 2019 16:08	
File	Sample Backup Set 03 Owner: DEV-DS415PLUS Newly created on Monday, 28 October 2019 16:09	
File	Sample Backup Set 01 Owner: DEV-DS415PLUS Newly created on Monday, 28 October 2019 15:20	
		Close Help

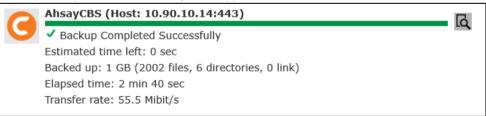
3. When the following options are shown, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** in the Retention Policy section at the bottom. This will help you save hard disk quota in the long run. In the In-File Delta type section, the following three options are available:



- Full A full backup captures all the data that you want to protect. When you run a backup job for the first time, AhsayOBM will run a full backup regardless of the in-file delta setting.
- Differential A differential backup captures only the changes made as compared with the last uploaded full file only (i.e. changes since the last full backup, not since the last differential backup).
- Incremental An incremental backup captures only the changes made as compared with the last uploaded full or delta file (i.e. changes since the last incremental backup).
- 4. Click **Backup** to start the backup job. The status will be shown.



5. When the backup is completed, the progress bar will be green in color and the message "Backup Completed Successfully" will appear.



6. You can click the **Q** View icon on the right-hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.

		Show All
Туре	Log	Time
0	Start [AhsayOBM v8.3.0.30]	28/10/2019 16:14:30
0	Saving encrypted backup set encryption keys to server	28/10/2019 16:14:30
0	Start Backup [In-File Delta: Full]	28/10/2019 16:14:31
0	Using Temporary Directory /root/temp/1572250178351/OBS@1572250195445	28/10/2019 16:14:31
0	Start running pre-commands	28/10/2019 16:14:33
0	Finished running pre-commands	28/10/2019 16:14:33
0	Downloading server file list	28/10/2019 16:14:33
0	Downloading server file list Completed	28/10/2019 16:14:35
0	Reading backup source from hard disk	28/10/2019 16:14:36
0	[New Directory] /	28/10/2019 16:14:36
0	[New Directory] /volume1	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles/#recycle	28/10/2019 16:14:36
0	[New Directory] /volume1/Manyfiles/1000x100K1	28/10/2019 16:14:36
0	[New File] 100% of "/volume1/Manyfiles/#recycle/desktop.ini"	28/10/2019 16:14:36
0	[New File] 24% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 40% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 56% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 72% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 88% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 100% of "/volume1/Manyfiles/1000x100K1/100KB_1"	28/10/2019 16:14:37
0	[New File] 24% of "/volume1/Manyfiles/1000x100K1/100KB_10"	28/10/2019 16:14:37

10 Restore Data

10.1 Login to AhsayOBM

Login to the AhsayOBM application with the instructions provided in Login to AhsayOBM.

10.2Restore Data

1. Click the **Restore** icon on the main interface of AhsayOBM.



2. All the available backup sets for restore will be listed. Select the backup set that you would like to restore data from.

0	AhsayOBM P - E X
Please S	elect The Backup Set To R Sort by Creation Time ~
File	Sample Backup Set 02 Owner: DEV-DS415PLUS Last Backup: Monday, 28 October 2019 16:12
File	Sample Backup Set 03 Owner: DEV-DS415PLUS Last Backup: Monday, 28 October 2019 16:14
File	Sample Backup Set 01 Owner: DEV-DS415PLUS Newly created on Monday, 28 October 2019 15:20
	Close Help

3. Select where you would like to restore your data from.

Select The Destination From Whic
Sample Backup Set 03
C AhsayCBS Host: 10.90.10.14:443

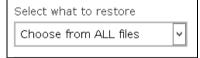
4. Select to restore files from a specific backup job, or from all files available. Then, select the files or folders that you would like to restore.

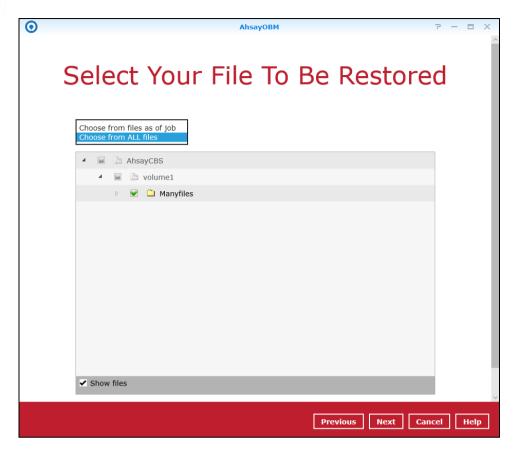
There are two options from the Select what to restore drop-down menu:

Choose from files as of job – This option allows you to select a backup version from a specific date and time to restore.

Select what to restore	
boose from files as of job \checkmark 28/10/2019 \checkmark Latest \checkmark	
Select what to restore	
Choose from files as of job \checkmark 28/10/2019 \checkmark Latest \checkmark	
Select what to restore	
Choose from files as of job \checkmark 28/10/2019 \checkmark Latest \checkmark)

Choose from ALL files – This option allows you to restore all the available backup versions for this backup set. Among all the available backup versions, you can even select only some of the backup versions of a file to restore.





Below is an example showing all the available backup versions of the file **File snapshot testing.txt**. The latest version is shown in solid black color and all the previous versions are shown in grey color. You can identify the file version from the **Date modified** column.

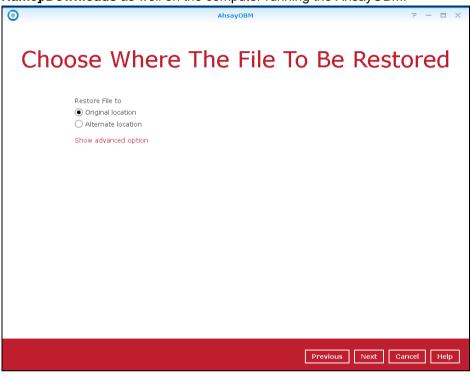
🗹 📄 File snapshot testing.txt	147 b	08/11/2016 09:05
🗹 📄 File snapshot testing.txt	147 b	08/11/2016 09:05
🗹 🗎 File snapshot testing.txt	113 b	07/11/2016 18:54
🗖 🖹 File snapshot testing.txt	96 byt	07/11/2016 18:52
🗖 🖹 File snapshot testing.txt	80 byt	07/11/2016 18:51
🗆 🖹 File snapshot testing.txt	64 byt	07/11/2016 18:39

When the restore is done, you will see all the selected backup versions in the restore destination. The latest backup version has the file name as the original file, while the previous versions have the time stamps added to their file names for easy identification.

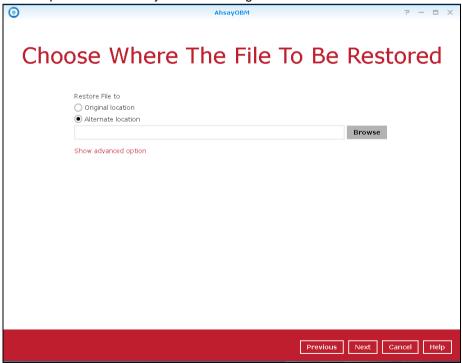
Name	Date modified	
File snapshot testing	11/7/2016 6:54 PM	
File snapshot testing_2016-11-07-18-39-11	11/7/2016 6:39 PM	
File snapshot testing_2016-11-07-18-51-55	11/7/2016 6:51 PM	
File snapshot testing_2016-11-07-18-53-26	11/7/2016 6:52 PM	

5. Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.

- 6. Select to restore the files to their **Original location**, or to an **Alternate location**. Then click **Next** to proceed.
 - Original location the backed-up data will be restored to the computer running the AhsayOBM under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under Users/[User's Name]/Downloads folder, the data will be restored to Users/[User's Name]/Downloads as well on the computer running the AhsayOBM.



 Alternate location – you can choose to restore the data to a location of your choice on the computer where AhsayOBM is running.





Alterna Change Pat				
	4]	admin	
	⊳		C Restore1	
	⊳		C Restore2	
	⊳		C Restore3	
	⊳		🗅 Restore4	
	⊳		🗀 TestFolder	
	4		🗅 UserNAS	
		⊳	Alternate Restore Location	
			👻 🗀 Document folder 01	
		⊳	🔲 🗀 Images	
		⊳	Templates	
		⊳	📃 🗀 Useful links	
			🗅 temp	
	⊳		 E 編時 	
	Þ		guest	

7. Click Show advanced option to configure other restore settings:

Restore File to
 Original location
O Alternate location
Show advanced option
Overwrite mode during restoration:
Skip All
🔘 Overwrite all
Restore file permissions
Delete extra files
✓ Follow Link
Verify checksum of in-file delta files during restore
Hide advanced option

• Overwrite mode during restoration

When there are file name conflicts during restoration, you can choose to skip them all or overwrite all existing files in the restore destination.

Restore file permissions

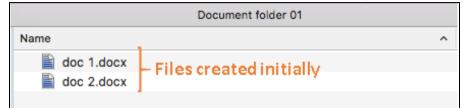
Restore file permissions is disabled by default. When you perform a file restore on a shared computer, it is recommended that you enable Restore file permissions by ticking the checkbox so that the files restored will not be fully accessible to everyone using the shared computer.

Oelete extra files

Synchronize the selected restore source with the restore destination. By enabling this option, the restore process will attempt to synchronize the selected restore source with the restore destination, making sure the data in the restore destination is the same as the restore source. Any data created after backup will be treated as "extra files" and will be deleted from the restore source if this feature is enabled.

Example:

i) Two files are created under the **Document folder 01**, namely doc 1 & doc 2.



- ii) A backup is performed for folder **Document folder 01**.
- iii) Two new files are created, namely doc 3 & doc 4.

Document folder 01		
Name		^
doc 1.docx		
doc 2.docx	Files created BEFORE backup	
doc 3.docx		
doc 4.docx	 Files created AFTER backup 	
	1	

- iv) A restore is performed for the **Document folder 01**, with **Delete extra files** option enabled.
- v) Since doc 3 & doc 4 have never been backed up, therefore they will be deleted from **Document folder 01**, leaving only the two files that have been backed up.

	Document folder 01	
Name		^
doc 1.docx	– Files remain after restore	
doc 2.docx	Thest enfant after restore	

WARNING

Please exercise extra caution when enabling this feature. Consider what data in the restore source has not been backed up and what impact it would cause if those data are deleted.

Prior to the data restore and synchronization, a warning message will show. Only by clicking **Yes** will the "extra file" be deleted. You can click **Apply to all** to confirm deleting all the "extra files" at one time.

Follow Link (Enabled by default)

When this option is enabled, 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.

The table below summarizes the behaviors when a restore is performed with different settings.



Follow Link	Restore to	Behavior
Origina locatio		Symbolic link or junction point is restored to the original backup location. Target directories or files are also restored to the original backup location.
Enabled	Alternate location	Symbolic link or junction point is restored to the location specified. Target directories or files are also restored to the alternate location specified.
Disabled Alternate location	Symbolic link or junction point is restored to the original backup location. Target directories or files are NOT restored to the original backup location.	
		Symbolic link or junction point is restored to the location specified. Target directories or files are NOT restored to the alternate location specified.

• Verify checksum of in-file delta files during restore

Verify checksum of in-file delta files during restore is disabled by default. You can enable the feature by ticking the checkbox so that the checksum of in-file delta files will be verified. As the feature will make the restore process time longer, it is recommended to enable the feature only if you want to verify whether the merged files were correct

- 8. Click **Next** to proceed when you are done with the settings.
- 9. Select the temporary directory for storing temporary files, such as delta files when they are being merged.

Temporary	y Directory
Temporary directory for storing restore files	

10. Click **Restore** to start the restore. The status will be shown.

0	AhsayCBS (Host: 10.90.10.14:443)	d X
9	Pending	
	Estimated time left:	
	Restored:	
	Elapsed time:	
	Transfer rate:	

11. When the restore is completed, the progress bar will be green in color and the message **Restore Completed Successfully** will appear.

0	AhsayCBS (Host: 10.90.10.14:443)	51
D	✓ Restore Completed Successfully	-4
	Estimated time left: 0 sec	
	Restored: 1 GB (2002 files, 0 directory)	
	Elapsed time: 4 min 40 sec	
	Transfer rate: 32.3 Mibit/s	

You can click the **Q** View icon on the right-hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.

		Show All
Туре	Log	Time
0	Start [AhsayOBM v8.3.0.30]	28/10/2019 16:28:41
0	Initializing decrypt action	28/10/2019 16:28:42
0	Initializing decrypt action Completed	28/10/2019 16:28:42
0	Creating new directory "/volume2/test/volume1/Manyfiles"	28/10/2019 16:28:42
0	Creating new directory "/volume2/test/volume1/Manyfiles/#recycle"	28/10/2019 16:28:42
0	Downloading "/volume2/test/volume1/Manyfiles/#recycle/desktop.ini" (Total 74 bytes)	28/10/2019 16:28:42
0	Creating new directory "/volume2/test/volume1/Manyfiles/1000x100K1"	28/10/2019 16:28:42
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_1" (Total 100k bytes)	28/10/2019 16:28:42
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_10" (Total 100k bytes)	28/10/2019 16:28:43
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_100" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_1000" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_101" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_102" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_103" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_104" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_105" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_106" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_107" (Total 100k bytes)	28/10/2019 16:28:46
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_108" (Total 100k bytes)	28/10/2019 16:28:47
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB_109" (Total 100k bytes)	28/10/2019 16:28:47
0	Downloading "/volume2/test/volume1/Manyfiles/1000x100K1/100KB 11" (Total 100k bytes)	28/10/2019 16:28:47

- 12. In the Restore window, click **Close** to close the Restore window.
- 13. To exit AhsayOBM, click the "x" on the top right corner. A message will appear to ask for your confirmation. Click **Yes** to close the application. If you wish to use AhsayOBM again, you will have to launch it again.

11 Contact Ahsay

11.1 Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the Partner Portal: https://www.ahsay.com/partners/

Also use the Ahsay Wikipedia for resource such as Hardware Compatibility List, Software Compatibility List, and other product information: http://wiki.ahsay.com/

11.2Documentation

Documentations for all Ahsay products are available at: https://www.ahsay.com/jsp/en/downloads/ahsay-downloads_documentation_guides.jsp

You can send us suggestions for improvements or report on issues in the documentation by contacting us at:

https://www.ahsay.com/partners/

Please specify the specific document title as well as the change required/suggestion when contacting us.

Appendix

Appendix A: Cloud Storage as Backup Destination

For most cloud storage providers (e.g. Dropbox, Google Drive, etc.), you need to enable access of AhsayOBM on your cloud destination. Click **OK** / **Test**, you will be prompted to login to the corresponding cloud service.

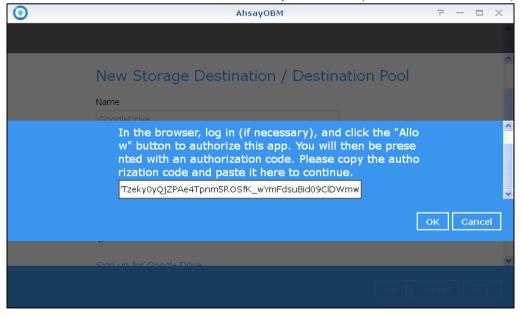
Important

The authentication request will be opened in a new tab / window on the browser, ensure that the pop-up tab / window is not blocked.

1. Click Allow to permit AhsayOBM to access the cloud storage.

 Ahsay would like to: 	
View and manage the files in your Google Drive	()
By clicking Allow, you allow this app and Google to use your information i with their respective terms of service and privacy policies. You can chan other Account Permissions at any time.	
Deny	Allow

2. Enter the authentication code returned in AhsayOBM to complete the destination setup.



NOTE: A backup destination can be set to a supported cloud storage, backup server, FTP / SFTP server, network storage, or local / removable drive on your computer.

Multiple backup destinations can be configured for a single backup set. In fact, it is recommended for you to set up at least 2 backup destinations for your backup set.

For more details on backup destination, for example which cloud service providers are supported, destination type, or limitation, you can refer to the following Wiki article: <u>http://wiki.ahsay.com/doku.php?id=public:8002_faq:faq_on_backup_destination</u>

Appendix B: Uninstall AhsayOBM

Refer to the following steps to uninstall AhsayOBM.

 Sign into DiskStation Manager (DSM) with the admin account. In a web browser, enter the Synology NAS device IP address, followed by 5000 <u>https://nas_hostname:5000</u>

NOTE: Refer to the following Synology Wiki article for information on how to sign into DSM: https://www.synology.com/en-us/knowledgebase/DSM/help/DSM/MainMenu/get_started

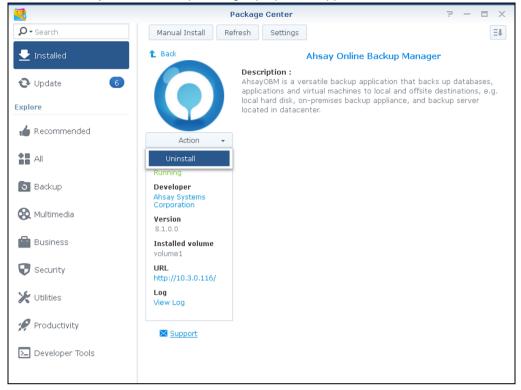
2. Double-click the Package Center icon on the desktop.



3. When the Package Center window appears, select **Ahsay Online Backup Manager** from the listed installed packages.

Package Center P - E X			
₽ - Search	Manual Install Refresh Settings	Ξŧ	
🛃 Installed	Installed		
Update Explore	Running R 100	DBM is a versatile backup application acks up databases, applications and machines to local and offsite ations, e.g. local hard disk,	
👍 Recommended	Running to STR	Backup provides a quick and flexible back up DiskStation shared folders ATO HiDrive online storage, which can	
All		as your contingency site for data	
S Backup	C++ bi	erives much of its syntax from C and ut has a simpler object model and low-level facilities than either C or	
😵 Multimedia			
Business	Running conten	tation helps you fully enjoy writing, g, managing, and sharing t-trich notes. It is very easy to create t with rich text editing, media	
Security			
🗶 Utilities			
Community			

4. When the Ahsay Online Backup Manager properties appears, select **Action > Uninstall**.



5. Click **Yes** to uninstall AhsayOBM.

?	Are you sure you want t	to uninstall this	package?
		Yes	No

NOTE: If you select yes, both AhsayOBM program files and user settings will be removed from the NAS drive.

6. When the uninstallation is completed, the following message will appear.



NOTE: Ahsay Online Backup Manager will no longer appear in the list of Installed packages. The uninstaller will also remove the **.obm** folder and all binary files from the following paths respectively: /volume1/@appstore/AhsayOBM/.obm

/volume1/@appstore/AhsayOBM/

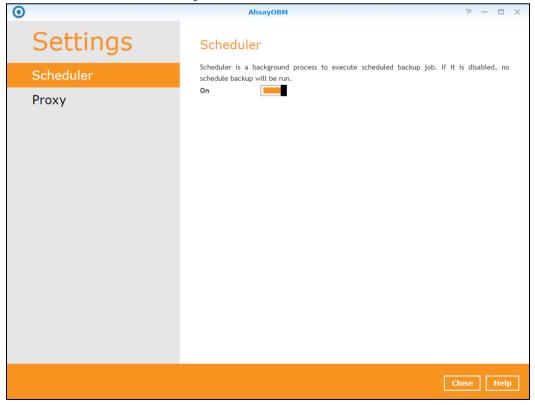
Appendix C: Scheduler Scenarios

NAS Synology has two (2) levels of Scheduler setting for the scheduled backup jobs.

Level 1: Scheduler under Backup Set Settings

\odot	AhsayOBM	? — E X
Sample Backu	Schedule	
General	Run scheduled backup for this backup set	
Source	Existing schedules	
Backup Schedule	Schedule-1 Weekly - Monday (Every week at 23:13)	
Destination	Schedule-2 Weekly - Tuesday&Wednesday (Every week at 16:36)	
Others	Schedule-3 Weekly - Saturday (Every week at 20:20)	
	Add	
Delete this backup set		Save Cancel Help

Level 2: Scheduler under Settings



Scenario no. 1: Scheduler under Setting is ON and Scheduler under Backup Set Settings is OFF

Scheduler under Setting	
•	AhsayOBM ? — E X
Settings	Scheduler
Scheduler	Scheduler is a background process to execute scheduled backup job. If it is disabled, no schedule backup will be run.
Proxy	On

Scheduler under Backup Set Settings

0	AhsayOBM	Ρ.	-	×
Sample Backu	Schedule			
General	Run scheduled backup for this backup set			
Source				
Backup Schedule				

Result: There is no scheduled backup job will be run for the backup set.

Scenario no. 2: Scheduler under Setting is ON and Scheduler under Backup Settings is ON

Scheduler	under	Setting	
Concation	unuor	County	

0	AhsayOBM	P -	- 0	Х
Settings	Scheduler			
Scheduler	Scheduler is a background process to execute scheduled backup job. If it is disabled, schedule backup will be run.			10
Proxy	On			

Scheduler under Backup Set Settings

\odot	AhsayOBM ? — 🗖 🗙
Sample Backu	Schedule
General	Run scheduled backup for this backup set
Source	Existing schedules
Backup Schedule	Schedule-1 Weekly - Monday (Every week at 23:13)
Destination	Schedule-2 Weekly - Tuesday&Wednesday (Every week at 16:36)
Others	Schedule-3 Weekly - Saturday (Every week at 20:20)
	Add

Result: Scheduled backup jobs which are Schedule-1, Schedule-2, and Schedule-3 for the backup set will run.

Scenario no. 3: Scheduler under Setting is OFF, and Scheduler under Backup Set Settings is OFF

Scheduler under Setting		
Ο	AhsayOBM	? — 🗆 X
Settings	Scheduler	
Scheduler	Scheduler is a background process to execute scheduled backup job. schedule backup will be run.	If it is disabled, no
Proxy	Off	

Scheduler under Backup Set Settings

\odot	AhsayOBM	7		×
Sample Backu	Schedule			
General	Run scheduled backup for this backup set			
Source				
Backup Schedule				

Result: There is no scheduled backup job will be run for the backup set.

Scenario no. 4: Scheduler under Setting is OFF, and Scheduler under Backup Set Settings is ON

Scheduler under Setting	
0	AhsayOBM P - E X
Settings	Scheduler
Scheduler	Scheduler is a background process to execute scheduled backup job. If it is disabled, no schedule backup will be run.
Proxy	Off

Scheduler under Backup Set Settings

\odot	AhsayOBM	?	_	×
Sample Backu	Schedule			
General	Run scheduled backup for this backup set			
Source	Existing schedules			
Backup Schedule	Schedule-1 Weekly - Monday (Every week at 23:13)			
Destination	Schedule-2 Weekly - Tuesday&Wednesday (Every week at 16:36)			
Others	Schedule-3 Weekly - Saturday (Every week at 20:20)			
	Add			

Result: There is no scheduled backup job will be run for the backup set.

Scenario no. 5: Scheduler under Setting is OFF and turning ON Scheduler under Backup Set Settings

Scheduler under Setting		
0	AhsayOBM P - E X	
Settings	Scheduler	
Scheduler	Scheduler is a background process to execute scheduled backup job. If it is disabled, no schedule backup will be run.	
Proxy	Off	

Scheduler under Backup Set Settings

0	AhsayOBM	? — 🗆 X
Sample Backu	Schedule	
General	Run scheduled backup for this backup set	
Source		
Backup Schedule		
Ο	AhsayOBM	7 — E X
Sample Backu	Schedule	
General	Run scheduled backup for this backup set	
Source	Existing schedules	
Backup Schedule	Schedule-1 Weekly - Monday (Every week at 23:13)	
Destination	Schedule-2 Weekly - Tuesday&Wednesday (Every week at 16:36)	
	ABLE_SCHEDULE_SETTING_QUESTION	
		Yes No

Result: There is an alert message that will be displayed confirming to set the Scheduler under Setting from OFF to ON.

If Yes is selected then the Scheduler under Settings will be turned ON. If No is selected then the Scheduler under Settings will remain turned OFF.

Appendix D: Create Free Trial Account in AhsayOBM

Users can create a free trial account when they login to AhsayOBM for the first time. Please ensure that the following requirements are met before creating your trial account:

 A valid email address which will be used for receiving notices. A welcome message will also be sent upon creation of the account which specifies the User Setting and Quota set for backup in AhsayCBS.

While here are the limitations of a trial account:

- The Free Trial button will only be displayed once, when the user login for the first time. If you cannot create a free trial account kindly contact your backup service provider.
- Only alphanumeric characters and selected special characters, A to Z, 0 to 9, @, and _, are allowed to be used for the Login name. While there may be some limitations on password complexity and age which is determined by the backup service provider. Please contact your service provider for further details.
- The add-on modules available and quota size are determined by your service provider.
- The trial account period is determined by your service provider. Please contact your service provider for details.

Follow the steps below to create a Free Trial backup account in AhsayOBM.

\odot	AhsayOBM	? — 🗆 X
		English V
	AhsayOBM	
	The Best On-Premises & Cloud Backup Software	
	Free Trial or Login	

1. Click on Free Trial.

2. Configure your Backup Server settings.

0	AhsayOBM	? — E X
	Backup Server	
	https V 10.90.10.14	
	Proxy (HTTP)	
	Use proxy to access the Internet	
		OK Cancel

3. Enter the Login name that you want. Also provide your email address and password. Confirm your password and click **OK** to create your trial account.

0	AhsayOBM	? — = ×
		English V
	O AhsayOBM	
	Free Trial	
	Login name	
	E-mail	
	Password	
	Confirm password	
	*All fields are required	
	Show advanced option OK Cancel	

4. Once the trial account is created, this screen will be displayed.

\odot	AhsayOBM	? — E X
AhsayOBM	testaccount	English V
Backup	Backup Sets	Report
Restore	Settings	Utilities

- 5. After your trial account has been created, you need to check several things:
 - > The expiry date of the trial account, which determines when it will be suspended.
 - > The Language which will be used for sending reports.
 - And the Time zone, this is to ensure that your backup schedule will run at the correct time.

You can check this by logging in to AhsayCBS, go to **Backup / Restore > User > User Profile > General**. For more information please refer to the <u>AhsayCBS User's Guide</u>.

User Profile	General Backup Client Settings Contact User Group Security Settings					
Backup Set	Suspend At					
Settings	30-Oct-2019					
Report	00 00 2010					
Statistics	Status					
Effective Policy	 Enable Suspended Locked 					
	Upload Encryption Key Upload encryption key after running backup for recovery					
	Language English •					
	Timezone GMT+08:00 (CST) v					

6. You also need to check the available add-on modules and quota by going to the **Backup Client Settings** tab.

User Profile	General	Backup Client Settings	Contact	User Group	Security Settings	
Backup Set	Settings of t	Settings of the client backup agent for this user.				
Settings						
Report	Backup	Client				
Statistics	Ahsay	OBM User 💿 AhsayACB	User			
Effective Policy	Add-on	Modules				
	✓	Microsoft Exchange Server		🖌 🤰 N	licrosoft SQL Server	
	🖌 🕅	MySQL Database Server		🖌 🖸 C	Pracle Database Server	
	🖌 Lotus.	Lotus Domino		🖌 Lotus. L	otus Notes	
	 O 	Windows System Backup		🖌 🖸 V	Vindows System State Backup	
		VMware Guest VM v 10		🗸 🍂 H	lyper-V Guest VM v 10	
	✓ M	Microsoft Exchange Mailbox	10	🖌 📜 s	hadowProtect System Backup	
	✓ ●	Continuous Data Protection		Syn N	IAS - Synology	
	Image: Second	Mobile 10		🗸 🔛 N	IAS - QNAP	
	✓	Volume Shadow Copy		🖌 🔽 Ir	n-File Delta	
	✓ 🔗	OpenDirect / Granular Restor	re 10	I 0	office 365 Backup 10	
	Quota					
	Unlimit storage space for the destination not shown in the following table					
	+ m					
	D	estination	Quota			
		AhsayCBS	50.0		ytes 🔻	
	(If preempted mode is enabled in policy settings, the quota settings are disabled)					

7. Lastly, you need to verify if your contact details are correct by going to the **Contact** tab. If you want to add more contact information, you can add it here.

User Profile	General	Backup Client	Settings	Contact	User Group	Security Settings	
Backup Set	Contact information for this user.						
Settings							
Report	Manage Contact Information 🚱						
Statistics	+ •						
Effective Policy		ame	Email			Encrypt Email	
	tri tri	ial	trial@email.c	:om		No	