Ahsay Backup

Ahsay Online Backup Manager v7

Office 365 Exchange Online Backup & Restore Guide for Windows

Ahsay Systems Corporation Limited

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A wholly owned subsidiary of
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Revision History

Date	Descriptions	Type of modification
24 Aug 2016	First Draft	New
13 Jan 2017	Added requirement in Ch. 2 Preparing for Backup and Restore; Overall minor formatting changes	Modified
3 Feb 2017	Added instructions and screen shots for Encryption key handling in Ch.4	New
5 Apr 2017	Added Backup Destination for Run-on-Server Backup Set related info; Added Encryption Type option in Ch. 4 Creating an Office 365 Exchange Online Backup Set	New
2 Nov 2017	Added Supported Source for Ch.2.4	New
14 Dec 2017	Updated diagram for System Architecture for Ch1.2; Added and updated items and diagram in Ch.1.3; Added limitation for Ch2.5; Added Best Practice and Recommendation for Ch.2.6; Updated process flow for Ch.5	New / Modified
2 Jan 2018	Added AhsayOBM Licenses, Continuous Backup Module and Java Heap Size requirement for Ch.2.3; Added Screen Shot for Add-on Module for Ch.2.3; Added Public Folder Management permission for user account for Ch.2.3; Added content of backup destination in the comparison table for Ch.1.3; Added administrative authority to restore mailbox to alternate location for Limitation for Ch.2.5; Added Set Backup Destination and Login AhsayOBM for Best Practice and Recommendation for Ch.2.6	New / Modified
14 September 2018	Added requirement of Antivirus Exclusion for Ch.2.3	New

Table of Contents

1 Overview 1

What is this software? 1
System Architecture 1
Why should I use AhsayOBM or AhsayCBS User Web Console? 2
About This Document 9

2 Preparing for Backup and Restore 10

Hardware Requirement 10
Software Requirement 10
Antivirus Exclusion Requirement 10
Other Requirements 10
Supported Source 15
Limitation 16
Best Practices and Recommendations 17

3 Login to AhsayOBM / AhsayCBS User Web Console 20

Login to AhsayOBM 20
Login to AhsayCBS User Web Console 21

4 Creating an Office 365 Exchange Online Backup Set 22

Creating a Backup Set on AhsayOBM 22
Create a Backup Set on User Web Console 32

5 Overview of Office 365 Exchange Online Backup Process 38

6 Running Backup Job 39

Start a Manual Backup in AhsayOBM 39
Start a Manual Backup on the User Web Console 40
Configure Backup Schedule for Automated Backup 42
Setting up on AhsayOBM 42
Setting on User Web Console 45

7 Restoring Office 365 Exchange Online Backup Set 47

Restore Backup with AhsayOBM 47
Restore Backup with User Web Console 51

8 Contacting Ahsay 53

Technical Assistance 53
Documentation 53

Appendix 54

Appendix A Setting Backup Destination on AhsayOBM for Backup Set Created on User Web Console 54

1 Overview

What is this software?

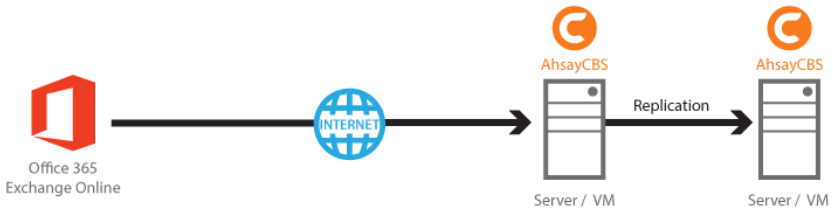
Ahsay brings you specialized client backup software, namely AhsayOBM, to provide a set of tools to protect your mailbox accounts on Office 365 Exchange Online. This includes backup and recovery of individual emails, contacts, calendars and other mail items in your Office 365 mailboxes, with snapshots / versioning, and retention policy to protect even email that you may have accidentally deleted from your Office 365 mailbox.

System Architecture

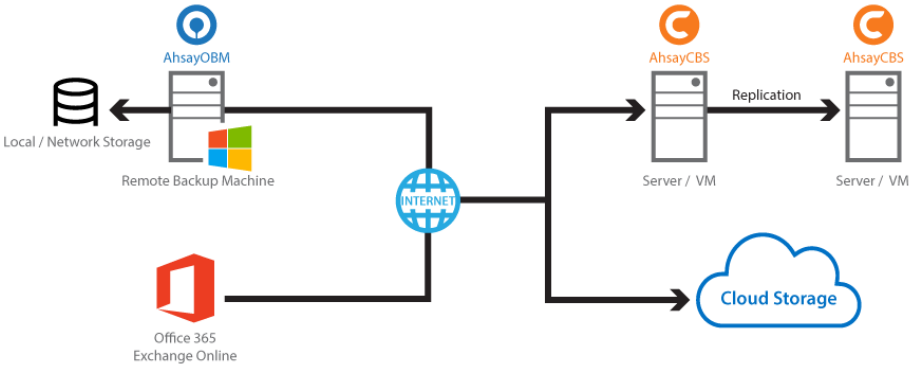
Below is the system architecture diagram illustrating the major elements involved in the backup process among the Office 365 Exchange Online service, AhsayOBM and AhsayCBS.

In this user guide, we will focus on the software installation, as well as the end-to-end backup and restore process using both AhsayCBS User Web Console (Agentless) and the AhsayOBM (Agent-based).

1. **Agentless**: No need to install AhsayOBM. The AhsayCBS backup server connects to the Office 365 Exchange online directly through the Internet.

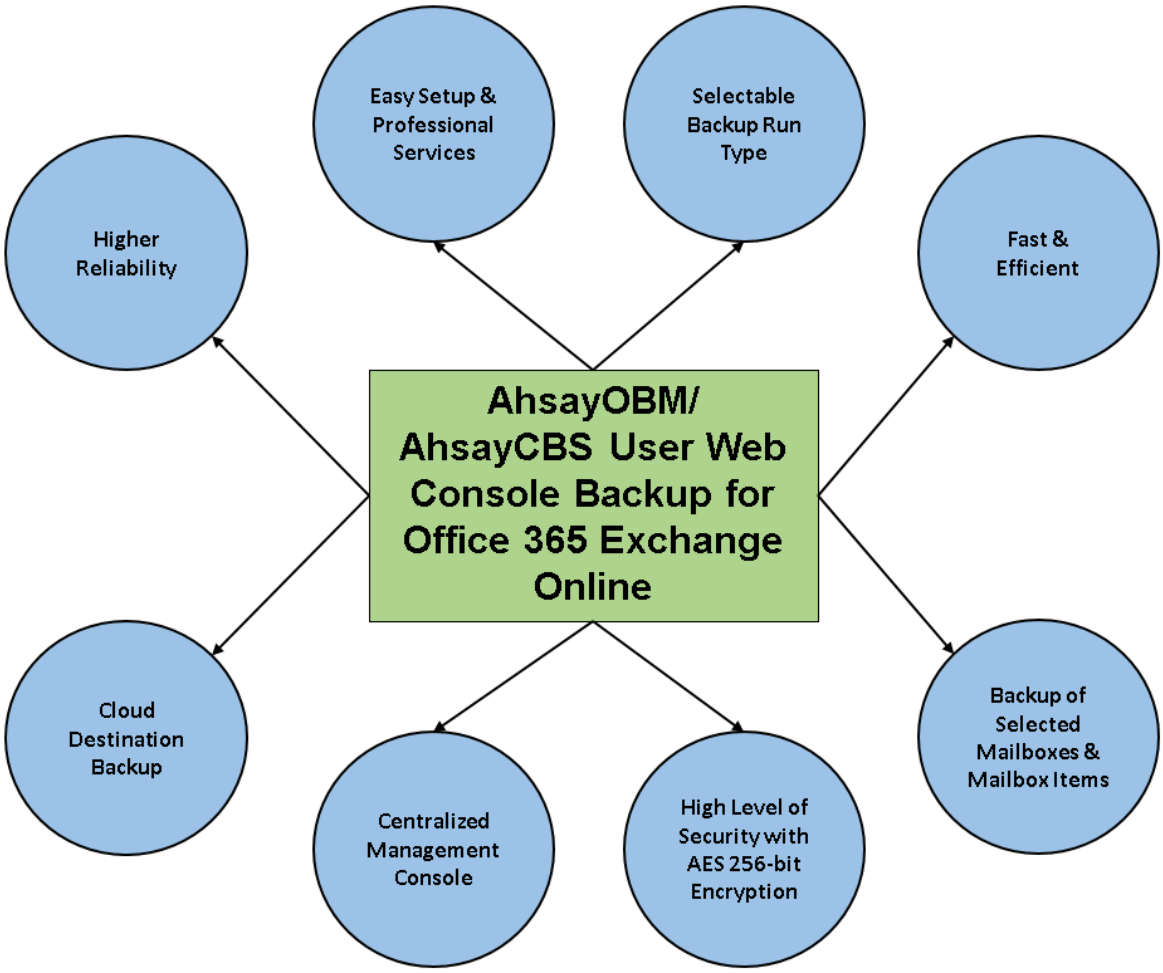


2. **Agent-based**: The latest version of AhsayOBM is installed on the remote backup machine which is connected to Office 365 Exchange online and AshayCBS backup server through internet.



Why should I use AhsayOBM or AhsayCBS User Web Console?

We are committed to bringing you a comprehensive Office 365 Exchange Online backup solution with AhsayOBM. Below are some key areas that we can help to make your backup experience a better one.



Easy Setup & Professional Services

Setup is a few clicks away - our enhanced AhsayOBM v7 can be easily downloaded and installed in just a few clicks. The refined user interface also provides user-friendly instructions to guide you through installation, configuration, backup and restore. The intuitive setup procedures together with instructions in this user guide makes the software installation and operations easy even for layman users. That being said, if you do run into any problems during setup, we are here to help out. Visit the URL below for details on technical assistance.
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Professional Services

AhsayOBM Installation and Configuration Service

If you would like to save the time of reading through this document for setup, we have introduced this service to take care of all the installation and setup for you. On top of the installation and setup services, we also have a whole series of premium after-sales services to provide you with the best user experiences possible.

Valid Maintenance

Our Valid Maintenance provides you with professional and timely customer support along the way. You

are entitled to the Valid Maintenance for free during the first year of your service subscription, and recurring annual fee at 20% of your annual subscription fee.

Refer to our Professional Services webpage for further details and subscription.

Selectable Backup Run Type

You can choose to either run the backup set you created on Server (AhsayCBS User Web Console) or Client (AhsayOBM).

NOTE

The run type of an Office 365 Exchange Online backup set can only be set if you create a backup set via the AhsayCBS Admin / User Web Console. For backup set created via the backup client application (i.e. AhsayOBM), the run type is set to Run on Client by default.

Run on Server

A Run on Server Office 365 Exchange Online backup set provides you with an agentless backup solution. Manual or scheduled backup job is performed on the backup server (i.e. AhsayCBS User Web Console); you do not need to install a backup agent on your personal computer in order to backup your data on cloud storages. The advantages of agentless backup technology make it a good option for users who want to simplify the backup and restore management.

Run on Client

A Run on Client Office 365 Exchange Online backup set provides you with an agent-based backup solution. Manual or scheduled backup job is performed on the client computer (i.e. AhsayOBM); you need to install a backup agent on your personal computer in order to back up your data on cloud storages. The advantages of agent-based backup technology make it a good option for users who want to have more control on individual backup / restore and resources management.

Comparison between Run on Server and Run on Client

With both **Run on Server** (agentless) and **Run on Client** (agent-based) backup options available and the freedom to use different setting on different backup sets according to your needs, our backup solution offers you with high level of flexibility and efficiency for Office 365 Exchange Online backup and restore.

Below is the comparison between backup and restore job Run on Server and Run on Client.

	Run on Server (AhsayCBS User Web Console)	Run on Client (AhsayOBM)
Installation	➢ No need to install the client backup agent on your computer or upgrade it when a newer version becomes available, which can fulfill some regulatory requirements of compliance during backup or	➢ Need to install the latest version of AhsayOBM on computer with internet access for connection to Office 365 account.

	restore. ➢ Only a web browser and internet connection is needed.	
Backup	➢ Backup operation of all users are performed on the backup server, which means multiple jobs may run at the same time leading to slower performance. ➢ Backup period will be shorter as the backup data are transferred directly from Office 365 Exchange Online to AhsayCBS backup server. ➢ Backup destination is restricted to AhsayCBS backup server.	➢ Backup job is performed on your computer with resources that is dedicated to yourself. ➢ In the event of a failure to a single backup agent, it fails in isolation to other users' environment. ➢ Backup period will be longer as the backup data are transferred from Office 365 Exchange Online to AhsayOBM, then to AhsayCBS backup server. ➢ Backup destination can be AhsayCBS backup server, local and cloud drive and FTP.
Large Number of Mailbox Backup Sets	➢ Backup of large number of mailbox backup set may take more time. As it will increase the AhsayCBS server load a lot if run multiple mailbox backup sets concurrently and may affect the server performance, so it will make backup speed slower and period longer.	➢ Backup of large number of mailbox backup sets may take less time. As backup sets can be run concurrently over several machines as distributed solution, the resource will be more and will make backup speed faster and period shorter.
Cost	➢ Do not require provision of additional Windows machine.	➢ May require the provision of an additional Windows machine.
Restore	➢ Restore operation of all users are performed on the backup server which may have multiple jobs to run at the same time, resulting in slower performance. ➢ Restore period should be shorter as the backed up items are transferred directly from AhsayCBS backup server to Office 365 Exchange Online.	➢ Restore job is performed on your computer with resources that is dedicated to yourself. ➢ In the event of a failure to a single backup agent, it fails in isolation to other users' environment. ➢ Restore period should be longer as the backed up items are transferred from AhsayCBS backup server to AhsayOBM first and then to Office 365 Exchange Online.

Differences between a Run on Server and Run on Client Backup Set

The following table summarizes the differences in backup options available for a Run on Server or Run on Client, and the tool to use (client agent or user web console) when performing a backup and restore:

	Run on Server Office 365 Exchange Online Backup Set	Run on Client Office 365 Exchange Online Backup Set
General Settings	Yes	Yes
Backup Source	Yes	Yes
Backup Schedule	Yes	Yes
Continuous Backup	Yes	Yes
Destination	Yes (Restricted to AhsayCBS only)	Yes
In-File Delta	Yes	Yes
Retention Policy	Yes	Yes
Command Line Tool	N/A	Yes
Reminder	N/A	Yes
Bandwidth Control	Yes	Yes
IP Allowed for Restore	N/A	Yes
Other	Yes	Yes
To Run a Backup	AhsayCBS User Web Console Only	AhsayOBM / AhsayCBS
To Run a Restore	AhsayCBS User Web Console Only	AhsayOBM / AhsayCBS

Fast and Efficient

We understand that backup could be a time and resources consuming process, which is why AhsayOBM is designed with advanced technologies to make backup a fast and efficient process.

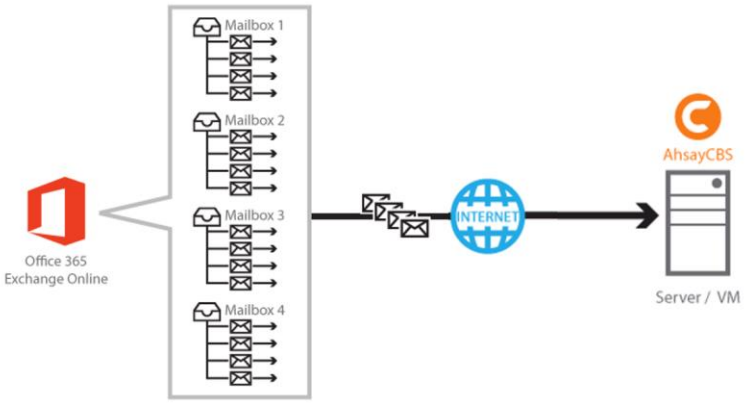
We also understand that you may wish to run backup at a specified time interval of your choice, that's why we also allow you to set your own backup schedules so that you can take full control of the time when to perform backup.

- **Multi-threading** – this technology utilizes the computing power of multiple CPU cores for creating multiple backup and restore threads to produce fast backup and restore performance.

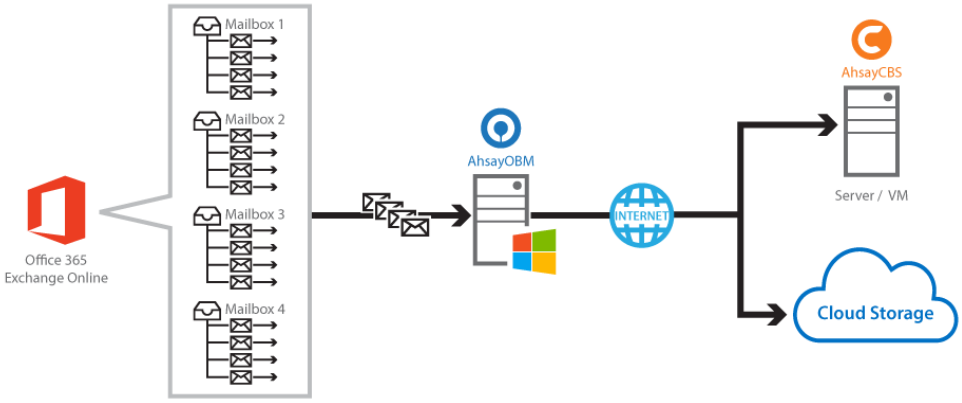
  The default setting for Office 365 Exchange Online backup sets supports

  - Backup of 4 mailboxes concurrently (4 threads).
  - For each of the 4 mailboxes, now supports a maximum 4 mail items concurrently (4 threads).

For Agentless Option:



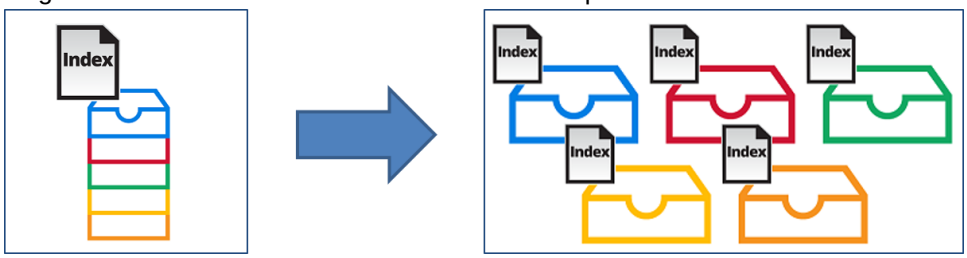
For Agent-based Option:



As shown the technology translate into a total of 16 concurrent threads.

- **Index File Structure** – The index file structure has been re-designed to improve the backup and restore performance.

  Each Office 365 Exchange online mailbox will have its own individual index file instead of a single index file for all mailboxes within the backup set.



  This new design eliminates any potential I/O performance bottlenecks when the index file is updated during each backup job, which can occur when using single index file structure for multi-thread concurrent backup.

- **Block Level Incremental Backup** – this technology breaks down the backup files into multiple blocks and only the changed blocks will be backed up each time.

Backup of Selected Mailboxes & Mailbox Items

The backup resources can be mailbox level, folder level and even item level.

- Flexible backup options:
  - Only select the required mailboxes, specific folders or items for backup.
- Flexible restore options:
  - Restore the whole mailbox contents or just one email.
  - Restore mail items to the original mailbox or an alternate mailbox

High Level of Security

We understand your Office 365 mail objects may contain sensitive information that requires to be protected, that is why your backup data will be encrypted with the highest level of security measure.

- **Un-hackable Encryption Key** – to provide the best protection to your backup data, you can turn on the encryption feature which will be default encrypt the backup data locally with AES 256-bit truly randomized encryption key.
- **Encryption Key Recovery** – Furthermore, we have a backup plan for you to recover your encryption key in case you have lost it. You backup service provider can make it mandatory for you to upload the encryption key to the centralized management console, the encryption key will be uploaded in hashed format and will only be used when you request for a recovery.

Centralized Management Console

Our enriched features on the centralized web console offers you a one-stop location for monitoring and managing your backup and restore. Below is an overview of what you can do with it. For more details regarding the setup and operations of the centralized management console, refer to the AhsayCBS Administrator's Guide for details.

- Create/ update/ delete backup set
- Restore backup
- Configure user settings
- Configure backup settings
- View and download backup and restore reports
- Monitor backup and restore live activities
- Monitor storage statistic

Cloud Destinations Backup

To offer you with the highest flexibility of backup destination, you can now back up mail objects to a wide range of cloud storage destinations. Utilizing cloud destination backup gives you an extra layer of protection in the event of a local drive corruption, where you will still be able to retrieve data from the cloud destination.

NOTE

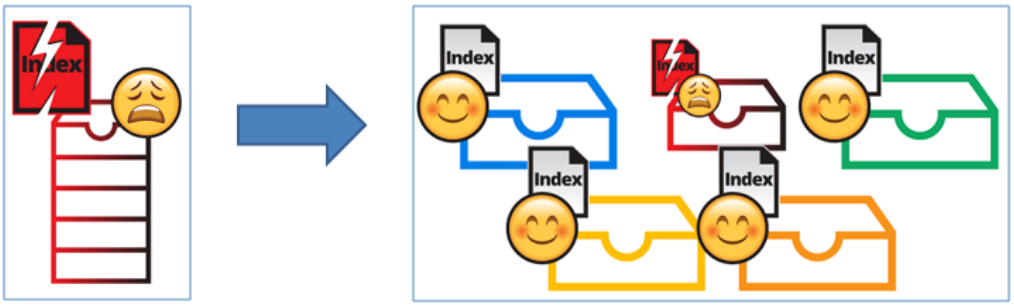
Cloud destination backup applies only to agent-based backup sets. The backup destination is restricted to AhsayCBS for all agentless backup sets.

Below is a list of supported cloud destinations.

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

Higher Reliability

The implementation of one index file per mailbox can significantly improve the overall resilience of backup and restore from index related issues.



For example, if a single index file corrupted, it will only affect corresponding mailbox, while other mailboxes selected for backup are unaffected.

About This Document

What is the purpose of this document?

This document aims at providing all necessary information for you to get started with setting up your system for Office 365 Exchange Online backup and restore, followed by step-by-step instructions on creating backup set, running backup job and restoring backed up data, using both the AhsayOBM and AhsayCBS Web User Console.

The document can be divided into 3 main parts.

Part 1: Preparing for Office 365 Exchange Online Backup & Restore

Requirements
Requirements on hardware & software for installation

Best Practices and Recommendations
Items recommended to pay attention to before backup and restore

Part 2: Performing Office 365 Exchange Online Backup

Logging in to Client Agent or User Web Console
Log in to AhsayOBM or User Web Console

Creating a Backup Set
Create a backup set using AhsayOBM and User Web Console

Running a Backup Set
Run a backup set using the AhsayOBM and User Web Console

Configuring an Automated Backup
Configure backup schedule for automated backup

Part 3: Restoring Office 365 Exchange Online Backup

Restoring a Backup Set using AhsayOBM & User Web Console
Restore a backup using the AhsayOBM and User Web Console

What should I expect from this document?

After reading through this documentation, you can expect to have sufficient knowledge to set up your system to backup Office 365 Exchange Online on AhsayOBM, as well as to carry out an end-to-end backup and restore process.

Who should read this document?

This documentation is intended for backup administrators and IT professionals who are responsible for the Office 365 Exchange Online backup and restore.

2 Preparing for Backup and Restore

Hardware Requirement

To achieve the optimal performance when AhsayOBM is running on your machine, refer to the following article for the list of hardware requirements.
FAQ: Ahsay Hardware Requirement List (HRL) for version 7.3 or above

Software Requirement

Make sure the operating system where you have the Office 365 Exchange Online installed is compatible with the AhsayOBM. Refer to the following article for the list of compatible operating systems and application versions.
FAQ: Ahsay Software Compatibility List (SCL) for version 7.3 or above

Antivirus Exclusion Requirement

To optimize performance of AhsayOBM on Windows, and to avoid conflict with your antivirus software, refer to the following KB article the list of processes and directory paths that should be added to all antivirus software white-list / exclusion list:
http://wiki.ahsay.com/doku.php?id=public:5352_suggestion_on_antivirus_exclusions

NOTE

For AhsayOBM version 7.17 or above, the bJW.exe process is automatically added to Windows Defender exclusion list for Windows 10 and 2016, during installation / upgrade via installer or upgrade via AUA.

Other Requirements

- **AhsayOBM Installation**

  For agent-based backup and restore, make sure that the latest version of AhsayOBM is installed on your computer with Internet access for connection to your Office 365 Exchange online account.

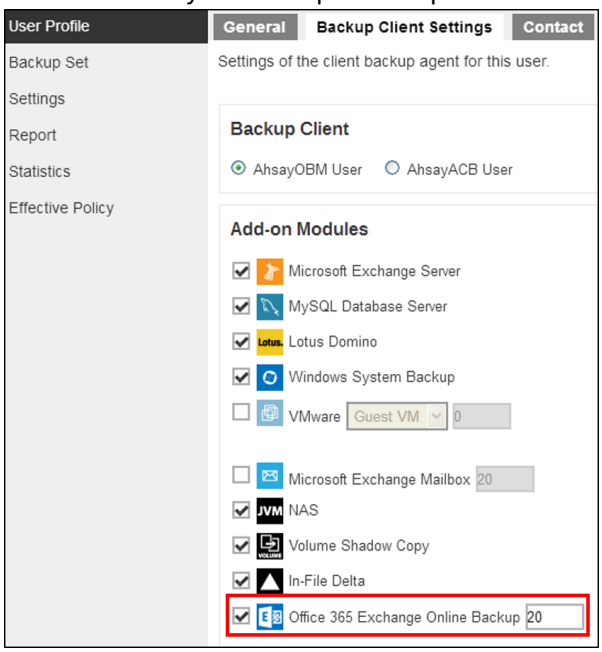
  User should also stay up-to-date when newer version of AhsayOBM is released. To get our latest product and company news through email, please subscribe to our mailing list.
  http://www.ahsay.com/jsp/en/home/subscribe_mail_list.jsp

- **Add-on Module Requirement**

  One Office 365 Exchange Online Backup license is required for the backup of each user mailbox. No license is required for public folder.

  Make sure that the Office 365 Exchange Online Backup feature has been enabled as an add-on module in your AhsayOBM user account and there is sufficient Office 365 Exchange Online Backup license quota to cover the backup of your mailboxes.

Please contact your backup service provider for more details.



- **Access for AhsayCBS User Web Console**

  It is now possible to perform agentless backup and restore, which can be done via the AhsayCBS User Web Console without using the AhsayOBM client agent. In order to access the User Web Console, make sure you have Internet connection and a web browser installed on your computer or mobile device.

- **AhsayOBM Licenses**

  AhsayOBM licenses are calculated on a per device basis:

  i. To backup mailboxes with 1 backup client computer / Exchange server (e.g. 1 AhsayOBM installed), 1 AhsayOBM license is required.

  ii. To backup mailboxes with multiple backup client computers, the number of AhsayOBM licenses required is equal to the number of devices. For example, if there are 10 mailboxes to be backup with 3 backup client computers, then 3 AhsayOBM licenses are required.

  Please contact your backup service provider for more details.

- **Backup Quota Requirement**

  Make sure that your AhsayOBM user account has sufficient quota assigned to accommodate the storage of the Office 365 Exchange Online mailboxes and public folder items for the new backup set and retention policy.

  Please contact your backup service provider for more details.

- **Continuous Backup Module**

  The Continuous backup add-on module is required if would like to enable the continuous backup feature.

- **Java Heap Size**

The default Java heap size setting on AhsayOBM is 2048MB. For Office 365 Exchange online backup, it is highly recommended to increase the Java heap size setting to at least 4096MB to improve backup and restore performance. The actual heap size is dependent on amount of free memory available on the machine with AhsayOBM installed (machine that is running the backup).

- **Office 365 Subscription Plan**

  The following subscription plans with Exchange Online email services are supported to run backup and restore on AhsayOBM or AhsayCBS User Web Console.

Office 365 Business Essentials	Office 365 Business Premium
Office 365 Education	Office 365 Enterprise E1
Office 365 Enterprise E3	Office 365 Enterprise E4
Office 365 Enterprise E5	

- **Office 365 Subscription Status**

  Make sure your Office 365 Exchange Online subscription with Microsoft is active in order to enjoy all privileges that come along with our backup services. If your account has expired, renew it with Microsoft as soon as possible so that you can continue enjoy the Office 365 Exchange Online backup services provided by Ahsay.

  When your account is expired, depending on your role, certain access restrictions will be applied to your account. Refer to the URL below for more details.

  Microsoft Office 365 Subscription Status

- **Granting Permission to Accounts for Creating Backup Set**

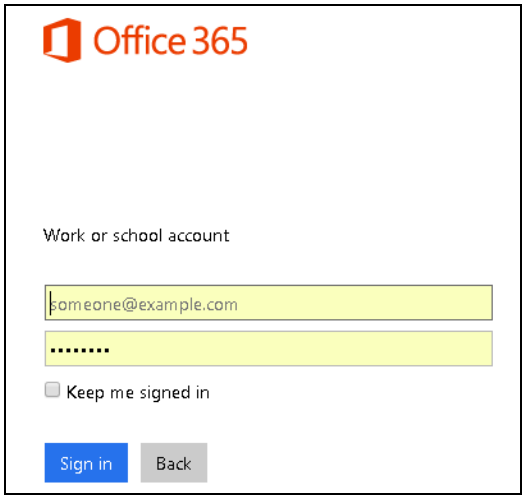
  Before the Office 365 account administrator or other accounts can create a backup set, the administrator has to grant permission to the account(s) which are going to create backup set. The account must be a member of the following security groups:

  - Discovery Management
  - Public Folder Management

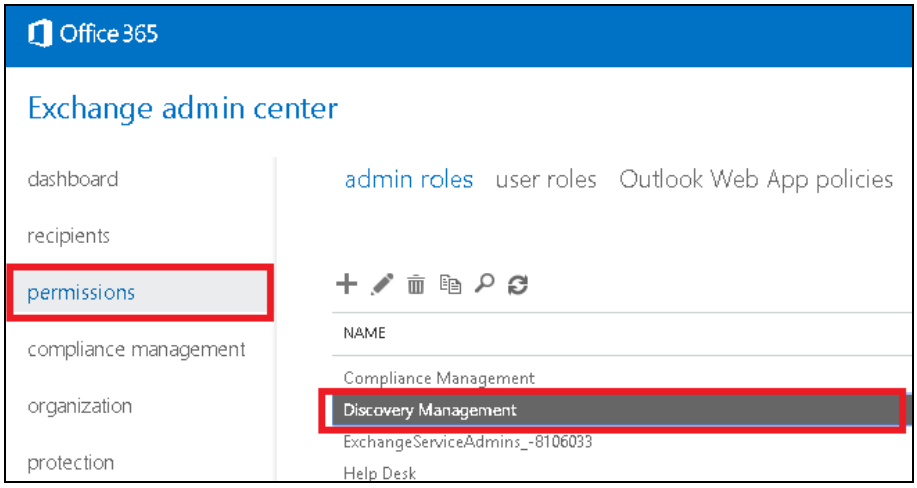
  Follow the steps below to grant permission to user account.

  i. Open https://outlook.office365.com/ecp

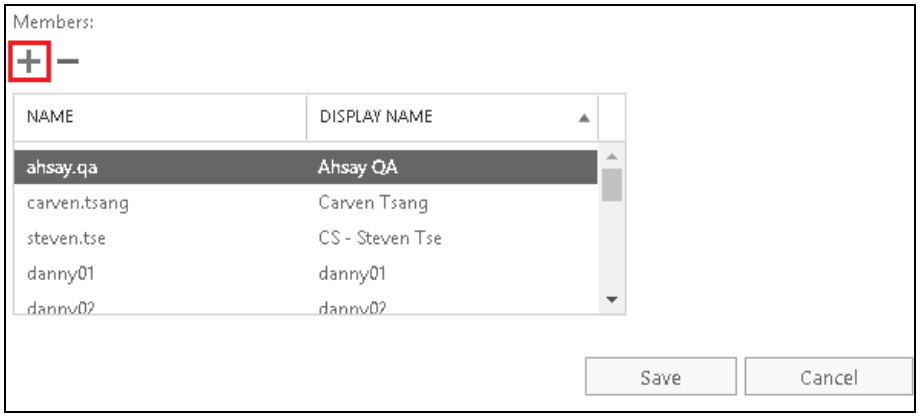
  ii. Login to the **Exchange admin center** as an account administrator.



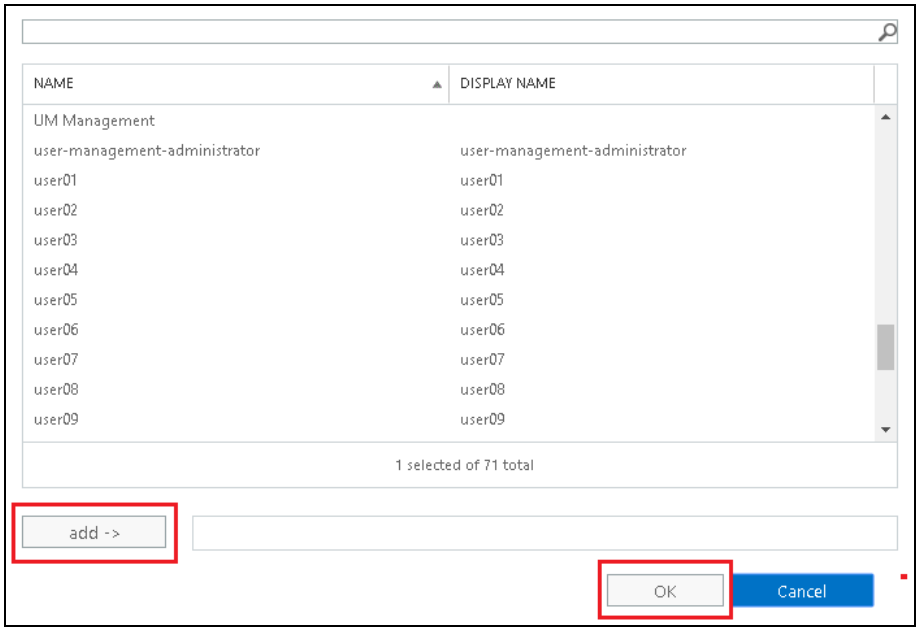
iii. Select the **permissions** menu on the left, then double click on **Discovery Management** or **Public Folder Management** on the right.



iv. You can now add users to this group. Click the **+** icon under the **Members** section.



v. Look for the username(s) of the account that you would like to add permission for, then click **add** > **OK** to add the corresponding user(s) to the permission group.



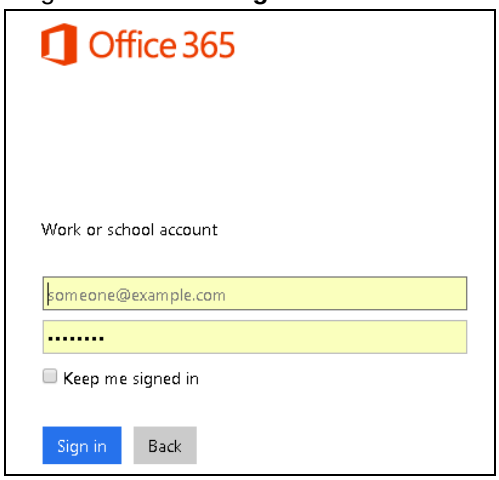
vi. Click **Save** to confirm and exit the setting.

Granting Permission for Application Impersonation

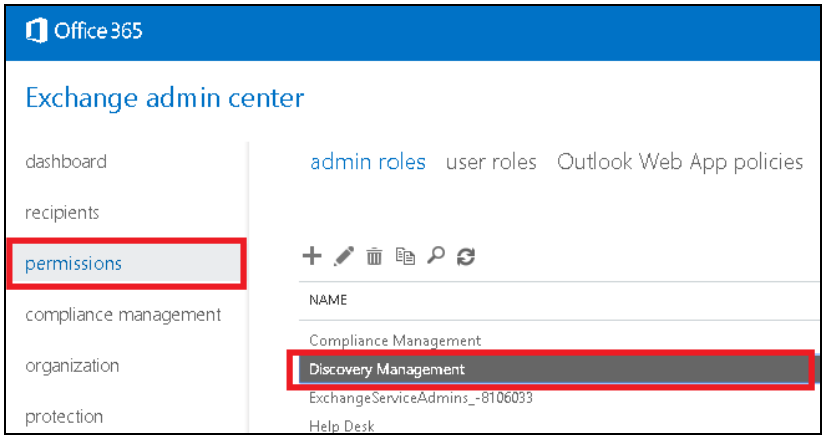
This permission allows users added under the **Members** section of the **Discovery Management** group (refer to the previous section for setup) to back up and/or restore mailbox item(s) not only for their own account, but also the accounts of other users in the same **Members** section. To grant permission for this feature, you have to add the **Application Impersonation** role by following the steps below.

i. Open https://outlook.office365.com/ecp

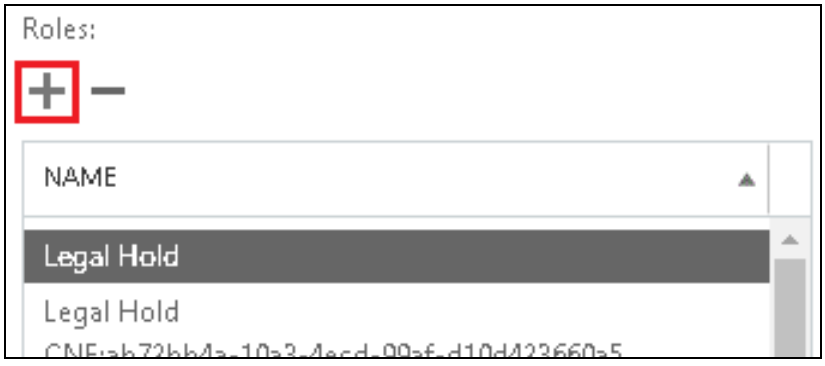
ii. Login to the **Exchange admin center** as an account administrator.



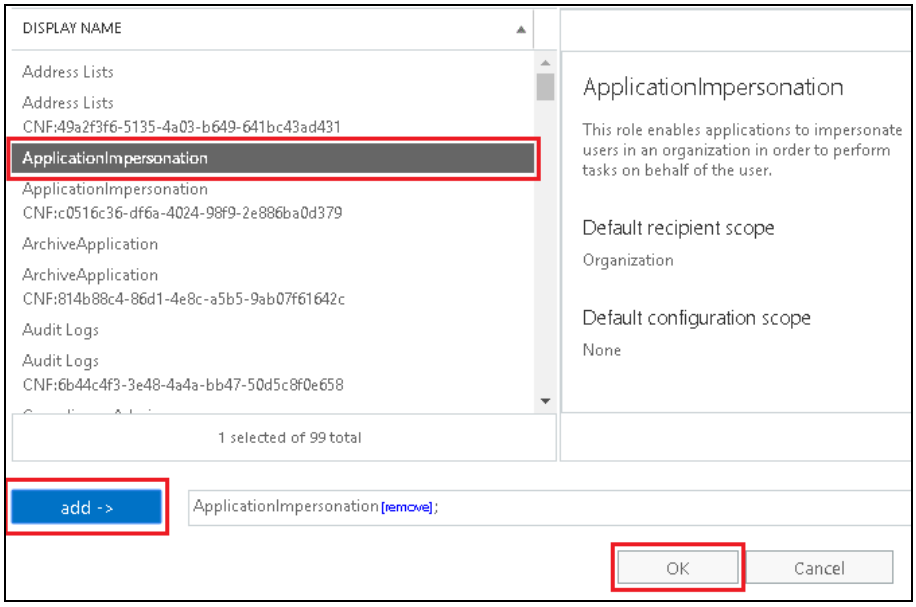
iii. Select the **permissions** menu on the left, then double click on **Discovery Management** on the right.



iv. Click the **+** icon under the **Role** section.



v. Select the **ApplicationImpersonation** role, then click the **add** button. Click **OK** afterward.



vi. Click **Save** to confirm and exit the setting.

Supported Source

Below is the supported mailbox type of Office 365 Exchange Online Backup.

Mailbox Level			
Item	**Supported?**	**Item**	**Supported?**
User mailbox	✓	Room Mailbox	✓
Public Folder	✓	Equipment Mailbox	✓
Public Folder Mailbox	✓	Shared Mailbox	✓

Below is the items that you can backup or restore from an Office 365 Exchange Online backup set.

Folder Level			
Item	**Supported?**	**Item**	**Supported?**
Inbox	✓	RSS Feeds	✓
Drafts	✓	Junk Email	✓
Sent Items	✓	Tasks	✓
Deleted Items	✓	Calendar	✓

Archive	✓	Contacts	✓
Notes	✓		

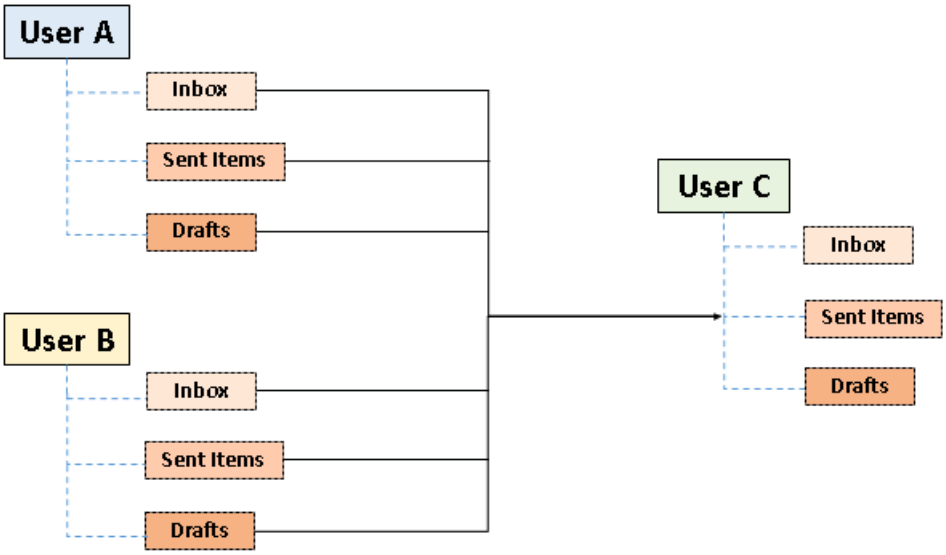
Limitation

For backup and restoration of Office 365 Exchange online backup set, there is some limitation.

1. If you are trying to restore item(s) from one mailbox to an alternate location mailbox, AhsayOBM will restore the item(s) to their respective destination folder(s) with the same name of the original folder(s).

   Example: Item from “Inbox” folder of Mailbox-A will be restored to the “Inbox” folder of the alternate location Mailbox-B; Item from “Drafts” folder of Mailbox-A will be restored to the “Drafts” folder of the alternate location Mailbox-B.

2. If you are trying to restore item(s) from several mailboxes to an alternate location mailbox, AhsayOBM will restore the item(s) to their respective destination folder(s) in alternate location mailbox with the same name of the original folder(s).



   Example: Item from “Inbox” folder of Mailbox-A and Mailbox-B will be restored to the “Inbox” folder of the alternate location Mailbox-C.

3. Restore of the mailbox items or public folder items is only supported if the according mailbox or public folder exists.

4. Only administrator account or user account with administrative authority can restore backup mailbox items to an alternate location.

5. Restore of mailbox item(s) in public folder to an alternate location mailbox is not supported.

   Example: Restore of mailbox item(s) in public folder from Mailbox-A to alternate location Mailbox-B is not supported.

6. If you are trying to restore the mailbox item to a destination mailbox which has a different language setting than the original mailbox, AhsayOBM will restore mailbox item(s) to their respective destination folder based on the translation listed below.

   For folders such as 'Calendar' or 'Notes', a new folder 'Calendar' or 'Notes' will be created.

Backup source (English)	Action	Destination mailbox with Chinese as default language settings
Inbox	Merge	收件箱
Outbox	Merge	寄件匣
Sent Items	Merge	寄件備份
Deleted Items	Merge	刪除的郵件
Drafts	Merge	草稿
Junk E-Mail	Merge	垃圾電郵
Calendar	Create new folder	Calendar
Notes	Create new folder	Notes

Best Practices and Recommendations

The following are some best practices or recommendations we strongly recommend you to follow before you start any Office 365 Exchange Online backup and restore.

- **Temporary Directory Folder Location (For backup and restore running on AhsayOBM only)**

  Temporary directory folder is used by AhsayOBM for storing backup set index files and any incremental or differential backup files generated during a backup job. To ensure optimal backup/restoration performance, it is recommended that the temporary directory folder is set to a local drive with sufficient free disk space.

- **Performance Recommendations**

  Consider the following best practices for optimized performance of the backup operations:

  - Enable schedule backup jobs when system activity is low to achieve the best possible performance.
  - Perform test restores periodically to ensure your backup is set up and performed properly. Performing recovery test can also help identify potential issues or gaps in your recovery plan. It's important that you do not try to make the test easier, as the objective of a successful test is not to demonstrate that everything is flawless. There might be flaws identified in the plan throughout the test and it is important to identify those flaws.

- **Individual Mail Object Size**

  Office 365 Exchange Online service has set a size limit for individual mail object to be uploaded. Considering the size of the mail object may become larger as a result of the transcoding process when it is being sent out, we strongly recommend you to keep individual mail object no larger than **80MB** if you definitely want it to be backed up.

- **Set Backup Destination**

After creating the backup set in **Run on Client** mode on AhsayCBS user web console, please remember to set the backup destination for the backup set in AhsayOBM.

- **Backup Destination**

  To provide maximum data protection and flexible restore options, it is recommended to configure:

  - At least one offsite or cloud destination
  - At least one local destination for fast recovery

- **Login AhsayOBM**

  After modifying the backup schedule setting or Continuous Backup setting of the **Run on Client** backup set on AhsayCBS user web console, please remember to login to the AhsaOBM client once to synchronize the changes immediately.

- **Large amount of Mailboxes to Backup**

  It is recommended to divide the mailboxes into multiple backup sets. By default, the Office 365 Exchange online backup module can back up a maximum of 4 mailboxes concurrently (4 concurrent backup threads), while backing up a maximum of 4 mail items concurrently per mailbox (4 concurrent backup threads). Therefore, each backup set supports a maximum of 4x4=16 backup threads at a time. By splitting up all mailboxes into separate backup sets, the more backup sets, the faster the backup process can achieve.

  Example-1: There are 100 mailboxes needed to be backup, you can divide 20 mailboxes into one backup set.

Backup Set Name	Mailbox Number
Badkup-Set-1	No.1 -- 20
Badkup-Set-2	No.21 -- 40
Badkup-Set-3	No.41 -- 60
Badkup-Set-4	No.61 -- 80
Badkup-Set-5	No.81 -- 100
Note: If there is new mailboxes added, you can create new backup set for the new mailboxes.	

  Example-2: There are 100 mailboxes needed to be backup, you can divide mailboxes into backup sets in alphabetic order.

Backup Set Name	Mailbox Name Start with
Badkup-Set-1	A -- E

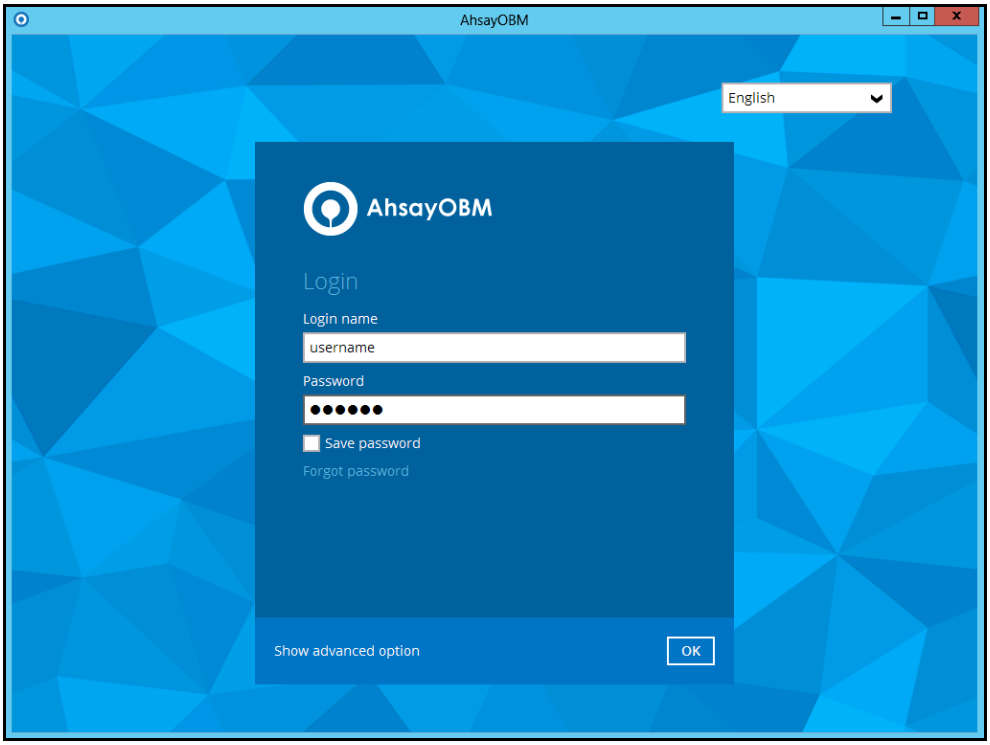
Badkup-Set-2	F -- J
Badkup-Set-3	K --O
Badkup-Set-4	P -- T
Badkup-Set-5	U -- Z
Note: If there is new mailboxes added, you can divide the new mailboxes into the original backup sets by the corresponding alphabetic order.	

3 Login to AhsayOBM / AhsayCBS User Web Console

Login to AhsayOBM

1. Login to the AhsayOBM application user interface.

   Double click the AhsayOBM desktop icon to launch the application.



2. Enter the **Login name** and **Password** of your AhsayOBM account.

3. Click **Show advanced option** to configure the **Backup Server** and **Proxy** details if necessary.

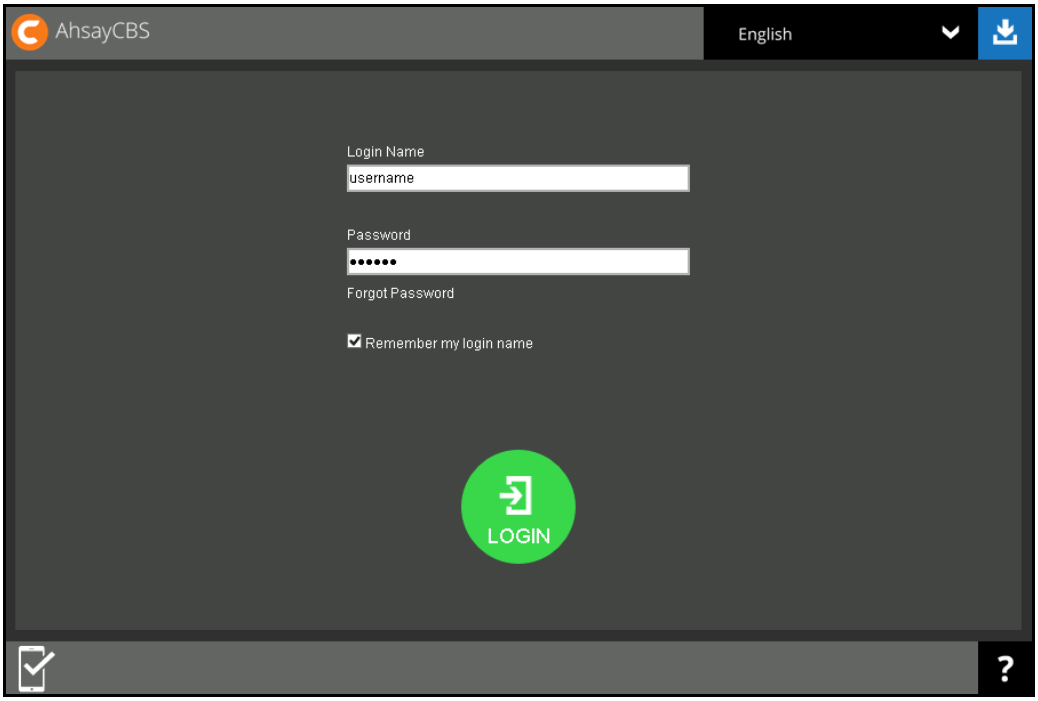
4. Click **OK** to login to AhsayOBM.

Login to AhsayCBS User Web Console

1. Login to the AhsayCBS web console at

   https://backup_server_hostname:port

   Note: *Contact your backup service provider for the URL to connect to the web console if necessary.*



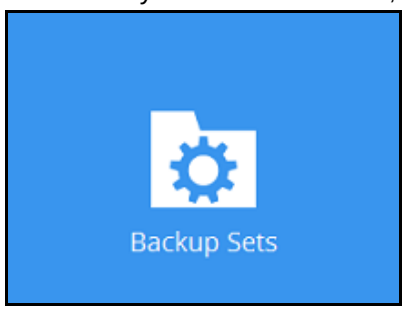
2. Enter the Login Name and Password of your AhsayOBM account.

3. Click **LOGIN** afterward to login to the web console.

4 Creating an Office 365 Exchange Online Backup Set

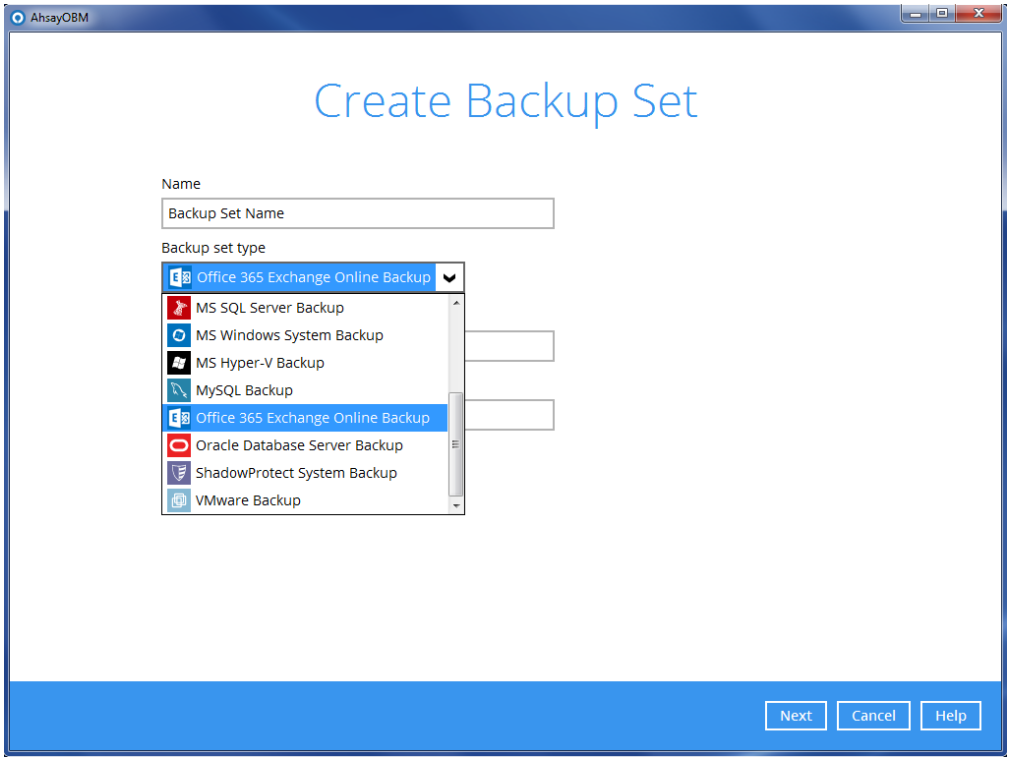
Creating a Backup Set on AhsayOBM

1. In the AhsayOBM main interface, click **Backup Sets**.

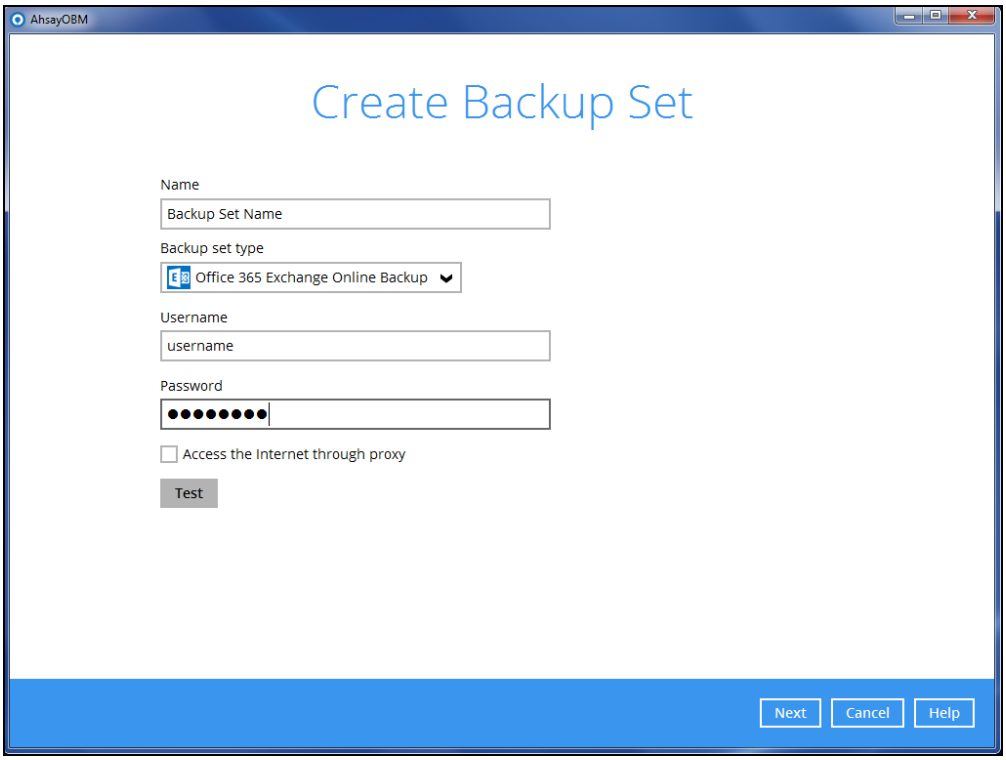


2. Click the "**+**" icon next to **Add new backup set**.

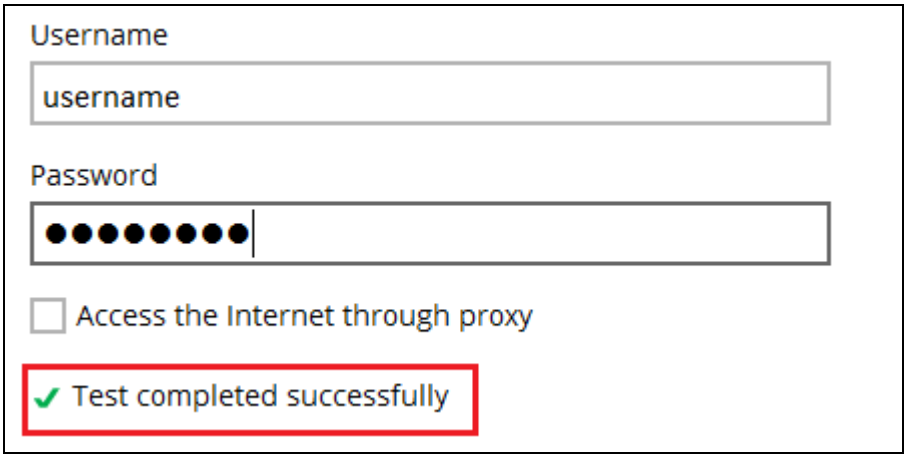
3. Enter a **Name** for your backup set and select **Office 365 Exchange Online Backup** as the **Backup set type**.



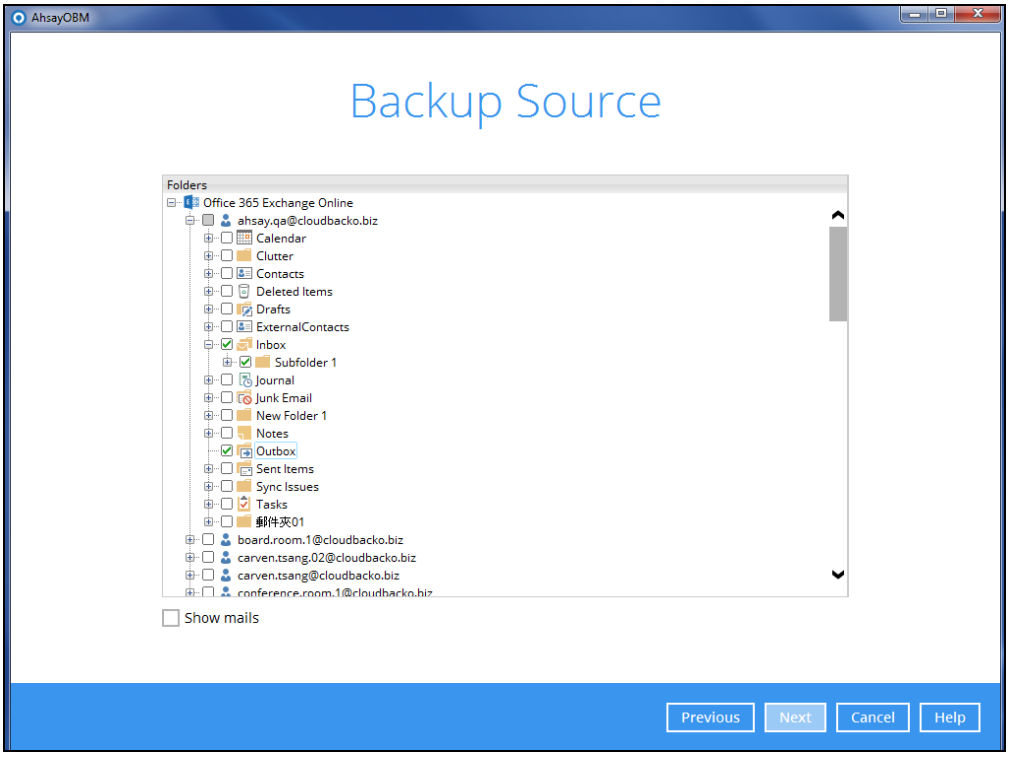
4. Enter the user name and password of your Office 365 Exchange Online account, then press **Test** to validate the account.



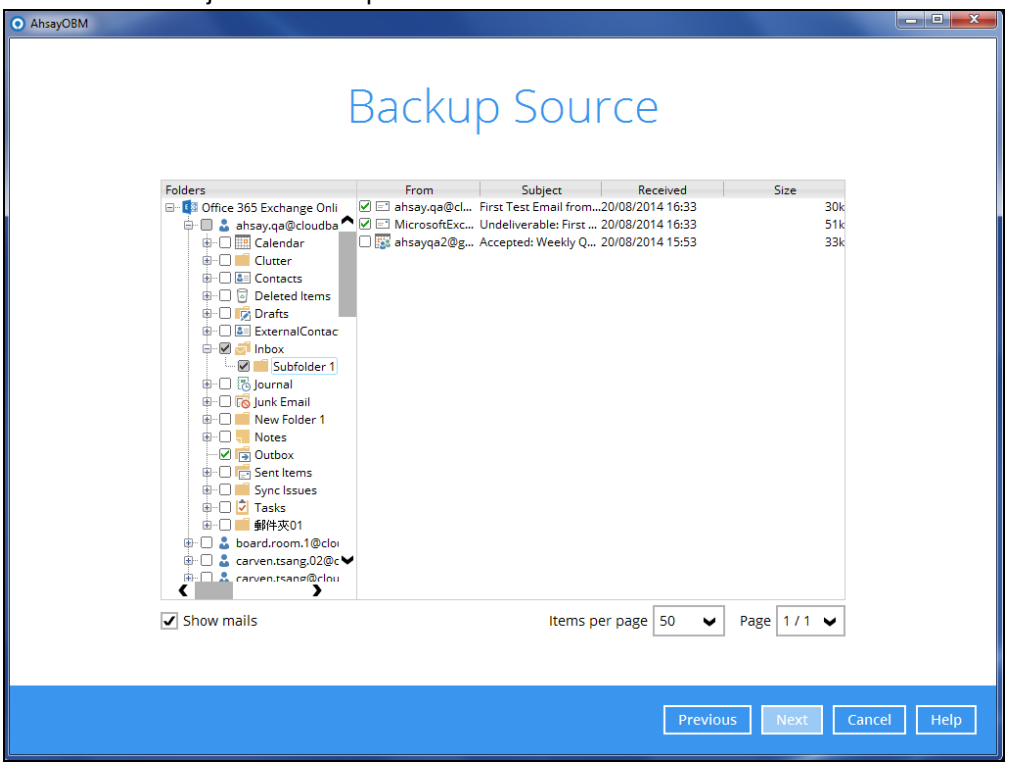
Test completed successfully shows when the validation is successful. Press **Next** to proceed to the next step.



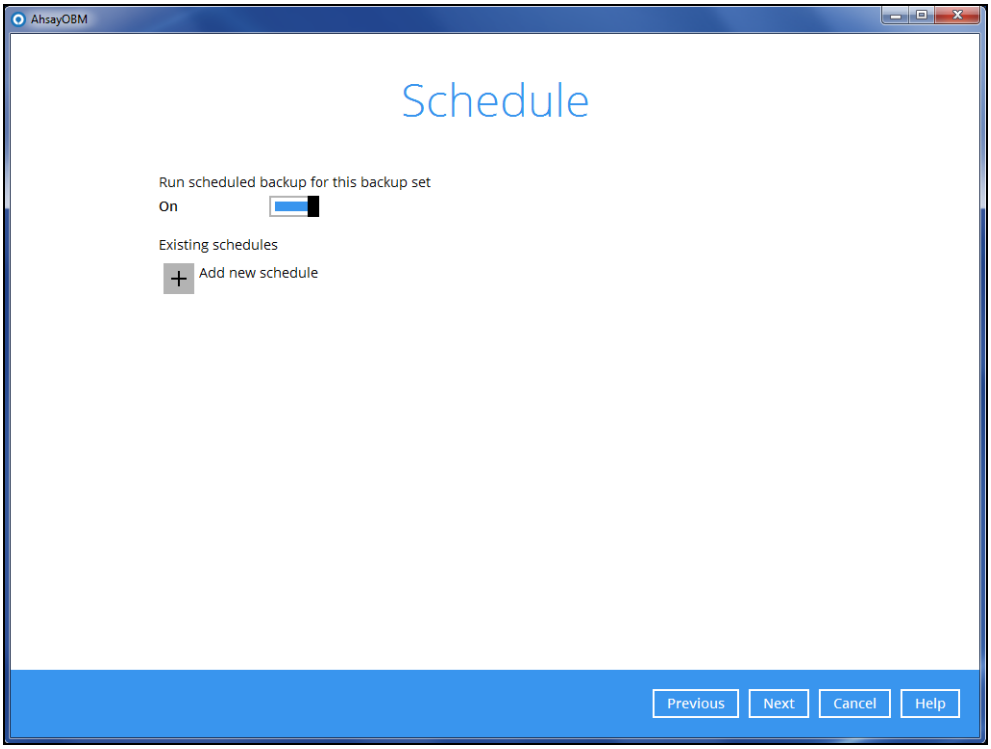
5. In the **Backup Source** menu, select the desired user account and content folder for backup.



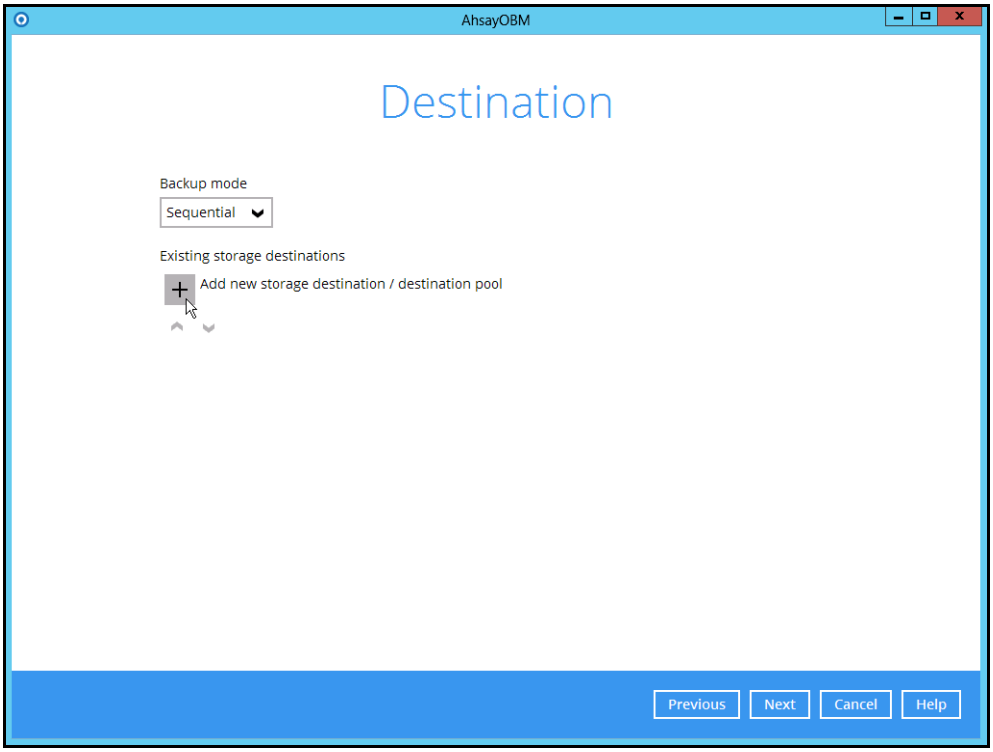
Enable the **Show mails** checkbox at the bottom left corner if you would like to choose individual mail object for backup.



6. In the **Schedule** menu, configure a backup schedule for backup job to run automatically at your specified time interval. Slide the on/off button to turn on this feature, then click **Add new schedule** to add a new schedule, then click **Next** to proceed afterward.



7. In the Destination menu, select a backup destination where the backup data will be stored. Click the "**+**" icon next to **Add new storage destination / destination pool**.

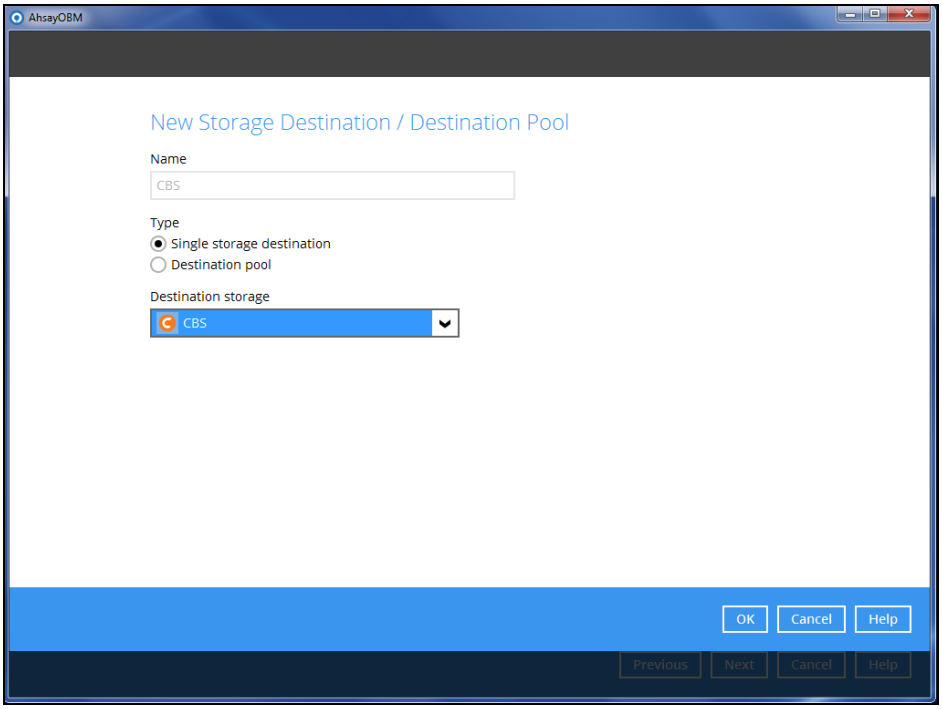


Note

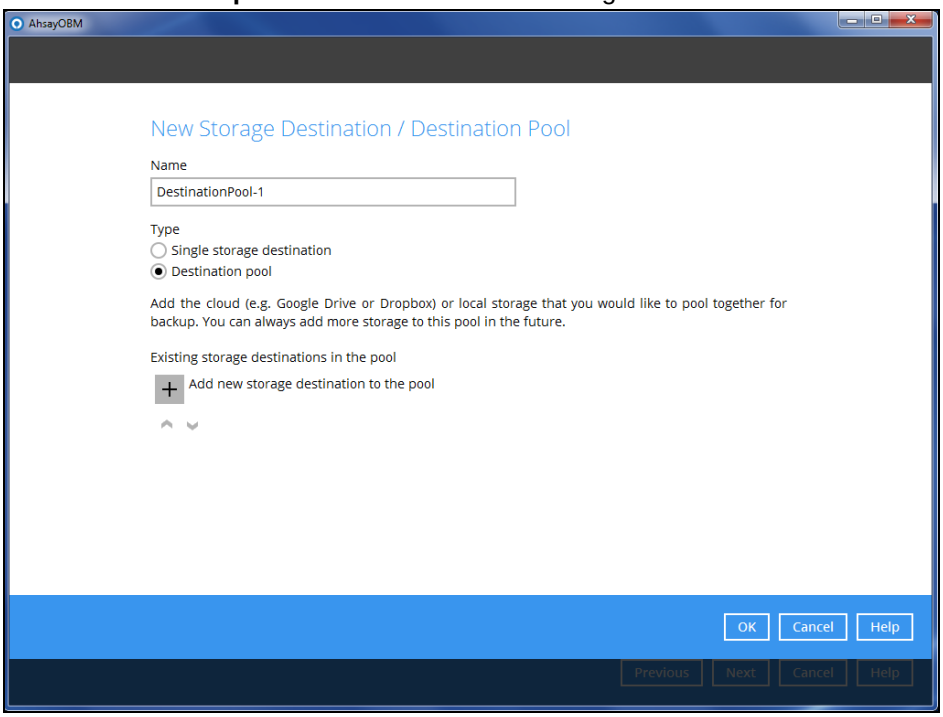
For more details on Backup Destination, refer to the following KB article for details:
https://forum.ahsay.com/viewtopic.php?f=186&t=14049

8. Select the storage type.

- **Single storage destination** – the entire backup will be uploaded to one single destination you selected under the **Destination storage** drop-down list. By default, the destination storage is selected as **CBS**.

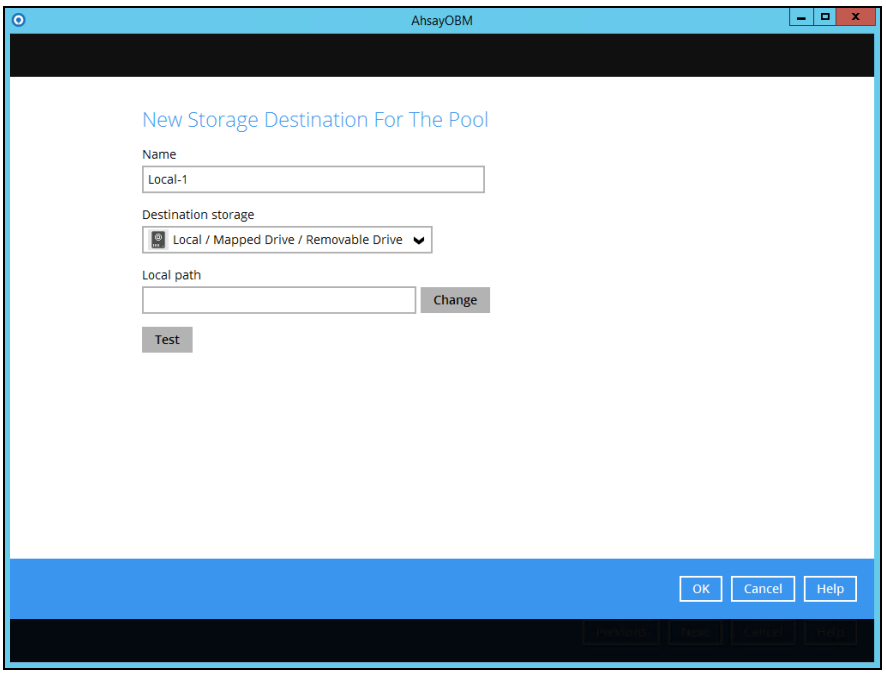


- **Destination pool** – the backup will be spread over on the destinations you have selected. Enter a **Name** for the destination pool and then click **Add new storage destination to the pool** to select the desired storage destinations.

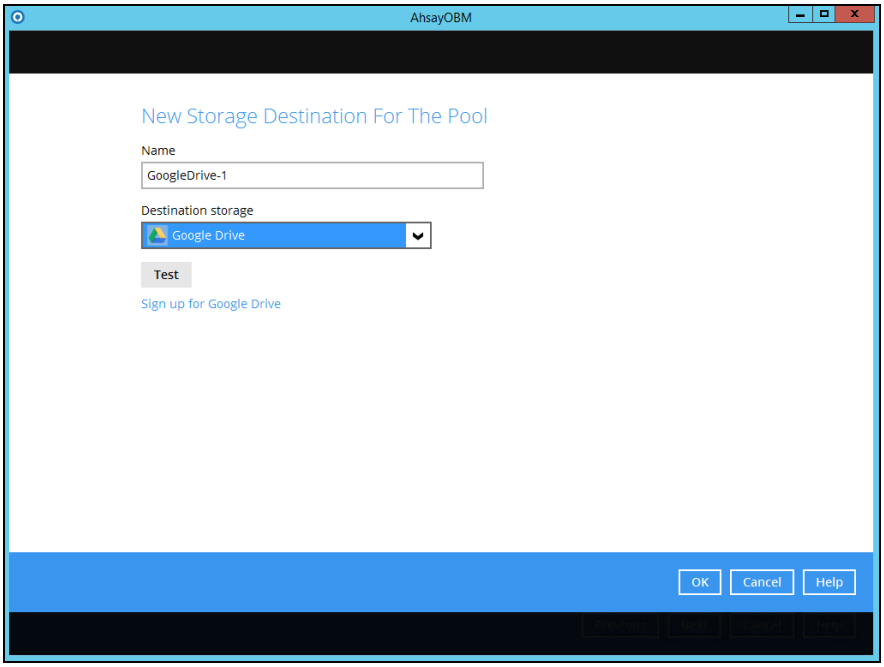


You can choose a storage combination of the Local/Mapped drive/Removable Drive, Cloud storage or FTP. Click **OK** to proceed when you are done with the settings.

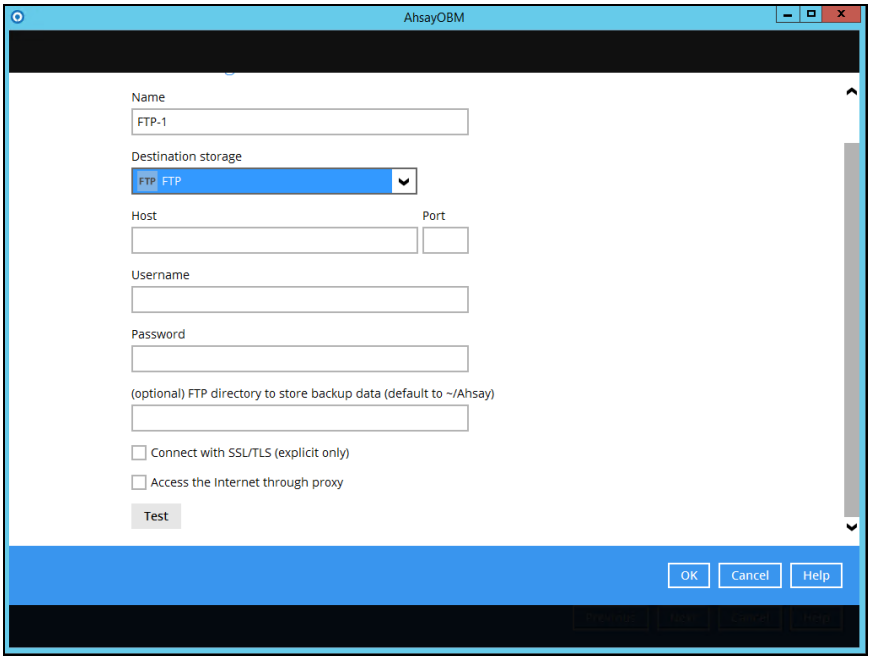
- If you have chosen the Local/Mapped Drive/Removable Drive option, click **Change** to browse to a directory path where backup data will be stored, then click **Test** to validate the path. **Test completed successfully** shows when the validation is done.



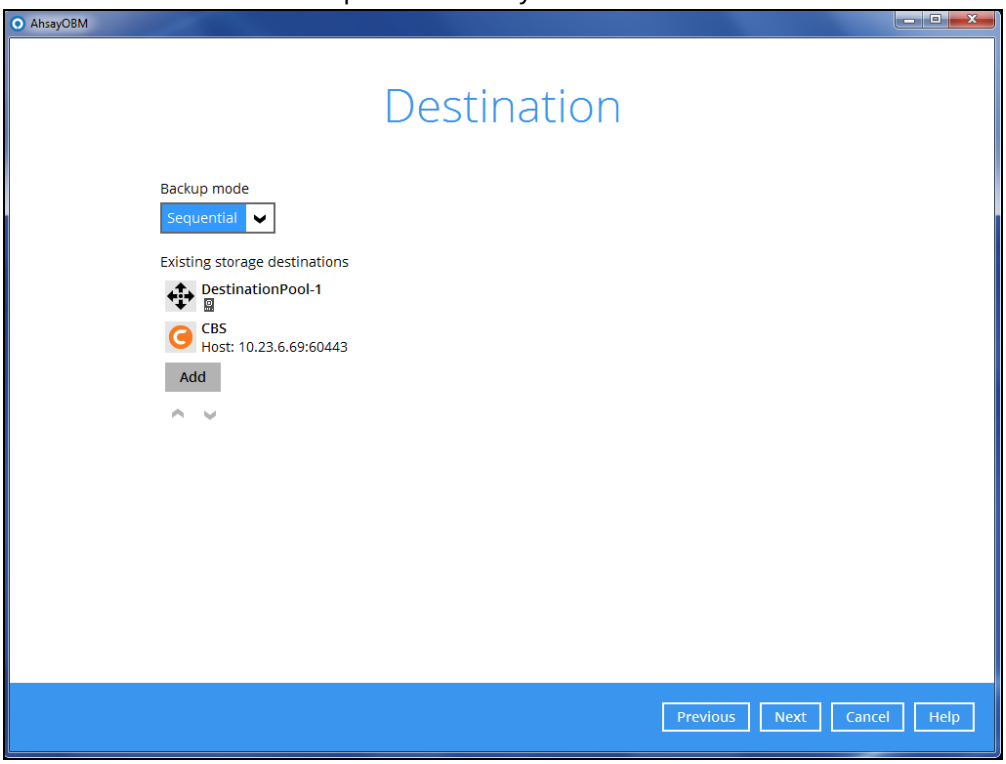
- If you have chosen the Cloud Storage, click **Test** to log in to the corresponding cloud storage service.



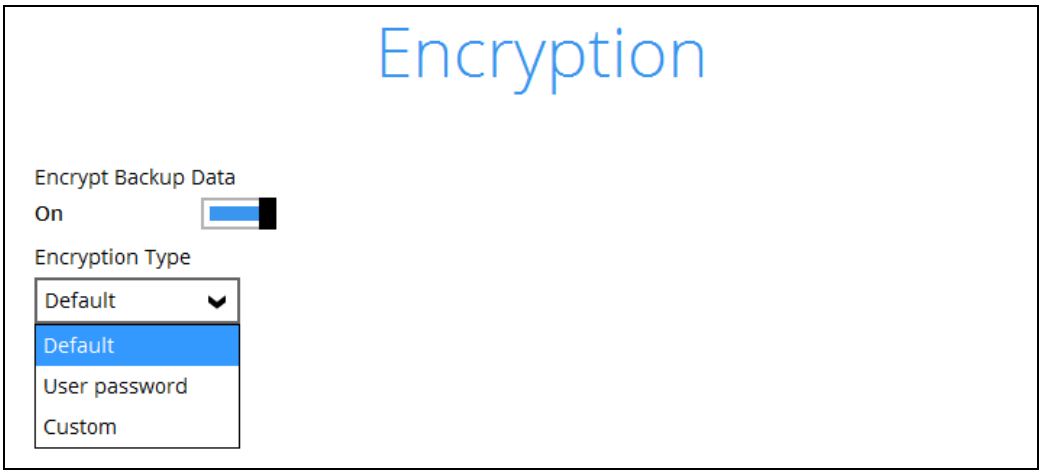
- If you have chosen the FTP as the destination, enter the the Host, Username and Password details.



9. You can add multiple storage destinations. The backup data will be uploaded to all the destinations you have selected in the order you added them. Press the icon to alter the order. Click **Next** to proceed when you are done with the selection.

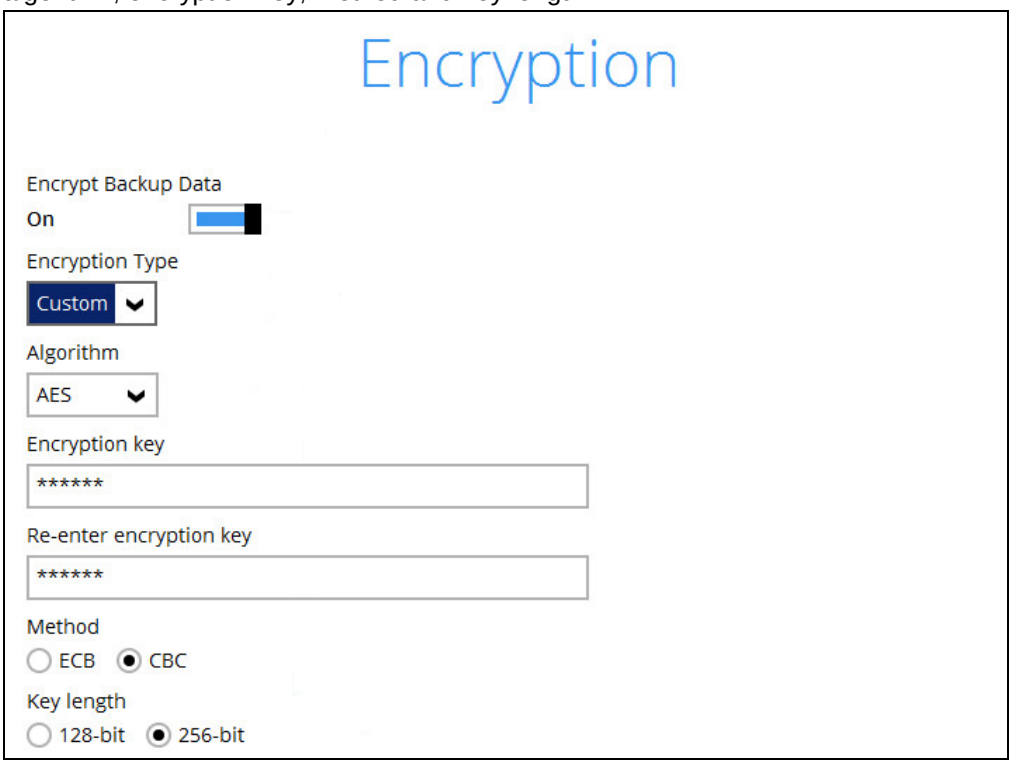


10. In the Encryption window, the default **Encrypt Backup Data** option is enabled with an encryption key preset by the system which provides the most secure protection.



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

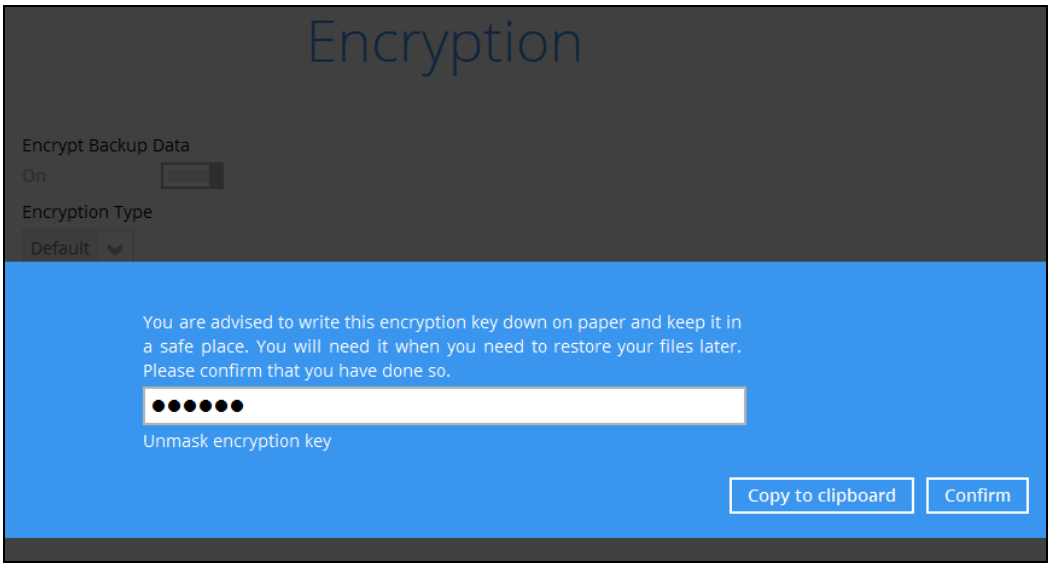
- **Default** – an encryption key with 44 alpha numeric characters will be randomly generated by the system
- **User password** – the encryption key will be the same as the login password of your AhsayOBM at the time when this backup set is created. Please be reminded that if you change the AhsayOBM 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.



Note: *For best practice on managing your encryption key, refer to the following KB article.* *https://forum.ahsay.com/viewtopic.php?f=169&t=14090*

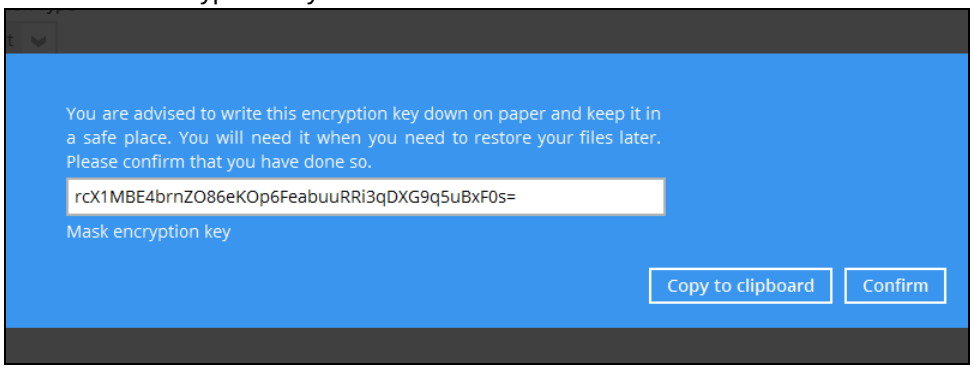
Click **Next** when you are done setting.

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



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

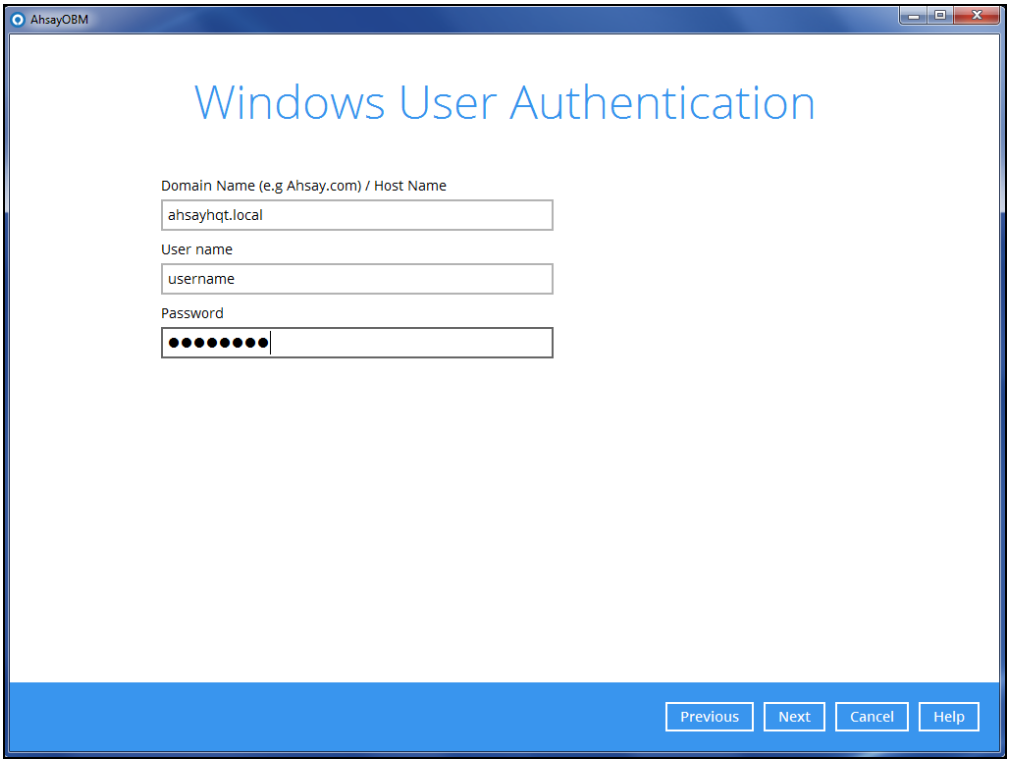
- **Unmask encryption key** – The encryption key is masked by default. Click this option to show the encryption key.



- **Copy to clipboard** – Click to copy the encryption key, then you can paste it in another location of your choice.

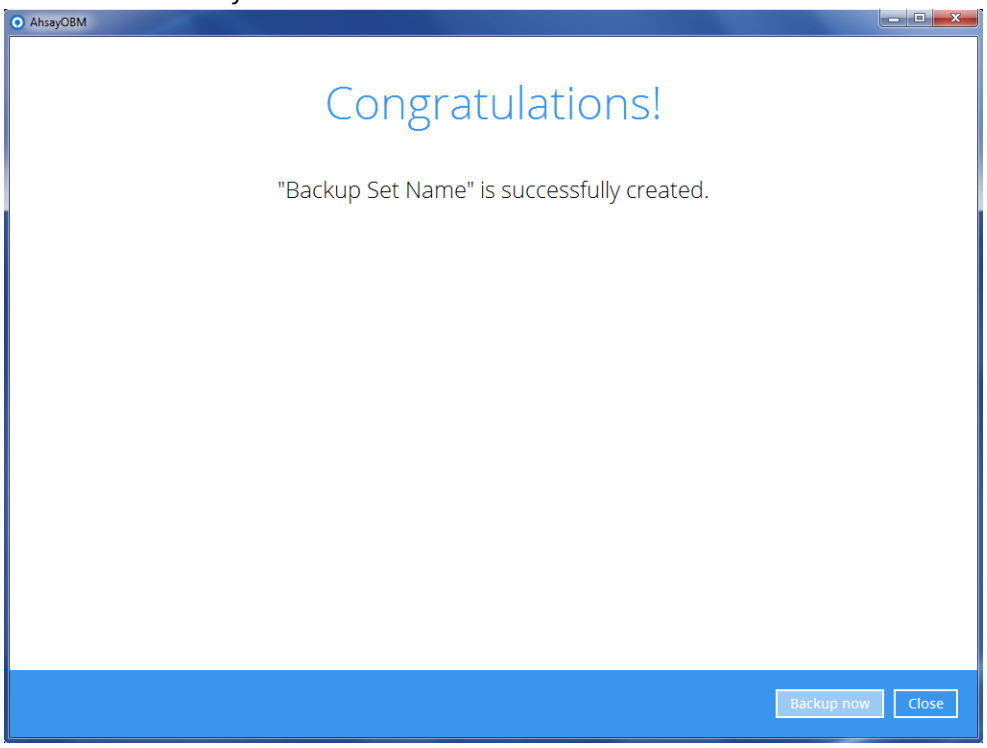
- **Confirm** – Click to exit this pop-up window and proceed to the next step.

12. **If you have enabled the scheduled backup option**, you will be prompted to enter the **User Name** and **Password** of the Windows account that will be running the backup.



13. Click **Next** to create the backup set.

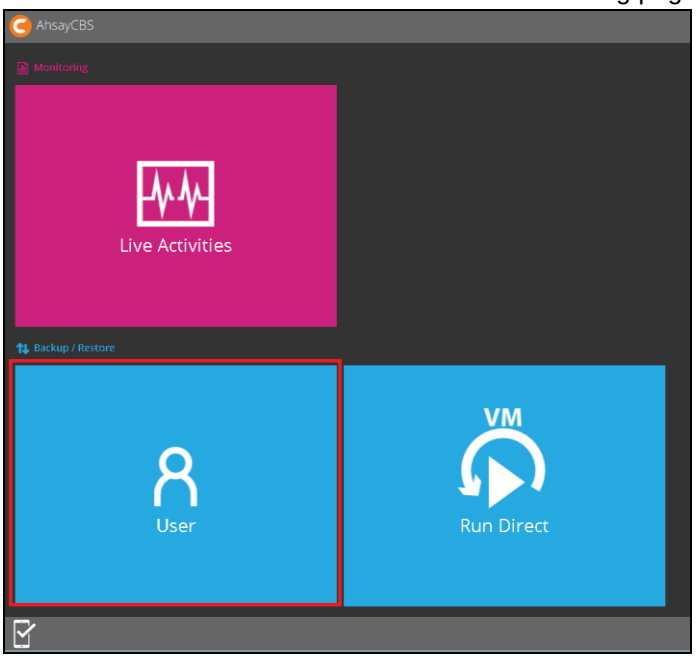
14. The following screen is displayed when the new Office 365 Exchange Online backup set is created successfully.



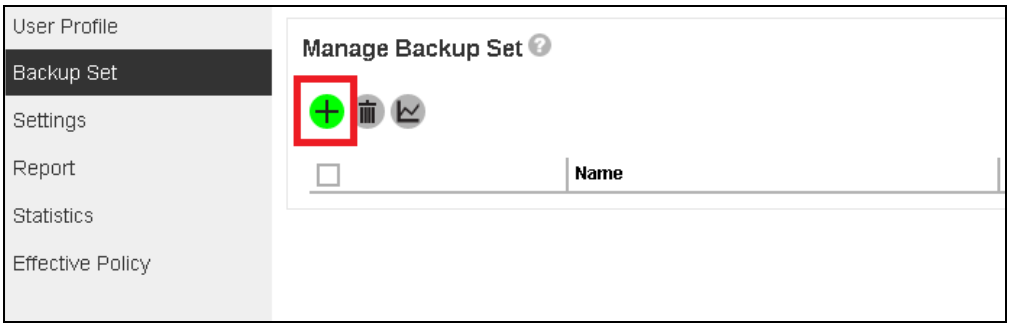
Create a Backup Set on User Web Console

1. Log in to the User Web Console according to the instructions in Login to User Web Console.

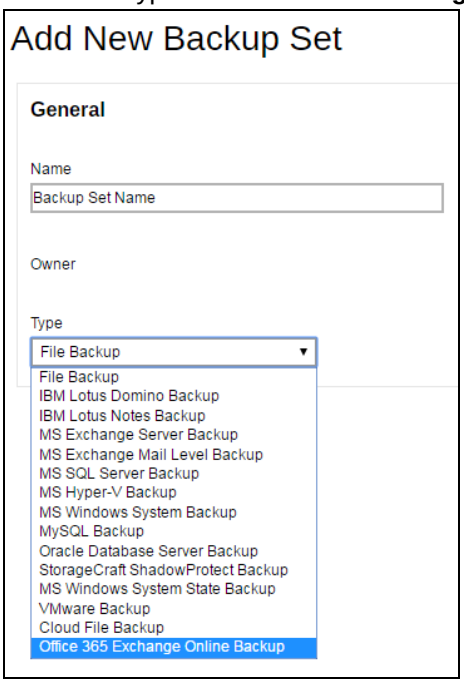
2. Click the User icon on the User Web Console landing page.



3. On the **Backup Set** menu, click the **+** icon highlighted to create a bcakup set.

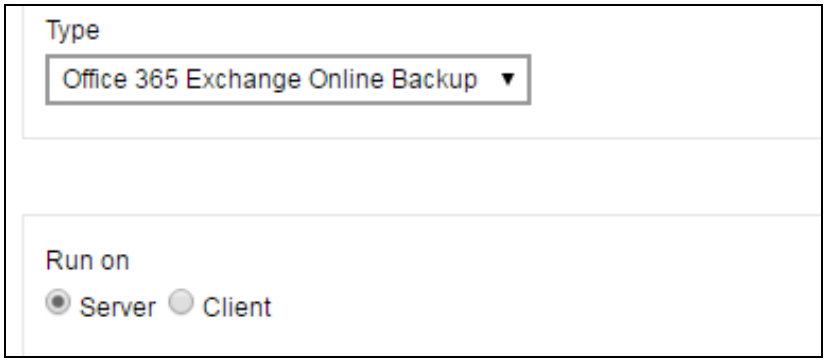


4. Select the type as **Office 365 Exchange Online Backup**, then name the backup set.



5. On the same menu under **Run on**, select **Server** to create a run on server (agentless backup) backup set or **Client** to create a run on client (agent-based backup) backup set.

- **Server** - If you choose to run the backup set on the CBS server, you won't be able to back up, restore or manage your backups on the AhsayOBM once the backup set is created.
- **Client** - If you choose to run the backup set on the AhsayOBM, you won't be able to back up, restore or manage your backups on the AhsayCBS Web Management Console once the backup is created.



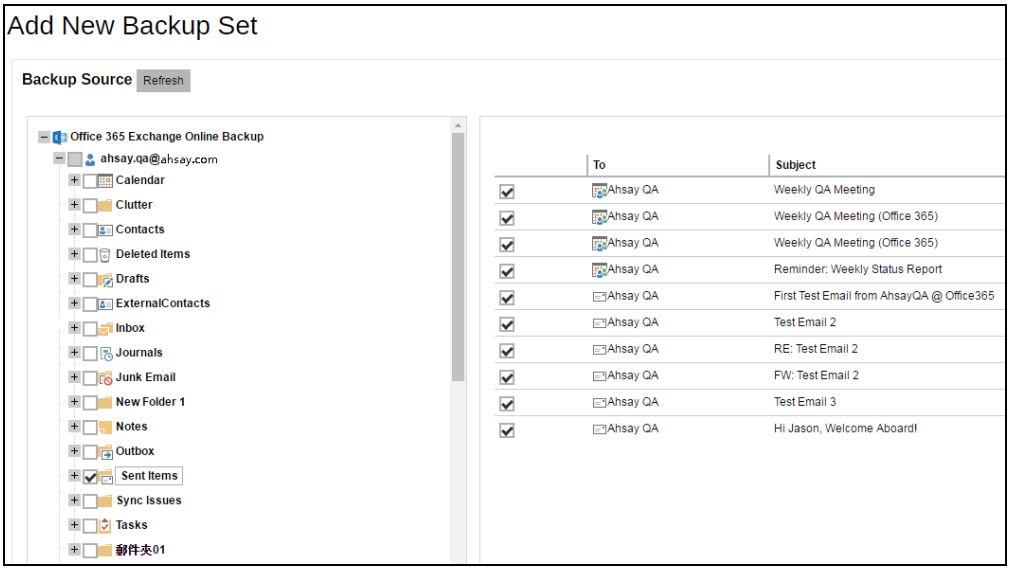
Notes

1. This setting **CANNOT** be altered once the backup set is created. If you wish to change the backup method later, you will have to create a new backup set and start over the configurations again.
2. For backup sets created in **Run on Server** backup type, the backup destination is restricted to AhsayCBS by default and cannot be altered. If you wish to back up to other destinations, backup sets should be created in **Run on Client** backup type instead.

6. Enter the user name and passowrd of your Office 365 Exchange Online account, then press **Test** to verify the account.

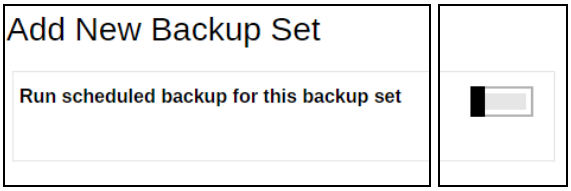
7. Press the → icon at the bottom right corner to proceed when you are done settings.

8. Select the **Backup Source** in this menu. Click on the folder or individual file you would like to back up.



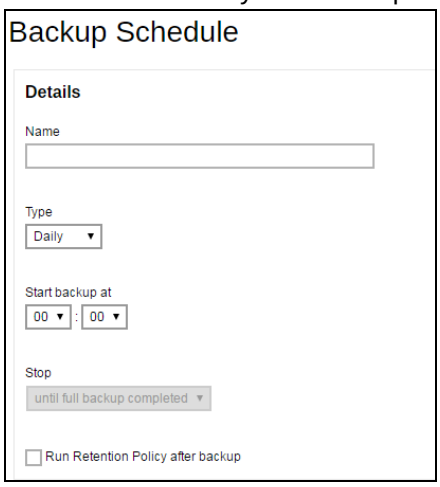
9. Press the → icon at the bottom right corner to proceed when you are done with the selection.

10. If you would like the backup set to run at a specified time interval of your choice, turn this feature on by sliding the on/off switch in the **Schedule** menu.



If you choose to turn this feature on, you may configure the following items.

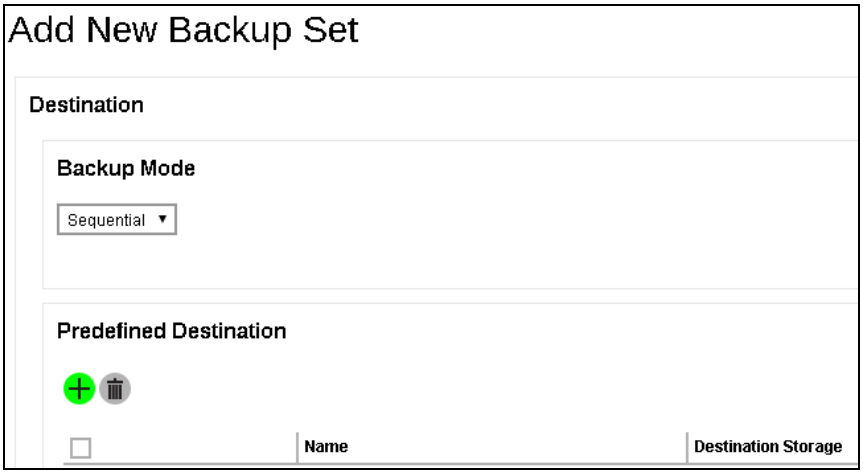
- Name of the scheduled backup
- Backup schedule type
- Backup start time
- Run Retention Policy after backup



Click the + icon at the bottom right corner to confirm the backup schedule once you finish setting.

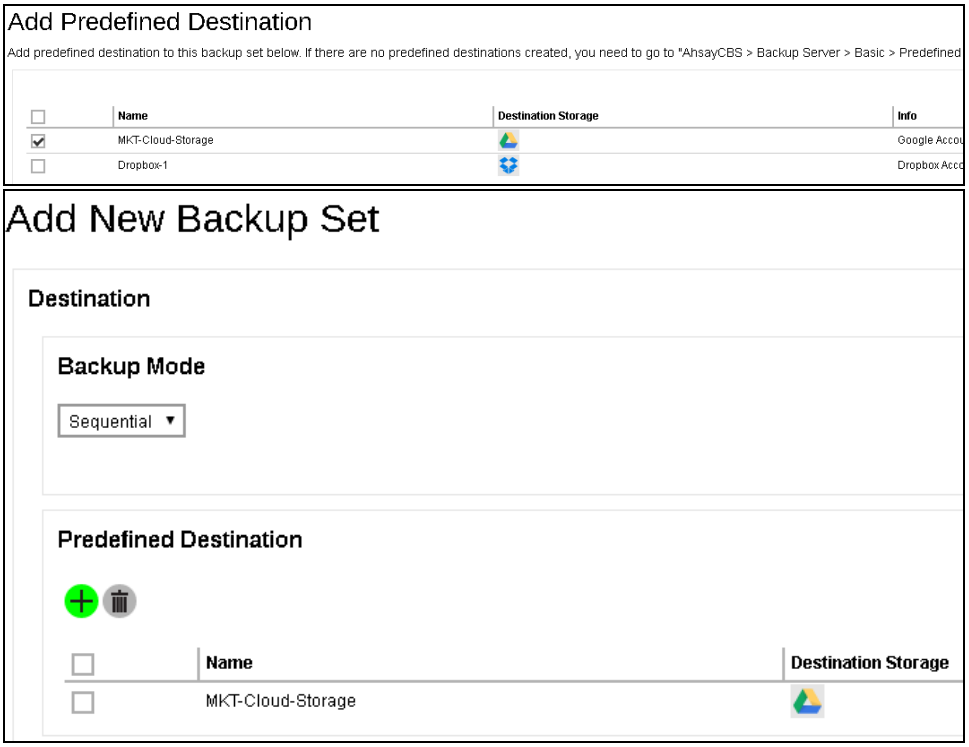
11. This step is only for user who has chosen to Run the backup set on **Client** in step 5.

If you have chosen to Run on **Server**, the backup destination is preset as the CBS and is not configurable. In that case, you can skip to step 12 now.



To define the backup destination, there are two options:

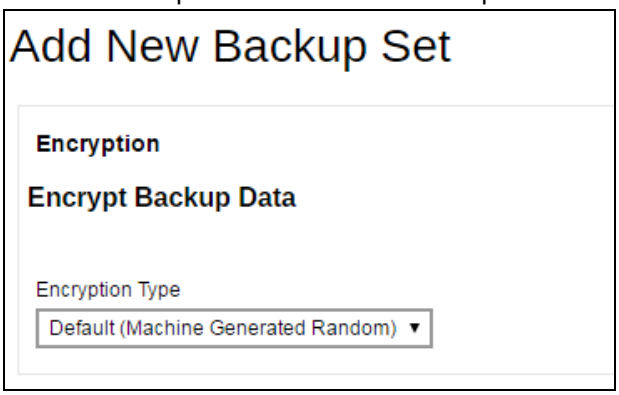
- In this menu, you can choose the Predefined Destination set by your backup service provider. Click the + icon under the **Predefinied Destination** section to display the available destinations. Mark the checkbox of your desired destination, then click the + icon at the bottom right corner to confirm your selection.



- If you would like to choose other backup destination other than the Predefined Destination, proceed to the next step without making any setting here. You will have to complete this backup set creation first, then log in to the AhsayOBM and configure the backup destination from there. For further details, refer to Appendix A Setting Backup Destination on AhsayOBM for Backup Created on User Web Console.

Press the icon at the bottom right corner to proceed when you are done with the setting.

12. By default, the **Encrypt Backup Data** option is enabled with the Encryption Type preset as **Default** which provides the most secure protection.

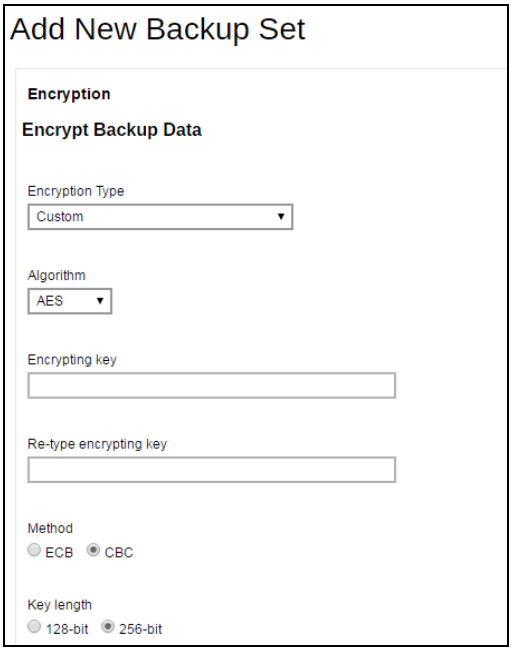


You can choose from one of the following three Encryption Type options:

- **Default (Machine Generated Random)** – 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 set 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.



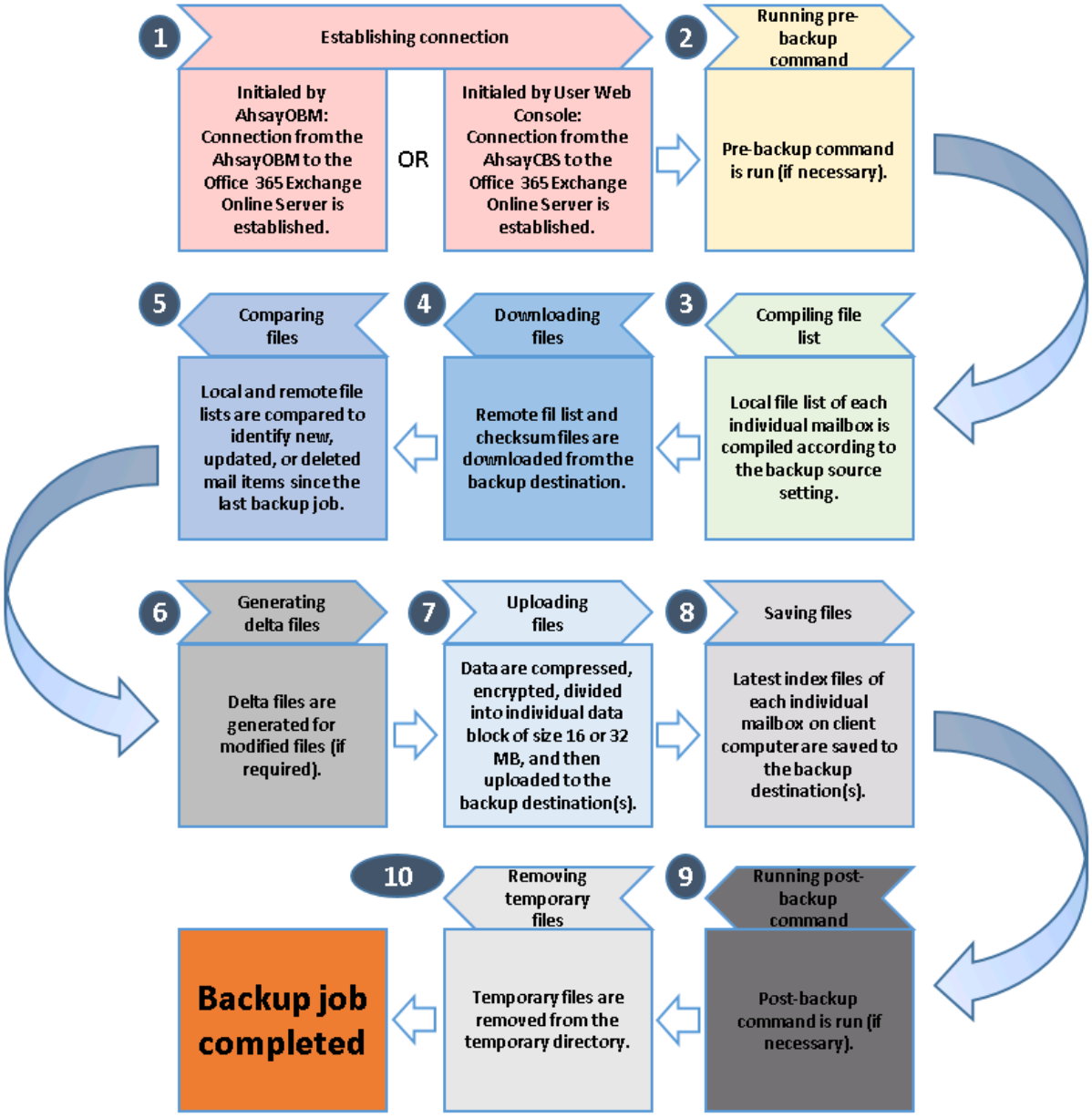
Note: *For best practice on managing your encryption key, refer to the following KB article:* *https://forum.ahsay.com/viewtopic.php?f=169&t=14090*

Click the green + icon at the bottom right corner to confirm the backup schedule once you finish setting.

13. Click the icon at the bottom right corner to confirm creating this backup set.

5 Overview of Office 365 Exchange Online Backup Process

The following steps are performed during an Office 365 Exchange Online backup job:

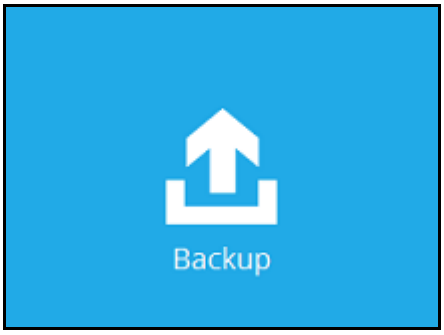


6 Running Backup Job

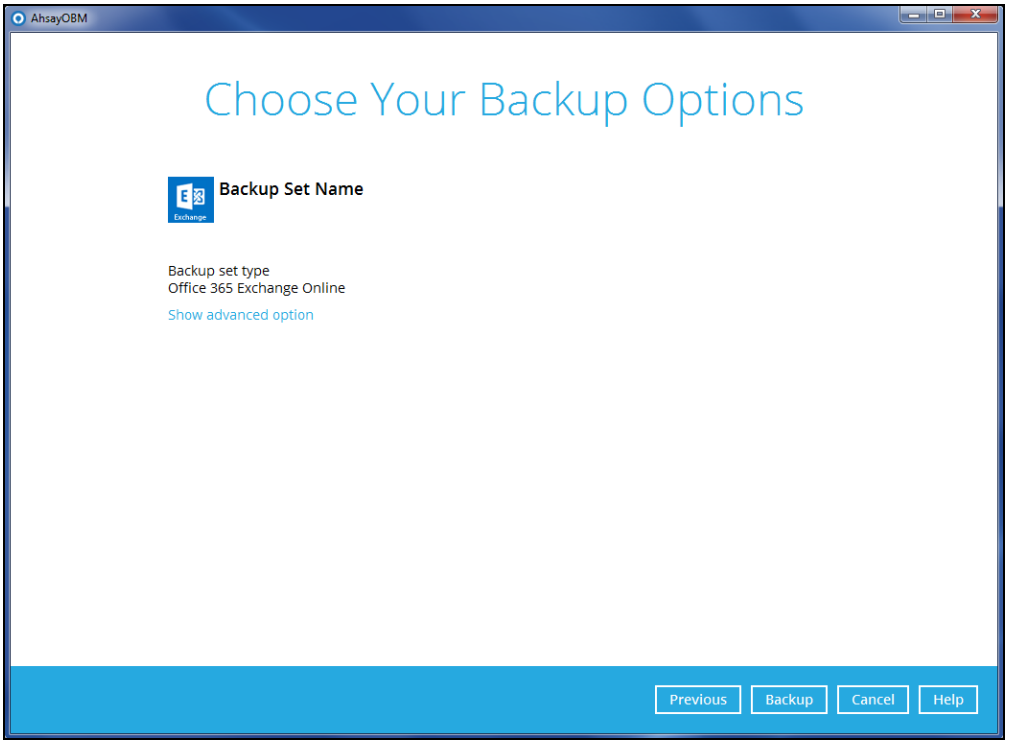
Start a Manual Backup in AhsayOBM

1. Login to AhsayOBM according to the instructions in Login to AhsayOBM.

2. Click the **Backup** icon on the main interface of AhsayOBM.



3. Select the backup set which you would like to start a backup for.



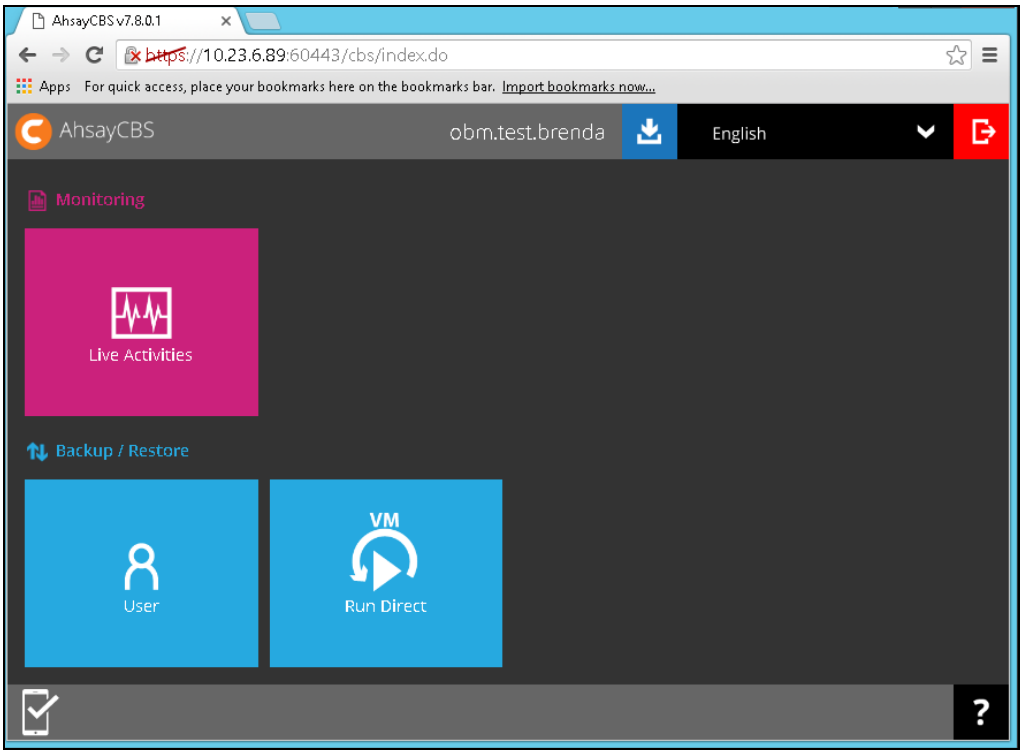
4. If you would like to modify the In-File Delta type, Destinations and Retention Policy Settings, click **Show advanced option**.

5. Click **Backup** to start the backup.

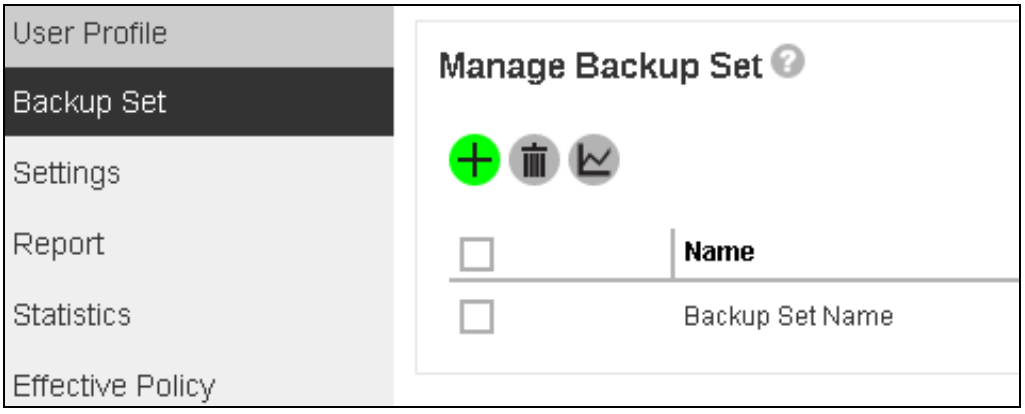
Start a Manual Backup on the User Web Console

1. Log in to the User Web Console according to the instructions in Login to User Web Console.

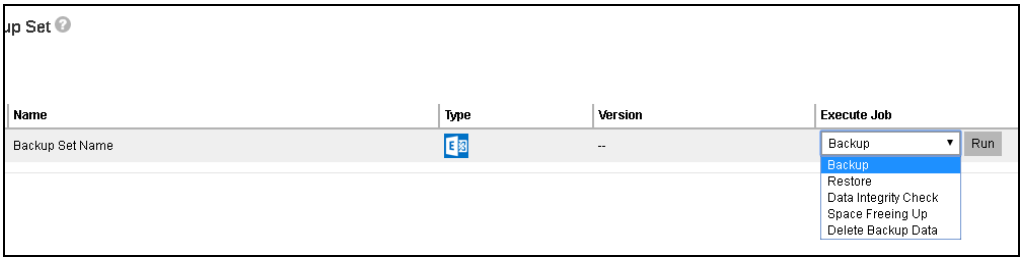
2. Click on the User icon.



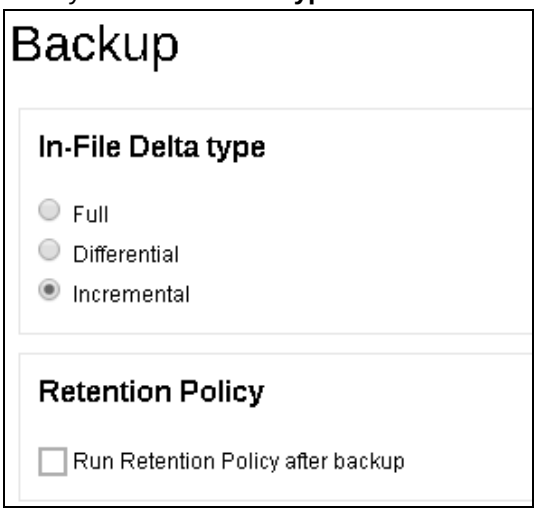
3. Under the **Backup Set** > **Manage Backup Set** menu, you should see the backup set you have created.



4. Click the drop-down menu on the backup set that you would like to start a backup for. Select **Backup** and then click **Run**.

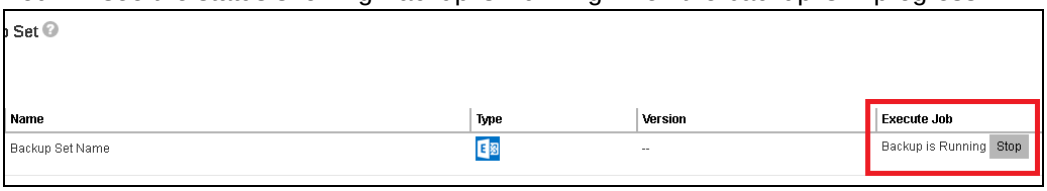


5. Modify the **In-file Delta type** and **Rentention Policy** settings if necessary.



6. Click the icon at the bottom right corner to start the backup.

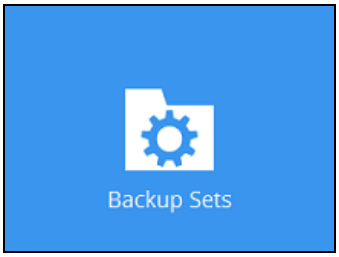
7. You will see the status showing Backup is Running when the backup is in progress.



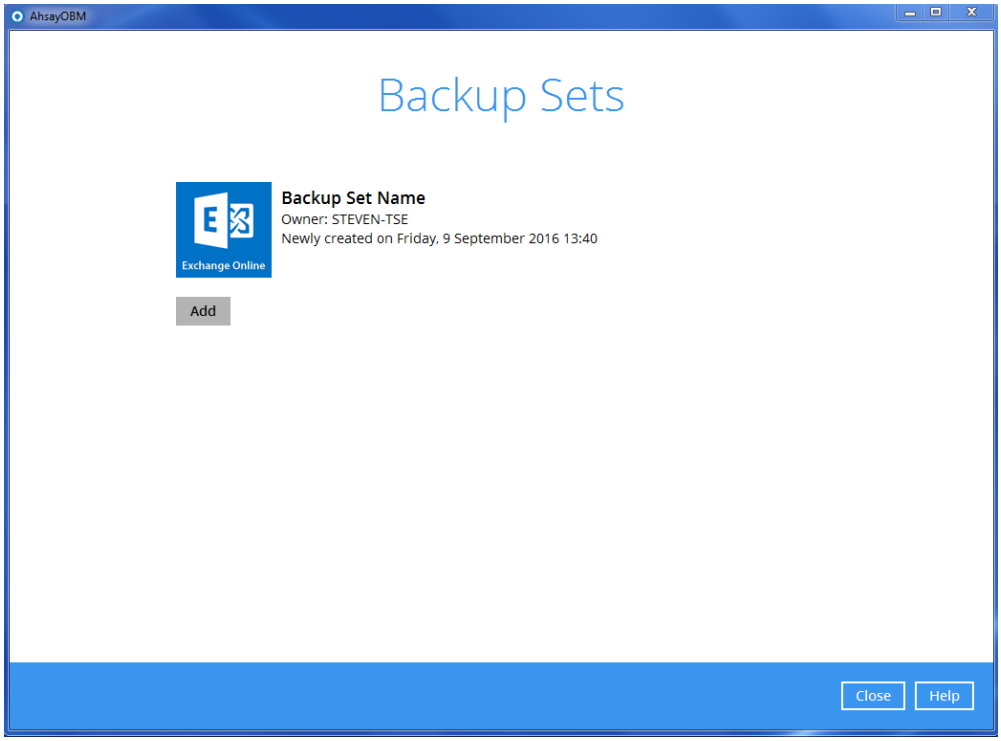
Configure Backup Schedule for Automated Backup

Setting up on AhsayOBM

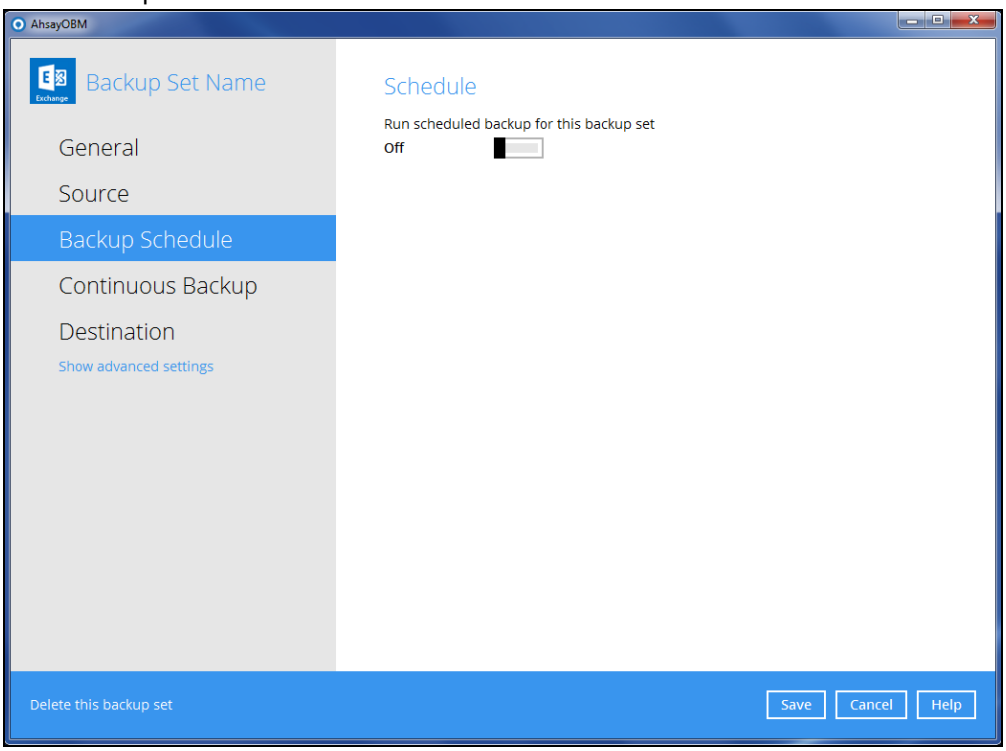
1. Click the **Backup Sets** icon on the AhsayOBM main interface.



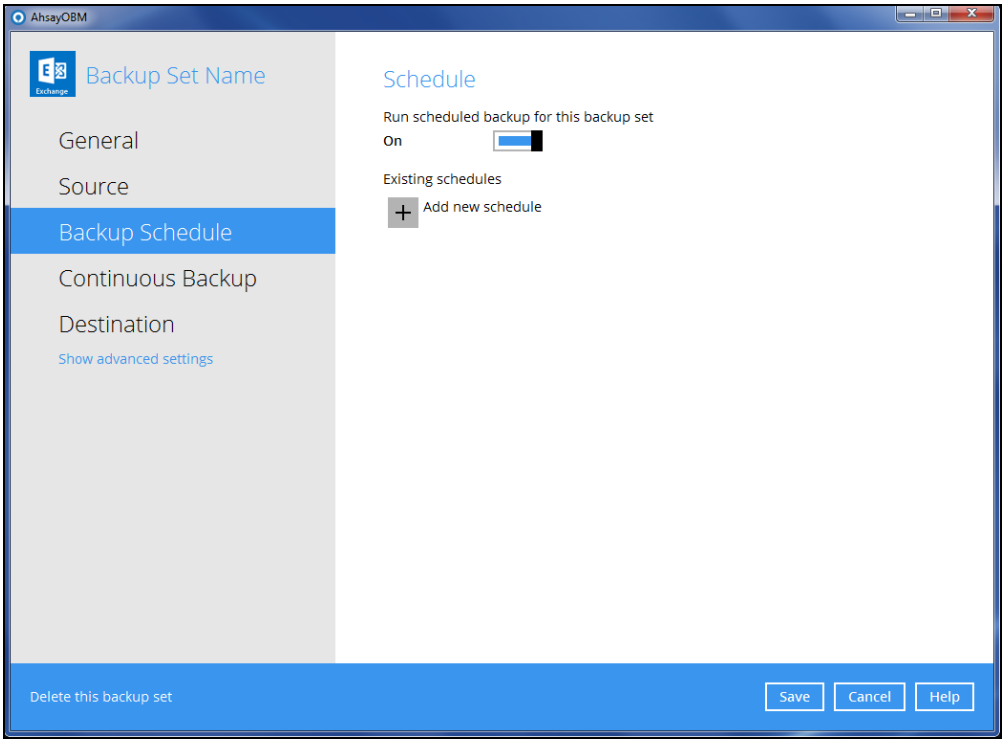
2. Select the backup set that you want to create a backup schedule for.



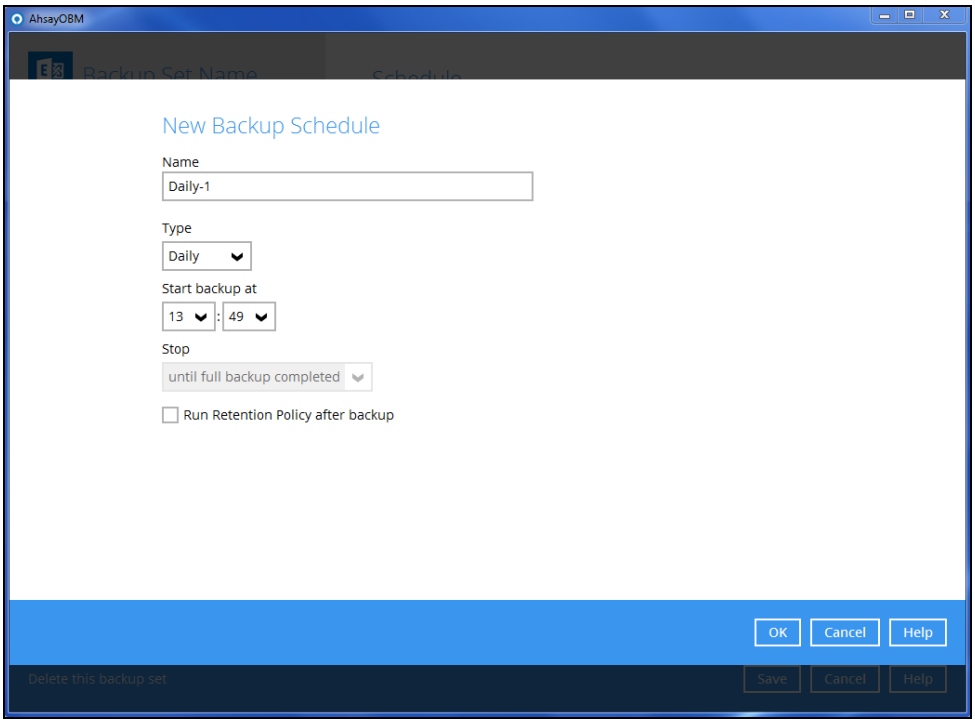
3. Click Backup Schedule.



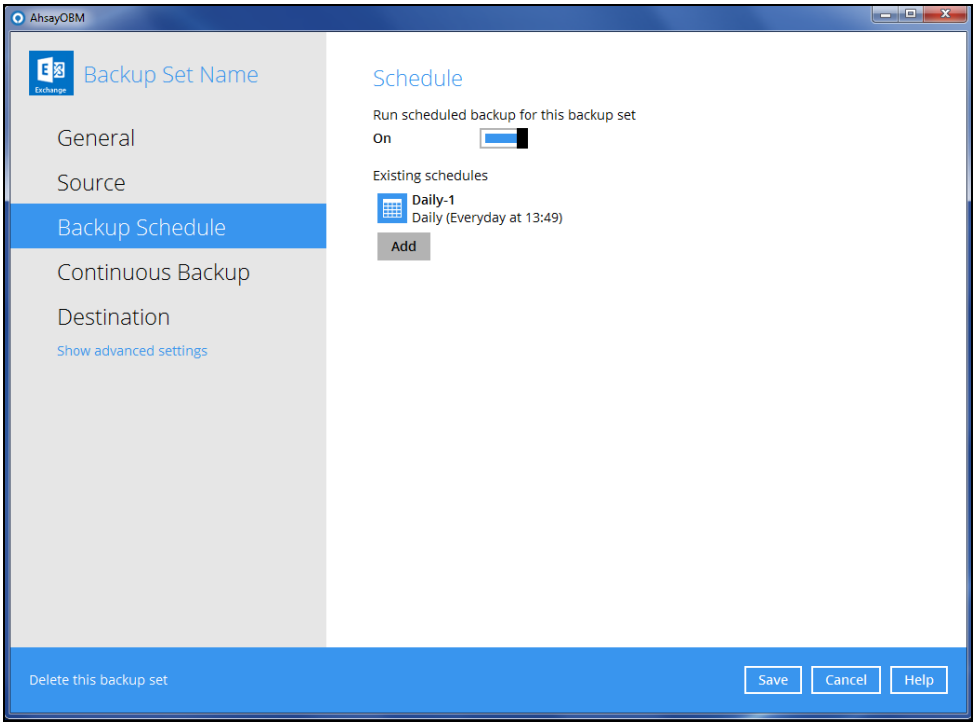
4. Turn on the backup schedule by switching the "**Run scheduled backup for this backup set**" feature to **On**, then click the **+** icon next to **Add new schedule**.



5. Configure the backup schedule settings on this page, then click **OK** when you are done with the settings.

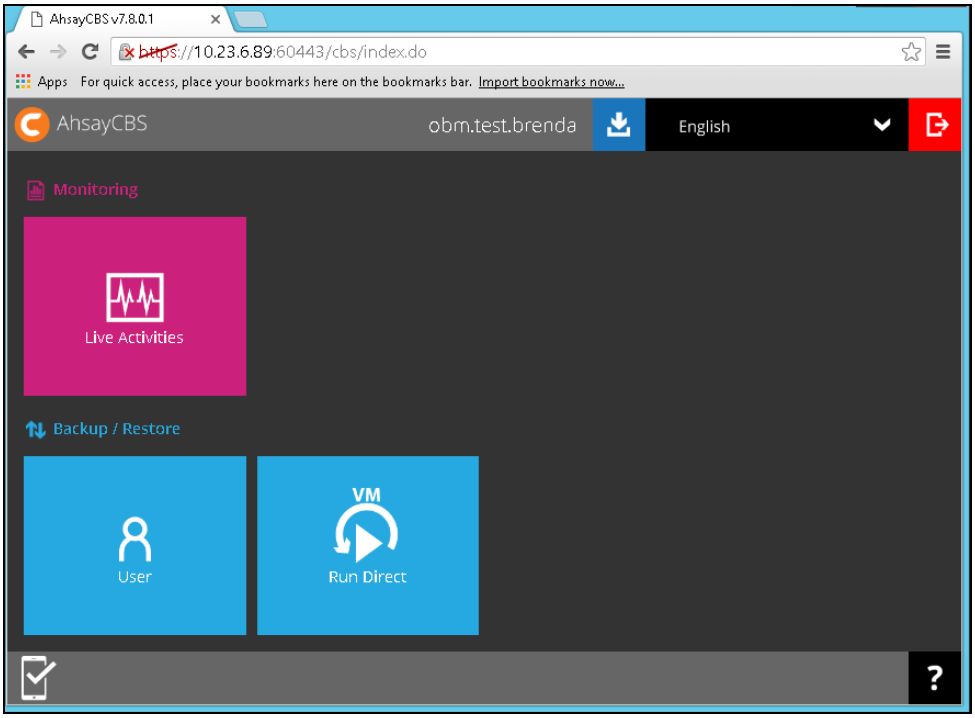


6. Click **Save** to confirm the settings and exit the **Backup Schedule** menu.



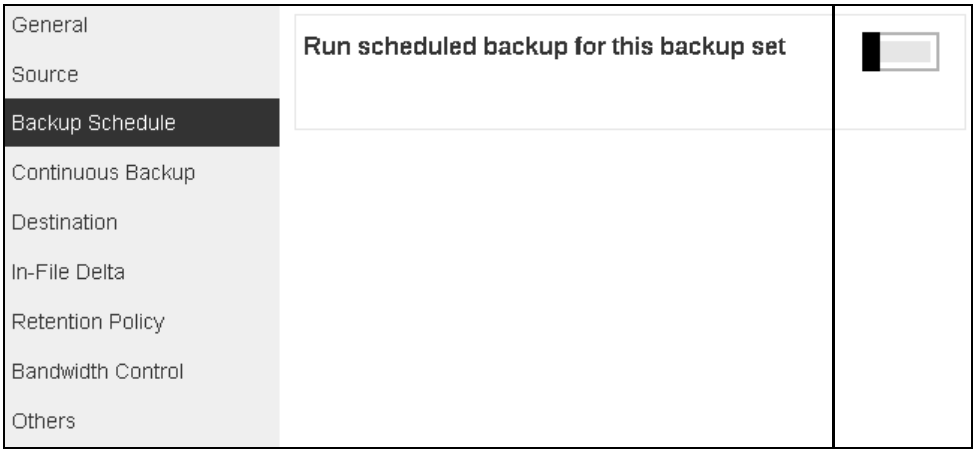
Setting on User Web Console

1. Click on the **User** icon on the main page of the User Web Console.

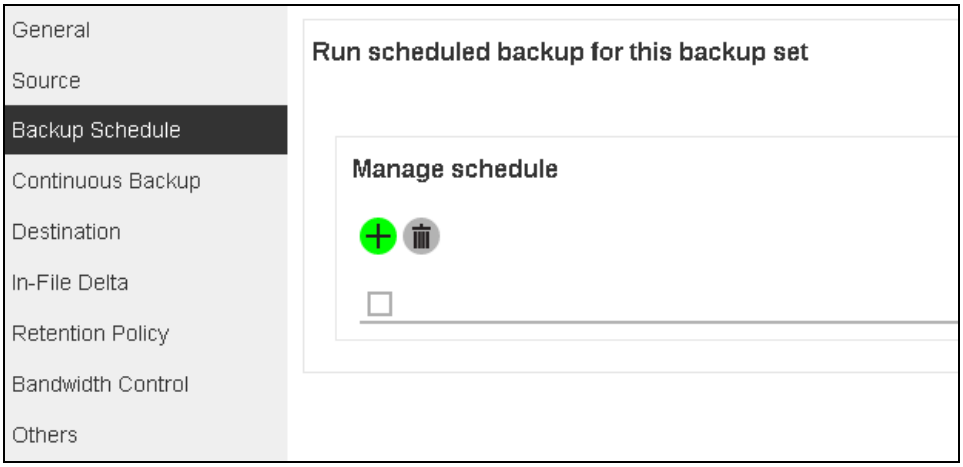


2. Click on the backup set which you would like to create a scheduled backup for under the **Backup Set** menu.

3. Go to the **Backup Schedule** menu, slide the on/off switch at the right to turn this feature on.

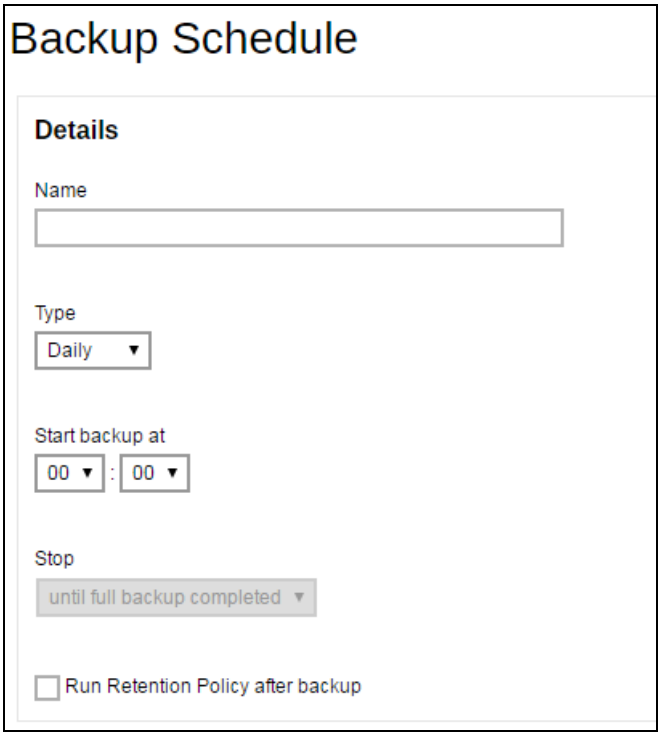


4. Click the icon under the **Manage schedule** to add your desired schedule.



5. You may configure the following items for the schedule.

- Name of the scheduled backup
- Backup schedule type
- Backup start time
- Run Retention Policy after backup



Click the icon at the bottom right corner to confirm the backup schedule once you finish setting.

6. Click the icon and then the icon to confirm the setting.

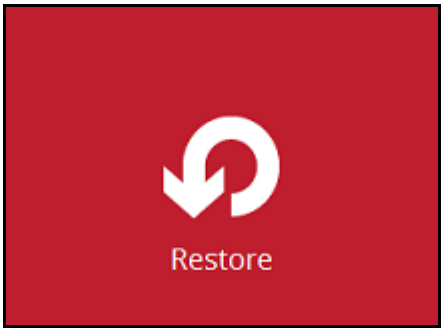
7 Restoring Office 365 Exchange Online Backup Set

Follow the instructions below to restore the Office 365 Exchange Online backup to either the original location where you back them up or to another users' accounts under the same Office 365 account.

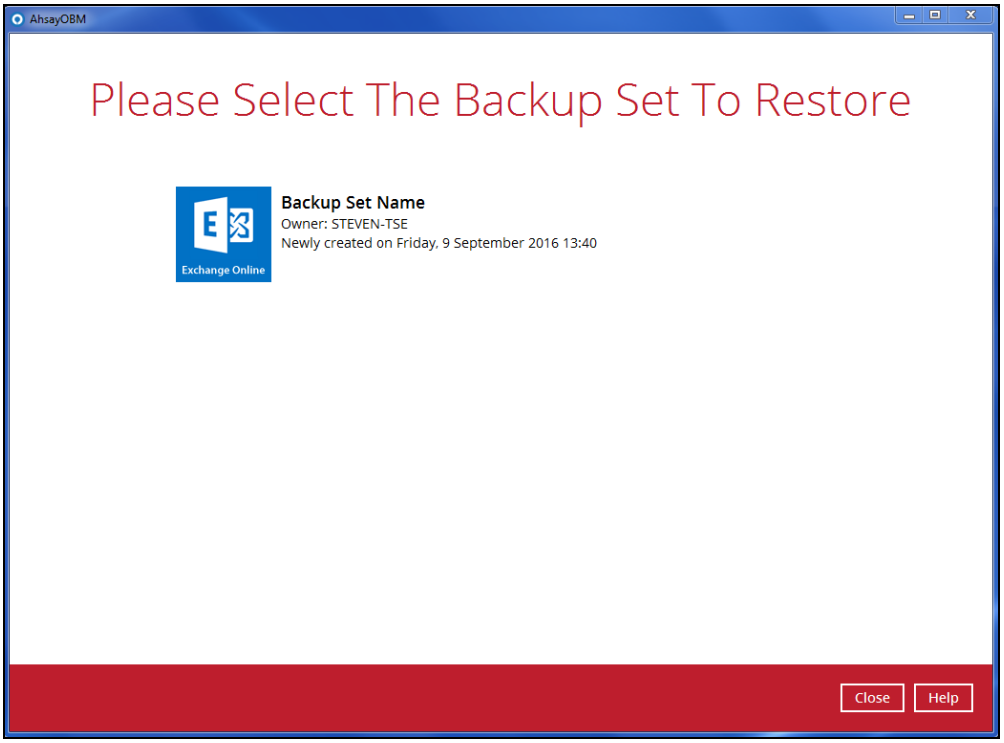
Restore Backup with AhsayOBM

1. Login to AhsayOBM according to the instructions in Login to AhsayOBM.

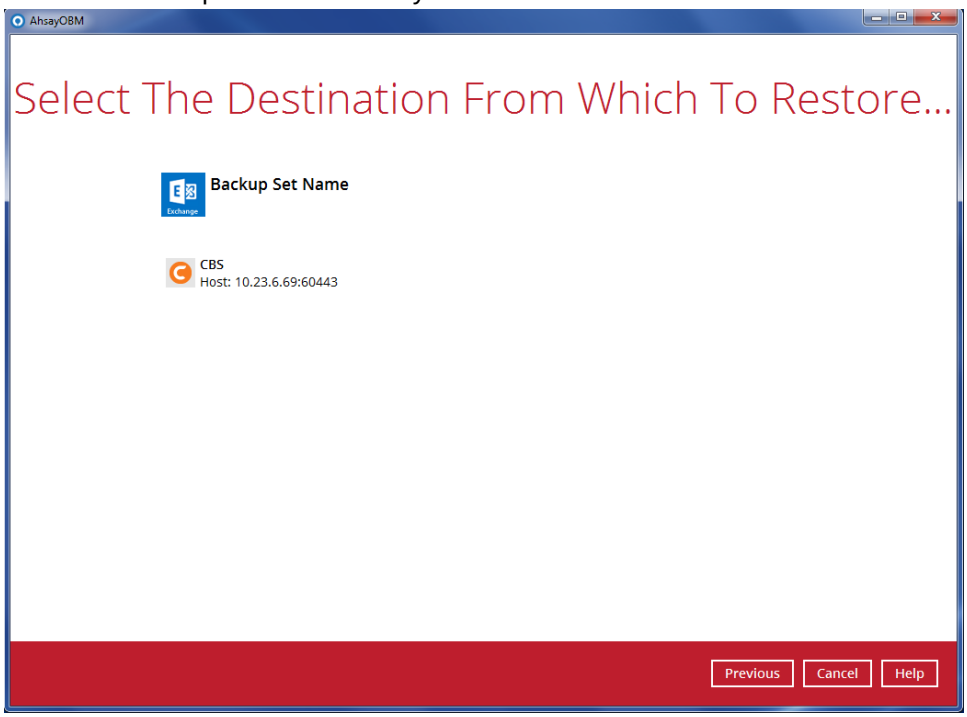
2. Click the **Restore** icon on the main interface of AhsayOBM.



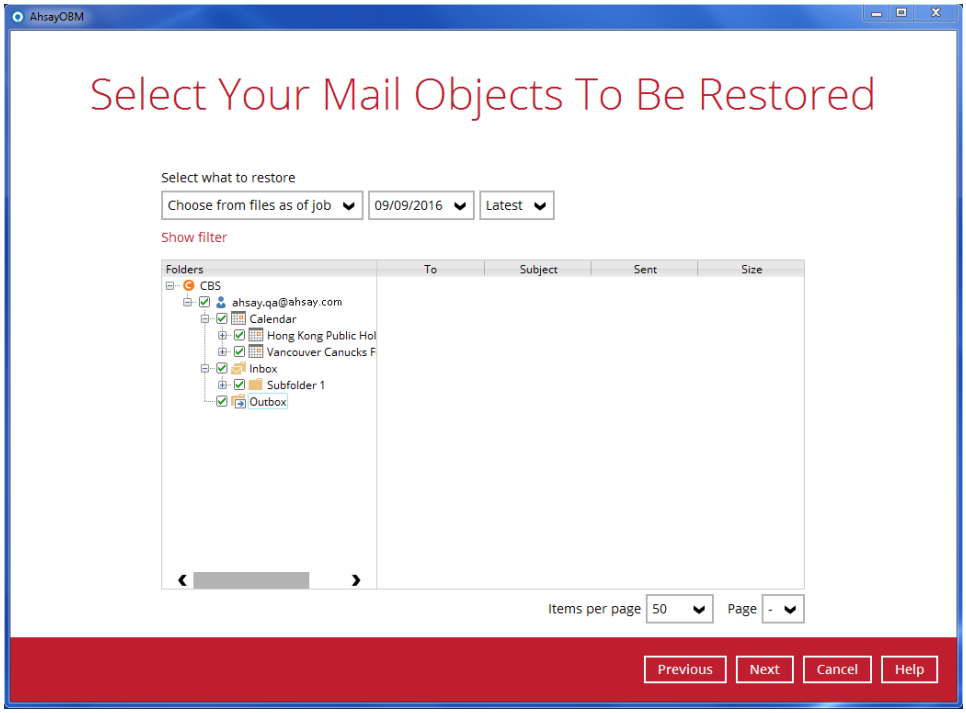
3. Select the backup set that you would like to restore.



4. Select the backup destination that you would like to restore mail items to.

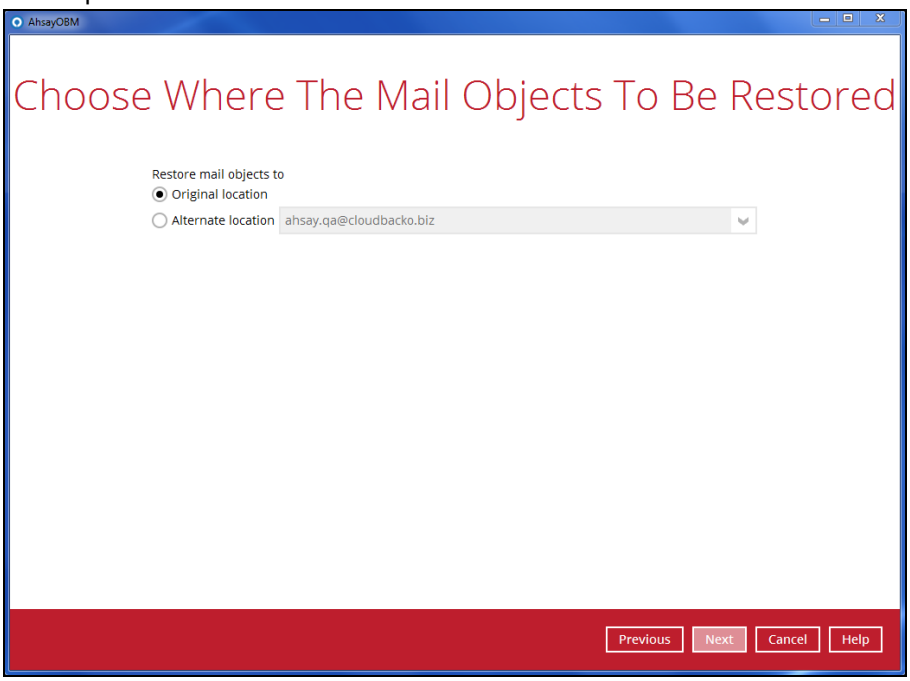


5. Select the item(s) you would like to restore. You can also choose to restore backed up file from a specific backup job of your choice using the **Select what to restore** drop-down menu at the top. Click **Next** to proceed when you are done with the selection.

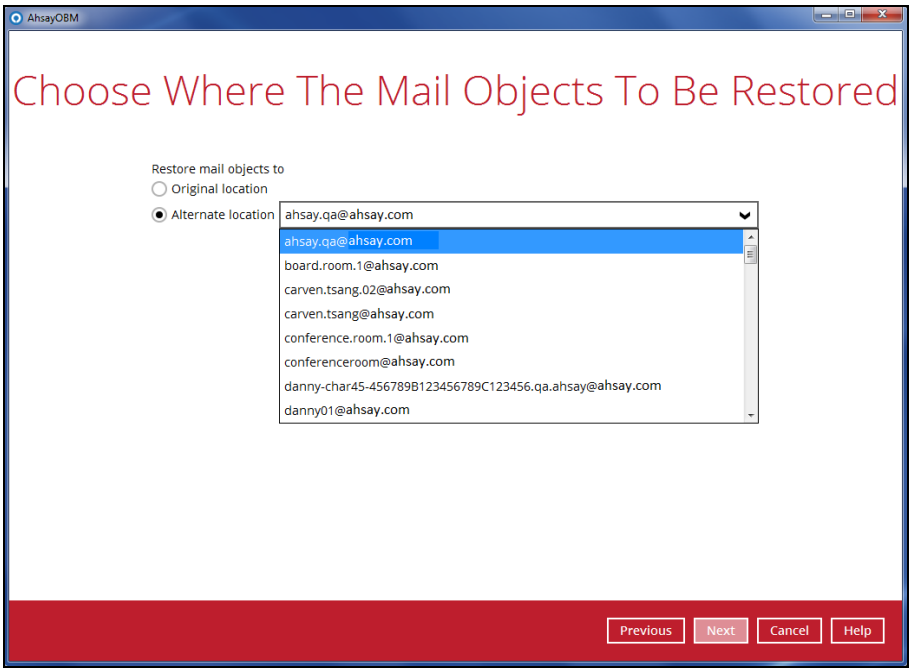


6. Select the destination you would like the mail objects to be restored.

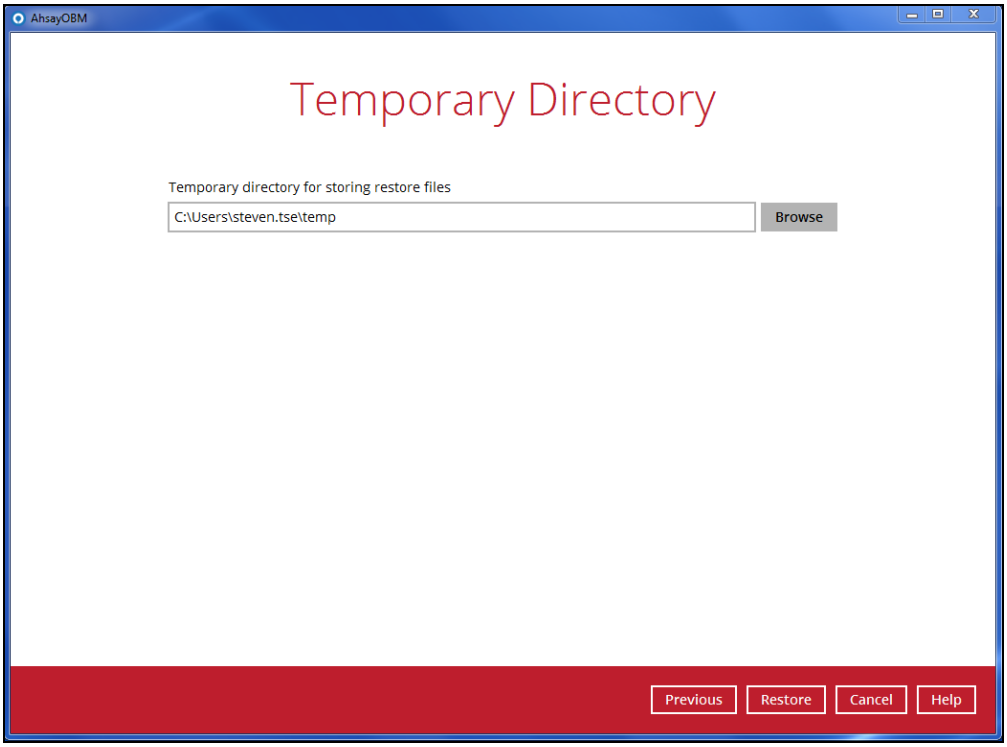
- **Original location** – restore mail objects to the original location where you backed them up.



- **Alternate Location –** restore mail object to other users' accounts under the same Office 365 account.



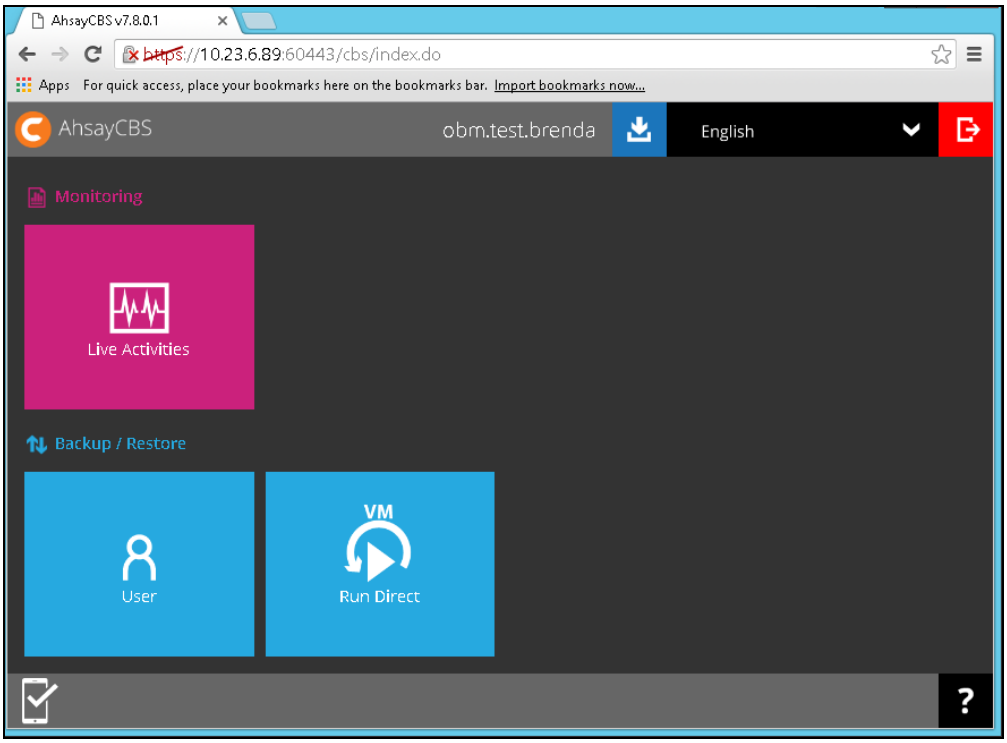
7. Select the temporary directory for storing temporary files, such as delta files when they are being merged, click **Restore** to start the restoration.



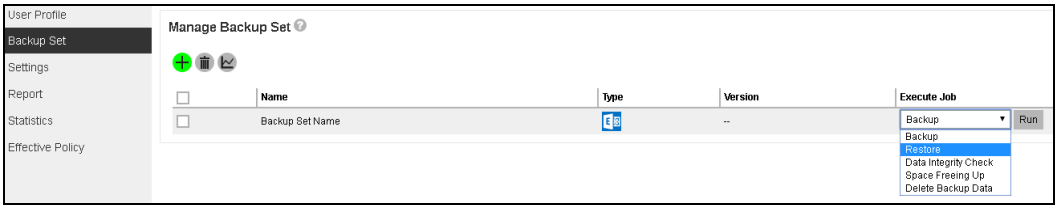
Restore Backup with User Web Console

1. Log in to the User Web Console according to the instructions in Login to User Web Console.

2. Click on the **User** icon.



3. You should see the backup set you would like to restore under **Backup Set** > **Manage Backup Set**. Click on the drop-down menu on the backup set you would like to restore, then select **Restore** and click **Run**.



4. Select the mail object that you would like to restore. You can also choose to restore backed up mail objects from a specific backup job of your choice using the **Select What to Restore** drop-down menu.

5. Click the icon to proceed when you are done with the selection.

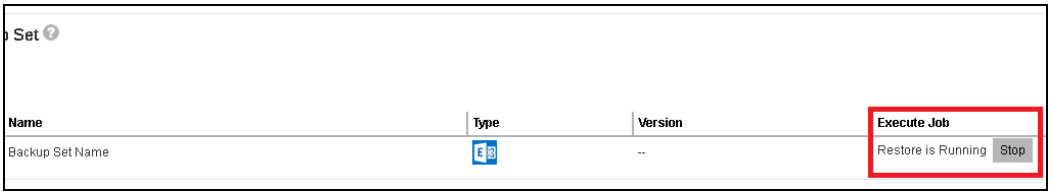
6. Select the destination you would like the mail objects to be restored.

- **Original location** – restore mail objects to the original location where you backed them up.

- **Alternate location -** restore mail object to other users' accounts under the same Office 365 account.

7. Click the icon to start the restoration.

8. You will see the status showing **Restore is Running** when the restore is in progress.



8 Contacting Ahsay

Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the following website:
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Also use the Ahsay Knowledge Base for resource such as Hardware Compatibility List, Software Compatibility List, and other product information:
https://forum.ahsay.com

Documentation

Documentations for all Ahsay products are available at:
https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_documentation_guides

You can send us suggestions for improvements or report on issues in the documentation, by contacting us at:
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

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

Appendix

Appendix A
Setting Backup Destination on AhsayOBM for Backup Set Created on User Web Console

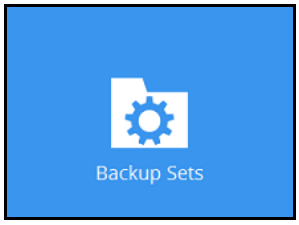
You need to read the instructions below only if you:

- Have created a backup set on AhsayCBS User Web Console; **AND**
- Selected the backup set to Run on Client; **AND**
- Have not selected any Predefined Destination in the backup creation process on the User Web Console

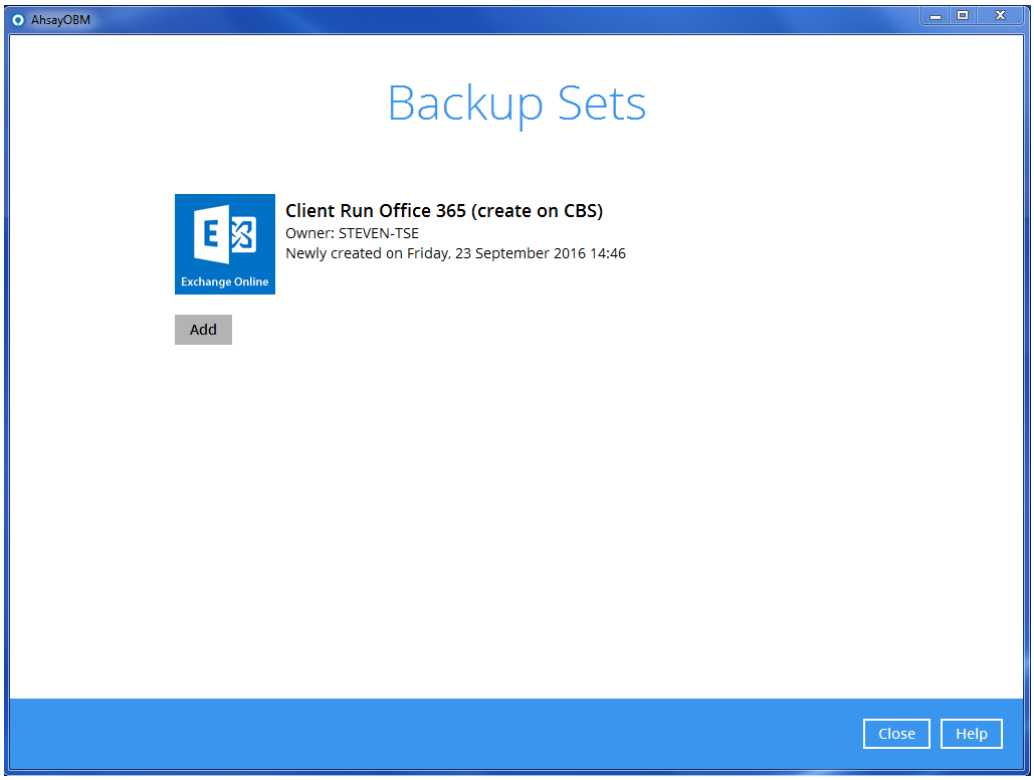
  -**OR-**

  Have selected a Predefined Destination in the backup creation process on User Web Console but wish to add additional backup destination other than the predefined destination

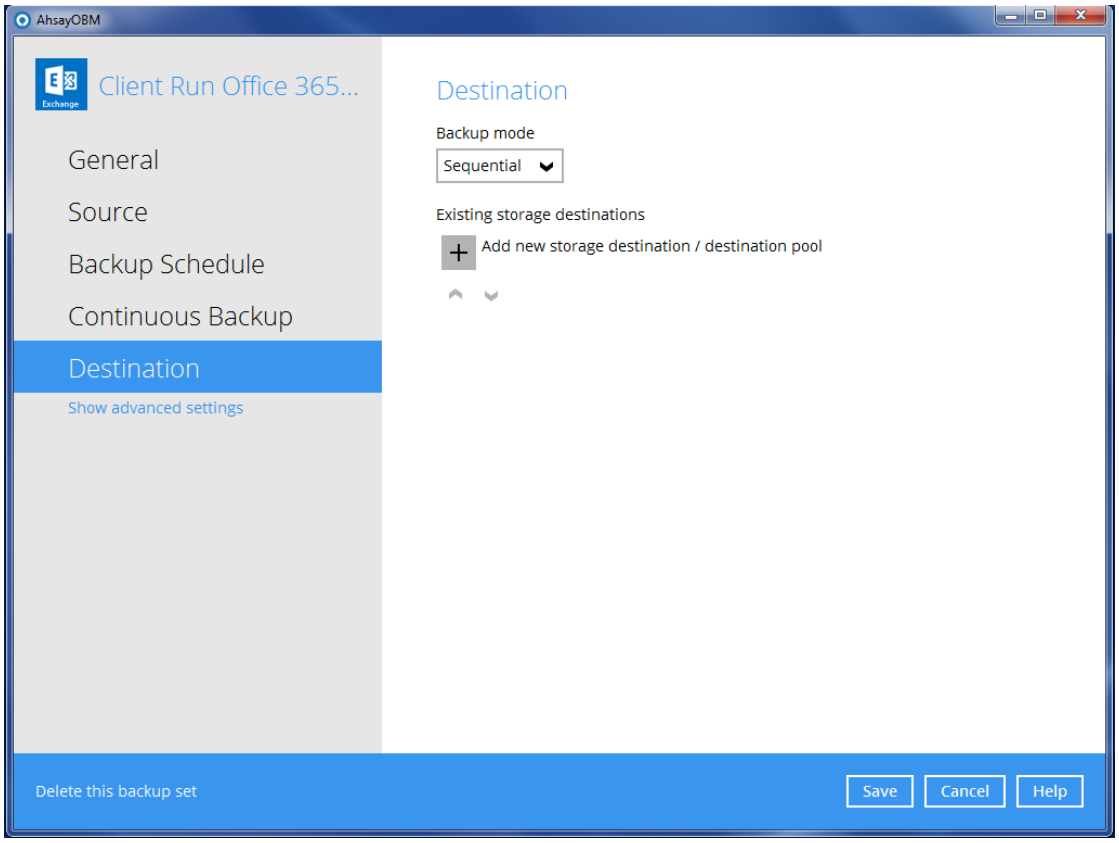
1. Log in to AhsayOBM according to the instructions in Login to AhsayOBM.
2. In the AhsayOBM main interface, click **Backup Sets**.



3. Click the backup set which you wish to add backup destination to.

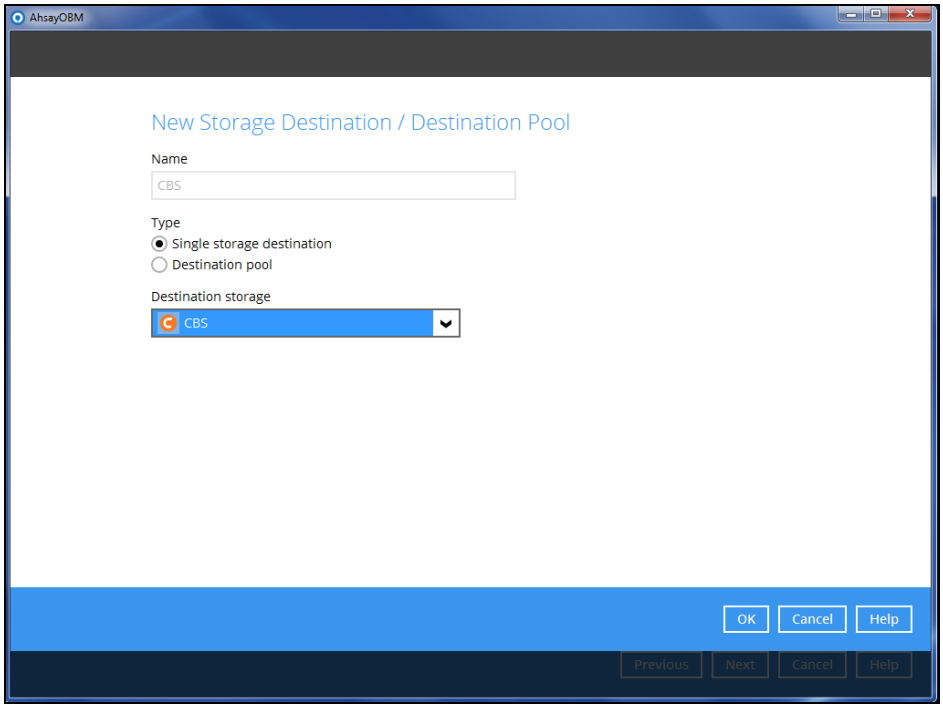


4. Click the **Destination** menu on the left side, then click the **Add** button on the right to add backup destination.

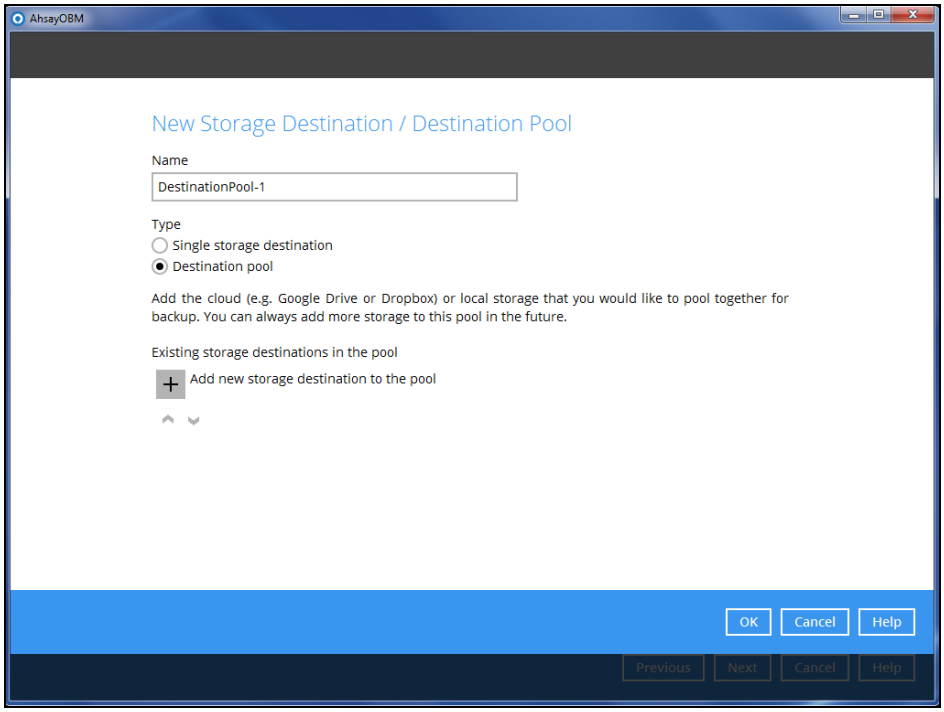


5. Select the storage type.

   - **Single storage destination** – the entire backup will be uploaded to one single destination you selected under the **Destination storage** drop-down list. By default, the destination storage is selected as **CBS**.

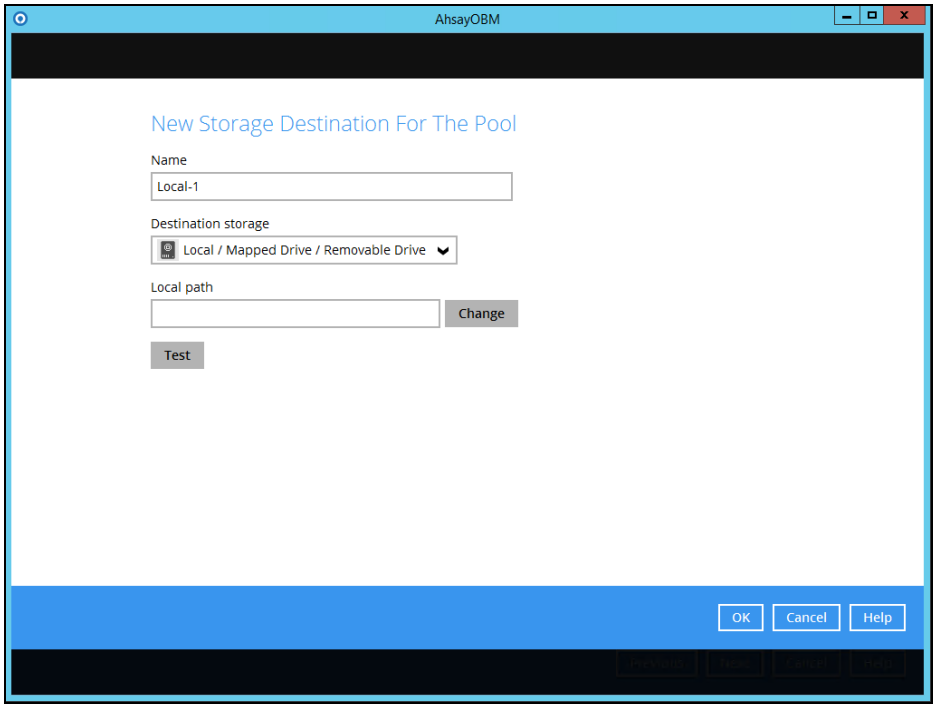


- **Destination pool** – the backup will be spread over on the destinations you have selected. Enter a **Name** for the destination pool and then click **Add new storage destination to the pool** to select the desired storage destinations.

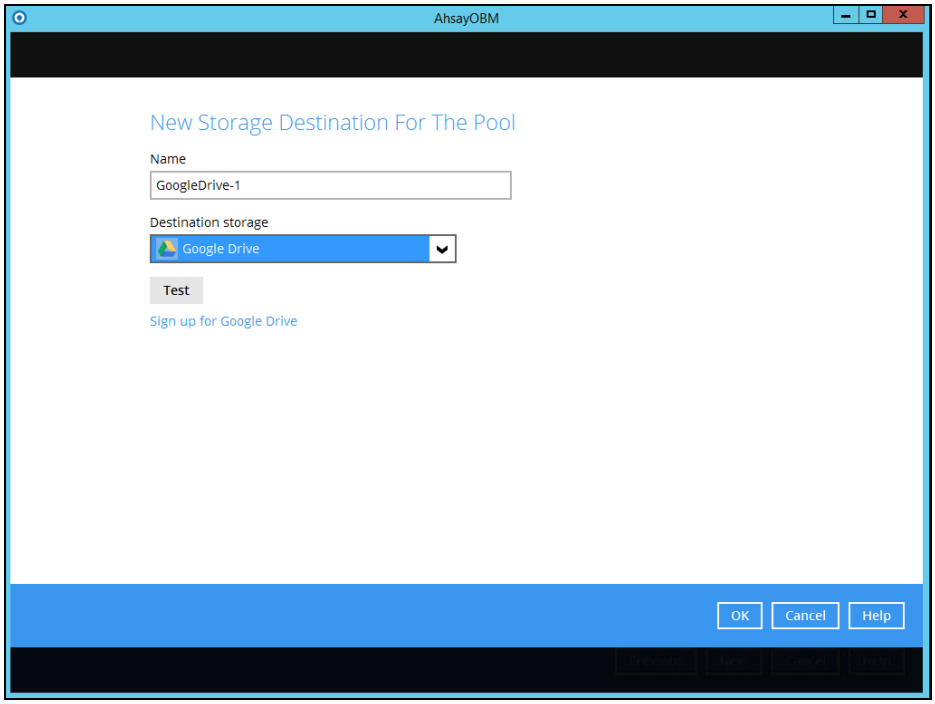


You can choose a storage combination of the Local/Mapped drive/Removable Drive, Cloud storage or FTP. Click **OK** to proceed when you are done with the settings.

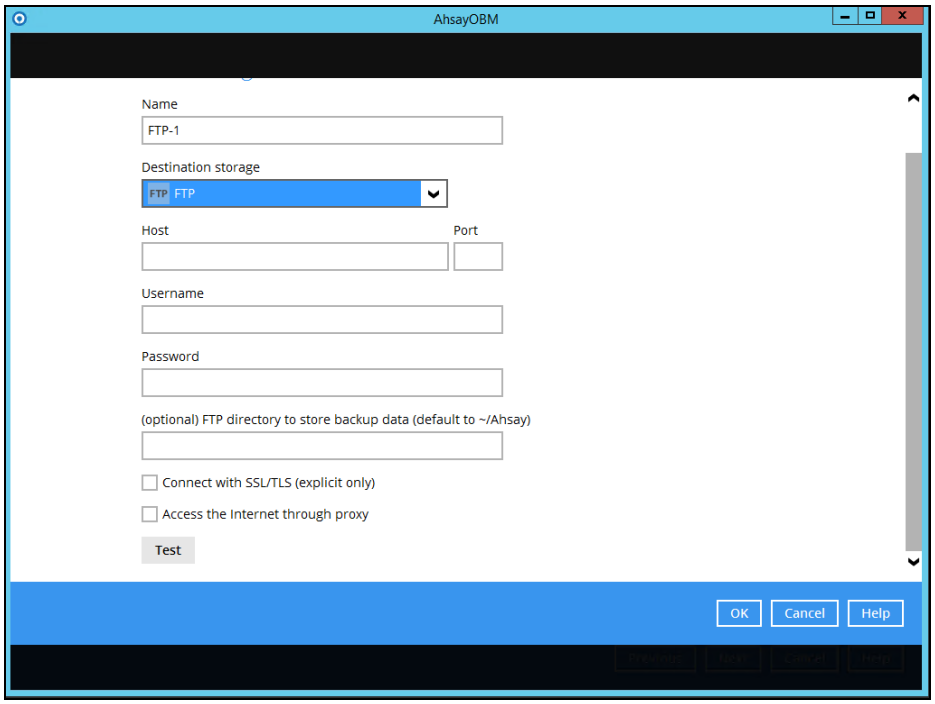
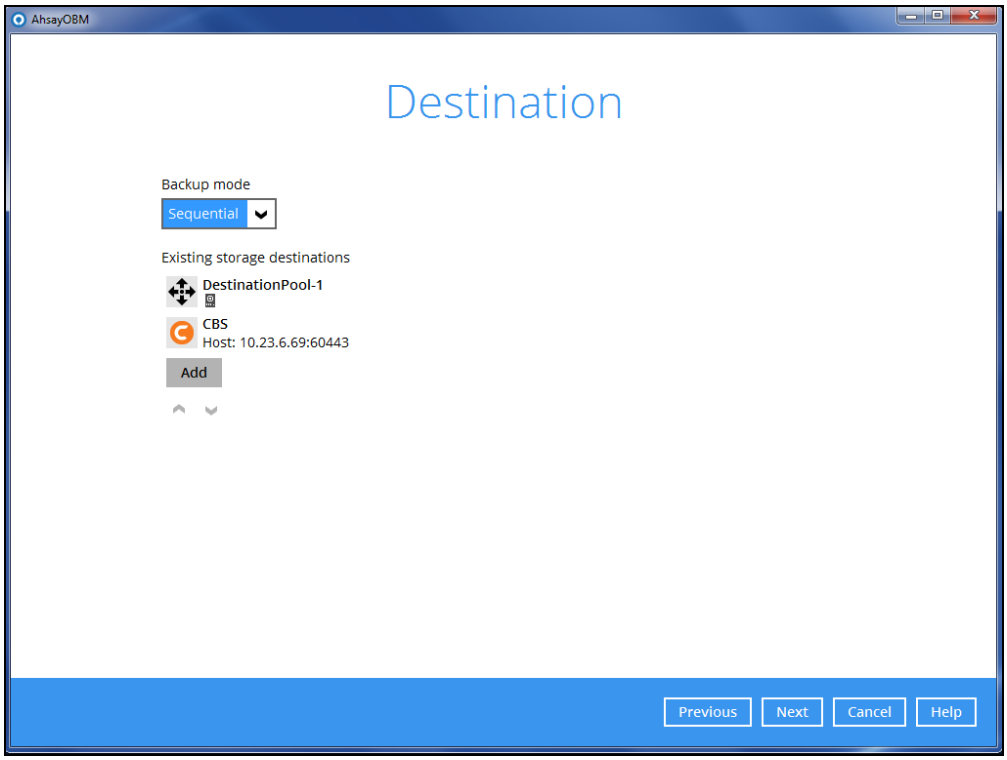
- If you have chosen the Local/Mapped Drive/Removable Drive option, click **Change** to browse to a directory path where backup data will be stored, then click **Test** to validate the path. **Test completed successfully** shows when the validation is done.



- If you have chosen the Cloud Storage, click **Test** to log in to the corresponding cloud storage service.



- If you have chosen the FTP as the destination, enter the the Host, Username and Password details.



6. You can add multiple storage destinations. The backup data will be uploaded to all the destinations you have selected in the order you added them. Press the ^ v icon to alter the order. Click **Next** to proceed when you are done with the selection.