

Ahsay Online Backup Manager v8

Quick Start Guide for QNAP NAS

Ahsay Systems Corporation Limited

11 October 2021

Copyright Notice

© 2021 Ahsay Systems Corporation Limited. All rights reserved.

The use and copying of this product is subject to a license agreement. Any other use is prohibited. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without prior written consent of Ahsay Systems Corporation Limited. Information in this manual is subject to change without notice and does not represent a commitment on the part of the vendor, Ahsay Systems Corporation Limited does not warrant that this document is error free. If you find any errors in this document, please report to Ahsay Systems Corporation Limited in writing.

This product includes software developed by the Apache Software Foundation (<https://www.apache.org/>).

Trademarks

Ahsay, Ahsay Cloud Backup Suite, Ahsay Online Backup Suite, Ahsay Offsite Backup Server, Ahsay Online Backup Manager, Ahsay A-Click Backup, Ahsay Replication Server, Ahsay BackupBox Firmware, Ahsay Universal Backup System and Ahsay NAS Client Utility, Ahsay Mobile are trademarks of Ahsay Systems Corporation Limited.

Amazon S3 is a registered trademark of Amazon Web Services, Inc., or its affiliates.

Apple and Mac OS X, macOS, and iOS are registered trademarks of Apple Computer, Inc.

Dropbox is a registered trademark of Dropbox Inc.

Google Cloud Storage, Google Drive, Google Authenticator, and Android are registered trademarks of Google Inc.

Wasabi Hot Cloud Storage is a registered trademark of Wasabi Technologies Inc.

Backblaze B2 Cloud Storage is a registered trademark of Backblaze Inc.

MariaDB is a registered trademark of MariaDB Corporation AB.

Lotus, Domino, and Notes are registered trademark of IBM Corporation.

Microsoft Windows, Microsoft Exchange Server, Microsoft SQL Server, Microsoft Hyper-V, Microsoft Azure, OneDrive, OneDrive for Business, Microsoft Authenticator, and Microsoft Office 365 are registered trademarks of Microsoft Corporation.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Oracle 11g, Oracle 12c, Oracle 18c, Oracle 19c, and MySQL are registered trademarks of Oracle Corporation.

Rackspace and OpenStack are registered trademarks of Rackspace US, Inc.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo and JBoss are registered trademarks of Red Hat, Inc. www.redhat.com in the U.S. and other countries.

Linux is a registered trademark of Linus Torvalds in the U.S. and other countries.

Ubuntu is a registered trademark of Canonical Ltd.

ShadowProtect is a registered trademark of StorageCraft Technology Corporation.

VMware ESXi, vCenter, and vSAN are registered trademarks of VMware, Inc.

All other product names are registered trademarks of their respective owners.

Disclaimer

Ahsay Systems Corporation Limited will not have or accept any liability, obligation or responsibility whatsoever for any loss, destruction or damage (including without limitation consequential loss, destruction or damage) however arising from or in respect of any use or misuse of reliance on this document. By reading and following the instructions in this document, you agree to accept unconditionally the terms of this Disclaimer and as they may be revised and/or amended from time to time by Ahsay Systems Corporation Limited without prior notice to you.

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	Modifications
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. 2.10; Updated Ch. 4.1 and Ch. 4.2	New / Modifications
18 June 2021	Added note on save password in Ch. 5 and 6.1; Updated 2FA screenshots in Ch. 5	New / Modifications
11 October 2021	Added two parts of backup source in Ch. 7	New / Modifications

Table of Contents

1	Overview.....	1
1.1	What is this software?	1
1.2	System Architecture	1
2	Requirements for AhsayOBM on QNAP NAS.....	2
2.1	Hardware Requirements.....	2
2.2	Software Requirements	2
2.3	AhsayOBM Installation	2
2.4	NAS-QNAP Add-on Module.....	2
2.5	Backup Quota Storage	3
2.6	Java Requirement	3
2.7	Memory Requirement	3
2.8	TCP Port Requirement	3
2.9	QNAP NAS User Account Permission	3
2.10	Network Bandwidth.....	4
2.11	Limitations	4
2.12	Supported Features from AhsayCBS Web Console.....	4
3	Get started with AhsayOBM.....	5
4	Download and Install AhsayOBM.....	6
4.1	Download AhsayOBM	6
4.2	Install AhsayOBM using QPKG online installer	7
4.3	AhsayOBM Scheduler Service Check.....	10
4.4	RunLevel Symlink Check.....	11
5	Start AhsayOBM	12
6	AhsayOBM Overview.....	17
6.1	Profile	18
6.2	Online Help.....	23
6.3	Language	24
6.4	Information	24
6.5	Backup	25
6.6	Backup Sets	28
	Backup Set Settings	28
6.7	Report	40
	6.7.1 Backup	40
	6.7.2 Restore.....	45

6.8	Restore.....	46
6.9	Settings	48
6.9.1	Scheduler	48
6.9.2	Proxy	49
6.10	Utilities.....	50
6.10.1	Data Integrity Check	50
6.10.2	Delete Backup Data	62
7	Create a Backup Set	66
8	Overview on the Backup Process	74
8.1	Periodic Data Integrity Check (PDIC) Process.....	75
8.2	Backup Set Index Handling Process.....	77
8.2.1	Start Backup Job.....	77
8.2.2	Completed Backup Job	78
8.3	Data Validation Check Process	79
9	Run Backup Jobs	80
	Start a Manual Backup.....	80
10	Restore Data.....	83
10.1	Login to AhsayOBM.....	83
10.2	Restore Data	83
11	Contact Ahsay.....	91
11.1	Technical Assistance	91
11.2	Documentation	91
Appendix.....		92
Appendix A:	Cloud Storage as Backup Destination	92
Appendix B:	Uninstall AhsayOBM	94
Appendix C:	Scheduler Scenarios	96
Appendix D:	Create Free Trial Account in AhsayOBM.....	100

1 Overview

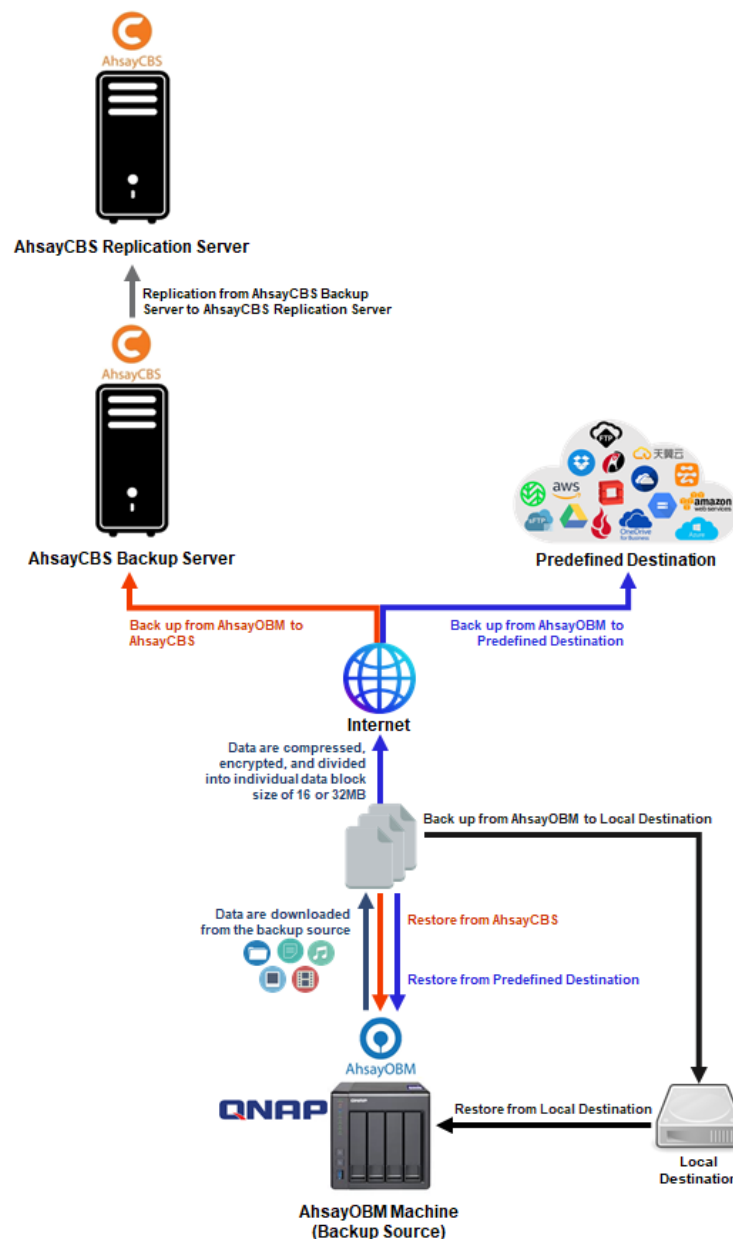
1.1 What is this software?

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 QNAP NAS

2.1 Hardware Requirements

Refer to the following article for the list of supported QNAP NAS modes:

[FAQ: Ahsay Hardware Compatibility List \(HRL\) for AhsayOBM on QNAP NAS](#)

WARNING

QNAP NAS models with less than 1GB RAM are not supported. As 1GB RAM or above is required to ensure application stability and optimal backup/restore performance. To back up data on unsupported QNAP NAS models, share the folder(s) then backup the data as network shared folder from a Windows machine.

For more details on how to create a shared folder(s), please refer to this link [Creating a Shared Folder](#).

2.2 Software Requirements

Refer to the following article on supported QTS versions for QNAP NAS

[FAQ: Ahsay Hardware Compatibility List \(HRL\) for AhsayOBM on QNAP NAS](#)

2.3 AhsayOBM Installation

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

2.4 NAS-QNAP Add-on Module

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

NOTE

The NAS-QNAP add-on module allows for the backup of unlimited number of QNAP NAS devices. However, each new AhsayOBM installation on a QNAP 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

Settings of the client backup agent for this user.

Backup Client

☒ AhsayOBM User ☐ AhsayACB User

Add-on Modules

<input type="checkbox"/> Microsoft Exchange Server	<input type="checkbox"/> Microsoft SQL Server
<input type="checkbox"/> MySQL Database Server	<input type="checkbox"/> Oracle Database Server
<input type="checkbox"/> Lotus Domino	<input type="checkbox"/> Lotus Notes
<input type="checkbox"/> Windows System Backup	<input type="checkbox"/> Windows System State Backup
<input type="checkbox"/> VMware <input type="text" value="Guest VM"/> 0	<input type="checkbox"/> Hyper-V <input type="text" value="Guest VM"/> 0
<input type="checkbox"/> Microsoft Exchange Mailbox <input type="text" value="0"/>	<input type="checkbox"/> ShadowProtect System Backup
<input checked="" type="checkbox"/> NAS - QNAP	<input type="checkbox"/> NAS - Synology
<input type="checkbox"/> Mobile (max. 10)	<input type="checkbox"/> Continuous Data Protection
<input type="checkbox"/> Volume Shadow Copy	<input checked="" type="checkbox"/> In-File Delta
<input type="checkbox"/> OpenDirect / Granular Restore <input type="text" value="0"/>	<input type="checkbox"/> Office 365 Backup <input type="text" value="0"/>
<input type="checkbox"/> 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 QNAP 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 QNAP NAS is 256 MB. It is recommended that 1 GB RAM or more is installed for stability and better backup / restore performance.

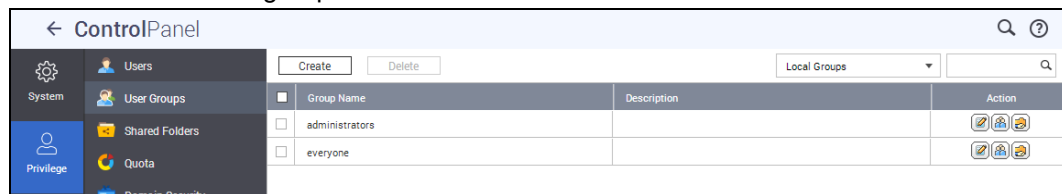
2.8 TCP Port Requirement

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

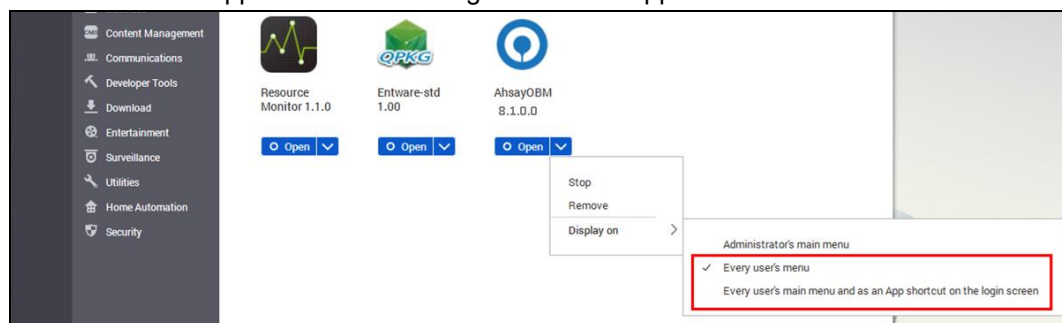
TCP port 32168 must be free on the machine. Otherwise, the AhsayOBM client will not start and its backup and/or restore functions will not work.

2.9 QNAP NAS User Account Permission

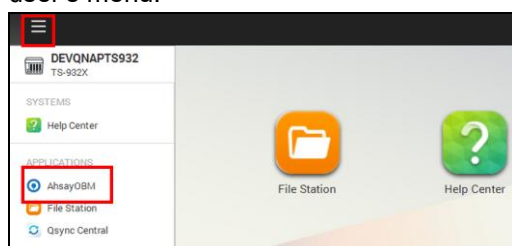
The QNAP NAS user account used for the AhsayOBM installation must be a member of “**administrator**” user group.



The QNAP NAS user account belongs to “**everyone**” user group can apply AhsayOBM after administrator assigning AhsayOBM to Display on “Every user’s menu” or “Every user’s main menu and as an App shortcut on the login screen” in App Center.



After login with user account belongs to “everyone” user group, you can find the App in the user’s menu.



2.10 Network Bandwidth

10 Mbps or above connection speed.

2.11 Limitations

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

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

2.12 Supported Features from AhsayCBS Web Console

The following features of AhsayOBM on QNAP 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 QNAP 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

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 **QNAP** section under the **AhsayOBM** tab of the download page, download the AhsayOBM **QPKG online installer**.

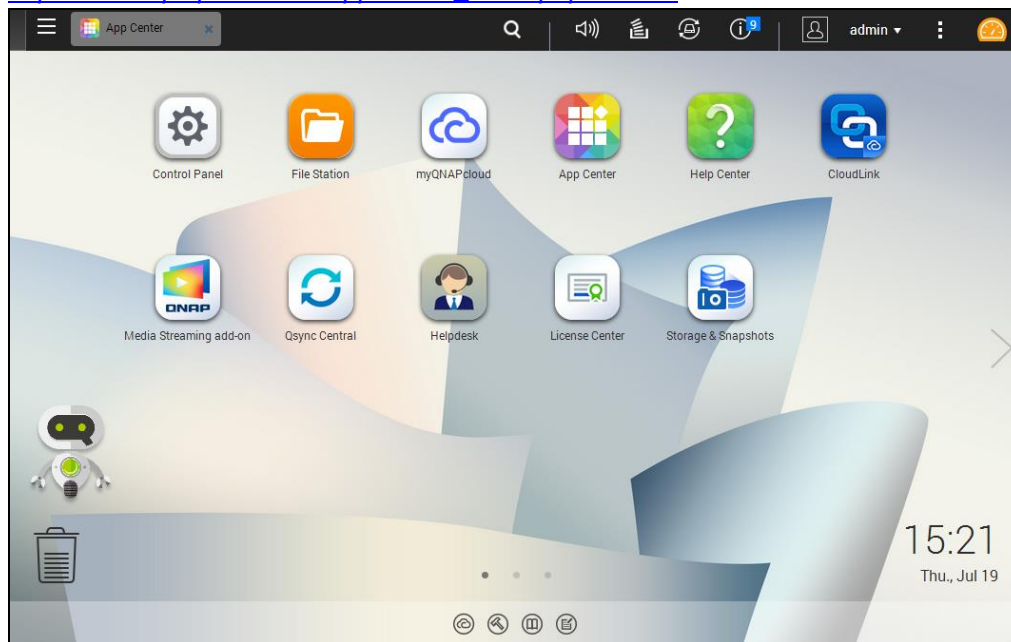


4.2 Install AhsayOBM using QPKG online installer

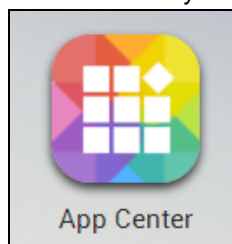
1. Log in to QNAP QTS with the admin account. In a web browser, enter the QNAP NAS device IP address and use the login credentials to login.

Note: Refer to the following user manual for information on how to login to QTS:

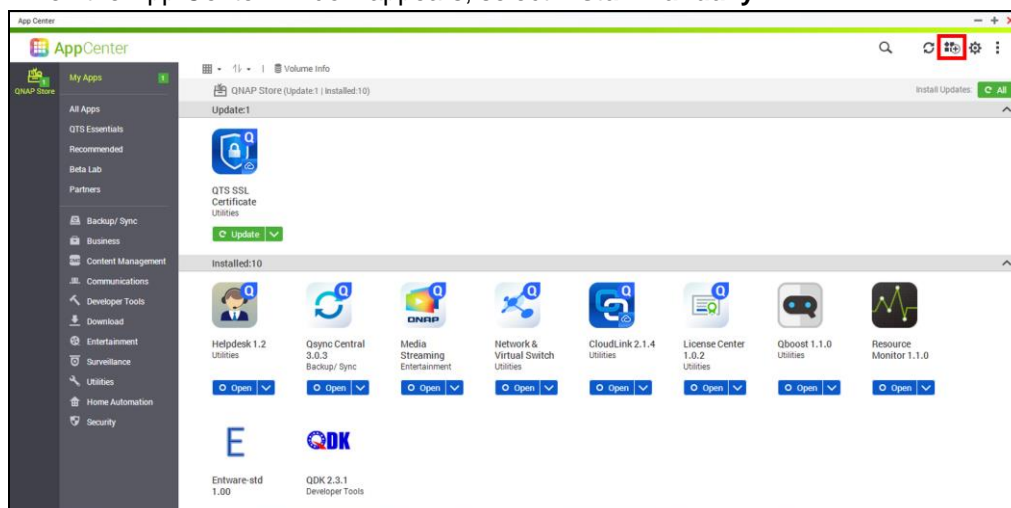
https://www.qnap.com/en/support/con_show.php?cid=11



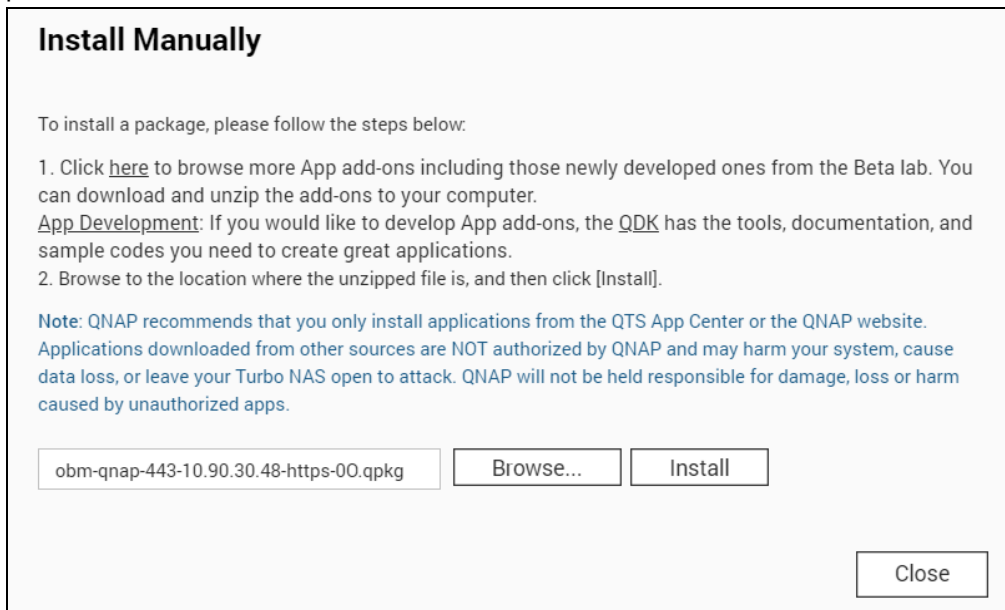
2. To install AhsayOBM on QNAP NAS, click the **App Center** icon from the desktop.



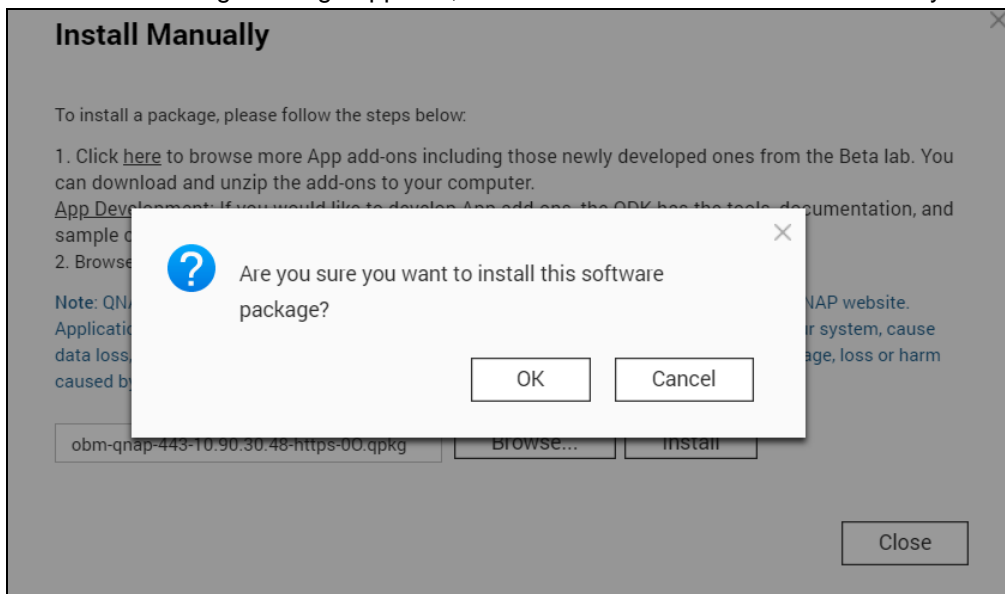
3. When the App Center window appears, select **Install Manually**.

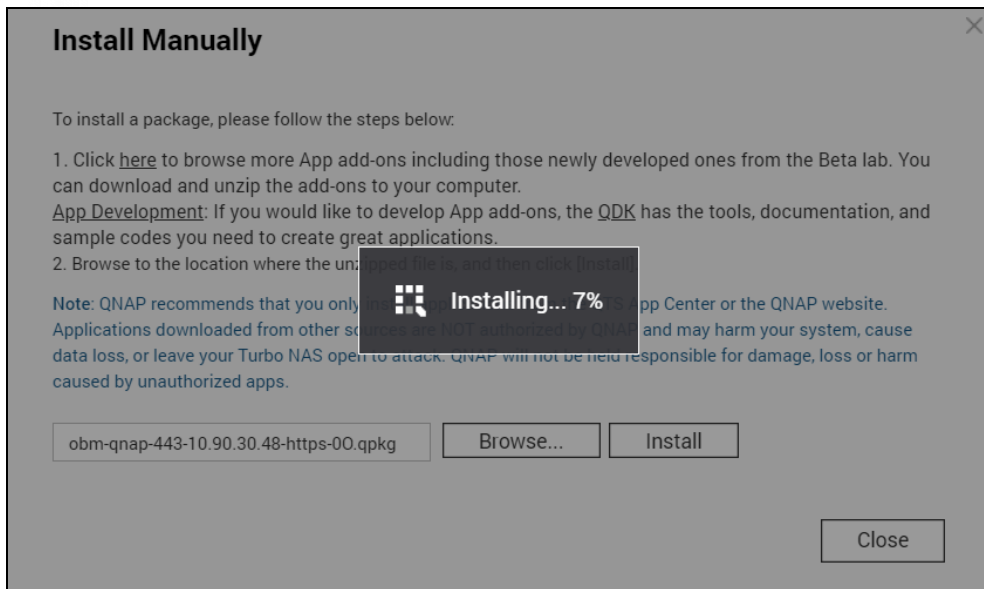


- When the Install Manually window appears, click **Browse** to select the AhsayOBM QPKG file which you have downloaded (e.g., obm-qnap-443-10.90.30.48-https-00). Then, click **Install** to proceed.

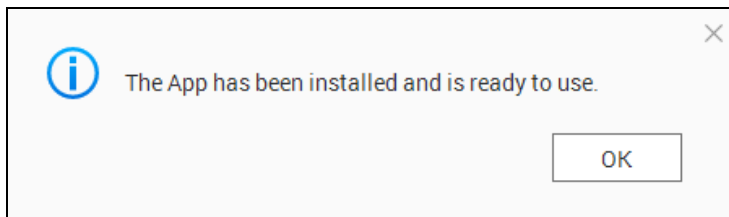


- When the following message appears, click **OK** to start the installation of AhsayOBM.

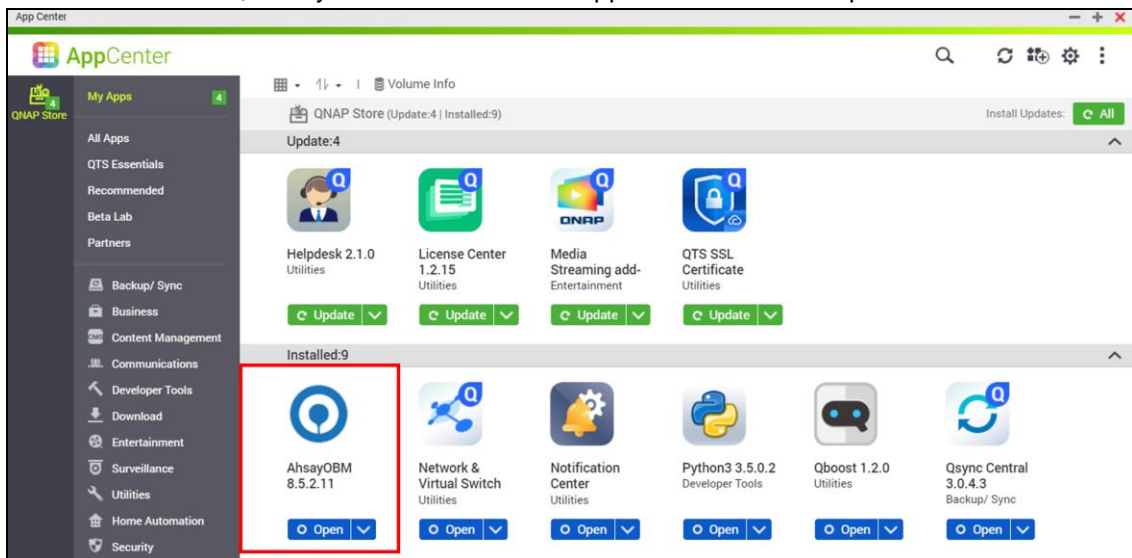


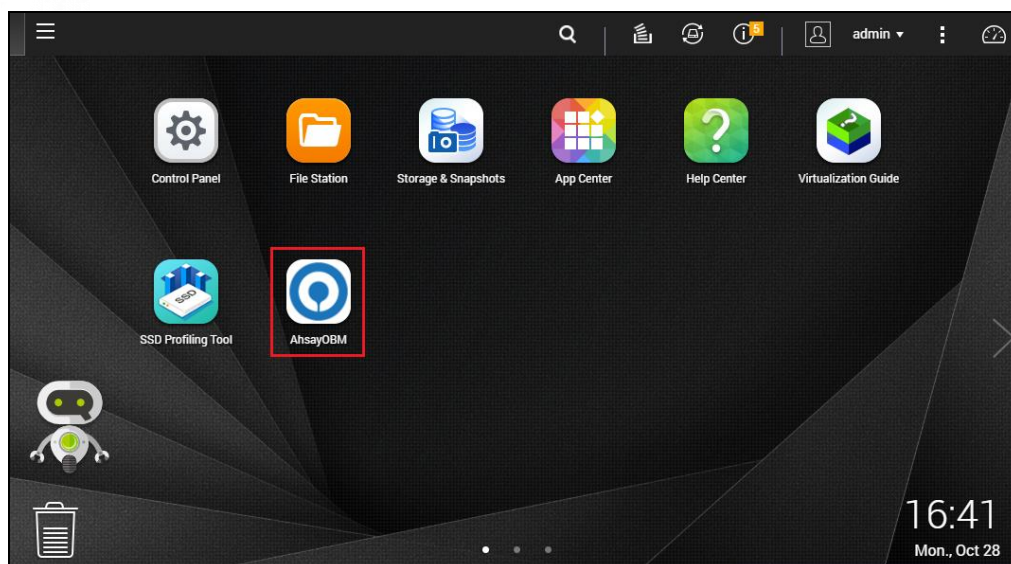


6. When the installation is completed, the following message will be displayed. Click **OK** to finish the installation.



7. After the installation, AhsayOBM will be listed in App Center and desktop.





4.3 AhsayOBM Scheduler Service Check

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

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

Scheduler service is running, highlighted in **red**.

```
login as: admin
admin@10.3.0.122's password:
[~] # ps -ef|grep java
3562 admin 640772 S
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/jvm/bin/java
-Xrs -Xms64m -Xmx1024m -Dsun.nio.PageAlignDirectMemory=true -
Djava.library.path= . -cp ../cb.jar WuiService
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm /share/CACH
EDEV1_DATA/.qpkg/AhsayOBM/.obm --port=32168
11017 admin 956 S grep java
20327 admin 157000 S /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/jvm/bin/java
-Xms64m -Xmx256m -Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=
-cp ../cbs.jar cbs /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm
```

To manually **stop** the scheduler service, use the

touch /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/ipc/Scheduler/stop script and use the **ps** command.

```
[~] # touch /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/ipc/Scheduler/stop
[~] # ps -ef|grep java
3562 admin 640772 S
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/jvm/bin/java -Xrs -Xms64m -
Xmx1024m -Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=
. -cp ../cb.jar WuiService /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/.obm --port=32168
12542 admin 1000 S grep java
```


To manually **start** the scheduler service, use the

/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/bin/Scheduler.sh script and use the **ps** command again.

Scheduler service is running, highlighted in **red**.

```
[~] # /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/bin/Scheduler.sh
[~] # ps -ef|grep java
3562 admin 640772 S /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/jvm/bin/java
-Xrs -Xms64m -Xmx1024m -Dsun.nio.PageAlignDirectMemory=true -
Djava.library.path=. -cp ../cb.jar WuiService
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/.obm --port=32168
17562 admin 86536 S /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm/jvm/bin/java -
Xms64m -Xmx256m -Dsun.nio.PageAlignDirectMemory=true -Djava.library.path=.
-cp ../cbs.jar cbs /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/obm
18004 admin 944 R grep java
```

4.4 RunLevel Symlink Check

During installation, the following symlinks to the scheduler startup script

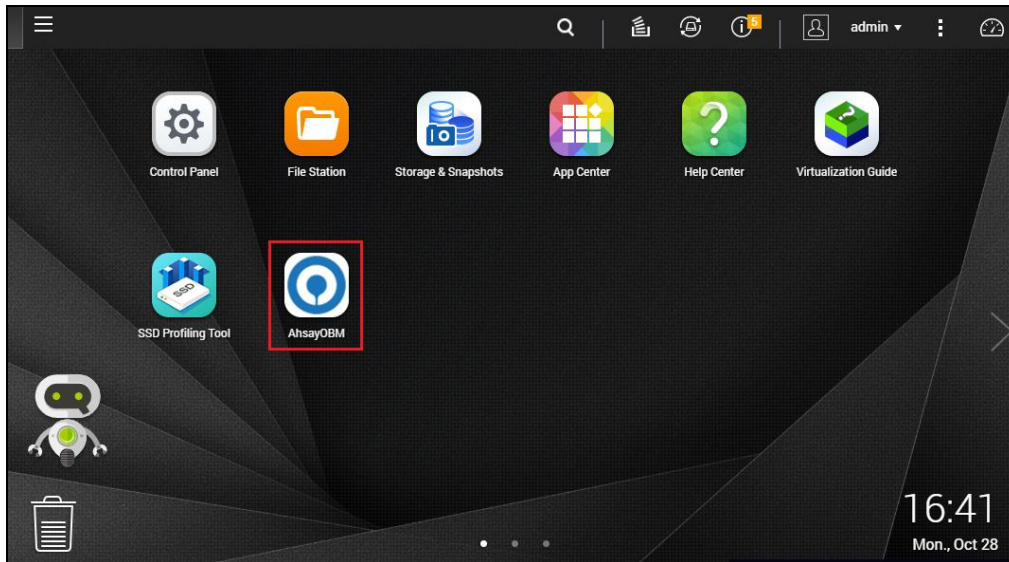
/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/AhsayOBM.sh will be created that allows the AhsayOBM Scheduler Service to automatically start each time the machine is rebooted or restarted.

To verify if the symlinks have been created correctly, use the **ls** command. You will see the symlink, highlighted in **red**.

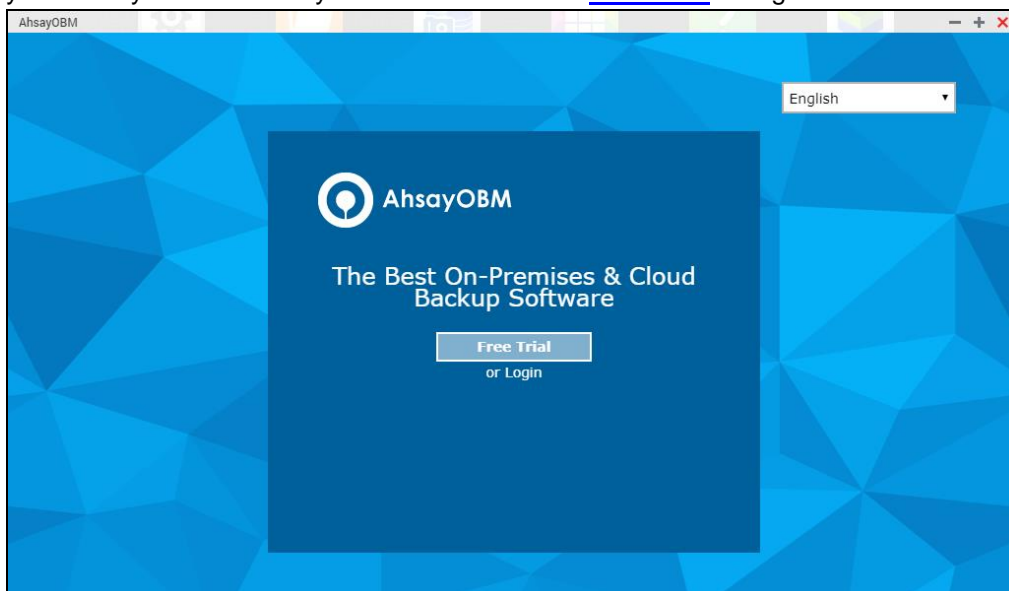
```
[~] # ls -la /etc/init.d/Ahsay*
lrwxrwxrwx 1 admin administrators 48 2019-05-23 12:55 /etc/init.d/AhsayOBM
.sh -> /share/CACHEDEV1_DATA/.qpkg/AhsayOBM/AhsayOBM.sh*
[~] #
```

5 Start AhsayOBM

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



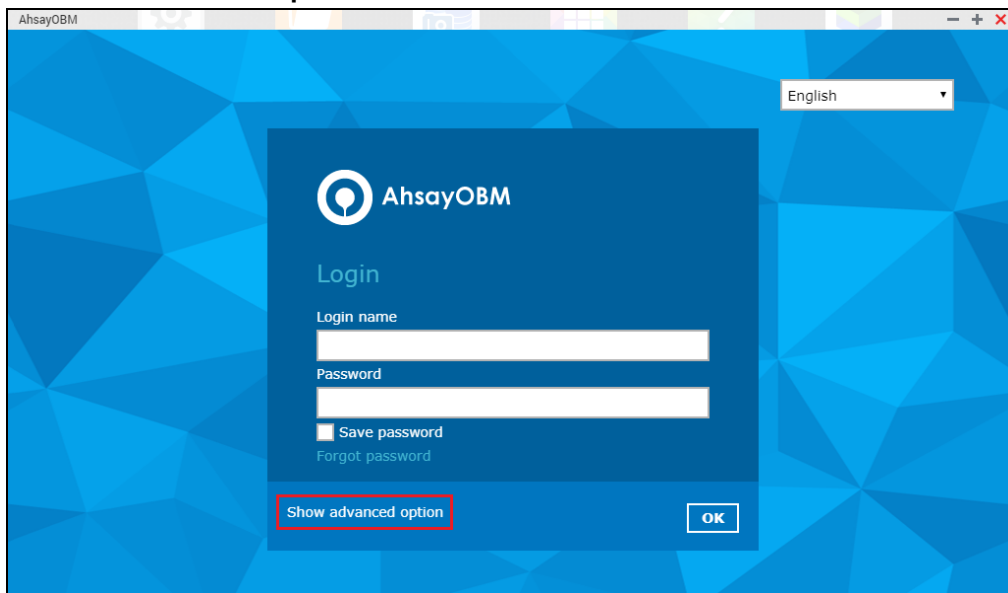
2. The Free Trial Registration menu may display when you login for the first time. Click **Login** if you already have an AhsayOBM account or click [Free Trial](#) to register for a trial backup account.



NOTE

The Free Trial Registration option will only be displayed if your backup service provider has enabled free trial registration on the backup server.

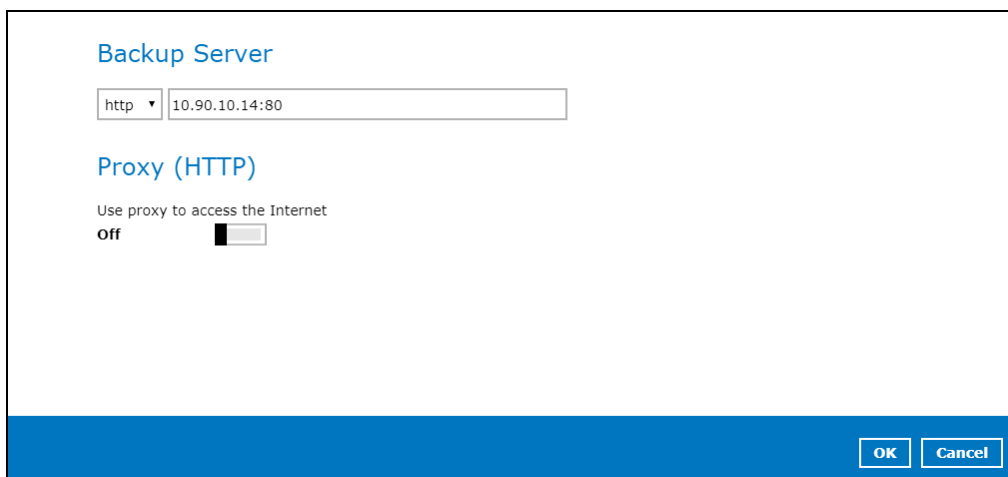
3. In case you want to enter the backup server setting provided by your backup service provider, click **Show advanced option**.

The image shows the AhsayOBM login window. It has a blue background with a geometric pattern. In the center is a dark blue login box. Inside the box, there is the AhsayOBM logo, the word "Login", and two input fields for "Login name" and "Password". Below these fields are checkboxes for "Save password" and a link for "Forgot password". At the bottom of the login box, there is a button labeled "Show advanced option" which is highlighted with a red rectangle, and an "OK" button to its right. The window title bar says "AhsayOBM" and there is a language dropdown menu in the top right corner set to "English".

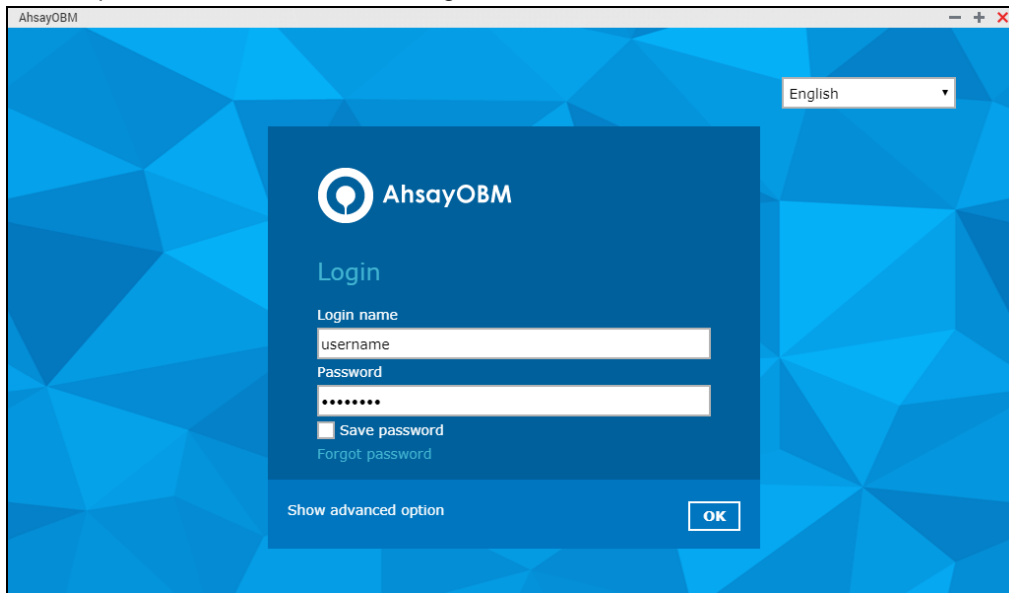
NOTE

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 information.

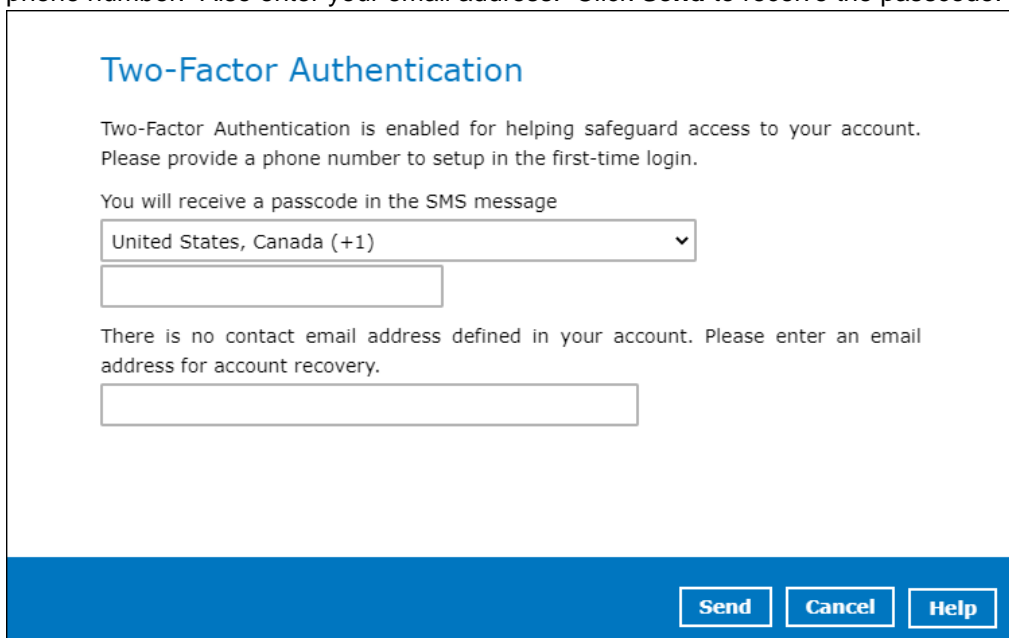
4. Click **OK** after typing in the backup server information. You can turn on the Proxy feature if needed.

The image shows the "Backup Server" configuration window. It has a white background with a blue header bar at the bottom. The title "Backup Server" is in blue. Below the title, there is a dropdown menu for the protocol (set to "http") and a text input field for the address (containing "10.90.10.14:80"). Below this, the title "Proxy (HTTP)" is in blue. Underneath, there is a label "Use proxy to access the Internet" and a toggle switch. The toggle switch is currently in the "off" position. At the bottom right, there are "OK" and "Cancel" buttons.

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

The image shows the AhsayOBM login interface. It features a blue background with a geometric pattern. In the center, there is a dark blue login box. At the top of this box is the AhsayOBM logo and the text 'AhsayOBM'. Below this is the word 'Login'. There are two input fields: 'Login name' with the placeholder text 'username' and 'Password' with placeholder dots. Below the password field is a checkbox labeled 'Save password' and a link 'Forgot password'. At the bottom of the login box, there is a link 'Show advanced option' and an 'OK' button. In the top right corner of the main window, there is a language dropdown menu set to 'English'.

6. 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.


The image shows the Two-Factor Authentication setup screen. It has a light blue header with the title 'Two-Factor Authentication'. Below the title, there is a paragraph explaining that Two-Factor Authentication is enabled for safeguarding access and that a phone number is needed for first-time login. There is a section titled 'You will receive a passcode in the SMS message' which includes a dropdown menu for country codes (currently showing 'United States, Canada (+1)') and an empty input field for the phone number. Below this, there is a paragraph stating 'There is no contact email address defined in your account. Please enter an email address for account recovery.' followed by an empty input field for the email address. At the bottom right, there are three buttons: 'Send', 'Cancel', and 'Help'.


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


Two-Factor Authentication

Two-Factor Authentication is enabled for helping safeguard access to your account.
Please provide a phone number to setup in the first-time login.

Please select phone number to receive passcode via SMS message to continue login.

 **Philippines (+63) - *****36123**

 **Austria (+43) - ****5814**

 **Georgia (+995) - ****3685**

Cancel

Help

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

Two-Factor Authentication

SMS message with a passcode was already sent to the phone number (+63) - *****36123 Please enter the passcode to continue login.

KKFZ - (00:04:52)

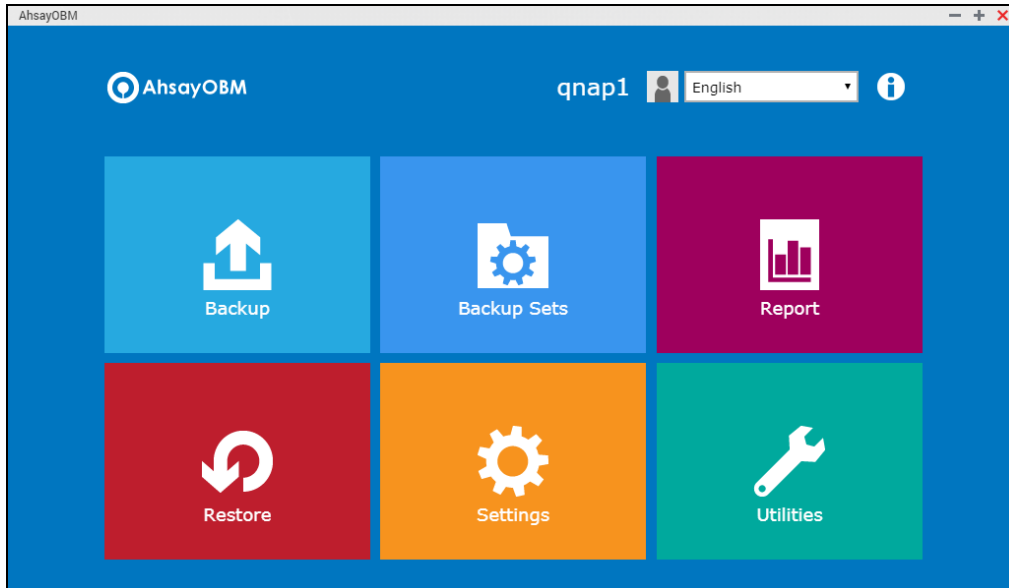
Resend passcode

Verify

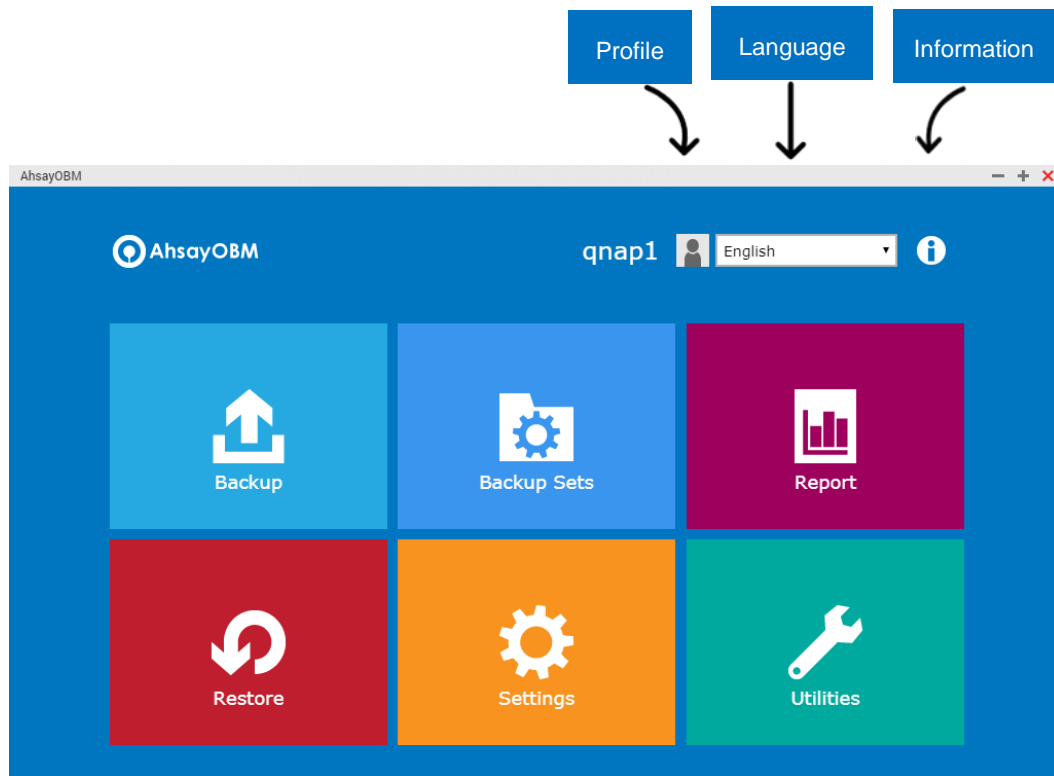
Cancel

Help

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



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 six (6) features:

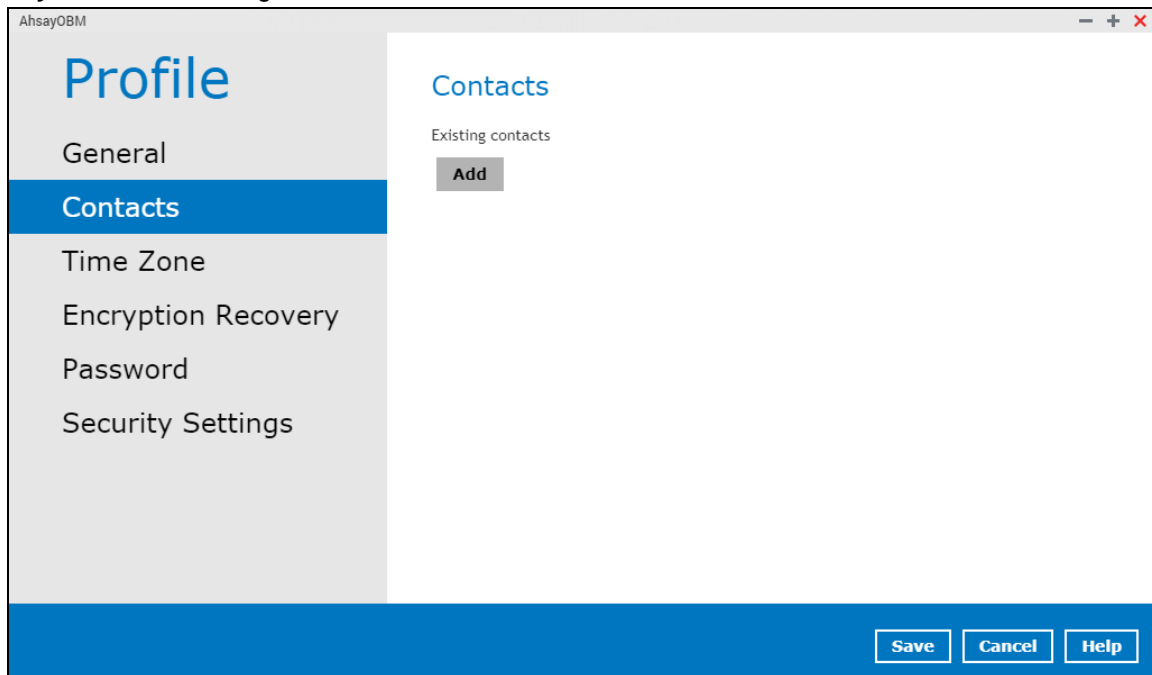
- **General**
- **Contacts**
- **Time Zone**
- **Encryption Recovery**
- **Password**
- **Security Settings**

The **General** tab displays the **user information**.

The image is a screenshot of the 'Profile' window in AhsayOBM, specifically the 'General' tab. The window has a title bar with 'AhsayOBM' and standard window controls. On the left is a sidebar with the title 'Profile' and a list of tabs: 'General' (selected), 'Contacts', 'Time Zone', 'Encryption Recovery', 'Password', and 'Security Settings'. The main content area is titled 'User Information' and contains two input fields: 'Login name' with the value 'qnap1' and 'Display name' which is empty. Below this is a section titled 'Last Successful Login' which displays the following information: 'Time: 2019-10-28 10:36:57 (HKT)', 'IP address: 10.3.0.125', 'Phone number (MFA): 852- [redacted] 3', and 'Browser / App: OBM'. At the bottom right of the window are three buttons: 'Save', 'Cancel', and 'Help'.

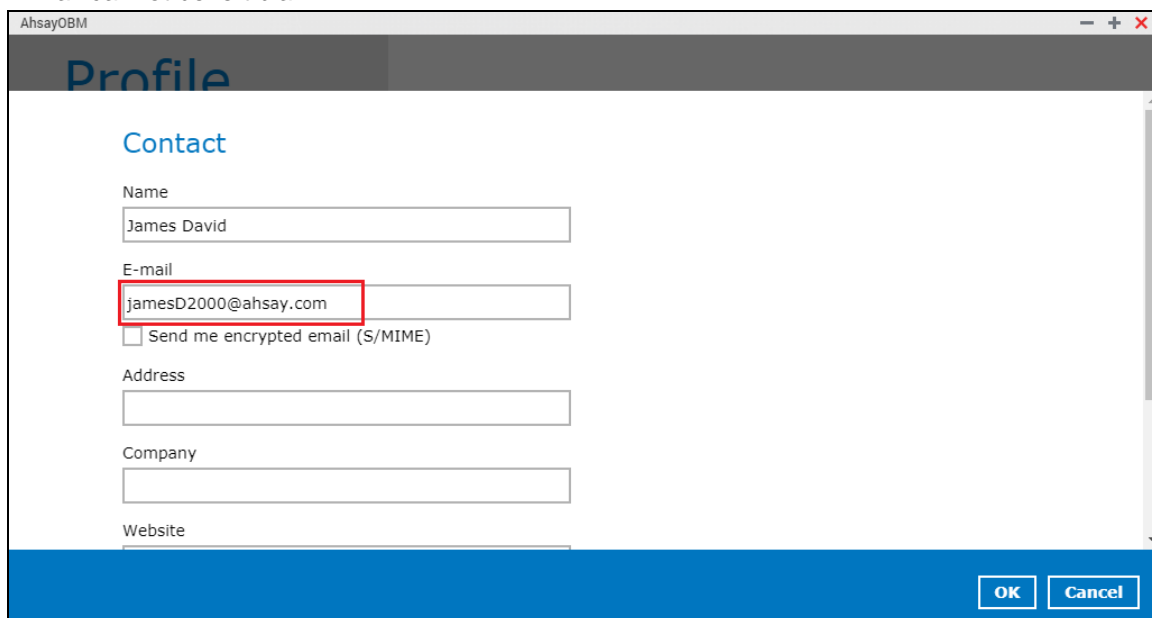
- The **login name** is the name of your backup account.
- The **display name** is the display name of your backup account as you log on to the AhsayCBS management console.
- The **time** is the date and time the user last logged in.
- The **IP address** used to login.
- The **phone number (MFA)** is where the sms authentication will be sent when MFA is enabled.
- The **browser / app** used to login to AhsayCBS User Web Console or AhsayOBM.

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.

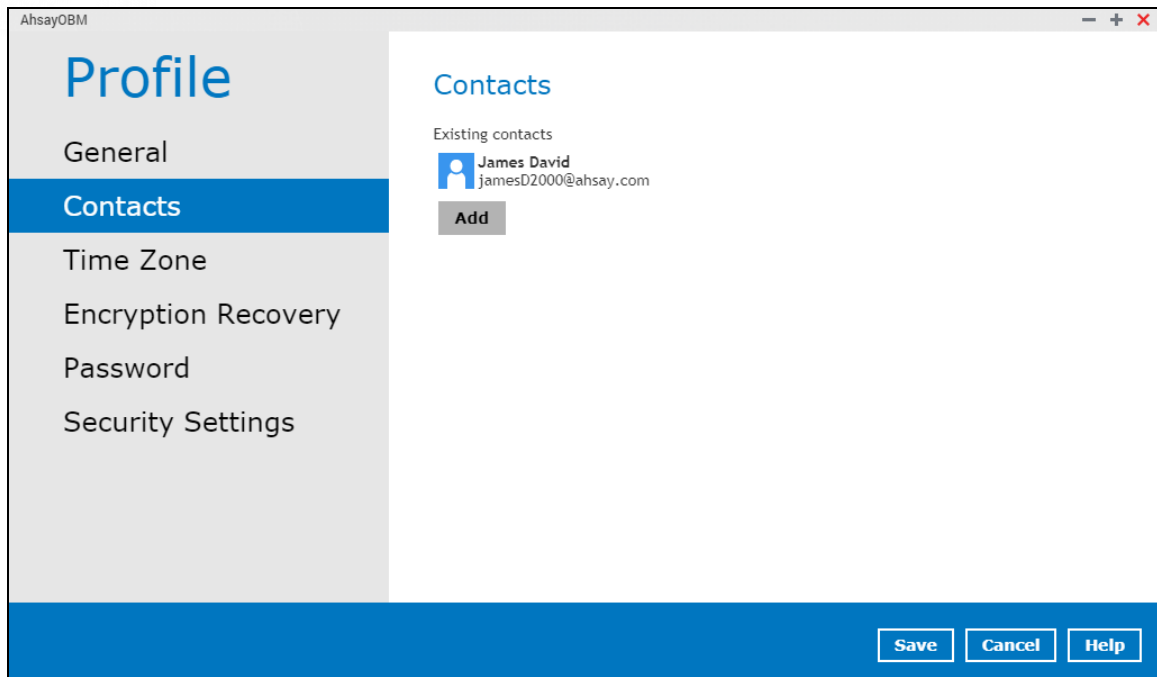


The screenshot shows the 'Profile' window of AhsayOBM. The 'Contacts' tab is selected in the left sidebar. The main area is titled 'Contacts' and shows 'Existing contacts' with an 'Add' button. At the bottom, there are 'Save', 'Cancel', and 'Help' buttons.

E-mail cannot be left blank.

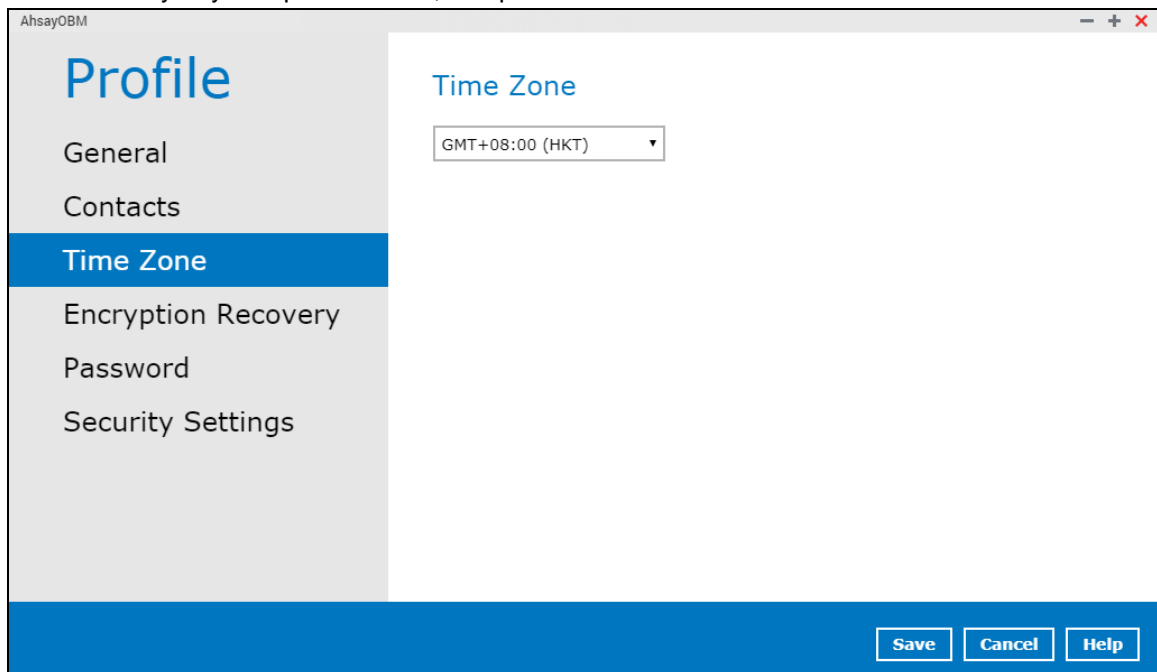


The screenshot shows the 'Contact' form in the 'Profile' window. The 'E-mail' field is highlighted with a red box and contains the text 'jamesD2000@ahsay.com'. Other fields include 'Name' (James David), 'Address', 'Company', and 'Website'. There is a checkbox for 'Send me encrypted email (S/MIME)'. At the bottom, there are 'OK' and 'Cancel' buttons.

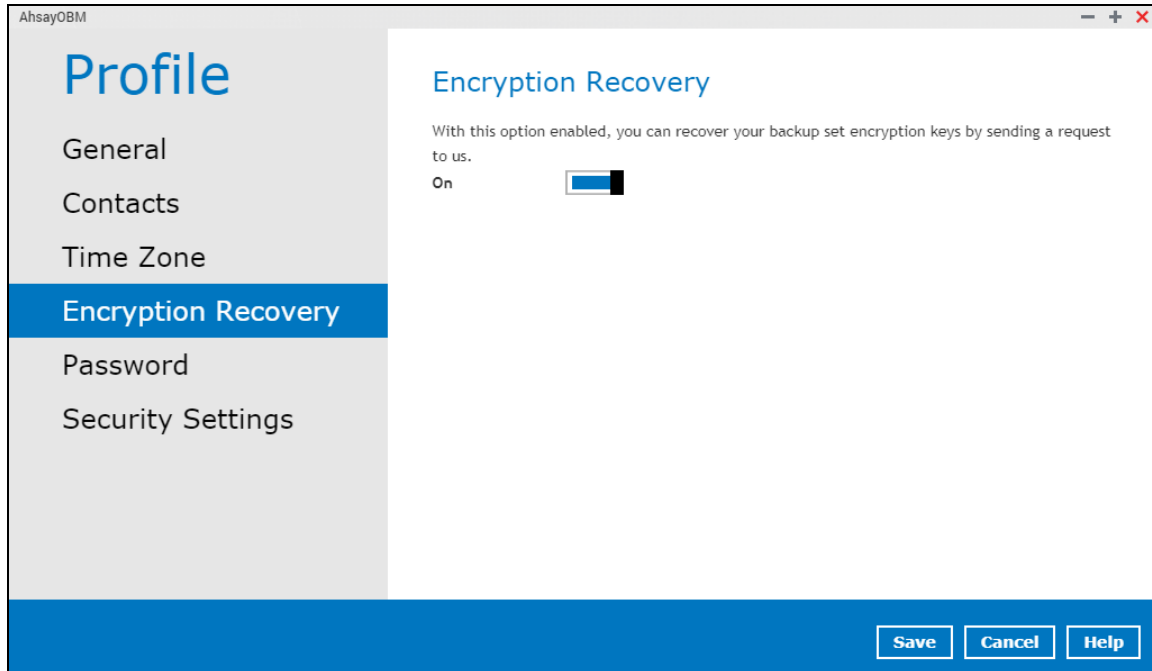


Note: You can add multiple contacts here.

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.



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

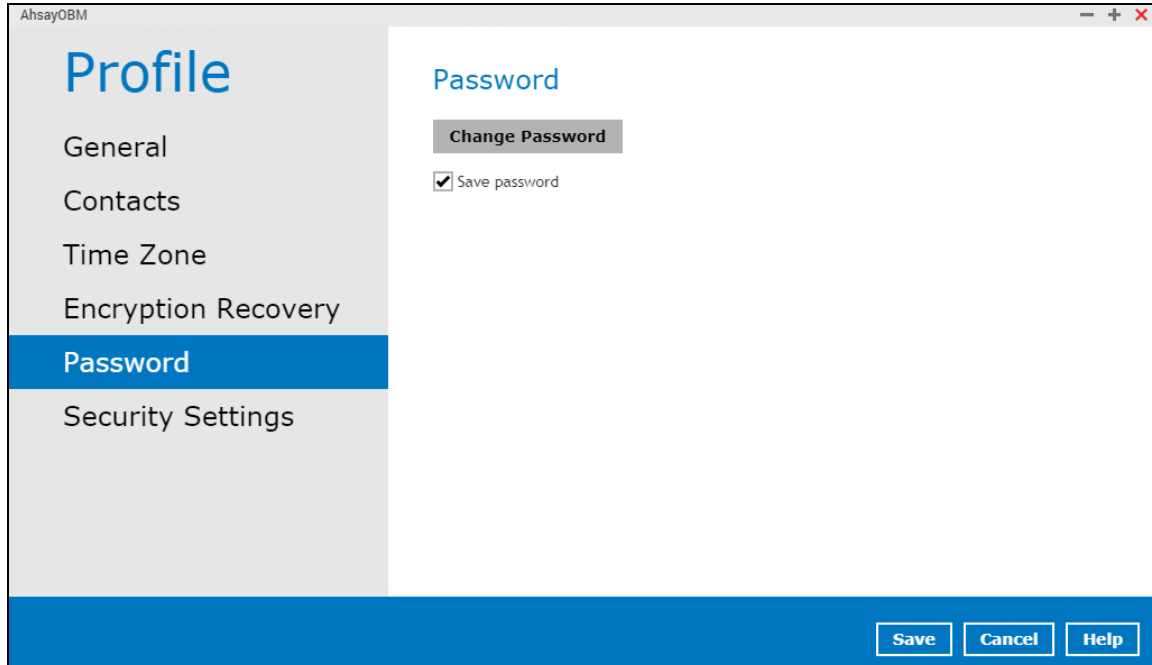


The screenshot shows the AhsayOBM Profile page. The left sidebar contains the following menu items: Profile, General, Contacts, Time Zone, Encryption Recovery (highlighted in blue), Password, and Security Settings. The main content area is titled "Encryption Recovery" and contains the text: "With this option enabled, you can recover your backup set encryption keys by sending a request to us." Below this text is a toggle switch labeled "On" which is currently turned on. At the bottom right of the page are three buttons: "Save", "Cancel", and "Help".

NOTE

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

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



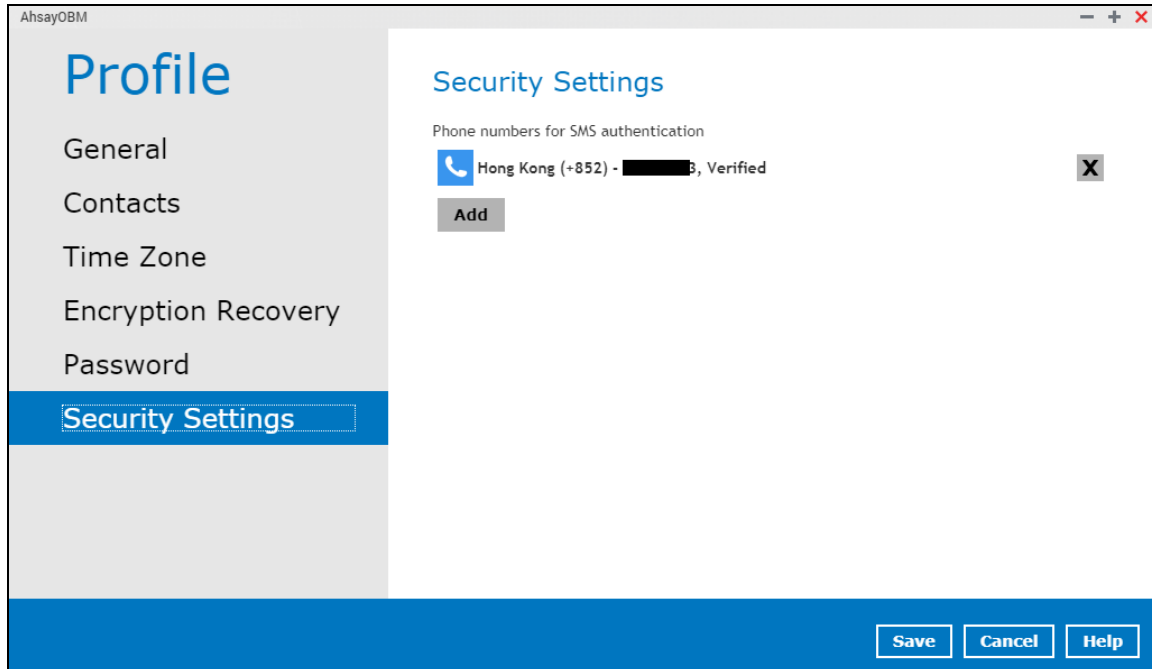
The screenshot shows the AhsayOBM Profile page with the "Password" section selected in the sidebar. The main content area is titled "Password" and contains a "Change Password" button. Below this button is a checkbox labeled "Save password" which is checked. At the bottom right of the page are three buttons: "Save", "Cancel", and "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 information.

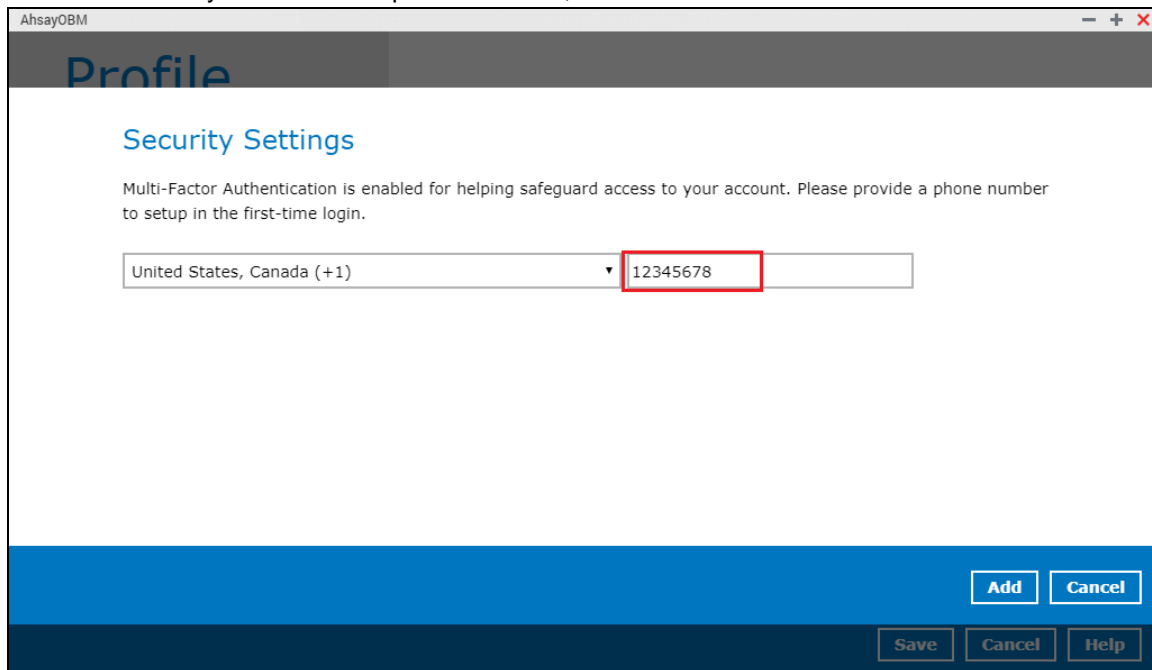
Security Settings will only be visible if two-factor authentication is enabled. Phone numbers that will be used for sending sms authentication will be listed here and will show the status if it is verified or not.

You can also add phone numbers here that can be used for sending the sms authentication.



The screenshot shows the AhsayOBM interface with the 'Profile' sidebar on the left and 'Security Settings' on the right. Under 'Security Settings', there is a section titled 'Phone numbers for SMS authentication'. It displays a single entry: 'Hong Kong (+852) - [redacted], Verified'. To the right of this entry is a close button 'X'. Below the entry is an 'Add' button. At the bottom of the page, there are three buttons: 'Save', 'Cancel', and 'Help'.

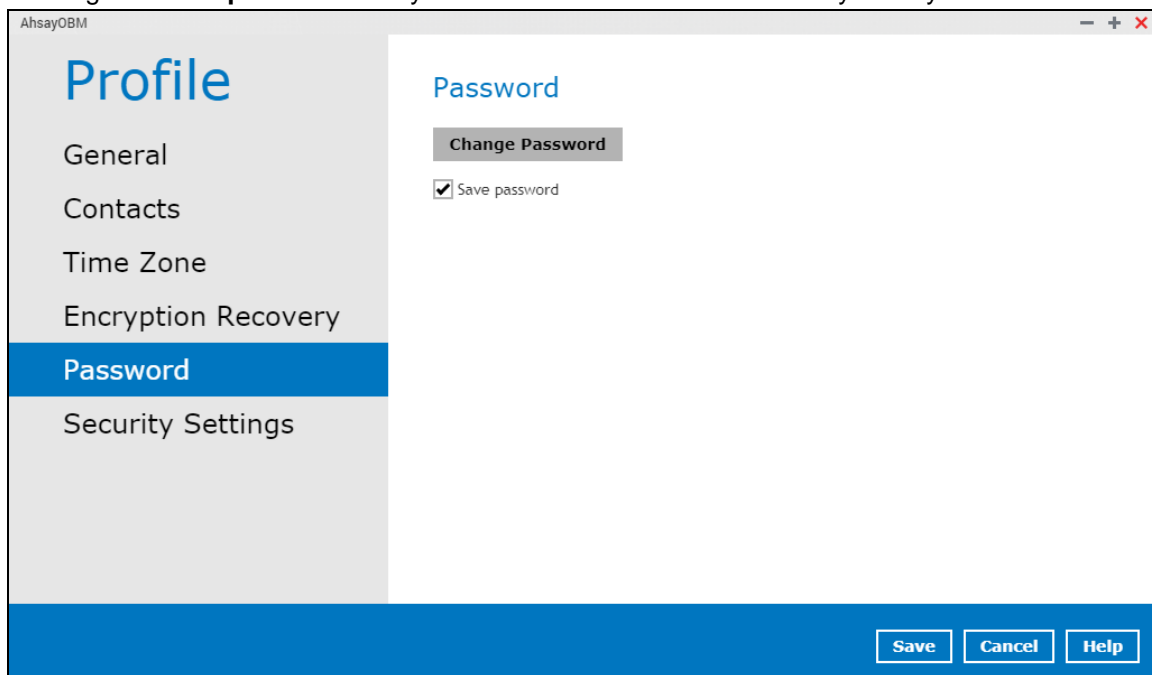
Select the country and enter the phone number, then click **Add**.



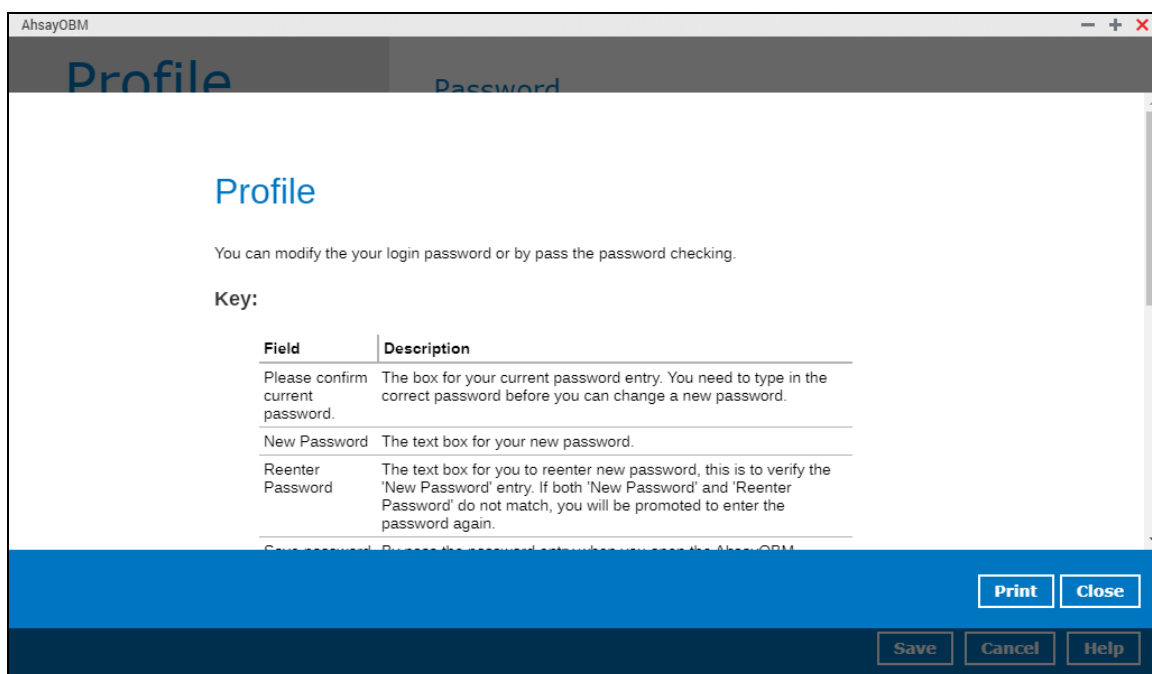
The screenshot shows the AhsayOBM interface with the 'Profile' sidebar on the left and 'Security Settings' on the right. Under 'Security Settings', there is a message: 'Multi-Factor Authentication is enabled for helping safeguard access to your account. Please provide a phone number to setup in the first-time login.' Below this message is a form with a dropdown menu showing 'United States, Canada (+1)' and a text input field containing '12345678'. The text input field is highlighted with a red border. At the bottom of the page, there are three buttons: 'Add', 'Cancel', and 'Help'.

6.2 Online Help

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



A screenshot of the AhsayOBM application window. The title bar says 'AhsayOBM'. On the left is a sidebar with a 'Profile' header and a list of menu items: 'General', 'Contacts', 'Time Zone', 'Encryption Recovery', 'Password' (which is highlighted in blue), and 'Security Settings'. The main content area is titled 'Password' and contains a 'Change Password' button and a checked checkbox labeled 'Save password'. At the bottom of the window is a blue bar with three buttons: 'Save', 'Cancel', and 'Help'.

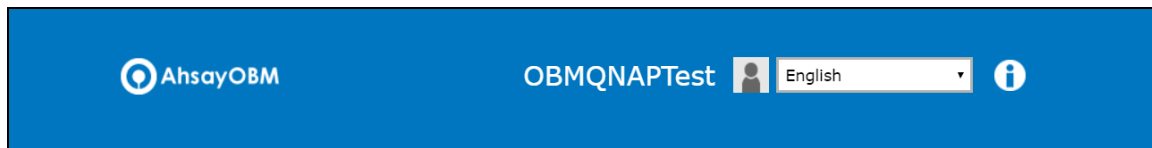


A screenshot of the AhsayOBM application window showing the 'Profile' help page. The title bar says 'AhsayOBM'. The window has a dark header bar with 'Profile' and 'Password' tabs. The main content area is titled 'Profile' and contains the text: 'You can modify the your login password or by pass the password checking.' Below this is a section titled 'Key:' followed by a table. The table has two columns: 'Field' and 'Description'. The rows are: 'Please confirm current password' (The box for your current password entry. You need to type in the correct password before you can change a new password.), 'New Password' (The text box for your new password.), 'Reenter Password' (The text box for you to reenter new password, this is to verify the 'New Password' entry. If both 'New Password' and 'Reenter Password' do not match, you will be promoted to enter the password again.), and 'Save password' (By pass the password entry when you pass the AhsayOBM). At the bottom of the window is a blue bar with three buttons: 'Print', 'Close', 'Save', 'Cancel', and 'Help'.

Field	Description
Please confirm current password.	The box for your current password entry. You need to type in the correct password before you can change a new password.
New Password	The text box for your new password.
Reenter Password	The text box for you to reenter new password, this is to verify the 'New Password' entry. If both 'New Password' and 'Reenter Password' do not match, you will be promoted to enter the password again.
Save password	By pass the password entry when you pass the AhsayOBM.

6.3 Language

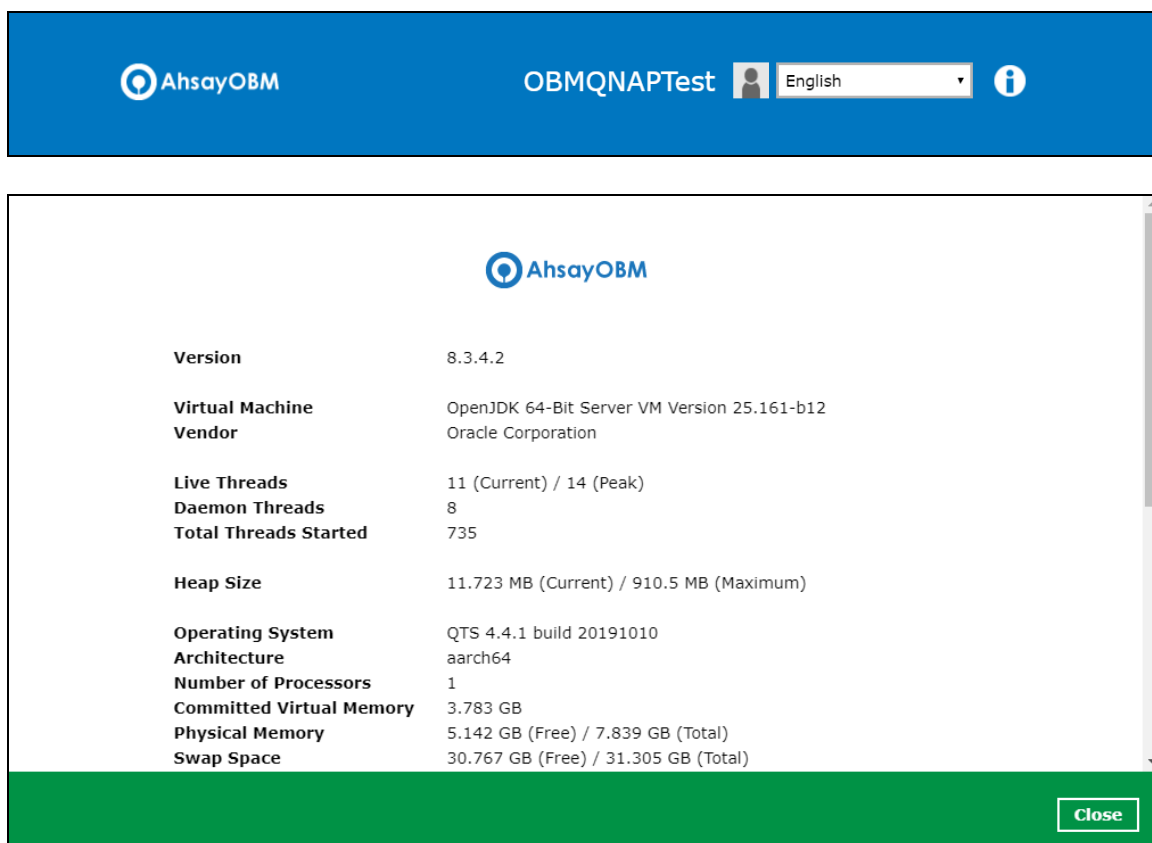
This option is used to change the language of the user interface. The list of available languages depends on the backup service provider.



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.

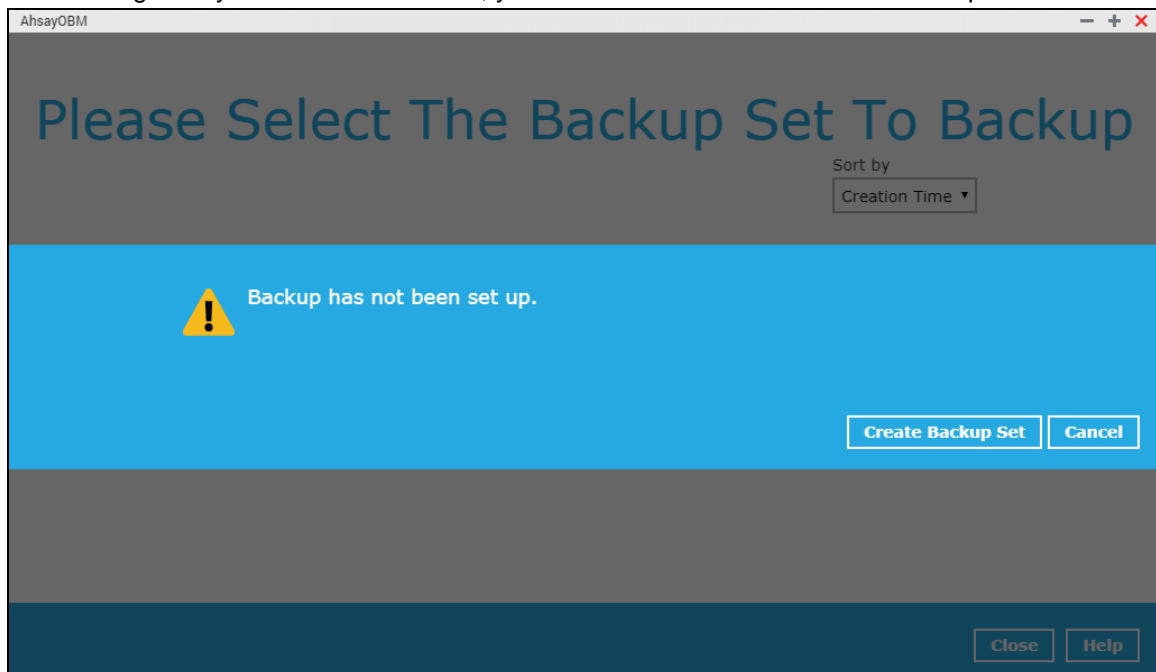


6.5 Backup

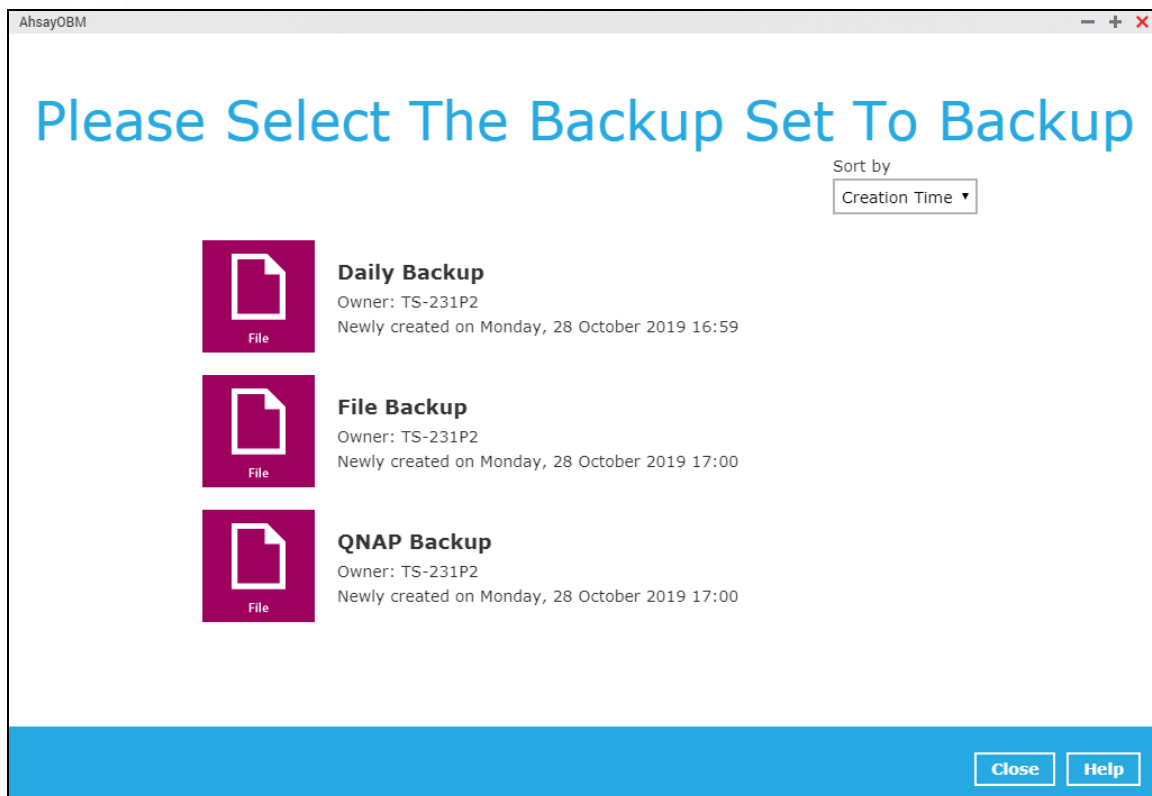
This feature is used to run your backup set(s).



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



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



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.

AhsayOBM

Choose Your Backup Options

 **QNAP Backup**


In-File Delta type

☐ Full

☐ Differential

☒ Incremental

Destinations

☒  AhsayCBS (Host: 10.90.10.14:80)

Retention Policy

☒ Run Retention Policy after backup

[Previous](#) [Backup](#) [Close](#) [Help](#)

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](#).

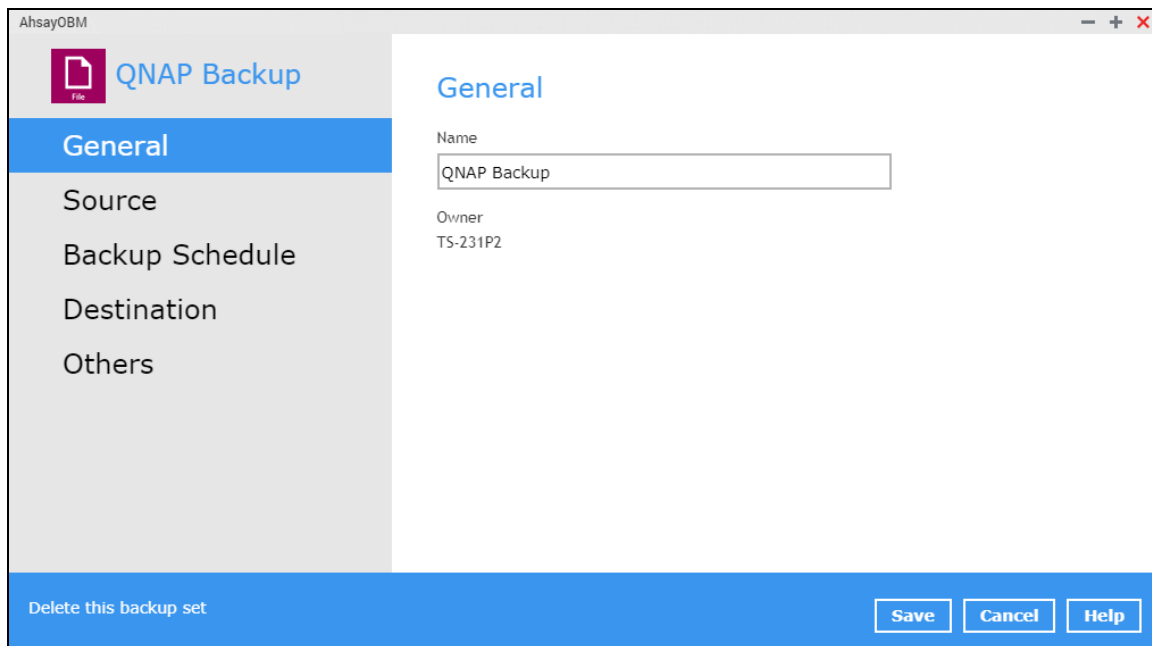
Backup Set Settings

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

- [General](#)
- [Source](#)
- [Backup Schedule](#)
- [Destination](#)
- [Others](#)

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.



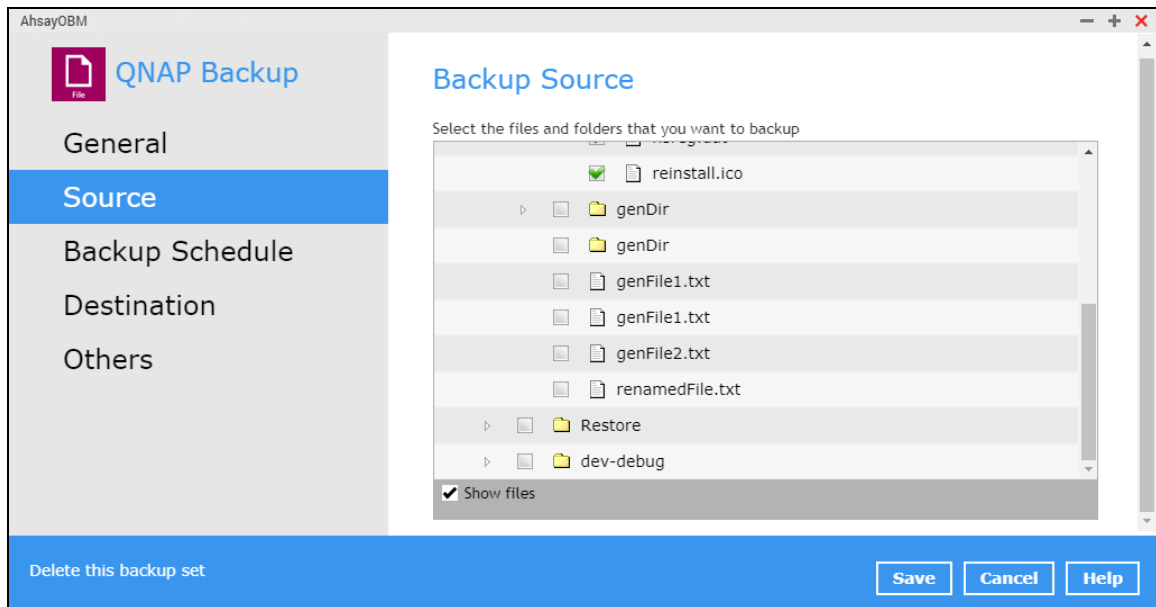
The screenshot shows a window titled "AhsayOBM" with a "QNAP Backup" icon. On the left is a sidebar with a blue header "General" and four menu items: "Source", "Backup Schedule", "Destination", and "Others". The main area is titled "General" and contains two fields: "Name" with a text input box containing "QNAP Backup", and "Owner" with the text "TS-231P2". At the bottom is a blue bar with the text "Delete this backup set" on the left and three buttons: "Save", "Cancel", and "Help" on the right.

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.

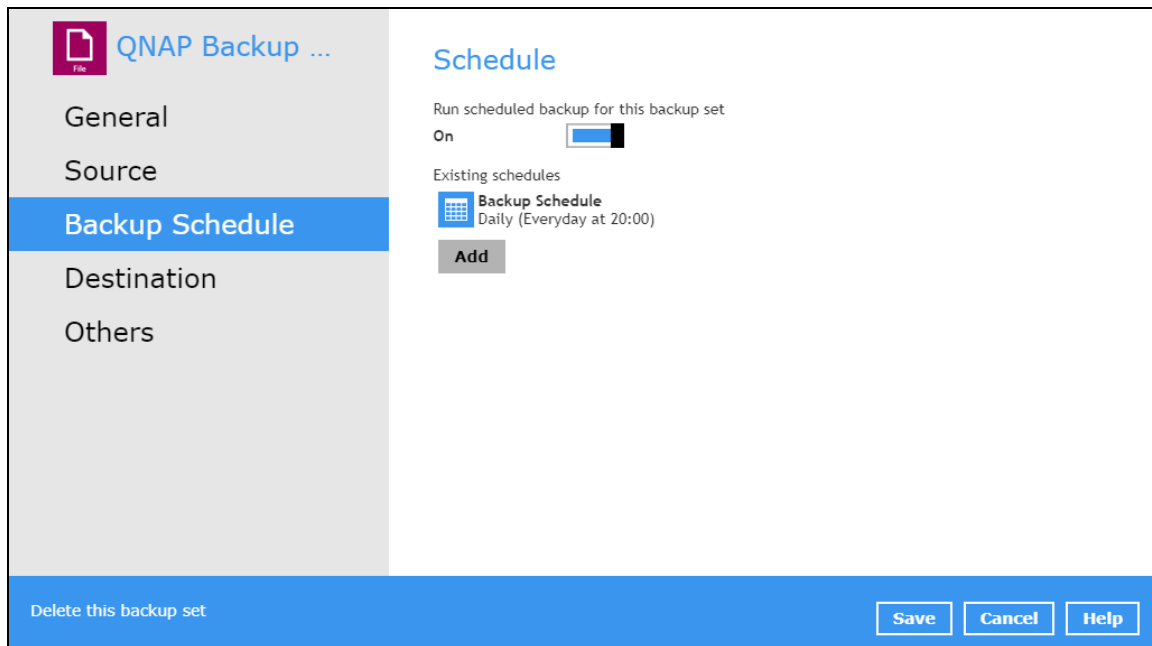


To add backup source, follow the instructions below:

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.

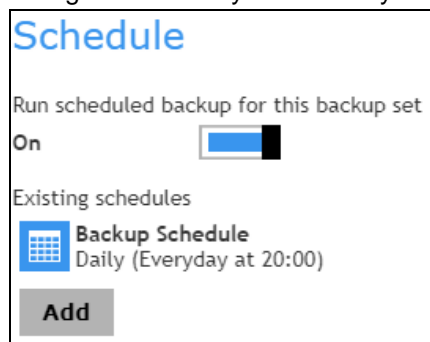


The screenshot shows the 'QNAP Backup ...' window with the 'Backup Schedule' tab selected in the left sidebar. The main area is titled 'Schedule' and contains the following elements:

- A toggle switch for 'Run scheduled backup for this backup set' is currently turned 'On'.
- A section titled 'Existing schedules' displays a single schedule: 'Backup Schedule' with a calendar icon and the text 'Daily (Everyday at 20:00)'. Below this is an 'Add' button.
- At the bottom of the window, there is a blue bar with the text 'Delete this backup set' on the left and 'Save', 'Cancel', and 'Help' buttons on the right.

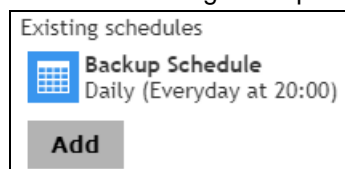
To configure a backup schedule, follow the steps below:

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.



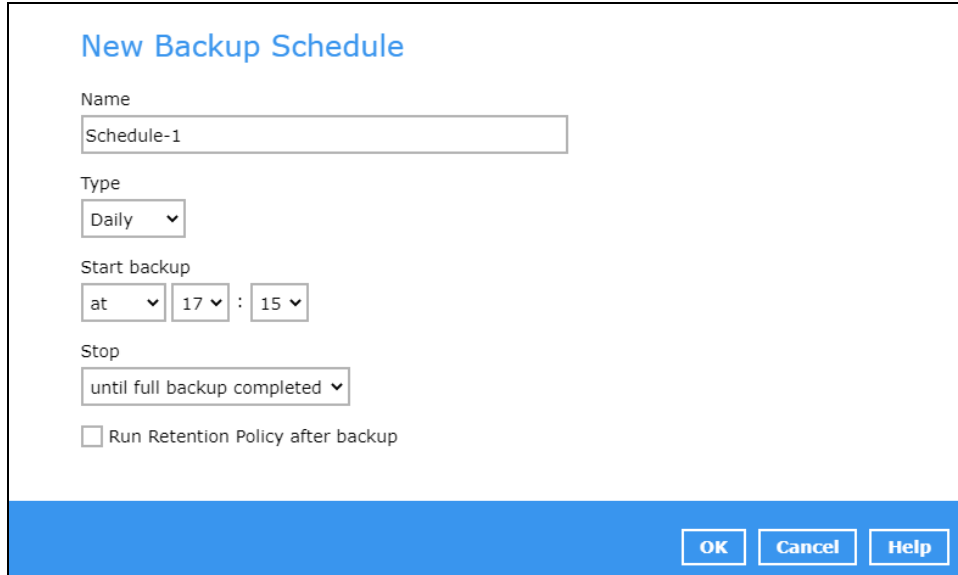
This close-up view of the 'Schedule' section shows the 'Run scheduled backup for this backup set' toggle switch is turned 'On'. Below it, the 'Existing schedules' section lists 'Backup Schedule' (Daily (Everyday at 20:00)) with an 'Add' button underneath.

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



This close-up view of the 'Existing schedules' section shows the 'Backup Schedule' (Daily (Everyday at 20:00)) entry with an 'Add' button below it.

3. In the New Backup Schedule window, configure the following backup schedule settings.

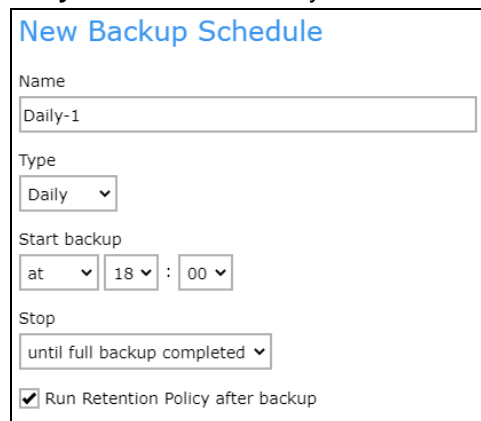


The 'New Backup Schedule' window shows the following configuration:

- Name:** Schedule-1
- Type:** Daily
- Start backup:** at 17 : 15
- Stop:** until full backup completed
- Run Retention Policy after backup:** ☐

Buttons at the bottom: OK, Cancel, Help.

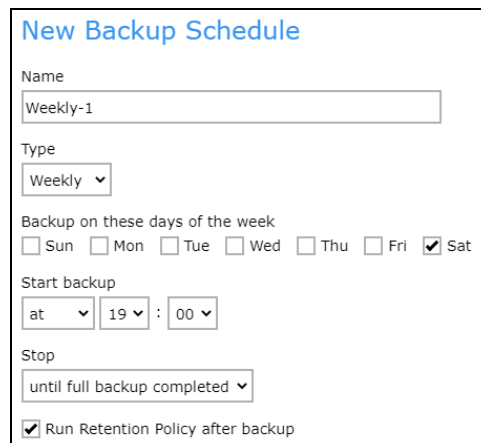
- **Name** – the name of the backup schedule.
- **Type** – the type of the backup schedule. There are four (4) different types of backup schedule: Daily, Weekly, Monthly and Custom.
- **Daily** – the time of the day when the backup job will run.



The 'New Backup Schedule' window for a Daily backup is configured as follows:

- Name:** Daily-1
- Type:** Daily
- Start backup:** at 18 : 00
- 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.



The 'New Backup Schedule' window for a Weekly backup is configured as follows:

- Name:** Weekly-1
- Type:** Weekly
- Backup on these days of the week:** ☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☒ 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.

New 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.

New Backup Schedule

Name
Custom-1

Type
Custom ▾

Backup on the following day once
2020 December 31 ▾

Start backup at
21 ▾ : 00 ▾

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.
- **every** – this option will start a backup job in intervals of minutes or hours.

Start backup
every ▾

Stop
until full backup completed ▾

☐ Run Retention Policy after backup

1 minute ▾

1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
10 minutes
12 minutes
15 minutes

Start backup
every ▾

Stop
until full backup completed ▾

☐ Run Retention Policy after backup

1 minute ▾

20 minutes
30 minutes
1 hour
2 hours
3 hours
4 hours
6 hours
8 hours
12 hours

Here is an example of a backup set that has a periodic and normal backup schedule.

Figure 1.1

Figure 1.2

Figure 1.1 – Periodic backup schedule runs every 4 hours from Monday – Friday during business hours

Figure 1.2 – Normal backup schedule runs at 21:00 or 9:00 PM on Saturday and Sunday on weekend non-business hours

- **Stop** – the stop **time** of the backup job. This only applies to schedules with start backup “at” and is not supported for periodic backup schedule (start backup “every”)
- **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 [data 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.

4. Click the **[OK]** button to save the configured backup schedule settings.
5. Click the **[Save]** button to save settings.





6. 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-1**
Custom (31/12/2020 at 21:00)

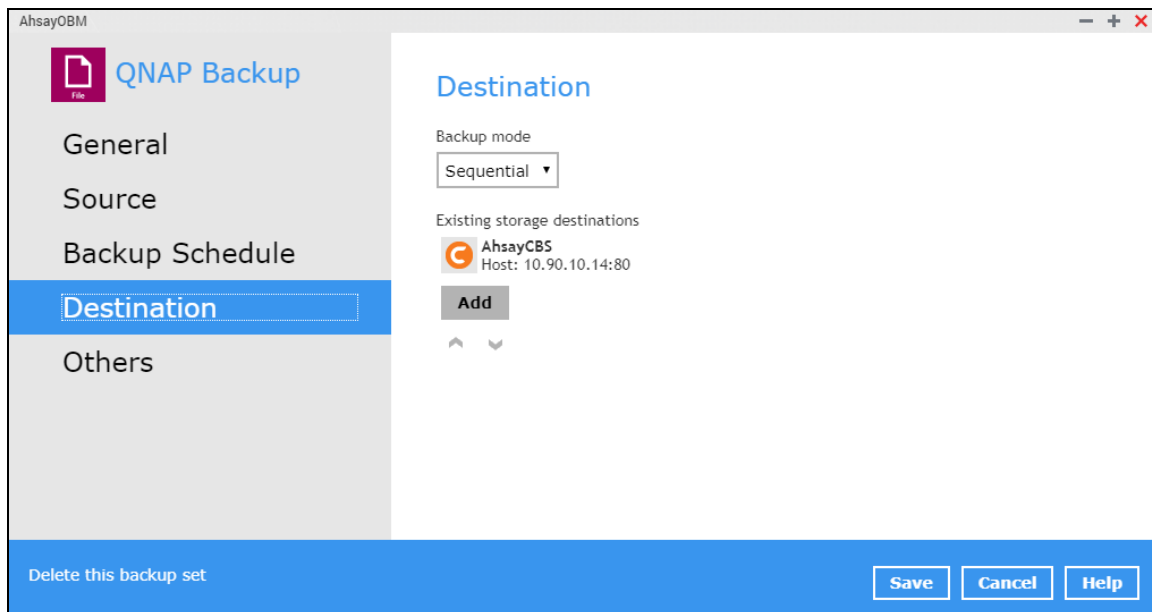
Add

NOTE

For more details on the scenario for Backup Schedule under Backup Set Settings, refer to [Appendix C: Scheduler Scenarios](#).

Destination

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



To add a destination, follow the instructions below:

1. Select [Destination].
2. Click the [Add] button.
3. Complete the following fields:
 - a. Name
 - b. 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](#)
- [Temporary Directory](#)
- [File Permissions](#)
- [Encryption](#)

The screenshot shows the 'Others' configuration tab for a QNAP backup set. The left sidebar contains navigation links: General, Source, Backup Schedule, Destination, and Others (which is highlighted). The main content area is divided into four sections: Retention Policy, Temporary Directory, File Permissions, and Encryption. The Retention Policy section has a text input '7' and a dropdown 'Day(s)'. The Temporary Directory section has a text input '/share/homes/admin/temp' and a 'Change' button, with a checked checkbox 'Remove temporary files after backup'. The File Permissions section has a toggle switch 'On'. The Encryption section shows an 'Encryption key' field with masked characters, a link 'Unmask Encryption key', and fields for 'Algorithm' (AES), 'Method' (CBC), and 'Key length' (256 bits). At the bottom, there is a blue bar with the text 'Delete this backup set' and three buttons: 'Save', 'Cancel', and 'Help'.

AhsayOBM

QNAP Backup

General

Source

Backup Schedule

Destination

Others

Retention Policy

Keep the deleted files for

7 Day(s)

Temporary Directory

Temporary directory for storing backup files

/share/homes/admin/temp **Change**

☒ Remove temporary files after backup

File Permissions

Backup files' permissions

On

Encryption

Encryption key *****

[Unmask Encryption key](#)

Algorithm AES

Method CBC

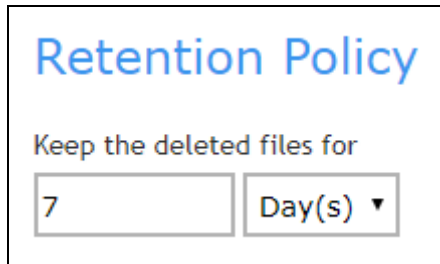
Key length 256 bits

Delete this backup set

Save **Cancel** **Help**

Retention Policy

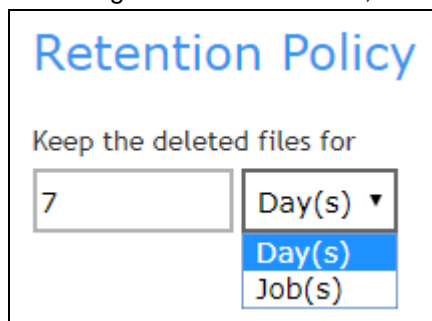
This allows the user to retain the deleted files based on the selected retention type policy.



The screenshot shows a window titled "Retention Policy". Inside, it says "Keep the deleted files for". Below this, there is a text input field containing the number "7" and a dropdown menu currently set to "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).

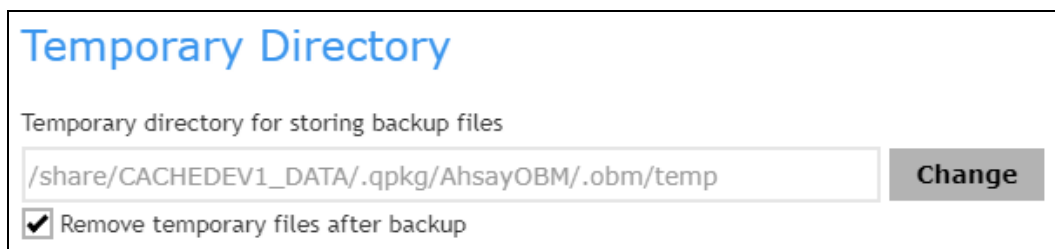


This screenshot shows the "Retention Policy" window with the dropdown menu open. The menu lists two options: "Day(s)" and "Job(s)". The "Day(s)" option is currently selected and highlighted in blue.

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.



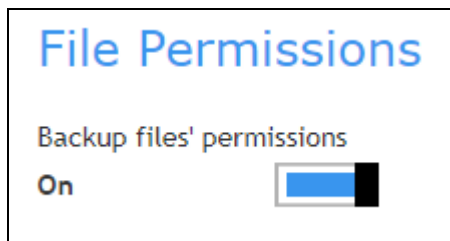
The screenshot shows a window titled "Temporary Directory". It contains the label "Temporary directory for storing backup files". Below this is a text input field with the path "/share/CACHEDEV1_DATA/.qpkg/AhsayOBM/.obm/temp". To the right of the input field is a "Change" button. At the bottom, there is a checkbox labeled "Remove temporary files after backup", which is currently checked.

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

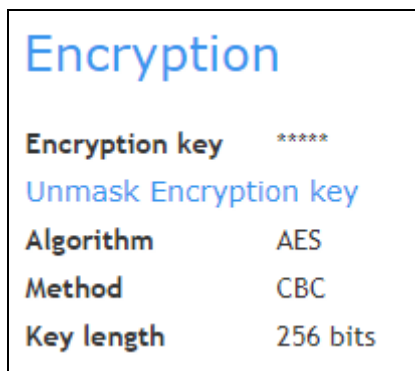
This allows the user to enable or disable the backup file permission which backups the operating system file permission of the data selected as backup source.



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.

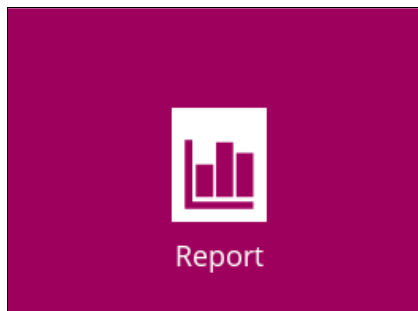
Encryption

This allows the user to view the current encryption settings. For more details about the encryption, check [Chapter 7 Creating a File Backup Set](#).



6.7 Report

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



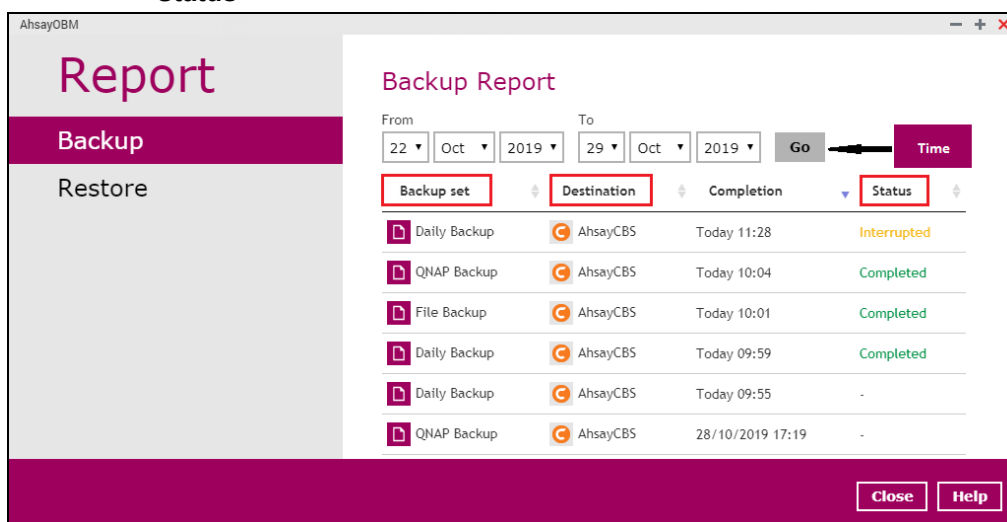
There are two (2) functions that are available for this feature:

- **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**



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

Backup Report

From

22 ▾ Oct ▾ 2019 ▾

 To

29 ▾ Oct ▾ 2019 ▾

 Go

Backup set	Destination	Completion	Status
Daily Backup	AhsayCBS	Today 11:28	Interrupted
QNAP Backup	AhsayCBS	Today 10:04	Completed
File Backup	AhsayCBS	Today 10:01	Completed
Daily Backup	AhsayCBS	Today 09:59	Completed
QNAP Backup	AhsayCBS	28/10/2019 17:19	-

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

Backup Report

From

22 ▾ Oct ▾ 2019 ▾

 To

29 ▾ Oct ▾ 2019 ▾

 Go

Backup set	Destination	Completion	Status
Daily Backup	AhsayCBS	Today 11:28	Interrupted
Daily Backup	AhsayCBS	Today 09:59	Completed
File Backup	AhsayCBS	28/10/2019 17:18	-
QNAP Backup	AhsayCBS	Today 10:04	Completed
QNAP Backup	AhsayCBS	28/10/2019 17:19	-

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

Backup Report

From

22 ▾ Oct ▾ 2019 ▾















 To

29 ▾ Oct ▾ 2019 ▾











 Go

Backup set	Destination	Completion	Status
Daily Backup	Local-1	Today 12:00	Completed
Daily Backup	AhsayCBS	Today 11:28	Interrupted
QNAP Backup	AhsayCBS	Today 10:04	Completed

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



Backup Report				
From		To		
22 ▾	Oct ▾	2019 ▾	29 ▾	Oct ▾ 2019 ▾ Go
Backup set	Destination	Completion	Status ▾	
 Daily Backup	 AhsayCBS	Today 11:28	Interrupted	
 Daily Backup	 Local-1	Today 12:00	Completed	
 QNAP Backup	 AhsayCBS	Today 10:04	Completed	
 File Backup	 AhsayCBS	Today 10:01	Completed	
 Daily Backup	 AhsayCBS	Today 09:59	Completed	
 File Backup	 AhsayCBS	Today 12:09	-	
 File Backup	 AhsayCBS	Today 12:05	-	

To view a backup report in detail, choose a specific backup set.

Backup Report				
From		To		
22 ▾	Oct ▾	2019 ▾	29 ▾	Oct ▾ 2019 ▾ Go
Backup set	Destination	Completion	Status ▾	
 Daily Backup	 AhsayCBS	Today 11:28	Interrupted	
 Daily Backup	 Local-1	Today 12:00	Completed	
 QNAP Backup	 AhsayCBS	Today 10:04	Completed	
 File Backup	 AhsayCBS	Today 10:01	Completed	
 Daily Backup	 AhsayCBS	Today 09:59	Completed	

Click **view log** to show the event log during a backup.

Backup Report

Backup set	 QNAP Backup
Destination	 AhsayCBS
Job	29/10/2019 10:04
Time	Today 10:04 - 10:04 (HKT)
Status	✓ Completed successfully
New files *	18 [168 KB / 168 KB (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 logClose

Report

Backup Report

Show All

Type	Log	Time
1	The In-File Delta Backup feature is not enabled on this account. Please be aware that files are being backed up in their entirety in this backup job.	29/10/2019 10:04:14
1	Start [AhsayOBM v8.3.0.30]	29/10/2019 10:04:26
1	Saving encrypted backup set encryption keys to server...	29/10/2019 10:04:27
1	Start Backup ... [In-File Delta: Full]	29/10/2019 10:04:28
1	Using Temporary Directory /share/CACHEDEV1_DATA/homes/admin/temp/1572253245152/OBS@1572253270044	29/10/2019 10:04:28
1	Start running pre-commands	29/10/2019 10:04:31
1	Finished running pre-commands	29/10/2019 10:04:31
1	Downloading server file list...	29/10/2019 10:04:31
1	Downloading server file list... Completed	29/10/2019 10:04:34
1	Reading backup source from hard disk...	29/10/2019 10:04:35
1	[New Directory]... /	29/10/2019 10:04:35
1	[New Directory]... /share	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData/.@upload_cache	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData/@Recently-Snapshot	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData/@Recycle	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData/Sample_Test_Data	29/10/2019 10:04:35
1	Reading backup source from hard disk... Completed	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData/genDir	29/10/2019 10:04:35
1	[New Directory]... /share/CACHEDEV1_DATA/BackupData/genDir	29/10/2019 10:04:35

CloseCloseHelp

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

The screenshot shows the 'Backup Report' window in AhsayOBM. A 'Show' dropdown menu is open, displaying options: 'All', 'Information', 'Warning', and 'Error'. The 'All' option is currently selected. The report table below shows various backup events with their types, log messages, and timestamps.

Type	Log	Time
Information	The In-File Delta Backup feature is not enabled on this account. Please be aware that files are being backed up in their entirety in this backup job.	29/10/2019 10:04:26
Information	Start [AhsayOBM v8.3.0.30]	29/10/2019 10:04:26
Information	Saving encrypted backup set encryption keys to server...	29/10/2019 10:04:27
Information	Start Backup ... [In-File Delta: Full]	29/10/2019 10:04:28
Information	Using Temporary Directory /share/CACHEDEV1_DATA/homes/admin/temp/1572253245152/OBS@1572253270044	29/10/2019 10:04:28
Information	Start running pre-commands	29/10/2019 10:04:31
Information	Finished running pre-commands	29/10/2019 10:04:31
Information	Downloading server file list...	29/10/2019 10:04:31
Information	Downloading server file list... Completed	29/10/2019 10:04:34
Information	Reading backup source from hard disk...	29/10/2019 10:04:35
Information	[New Directory]... /	29/10/2019 10:04:35
Information	[New Directory]... /share	29/10/2019 10:04:35
Information	[New Directory]... /share/CACHEDEV1_DATA	29/10/2019 10:04:35
Information	[New Directory]... /share/CACHEDEV1_DATA/BackupData	29/10/2019 10:04:35

At the bottom of the window, there are buttons for 'Close', 'Close', and 'Help'.

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

The screenshot shows the 'Backup Report' window in AhsayOBM. A 'Logs per page' dropdown menu is open, displaying options: '50', '100', '200', '500', and '1000'. The '50' option is currently selected. The report table below shows various backup events with their types, log messages, and timestamps.

Type	Log	Time
Information	The In-File Delta Backup feature is not enabled on this account. Please be aware that files are being backed up in their entirety in this backup job.	29/10/2019 11:28:13
Information	Start [AhsayOBM v8.3.0.30]	29/10/2019 11:28:25
Information	Saving encrypted backup set encryption keys to server...	29/10/2019 11:28:26
Information	Start Backup ... [In-File Delta: Full]	29/10/2019 11:28:27
Information	Using Temporary Directory /share/CACHEDEV1_DATA/homes/admin/temp/1572253165285/OBS@1572253182589	29/10/2019 11:28:27
Information	Start running pre-commands	29/10/2019 11:28:30
Information	Finished running pre-commands	29/10/2019 11:28:30
Information	Start running post-commands	29/10/2019 11:28:30
Information	Finished running post-commands	29/10/2019 11:28:30
Information	Deleting temporary file /share/CACHEDEV1_DATA/homes/admin/temp/1572253165285/OBS@1572253182589	29/10/2019 11:28:33
Warning	Backup Interrupted by User	29/10/2019 11:28:35

At the bottom of the window, there are buttons for 'Close', 'Close', and 'Help'.

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.

AhsayOBM

Report

Backup

Restore

Restore Report

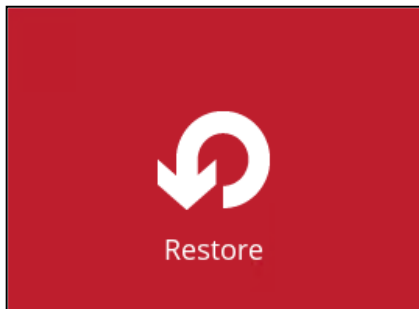
From: 22 Oct 2019 To: 29 Oct 2019 [Go](#)

Backup set	Destination	Job	Status
Q NAP Backup	AhsayCBS	Today 14:08	Interrupted
Q NAP Backup	AhsayCBS	Today 11:27	Completed
Q NAP Backup	AhsayCBS	Today 11:26	Completed
File Backup	AhsayCBS	Today 11:25	Completed
Daily Backup	AhsayCBS	Today 11:24	Completed

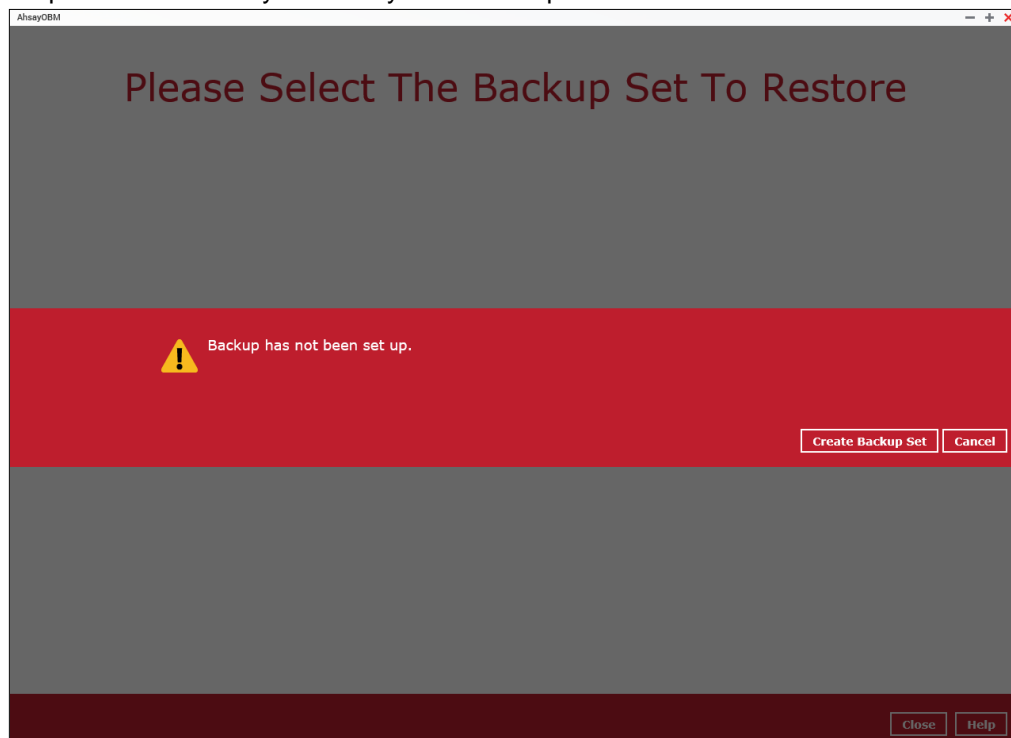
[Close](#) [Help](#)

6.8 Restore

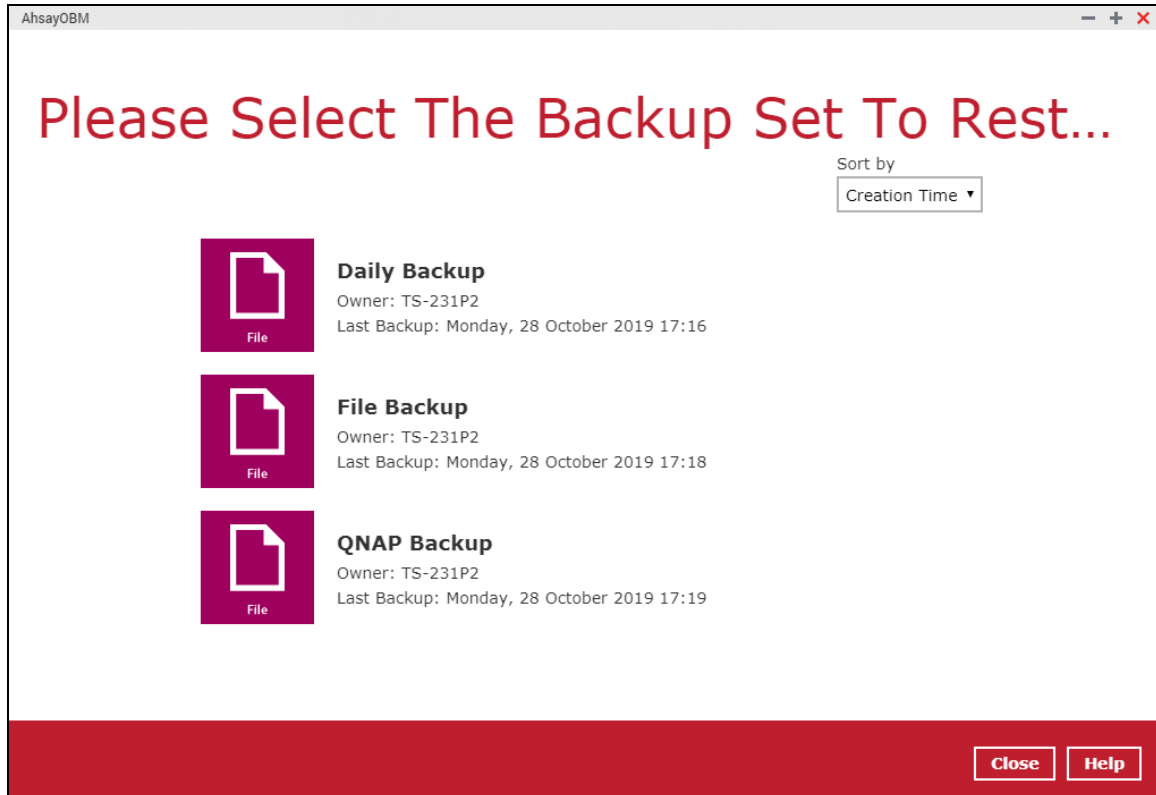
This feature is used to copy the backed-up file(s) from the backup set and restoring it to its original location or new location.



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.

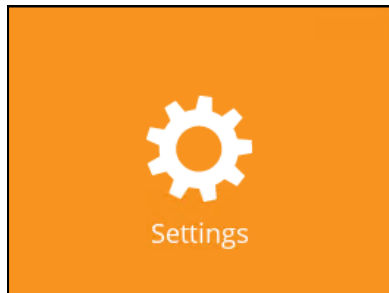


If a backup job has been performed, select a backup set you wish to restore.



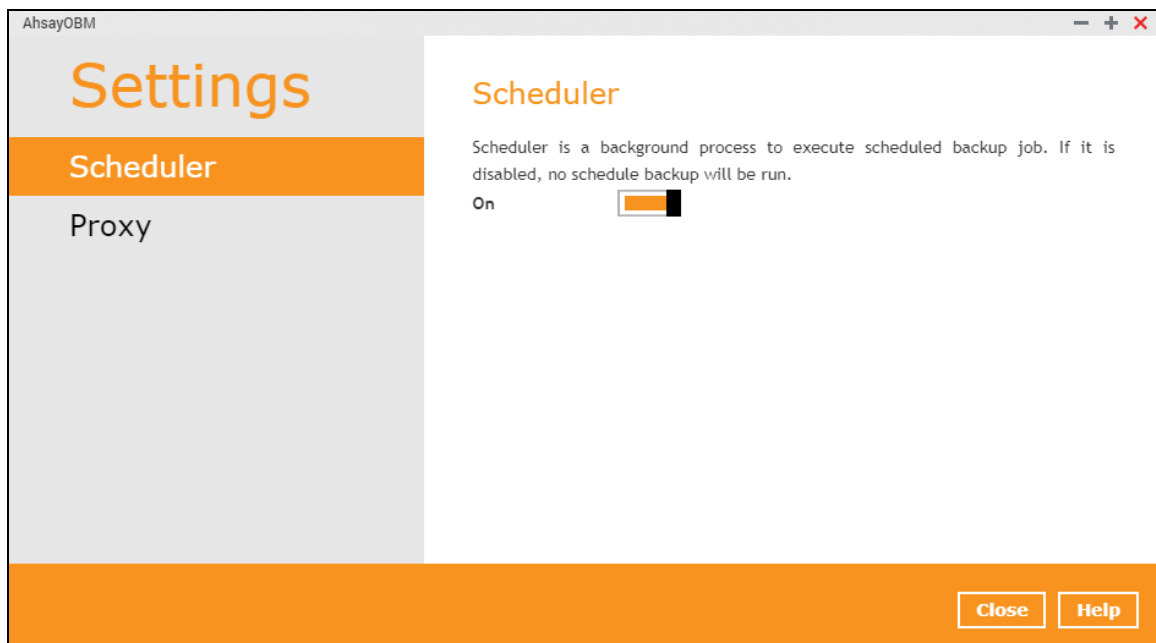
6.9 Settings

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.



Note

For more details on the scenario for the Scheduler under Settings, refer to [Appendix C: Scheduler Scenarios](#).

6.9.2 Proxy

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

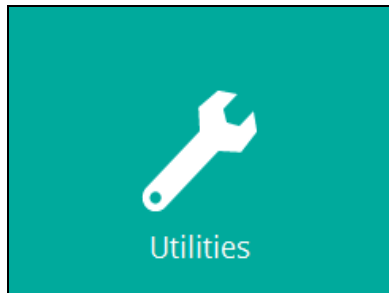
The screenshot shows the AhsayOBM Settings window with the 'Proxy (HTTP)' tab selected. The window has a title bar with 'AhsayOBM' and standard window controls. The left sidebar contains 'Settings', 'Scheduler', and 'Proxy' (highlighted in orange). The main content area is titled 'Proxy (HTTP)' and contains the following elements:

- A toggle switch for 'Use proxy to access the Internet' is set to 'On'.
- Input fields for 'IP address' and 'Port' are provided.
- Input fields for 'Login ID' and 'Password' are provided.
- A 'Test connection' button is located below the password field.

At the bottom of the window, there is an orange bar containing 'Save', 'Cancel', and 'Help' buttons.

6.10 Utilities

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).

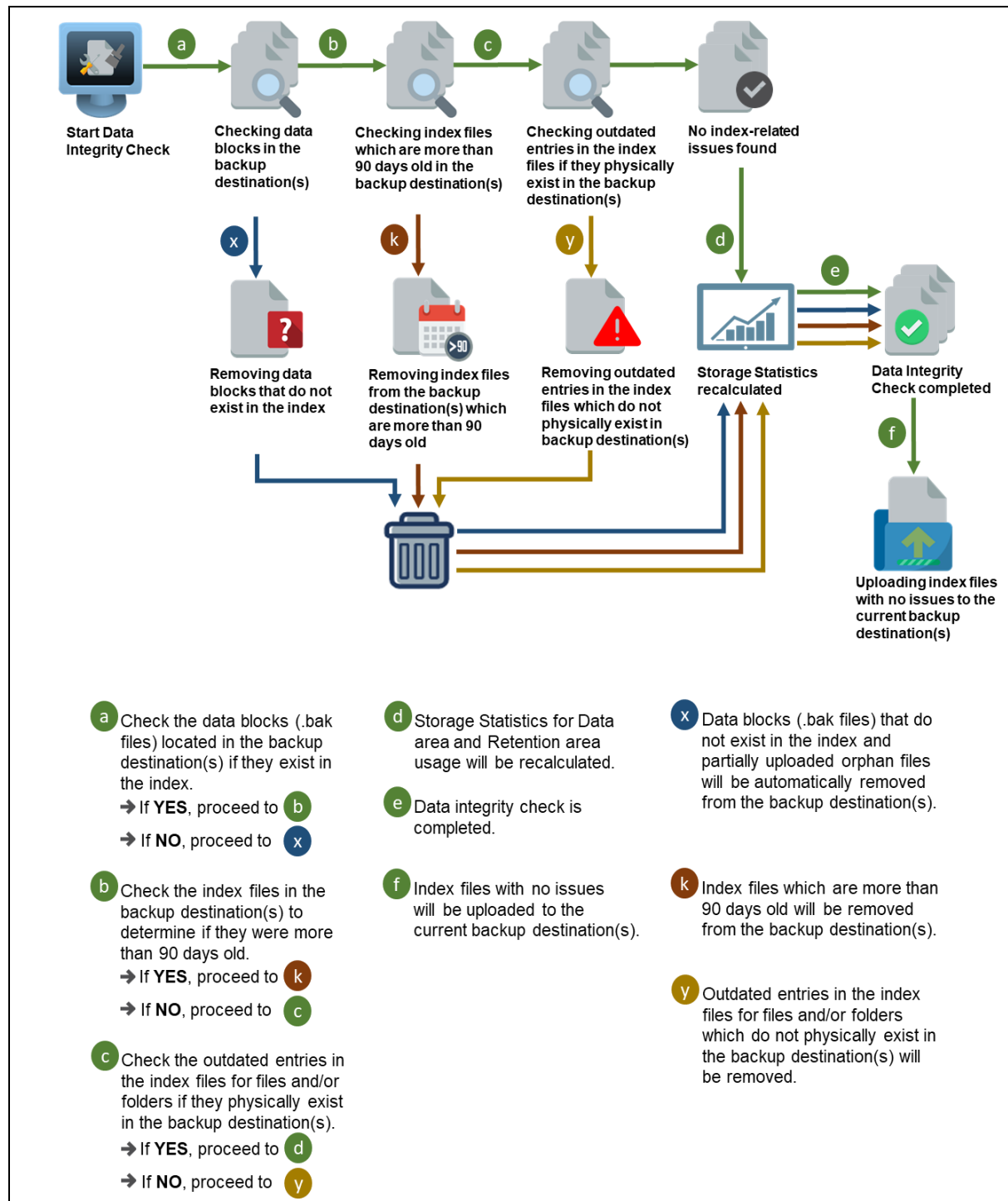
There are two (2) options in performing the Data Integrity Check:

Option 1 <input type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check Start	For checking of index and data.
Option 2 <input checked="" type="checkbox"/> 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.

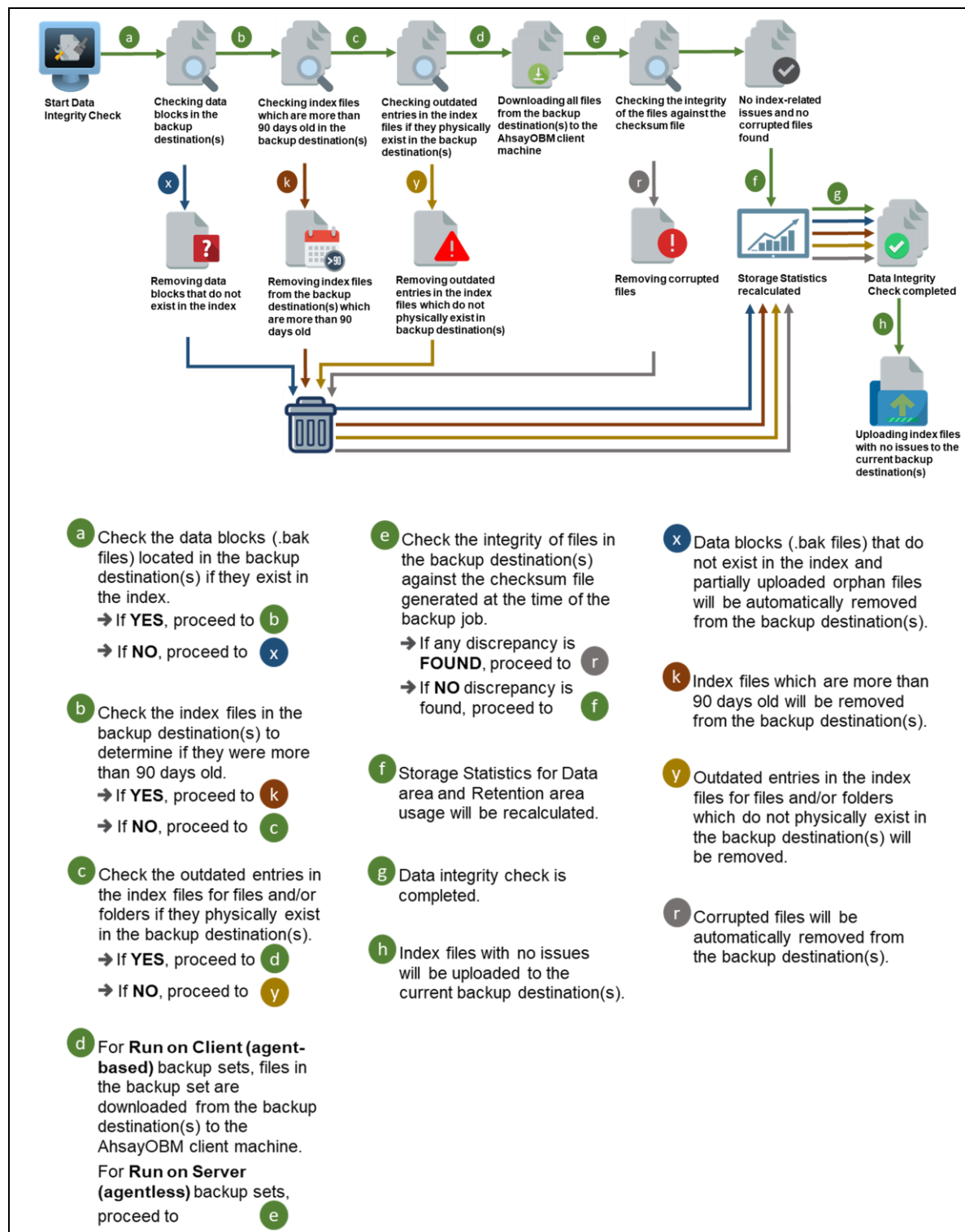
The following diagrams show the detailed process of the Data Integrity Check (DIC) in two (2) modes:

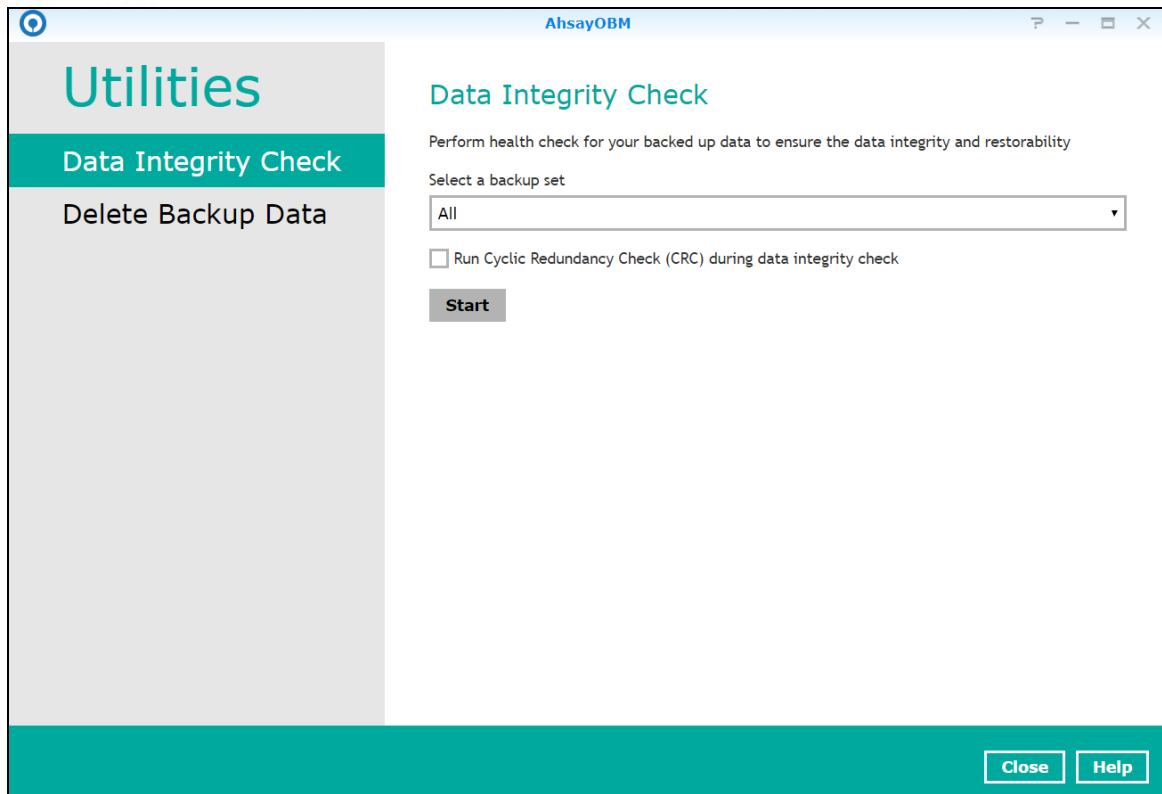
- **Option 1**
Disabled Run Cyclic Redundancy Check (CRC) - **(Default mode)**
- **Option 2**
Enabled Run Cyclic Redundancy Check (CRC)

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



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

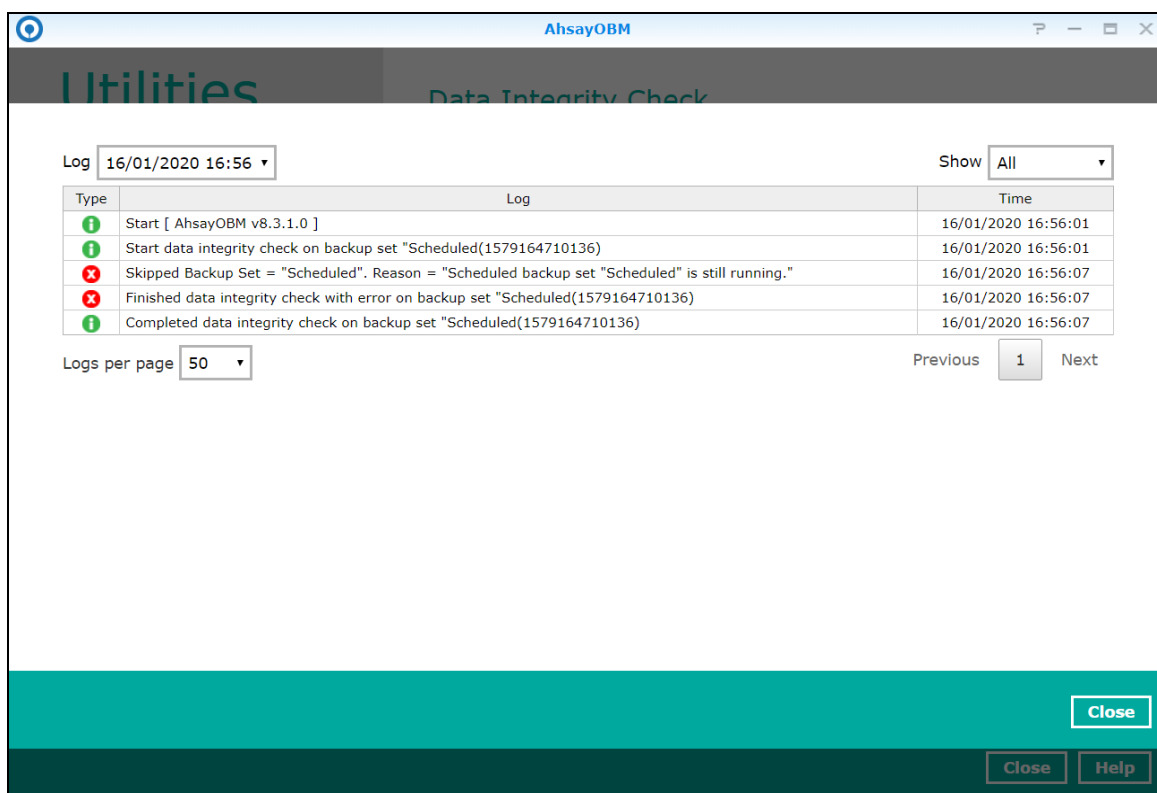
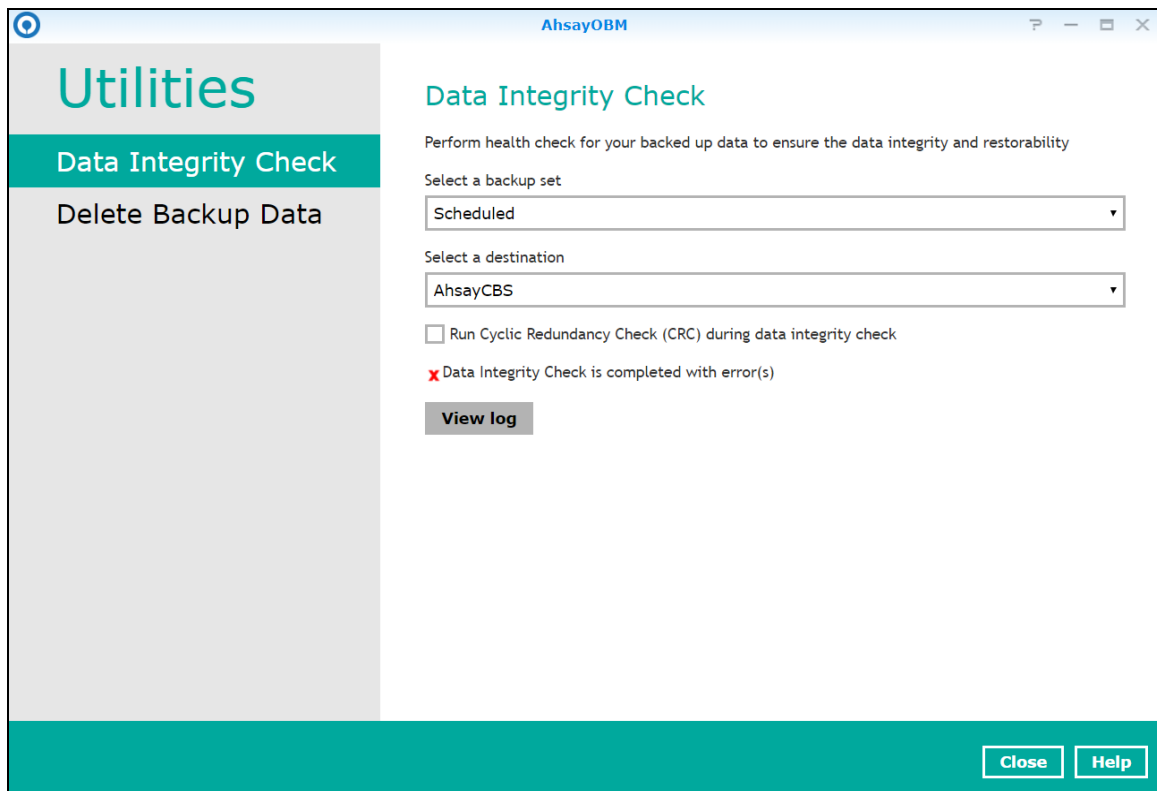




NOTES

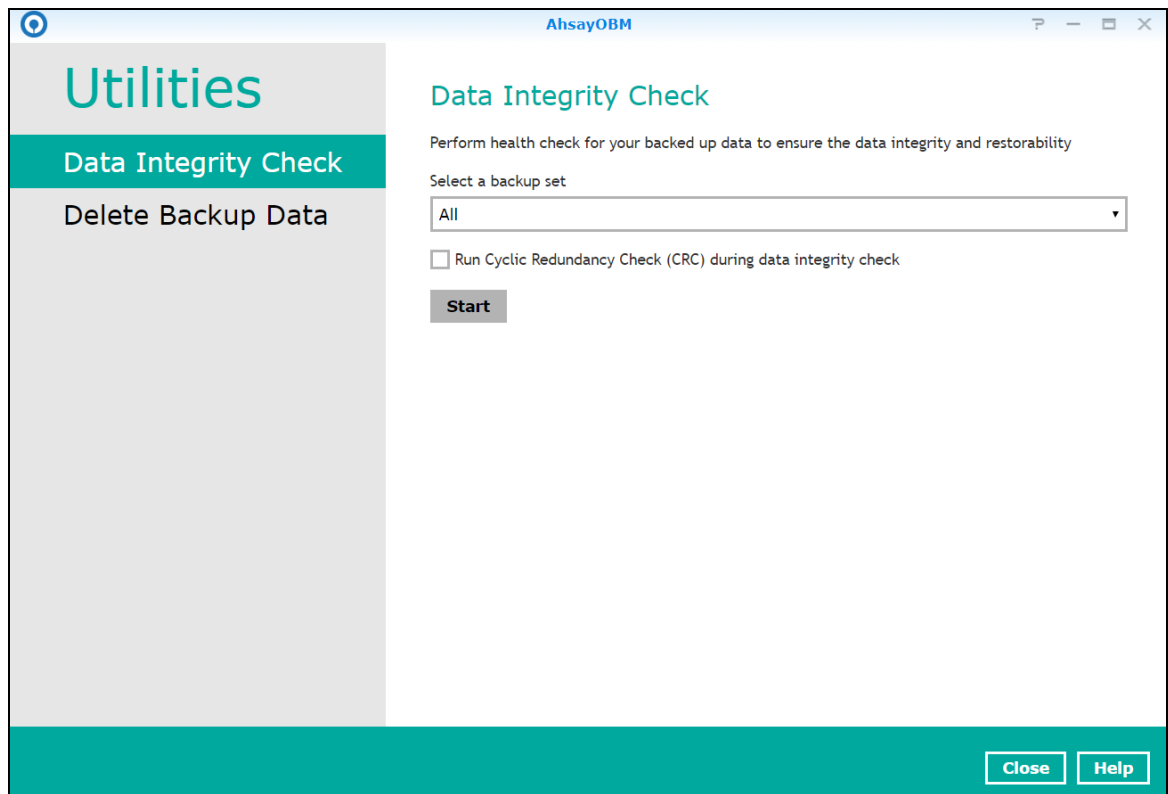
1. Data Integrity Check CANNOT fix or repair files that are already corrupted.
2. Data Integrity Check can only be started if there is NO active backup or restore job(s) running on the backup set selected for the DIC job. As the **backup**, **restore** and **data integrity check** are using the same 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).

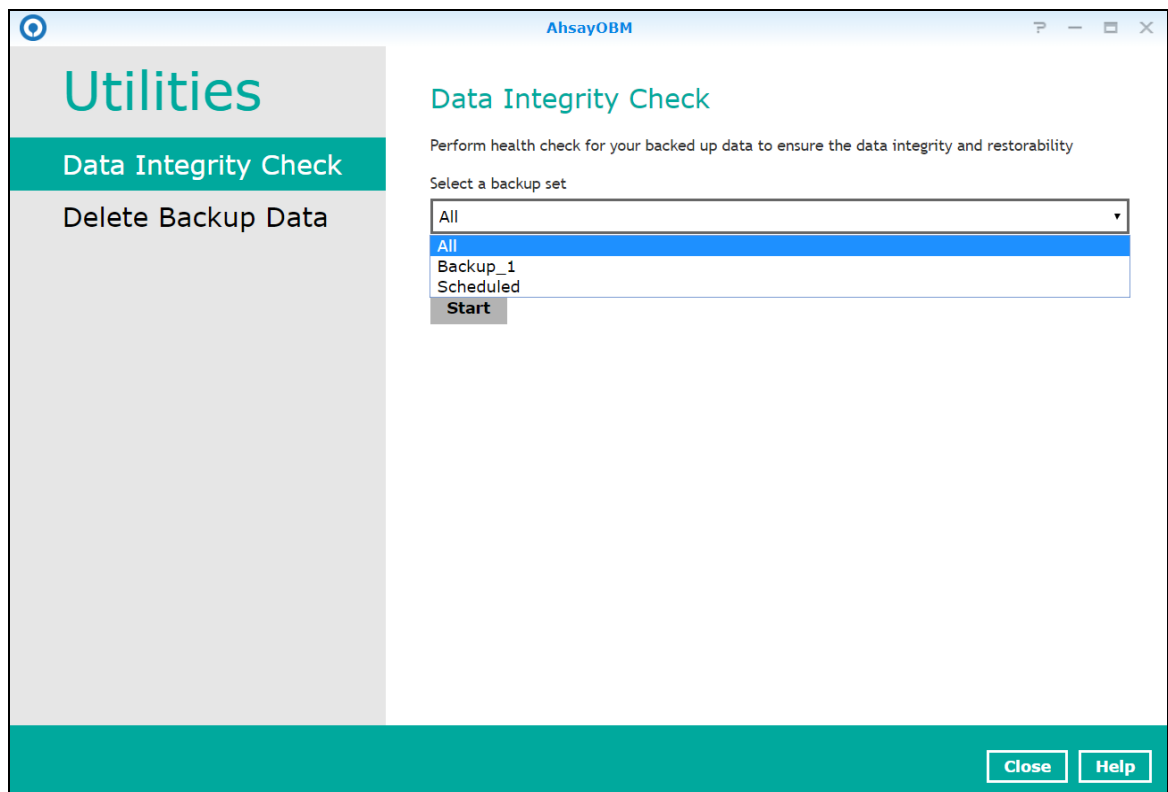


To perform a Data Integrity Check, follow the instructions below:

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.

Utilities

Data Integrity Check

Delete Backup Data

Data Integrity Check

Perform health check for your backed up data to ensure the data integrity and restorability

Select a backup set

Backup_1

Select a destination

All

All

AhsayCBS

Start

Close **Help**

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

Utilities

Data Integrity Check

Delete Backup Data

Data Integrity Check

Perform health check for your backed up data to ensure the data integrity and restorability

Select a backup set

All

☐ Run Cyclic Redundancy Check (CRC) during data integrity check

Start

Close **Help**

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.

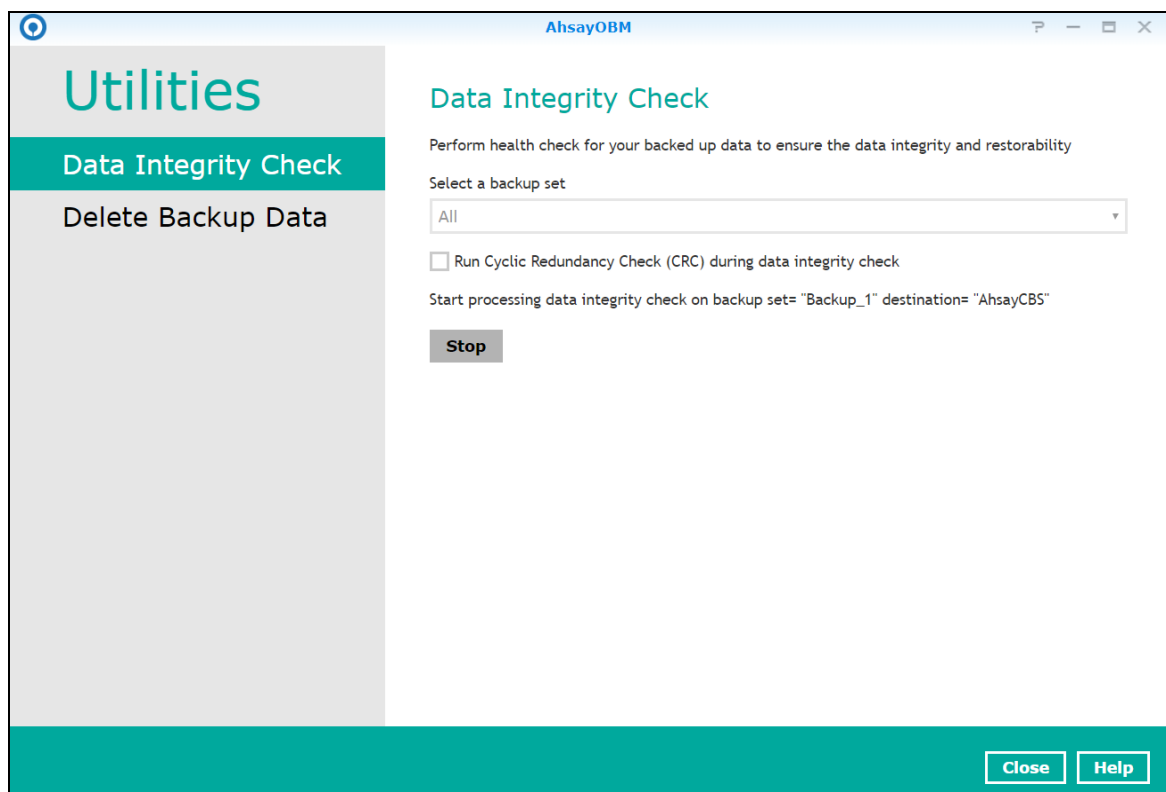
The time required to complete a data integrity check depends on the number of factors such as:

- 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

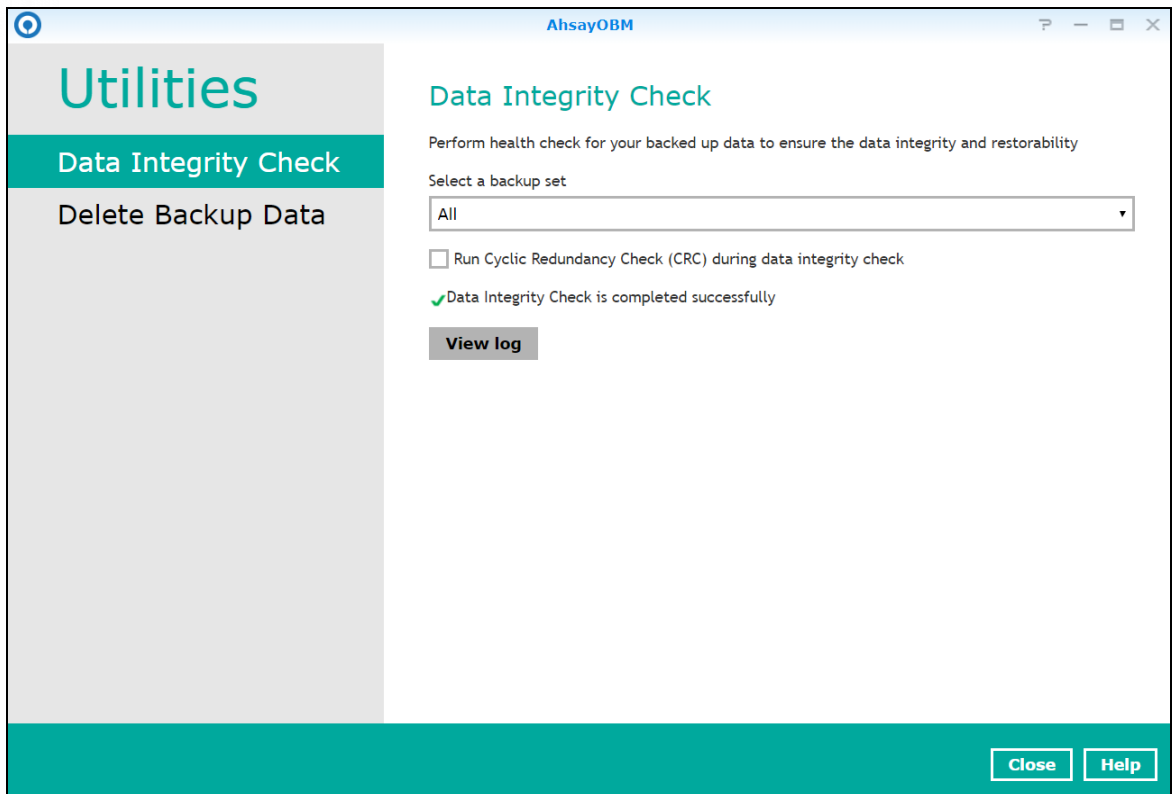
NOTE

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.

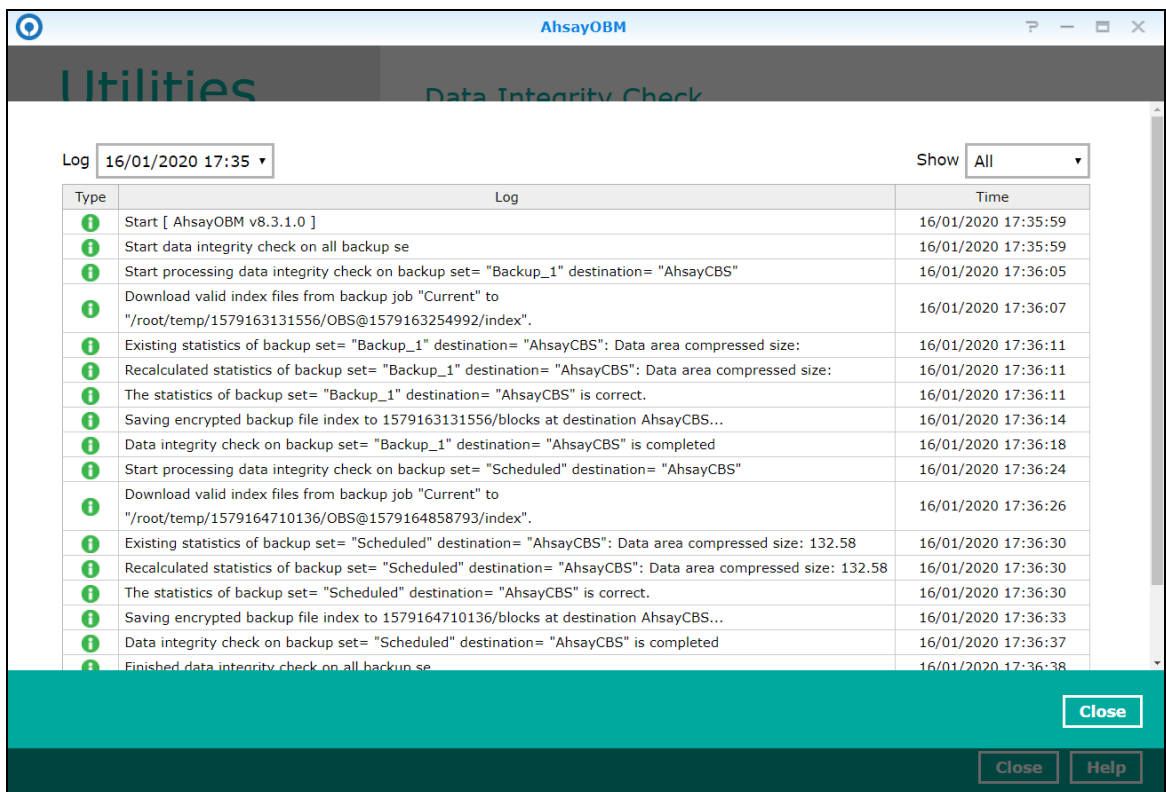
5. Click the [Start] button to begin the Data Integrity Check.
6. Data Integrity Check will start running on the selected backup set(s) and backup destination(s).



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.



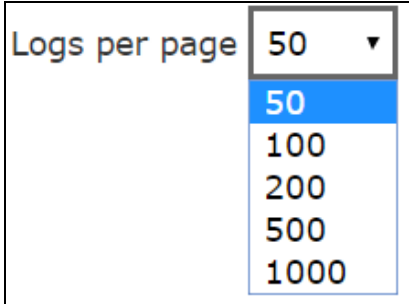

The following options can be used for further viewing of the detailed DIC log:

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

The screenshot shows the AhsayOBM Data Integrity Check utility window. The window has a title bar with the AhsayOBM logo and standard window controls. The main content area is titled 'Utilities' and 'Data Integrity Check'. It features a log table with columns 'Type', 'Log', and 'Time'. The log entries are filtered by date and time. The 'Log' dropdown is set to '16/01/2020 17:35'. The 'Show' dropdown is set to 'All'. The 'Logs per page' dropdown is set to '50'. The 'Previous', '1', and 'Next' buttons are visible at the bottom right.

Type	Log	Time
i	Start [AhsayOBM v8.3.1.0]	16/01/2020 17:35:27
i	Start data integrity check on backup set "Backup_1(1579163131556)"	16/01/2020 17:35:27
i	Start processing data integrity check on backup set= "Backup_1" destination= "AhsayCBS"	16/01/2020 17:35:33
i	Download valid index files from backup job "Current" to "/root/temp/1579163131556/OBS@1579163254992/index".	16/01/2020 17:35:35
i	Existing statistics of backup set= "Backup_1" destination= "AhsayCBS": Data area compressed size:	16/01/2020 17:35:39
i	Recalculated statistics of backup set= "Backup_1" destination= "AhsayCBS": Data area compressed size:	16/01/2020 17:35:39
i	The statistics of backup set= "Backup_1" destination= "AhsayCBS" is correct.	16/01/2020 17:35:39
i	Saving encrypted backup file index to 1579163131556/blocks at destination AhsayCBS...	16/01/2020 17:35:42
i	Data integrity check on backup set= "Backup_1" destination= "AhsayCBS" is completed	16/01/2020 17:35:46
i	Finished data integrity check on backup set "Backup_1(1579163131556)"	16/01/2020 17:35:46
i	Completed data integrity check on backup set "Backup_1(1579163131556)"	16/01/2020 17:35:46

Control	Screenshot	Description
Log filter		This option can be used to display logs of the previous data integrity check jobs.
Show filter		<p>This option can be used to sort the data integrity check log by its status (i.e., All, Information, Warning, and Error).</p> <p>With this filter, it will be easier to sort the DIC logs by its status especially for longer data integrity check logs.</p>

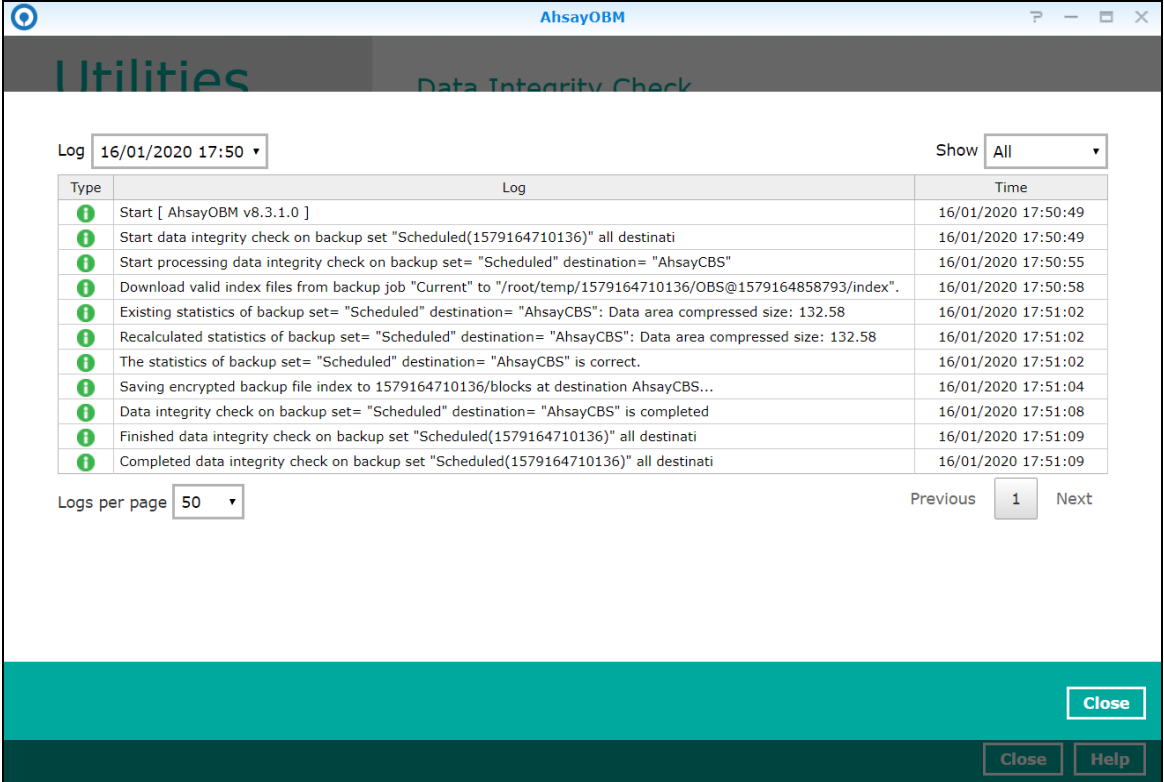
Logs per page		This option allows user to control the displayed number of logs per page.
Page		This option allows user to navigate the logs to the next page(s).

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 and deleted

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



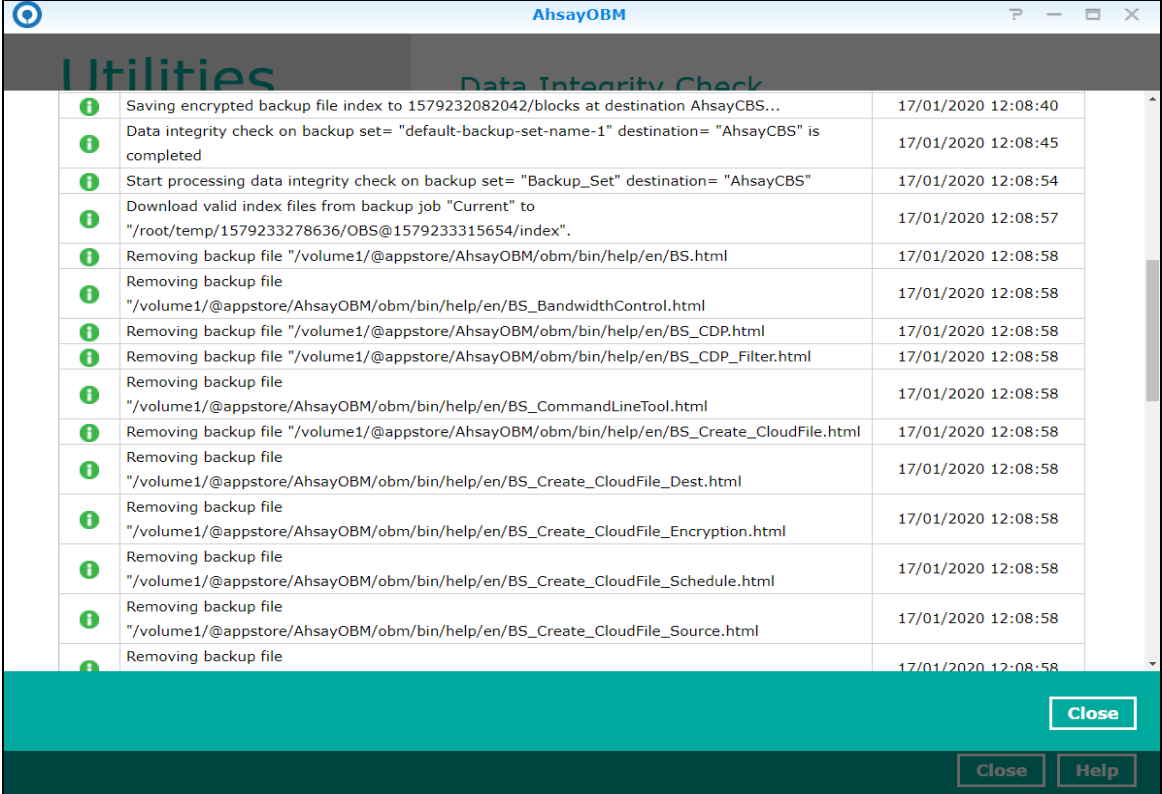
Utilities **Data Integrity Check**

Log Show

Type	Log	Time
	Start [AhsayOBM v8.3.1.0]	16/01/2020 17:50:49
	Start data integrity check on backup set "Scheduled(1579164710136)" all destinati	16/01/2020 17:50:49
	Start processing data integrity check on backup set= "Scheduled" destination= "AhsayCBS"	16/01/2020 17:50:55
	Download valid index files from backup job "Current" to "/root/temp/1579164710136/OBS@1579164858793/index".	16/01/2020 17:50:58
	Existing statistics of backup set= "Scheduled" destination= "AhsayCBS": Data area compressed size: 132.58	16/01/2020 17:51:02
	Recalculated statistics of backup set= "Scheduled" destination= "AhsayCBS": Data area compressed size: 132.58	16/01/2020 17:51:02
	The statistics of backup set= "Scheduled" destination= "AhsayCBS" is correct.	16/01/2020 17:51:02
	Saving encrypted backup file index to 1579164710136/blocks at destination AhsayCBS...	16/01/2020 17:51:04
	Data integrity check on backup set= "Scheduled" destination= "AhsayCBS" is completed	16/01/2020 17:51:08
	Finished data integrity check on backup set "Scheduled(1579164710136)" all destinati	16/01/2020 17:51:09
	Completed data integrity check on backup set "Scheduled(1579164710136)" all destinati	16/01/2020 17:51:09

Logs per page Previous Next

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).



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

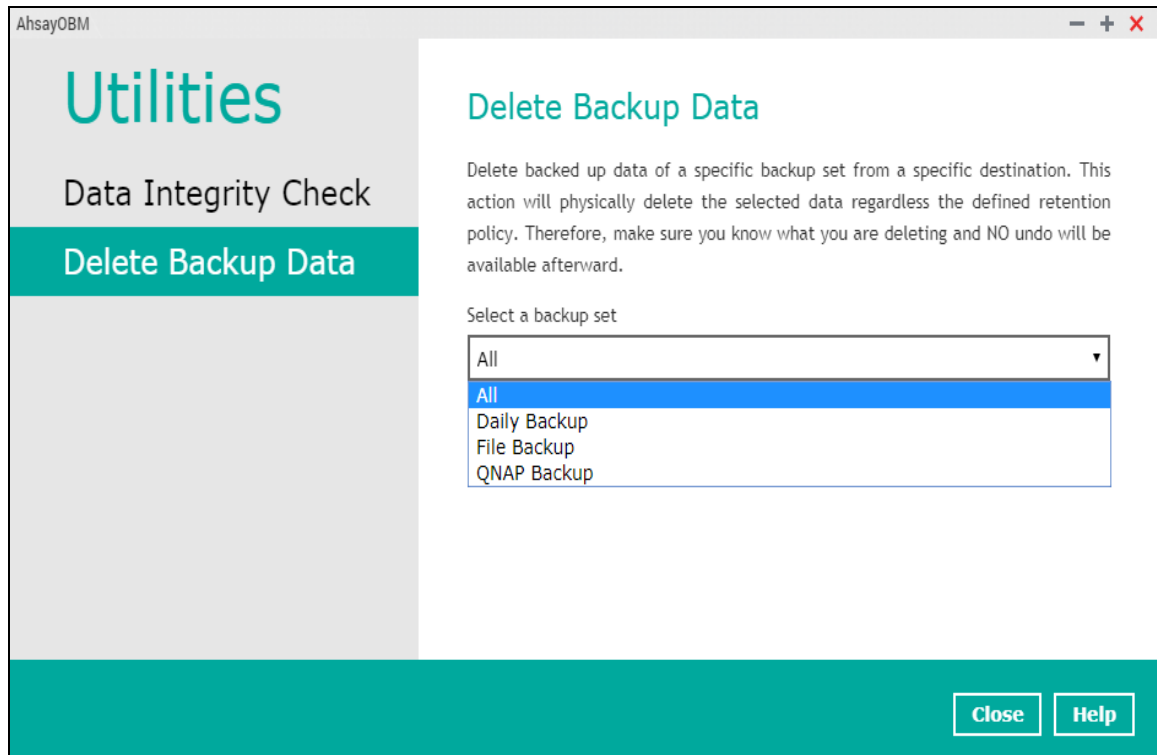
`${system_volume_path}/homes/admin/.obm/system/IntegrityCheck`

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.

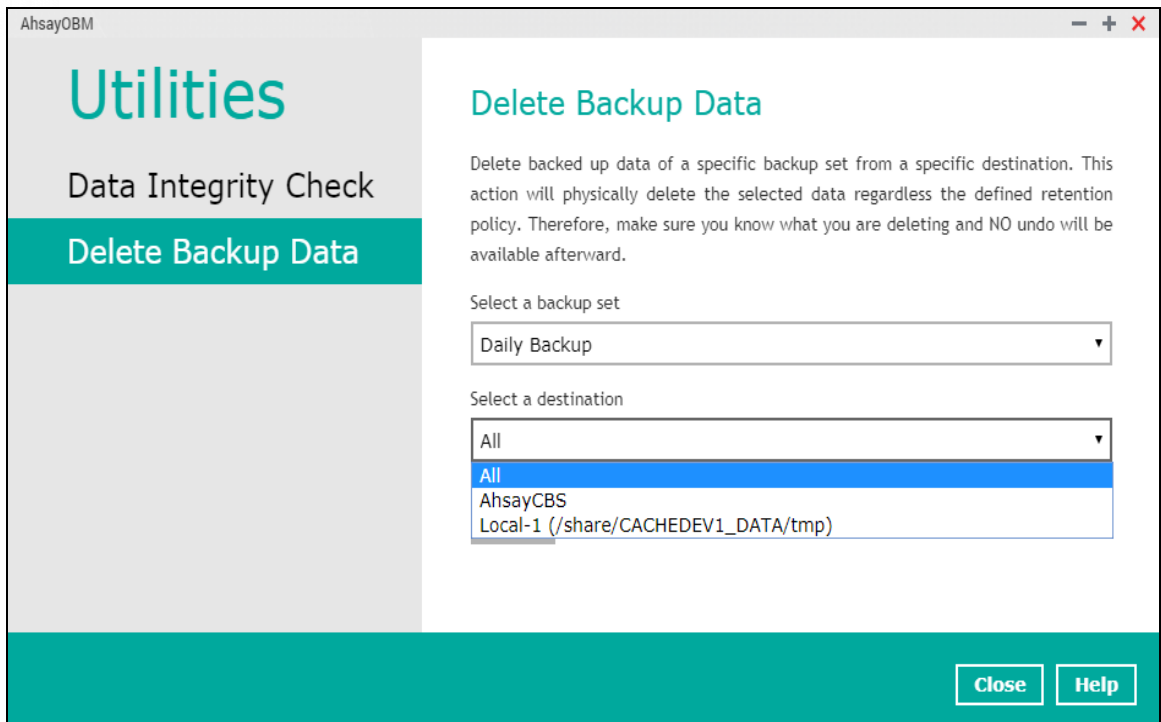
To perform deletion of backup data, follow the instructions below:

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

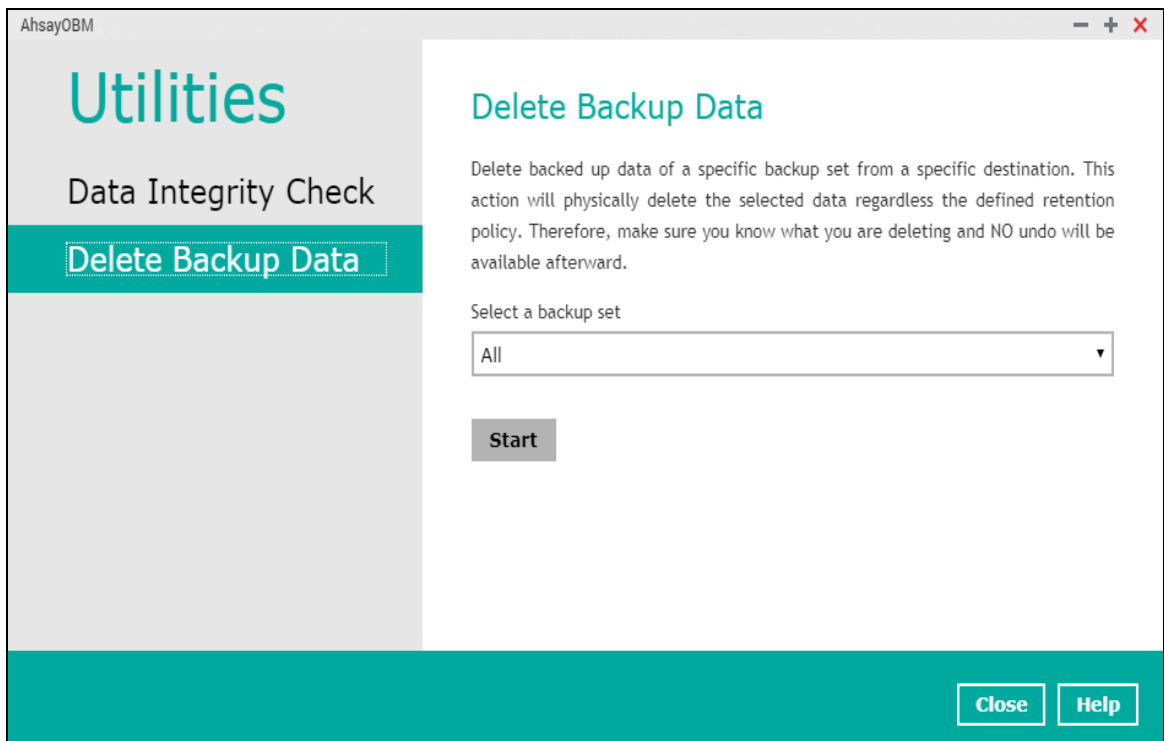


NOTE: This will only delete the backed up files in a backup set(s) and destination(s), but the backup set and destination will remain.

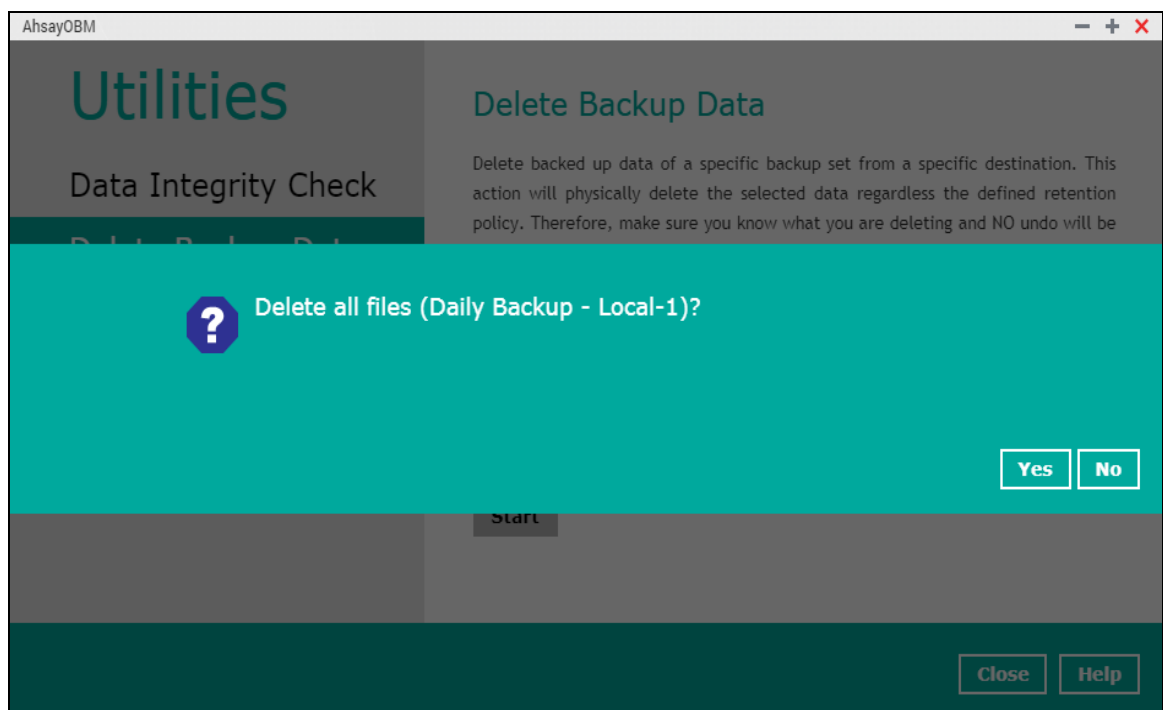
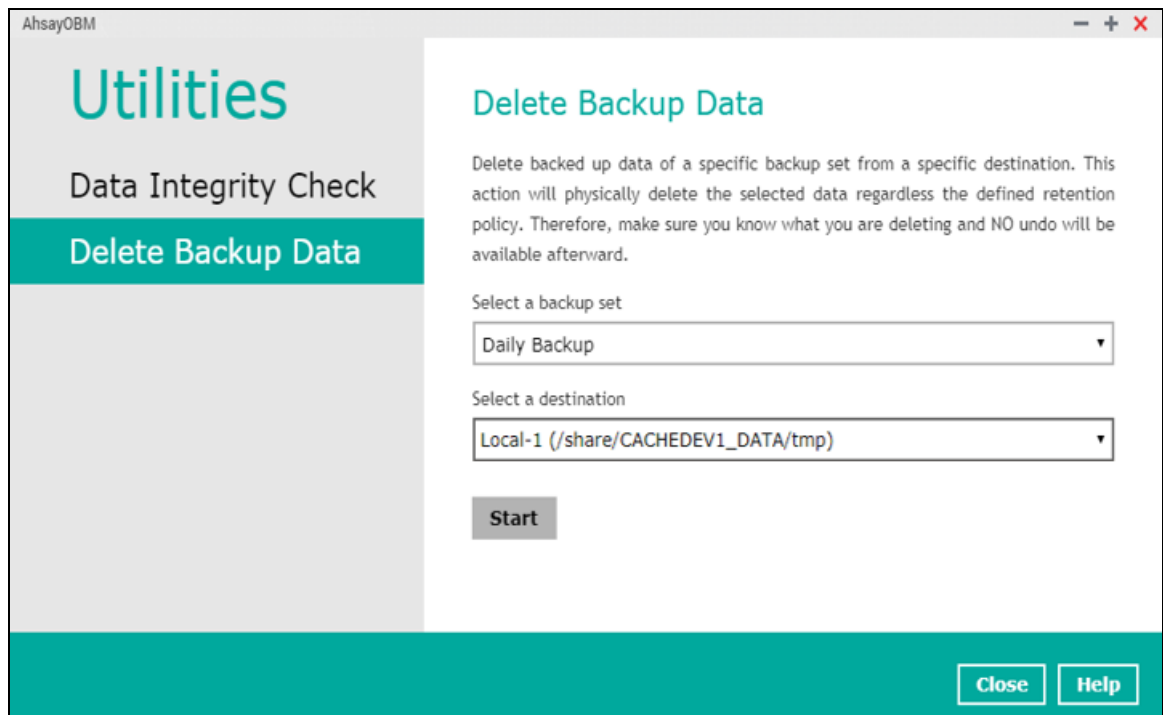
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



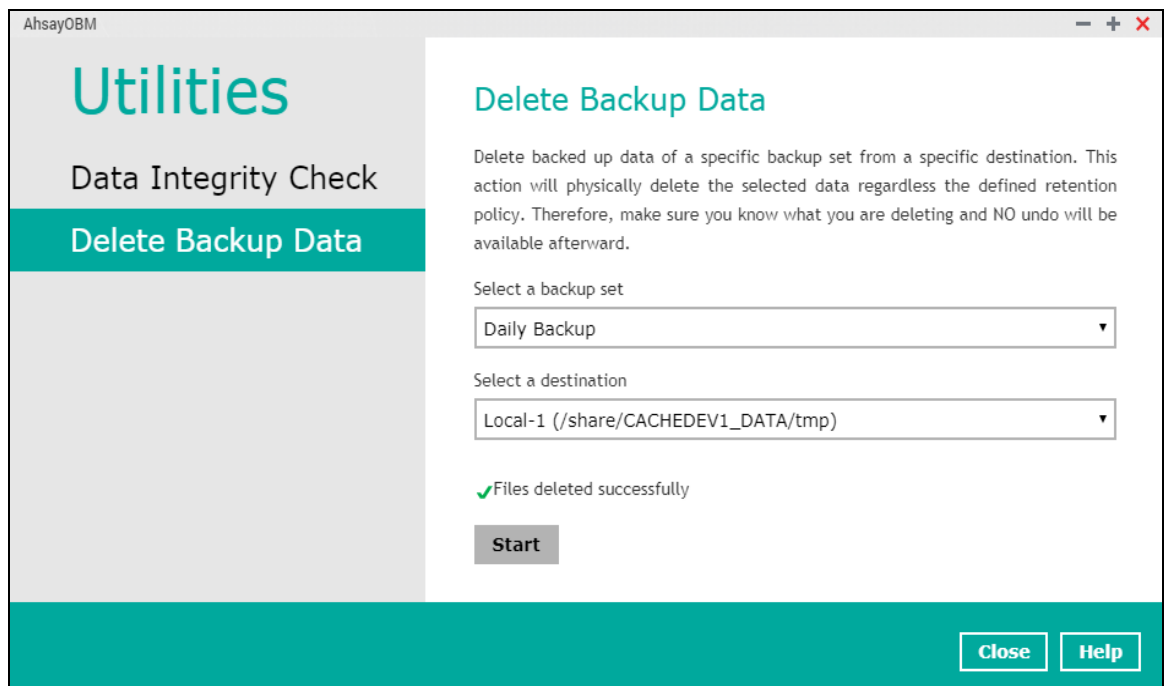
If you select **All** backup sets, then there is no need to select a destination.



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).



- Files are successfully deleted.

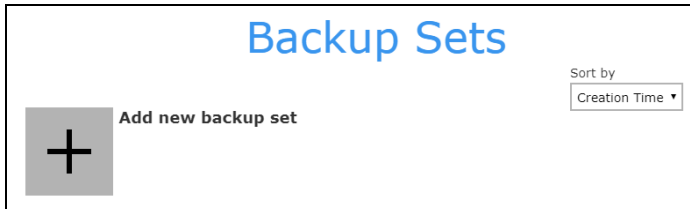


7 Create a Backup Set

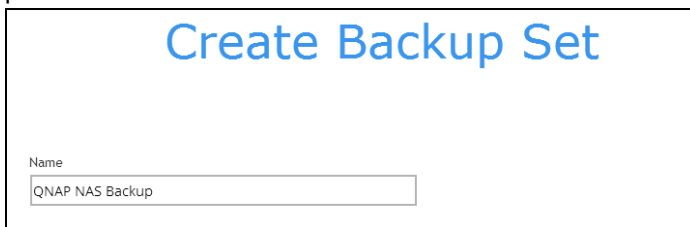
1. Click the **Backup Sets** icon on the main interface of AhsayOBM.



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.

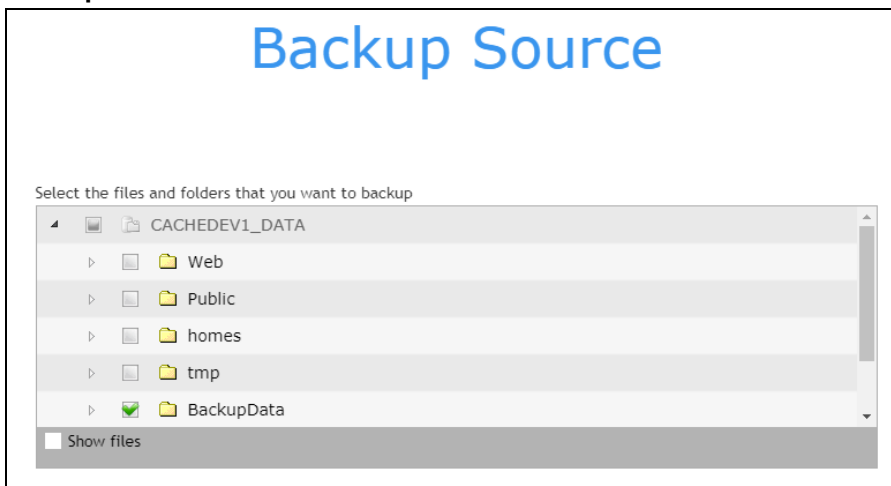


4. In the Backup Source window, select the files and folders that you would like to back up.

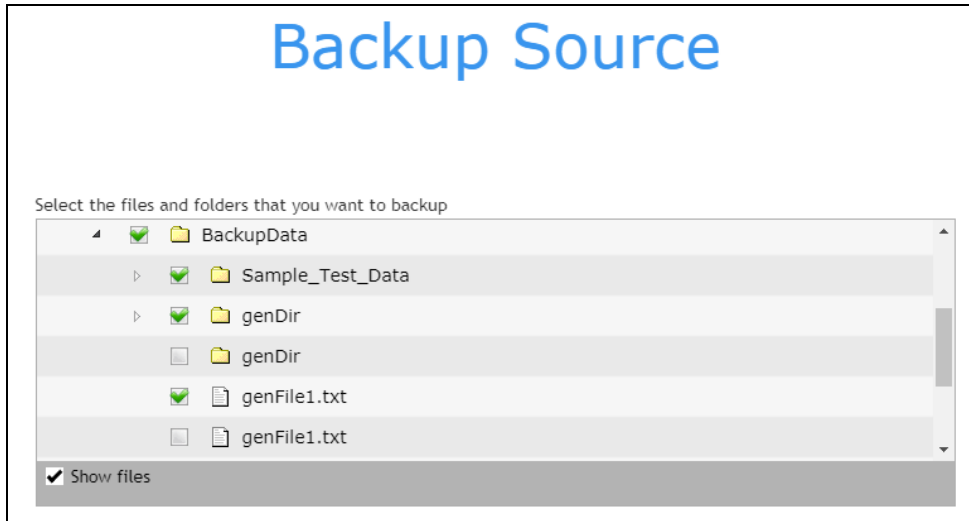
NOTE

Starting v8.5.4.86 (or above), AhsayOBM supports backup of files and/or folders from an external USB drive attached to the QNAP NAS machine where the AhsayOBM is installed.

Backup Source on the QNAP NAS



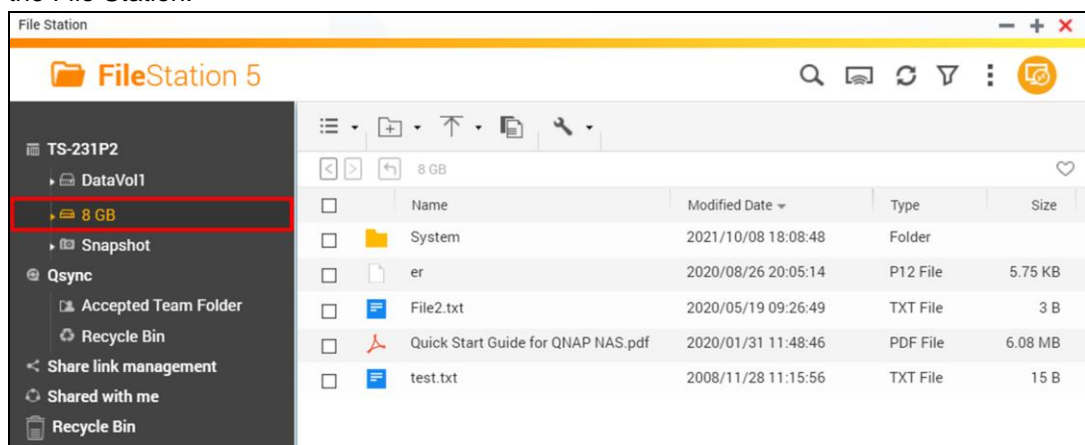
You may click the **Show files** checkbox if you want to select individual file(s) for backup.



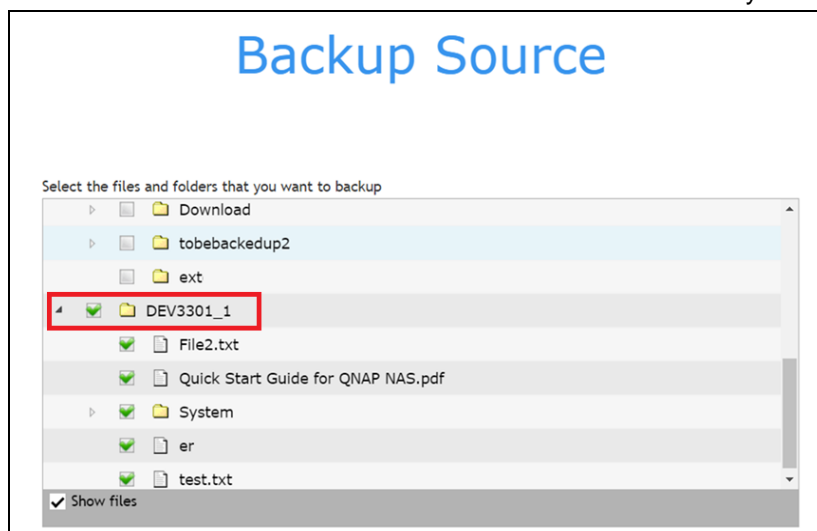
Backup Source on the External USB Drive

To select a backup source from an external USB drive, follow the instructions below:

- i. Ensure that your AhsayOBM is updated to v8.5.4.86 (or above).
- ii. Attach your external USB drive, then verify if the attached external USB drive is visible on the File Station.



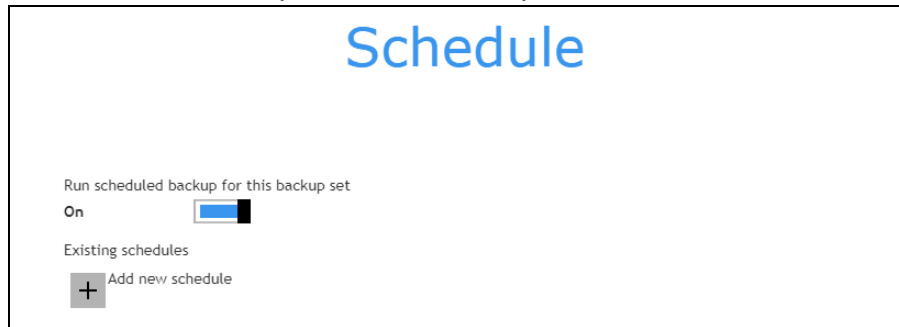
- iii. Select the files and/or folders from the external USB drive that you would like to back up.



After selecting the backup source, click **Next** to proceed.

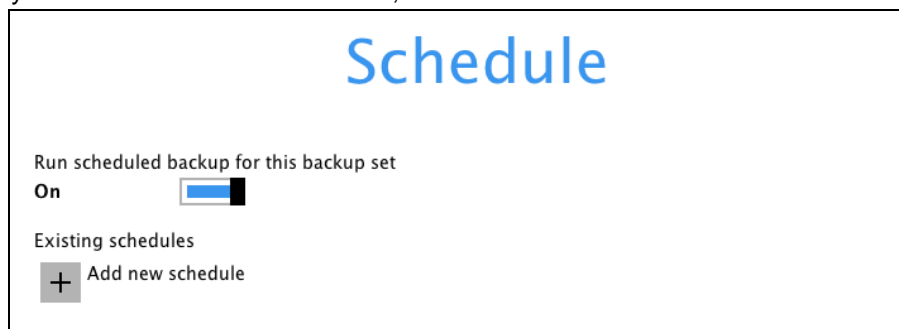
5. When the Schedule window appears, you can configure a backup schedule to automatically run a backup job at your specified time interval. In the Schedule window, the Run scheduled backup for this backup set is **On** by default.

- You can leave it as is or you can turn it **Off** if you do not want to add a schedule again.



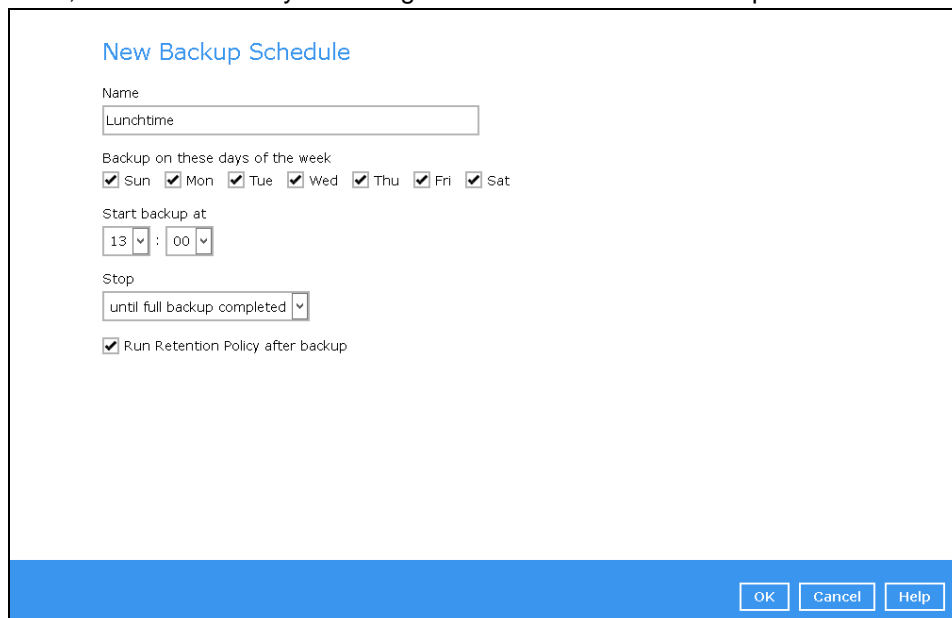
The screenshot shows a window titled "Schedule". Below the title, there is a section "Run scheduled backup for this backup set" with a toggle switch set to "On". Below this, there is a section "Existing schedules" with a button labeled "+ Add new schedule".

- If you want to add a schedule now, click "+" next to Add New schedule.



This screenshot is identical to the previous one, showing the "Schedule" window with the toggle set to "On" and the "+ Add new schedule" button.

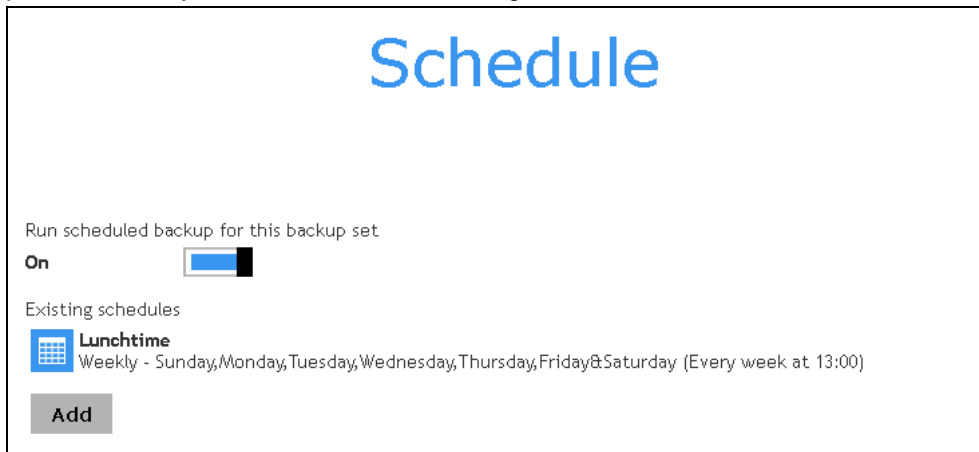
When the **New Backup Schedule** window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.



The screenshot shows a window titled "New Backup Schedule". It contains several fields and checkboxes: "Name" with the value "Lunchtime"; "Backup on these days of the week" with checkboxes for Sun, Mon, Tue, Wed, Thu, Fri, and Sat, all of which are checked; "Start backup at" with a time picker set to 13:00; "Stop" with a dropdown menu set to "until full backup completed"; and a checked checkbox for "Run Retention Policy after backup". At the bottom right, there are three buttons: "OK", "Cancel", and "Help".

Note: For details about the options from the dropdown menus, please refer to [Configure Backup Schedule for Automated Backup](#).

6. 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.



The 'Schedule' window has a title bar and a main content area. At the top, the word 'Schedule' is displayed in a large blue font. Below it, the text 'Run scheduled backup for this backup set' is followed by a toggle switch labeled 'On'. Underneath, the section 'Existing schedules' contains a list item with a calendar icon, the name 'Lunchtime', and the description 'Weekly - Sunday, Monday, Tuesday, Wednesday, Thursday, Friday & Saturday (Every week at 13:00)'. At the bottom left of this section is a grey 'Add' button.

7. The Destination window will appear.



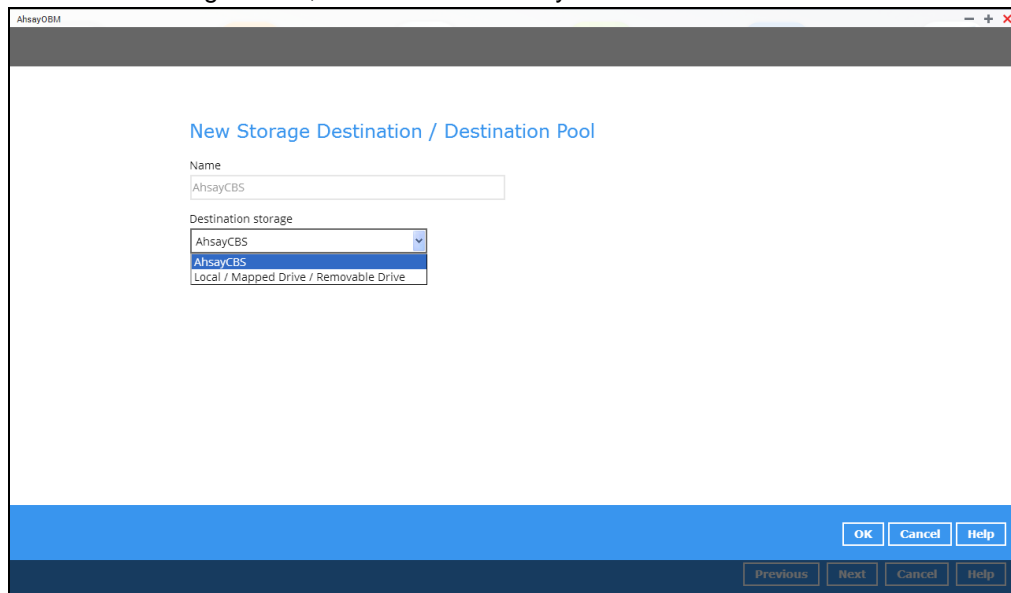
The 'Destination' window has a title bar and a main content area. At the top, the word 'Destination' is displayed in a large blue font. Below it, the section 'Backup mode' features a dropdown menu currently showing 'Sequential'. Underneath, the section 'Existing storage destinations' includes a grey button with a plus sign and the text 'Add new storage destination / destination pool'. At the bottom of this section are two small, faint upward and downward arrow icons.

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

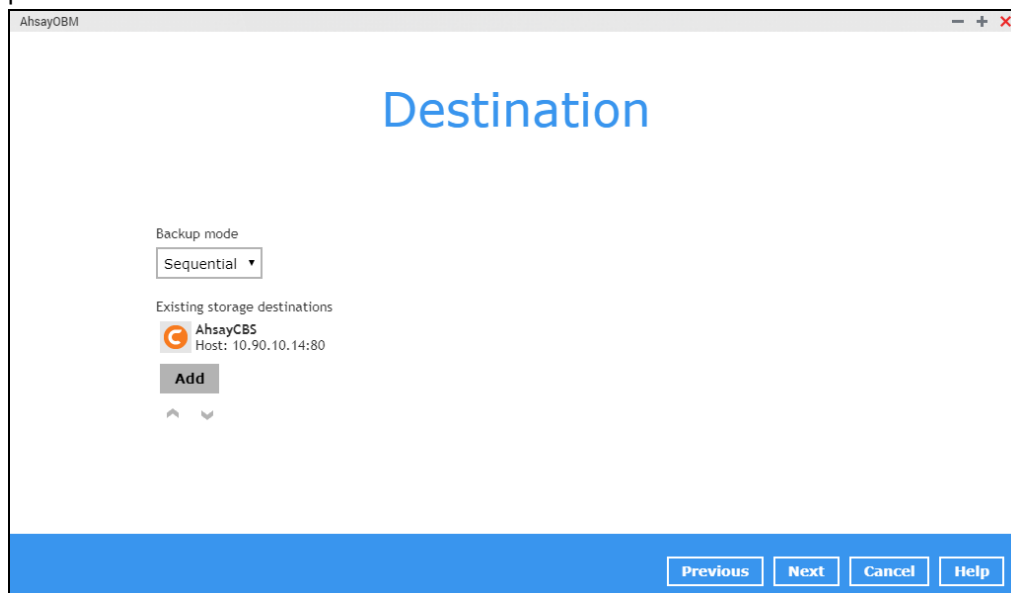
To select a backup destination for the backup data storage, click the “+” icon next to **Add new storage destination / destination pool**.

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




Note: For more details on configuration of cloud storage as backup destination, refer to [Appendix A](#) in this guide.

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



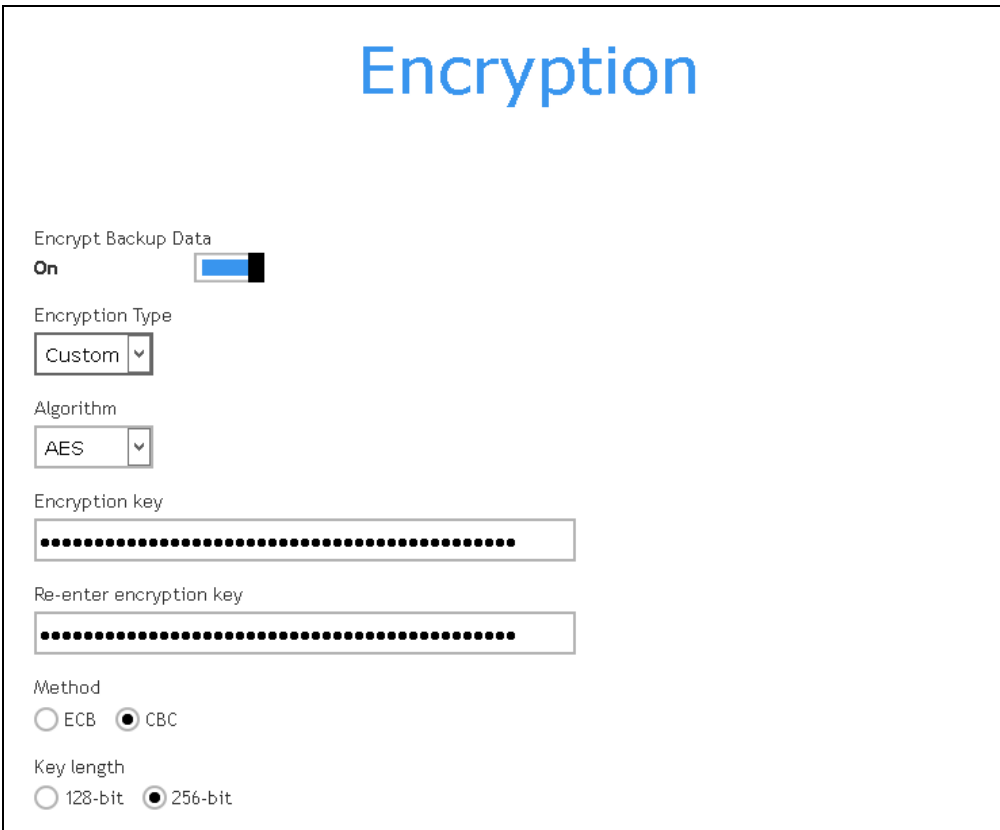
10. In the Encryption window, the default **Encrypt Backup Data** option is enabled with an encryption key preset by the system which provides the most secure protection.



The screenshot shows the 'Encryption' window. At the top, the word 'Encryption' is displayed in a large blue font. Below it, the 'Encrypt Backup Data' section has a toggle switch set to 'On'. The 'Encryption Type' section features a dropdown menu that is currently open, showing four options: 'Default' (highlighted in blue), 'User password', 'Custom', and '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.



The screenshot shows the 'Encryption' window with the 'Custom' encryption type selected. The 'Encrypt Backup Data' toggle is still 'On'. The 'Encryption Type' dropdown is set to 'Custom'. Below this, the 'Algorithm' dropdown is set to 'AES'. There are two text input fields for the 'Encryption key' and 'Re-enter encryption key', both containing a series of dots. The 'Method' section has two radio buttons: 'ECB' and 'CBC', with 'CBC' selected. The 'Key length' section has two radio buttons: '128-bit' and '256-bit', with '256-bit' selected.

Note: For best practice on managing your encryption key, refer to the following Wiki article.
http://wiki.ahsay.com/doku.php?id=public:8015_faq:best_practices_for_managing_encryption_key

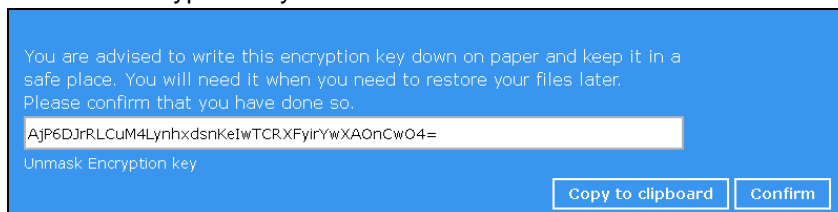
Click **Save** when you are done with the settings.

11. 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.



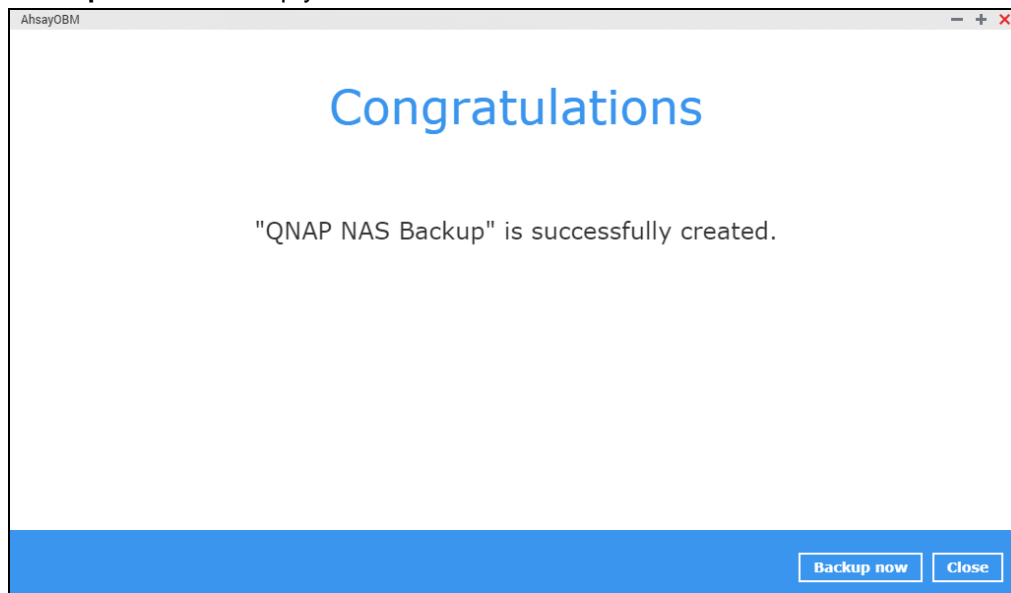
The pop-up window has the following three options to choose from:

- **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.

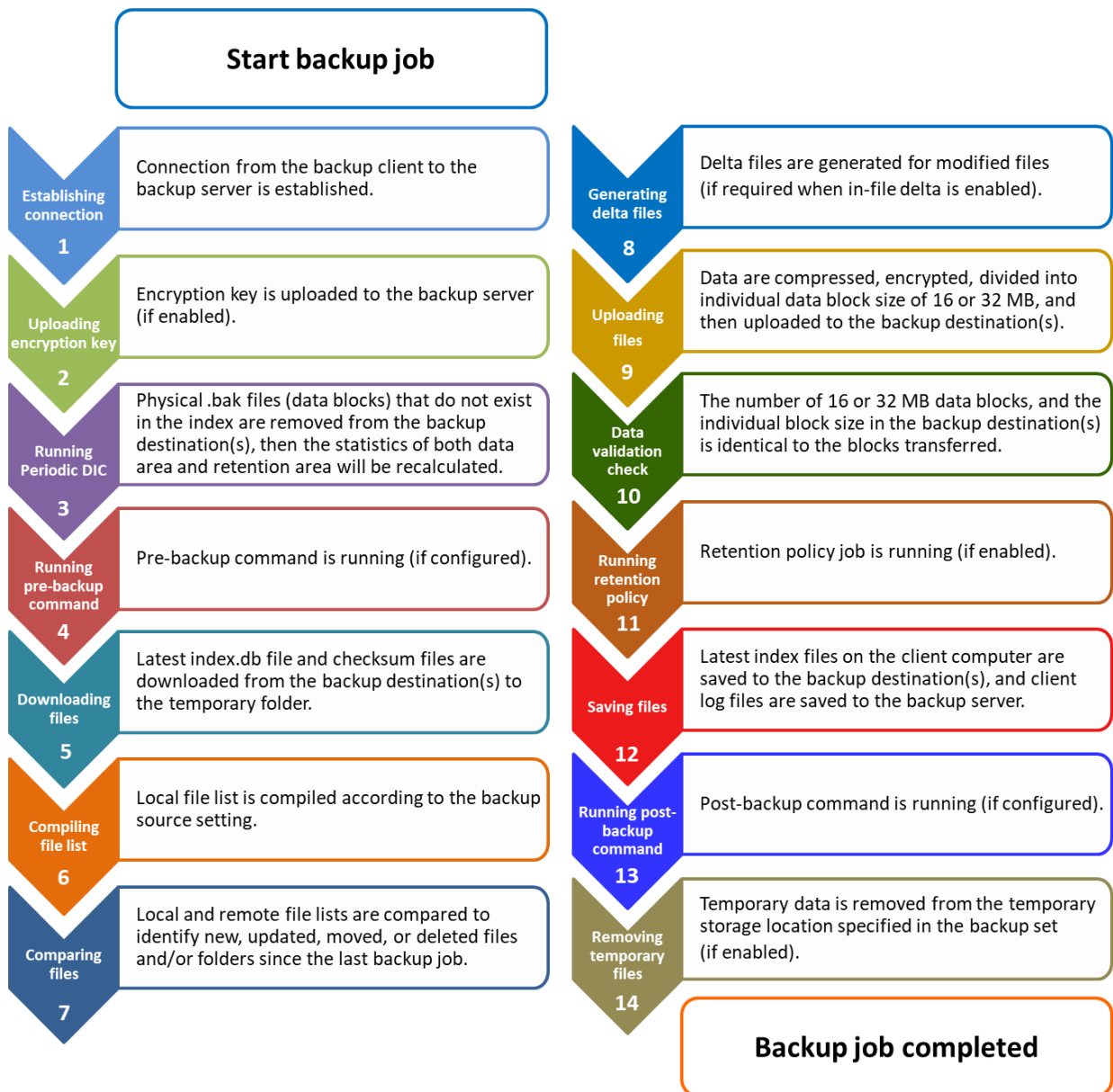
12. Upon successful creation of the backup set, the following screen will appear. You can click **Backup now** to back up your data or click **Close** to exit.



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: $1594627447932 \bmod 5 = 2$

2	Wednesday
---	-----------

In this example:

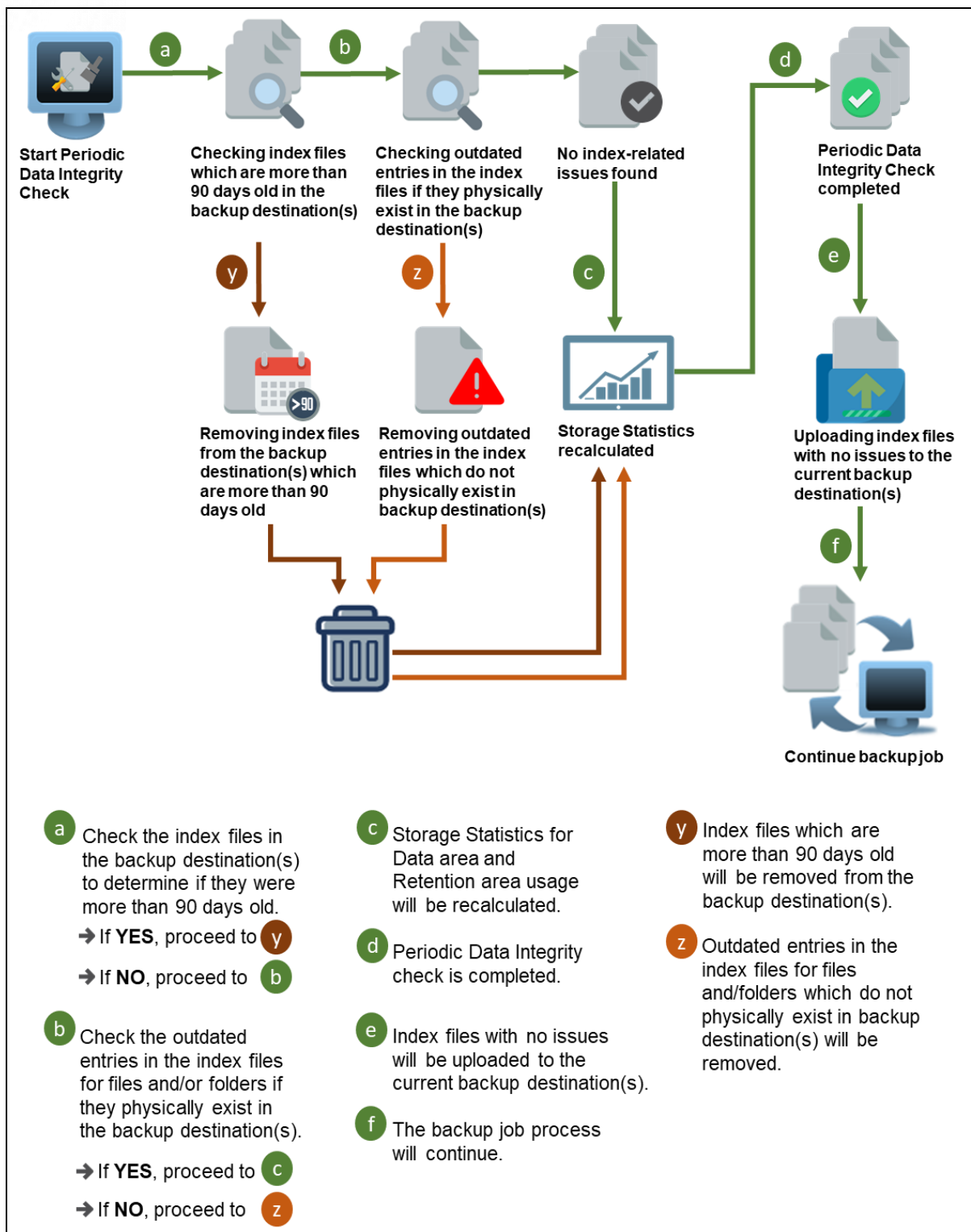
- the PDIC will run on the first backup job that falls on Wednesday; or
- if there is no active backup job(s) running from Monday to Friday, then the PDIC will run on the next available backup job.

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:

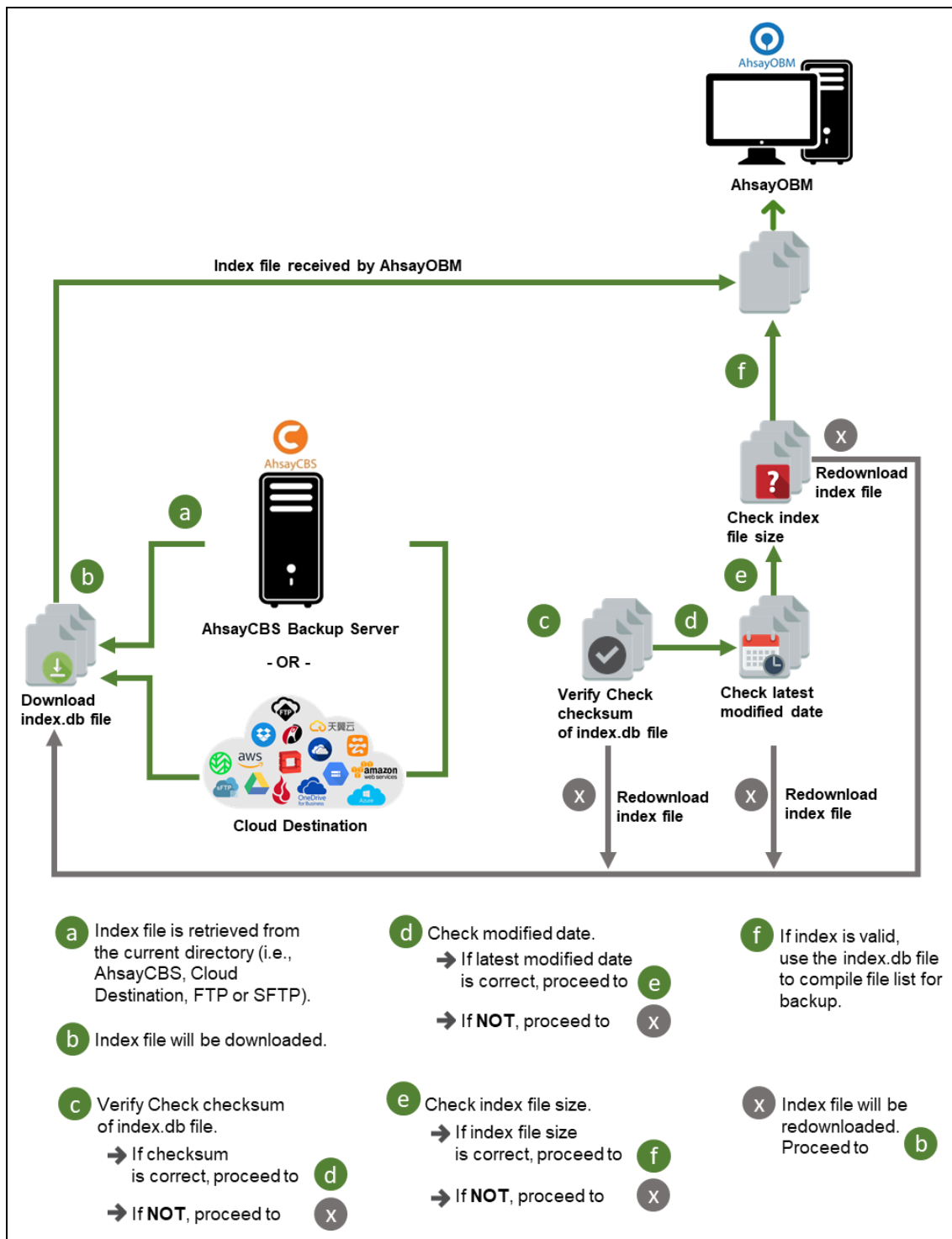
1. If AhsayOBM was upgraded to v8.5 (or above) from an older version v6, v7, or pre-8.3.6.0 version. In this case, the PDIC job will run on the first backup job after upgrade.
2. If backup jobs for a backup set are not run on a regular daily backup schedule (for example: on a weekly or monthly schedule), 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 [Delete Backup Data](#) 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.



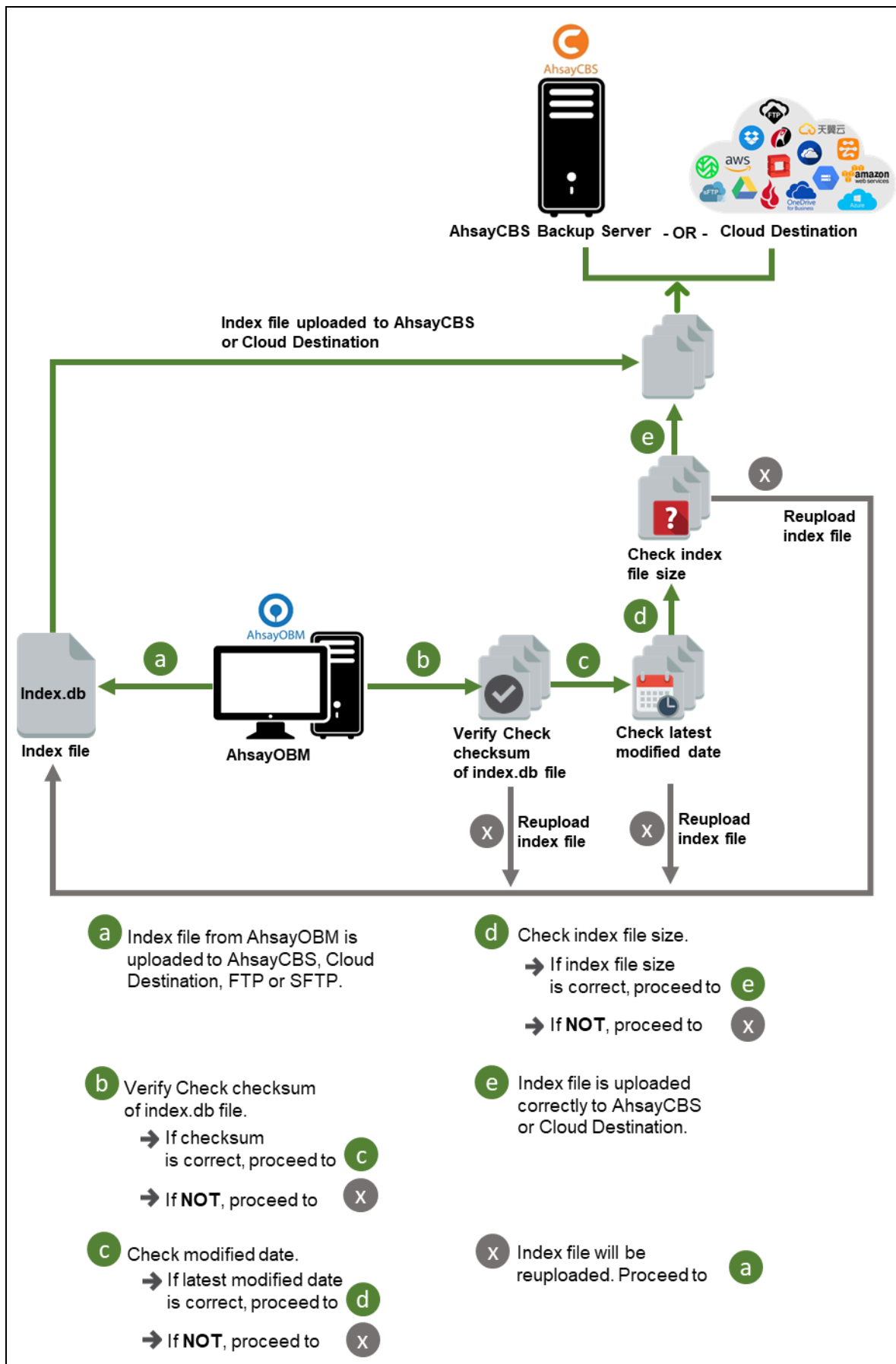
8.2 Backup Set Index Handling Process

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

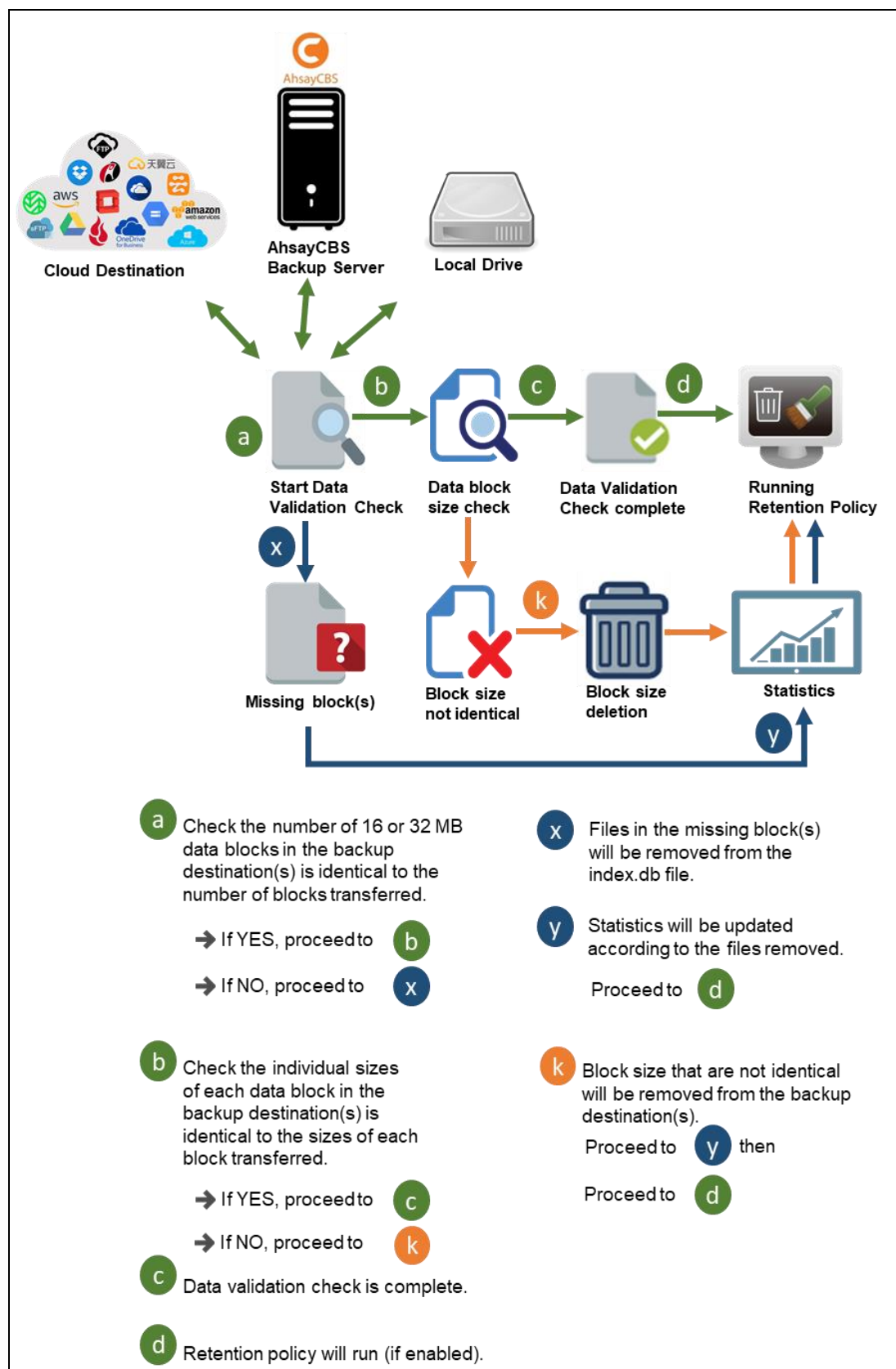


8.2.2 Completed Backup Job



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.



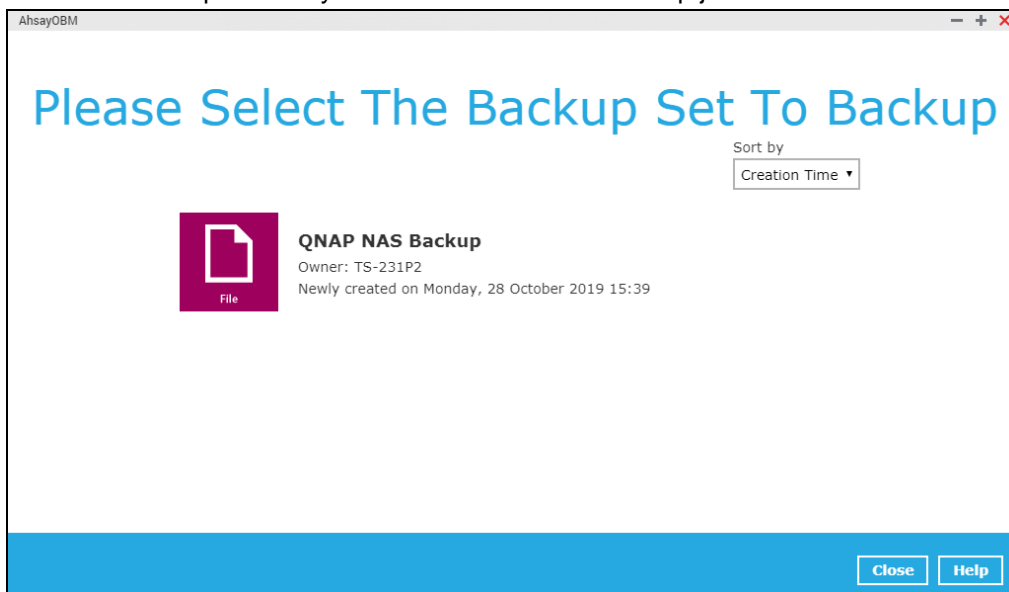
9 Run Backup Jobs

Start a Manual Backup

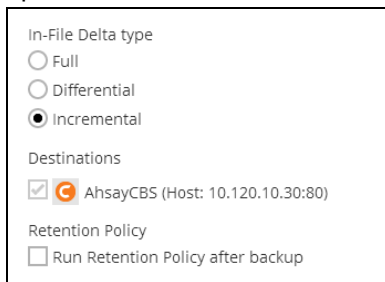
1. Login to the AhsayOBM application with the instructions provided in [Login to AhsayOBM](#).
2. Click **Backup** on the main interface of AhsayOBM.



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



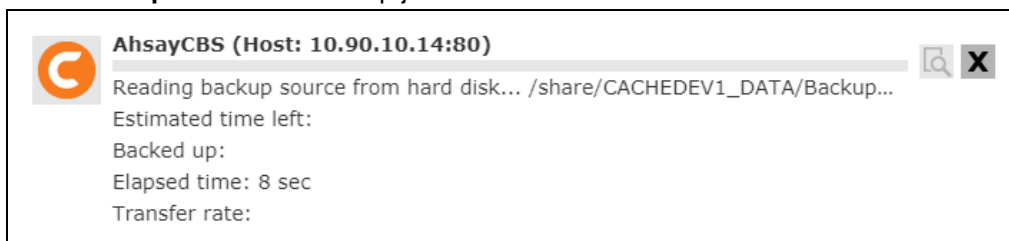
4. When the following options are shown, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** in the Retention Policy section at the bottom. This will help you save hard disk quota in the long run. In the In-File Delta type section, the following three options are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



The screenshot shows a configuration window with the following sections:

- In-File Delta type**: Three radio buttons are present:
☐ Full
☐ Differential
☒ Incremental
- Destinations**: A checkbox is checked next to the AhsayCBS (Host: 10.120.10.30:80) entry.
- Retention Policy**: A checkbox labeled "Run Retention Policy after backup" is currently unchecked.

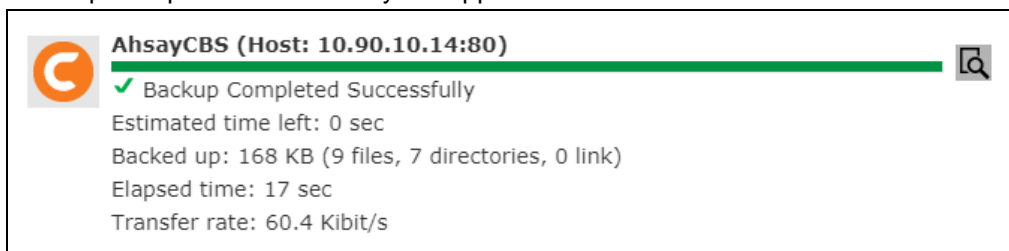
- **Full** – A full backup captures all the data that you want to protect. When you run a backup job for the first time, AhsayOBM will run a full backup regardless of the in-file delta setting.
 - **Differential** – A differential backup captures only the changes made as compared with the last uploaded 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).
5. Click **Backup** to start the backup job. The status will be shown.



The screenshot shows a progress window titled "AhsayCBS (Host: 10.90.10.14:80)". It features a grey progress bar and the following text:


- Reading backup source from hard disk... /share/CACHEDEV1_DATA/Backup...
- Estimated time left:
- Backed up:
- Elapsed time: 8 sec
- Transfer rate:

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



The screenshot shows the same progress window after completion. The progress bar is now green, and the text has updated:

- ✓ Backup Completed Successfully
- Estimated time left: 0 sec
- Backed up: 168 KB (9 files, 7 directories, 0 link)
- Elapsed time: 17 sec
- Transfer rate: 60.4 Kibit/s

7. You can click the  **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		
Type	Log	Time
	Start [AhsayOBM v8.3.0.30]	28/10/2019 15:41:25
	Saving encrypted backup set encryption keys to server...	28/10/2019 15:41:25
	Start Backup ... [In-File Delta: Incremental]	28/10/2019 15:41:26
	Using Temporary Directory /share/CACHEDEV1_DATA/homes/admin/temp/1572248343679/OBS@1572248370655	28/10/2019 15:41:26
	Start running pre-commands	28/10/2019 15:41:30
	Finished running pre-commands	28/10/2019 15:41:30
	Downloading server file list...	28/10/2019 15:41:30
	Downloading server file list... Completed	28/10/2019 15:41:33
	Reading backup source from hard disk...	28/10/2019 15:41:34
	Reading backup source from hard disk... Completed	28/10/2019 15:41:34
	[New Directory]... /	28/10/2019 15:41:34
	[New Directory]... /share	28/10/2019 15:41:35
	[New Directory]... /share/CACHEDEV1_DATA	28/10/2019 15:41:35
	[New Directory]... /share/CACHEDEV1_DATA/BackupData	28/10/2019 15:41:35
	[New Directory]... /share/CACHEDEV1_DATA/BackupData/Sample_Test_Data	28/10/2019 15:41:35
	[New Directory]... /share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files	28/10/2019 15:41:35
	[New Directory]... /share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/abc	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/reinstall.ico"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/nsreg.dat"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/0.test"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/Copy (3) of empty.txt"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/Copy (4) of empty.txt"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/empty.txt"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/Copy of empty.txt"	28/10/2019 15:41:35
	[New File]... 19% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 34% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 48% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 63% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 78% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 92% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe"	28/10/2019 15:41:35
	[New File]... 100% of "/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/abc/test.txt"	28/10/2019 15:41:35
	Start validating the presence and size of backup data in destination "AhsayCBS"...	28/10/2019 15:41:36
	File: "1572248343679/blocks/2019-10-28-15-41-07/0/000000.bak", Size: 171,648, OK	28/10/2019 15:41:36
	Finished validating the presence and size of backup data in destination "AhsayCBS"	28/10/2019 15:41:36
	Total New Files = 9	28/10/2019 15:41:36
	Total New Directories = 7	28/10/2019 15:41:36
	Total New Links = 0	28/10/2019 15:41:36
	Total Updated Files = 0	28/10/2019 15:41:36
	Total Attributes Changed Files = 0	28/10/2019 15:41:36
	Total Deleted Files = 0	28/10/2019 15:41:36
	Total Deleted Directories = 0	28/10/2019 15:41:36
	Total Deleted Links = 0	28/10/2019 15:41:36
	Total Moved Files = 0	28/10/2019 15:41:36
	Start running retention policy on backup set "QNAP NAS Backup(1572248343679)", "AhsayCBS(1572248370655)"	28/10/2019 15:41:36
	Start processing space freeing up on backup set= "QNAP NAS Backup (1572248343679)" destination= "AhsayCBS (1572248370655)"	28/10/2019 15:41:36
	Space freeing up on backup set= "QNAP NAS Backup (1572248343679)" destination= "AhsayCBS (1572248370655)" is completed	28/10/2019 15:41:36
	Finished running retention policy on backup set "QNAP NAS Backup(1572248343679)", "AhsayCBS(1572248370655)"	28/10/2019 15:41:36
	Saving encrypted backup file index to 1572248343679/blocks at destination AhsayCBS...	28/10/2019 15:41:37
	Saving encrypted backup file index to 1572248343679/blocks/2019-10-28-15-41-07 at destination AhsayCBS...	28/10/2019 15:41:37
	Start running post-commands	28/10/2019 15:41:39
	Finished running post-commands	28/10/2019 15:41:39
	Deleting temporary file /share/CACHEDEV1_DATA/homes/admin/temp/1572248343679/OBS@1572248370655	28/10/2019 15:41:42
	Backup Completed Successfully	28/10/2019 15:41:43

Logs per page 100
Previous 1 Next

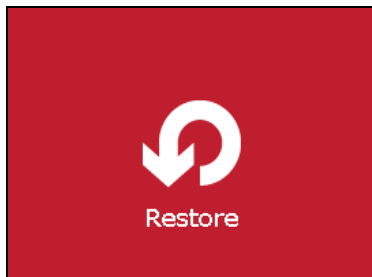
10 Restore Data

10.1 Login to AhsayOBM

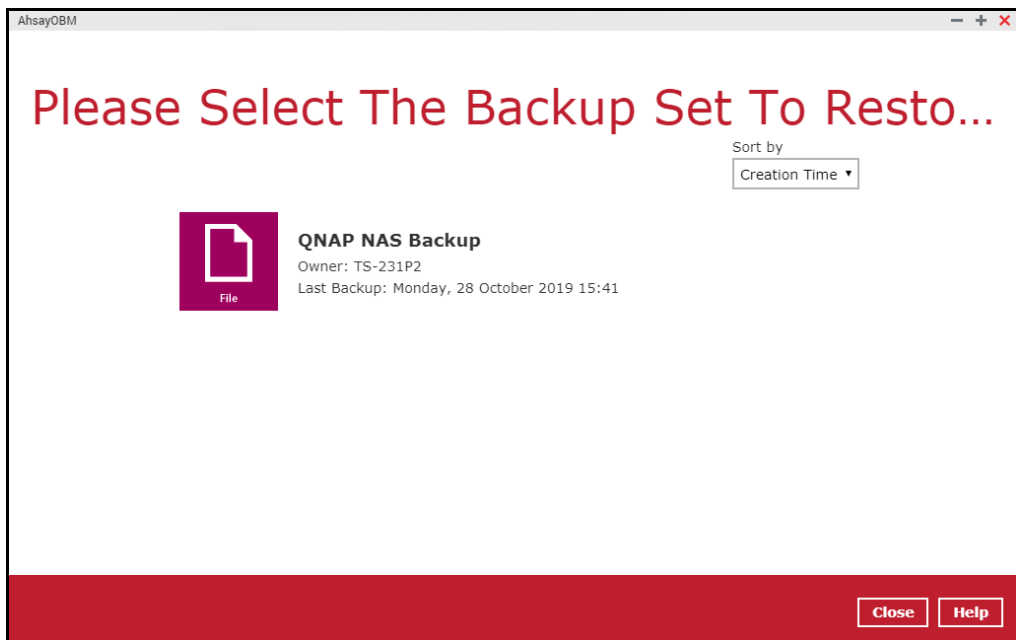
Login to the AhsayOBM application with the instructions provided in [Login to AhsayOBM](#).

10.2 Restore Data

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



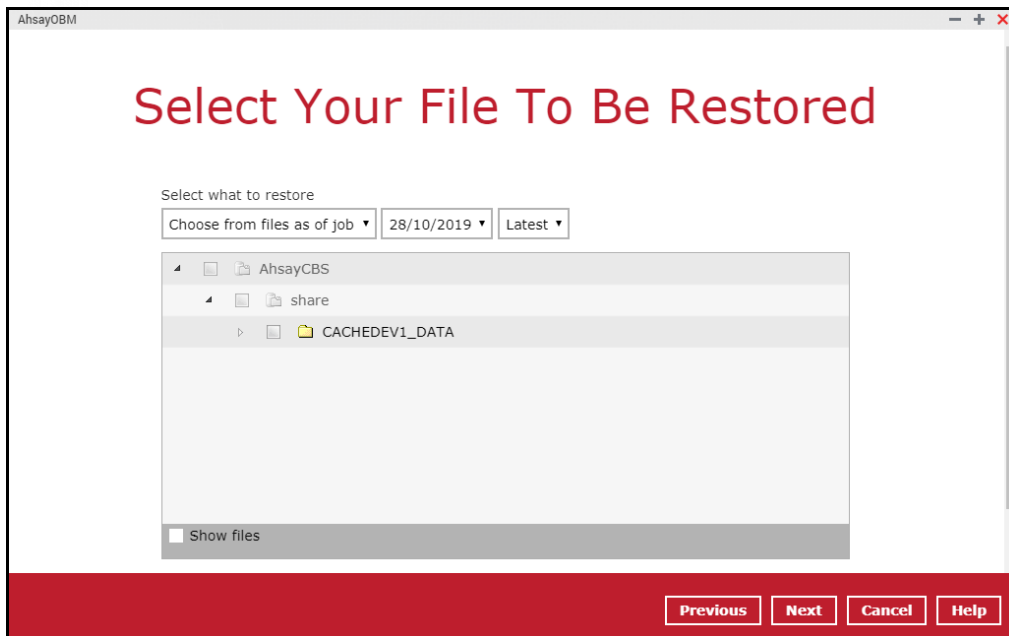
2. All the available backup sets for restore will be listed. Select the backup set that you would like to restore the data from.



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

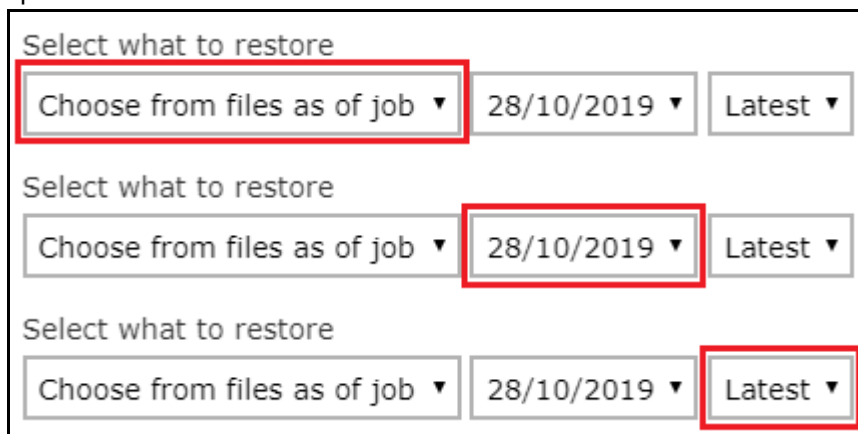


4. Select to restore files from a specific backup job, or from all files available. Then, select the files or folders that you would like to restore.



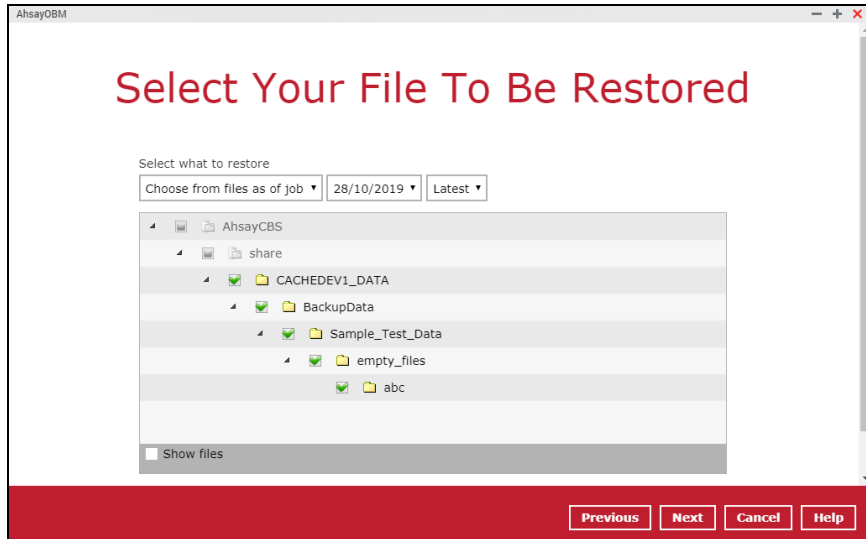
There are two options from the **Select what to restore** drop-down menu:

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

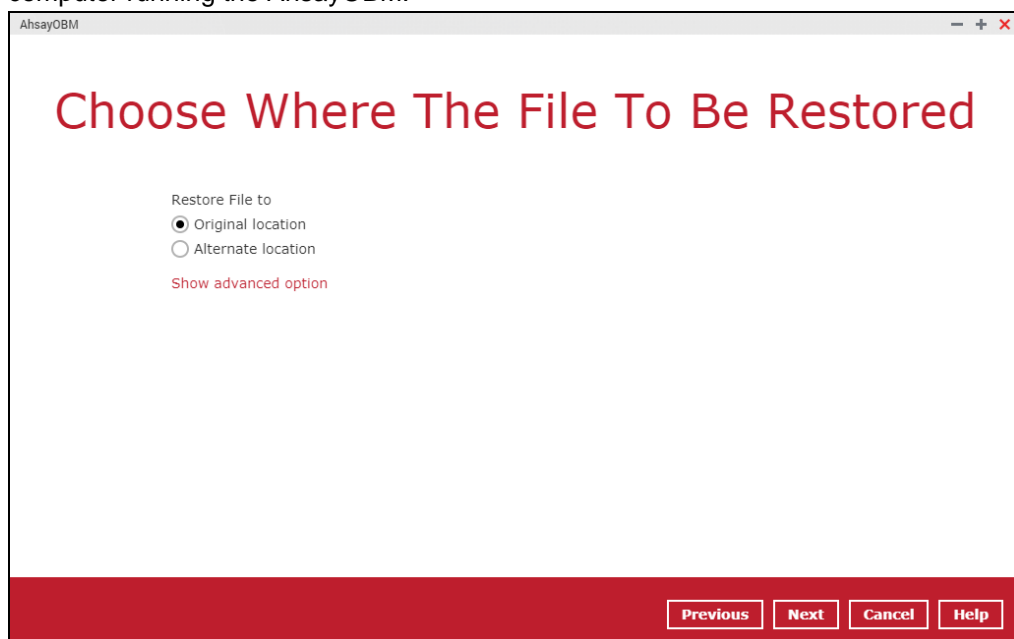


- Choose **from ALL files** – This option allows you to restore all the available backup files and folders for this backup set. Among all the available backup files and folders, you can

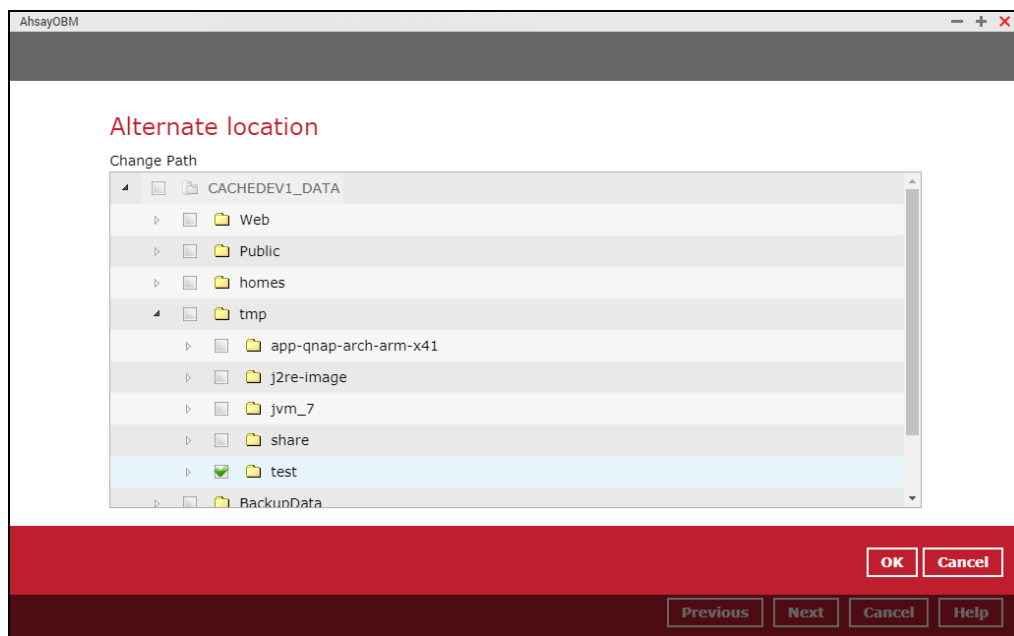
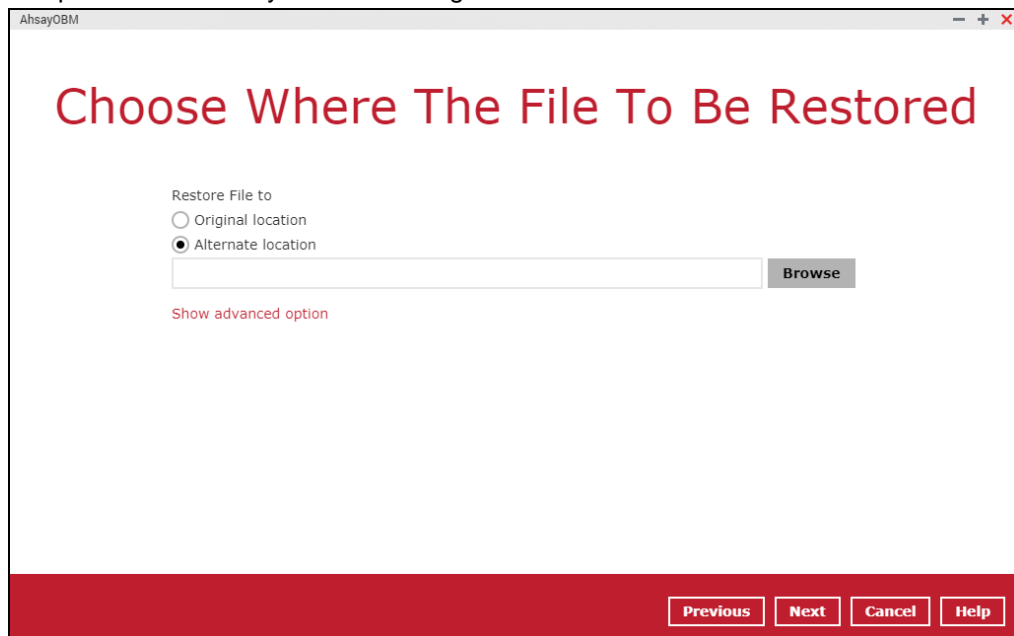
even select only some of the backup files or folders to restore.



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.



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

Restore File to

☒ Original location

☐ 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 are 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.



• **Delete 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 exactly 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:

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

Document folder 01	
Name	
 doc 1.docx	} Files created initially
 doc 2.docx	



- A backup is performed for folder Document folder 01.

- Two new files are created, namely doc 3 & doc 4.

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

- A restore is performed for the Document folder 01, with Delete extra files option enabled.

- 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	

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 were deleted.

Prior to the data restore and synchronization, a warning message shows as the one shown below. Only clicking **Yes** will the “extra file” be deleted. You can click **Apply to all** to confirm deleting all the “extra files” at a 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.

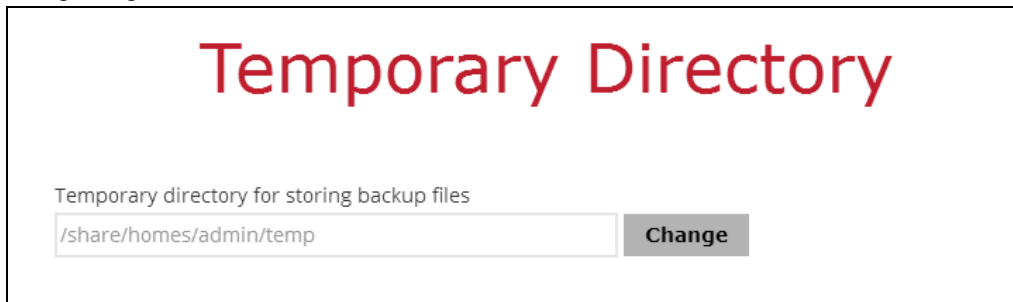
Follow Link	Restore to	Behavior
Enabled	Original location	Symbolic link or junction point is restored to the original backup location. Target directories or files are also restored to the original backup location.
	Alternate location	Symbolic link or junction point is restored to the location specified. Target directories or files are also restored to the alternate location specified.
Disabled	Original 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.
	Alternate 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

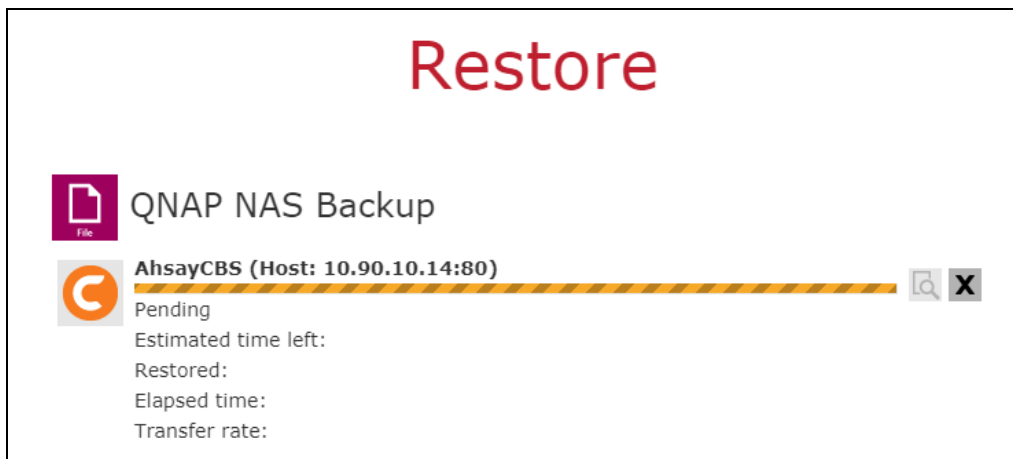
Verify checksum of in-file delta files during restore is disabled by default. You can enable the feature by ticking the checkbox so that the checksum of in-file delta files will be verified.

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 file were correct.

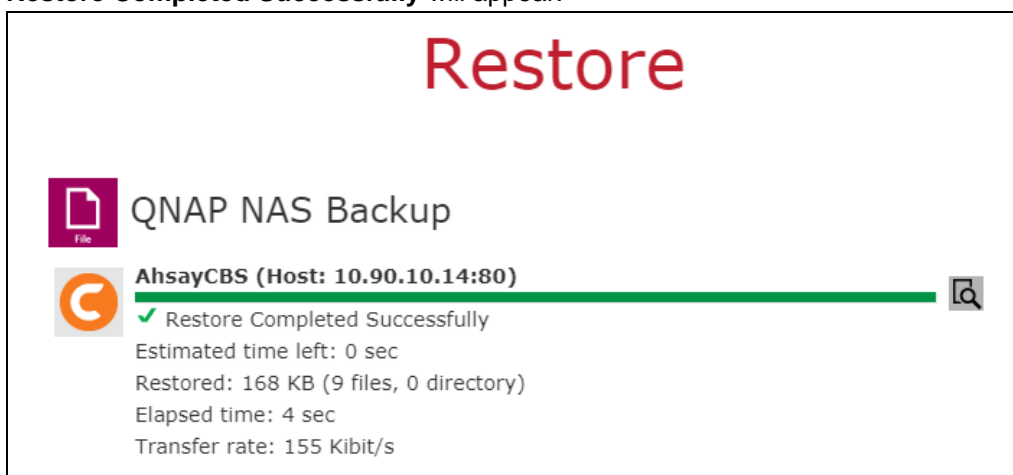
8. Click Next to proceed when you are done with the settings.
9. Select the temporary directory for storing temporary files, such as delta files when they are being merged.




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



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



You can click the  **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.

Type		Log	Time
1	Start [AhsayOBM v8.3.0.30]		28/10/2019 16:14:32
1	Initializing decrypt action...		28/10/2019 16:14:32
1	Initializing decrypt action... Completed		28/10/2019 16:14:32
1	Creating new directory... "/share/CACHEDEV1_DATA/Restore/tmp/share"		28/10/2019 16:14:32
1	Creating new directory... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA"		28/10/2019 16:14:32
1	Creating new directory... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData"		28/10/2019 16:14:32
1	Creating new directory... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data"		28/10/2019 16:14:32
1	Creating new directory... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files"		28/10/2019 16:14:32
1	Creating new directory... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/abc"		28/10/2019 16:14:32
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/abc/test.txt" (Total 15 bytes)		28/10/2019 16:14:32
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/0.test" (Total 0 bytes)		28/10/2019 16:14:32
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/Copy (3) of empty.txt" (Total 0 bytes)		28/10/2019 16:14:32
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/Copy (4) of empty.txt" (Total 0 bytes)		28/10/2019 16:14:34
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/Copy of empty.txt" (Total 0 bytes)		28/10/2019 16:14:34
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/empty.txt" (Total 0 bytes)		28/10/2019 16:14:34
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/empty_files/tail.exe" (Total 164k bytes)		28/10/2019 16:14:34
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/nsreg.dat" (Total 335 bytes)		28/10/2019 16:14:34
1	Downloading... "/share/CACHEDEV1_DATA/Restore/tmp/share/CACHEDEV1_DATA/BackupData/Sample_Test_Data/reinstall.ico" (Total 3k bytes)		28/10/2019 16:14:34
1	Restore Completed Successfully		28/10/2019 16:14:35

Logs per page
 Previous Next

12. In the Restore window, click **Close** to close the Restore window.

13. To exit AhsayOBM, click the red "x" on the top right corner. If you wish to use the AhsayOBM again, you will then 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/>

11.2 Documentation

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

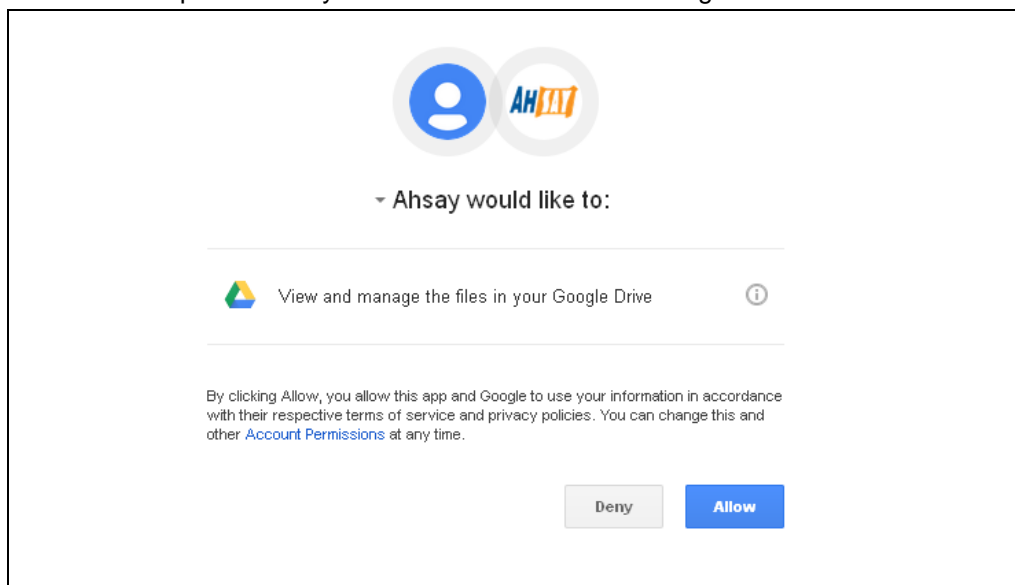
Appendix A: Cloud Storage as Backup Destination

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.

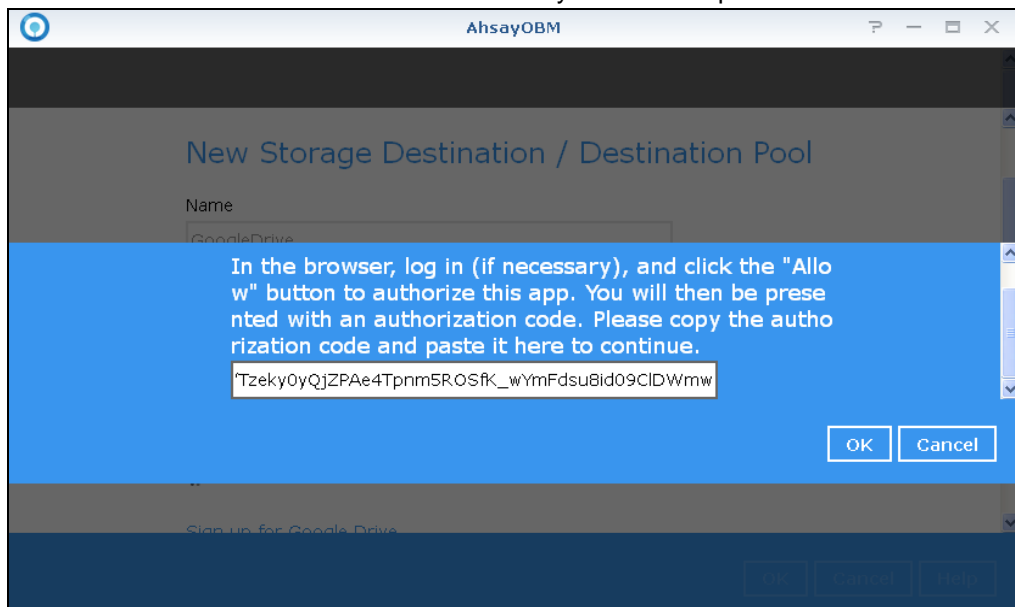
IMPORTANT

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.



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 article:

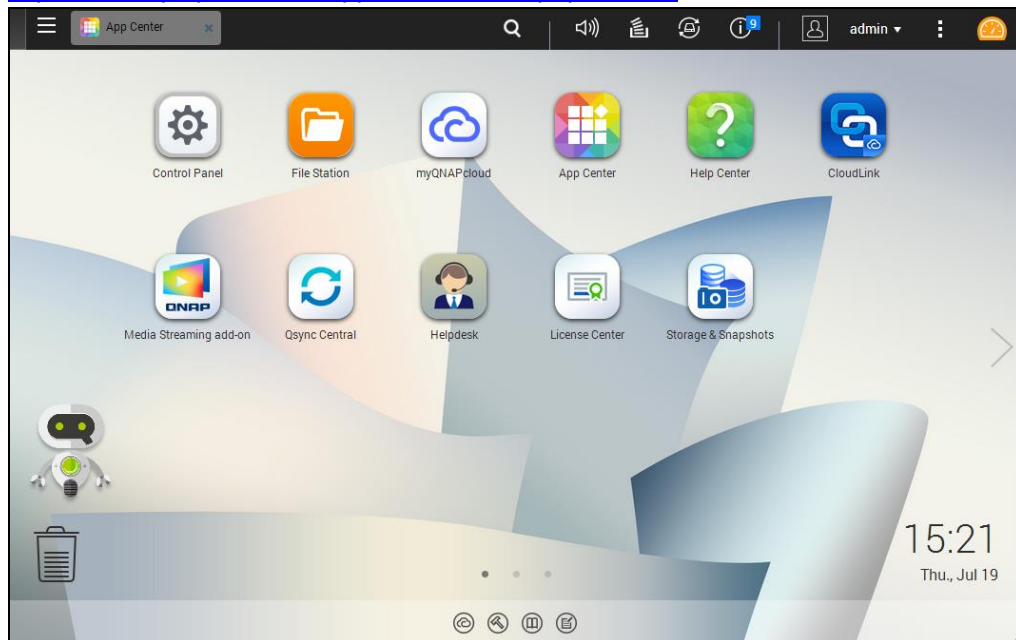
http://wiki.ahsay.com/doku.php?id=public:8002_faq:faq_on_backup_destination

Appendix B: Uninstall AhsayOBM

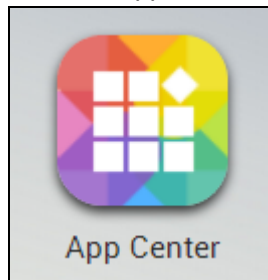
Refer to the following steps to uninstall AhsayOBM.

1. Login to QNAP QTS with the admin account. In a web browser, enter the QNAP NAS device IP address and use the login credentials to login.

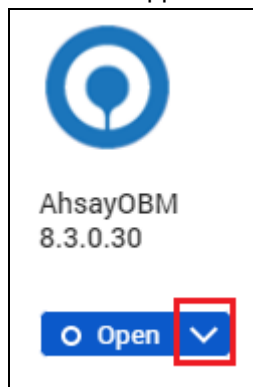
Note: Refer to the following user manual for information on how to login to QTS:
https://www.qnap.com/en/support/con_show.php?cid=11



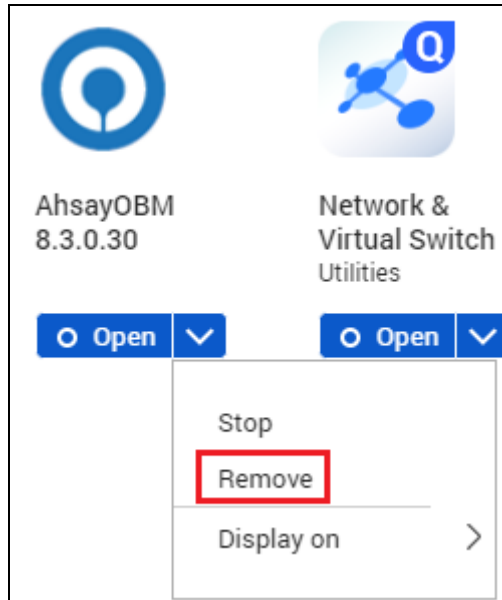
2. Click the App Center icon on the desktop.



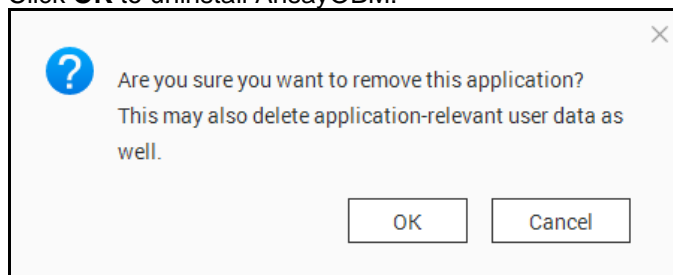
3. When the App Center window appears, click the arrow icon of AhsayOBM.



4. Select **Remove** to uninstall the AhsayOBM.

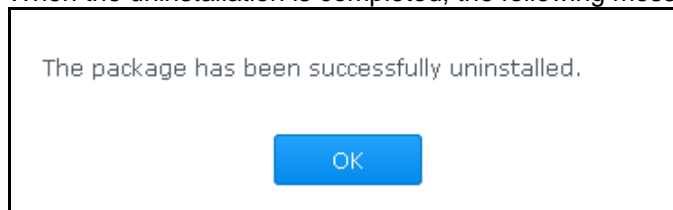


5. Click **OK** to uninstall AhsayOBM.



Note: If you select **OK**, AhsayOBM program files, user settings and AhsayOBM-relevant user data will be removed from the NAS drive.

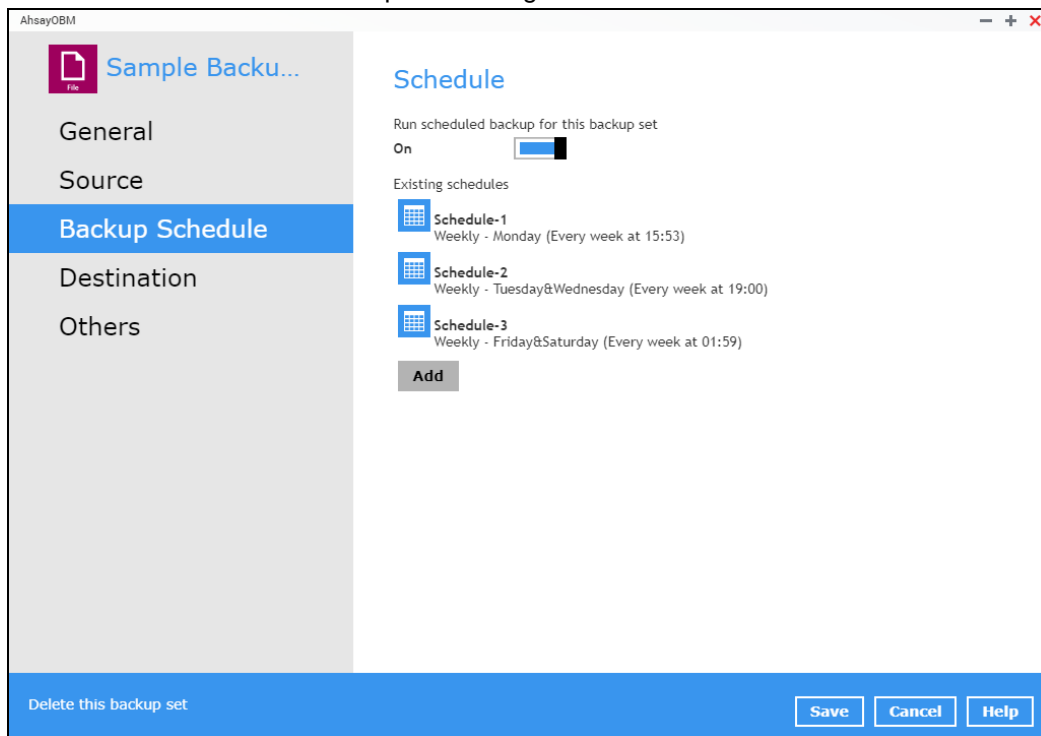
6. When the uninstallation is completed, the following message will appear.



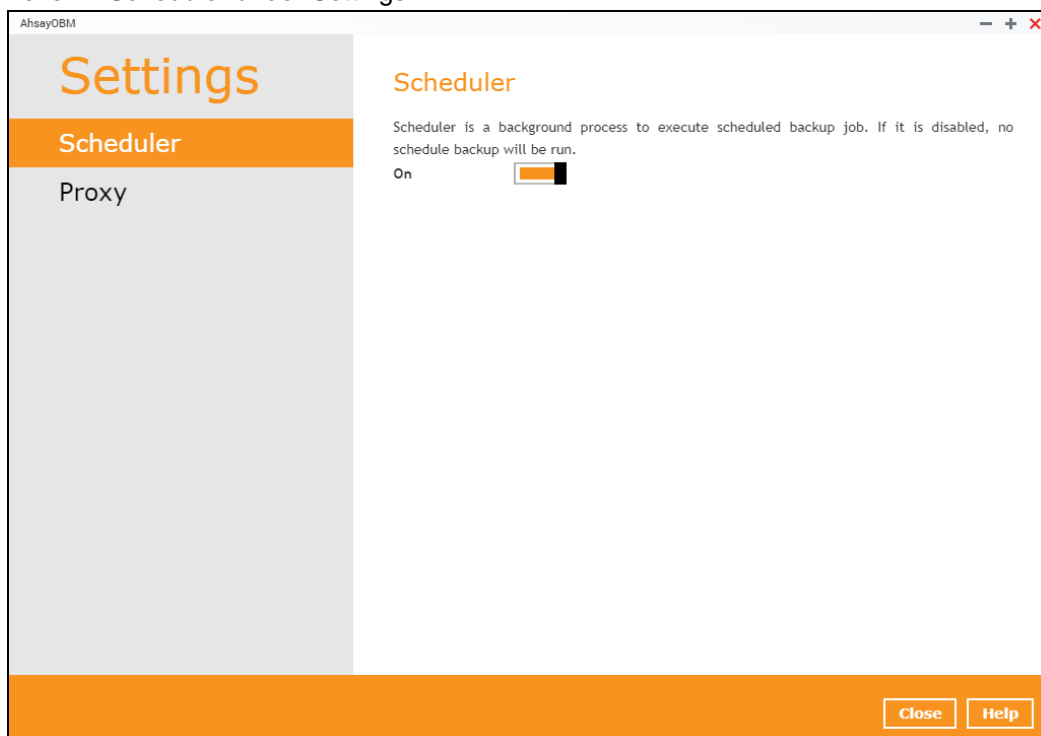
Appendix C: Scheduler Scenarios

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

Level 1: Scheduler under Backup Set Settings

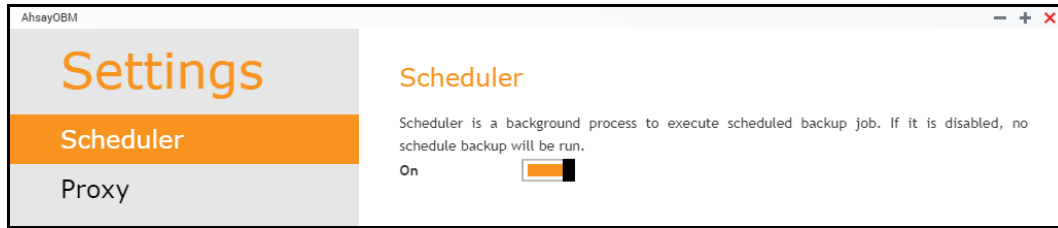


Level 2: Scheduler under Settings

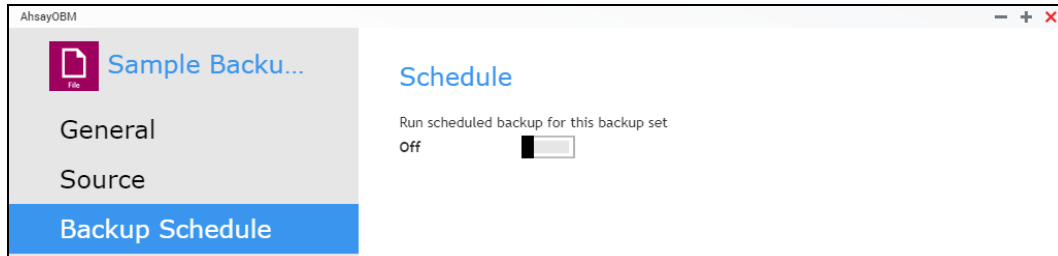


Scenario no. 1: Scheduler under Setting is ON, and Scheduler under Backup Set Settings is OFF

Scheduler under Setting



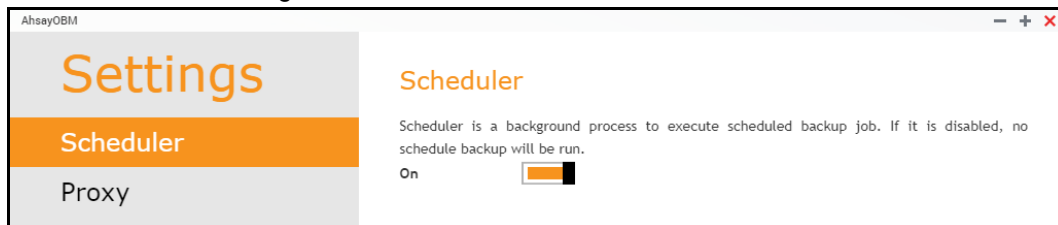
Scheduler under Backup Set Settings



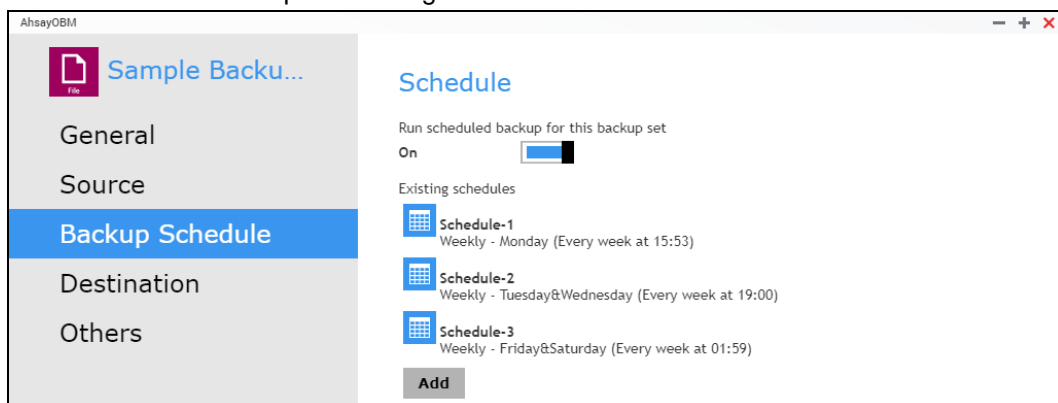
Result: There is no scheduled backup job will be run for the backup set.

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

Scheduler under Setting



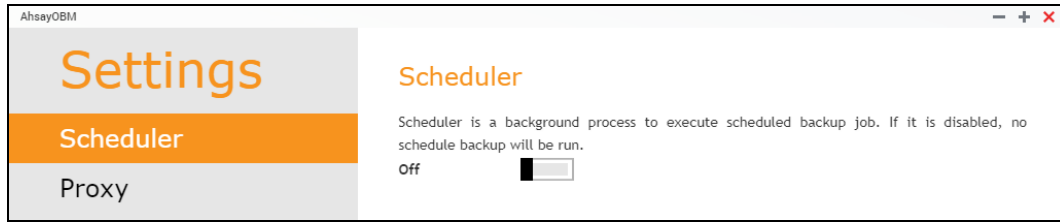
Scheduler under Backup Set Settings



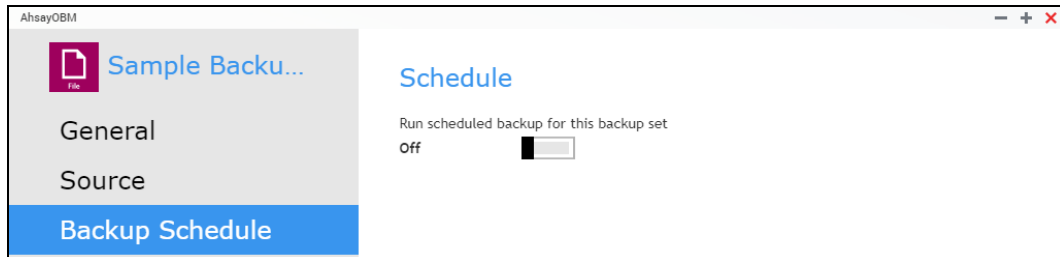
Result: Scheduled backup jobs which are Schedule-1, Schedule-2, and Schedule-3 for the backup set will run.

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

Scheduler under Setting



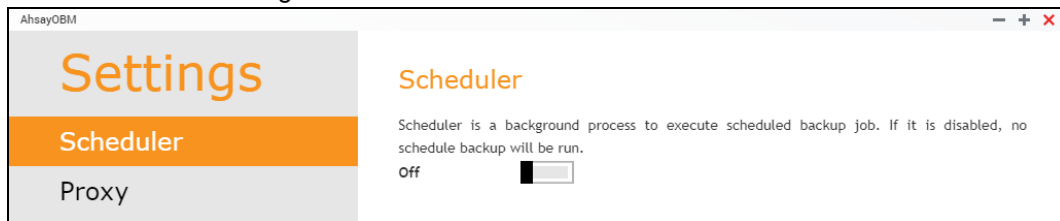
Scheduler under Backup Set Settings



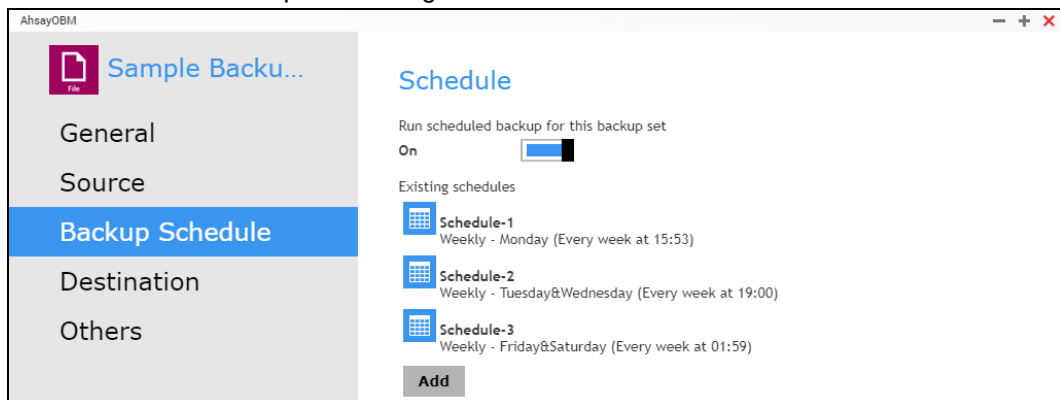
Result: There is no scheduled backup job will be run for the backup set.

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

Scheduler under Setting



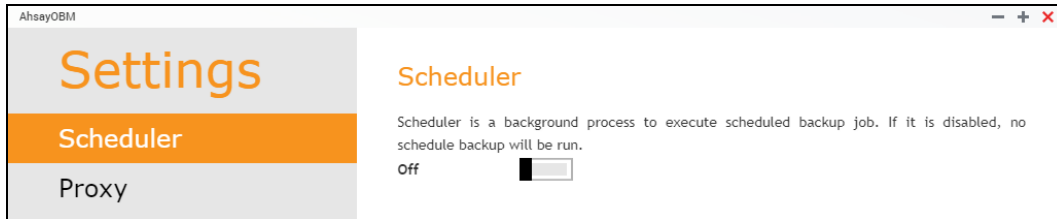
Scheduler under Backup Set Settings



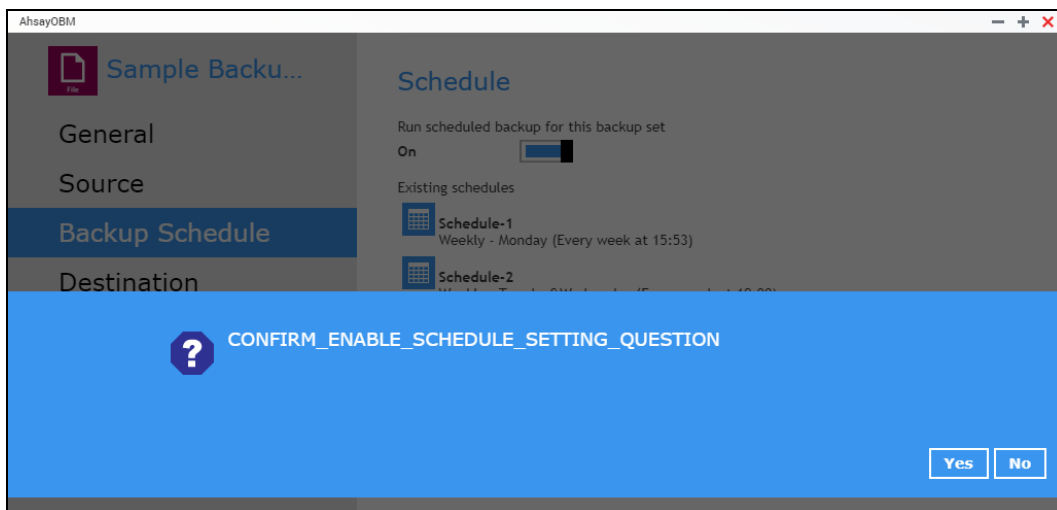
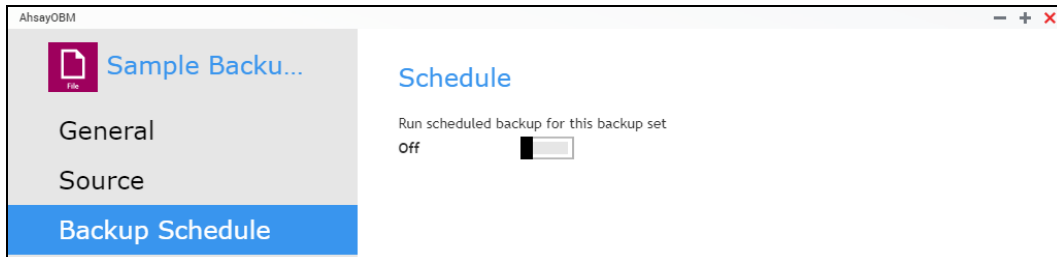
Result: There is no scheduled backup job will be run for the backup set.

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

Scheduler under Setting



Scheduler under Backup Set Settings



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:

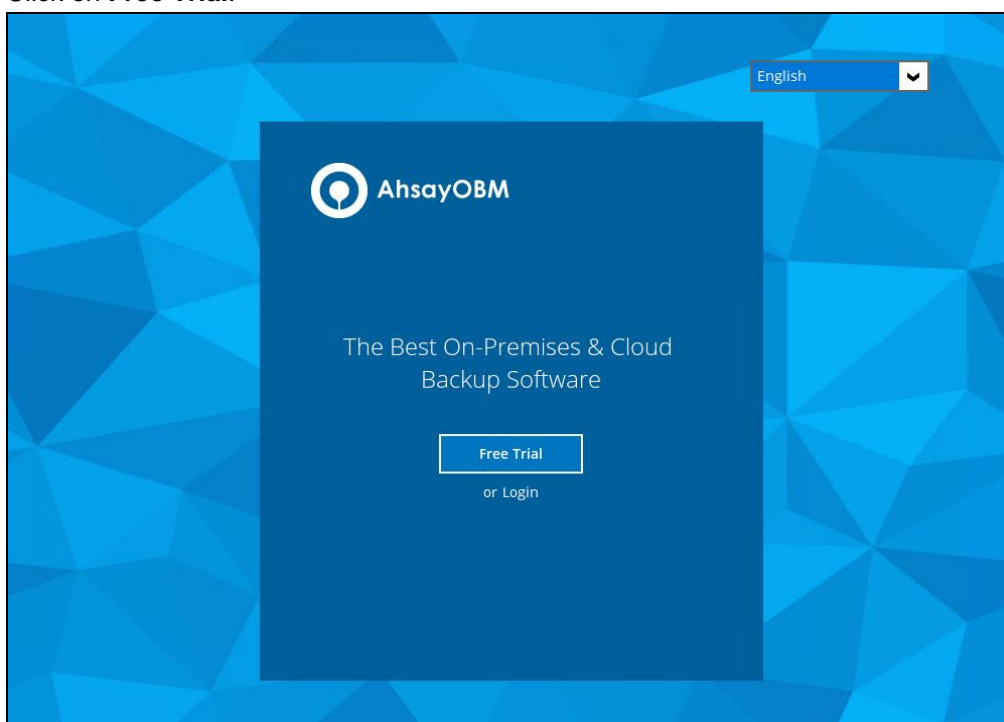
- A valid email address which will be used for receiving notices. A welcome message will also be sent upon creation of the account which specifies the User Setting and Quota set for backup in AhsayCBS.

While here are the limitations of a trial account:

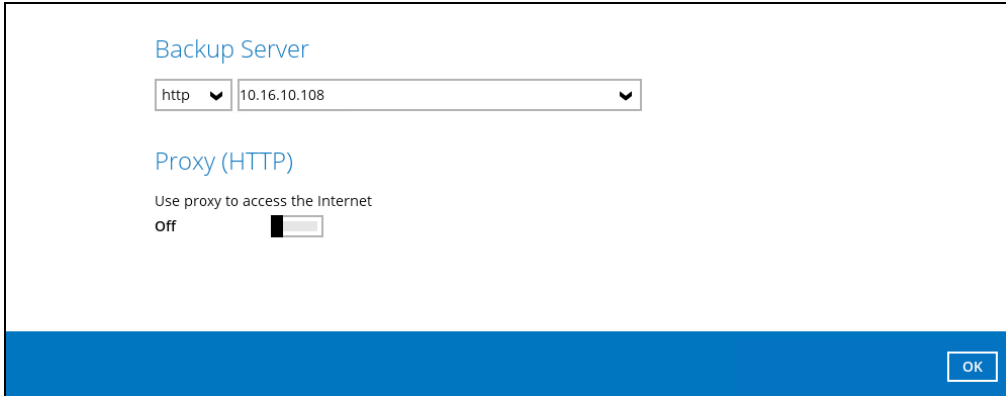
- The Free Trial button will only be displayed once when the user login for the first time. If you cannot create a free trial account kindly contact your backup service provider.
- Only alphanumeric characters and selected special characters, A to Z, 0 to 9, @, - and _ , are allowed to be used for the 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.

1. Click on **Free Trial**.

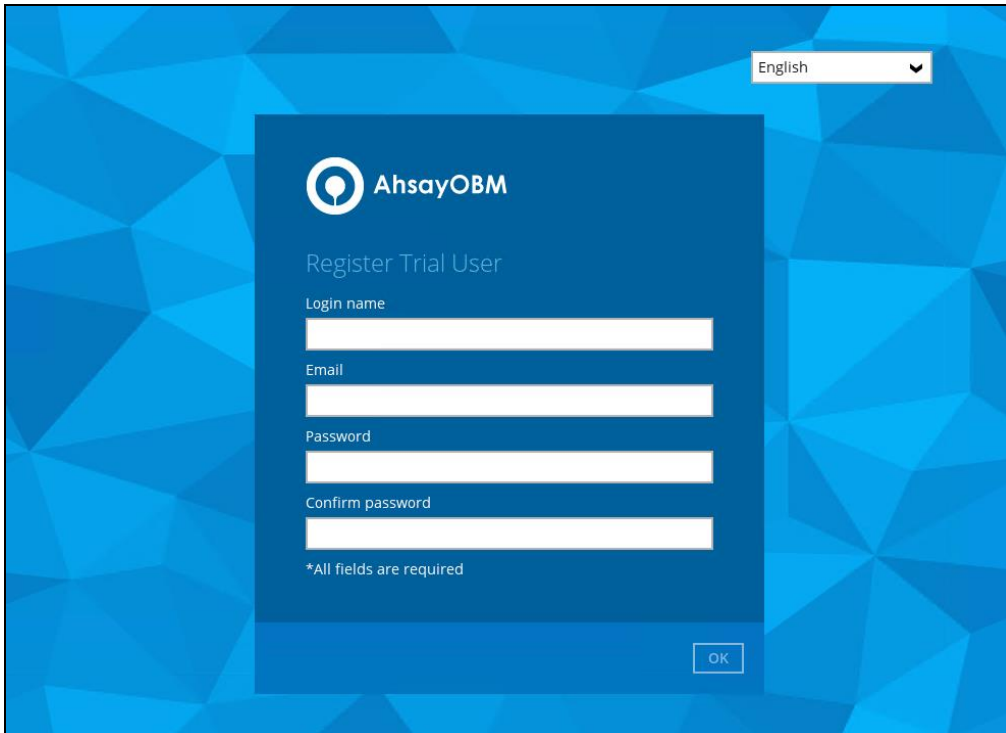


2. Configure your Backup Server settings.



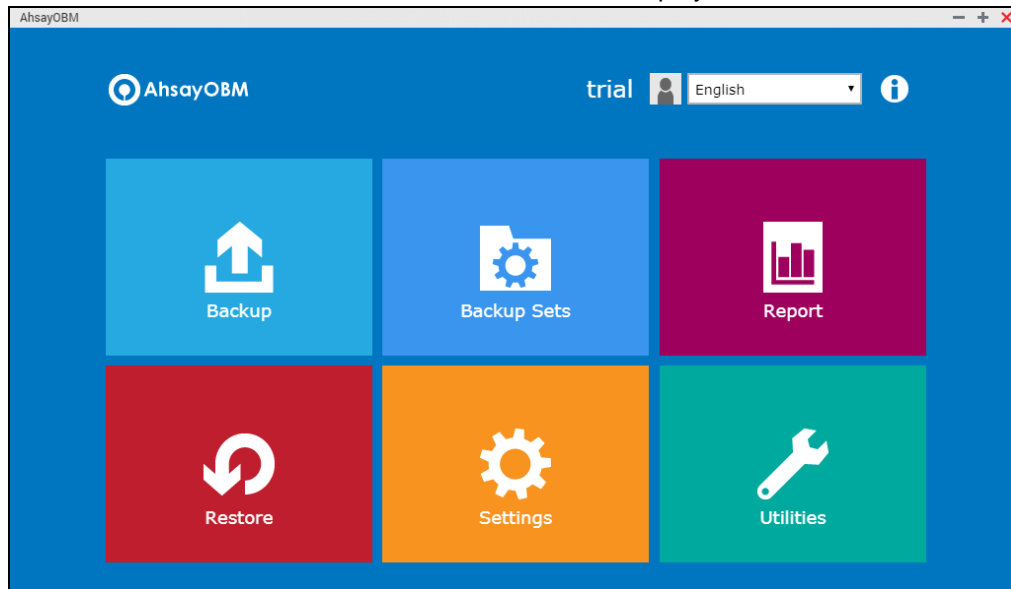
The screenshot shows a configuration window titled "Backup Server". It contains two dropdown menus: the first is set to "http" and the second is set to "10.16.10.108". Below these is a section titled "Proxy (HTTP)" with the text "Use proxy to access the Internet" and a toggle switch labeled "off". An "OK" button is located in the bottom right corner of the window.

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.



The screenshot shows the "Register Trial User" window in AhsayOBM. The window has a blue background with a geometric pattern. It features the AhsayOBM logo and the title "Register Trial User". There are four input fields labeled "Login name", "Email", "Password", and "Confirm password". Below the fields is a note that says "*All fields are required". An "OK" button is located in the bottom right corner of the window. In the top right corner of the main window, there is a language dropdown menu set to "English".

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



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 Timezone, 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 [AhsayCBS User's Guide](#).

The screenshot shows the 'User Profile' settings page in AhsayCBS, specifically the 'General' tab. The left sidebar contains links for 'User Profile', 'Backup Set', 'Settings', 'Report', 'Statistics', and 'Effective Policy'. The main content area has tabs for 'General', 'Backup Client Settings', 'Contact', 'User Group', and 'Security Settings'. Under the 'General' tab, there are several sections: 'Suspend At' with a date picker set to '30-Oct-2019'; 'Status' with radio buttons for 'Enable' (selected), 'Suspended', and 'Locked'; 'Upload Encryption Key' with a checkbox 'Upload encryption key after running backup for recovery' (unchecked); 'Language' with a dropdown menu set to 'English'; and 'Timezone' with a dropdown menu set to 'GMT+08:00 (CST)'.

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

The screenshot shows the 'Backup Client Settings' tab for a user profile. The left sidebar contains links: User Profile, Backup Set, Settings, Report, Statistics, and Effective Policy. The main content area has tabs: General, Backup Client Settings (selected), Contact, User Group, and Security Settings. Below the tabs, it says 'Settings of the client backup agent for this user.' The 'Backup Client' section has two radio buttons: 'AhsayOBM User' (selected) and 'AhsayACB User'. The 'Add-on Modules' section lists various modules with checkboxes and input fields for quotas. The 'Quota' section includes a table for storage space.

Destination	Quota
AhsayCBS	50.0 Gbytes

(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.

The screenshot shows the 'Contact' tab for a user profile. The left sidebar is the same as in the previous screenshot. The main content area has tabs: General, Backup Client Settings, Contact (selected), User Group, and Security Settings. Below the tabs, it says 'Contact information for this user.' The 'Manage Contact Information' section includes a table for contact details.

Name	Email	Encrypt Email
trial	trial@email.com	No