



Ahsay Online Backup Manager v8

Office 365 Backup & Restore Guide for Mac OS X

Ahsay Systems Corporation Limited

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Revision History

Date	Descriptions	Type of modification
21 January 2019	First Draft	New
17 April 2019	Updated the Office 365 Add-on Module Requirement in Ch. 2.3; Updated the AhsayOBM Licenses for the agentless in Ch 2.3; Updated the Subscription Plan by adding the Office 365 Business in Ch. 2.3; Added the Supported Services for the Office 365 in Ch. 2.4; Added four (4) limitations in Ch. 2.4; Updated the Backup Destination for the Agentless in Ch. 2.6; Added scenarios for the Office 365 License Requirement and Usage in Appendix B; Updated the Java Heap Size and added examples in Appendix C; Updated the scenarios for the large number of users to backup in Appendix D;	New / Modifications

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1 Overview

What is this software?

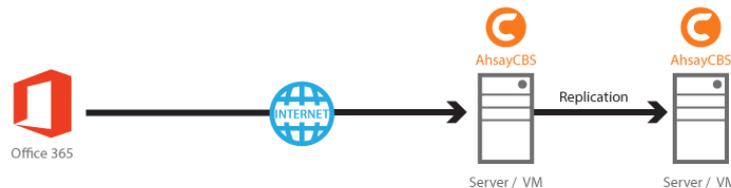
Ahsay brings you specialized client backup software, namely AhsayOBM, to provide a set of tools to protect your Office 365 user accounts. This includes backup and recovery of individual emails, contacts, calendars and other mail items in your Office 365 Outlook, files on OneDrive and SharePoint, with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

System Architecture

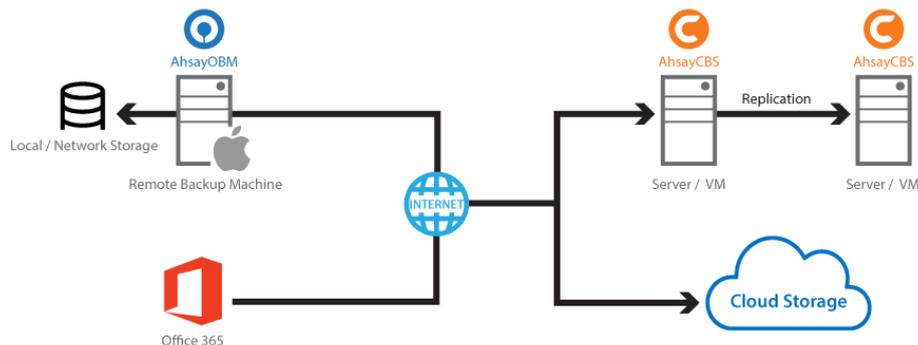
Below is the system architecture diagram illustrating the major elements involved in the backup process among the Office 365 service, AhsayOBM and AhsayCBS.

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 directly through the Internet.

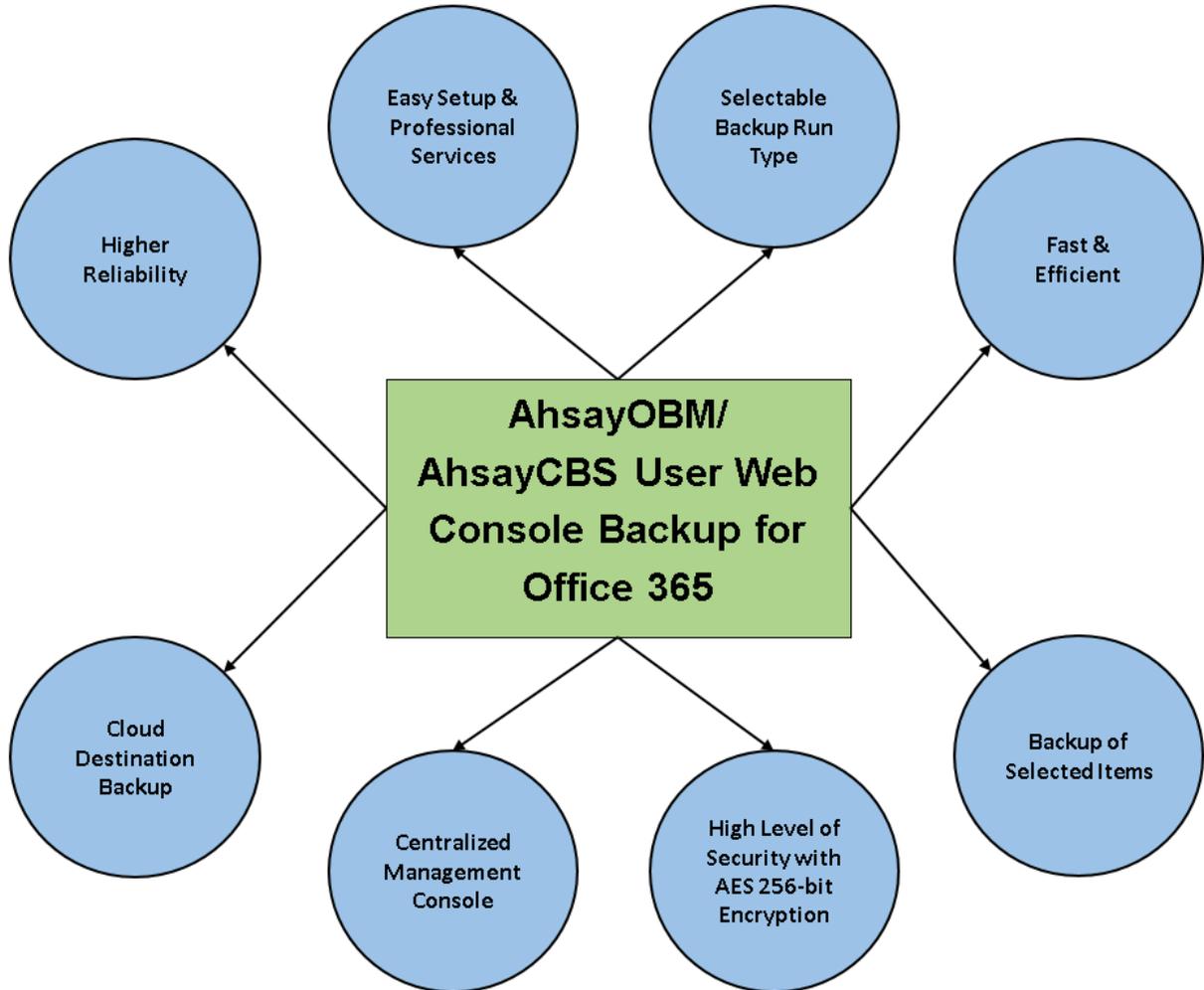


2. **Agent-based:** The latest version of AhsayOBM is installed on the remote backup machine which is connected to Office 365 and AhsayCBS backup server through internet.



Why should I use AhsayOBM or AhsayCBS User Web Console?

We are committed to bringing you a comprehensive Office 365 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 v8 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 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 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 back up 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 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 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.

	<p>restore.</p> <ul style="list-style-type: none"> ➤ Only a web browser and internet connection is needed. 	
Backup	<ul style="list-style-type: none"> ➤ 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 to AhsayCBS backup server. ➤ Backup destination is restricted to AhsayCBS backup server. 	<ul style="list-style-type: none"> ➤ 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 to AhsayOBM, then to AhsayCBS backup server. ➤ Backup destination can be AhsayCBS backup server, local and cloud drive and FTP.
Large Number of User Backup Sets	<ul style="list-style-type: none"> ➤ Backup of large number of user backup set may take more time. As it will increase the AhsayCBS server load a lot if run multiple user backup sets concurrently and may affect the server performance, so it will make backup speed slower and period longer. 	<ul style="list-style-type: none"> ➤ Backup of large number of user 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	<ul style="list-style-type: none"> ➤ Do not require provision of additional Mac machine. 	<ul style="list-style-type: none"> ➤ May require the provision of an additional Mac machine.
Restore	<ul style="list-style-type: none"> ➤ 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. 	<ul style="list-style-type: none"> ➤ 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.

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

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.

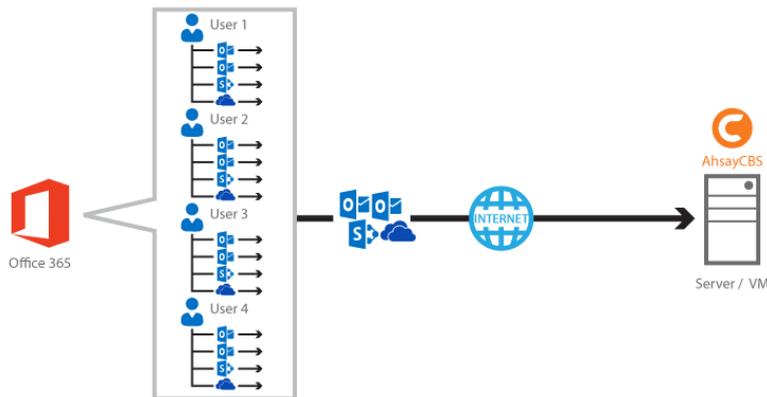
We also understand that you may wish to run backup at a specified time interval of your choice, that's why we also allow you to set your own backup schedules so that you can take full control of the time when to perform backup.

- **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.

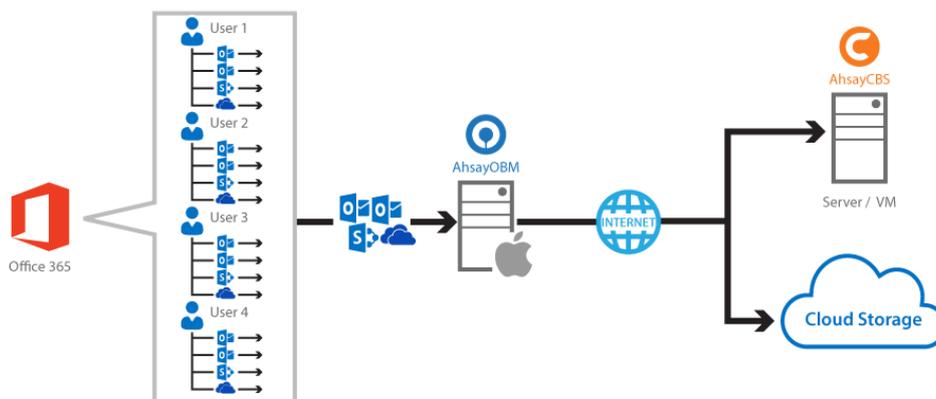
The default setting for Office 365 backup sets supports

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

For Agentless Option:



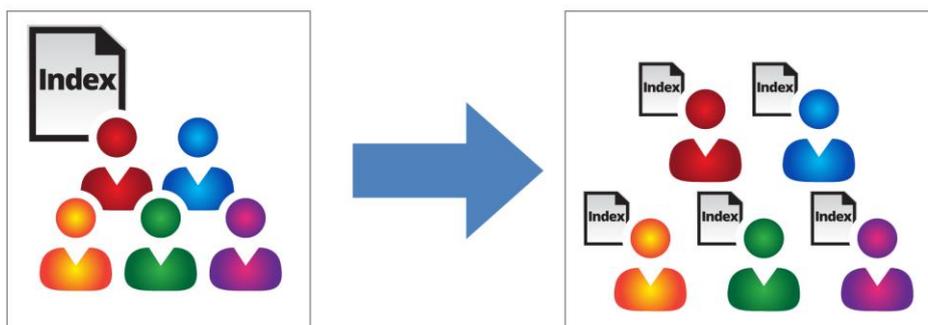
For Agent-based Option:



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 user will have its own individual index file instead of a single index file for all users within the backup set.



This new design eliminates any potential I/O performance bottlenecks when the index files are 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 Items

To back up the Office 365 user accounts, the backup resources can be user level, site collection level and even item level.

- ▶ Flexible backup options:
 - ◉ Only select the required users, specific site collection or items for backup.
- ▶ Flexible restore options:
 - ◉ Restore all the users or just one user, or restore the whole site collection or just one site, or restore the whole user contents or just one item.
 - ◉ Restore items to the original location or an alternate location

High Level of Security

We understand your Office 365 users 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. Your 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 v8 Administrator's Guide](#) for details.

- ▶ Create/ update/ delete backup set
- ▶ Restore backup set
- ▶ 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 Office 365 user 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

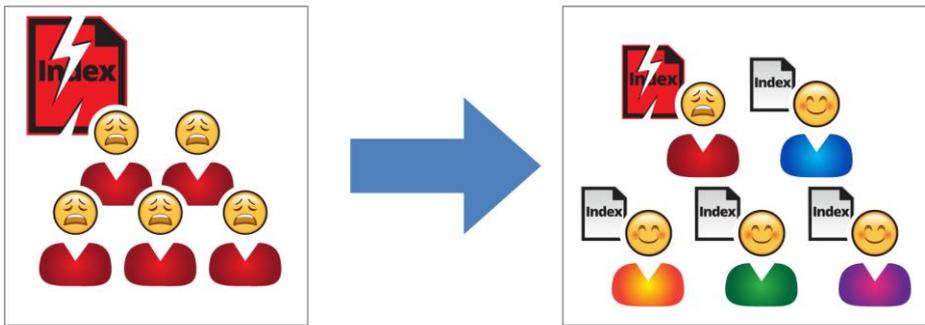
Cloud destination backup applies only to agent-based backup sets. The backup destination is restricted to AhsayCBS for all agentless backup sets.

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 user 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 user, while other users 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 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 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 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 or User Web Console

Running a Backup Set

Run a backup set using the AhsayOBM or User Web Console

Configuring an Automated Backup

Configure backup schedule for automated backup

Part 3: Restoring Office 365 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 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 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 8.1 or above](#)

Software Requirement

Make sure the operating system where you have the Office 365 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 8.1 or above](#)

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 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

🔹 Office 365 Add-on Module Requirement

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

Please contact your backup service provider for more details. Below is a sample screen shot of an AhsayOBM User with an add-on module of Office 365 with 20 licenses.

Please contact your backup service provider for more details.

The screenshot shows the 'User Profile' settings page for a user. The 'Backup Client Settings' tab is active. Under 'Backup Client', 'AhsayOBM User' is selected. In the 'Add-on Modules' section, 'Office 365 Backup' is checked and has a license quota of 20, which is highlighted with a red box. Other modules like 'Microsoft Exchange Server', 'MySQL Database Server', and 'Lotus Domino' are also visible.

Module	License Quota
Microsoft Exchange Server	0
MySQL Database Server	0
Lotus Domino	0
Windows System Backup	0
VMware	0
Microsoft Exchange Mailbox	0
Continuous Data Protection	0
Mobile	0
Volume Shadow Copy	0
OpenDirect / Granular Restore	10
Office 365 Backup	20

The licenses for the Office 365 module are calculated by the number of unique Office 365 accounts. If same Office 365 account is backed up on multiple backup sets with an OBM user account would be counted a one Office 365 license.

If you are trying to backup SharePoint Sites under the Site Collections and/or files or folders under Public Folder, only one Office 365 license module is required.

However, If you are trying to backup Items from Outlook, Items from OneDrive, Personal Sites under Users, the Office 365 license count will be calculated based on the number of the user account selected.

For more detailed examples about the Office 365 license requirement and usage, refer to [Appendix B: Example Scenarios for Office 365 License Requirement and Usage](#).

▶ **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:

For Agent-based:

- i. To backup users with one (1) backup client computer
Example: If one AhsayOBM is installed then, one AhsayOBM license is required.
- ii. To backup users with multiple backup client computers, the number of AhsayOBM licenses required is equal to the number of devices.
Example: If there are ten (10) users to be backed-up with three (3) backup client computers, then 3 AhsayOBM licenses are required.

For Agentless:

- i. To backup users using AhsayCBS User Web Console, one AhsayOBM license is 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 users for the new backup set and retention policy.

Please contact your backup service provider for details.

▶ **Java Heap Size**

The default Java heap size setting for AhsayOBM is 2048 MB / 2.048 GB. To avoid any inconveniences and ensure smooth operation when performing Office 365 backup, it is highly recommended to allot extra memory.

Below is the table for the memory requirement:

Per OneDrive Account	100 MB
Per SharePoint Site Collection	150 MB

Note: The memory requirement is dependent on the number of OneDrive or SharePoint Site Collections selected for backup.

For more detailed examples about the Office 365 license requirement and usage, refer to [Appendix C: Example Setting for Java Heap Size](#).

NOTE:

The Java heap size to be configured should not exceed 2/3 of the RAM available, to allow sufficient resources for the operating system.

For more detailed information on how to change the Java heap size, please refer to this link: [FAQ: How to modify the Java heap size setting of AhsayOBM?](#)

Office 365 Subscription Plan

The following subscription plans with Office 365 email services are supported to run backup and restore on AhsayOBM or AhsayCBS User Web Console.

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

Office 365 Subscription

Make sure your Office 365 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 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

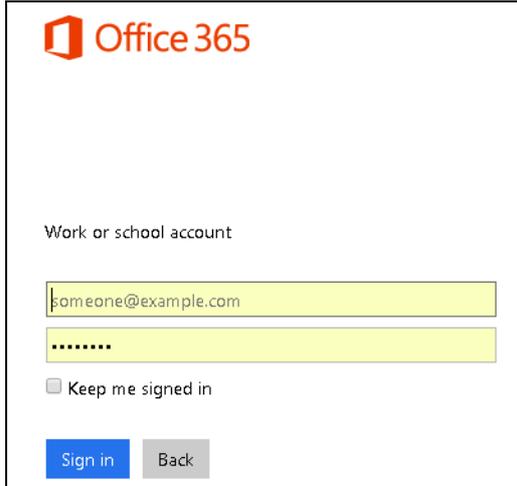
Before the Office 365 account administrator or other accounts can create a backup set, the administrator has to grant permission to the account(s) which are going to create backup set. The account must be a member of the following security groups:

- Discovery Management
- Public Folder Management

Follow the steps below to grant permission to user account.

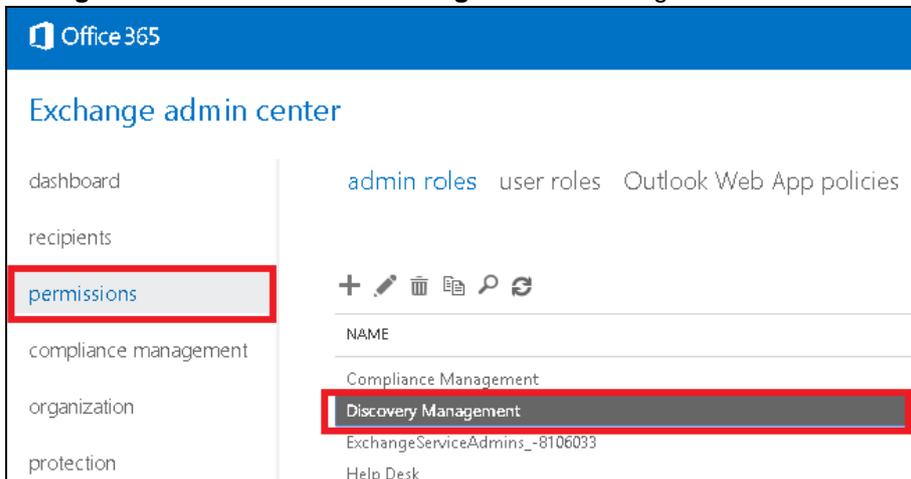
- i. Open <https://outlook.office365.com/ecp>

- ii. Login to the **Office 365 admin center** as an account administrator.



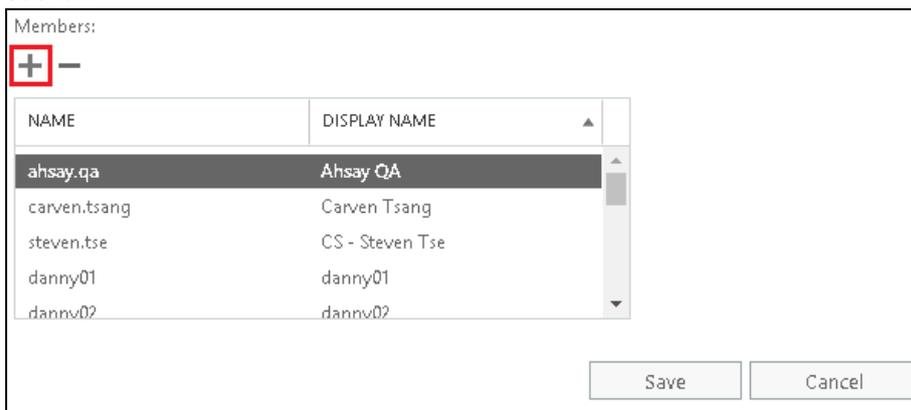
The image shows the Office 365 login page. At the top left is the Office 365 logo. Below it, the text "Work or school account" is displayed. There are two input fields: the first contains the email address "someone@example.com" and the second contains a masked password ".....". Below the password field is a checkbox labeled "Keep me signed in". At the bottom, there are two buttons: "Sign in" (highlighted in blue) and "Back".

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



The image shows the Exchange admin center interface. The top navigation bar is blue with the Office 365 logo. Below it, the title "Exchange admin center" is displayed. On the left is a sidebar menu with items: "dashboard", "recipients", "permissions" (highlighted with a red box), "compliance management", "organization", and "protection". On the right, there are tabs for "admin roles", "user roles", and "Outlook Web App policies". Below the tabs are icons for adding, editing, deleting, and refreshing. A table lists various roles, with "Discovery Management" highlighted by a red box. The table has a "NAME" column and lists "Compliance Management", "Discovery Management", "ExchangeServiceAdmins_-8106033", and "Help Desk".

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

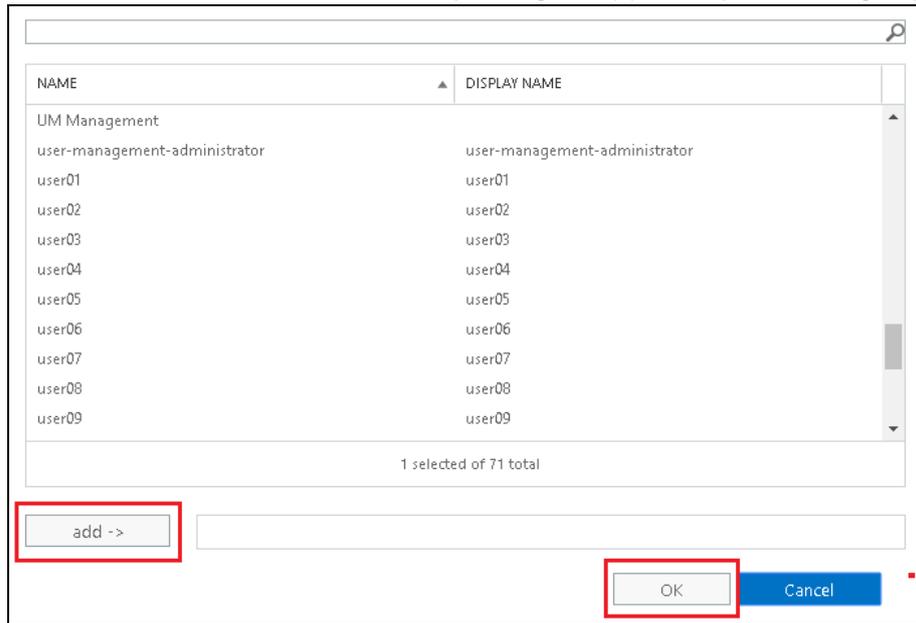


The image shows a "Members" selection dialog. At the top, there is a "Members:" label and a "+ -" control, where the "+" icon is highlighted with a red box. Below this is a table with two columns: "NAME" and "DISPLAY NAME". The table contains the following entries:

NAME	DISPLAY NAME
ahsay.qa	Ahsay QA
carven.tsang	Carven Tsang
steven.tse	CS - Steven Tse
danny01	danny01
danny02	danny02

At the bottom right of the dialog are "Save" and "Cancel" buttons.

- 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.

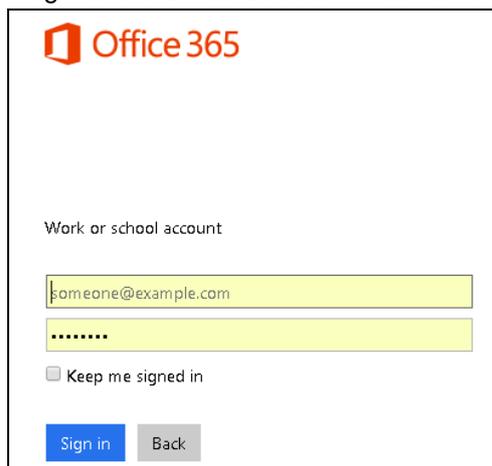


- vi. Click **Save** to confirm and exit the setting.

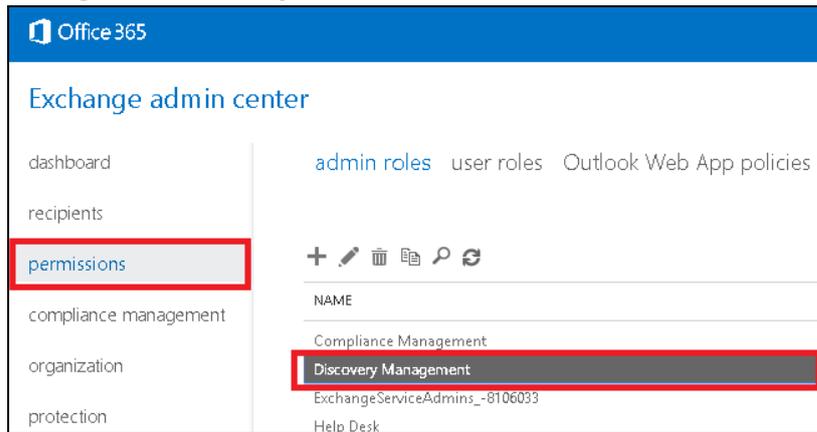
📌 Granting Permission for Application Impersonation & Mail Search

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 user 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 & Mail Search** role by following the steps below.

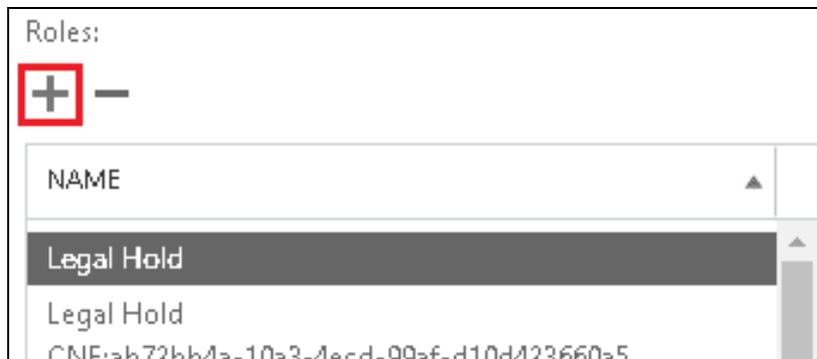
- vii. Open <https://outlook.office365.com/ecp>
- viii. Login to the **Office 365 admin center** as an account administrator.



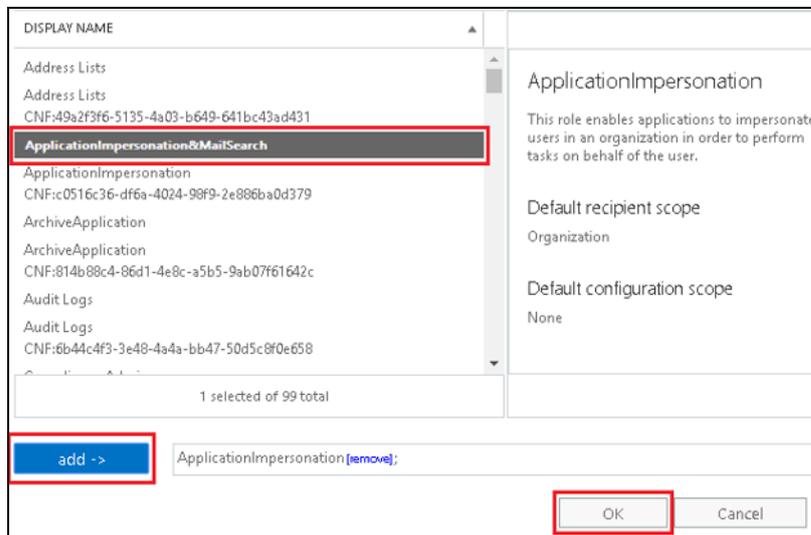
- ix. Select the **permissions** menu on the left, then double click on **Discovery Management** on the right.



- x. Click the **+** icon under the **Role** section.



- xi. Select the **ApplicationImpersonation&MailSearch** role, then click the **add** button. Click **OK** afterward.



- xii. Click **Save** to confirm and exit the setting.

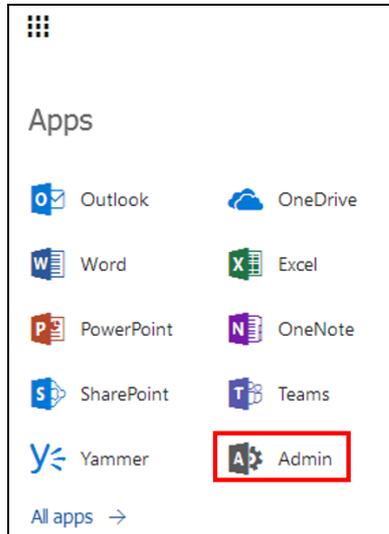
Granting Permission for SharePoint Global Admin

The Global Admin permission allow SharePoint account to list other account's Personal Site and OneDrive in the backup source tree. So before using AhsayOBM to create backup set, please ensure the SharePoint account has already owned the

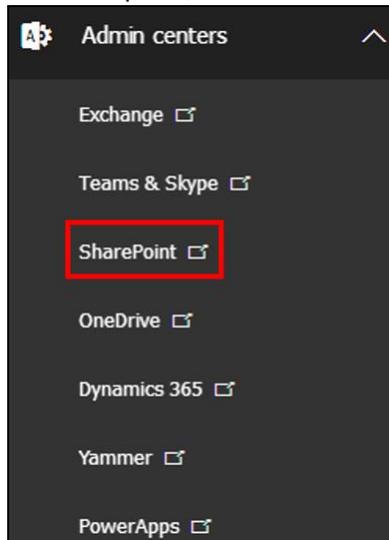
permission in order to apply AhsayOBM to back up and/or restore user item(s) not only for their own account, but also the accounts of other users.

- i. Open <https://outlook.office365.com/owa> to sign in Office 365 as a global admin or SharePoint admin.

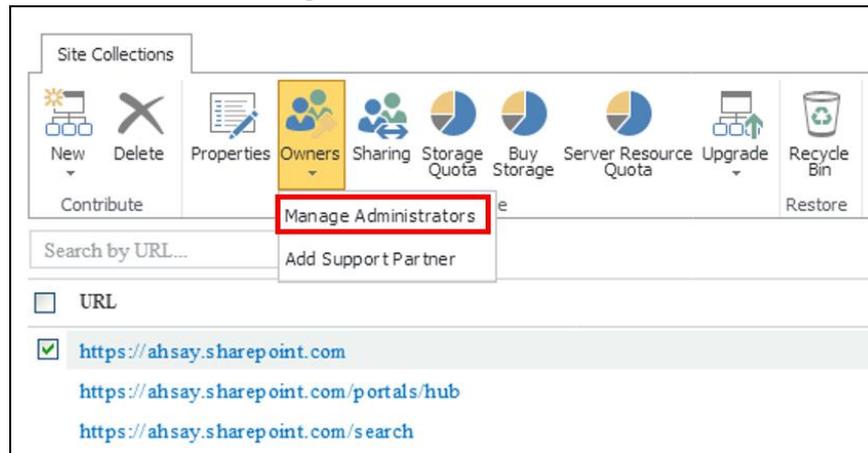
- ii. Click  in the upper-left and choose **Admin** to open the Office 365 admin center.



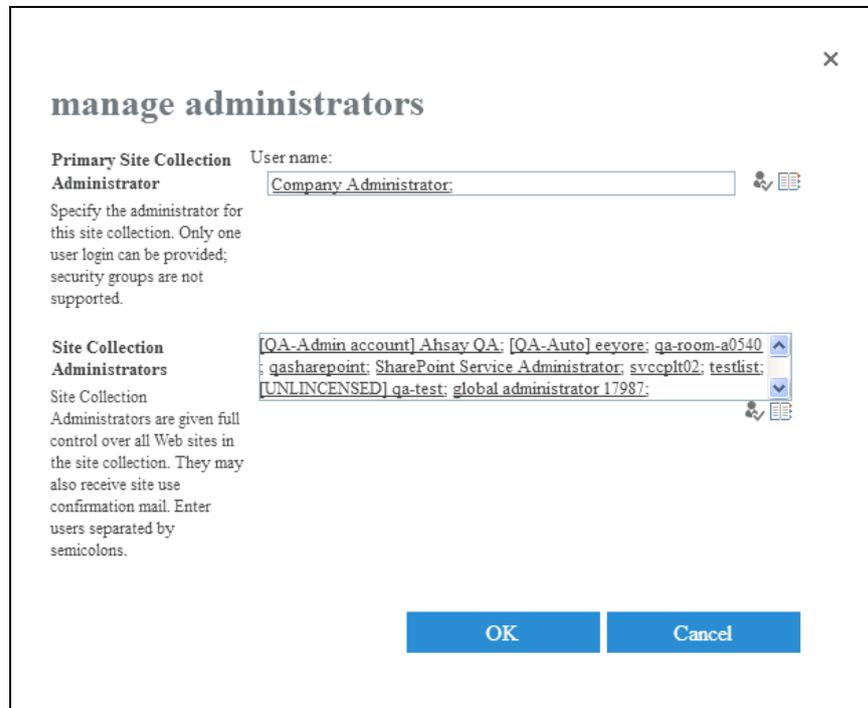
- iii. In the left pane, choose **Admin Centers > SharePoint**.



- iv. Check the box of the site collection you want to grant Global Admin and click **Owners** to choose **Manage Administrators**.



- v. Add **Global Admin** in the **Site Collection Administrators** box.

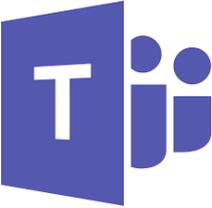


- vi. Click **OK** to confirm.

Supported Services

Below are the supported services of Office 365 Backup module. It is also specified in the table some services that are currently not yet supported by the Office 365 Backup module.



Services		Supported ?	Services		Supported ?
Outlook		✓	OneDrive		✓
SharePoint		✓	Microsoft Teams		✗
Yammer		✗	Microsoft Stream		✗
Power BI		✗	Microsoft Power Apps		✗

Below are the supported Outlook Mailbox types of Office 365 Backup.

Outlook Mailbox



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

Below are the items that you can backup or restore from an Outlook mailbox.

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

Below are the items that you can backup or restore from OneDrive.

OneDrive



Item	Supported?	Item	Supported?
Folders	✓	Files	✓
Access Permissions	✓	Albums	✗
Recycle Bin	✗	Tags	✗

Below are the SharePoint items that you can backup or restore from an Office 365 backup set.

SharePoint



Item	Supported?	Item	Supported?
Lists and Libraries	✓	Subsites	✓

Below are the SharePoint Site Collections template that you can backup or restore from an Office 365 backup set.

SharePoint Site Level Collection			
Item	Supported?	Item	Supported?
Team Site	✓	Team Site (Classic Experience)	✓
Blog	✓	Project Site	✓
Developer Site	✓	Community Site	✗
Document Center	✗	eDiscovery Center	✗
Records Center	✗	Business Intelligence Center	✗
Compliance Policy Center	✗	Enterprise Search Center	✗
Community Portal	✗	Basic Search Center	✗
Visio Process Repository	✗	My Site Host	✓
Publishing Portal	✗	Enterprise Wiki	✗
Modern Team Site	✓	Modern Communication Site	✗

Below is the Site Column Type that you can backup or restore from an Office 365 backup set.

Item Level			
Item	Supported?	Item	Supported?
Single line of text	✓	Number (1, 1.0, 100)	✓
Multiple lines of text	✓	Date and Time	✓
Choice (menu to choose from)	✓	Yes / No (checkbox)	✓

Below are the items from the Public Folder that you can backup and restore from an Office 365 backup set.

Public Folder			
Item	Supported?	Item	Supported?
Folders	✓	Files	✓

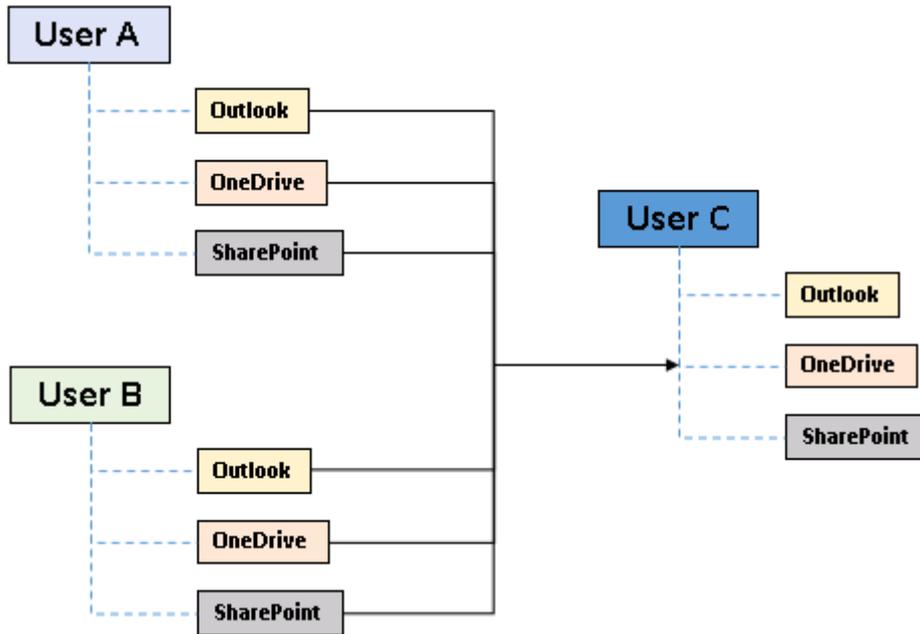
Limitation

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

1. AhsayOBM and AhsayCBS User Web Console currently do not support Office 365 user accounts with enabled Multi-Factor Authentication (MFA). If you are trying to backup Office 365 user accounts with MFA enabled, you have to disable it.
2. Restore filter using AhsayCBS User Web Console is not yet supported.
3. If you are trying to restore item(s) from multiple office 365 user account to an alternate office 365 user account, AhsayOBM can only restore one office 365 user account at a time.
4. Restore to Local Machine is not supported using AhsayCBS User Web Console. It is only available using AhsayOBM.
5. If you are trying to restore item(s) from one user to an alternate location user, AhsayOBM will restore the item(s) to their respective destination folder(s) with the same name of the original folder(s).

Example: Item from Outlook of User-A will be restored to the Outlook of the alternate location User-B; Item from SharePoint of User-A will be restored to the SharePoint of the alternate location User-B.

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



Example: Item from Outlook of User-A and User-B will be restored to the Outlook of the alternate location User-C.

- Only administrator account or user account with administrative authority can restore backup items to an alternate location.
- Restore of item(s) in public folder to an alternate location public folder is not supported.

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

- If you are trying to restore the item to a destination user which has a different language setting than the original user, AhsayOBM will restore 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.

For folders in OneDrive and SharePoint, a new folder will be created.

Backup source (English)	Action	Destination User 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
OneDrive Folder	Create new folder	OneDrive Folder
SharePoint Folder	Create new folder	SharePoint Folder

Best Practices and Recommendations

The following are some best practices or recommendations we strongly recommend you to follow before you start any Office 365 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 is 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.

Set Backup Destination

After creating the backup set in **Run on Client** mode on AhsayCBS user web console, please remember to login AhsayOBM to set the backup destination if you want the backup destination to be Local/ Mapped Drive/ Removable Drive.

Backup Destination

To provide maximum data protection and flexible restore options for agent-based backup, it is recommended to configure:

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

However, for Agentless Cloud storage there may be an impact on the backup performance.

• **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 Users to Backup**

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

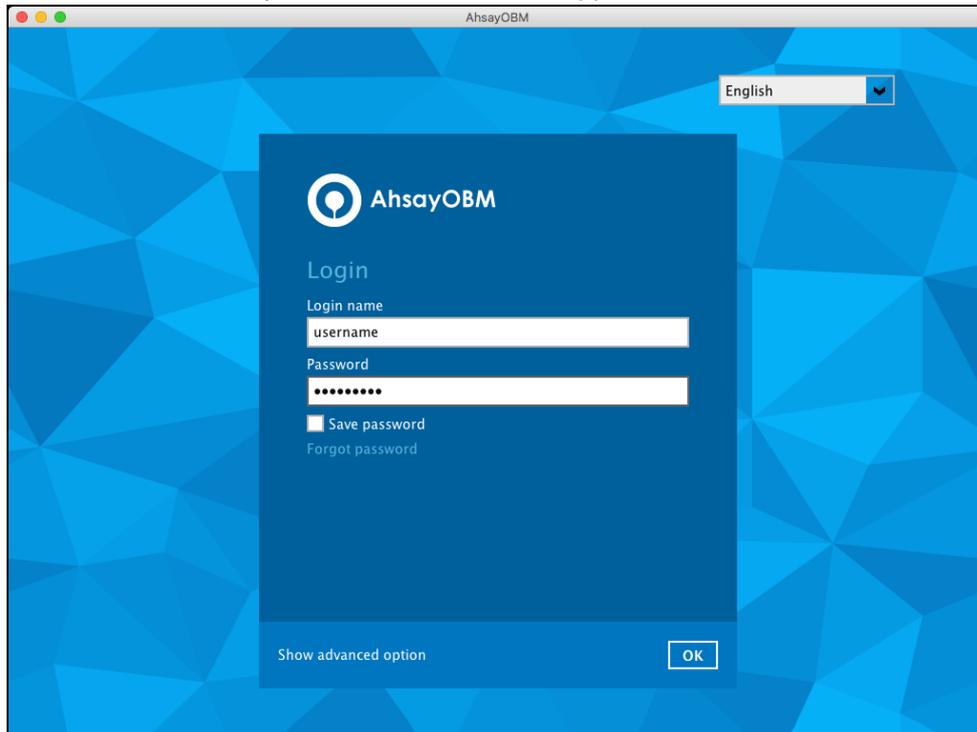
For more detailed examples about the number of users to backup, refer to [Appendix D: Example Scenarios for Number of Users to Backup](#).

3 Login to AhsayOBM / AhsayCBS User Web Console

Login to AhsayOBM

1. Login to the AhsayOBM application user interface.

Double click the AhsayOBM icon to launch the application.

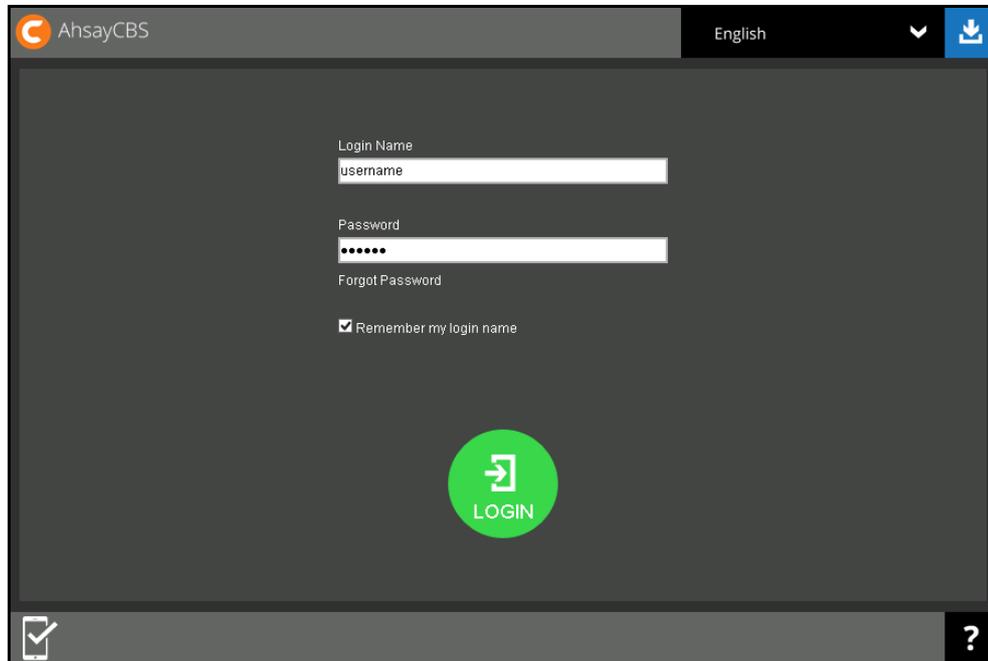


2. Enter the **Login name** and **Password** of your AhsayOBM account.
3. Click **Show advanced option** to configure the **Backup Server** and **Proxy** details if necessary.
4. Click **OK** to login to AhsayOBM.

Login to AhsayCBS User Web Console

1. Login to the AhsayCBS web console at https://backup_server_hostname:port

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

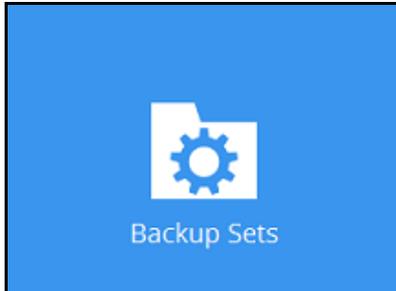


2. Enter the Login Name and Password of your AhsayOBM account.
3. Click **LOGIN** afterward to login to the web console.

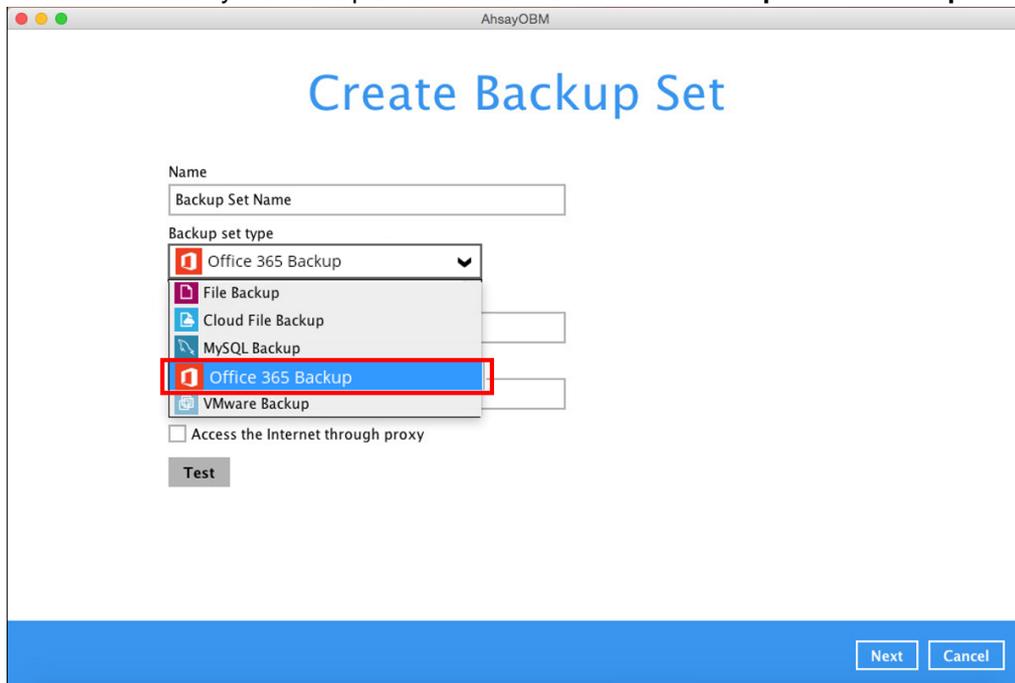
4 Creating an Office 365 Backup Set

Create 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 Backup** as the **Backup set type**.

A screenshot of a web browser window titled "AhsayOBM" showing a "Create Backup Set" dialog box. The dialog has a title bar with red, yellow, and green window control buttons. The main heading is "Create Backup Set" in blue. Below the heading, there is a "Name" field with the placeholder text "Backup Set Name". Underneath is a "Backup set type" dropdown menu. The dropdown is open, showing a list of options: "Office 365 Backup" (selected and highlighted with a red box), "File Backup", "Cloud File Backup", "MySQL Backup", and "VMware Backup". To the right of the dropdown, there are two empty input fields. Below the dropdown is a checkbox labeled "Access the Internet through proxy" which is unchecked. At the bottom left of the dialog is a "Test" button. At the bottom right, there are "Next" and "Cancel" buttons. The dialog box has a blue footer bar.

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

AhsayOBM

Create Backup Set

Name
Office 365 Backup Set

Backup set type
Office 365 Backup

Username
[Empty]

Password
[Empty]

Region
Global

Access the Internet through proxy

Test

Next Cancel

Region
Global
Global
China
Germany

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

Username
carven.tsang@cloudbacko.biz

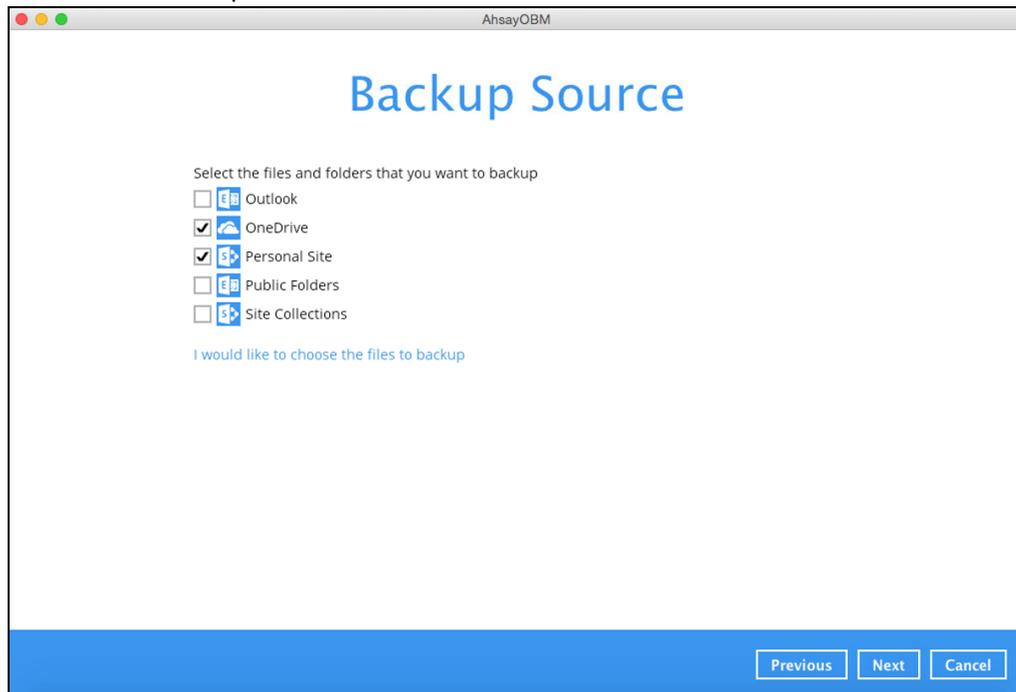
Password
[Masked]

Region
Global

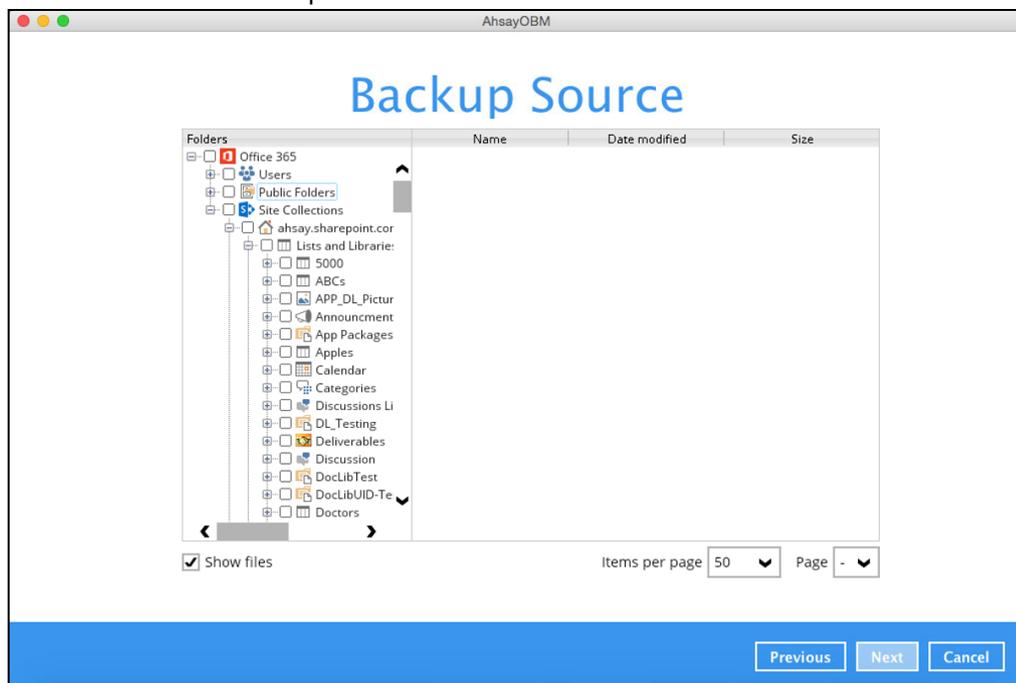
Access the Internet through proxy

✓ Test completed successfully

- In the **Backup Source** menu, select the desired Outlook, OneDrive, Personal Site, Public Folders or Site Collections for backup. Check the box will back up all, i.e. check the box of Outlook will back up the mailboxes of all the users.

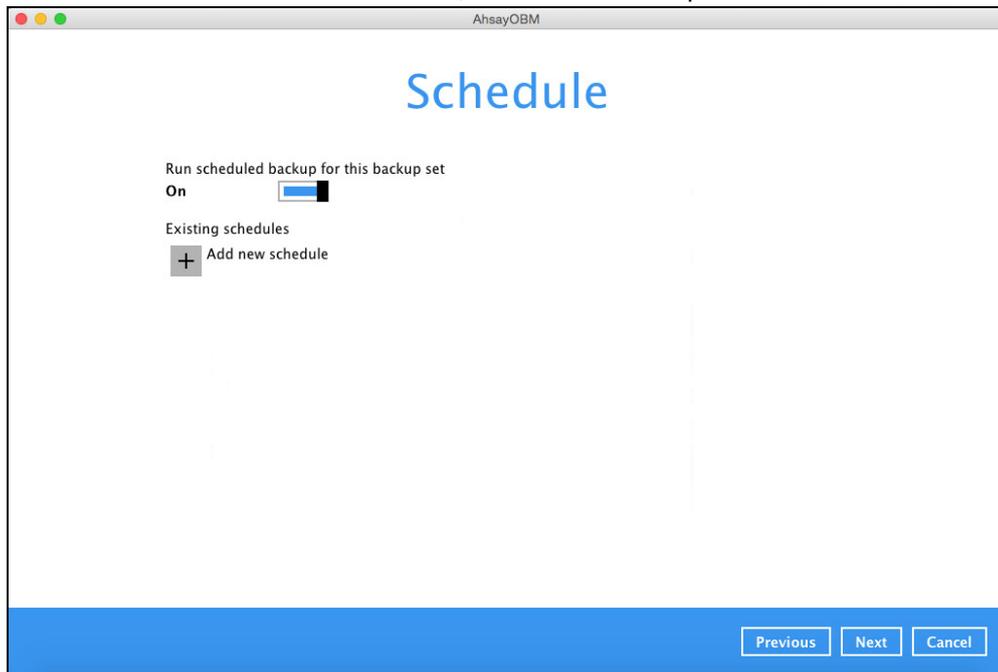


Or click **I would like to choose the files to backup** to choose the detailed files to backup. Enable the **Show mails** checkbox at the bottom left corner if you would like to choose individual items for backup.

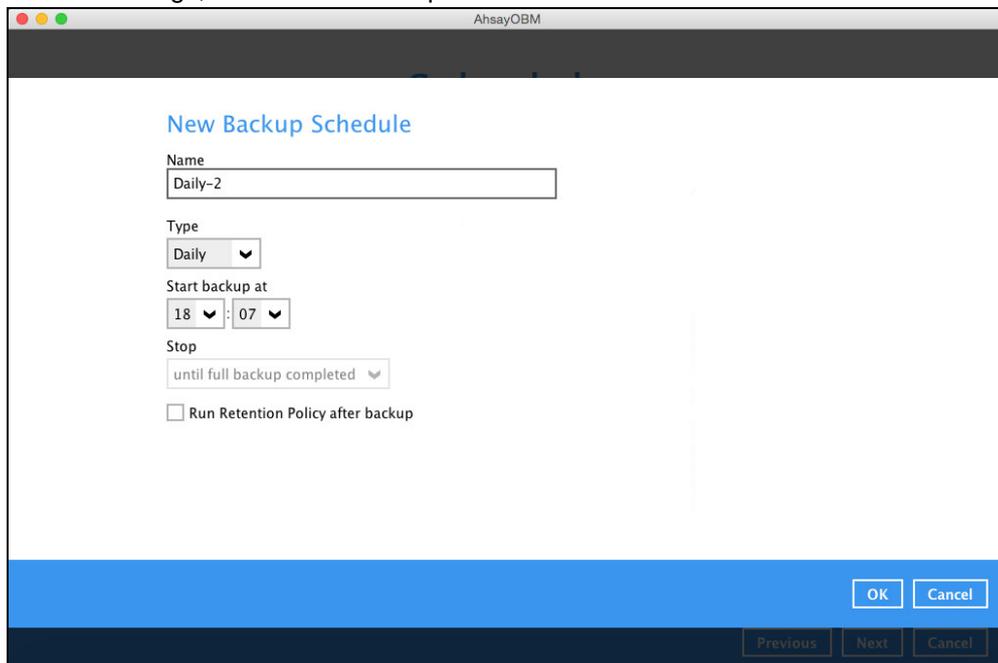


- Users: include Outlook, OneDrive and Personal Sites
- Public Folders: include public folders
- Site Collections: include Personal Sites and Site Collections

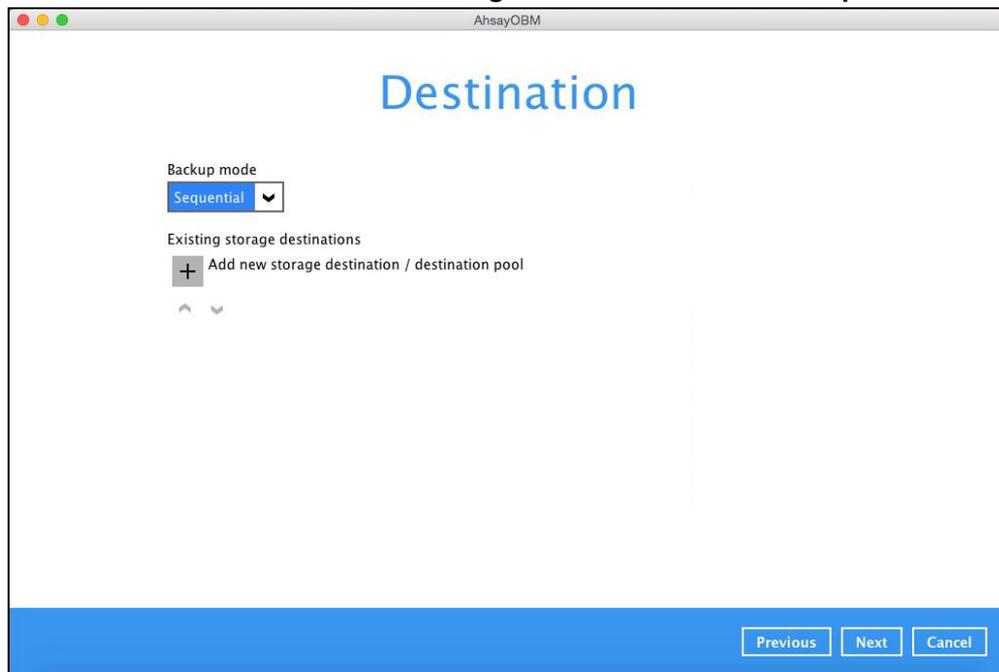
6. In the Schedule menu, configure a backup schedule for backup job to run automatically at your specified time interval. Slide the on/off button to turn on this feature, then click **Add new schedule** to add a new schedule, then click **Next** to proceed afterward.



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



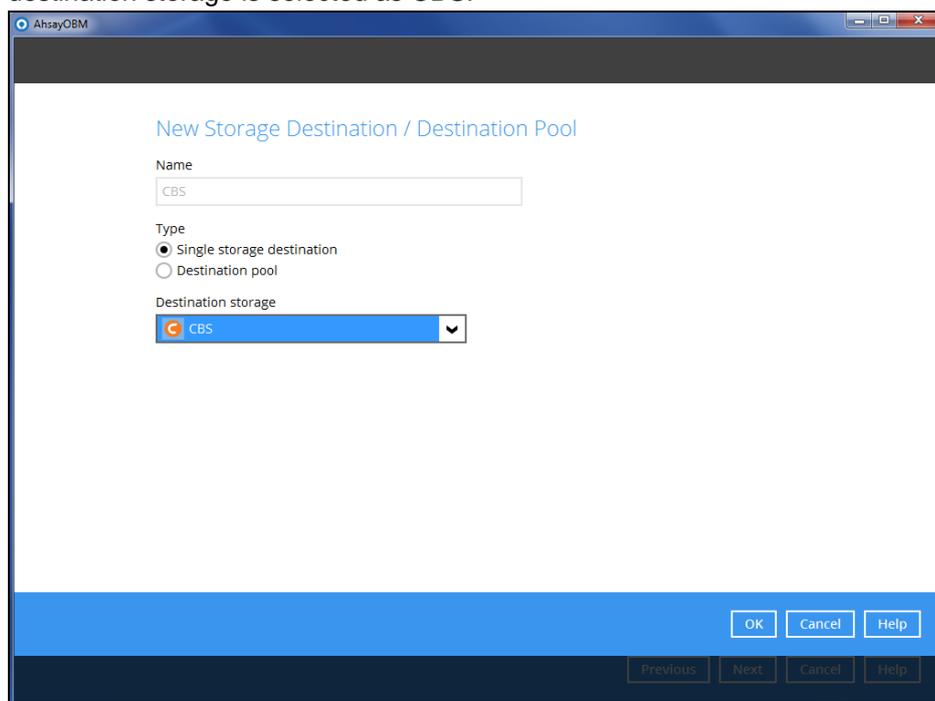
7. In the **Destination** menu, select a backup destination where the backup data will be stored. Click the “+” icon next to **Add new storage destination / destination pool**.



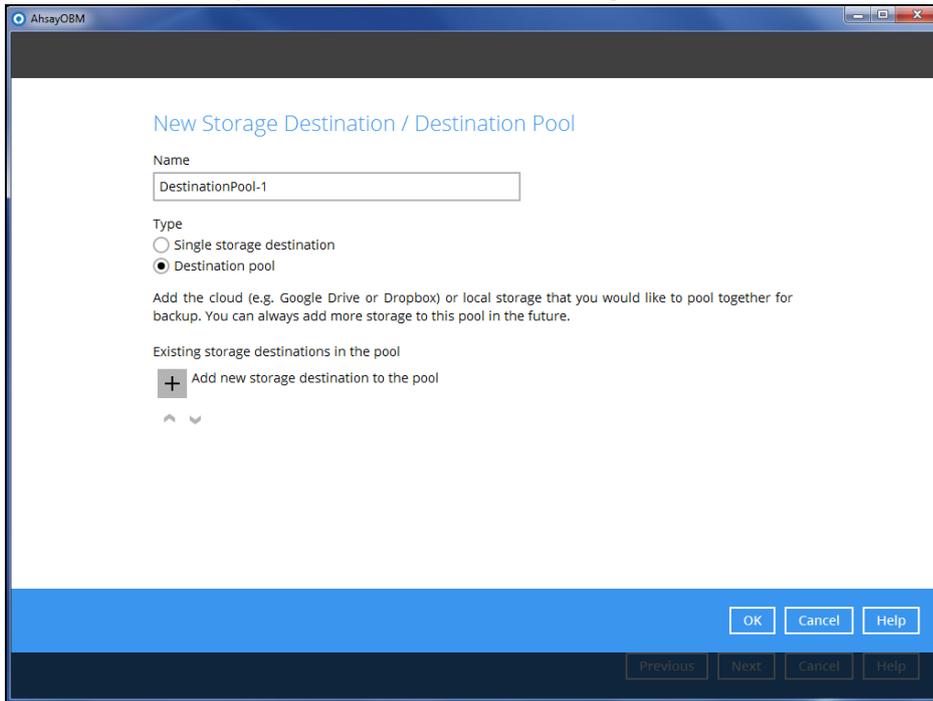
Note

For more details on Backup Destination, refer to the following Wiki article for details:
http://wiki.ahsay.com/doku.php?id=public:8002_faq:faq_on_backup_destination

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.

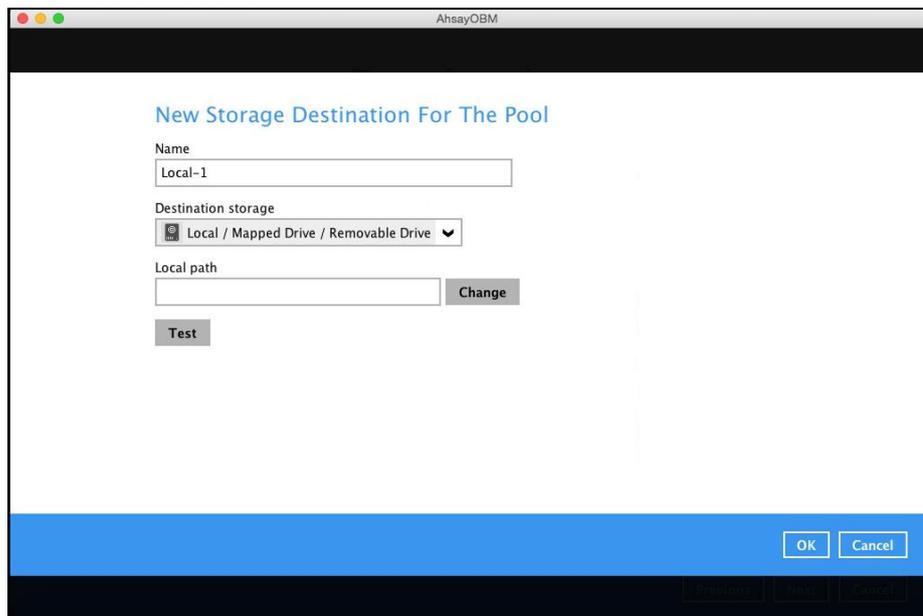


- ⦿ **Destination pool** – the backup will be spread over on the destinations you have selected. Enter a **Name** for the destination pool and then click **Add new storage destination to the pool** to select the desired storage destinations.

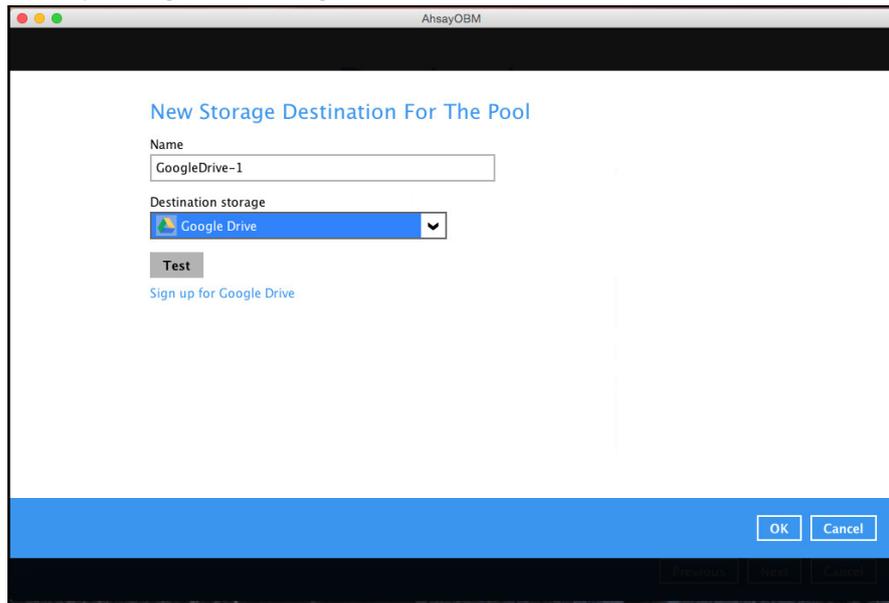


You can choose a storage combination of the Local/Mapped drive/Removable Drive, Cloud storage or FTP. Click **OK** to proceed when you are done with the settings.

- 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.

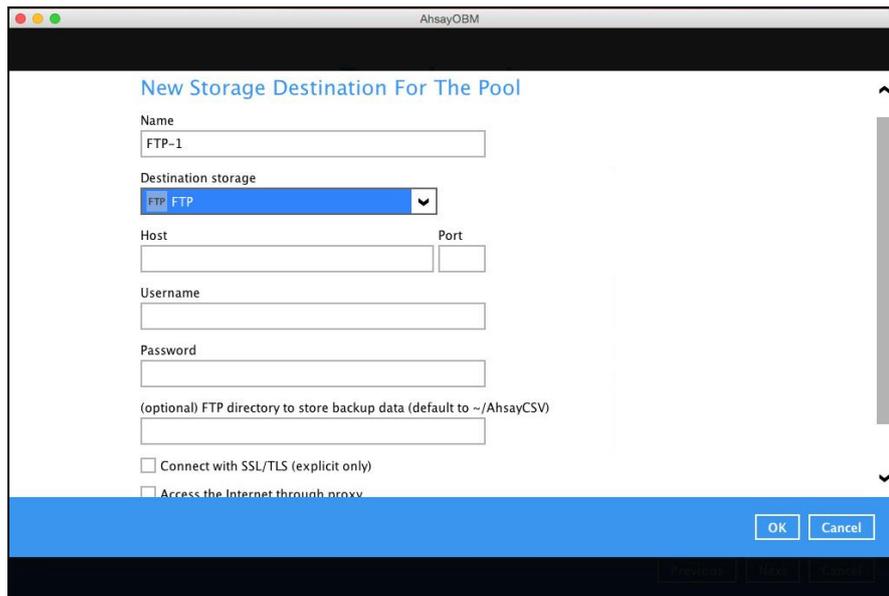


- If you have chosen the Cloud Storage, click **Test** to log in to the corresponding cloud storage service.



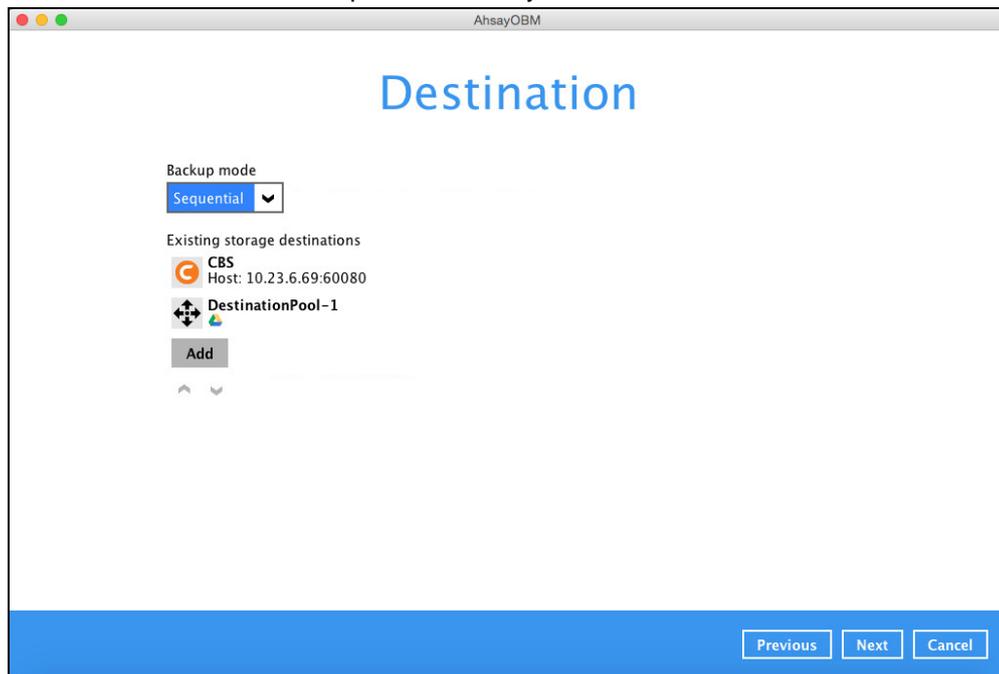
The screenshot shows a dialog box titled "New Storage Destination For The Pool" from the application "AhsayOBM". The "Name" field contains "GoogleDrive-1". The "Destination storage" dropdown menu is set to "Google Drive". Below the dropdown is a "Test" button and a link that says "Sign up for Google Drive". At the bottom right of the dialog are "OK" and "Cancel" buttons.

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



The screenshot shows the same dialog box, but now the "Destination storage" dropdown is set to "FTP". The "Name" field contains "FTP-1". Below the dropdown are fields for "Host" and "Port". Underneath are fields for "Username" and "Password". There is also an optional field for "FTP directory to store backup data (default to ~/AhsayCSV)". At the bottom, there are two checkboxes: "Connect with SSL/TLS (explicit only)" and "Access the Internet through proxy". "OK" and "Cancel" buttons are at the bottom right.

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 is created. Please be reminded that if you change the AhsayOBM login password later, the encryption keys of the backup sets previously created with this encryption type will remain unchanged.

- **Custom** – you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length.

Encryption

Encrypt Backup Data
On

Encryption Type
Custom ▼

Algorithm
AES ▼

Encryption key
.....

Re-enter encryption key
.....

Method
 ECB CBC

Key length
 128-bit 256-bit

Note: For best practice on managing your encryption key, refer to the following Wiki article. http://wiki.ahsay.com/doku.php?id=public:5034_best_practices_for_managing_encryption_key

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 key you have selected.

Encryption

Encrypt Backup Data
On

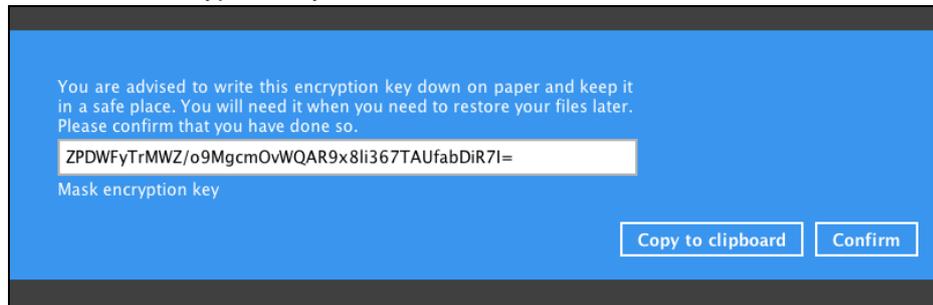
Encryption Type
Default ▼

You are advised to write this encryption key down on paper and keep it in a safe place. You will need it when you need to restore your files later. Please confirm that you have done so.

.....
[Unmask encryption key](#)

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

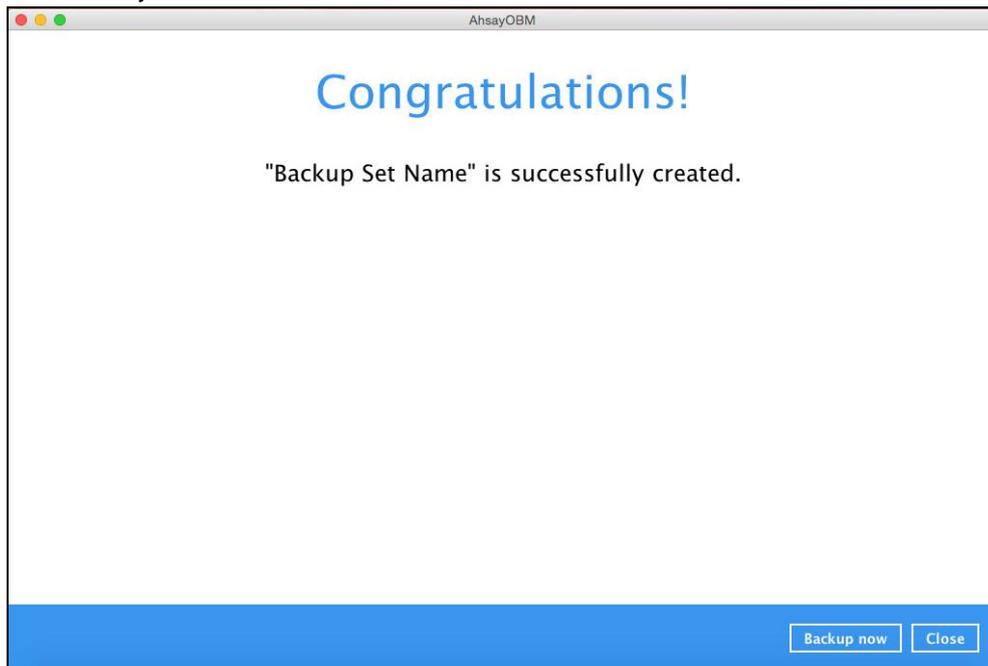
- **Unmask encryption key** – The encryption key is masked by default. Click this option to show the encryption key.



- **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.

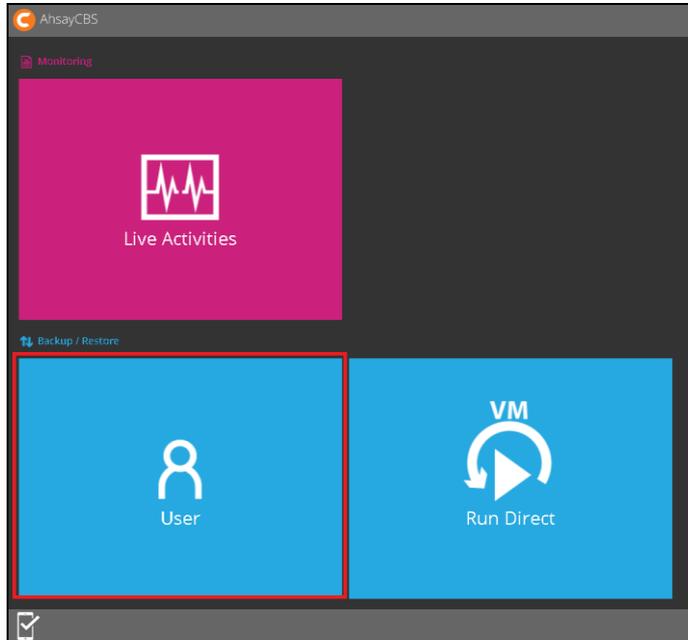
12. Click **Next** to create the backup set.

13. The following screen is displayed when the new Office 365 backup set is created successfully.

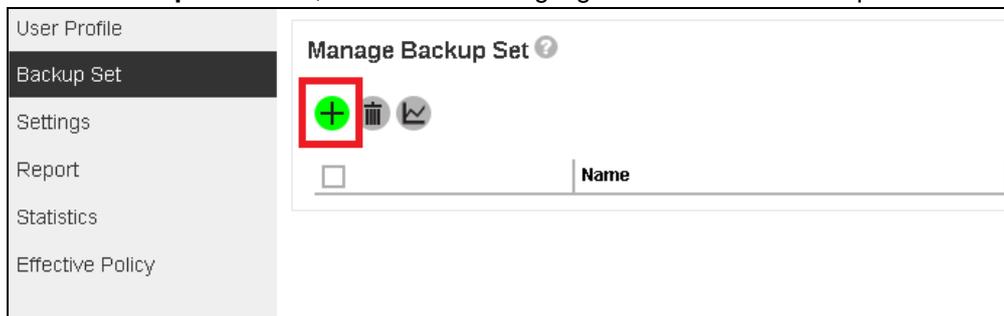


Create a Backup Set on User Web Console

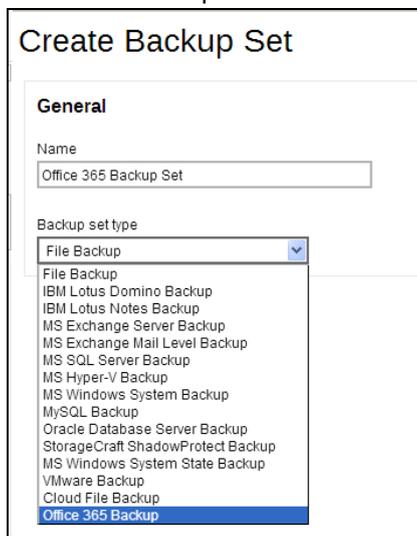
1. Log in to the User Web Console according to the instructions in [Login to User Web Console](#).
2. Click the User icon on the User Web Console landing page.



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



4. Name the backup set and then select the type as **Office 365 Backup**.



5. Select whether you would like the backup set to run on the CBS server (**Server**) or AhsayOBM (**Client**). This selection determines the location where you can back up or restore the backup set you are creating.

- ⦿ **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.

Office 365

Run on

Server Client

For "Run on server" backup set, only the AhsayCBS standard destination is supported

- ⦿ **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.

Office 365

Run on

Server Client

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 password of your Office 365 account, choose the region for the account and then press **Test** to verify the account.

Create Backup Set

General

Name
Office 365 Backup Set

Backup set type
Office 365 Backup

Office 365

Run on
 Server Client

Username
carven.tsang@cloudbacko.biz

Password

Region
Global

Access the Internet through Proxy

Test

[Sign up for Office 365 Backup](#)

Region
Global
China
Germany

7. Press the  icon at the bottom right corner to proceed when you are done settings.
8. Select the **Backup Source** in this menu. Select the desired Outlook, OneDrive, Personal Site, Public Folders or Site Collections for backup. Check the box will back up all, i.e. check the box of Outlook will back up the mailboxes of all the users.

Backup Source

Select the files and folders that you want to backup

Outlook

OneDrive

Personal Site

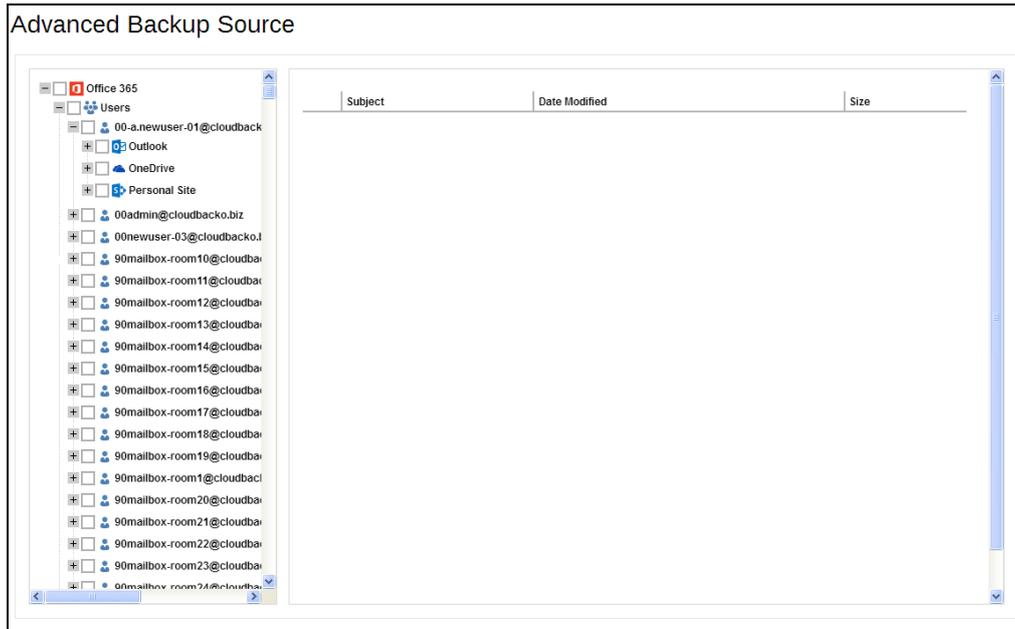
Public Folders

Site Collection

[I would like to choose the files to backup](#)

Or click **I would like to choose the files to backup** to choose the detailed files to backup.

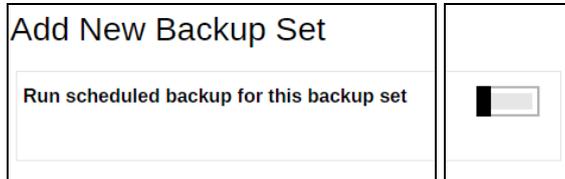
- Users: include Outlook, OneDrive and Personal Sites
- Public Folders: include public folder
- Site Collections: include personal site and site collection



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

9. Press  at the bottom right corner to continue.

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

Backup Schedule

Details

Name

Type

Start backup at
 :

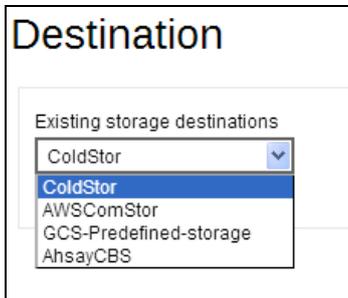
Stop

Run Retention Policy after backup

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

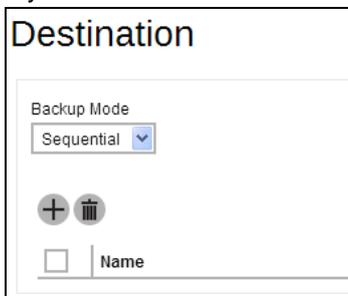
11. This step is only for user who has chosen to Run the backup set on **Client** in step 5.

If you have chosen to Run on **Server**, the backup destination is preset to the AhsayCBS or Predefined Destination.



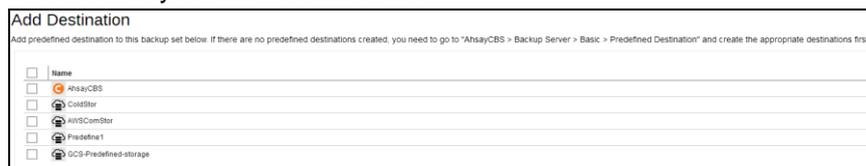
You can choose one backup destination and skip to step 12.

If you have chosen to Run the backup set on Client.



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  to display the available destinations. Mark the checkbox of your desired destination.



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

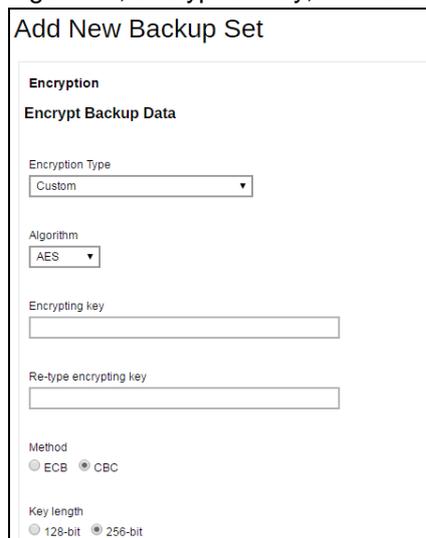
12. By default, the **Encrypt Backup Data** option is enabled with the Encryption Type preset as **Default** which provides the most secure protection.



The screenshot shows a form titled "Add New Backup Set". Under the "Encryption" section, the "Encrypt Backup Data" checkbox is checked. Below it, the "Encryption Type" dropdown menu is set to "Default (Machine Generated Random)".

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.



The screenshot shows the "Add New Backup Set" form with the "Encryption" section expanded. The "Encrypt Backup Data" checkbox is checked. The "Encryption Type" dropdown is set to "Custom". Below it, the "Algorithm" dropdown is set to "AES". There are two text input fields for "Encrypting key" and "Re-type encrypting key". The "Method" section has radio buttons for "ECB" and "CBC", with "CBC" selected. The "Key length" section has radio buttons for "128-bit" and "256-bit", with "256-bit" selected.

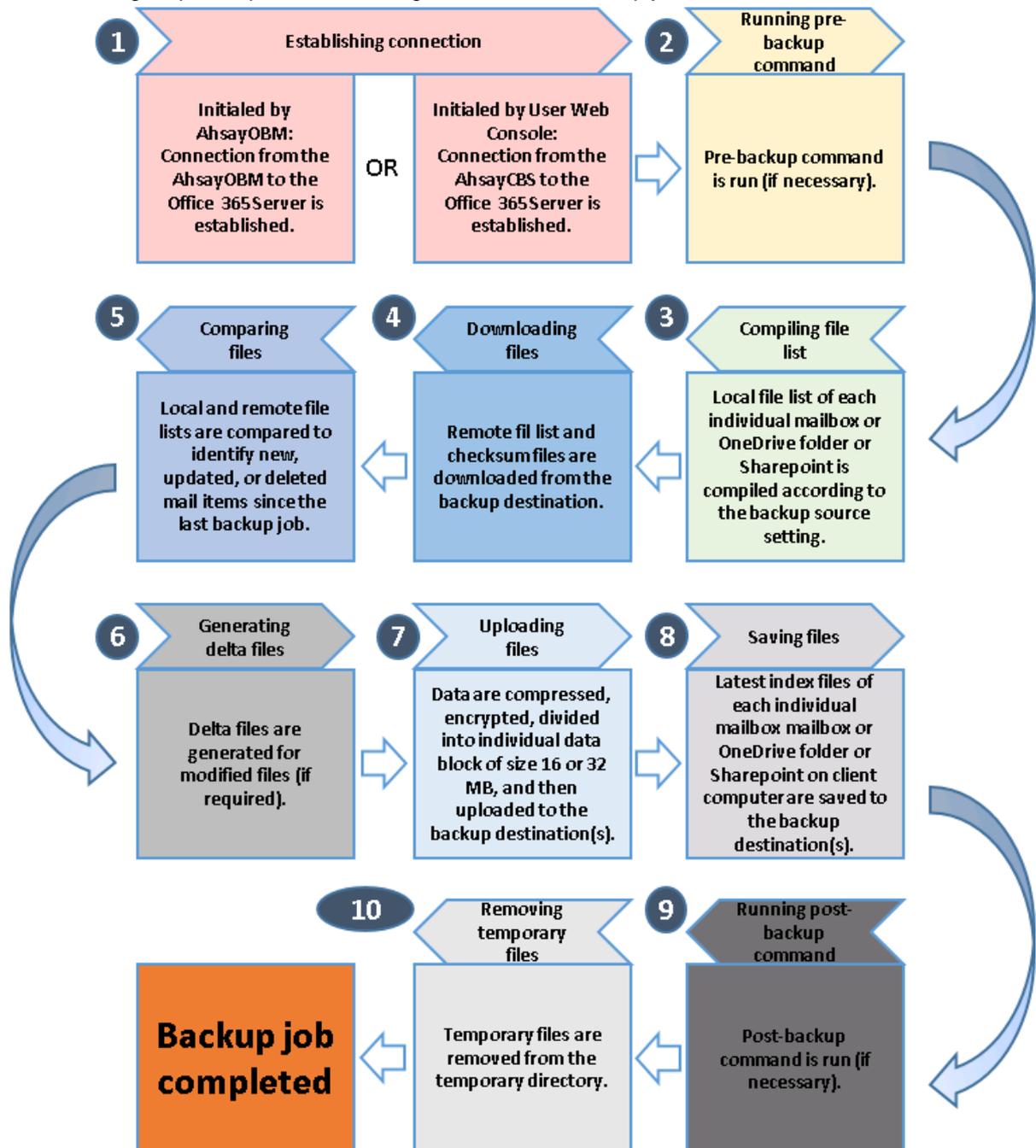
Note: For best practice on managing your encryption key, refer to the following Wiki article: http://wiki.ahsay.com/doku.php?id=public:5034_best_practices_for_managing_encryption_key

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 Backup Process

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



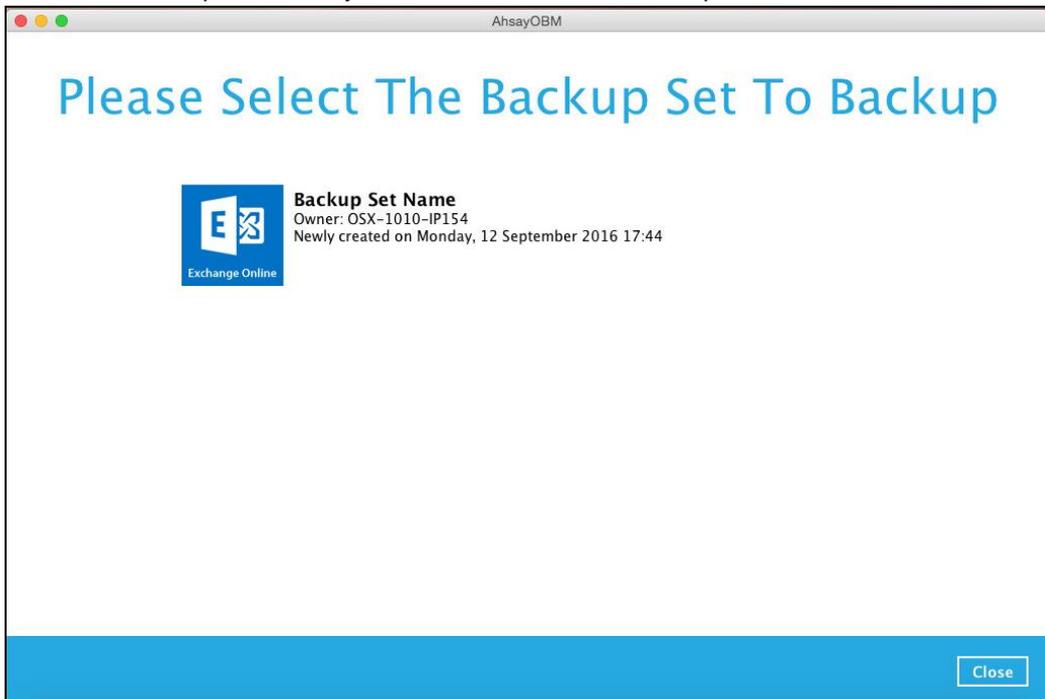
6 Running Backup Job

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.



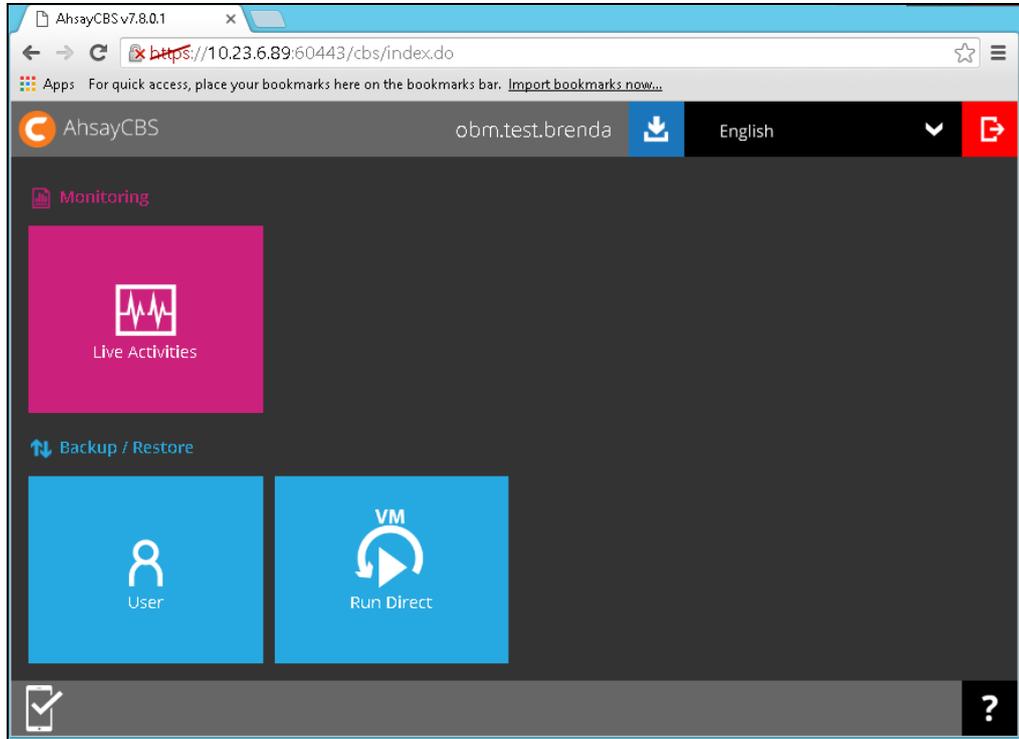
3. Select the backup set which you would like to start a backup for.



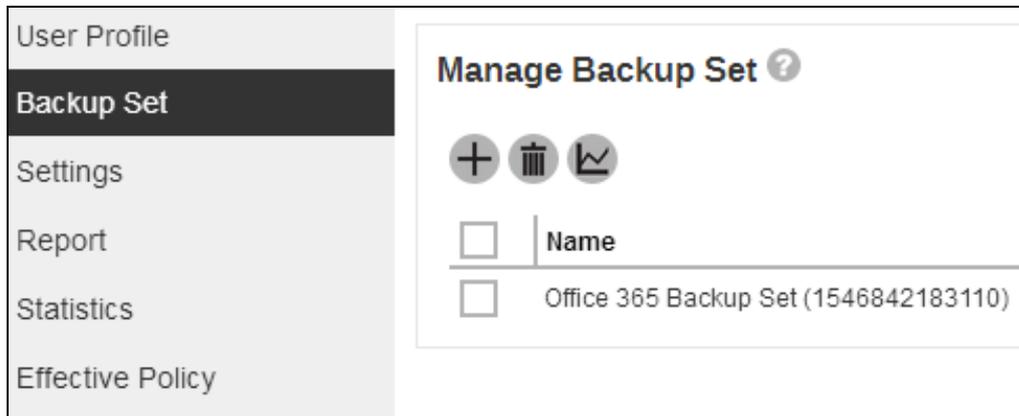
4. If you would like to modify the In-File Delta type, Destinations and Retention Policy Settings, click **Show advanced option**.
5. Click **Backup** to start the backup.

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**.



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

Backup

In-File Delta type

Full
 Differential
 Incremental

Retention Policy

Run Retention Policy after backup

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

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

Manage Backup Set ?

+
-
↺

	Name	Type	Version	Owner	Timezone	Execute Job
<input type="checkbox"/>	Office 365 Backup Set (1546842183110)	1	--	--	GMT+08:00 (CST)	Backup is Running Stop

- If you want to monitor the backup status, you need to go to **Live Activities** to watch the process.

AhsayCBS
obm.test.brenda
English

Monitoring



Live Activities

Backup / Restore



User



Run Direct

Backup Status **Restore Status**

Backup jobs that are currently running or finished within 1 hour.

Backup Status

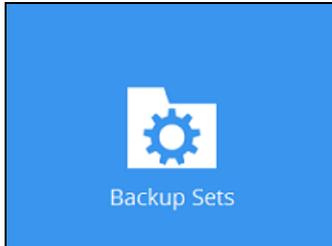
Filter Client Type User Registration Date User Group

Login Name (Alias)	Owner	Backup Set	Destination	Progress	Estimated Time Left	Current File	Transfer Rate
user3 ()	--	Office 365 Backup Set	AhsayCBS	<div style="width: 100%; height: 10px; background-color: #00bcd4; border: 1px solid #00bcd4;"></div> 100 %	0 sec		0bit/s

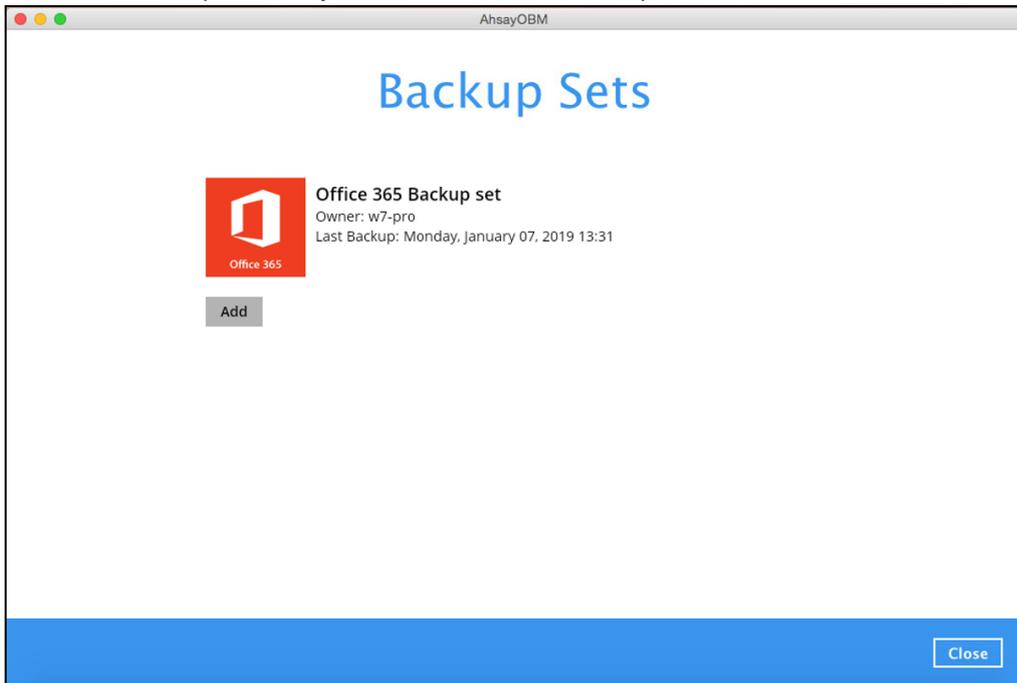
Configure Backup Schedule for Automated Backup

Setting up on AhsayOBM

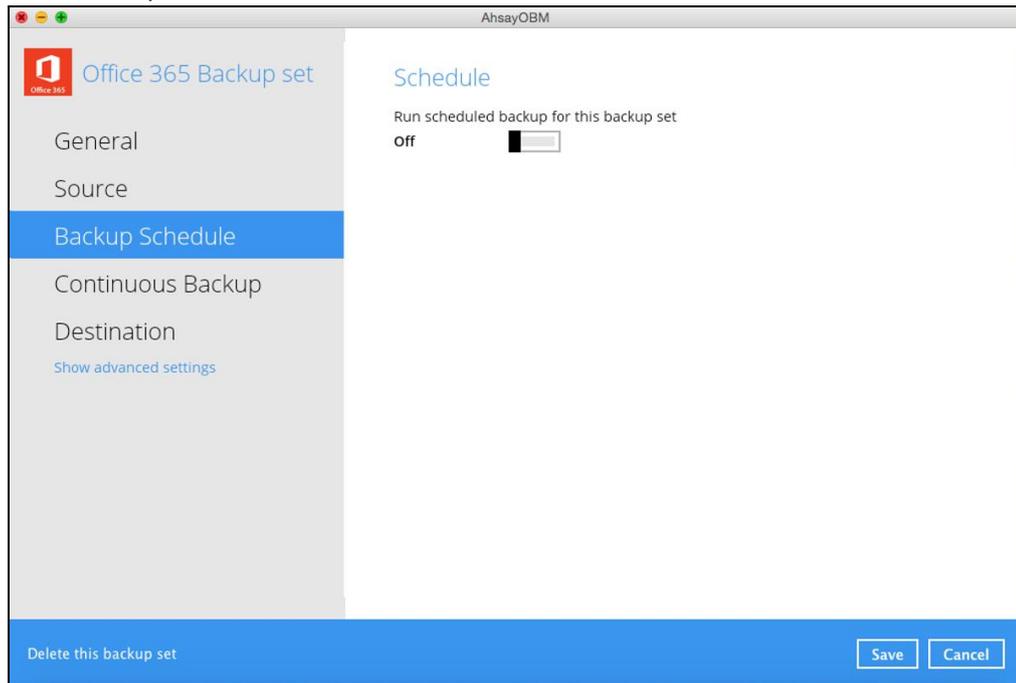
1. Click the **Backup Sets** icon on the AhsayOBM main interface.



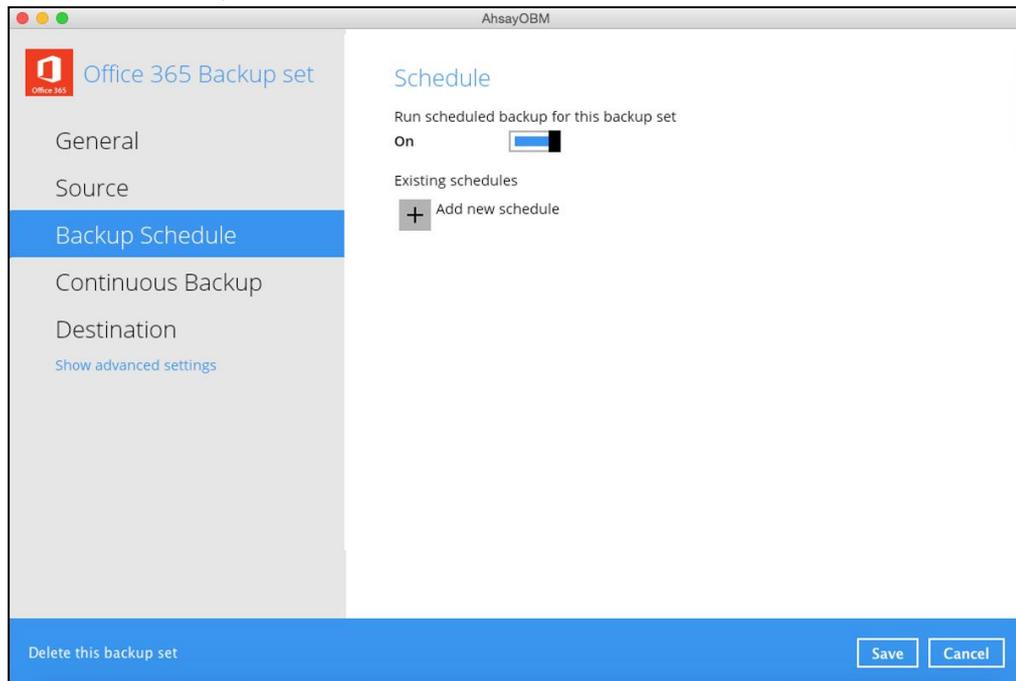
2. Select the backup set that you want to create a backup schedule for.



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.

AhsayOBM

Backup Set Name Schedule

New Backup Schedule

Name
Daily-1

Type
Daily

Start backup at
18 : 32

Stop
until full backup completed

Run Retention Policy after backup

OK Cancel

Delete this backup set Save Cancel

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

AhsayOBM

Office 365 Backup set

General
Source
Backup Schedule
Continuous Backup
Destination
[Show advanced settings](#)

Schedule

Run scheduled backup for this backup set
On

Existing schedules

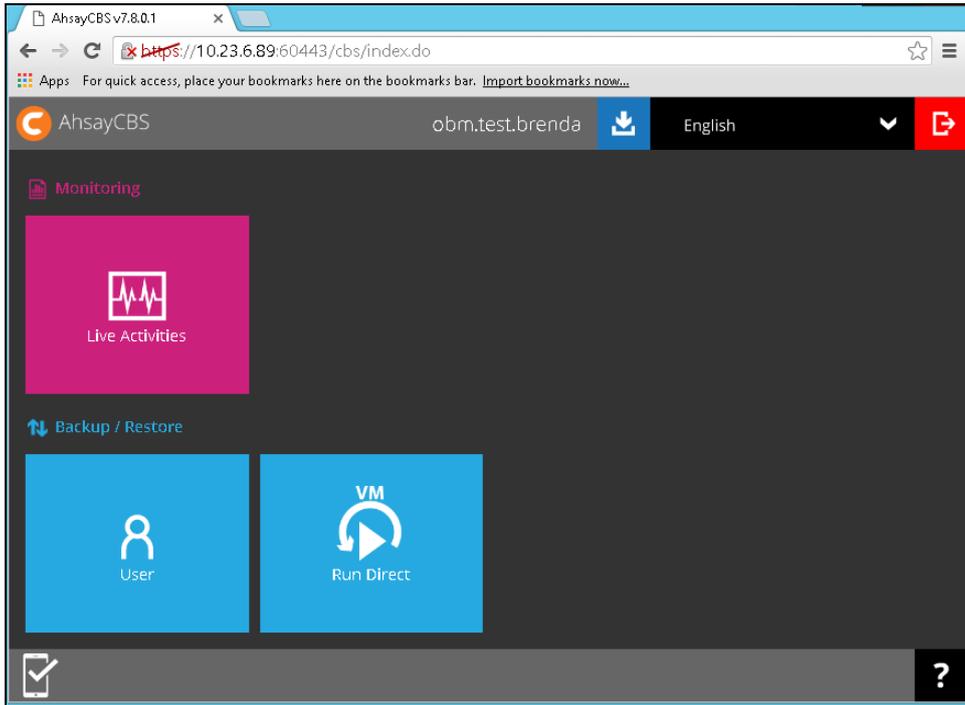
Daily-1
Daily (Everyday at 15:14)

Add

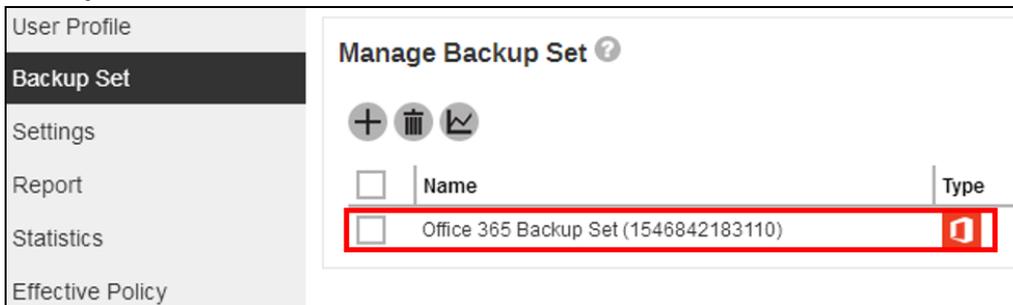
Delete this backup set Save Cancel

Setting on User Web Console

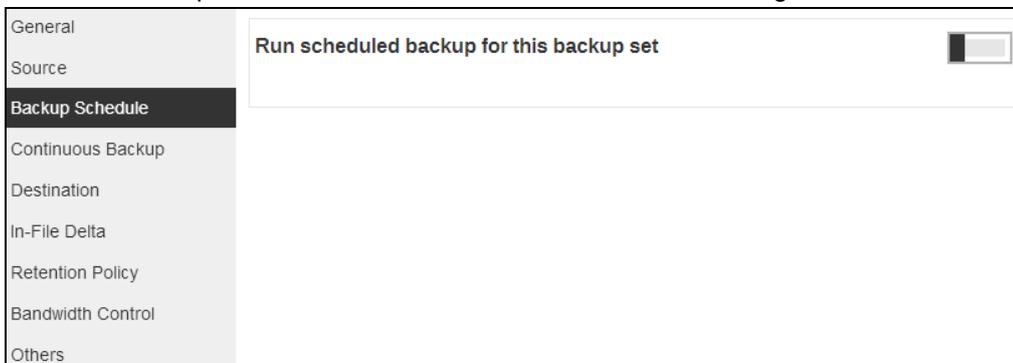
1. Click on the **User** icon on the main page of the User Web Console.



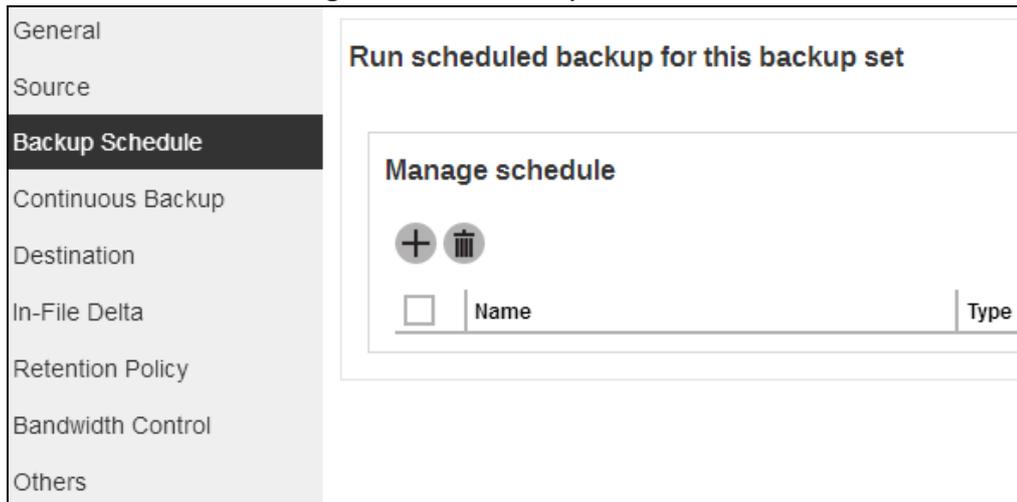
2. Click on the backup set which you would like to create a scheduled backup for under the **Backup Set** menu.



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

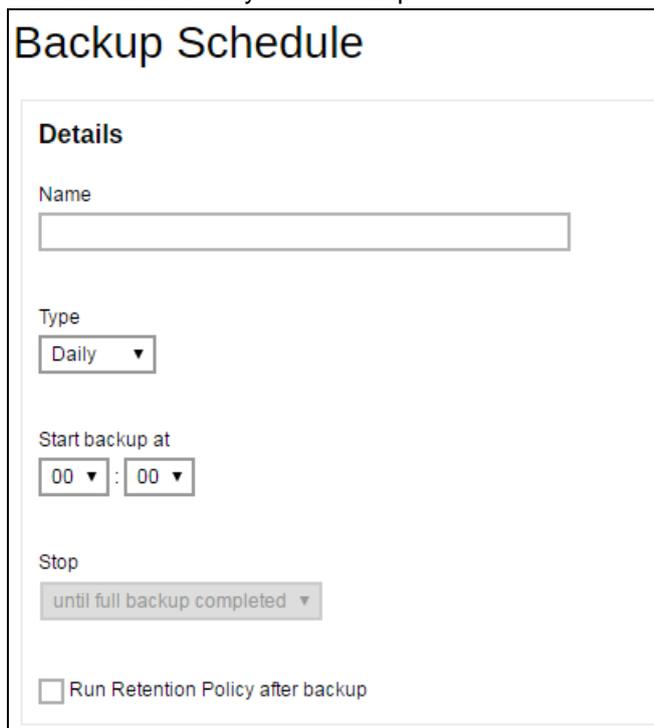


4. Click  under the **Manage schedule** to add your desired schedule.



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

6. Click  to confirm the setting.

7 Restoring Office 365 Backup Set

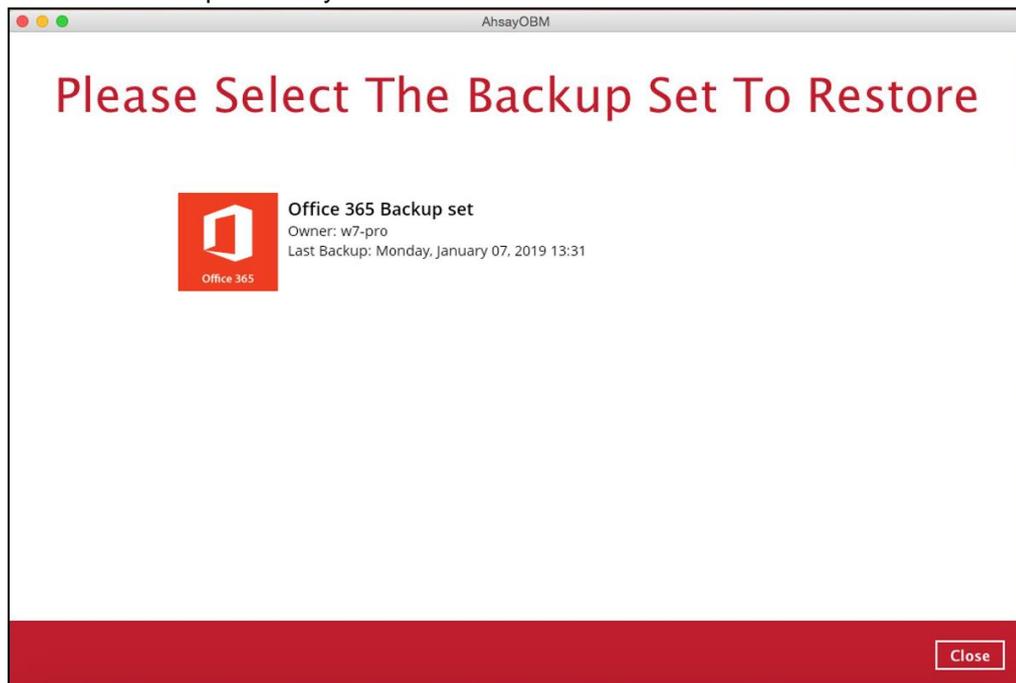
Follow the instructions below to restore the Office 365 backup to either the original location where you back them up or another users' accounts under the same Office 365 account.

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 from.

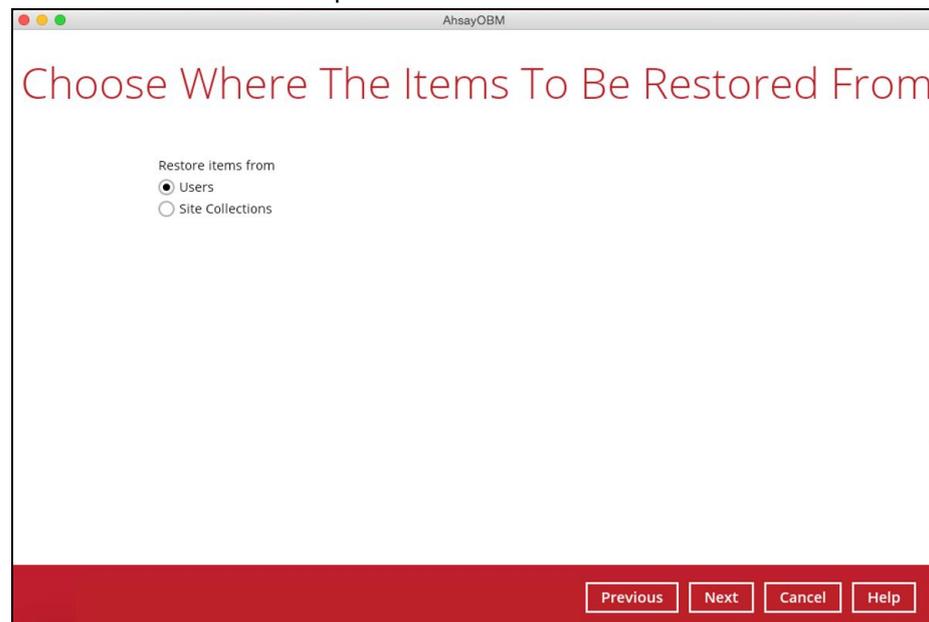


4. Select the backup destination that you would like to restore mail items to.



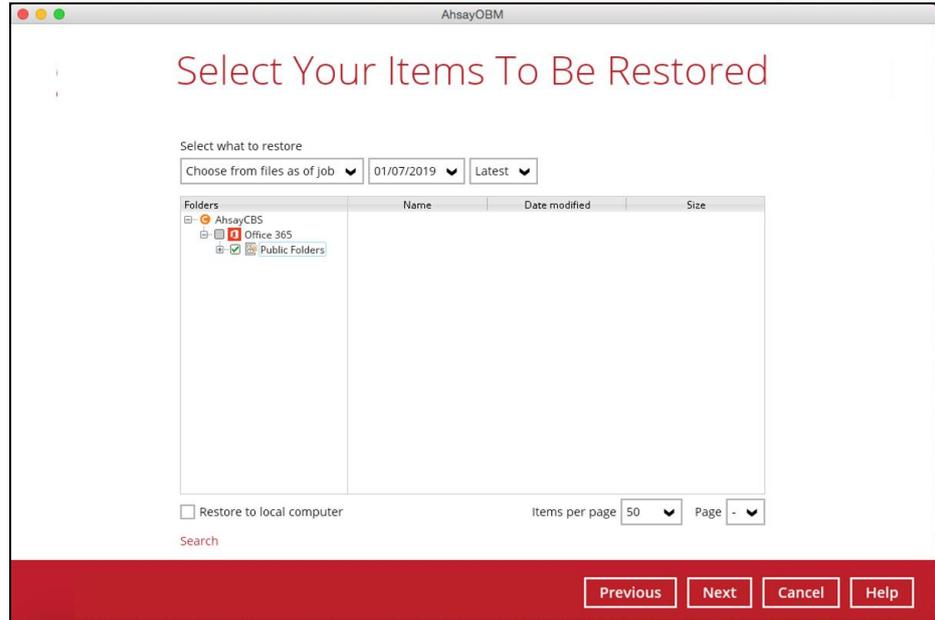
5. Select to restore from **Users** or **Site Collections**. Click **Next** to continue.

- i. From **Users**: For the backup data from Users.



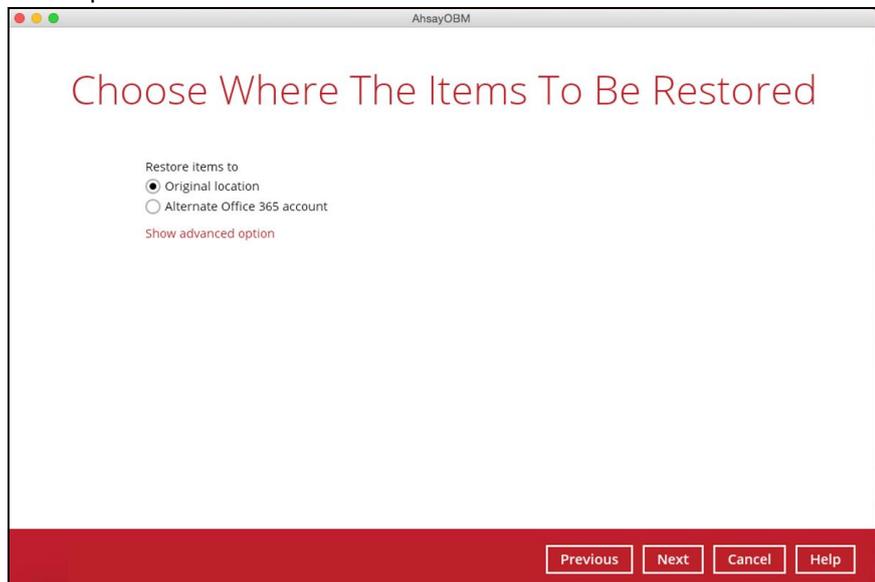
- ⦿ Select the item(s) you would like to restore. You can also choose to restore backed up file from a specific backup job of your choice using the **Select what to restore** drop-down menu at the top. Click **Next** to proceed when you are

done with the selection.



You can also check the box of Restore to local computer to restore the items to local computer.

- Select the destination you would like the mail objects to be restored.
 - **Original location** – restore items to the original location where you backed them up.



- **Alternate Office 365 Account** – restore items to another Office 365 account. Input the Username and Password and choose the region for the

other Office 365 account and press **Test** to validate the account.

Choose Where The Items To Be Restored

Restore items to

Original location

Alternate location

Alternate Office 365 account

Username
carven.tsang@cloudbacko.biz

Password

Region
Global

Access the Internet through proxy

Test

Show advanced option

Previous Next Cancel Help

Region
Global
Global
Global
China
Germany

Test completed successfully shows when the validation is successful, then click **Next** to continue.

Username
carven.tsang@cloudbacko.biz

Password

Region
Global

Access the Internet through proxy

✓ Test completed successfully

ii. From **Site Collections**: For the backup data from Site Collections.

Choose Where The Items To Be Restored From

Restore items from

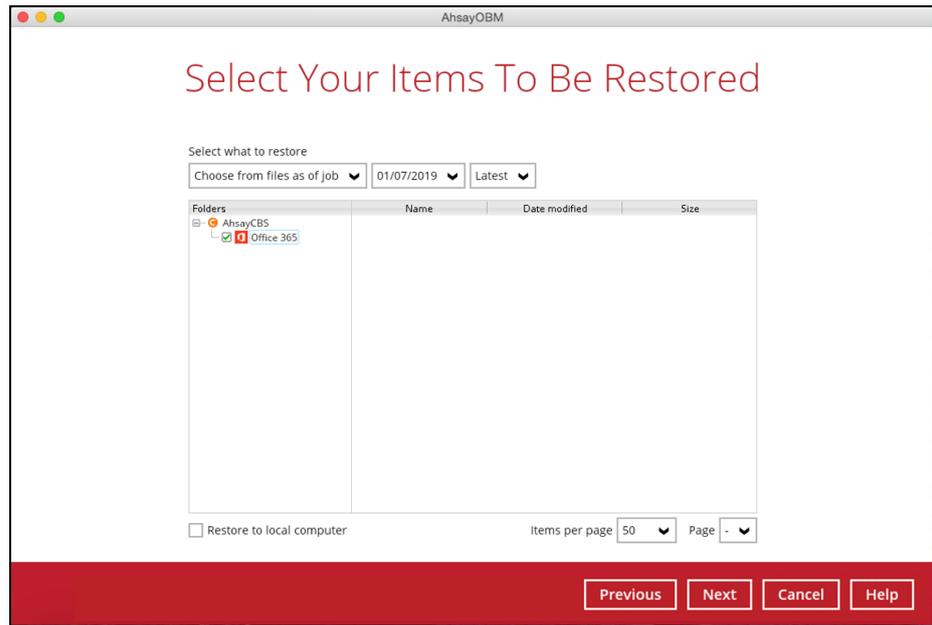
Users

Site Collections

Previous Next Cancel Help

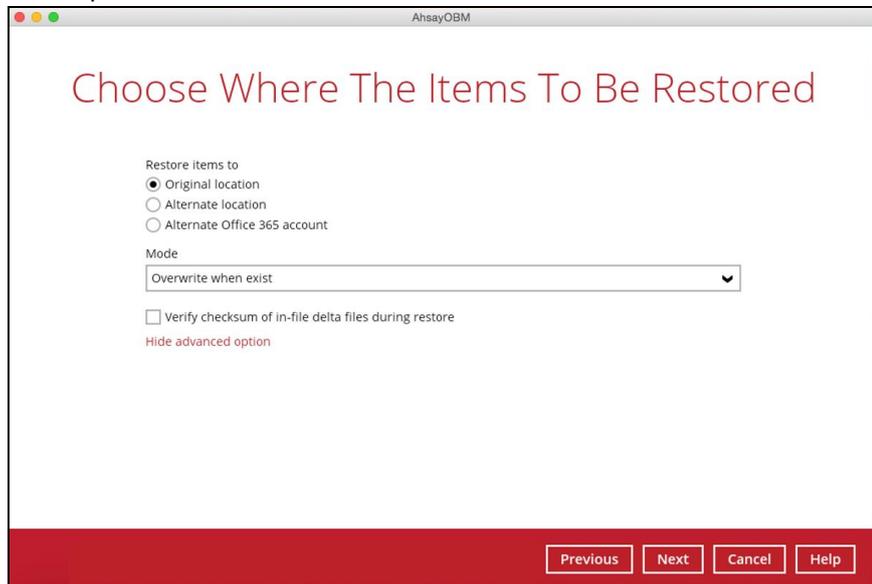
⦿ Select the item(s) you would like to restore. You can also choose to restore backed up file from a specific backup job of your choice using the **Select what**

to **restore** drop-down menu at the top. Click **Next** to proceed when you are done with the selection.

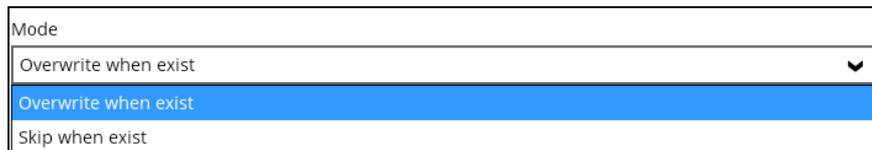


You can also check the box of **Restore to local computer** to restore the items to local computer.

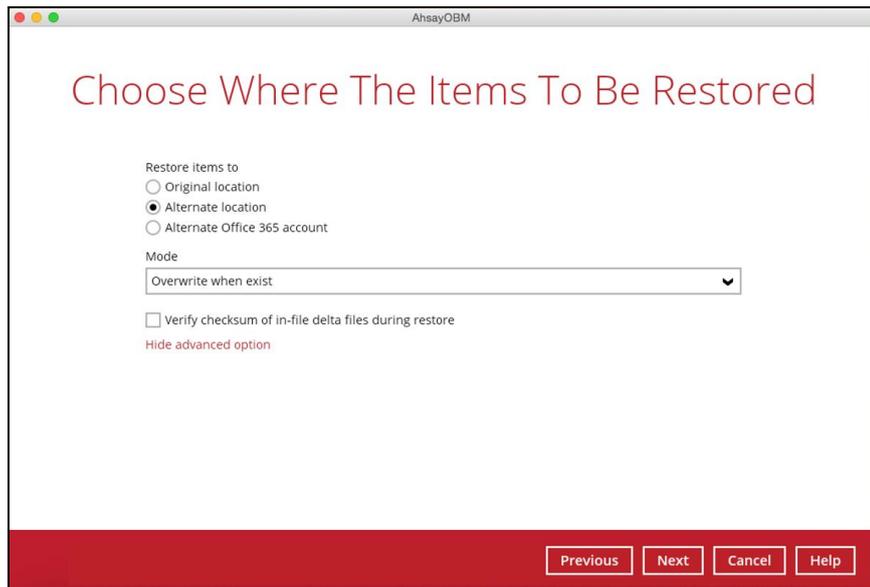
- Select the destination you would like the mail objects to be restored.
 - **Original location** – restore items to the original location where you backed them up.



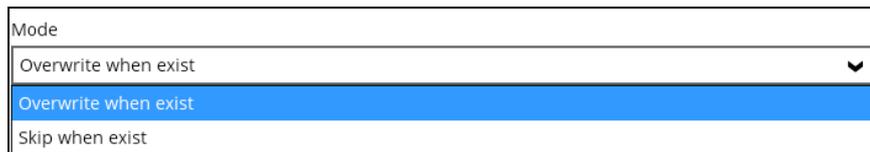
Choose the restore mode and click **Next** to continue.



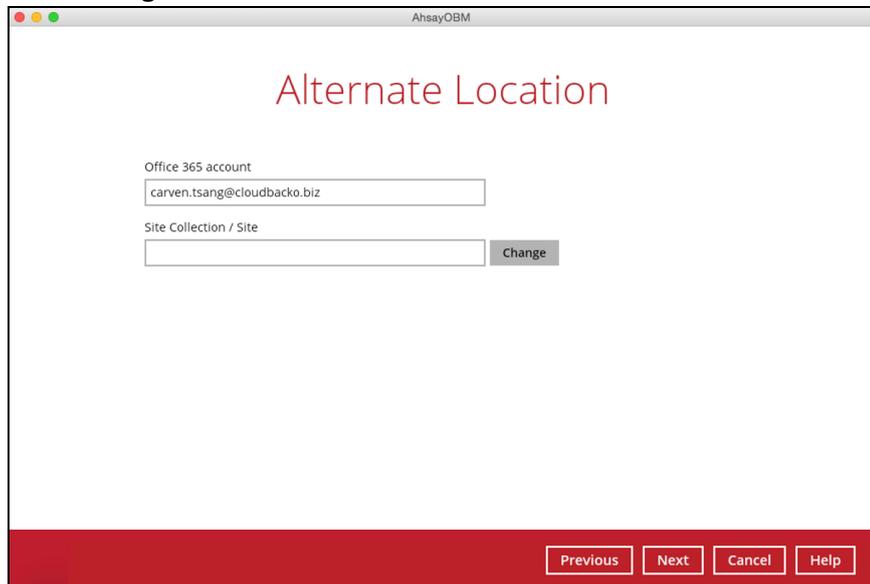
- **Alternate Location** – restore items to other site collection or site under the same Office 365 account.



Choose the restore mode and click **Next** to continue.



Click **Change** to select the alternate Site Collection/ Site.



After choosing the alternate Site Collection/ Site, click **Next** to continue.

- **Alternate Office 365 Account** – restore items to another Office 365 account. Input the Username and Password and choose the region for the

other Office 365 account and press **Test** to validate the account.

Choose Where The Items To Be Restored

Restore items to

- Original location
- Alternate location
- Alternate Office 365 account

Username
carven.tsang@cloudbacko.biz

Password

Region
Global

Access the internet through proxy

✓ Test completed successfully

Mode
Overwrite when exist

Verify checksum of in-file delta files during restore

[Hide advanced option](#)

Previous Next Cancel Help

Region
Global
China
Germany

Test completed successfully shows when the validation is successful, then choose the restore mode and click **Next** to continue.

Mode

Overwrite when exist

Overwrite when exist

Skip when exist

Click **Change** to select the alternate Site Collection/ Site.

Alternate Location

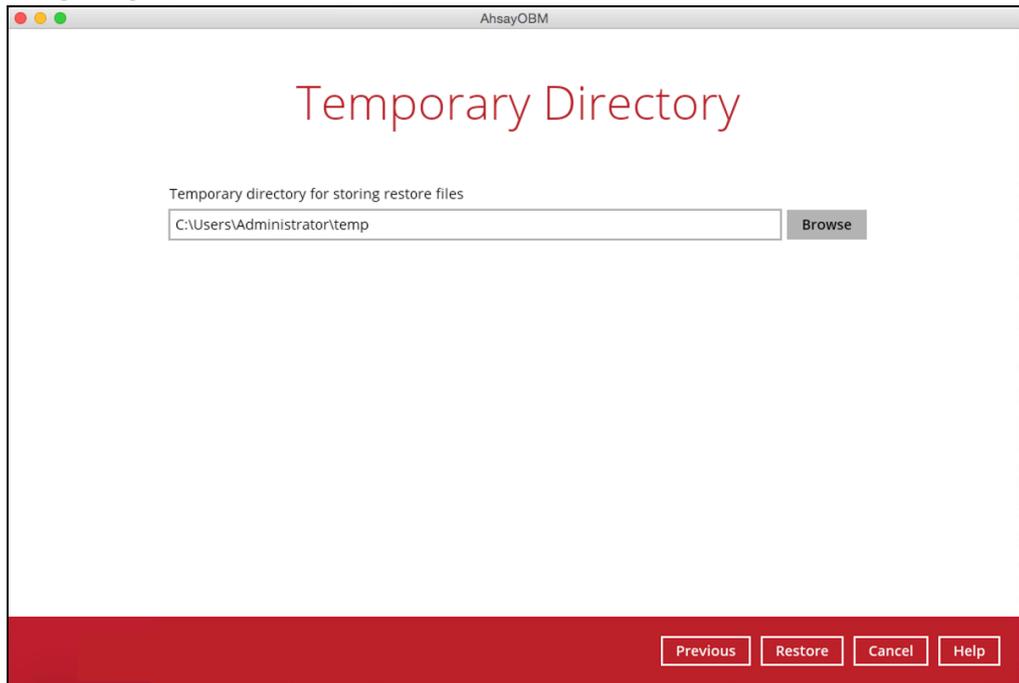
Office 365 account
carven.tsang@cloudbacko.biz

Site Collection / Site
Change

Previous Next Cancel Help

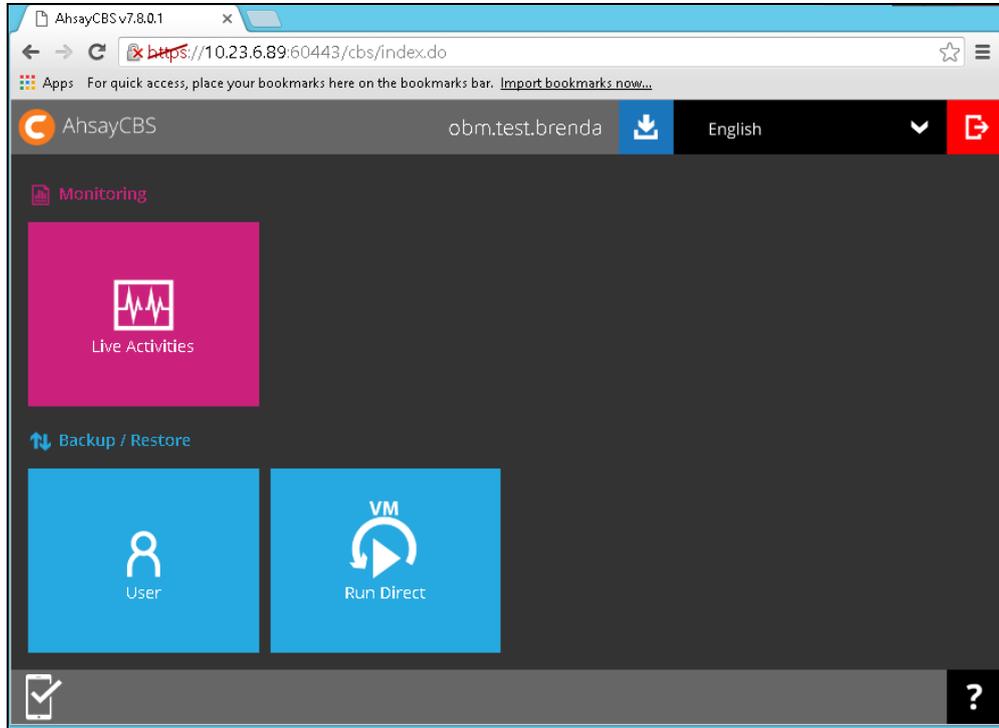
After choosing the alternate Site Collection/ Site, click **Next** to continue.

6. 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 AhsayCBS User Web Console

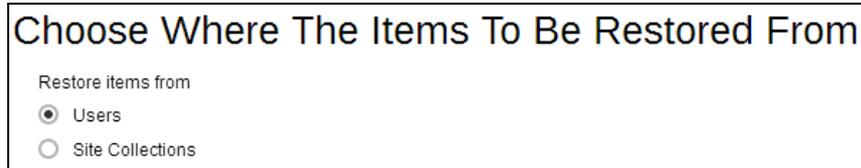
1. Log in to the User Web Console according to the instructions in [Login to User Web Console](#).
2. Click on the User icon.



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**.



- i. Choose where the items to be restored from.
From Users: For the backup data from Users



- 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  to proceed when you are done

with the selection.

Select Your Items To Be Restored

Select What To Restore
 Choose from files as of job | 2019-01-07 | Latest

Show filter

Office 365

- Public Folders
 - OBC Public Folder

File	Size	Last Modified
<input checked="" type="checkbox"/> Test - New Public Folder Post (2017-11-05) - 2	4.6k	2018-05-31 11:45:17
<input checked="" type="checkbox"/> TEST attachments	7.6M	2018-05-31 11:45:04
<input checked="" type="checkbox"/> test1	2.7k	2018-05-31 11:45:10
<input checked="" type="checkbox"/> Test - New Public Folder Post (2017-11-05) - 8	4.6k	2018-05-31 11:45:15
<input checked="" type="checkbox"/> Test - New Public Folder Post (2017-11-05) - 3	4.6k	2018-05-31 11:45:19
<input checked="" type="checkbox"/> Test - New Public Folder Post (2017-11-05) - 5	4.6k	2018-05-31 11:45:20
<input checked="" type="checkbox"/> Eeyore test	2.7k	2019-01-03 19:11:19
<input checked="" type="checkbox"/> test	2.8k	2019-01-03 19:16:11

- Select the destination you would like the mail objects to be restored.
 - Original location** – restore items to the original location where you backed them up.

Choose Where The Items To Be Restored

Restore Items To

Original location

Alternate Office 365 account

[Show advanced option](#)

- Alternate Office 365 Account** – restore items to another Office 365 account. Input the Username and Password and choose the region for the other Office 365 account and press **Test** to validate the account.

Choose Where The Items To Be Restored

Restore Items To

Original location

Alternate Office 365 account

Username

Password

Region

Access the Internet through Proxy

[Show advanced option](#)

Region

- Global
- Global**
- China
- Germany

ii. From Site Collections:

Choose Where The Items To Be Restored From

Restore items from

Users

Site Collections

- 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.

The screenshot shows a dialog box titled "Select Your Items To Be Restored". At the top, it says "Select What To Restore" and has three dropdown menus: "Choose from files as of job", "2019-01-07", and "Latest". Below these is a "Show filter" link. A search bar contains "+ [checked] Office 365". At the bottom, there are columns for "File", "Size", and "Last Modified".

- Select the destination you would like the mail objects to be restored.
 - **Original location** – restore items to the original location where you backed them up.

The screenshot shows a dialog box titled "Choose Where The Items To Be Restored". Under "Restore Items To", there are three radio buttons: "Original location" (selected), "Alternate location", and "Alternate Office 365 account". Under "Mode", there is a dropdown menu set to "Overwrite when exist". A "Show advanced option" link is at the bottom.

Choose the restore mode and click  to continue.

The screenshot shows the "Mode" dropdown menu with three options: "Overwrite when exist" (highlighted in blue), "Overwrite when exist", and "Skip when exist".

- **Alternate Location** – restore items to other site collection or site under the same Office 365 account.

The screenshot shows a dialog box titled "Choose Where The Items To Be Restored". Under "Restore Items To", there are three radio buttons: "Original location", "Alternate location" (selected), and "Alternate Office 365 account". Under "Mode", there is a dropdown menu set to "Overwrite when exist". A "Show advanced option" link is at the bottom.

Choose the restore mode and click  to continue.

The screenshot shows the "Mode" dropdown menu with three options: "Overwrite when exist" (highlighted in blue), "Overwrite when exist", and "Skip when exist".

Click **Change** to select the alternate Site Collection/ Site.

Alternate location

Office 365 account

Site Collection / Site

Click after done with the selection.

Change Site Collection / Site

- Office 365
 - Site Collections
 - + ahsay.sharepoint.com
 - + ahsay.sharepoint.com/sites/BlogDemo
 - + ahsay.sharepoint.com/sites/CI
 - + ahsay.sharepoint.com/sites/CIteam01
 - + ahsay.sharepoint.com/sites/CIteam Site
 - + ahsay.sharepoint.com/sites/Dev_u_o_x_SITE

- **Alternate Office 365 Account** – restore items to another Office 365 account. Input the Username and Password for the other Office 365 account, choose the region for the account and press **Test** to validate the account.

Choose Where The Items To Be Restored

Restore Items To

Original location

Alternate location

Alternate Office 365 account

Username

Password

Region

Access the Internet through Proxy

Mode

[Show advanced option](#)

Region

- Global
- Global**
- China
- Germany

Test completed successfully shows when the validation is successful,

choose the restore mode and then click  to continue.

Mode

Overwrite when exist
Overwrite when exist
Skip when exist

Click **Change** to select the alternate Site Collection/ Site.

Alternate location

Office 365 account

Site Collection / Site

Click  after done with the selection.

Change Site Collection / Site

- Office 365
 - Site Collections
 - ahsay.sharepoint.com
 - ahsay.sharepoint.com/sites/BlogDemo
 - ahsay.sharepoint.com/sites/CI
 - ahsay.sharepoint.com/sites/CITeam01
 - ahsay.sharepoint.com/sites/CITeamSite
 - ahsay.sharepoint.com/sites/Dev_u_o_x_SITE

4. Click  to start the restoration.

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

Manage Backup Set ?

<input type="checkbox"/>	Name	Type	Version	Owner	Timezone	Execute Job
<input type="checkbox"/>	Office 365 Backup Set (1546853177076)		--	--	GMT+08:00 (CST)	Restore is Running <input type="button" value="Stop"/>

6. If you want to monitor the backup status, you need to go to **Live Activities** to watch the process.

AhsayCBS obm.test.brenda English

Monitoring

Live Activities

Backup / Restore

User Run Direct

Backup Status Restore Status

All restore jobs that are currently running or finished within 1 hour.

Restore Status

Filter Client Type User Registration Date User Group

Login Name (Alias)	Owner	Backup Set	Destination	Progress	Estimated Time Left	Current File	Transfer Rate
user3 ()	--	Office 365 Backup Set	AhsayCBS	0 %	0 sec		0bit/s

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 Wiki for resource such as Hardware Compatibility List, Software Compatibility List, and other product information:

<http://wiki.ahsay.com/doku.php?id=public:home>

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

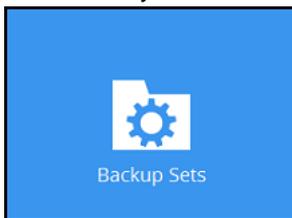
You need to read the instructions below only if you:

- 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

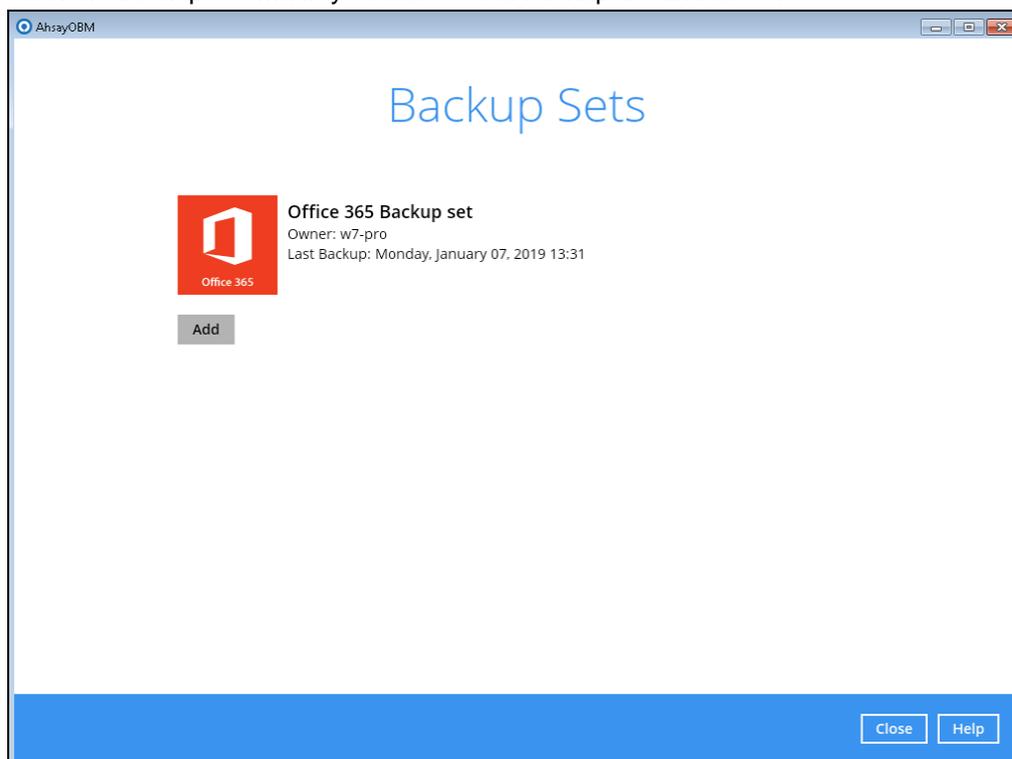
-OR-

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

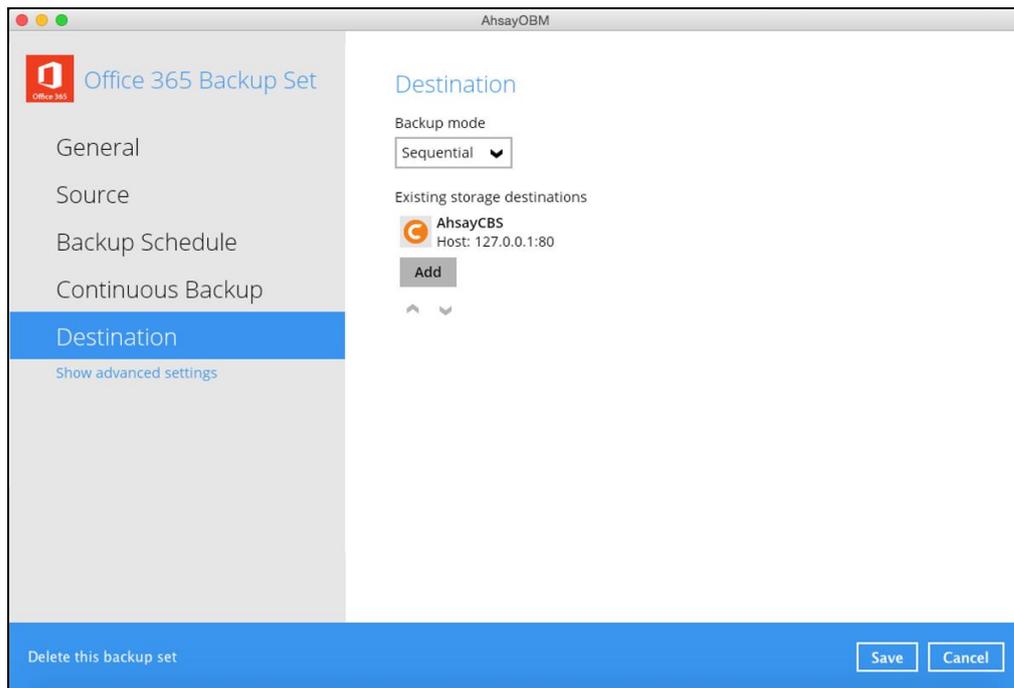
1. Log in to AhsayOBM according to the instructions in [Login to AhsayOBM](#).
2. In the AhsayOBM main interface, click **Backup Sets**.



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

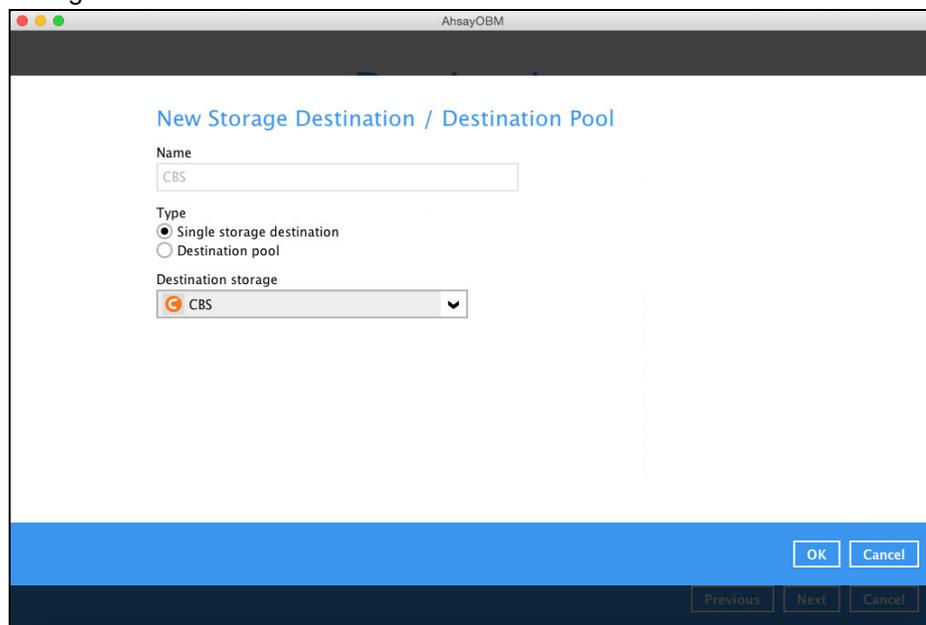


4. Click the **Destination** menu on the left side, then click the **Add** button on the right to add backup destination.



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.

AhsayOBM

New Storage Destination / Destination Pool

Name
DestinationPool-1

Type
 Single storage destination
 Destination pool

Add the cloud (e.g. Google Drive or Dropbox) or local storage that you would like to pool together for backup. You can always add more storage to this pool in the future.

Existing storage destinations in the pool
+ Add new storage destination to the pool

OK Cancel

Previous Next Cancel

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.

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New Storage Destination For The Pool

Name
Local-1

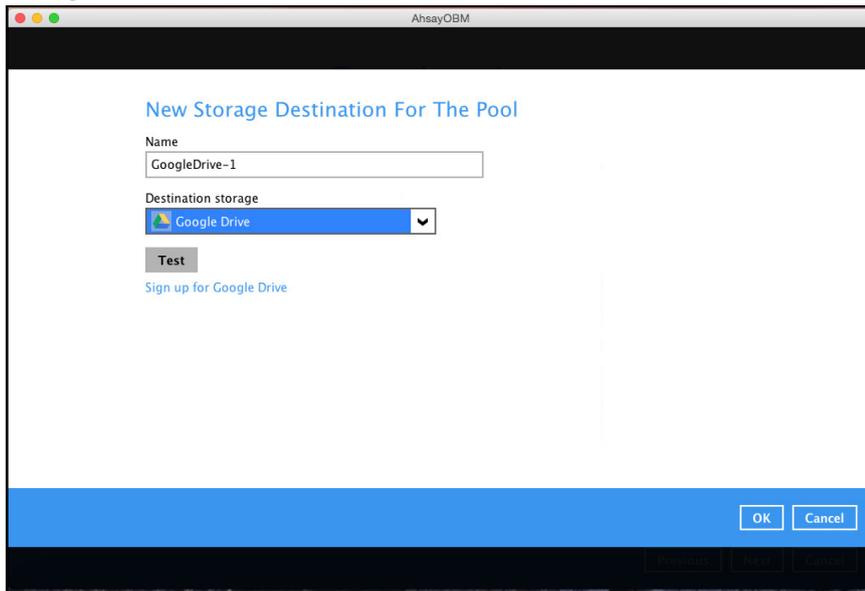
Destination storage
Local / Mapped Drive / Removable Drive

Local path
Change

Test

OK Cancel

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



AhsayOBM

New Storage Destination For The Pool

Name
GoogleDrive-1

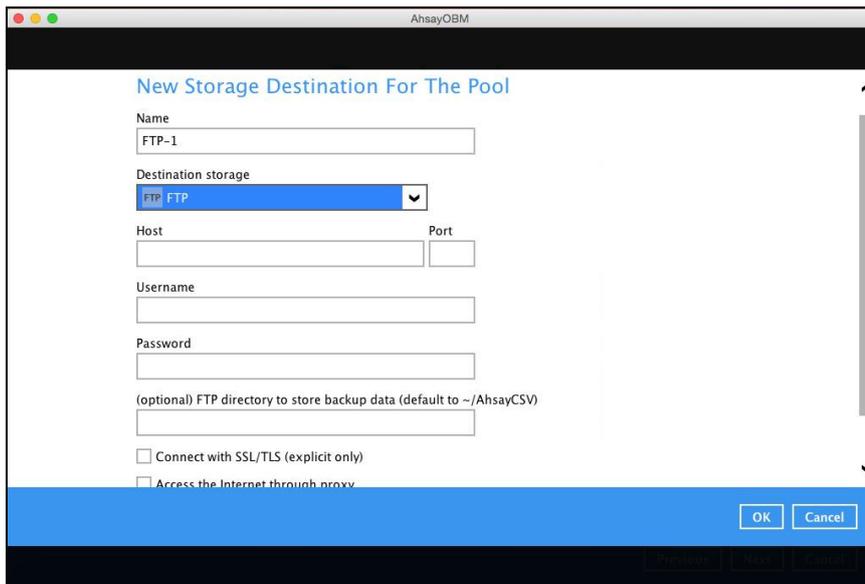
Destination storage
Google Drive

Test

[Sign up for Google Drive](#)

OK Cancel

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



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New Storage Destination For The Pool

Name
FTP-1

Destination storage
FTP

Host Port

Username

Password

(optional) FTP directory to store backup data (default to ~/AhsayCSV)

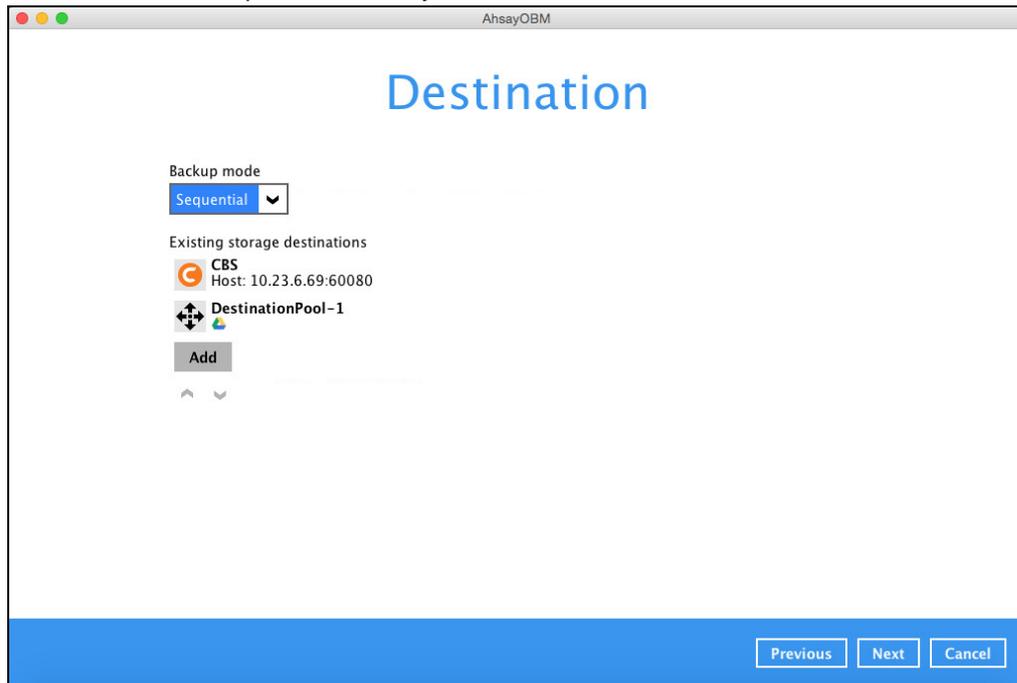
Connect with SSL/TLS (explicit only)

Access the Internet through proxy

OK Cancel

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.



Appendix B: Example Scenarios for Office 365 License Requirement and Usage

Scenario No. 1: Backing up Office 365 user accounts in multiple backup sets

The required Office 365 licenses are calculated by the number of Office 365 user accounts that you want to backup.

Example No. 1: To back up one (1) Office 365 user account on multiple backup sets, only one Office 365 license is needed.

Backup Set Name	Office 365 User Account
Backup Set A	user01 @company-office365.com
Backup Set B	user01 @company-office365.com
Backup Set C	user01 @company-office365.com

Example No. 2: To back up two (2) Office 365 user accounts on multiple backup sets, two Office 365 licenses are needed.

Backup Set Name	Office 365 User Account
Backup Set A	user01 @company-office365.com
	user02 @company-office365.com
Backup Set B	user01 @company-office365.com
Backup Set C	user02 @company-office365.com

Example No. 3: To back up three (3) Office 365 user accounts on multiple backup sets, two Office 365 licenses are needed.

Backup Set Name	Office 365 User Account
Backup Set A	user01 @company-office365.com
	user02 @company-office365.com
	user03 @company-office365.com
Backup Set B	user01 @company-office365.com
	user02 @company-office365.com
Backup Set C	user03 @company-office365.com

Scenario No. 2: Backing up SharePoint Sites under Site collections in multiple backup sets.

The required Office 365 license is only one.

Example No. 1: To back up one (1) SharePoint site under Site Collection, only one Office 365 license is needed.

Backup Set Name	SharePoint Site
Backup Set A	companyoffice365.sharepoint.com/user01
Backup Set B	companyoffice365.sharepoint.com/user01
Backup Set C	companyoffice365.sharepoint.com/user01

Example No. 2: To back up one (1) or two (2) SharePoint sites under Site Collection, only one Office 365 license is needed.

Backup Set Name	SharePoint Site
Backup Set A	companyoffice365.sharepoint.com/user01
	companyoffice365.sharepoint.com/user02
Backup Set B	companyoffice365.sharepoint.com/user01
Backup Set C	companyoffice365.sharepoint.com/user01
	companyoffice365.sharepoint.com/user02

Example No. 3: To back up three (3) or more SharePoint sites under Site Collection, only one Office 365 license is needed.

Backup Set Name	SharePoint Site
Backup Set A	companyoffice365.sharepoint.com/user01
	companyoffice365.sharepoint.com/user02
	companyoffice365.sharepoint.com/user03
Backup Set B	companyoffice365.sharepoint.com/user01
Backup Set C	companyoffice365.sharepoint.com/user01
	companyoffice365.sharepoint.com/user02
	companyoffice365.sharepoint.com/user03

Scenario No. 3: Backing up files and/or folders under Public Folder in multiple backup sets.

The required Office 365 license is only one.

Example No. 1: To back up files and/or folders under Public Folder, only one (1) Office 365 license is needed.

Backup Set Name	Files and/or Folders
Backup Set A	Folder01 <ul style="list-style-type: none"> ○ microsfotword01.docx ○ powerpointpresentation01.pptx ○ spreadsheet01.xls ○ notepad01.txt ○ picture01.jpg ○ picture02.jpg
Backup Set B	Folder01 <ul style="list-style-type: none"> ○ microsfotword01.docx ○ powerpointpresentation01.pptx ○ spreadsheet01.xls ○ notepad01.txt ○ picture01.jpg ○ picture02.jpg
	Folder02
	Folder03
Backup Set C	Folder01 <ul style="list-style-type: none"> ○ microsfotword01.docx ○ powerpointpresentation01.pptx ○ spreadsheet01.xls ○ notepad01.txt ○ picture01.jpg ○ picture02.jpg
	Folder02
	Folder03 <ul style="list-style-type: none"> ○ microsfotword02.docx ○ powerpointpresentation02.pptx ○ spreadsheet02.xls ○ notepad02txt ○ picture05.jpg ○ picture06.jpg

Scenario No. 4: Backing up Office 365 User Accounts, files and/or folders under Public Folder, and SharePoint sites under Site Collections in multiple backup sets.

The required Office 365 license will depend on the number of unique Office 365 accounts.

Example No. 1: To back up one (1) Office 365 user account, files and/or folders under Public Folder, and SharePoint sites under Site Collections on multiple backup sets, three (3) Office 365 licenses are needed.

Backup Set Name	Office 365 User Account, SharePoint Site, and Files and/or Folders
Backup Set A	user01@company-office365.com
Backup Set B	user01@company-office365.com
	user02@company-office365.com
	companyoffice365.sharepoint.com/user01
	companyoffice365.sharepoint.com/user02
Backup Set C	user01@company-office365.com
	user02@company-office365.com
	Folder01 <ul style="list-style-type: none"> ○ microsfotword01.docx ○ powerpointpresentation01.pptx ○ spreadsheet01.xls ○ notepad01.txt ○ picture01.jpg ○ picture02.jpg
Backup Set D	user01@company-office365.com
	user02@company-office365.com
	user03@company-office365.com
	Folder01 <ul style="list-style-type: none"> ○ microsfotword01.docx ○ powerpointpresentation01.pptx ○ spreadsheet01.xls ○ notepad01.txt ○ picture01.jpg ○ picture02.jpg
	companyoffice365.sharepoint.com/user01
	companyoffice365.sharepoint.com/user02

Appendix C: Example Setting for Java Heap Size

These are some examples for better appreciation with formula for calculating the required memory:

Example No. 1: Backup set with 20 SharePoint Sites and 50 OneDrive Accounts

- ◉ SharePoint Sites – $20 \times 150\text{MB} = 3000 \text{ MB} / 3 \text{ GB}$
- ◉ OneDrive Accounts – $50 \times 100\text{MB} = 5000 \text{ MB} / 5 \text{ GB}$

Total = 3000 MB / 3 GB + 5000 MB / 5 GB = 8000 MB / 8 GB

In this example, we first computed for the memory needed for the SharePoint Sites and OneDrive Accounts which are **3000 MB / 3 GB** and **5000 MB / 5 GB** respectively. Then we added those two and came up with **8000 MB / 8 GB**. This is the total Java heap size setting of the AhsayOBM client should set.

Example No 2: Backup set with 80 Site Collections and 100 OneDrive Accounts

- ◉ Site Collections – $80 \times 150\text{MB} = 12000 \text{ MB} / 12 \text{ GB}$
- ◉ OneDrive Accounts – $100 \times 100\text{MB} = 10000 \text{ MB} / 10 \text{ GB}$

Total = 12000 MB / 12 GB + 10000 MB / 10 GB = 22000 MB / 22 GB

In this example, we first computed for the memory needed for the Site Collections and OneDrive Accounts which are 12000 MB / 12 GB and 10000 MB / 10 GB respectively. Then we added those two and came up with 22000 MB / 22 GB. This is the total Java heap size setting of the AhsayOBM client should set.

Appendix D: Example Scenarios for Number of Users to Backup

Example No. 1: There are 1000 users needed to be backup, you can divide 200 users into one backup set.

Backup Set Name	User Number
Backup -Set-1	No.1 -- 200
Backup -Set-2	No.201 – 400
Backup -Set-3	No.401 -- 600
Backup -Set-4	No.601 – 800
Backup -Set-5	No.801 – 1000
Note: If there are new users added, you can create new backup set for the new users.	

Example No. 2: There are 1000 users needed to be backup, you can divide users into backup sets in alphabetic order.

Backup Set Name	User Name Start with
Backup -Set-1	A -- E
Backup -Set-2	F -- J
Backup -Set-3	K --O
Backup -Set-4	P -- T
Backup -Set-5	U -- Z
Note: If there are new users added, you can divide the new users into the original backup sets by the corresponding alphabetic order.	