

A-Click Backup Manager v8

Office 365 Backup & Restore Guide for Windows

Ahsay Systems Corporation Limited

11 October 2021

Copyright Notice

© 2021 Ahsay Systems Corporation Limited. All rights reserved.

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

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

Trademarks

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

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

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

Dropbox is a registered trademark of Dropbox Inc.

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

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

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

MariaDB is a registered trademark of MariaDB Corporation AB.

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

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

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

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

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

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

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

Ubuntu is a registered trademark of Canonical Ltd.

ShadowProtect is a registered trademark of StorageCraft Technology Corporation.

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

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

Disclaimer

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

Revision History

Date	Descriptions	Type of modification
6 October 2020	Added Appendix H	New
9 October 2020	Updated screenshots in Ch. 7, Appendices D and F;	Modifications
25 January 2021	Updated screenshot in Ch. 2.7; Updated login steps in Ch. 3; Updated PDIC diagram in Ch. 5; Reorganized Permission Requirements in Ch. 2.13; Added Ch. 2.17; Modified Limitations in Ch. 2.18;	Modifications
29 January 2021	Updated screenshots in Chapters 2, 7, and Appendix F;	Modifications
7 April 2021	Updated Ch. 5; added sub-chapters for the detailed process diagrams in Ch. 5.1, 5.2, 5.2.1, 5.2.2 and 5.3;	Modifications
23 July 2021	Updated Ch. 2.18.1 Ahsay Limitations;	Modifications
11 October 2021	Updated login instructions in Ch. 3	Modification

Table of Contents

1	Overview.....	1
1.1	What is this software?.....	1
1.2	System Architecture.....	1
1.3	Why should I use AhsayACB Run on Client (Agent-based) solution to back up my Office 365 data?.....	2
1.4	About This Document	8
2	Preparing for Backup and Restore.....	9
2.1	Hardware Requirement.....	9
2.2	Software Requirement	9
2.3	Antivirus Exclusion Requirement.....	9
2.4	Upgrade VMware Tools Requirement	9
2.5	AhsayACB Installation Requirements	10
2.6	AhsayACB Licenses Requirements	10
2.7	Add-on Module Requirements	10
2.8	Backup Quota Requirement.....	11
2.9	Public Folder Backup	11
2.10	SharePoint Personal Site Backup	11
2.11	Java Heap Size Requirement	11
2.12	Office 365 License Requirements	11
2.13	Office 365 Permission Requirements.....	12
2.13.1	Assigning Global Admin Role to Accounts.....	13
2.13.2	Granting Permission to Discovery Management Group	15
2.13.3	Granting Permission to Accounts for Creating Backup Set	17
2.14	Data Synchronization Check (DSC) Setup.....	20
2.15	Authentication	22
2.16	Supported Services.....	25
2.17	Maximum Supported File Size	30
2.18	Limitations	31
2.18.1	Ahsay Limitations	31
2.18.2	Microsoft Limitations.....	32
2.19	Best Practices and Recommendations.....	33
3	Logging in to AhsayACB.....	36
3.1	Login to AhsayACB without 2FA	36
3.2	Login to AhsayACB with 2FA using authenticator app	38
3.3	Login to AhsayACB with 2FA using Twilio.....	41
4	Creating an Office 365 Backup Set.....	43
4.1	Modern Authentication	43

4.2	Hybrid Authentication	64
5	Overview of Office 365 Backup Process.....	87
5.1	Periodic Data Integrity Check (PDIC) Process	88
5.2	Backup Set Index Handling Process	90
5.2.1	Start Backup Job	90
5.2.2	Completed Backup Job	91
5.3	Data Validation Check Process.....	92
6	Running Backup Job	93
7	Restoring Office 365 Backup Set	99
7.1	Restore Backup with AhsayACB	100
7.1.1	Local machine	102
7.1.2	Original Location.....	107
7.1.3	Alternate Office 365 Account	113
7.2	Restore Filter with AhsayACB.....	121
8	Contacting Ahsay	134
8.1	Technical Assistance	134
8.2	Documentation.....	134
Appendix.....	135
Appendix A	Example Scenarios for Office 365 License Requirement and Usage..	135
Appendix B	Example Scenarios for Restore Filter using AhsayACB.....	138
Appendix C	Setting Multi-Factor Authentication (MFA) in Microsoft 365 Admin Center	150
Appendix D	Example Scenario for Data Synchronization Check (DSC) with sample backup logs	163
Appendix E	Setting the Data Synchronization Check (DSC).....	167
Appendix F	Steps on How to view Item count and Storage used in Microsoft 365 Admin Center.....	168
Appendix G	Migrating Authentication of Office 365 Backup Set.....	172
Appendix H	Steps on How to Change the Office 365 Authentication	179

1 Overview

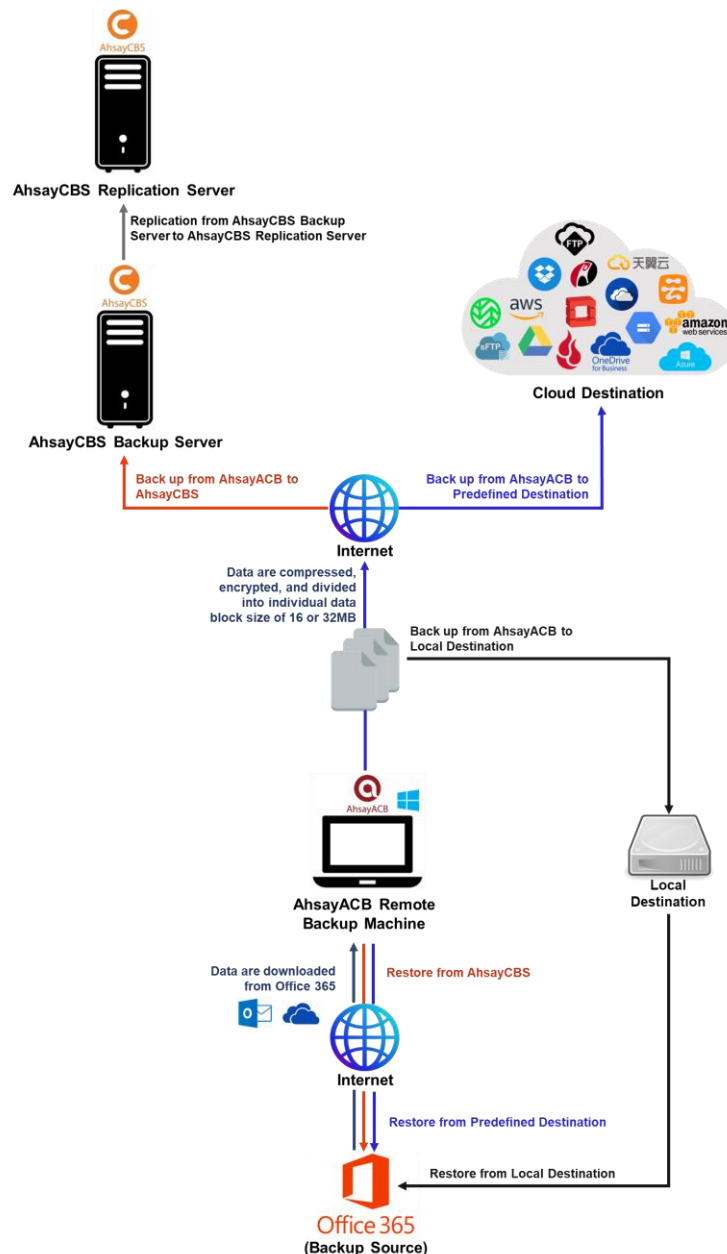
1.1 What is this software?

Ahsay brings you specialized client backup software, namely AhsayACB, 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.

1.2 System Architecture

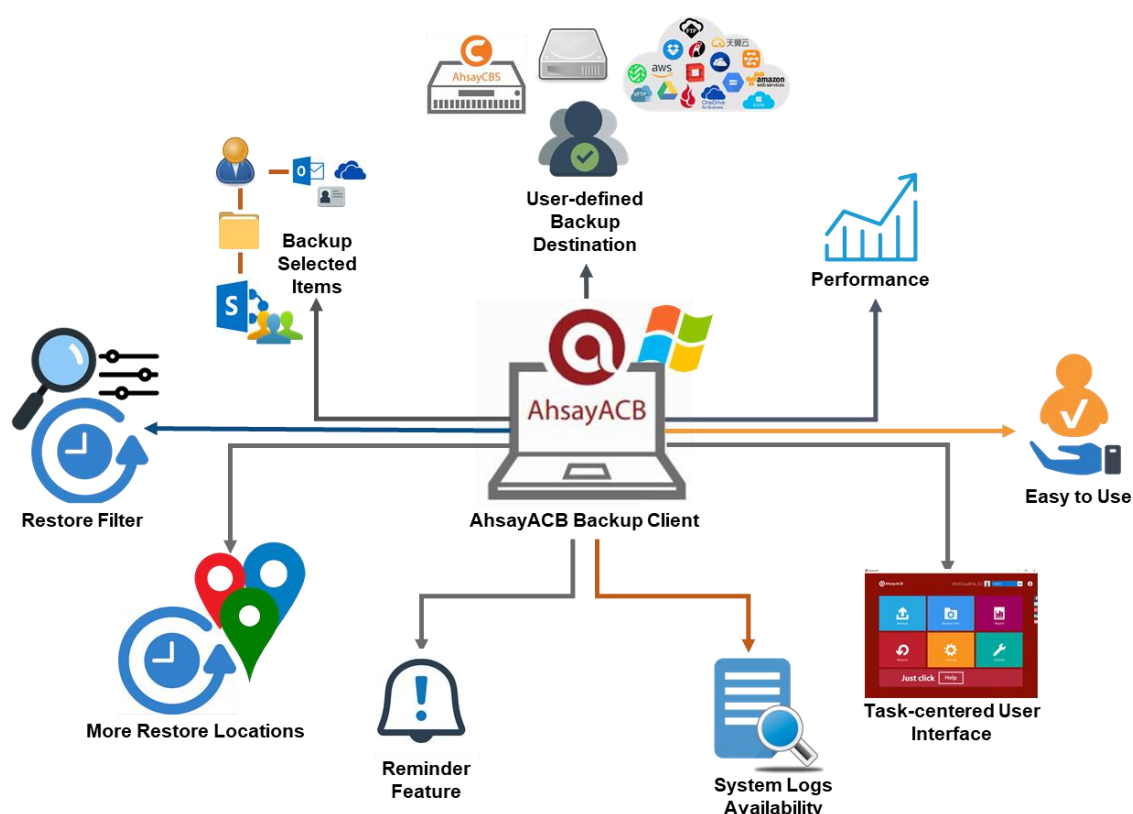
Below is the system architecture diagram illustrating the major elements involved in the backup process among the Office 365 service, AhsayACB and AhsayCBS.

In this user guide, we will focus on the software installation, as well as the end-to-end backup and restore process using the AhsayACB (Agent-based).



1.3 Why should I use AhsayACB Run on Client (Agent-based) solution to back up my Office 365 data?

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



User-defined Backup Destination

Backup users have more options in assigning a backup destination (i.e. AhsayCBS, Cloud or Predefined destinations, and standard and local destination).

Performance

Agent-based backup is performed on a physical machine or computer with resources that is dedicated for backup and restore operations. Once the backup client is deployed on the machine, the user have more control on the hardware which affects the overall backup and restore performance.

The introduction of the Change Key API in v8.3.4.0 has significantly improved backup performance for both Full and Incremental backup jobs, which means Office 365 user accounts with a large number of items, each incremental backup can be completed within hours.

Easy to Use

Agent-based backup solution has a traditional backup approach that is well understood by most administrators and end users who would only need minimal effort and time to understand the backup and/or restore operations.

Task-centered User Interface

Agent-based backup solution make it a good option for users to have more control on the individual backup/restore and resources management.

System Logs Availability

System logs for data integrity check and space freeing up results is accessible for the end users and can be reviewed anytime. Unlike with the agentless backup where system logs will only be available upon request from the backup service provider.

Reminder Feature

With the agent-based backup, a reminder feature is provided which will display a backup confirmation dialog box that will prompt user to run a backup job during machine log off, restart, or shut down when enabled.

More Restore Locations

Agent-based backup offers you three (3) restore locations such as the local machine, original location (or the cloud storage where you backed up them), and alternate location (which is through the same cloud storage but on a different folder).

Flexible restore option: Restore items to the original location or an alternate location.

Restore Filter

Agent-based backup has a restore filter feature which allows users to easily search directories, files, and/or folders to restore.

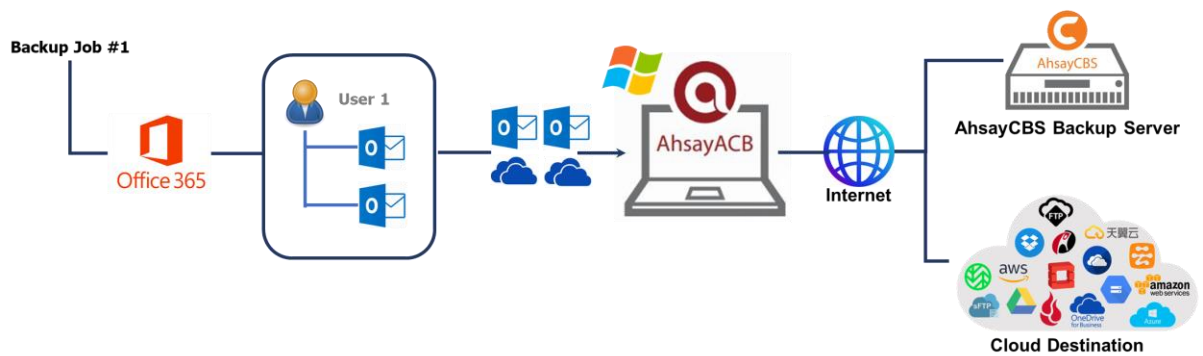
Fast and Efficient

We understand that backup could be a time and resources consuming process, which is why AhsayACB 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.

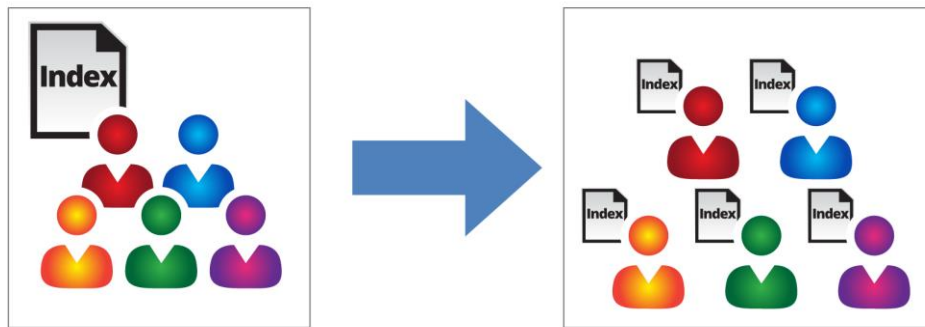
Backup job uses a maximum of 4 concurrent threads.



As shown the technology translate into a total of 4 concurrent threads.

- ❶ **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.

- ❷ **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 source can be user level, and even item level.

Flexible backup options: Can select all components in the Office 365 user account, individual components such as Outlook, OneDrive, or Personal SharePoint or specific items within Outlook, OneDrive, Personal SharePoint.

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.

- ❶ **Un-hackable Encryption Key** – to provide the best protection to your backup data, you can turn on the encryption feature which will by default encrypt the backup data locally with AES 256-bit truly randomized encryption key.
- ❷ **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 User's Guide](#) for details.

- ❶ Create/ update/ delete backup set
- ❷ Restore backup set
- ❸ Configure user settings
- ❹ Configure backup settings
- ❺ View and download backup and restore reports
- ❻ Monitor backup and restore live activities
- ❼ 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.

Below is a list of supported cloud destinations.



Aliyun (阿里云)*



天翼云 CTYun (中国电信天翼云)*



Amazon S3



amazon web services AWS S3 Compatible Cloud Storage



Wasabi



Backblaze



Google Cloud Storage



Google Drive



Microsoft Azure



Microsoft OneDrive



Microsoft OneDrive for Business



Rackspace



OpenStack



Dropbox



FTP



SFTP

Differences between a Run-on-Client and Run-on-Server 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:

Features/Functions	Run on Client Office 365 Backup Set	Run on Server Office 365 Backup Set
General Settings	✓	✓
Backup Source	✓	✓
Backup Schedule	✓	✓
Destination	AhsayCBS, Predefined Destinations, Standard and Local	AhsayCBS and Predefined Destinations only
Multiple Destinations	✓	✗
In-File Delta	✓	✓
Retention Policy	✓	✓
Command Line Tool	AhsayOBM for Windows only	✗
Reminder	AhsayOBM / AhsayACB for Windows only	✗
Bandwidth Control	✓	✓
IP Allowed for Restore	✓	✗
System Logs of Data Integrity Check and Space Freeing Up	✓	✗
Other	✓	✓
To Run a Backup	AhsayOBM / AhsayACB	AhsayCBS User Web Console Only
To Run a Restore	AhsayOBM / AhsayACB / AhsayOBR	AhsayCBS User Web Console Only

Aside from backup options, the table below shows other operations that can be performed using web console and client agent:

Features/Functions	Run on Client Office 365 Backup Set	Run on Server Office 365 Backup Set
Data Integrity Check	✓	✓
Space Freeing Up	✓	✓
Delete Backup Data	✓	✓
Decrypt Backup Data	✓	✗

NOTE

For more details on the Run-on Server backup option, please refer to the following guides:
[AhsayCBS v8 User Guide – Office 365 Run on Server \(Agentless\) Backup and Restore Guide](#)

1.4 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 AhsayACB.

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

Log in to AhsayACB

Creating a Backup Set

Create a backup set using AhsayACB

Running a Backup Set

Run a backup set using AhsayACB

Part 3: Restoring Office 365 Backup

Restoring a Backup Set using AhsayACB

Restore a backup using AhsayACB

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 AhsayACB, 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

2.1 Hardware Requirement

To achieve the optimal performance when AhsayACB 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](#)

2.2 Software Requirement

Make sure the operating system where you have the Office 365 installed is compatible with the AhsayACB. 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](#)

2.3 Antivirus Exclusion Requirement

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

[FAQ: Suggestion on antivirus exclusions to improve performance of Ahsay software on Windows](#)

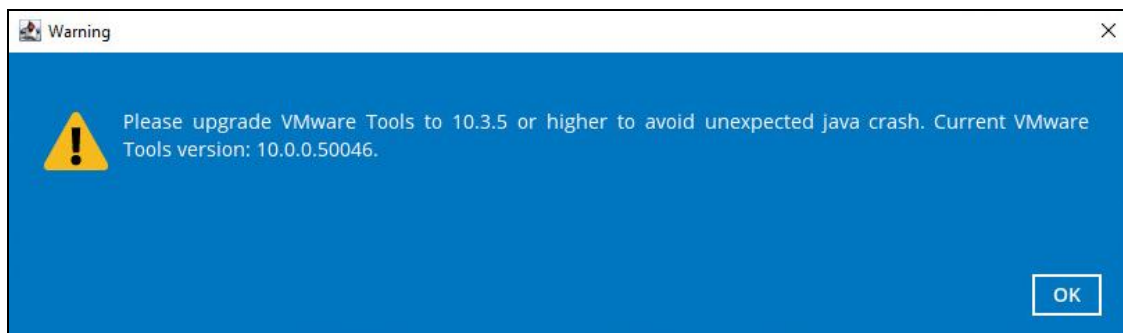
NOTE

The bJW.exe process is automatically added to Windows Defender exclusion list for Windows 10 and 2016, during installation / upgrade via installer or upgrade via AUA.

2.4 Upgrade VMware Tools Requirement

To avoid unexpected java crash, if the Windows machine is a guest VM hosted on a VMware Host then it is highly recommended that the VMware tools version installed on the guest VM must be 10.0.5 or above.

Below is the warning message that will be displayed if the version of the VMware Tools is less than 10.0.5.



NOTE

For more information about the upgrade of VMware Tools, refer to this article

https://wiki.ahsay.com/doku.php?id=public:5288_ahsayobc_crash_on_vm_with_vmware_tools_pre-10.0.5.

2.5 AhsayACB Installation Requirements

For agent-based backup and restore, make sure that the latest version of AhsayACB 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 AhsayACB is released. To get our latest product and company news through email, please subscribe to our mailing list. https://www.ahsay.com/jsp/en/home/subscribe_mail_list.jsp

2.6 AhsayACB Licenses Requirements

AhsayACB licenses are calculated on a per device basis:

For Agent-based:

- i. To backup users with one (1) backup client computer

Example: If one AhsayACB is installed then, one AhsayACB license is required.

- ii. To backup users with multiple backup client computers, the number of AhsayACB licenses required is equal to the number of devices.

2.7 Add-on Module Requirements

Make sure that the Office 365 Backup feature has been enabled as an add-on module in your AhsayACB 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 AhsayACB User with an add-on module of Office 365 with two (2) licenses.

NOTE

- Please be reminded that a maximum of two modules is allowed for Office 365 Backup on AhsayACB. If you wish to back up more than two Office 365 users, consider using AhsayOBM instead. Please contact your backup service provider for more details.
- Each AhsayACB Office 365 backup set is limited to one Office 365 user account. Therefore, when you backup two Office 365 user accounts it will require two separate backup sets.

User Profile	General	Backup Client Settings	Contact	User Group	Authentication	Mobile Backup
Backup Set	Settings of the client backup agent for this user.					
Settings	Backup Client					
Report	<input type="radio"/> AhsayOBM User <input checked="" type="radio"/> AhsayACB User					
Statistics	Add-on Modules					
Effective Policy	<div><input type="checkbox"/> Windows System Backup</div> <div><input checked="" type="checkbox"/> Mobile (max. 10)</div> <div><input type="checkbox"/> Volume Shadow Copy</div> <div><input checked="" type="checkbox"/> OpenDirect / Granular Restore 10</div> <div><input type="checkbox"/> Lotus Notes</div> <div><input type="checkbox"/> Continuous Data Protection</div> <div><input checked="" type="checkbox"/> In-File Delta</div> <div><input checked="" type="checkbox"/> Office 365 Backup 2</div>					

For more information, refer to [Appendix A: Example Scenarios for Office 365 License Requirement and Usage](#).

2.8 Backup Quota Requirement

Make sure that your AhsayACB 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 more details.

To get an accurate estimate of the backup quota requirement, it is recommended to check the actual usage of the Office 365 Organization in the Microsoft 365 Admin Centre. Please refer to this link: [Appendix F: Steps on How to view Item count and Storage used in Microsoft 365 Admin Center](#)

2.9 Public Folder Backup

A licensed Exchange Administrator or a licensed user with Public Folder permission is required otherwise you will not be able to access the public folder to select items and for backup or restore.

2.10 SharePoint Personal Site Backup

To be able to backup SharePoint Personal Sites, ensure that you use Hybrid Authentication when creating a backup set. Due to the current limitation with Microsoft API, Modern Authentication is currently not suitable for backup sets with Personal Sites selected. As backup and restore of SharePoint metadata are not fully supported.

2.11 Java Heap Size Requirement

The default Java setting heap 2048M, is sufficient for Office 365 backups.

2.12 Office 365 License Requirements

Office 365 Subscription Plan

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

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

Office 365 Subscription Status

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](#)

2.13 Office 365 Permission Requirements

The basic permissions required by an Office user account for authentication of an Office 365 backup set is as follows:

- **Global Admin Role**

Starting with AhsayACB v8.3.6.0 or above, the Office 365 account used for authentication must have Global Admin Role, since Modern Authentication will be used.

This is to ensure that the authorization configuration requirements will be fulfilled (e.g. connect to Microsoft Azure AD to obtain the App Access Token). To assign the role, please refer to [Ch. 2.13.1](#).

- A member of **Discovery Management** security group

The **Discovery Management** security group must be assigned the following roles. To assign the role, please refer to [Ch. 2.13.2](#).

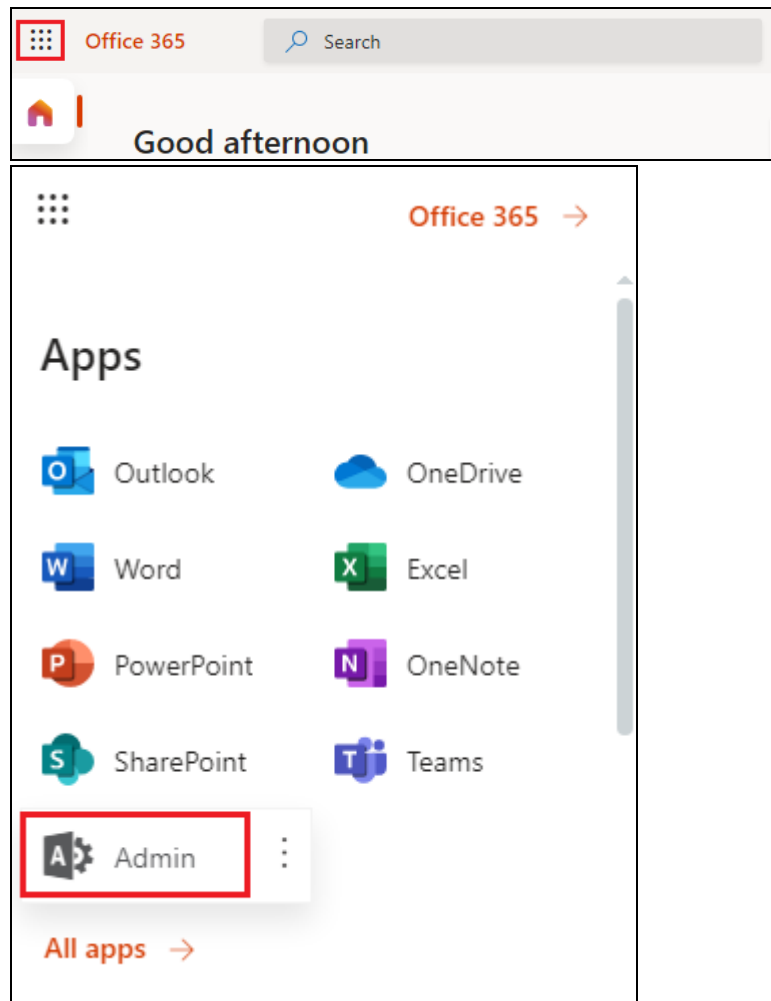
- Mailbox Search
- Public Folders

Otherwise, proceed to grant all necessary permissions to the Office user account as shown in the following chapters [2.13.1](#), [2.13.2](#) and [2.13.3](#).

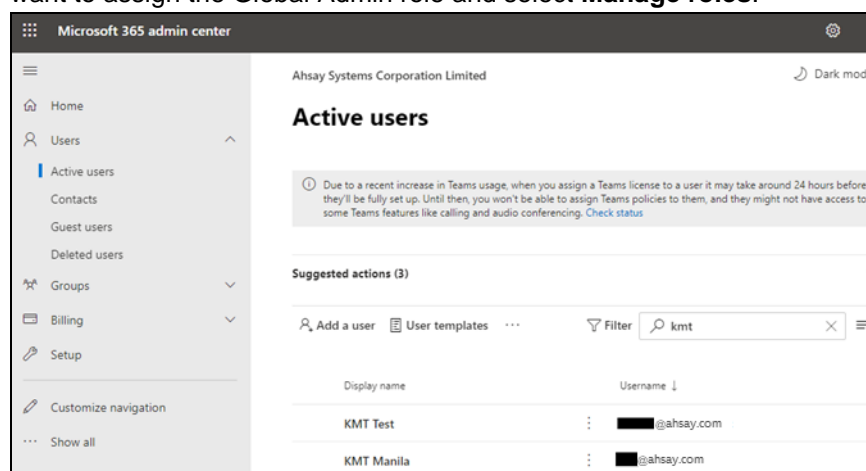
2.13.1 Assigning Global Admin Role to Accounts

To assign the Global Admin role to accounts, follow the steps below:

- i. Click the App launcher in the upper left side then click **Admin** to go to the Microsoft 365 admin center.



- ii. In the Microsoft 365 admin center, on the left panel click **Users**. Find the user you want to assign the Global Admin role and select **Manage roles**.



KM [Redacted]

[Reset password](#) [Block sign-in](#) [Delete user](#)

[Account](#) [Devices](#) [Licenses and Apps](#) [Mail](#) [OneDrive](#)

Username
[Redacted]@ahsay.com
[Manage username](#)

Last sign-in
No attempts in last 30 days
[View last sign-in](#)

Sign-out ⓘ
Sign-out of all Office 365 sessions.
[Initiate sign-out](#)

Groups
[Manage groups](#)

Roles
No administrator access
[Manage roles](#)

- iii. In the Manage roles window, select **Admin center access** then check the box beside **Global admin**. Click **Save Changes** to save the role you assigned.

Manage roles

Admin roles give users permission to view data and complete tasks in admin centers. Give users only the access they need by assigning the least-permissive role.

[Learn more about admin roles](#)

☐ User (no admin center access)

☒ **Admin center access**

Global readers have read-only access to admin centers, while Global admins have unlimited access to edit all settings. Users assigned other roles are more limited in what they can see and do.

☐ Exchange admin ⓘ

☒ **Global admin** ⓘ

⚠ Your org has more than 100 global admins. Global admins are attacked twice as often as other accounts, so you should have fewer than 5. To protect data and devices, assign a limited role instead. [See global admins.](#)

☐ Global reader ⓘ

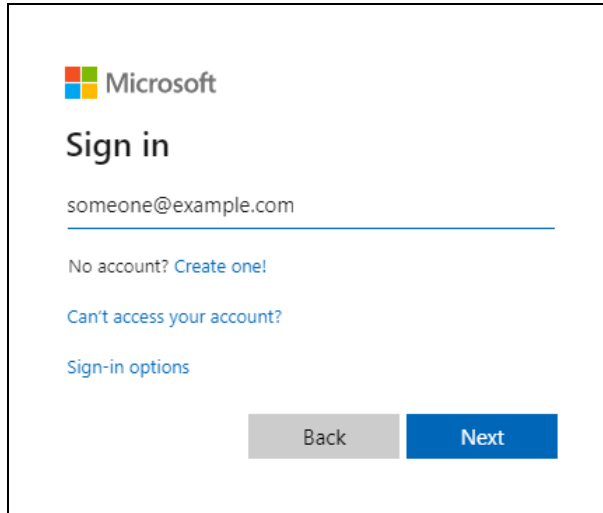
☐ Helndesk admin ⓘ

[Save changes](#)

2.13.2 Granting Permission to Discovery Management Group

This permission allows users added under the **Members** section of the **Discovery Management** group (refer to [Ch. 2.13.3](#) 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.

- i. Open <https://outlook.office365.com/ecp>
- ii. Log in to the **Office 365** as an account administrator.



Microsoft

Sign in

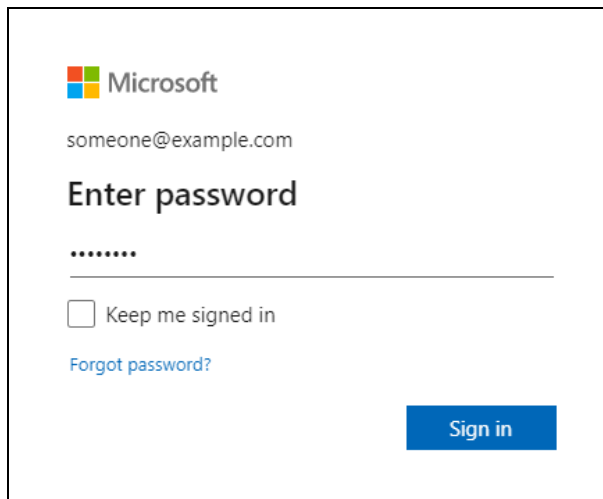
someone@example.com

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

Back Next



Microsoft

someone@example.com

Enter password

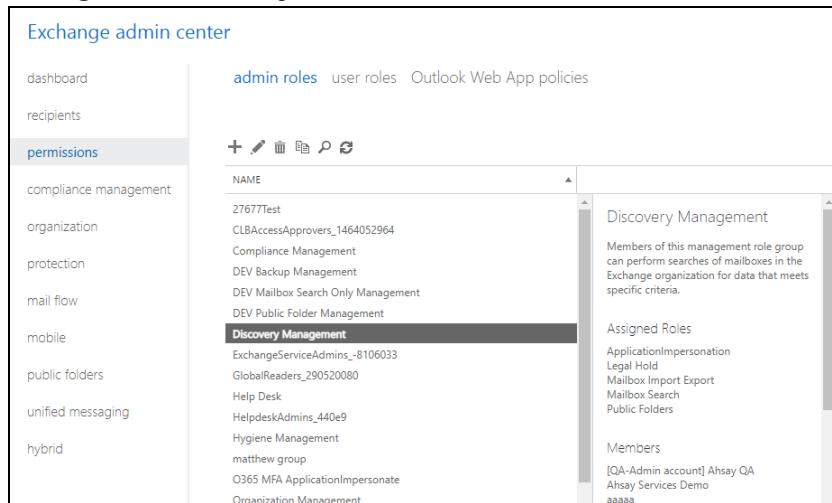
.....

☐ Keep me signed in

[Forgot password?](#)

Sign in

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



- iv. Click the **+** icon under the **Roles** section. These are the following roles:

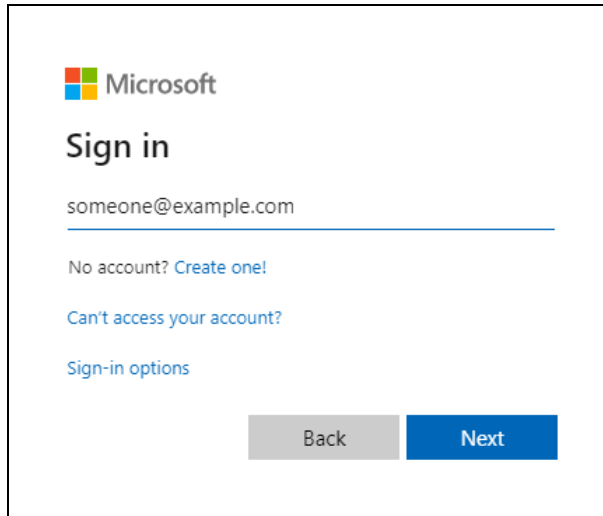
- Mailbox Search
- Public Folders

The screenshot shows the 'Discovery Management' configuration page. The 'Name' field is 'Discovery Management' and the 'Description' is 'Members of this management role group can perform searches of mailboxes in the Exchange organization for data that meets specific criteria.' The 'Write scope' is set to 'Default'. Under the 'Roles' section, the '+' icon is clicked, and a list of roles is shown with 'Mailbox Search' and 'Public Folders' selected. The 'Members' section shows a list of users with 'ahsay.qa' and '[QA-Admin account] Ah...' listed. 'Save' and 'Cancel' buttons are at the bottom.

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

2.13.3 Granting Permission to Accounts for Creating Backup Set

- i. Open <https://outlook.office365.com/ecp>
- ii. Log in to the **Office 365** as an account administrator.



Microsoft

Sign in

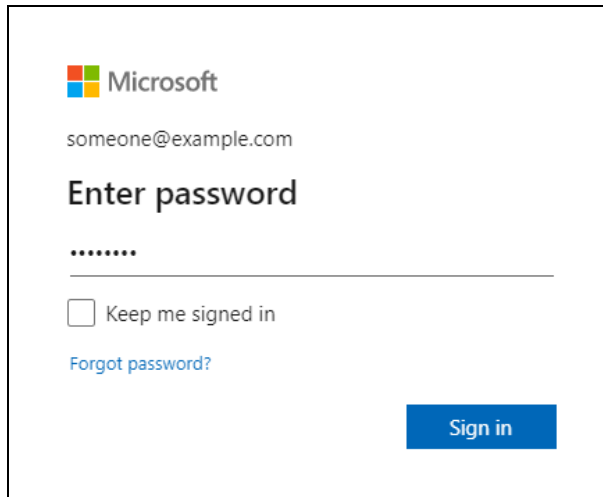
someone@example.com

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

[Back](#) [Next](#)



Microsoft

someone@example.com

Enter password

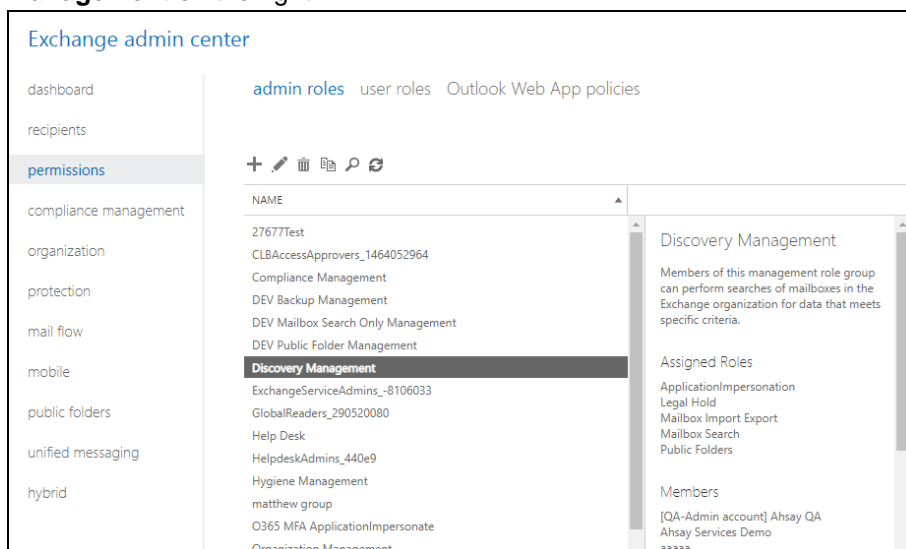
.....

☐ Keep me signed in

[Forgot password?](#)

[Sign in](#)

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



Exchange admin center

admin roles user roles Outlook Web App policies

permissions

NAME
27677Test
CLBAccessApprovers_1464052964
Compliance Management
DEV Backup Management
DEV Mailbox Search Only Management
DEV Public Folder Management
Discovery Management
ExchangeServiceAdmins_8106033
GlobalReaders_290520080
Help Desk
HelpdeskAdmins_440e9
Hygiene Management
matthew group
O365 MFA ApplicationImpersonate
Organization Management

Discovery Management

Members of this management role group can perform searches of mailboxes in the Exchange organization for data that meets specific criteria.

Assigned Roles

- ApplicationImpersonation
- Legal Hold
- Mailbox Import Export
- Mailbox Search
- Public Folders

Members

- [QA-Admin account] Ahsay QA
- Ahsay Services Demo
- aaaaa

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

Discovery Management

*Name:

Description:

Write scope:

Roles:
+ -

NAME ▲

Mailbox Search

Public Folders

Members:
+ -

NAME	DISPLAY NAME ▲
exchange-administrator...	[QA single 15GB file in ... ▲
ahsay.qa	[QA-Admin account] Ah...
[REDACTED]	[QA-Auto] [REDACTED]
piglet	[QA-Auto] Piglet
user01	[QA-DataType] user01 ▼

- 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.

NAME	DISPLAY NAME
performance-10000mails-user0006	[QA] File100000
performance-10000mails-user0007	[QA] 10000mails-user0007
performance-10000mails-user0008	[QA] 10000mails-user0008
performance-3MBAttachment-user0001	[QA] 3MBAttachment-user0001
performance-3MBAttachment-user0002	[QA] 3MBAttachment-user0002
performance-3MBAttachment-user0003	[QA] 3MBAttachment-user0003
performance-3MBAttachment-user0004	[QA] 3MBAttachment-user0004
performance-3MBAttachment-user0005	[QA] 3MBAttachment-user0005
performance-3MBAttachment-user0006	[QA] 3MBAttachment-user0006
performance-3MBAttachment-user0007	[QA] 3MBAttachment-user0007
performance-3MBAttachment-user0008	[QA] 20095files

1 selected of 500 total

add ->

OK Cancel

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

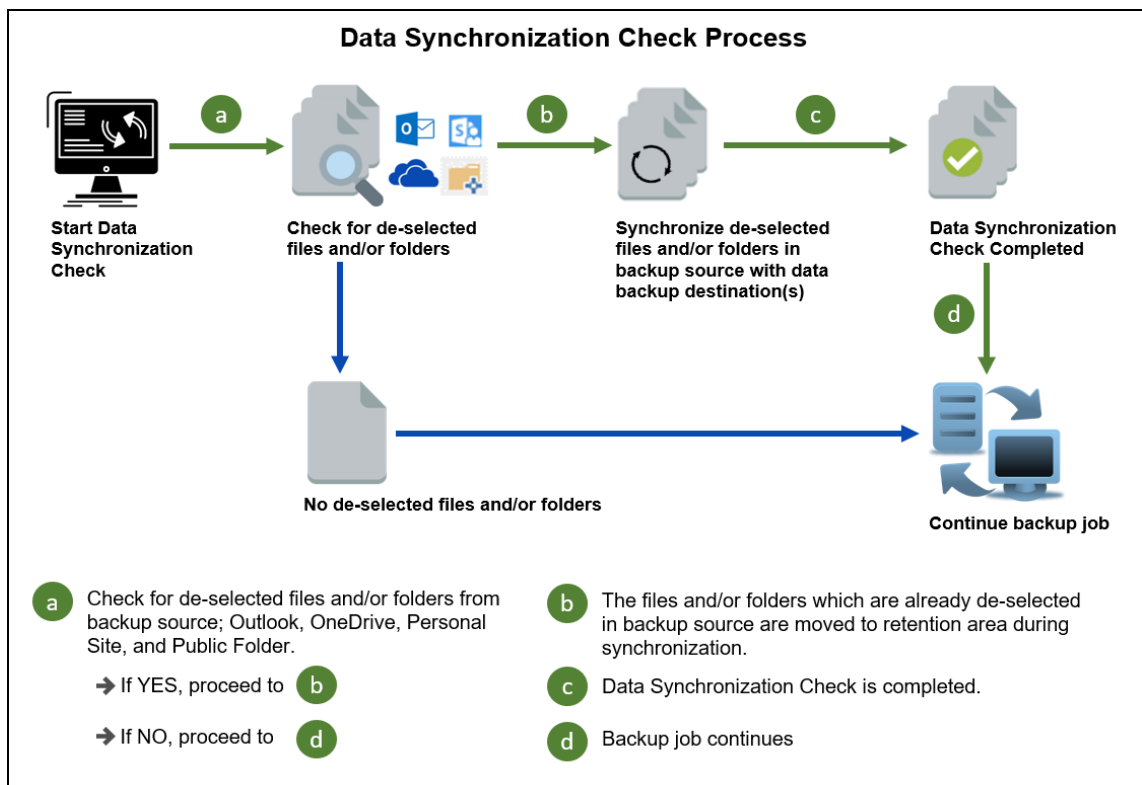
2.14 Data Synchronization Check (DSC) Setup

To compensate for the significant backup performance increase, there is a tradeoff made by the Change Key API, which skips the checking of de-selected files in the backup source, which over time can result in a discrepancy between the items or files/folders selected in the backup sources and the those in the backup destination(s). However, the Change Key API will continue to check for de-selected Office 365 user accounts. Un-selected individual Office 365 user accounts detected during a backup job and will be automatically moved to retention area.

To overcome this, it is necessary in some cases to run a Data Synchronization Check (DSC) periodically. The DSC is similar to a regular Office 365 Change Key API backup job but with the additional checking and handling of de-selected files and/or folders in the backup source. So that it will synchronize the data in the backup source and backup destination(s) to avoid data build-up and the freeing up of storage quota.

Here are the pros and cons of performing the data synchronization check.

	Enabled	Disabled
Backup time	<p>Since data synchronization check is enabled, it will only run on the set interval. For example, the default number of interval is 60 days.</p> <p>The backup time for the data synchronization job will take longer than the usual backup as it is checking the de-selected files and/or folders in the backup source and data in backup destination(s).</p>	<p>As data synchronization check is disabled, the backup time will not be affected.</p>
Storage	<p>Management of storage quota will be more efficient as it will detect items that are de-selected and moved it to retention and will be removed after it exceeds the retention policy freeing up the storage quota.</p>	<p>Management of storage quota will be less efficient even though files and/or folders are already de-selected from the backup source, these files will remain in the data area of backup destination(s).</p>



NOTE

To setup the Data Synchronization Check (DSC), refer to this [Appendix E Setting the Data Synchronization Check \(DSC\)](#)

2.15 Authentication

To comply with Microsoft's product roadmap for Office 365, from AhsayACB v8.3.6.0 or above, Basic Authentication (Authentication using Office 365 login credentials) will no longer be utilized. Instead all new Office 365 backup sets created will use either Modern Authentication or Hybrid Authentication.

By second half of 2021, it will be a mandatory requirement for organizations still using Basic Authentication or Hybrid Authentication to migrate to Modern Authentication.

Modern Authentication provides a more secure user authentication by using app token for authentication aside from using the Office 365 login credentials. In order to use Modern Authentication, the Office 365 account is registered under Global region and the Office 365 backup is configured to use Global region. As both Germany and China region do not support Modern Authentication.

Existing backup sets using Basic Authentication created prior to AhsayACB v8.3.6.0 can be migrated to Hybrid Authentication or Modern Authentication. However, once the authentication process is completed, the authentication can never be reverted back to Basic Authentication. For more information on how to migrate to Hybrid Authentication or Modern Authentication please refer to [Appendix G Migrating Authentication of Office 365 Backup Set](#). After the upgrade to AhsayACB v8.3.6.0 or above, the backup and restore process of existing Office 365 backup sets still using Basic Authentication will not be affected during this transition period since Modern Authentication is not yet enforced by Microsoft.

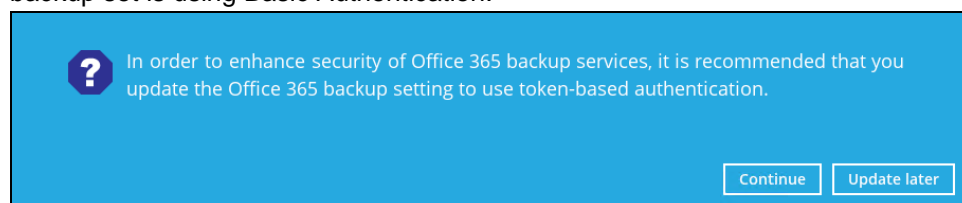
NOTE

Please note that Modern Authentication with enabled security in Azure Active Directory (AD) will be made default if there is zero-usage on any Office 365 organization by October 2020.

To check the current authentication being used in your Office 365 backup set, see criteria below:

• Basic Authentication

If you click on the backup set and the following pop-up message is displayed, then the backup set is using Basic Authentication.



Modern Authentication

Go to **Backup Sets > backup set name > General > Change settings**.

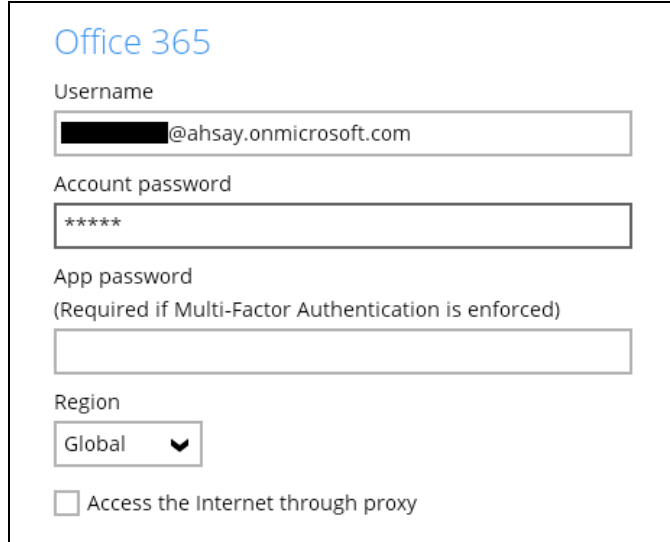
The screenshot shows the 'Run on Client Office 365 Backup Set' configuration window. The left sidebar lists 'General', 'Source', 'Backup Schedule', and 'Destination', with 'General' selected. The main area is titled 'General' and contains the following fields: 'Name' (Run on Client Office 365 Backup Set), 'Owner' (win08r2entbyol), 'Office 365' section with 'Username' (@ahsay.onmicrosoft.com) and 'Region' (Global), and an unchecked checkbox for 'Access the Internet through proxy'. A 'Change settings' button is located below the 'Office 365' section. At the bottom, there is a 'Delete this backup set' link on the left and 'Save', 'Cancel', and 'Help' buttons on the right.

In the Office 365 credentials page, the region is Global and the Username exists but has no password, then the backup set is using Modern Authentication .

The screenshot shows the 'Office 365' credentials page. It includes fields for 'Username' (@ahsay.onmicrosoft.com), 'Account password', and 'App password' (with a note: '(Required if Multi-Factor Authentication is enforced)'). The 'Region' is set to 'Global' in a dropdown menu. There is an unchecked checkbox for 'Access the Internet through proxy' at the bottom.

Hybrid Authentication

1. There is no pop up authentication alert.
2. In the Office 365 credentials page, the region is Global and there is a Username and Account password then the backup set is using Hybrid Authentication.



Office 365

Username
[REDACTED]@ahsay.onmicrosoft.com

Account password

App password
(Required if Multi-Factor Authentication is enforced)

Region
Global ▼



☐ Access the Internet through proxy

2.16 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.

Note: If you wish to backup SharePoint Sites you have to use the AhsayOBM.

Refer to this link for the [AhsayOBM v8 User Guide - Office365 Backup & Restore for Windows](#).

Office 365			
Services	Supported?	Services	Supported?
 Outlook		 Yammer	
 OneDrive		 Microsoft Stream	
 Personal Site		 Power BI	
 Site Collections		 Microsoft Power Apps	
 Microsoft Teams			








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

<div>  </div> <div>Outlook Mailbox</div>			
Item	Supported?	Item	Supported?
Archive Mailbox		Distribution Group	
Dynamic Distribution Group		Equipment Mailbox	
Office 365 Group		Public Folder	
Public Folder Mailbox		Room Mailbox	
Security Group		Shared Mailbox	
User Mailbox			
Notes			
1	For backing up Shared Mailbox on ACB, it is required to set a password to the Shared Mailbox on Office 365 portal, such that it can be logged in on ACB to create backup set		
2	For backing up Public Folder, a licensed Exchange Administrator or a licensed user with Public Folder permission is required		

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

<div>  <p>Folder Level</p> </div>			
Item	Supported?	Item	Supported?
Archive	✓	Calendar	✓
Clutter	✓	Companies	✗
Contacts	✓	Conversation History	✗
Deleted Items	✓	Drafts	✓
External Contacts	✗	GAL Contacts	✗
Inbox	✓	Journal	✗
Junk Emails	✓	Notes	✓
Organizational Contacts	✗	Outbox	✗
PeopleCentricConversation Buddies	✗	PersonMetaData	✗
Recipient Cache	✗	RS Feeds	✓
Search Folders	✗	Sent Items	✓
Social Activity Notifications	✗	Sync Issues	✗
Tasks	✓	Trash	✓


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

<div> OneDrive</div>			
Item	Supported?	Item	Supported?
Folders		Files	
Access Permissions		Albums	
Recycle Bin		Tag	

Below are the Personal Site items that you can back up or restore from an Office 365 backup set.





<div>  Personal Site </div>			
Item	Supported?	Item	Supported?
Announcements		Assets Libraries	
Bright Banner		Calendar	
Contacts		Custom Lists	
Data Connection Libraries		Discussion Boards	
External Lists		Form Libraries	
General Settings	1	Import Spreadsheets	
Issue Tracking		Links	
Look and Feel	2	Manage Site Features	
Newsfeed		Permissions and Management	3
Picture and Libraries		Report Libraries	
Site Collection Features		Site Page	
Survey		Version History	3
Wiki / Page Libraries			
Notes			
1	For the General Settings, only the List Name can be restored.		
2	For the Look and Feel, only the Title can be restored.		
3	For the Version History and Permissions and Management, the backup and restore are supported for OneDrive files and SharePoint documents (Document Library) only.		

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

Public Folders			
Item	Supported?	Item	Supported?
Folders		Files	

2.17 Maximum Supported File Size

The following table shows the maximum supported file size per item for backup and restore of each service.

Service	Maximum File Size
 Outlook with or without attachments (applies to User mailbox, Room mailbox, Shared mailbox, Equipment mailbox)	150 MB
 Public Folders with or without attachments	150 MB
 OneDrive	8 GB
 Personal Site	8 GB

2.18 Limitations

2.18.1 Ahsay Limitations

Supports Backup up to 2 Office 365 User Accounts

Each AhsayACB Office 365 backup set is limited to one Office 365 user account. Therefore, when you backup two Office 365 user accounts it will require two separate backup sets.

Supported backup set configurations:

Example 1 shows one (1) backup set with one (1) Office 365 user account.

Example 2 shows two (2) separate backup sets, each with one (1) Office 365 user account.

#	Backup Set	Office 365 User Account
1	Sample Backup Set 01	user01@company-office365.com
2	Sample Backup Set 01	user01@company-office365.com
	Sample Backup Set 02	user02@company-office365.com

Consider using AhsayOBM instead if you wish to back up two or more Office 365 user accounts per backup set.

Contact your backup service provider for more details and refer to [AhsayOBM v8 User Guide - Office365 Backup & Restore for Windows](#).

Modern Authentication

- Modern Authentication is only supported for Office 365 account that is registered in Global region and the Office 365 backup is configured to use Global region.
- Migration to Modern Authentication is not supported on an Office 365 account without a Global Admin role; or during the migration process, the Office 365 account used to authenticate the migration does not have Global Admin role.
- Due to limitations in Microsoft API, when using Modern Authentication, backup and restore of SharePoint Web Parts and Metadata are not fully supported.
- Backup sets using Modern Authentication do not support backup of external content types (through the linkage from selected lists).
- Backup sets using Modern Authentication do not support backup and restore of the following:
 - Some list settings, currently known as Survey Options on survey list.
 - Feature setting for Personal Site.

OneDrive

- Backup and restore of file share links will be supported for OneDrive and SharePoint Documents only, and only for restore to the same Office 365 organization.
- Backup and restore of all versions will be supported for **OneDrive and SharePoint Documents** only, except for ".aspx" files.

Outlook

- For Outlook mail item, after using restore to original location to overwrite a mail item (and hence id of the mail id is changed), then

In the backup source tree of the same backup set:

- the original ticked item still uses the old mail id to reference and becomes red item.
- there is another item (with the latest mail id) created for that mail item
- ⦿ User will need to deselect the red item and tick the mail item again in the backup source tree in order to do the next backup properly. As per development team, the issue will not be handled as user's selected source should not be modified by system

2.18.2 Microsoft Limitations

⦿ OneDrive

For more detailed information on the limitations of OneDrive, please refer to this Microsoft article, [OneDrive Limits](#). These are some of the limitations that will be discussed in the OneDrive Limits article:

- ⦿ File upload size which is 15GB for OneDrive
- ⦿ File name and path lengths
- ⦿ Thumbnails and previews
- ⦿ Number of items to be synced
- ⦿ Information rights management
- ⦿ Differential sync
- ⦿ Libraries with specific columns
- ⦿ Windows specific limitations

2.19 Best Practices and Recommendations

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

❶ Temporary Directory Folder Location (For backup and restore running on AhsayACB only)

Temporary directory folder is used by AhsayACB 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.

❷ Performance Recommendations

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

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

❸ Set Backup Destination

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

❹ Backup Destination

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

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

❺ Login AhsayACB

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

❻ Periodic Backup Schedule

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

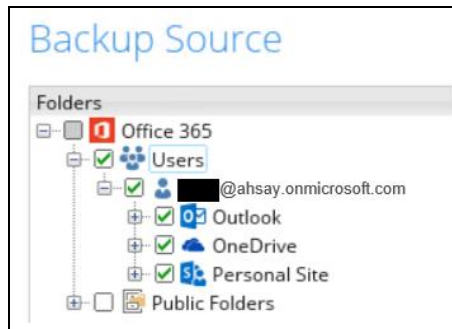
Consider the following key points to efficiently handle backup sets with periodic backup schedule.

- ◉ Hardware – to achieve optimal performance, compatible hardware requirements is a must. Ensure you have the backup machine's appropriate hardware specifications to accommodate frequency of backups,
 - so that the data is always backed up within the periodic backup interval
 - so that the backup frequency does not affect the performance of the production server
- ◉ Network – make sure to have enough network bandwidth to accommodate the volume of data within the backup interval.
- ◉ Retention Policy - also make sure to consider the retention policy settings and retention area storage management which can grow because of the changes in the backup data for each backup job.

◉ Backup Source

For Office 365 backup sets there are two approaches for backup source selection. Below are the sample screenshots of the selection All Items and Selective Items.

All Items



Selective Items



◉ All Items

If you tick the “Users” checkbox, all of the Items of the Office 365 user account will automatically be selected.

◉ Selective Items

If you tick selective Items from Outlook or OneDrive, you will notice that the “Users” checkbox is highlighted with gray color. This indicates that not all items are selected.

These are the Pros and Cons when selecting a backup source from All Items and Selective Items.

	All Items	Selective Items
User Maintenance	The Admin does not need to manage the backup set, i.e. to select or unselect items, the changes are automatically updated in the backup source	The Admin will have to select or unselect items manually as the changes are not automatically updated in the backup source.
Backup Time	All Items of the Office 365 user account will be backed up. This means the initial of full backup job will take longer, any subsequent incremental backup will take longer.	Only selective Items of the Office 365 user account will be backed up. This will mean the initial of full backup job will be faster, any subsequent incremental backup will be faster.
Storage	As all Items of the Office 365 user account are backed up, more storage will be required.	As only selective Office 365 user accounts will be backed up, the backup set will require relatively less storage.

Authentication

Although Microsoft has moved the enforcement date for Modern Authentication from end of 2020 to the second half of 2021, since this new authentication is already available starting with AhsayACB v8.3.6.0 or above, it is recommended that backup sets are migrated to Modern Authentication. All newly created Office 365 backup sets on AhsayACB v8.3.6.0 or above automatically use Modern Authentication.

However, due to the current limitation with Microsoft API, Modern Authentication is currently not suitable for backup sets with Personal Sites selected. As a temporary workaround for Office 365 backup sets which require backup of Personal Sites selected, the backup set should be migrated to Hybrid Authentication until the issue has been resolved by Microsoft.

3 Logging in to AhsayACB

Starting with AhsayACB v8.5.0.0, there are several login scenarios depending on the setting of the account you are using. The different scenarios will be discussed below:

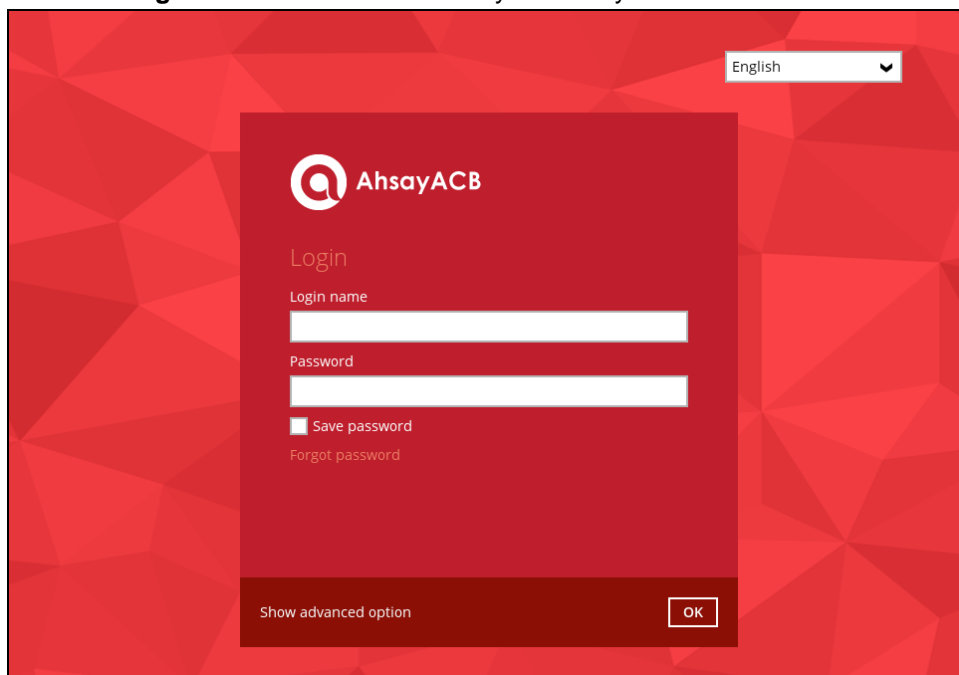
- [Login without 2FA](#)
- [Login with 2FA using authenticator app](#)
- [Login with 2FA using Twilio](#)

3.1 Login to AhsayACB without 2FA

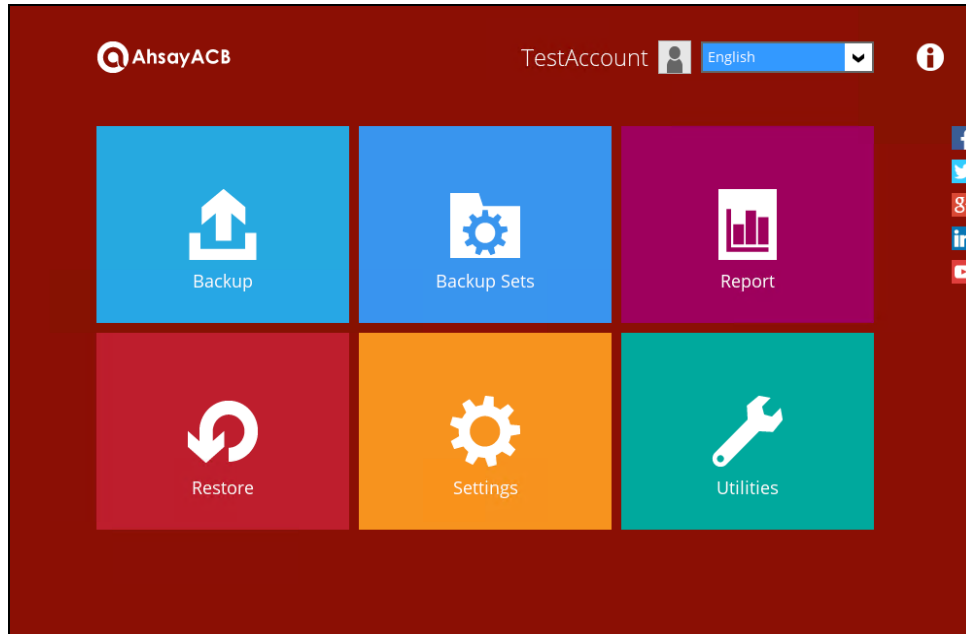
1. Log in to the AhsayACB application user interface. Double click the AhsayACB desktop icon to launch the application.



2. Enter the **Login name** and **Password** of your AhsayACB account then click **OK** to log in.

The image displays the AhsayACB login window. The window has a red background with a geometric, low-poly pattern. In the top-right corner, there is a language dropdown menu set to 'English'. The main content area is a dark red rectangle containing the AhsayACB logo (a white '@' symbol) and the text 'AhsayACB'. Below this, the word 'Login' is displayed. There are two input fields: 'Login name' and 'Password'. Below the 'Password' field, there is a checkbox labeled 'Save password' and a link labeled 'Forgot password'. At the bottom of the login panel, there is a 'Show advanced option' link and an 'OK' button.

3. After successful login, the following screen will appear.



3.2 Login to AhsayACB with 2FA using authenticator app

1. Log in to the AhsayACB application user interface. Double click the AhsayACB desktop icon to launch the application.



2. Enter the **Login name** and **Password** of your AhsayACB account then click **OK** to login.

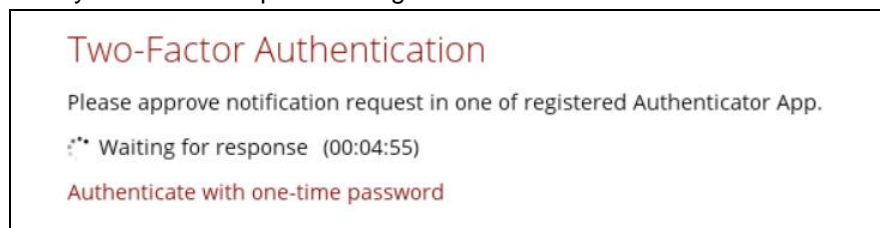
The image shows the AhsayACB login interface. It has a red background with a geometric pattern. In the center, there is a white login form. The form includes the AhsayACB logo and the text 'Login'. Below this, there are two input fields: 'Login name' and 'Password'. There is a checkbox labeled 'Save password' and a link 'Forgot password'. At the bottom of the form, there is a button labeled 'OK' and a link 'Show advanced option'. In the top right corner of the login window, there is a language dropdown menu set to 'English'.

3. One of the two authentication methods will be displayed to continue with the login:
 - [Push Notification and TOTP when using Ahsay Mobile app](#)
 - [TOTP only](#)

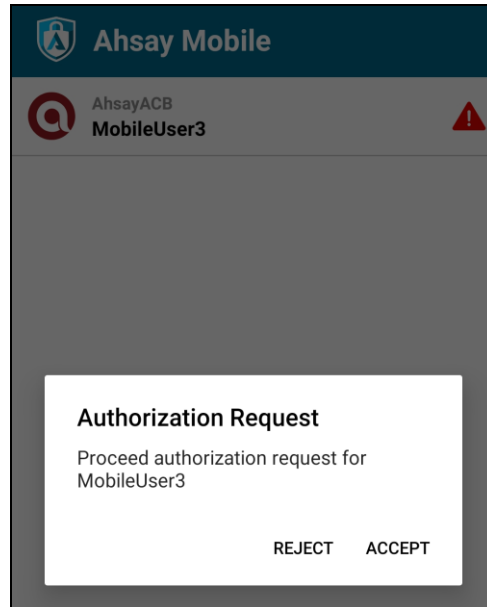
➤ If **Ahsay Mobile app** was configured to use Push Notification and TOTP, then there are two 2FA modes that can be used:

- Push Notification (default)

Push notification is the default 2FA mode. Accept the login request on Ahsay Mobile to complete the login.

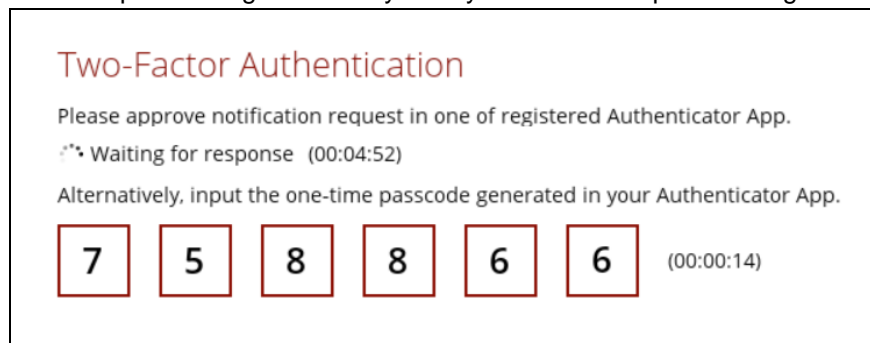
The image shows a 'Two-Factor Authentication' dialog box. It has a white background and a thin black border. The title 'Two-Factor Authentication' is in a large, bold, red font. Below the title, there is a message: 'Please approve notification request in one of registered Authenticator App.' followed by a status indicator (two small red dots) and 'Waiting for response (00:04:55)'. At the bottom, there is a red link: 'Authenticate with one-time password'.

Example of the login request sent to the Ahsay Mobile app.

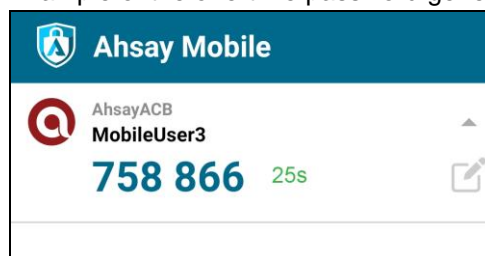


- TOTP

However, if push notification is not working or you prefer to use one-time passcode, click the [Authenticate with one-time password](#) link, then input the one-time passcode generated by Ahsay Mobile to complete the login.



Example of the one-time password generated in the Ahsay Mobile app.



➤ TOTP only

Enter the one-time passcode generated by the authenticator app to complete the login.

Two-Factor Authentication

Enter one-time passcode generated from authenticator app

2

2

8

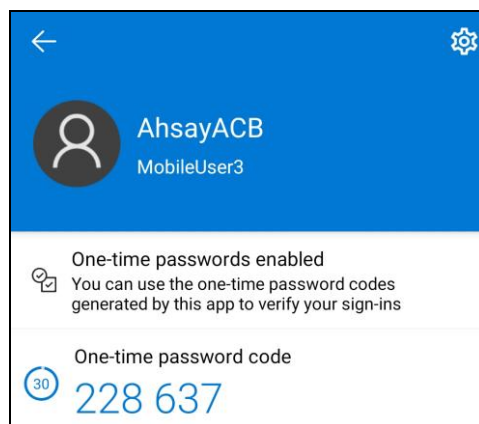
6

3

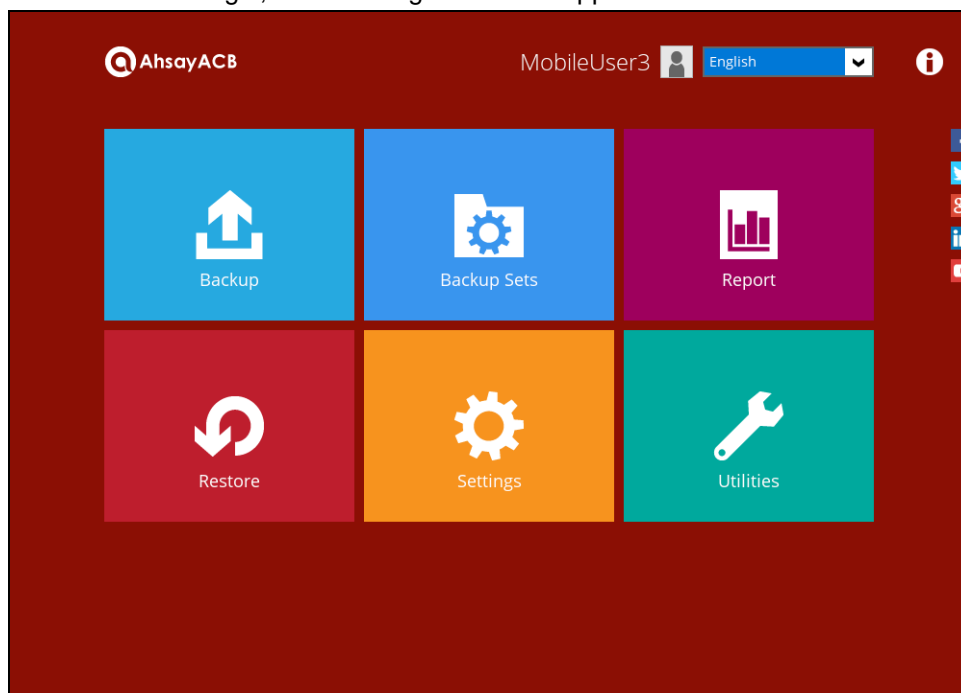
7

(00:00:21)

Example of the one-time passcode generated in the third party authenticator app Microsoft Authenticator.



4. After successful login, the following screen will appear.



NOTE

If you have trouble logging in using the authenticator app, please refer to Chapter 9 of the [AhsayACB Quick Start Guide for Windows](#) for more information.

3.3 Login to AhsayACB with 2FA using Twilio

1. Log in to the AhsayACB application user interface. Double click the AhsayACB desktop icon to launch the application.



2. Enter the **Login name** and **Password** of your AhsayACB account then click **OK** to login.

The image shows the AhsayACB Login dialog box. It has a red background with a geometric pattern. In the top right corner, there is a language dropdown menu set to 'English'. The main content area is a dark red rectangle containing the AhsayACB logo and the word 'Login'. Below the logo, there are two input fields: 'Login name' and 'Password'. Under the 'Password' field, there is a checkbox labeled 'Save password' and a link labeled 'Forgot password'. At the bottom of the dialog box, there is a 'Show advanced option' link on the left and an 'OK' button on the right.

3. Select your phone number.

The image shows the Two-Factor Authentication dialog box. It has a white background. At the top, the title 'Two-Factor Authentication' is displayed in a red font. Below the title, there is a message: 'Please select phone number to receive passcode via SMS message to continue login.' Underneath this message, there is a blue telephone icon followed by the text 'Philippines (+63) - *****8106'. At the bottom of the dialog box, there is a dark red bar containing two buttons: 'Cancel' and 'Help'.

4. Enter the passcode and click **Verify** to log in.

Two-Factor Authentication

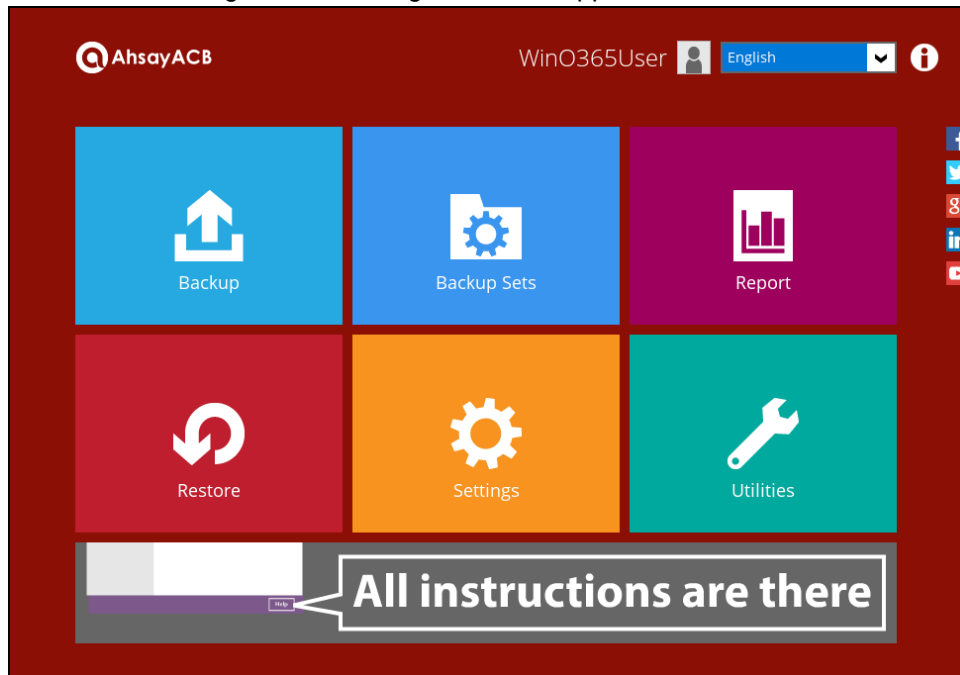
SMS message with a passcode was already sent to the phone number Philippines (+63) - *****8106
Please enter the passcode to continue login.

LDFZ - (00:04:40)

[Resend passcode](#)

[Verify](#) [Cancel](#) [Help](#)

5. After successful login, the following screen will appear.



4 Creating an Office 365 Backup Set

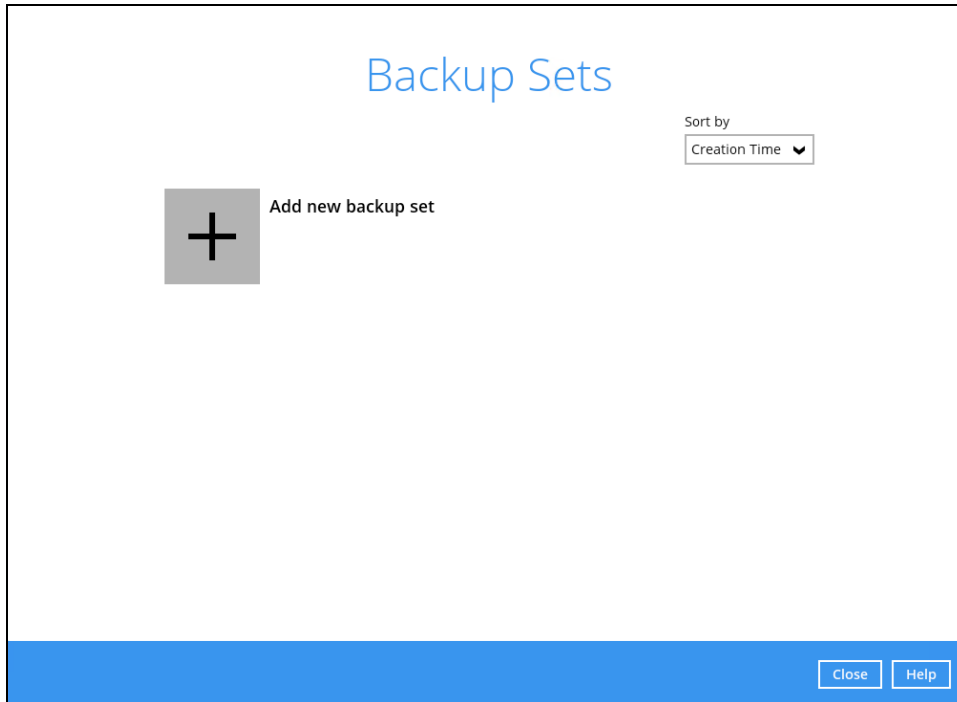
Starting with AhsayACB v8.3.6.0, Basic Authentication will not be utilized anymore, but instead there are two types of authentication that can be used in creating a backup set namely [Modern Authentication](#) or [Hybrid Authentication](#).

4.1 Modern Authentication

1. In the AhsayACB 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**.

Create Backup Set

Name
Client Run Office 365 Backup Set

Backup set type

- File Backup
- File Backup
- Cloud File Backup
- IBM Lotus Notes Backup
- MS Windows System Backup
- Office 365 Backup

Next Cancel Help

Leave the **Username** and **Account password** blank and click **Test**.

Create Backup Set

Name
Client Run Office 365 Backup Set

Backup set type
Office 365 Backup

Username

Account password

App password
(Required if Multi-Factor Authentication is enforced)


Region
Global

☐ Access the Internet through proxy

Test

Next Cancel Help

Click **I understand the limitation and confirm to proceed**.

 This will be using Modern Authentication without backup or restore functionality for SharePoint Web Parts and Managed Metadata.

I understand the limitation and confirm to proceed Cancel

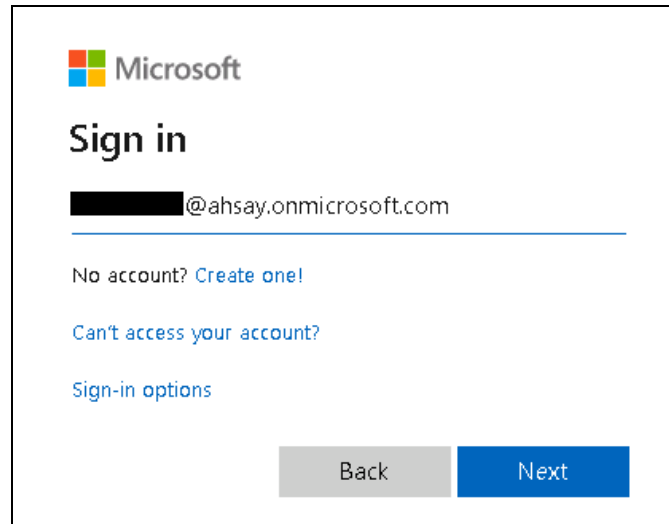
Click **Authorize** to start the authentication process.

Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

Authorize

Cancel

Sign in to your Microsoft account.



Microsoft

Sign in

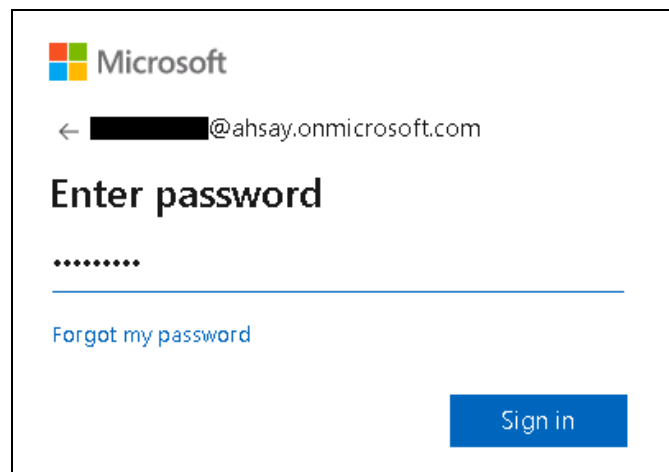
██████████@ahsay.onmicrosoft.com

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

Back Next



Microsoft

← ██████████@ahsay.onmicrosoft.com

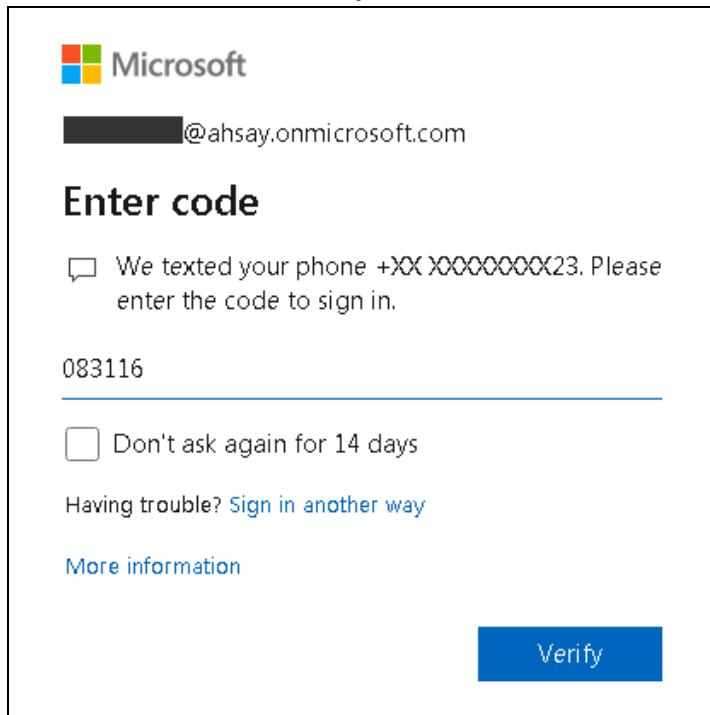
Enter password

.....

[Forgot my password](#)

Sign in

If MFA is enforced for the Office 365 user account used to authenticate the backup set, enter the code and click **Verify**.



The image shows a Microsoft login interface for MFA verification. At the top is the Microsoft logo. Below it is a placeholder email address ending in @ahsay.onmicrosoft.com. The heading "Enter code" is prominent. A message states: "We texted your phone +XX XXXXXXXXX23. Please enter the code to sign in." Below this, the code "083116" is entered into a text field. There is a checkbox for "Don't ask again for 14 days" and a link for "Having trouble? Sign in another way". A "More information" link is at the bottom left, and a blue "Verify" button is at the bottom right.

NOTE

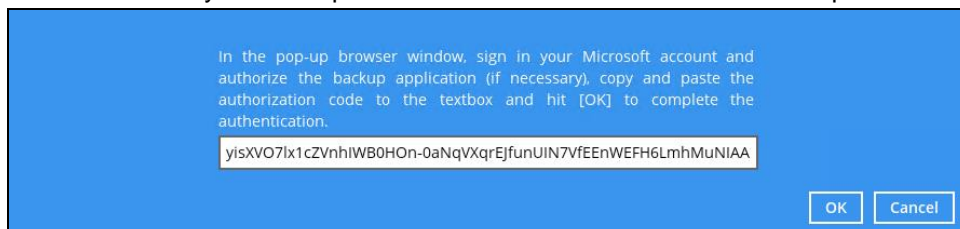
The verification code is only required if the MFA status of an Office 365 account is enforced.

Copy the authorization code.



The image shows an Ahsay authorization screen. At the top is the Ahsay logo. Below it, the text "Authorization Code for Microsoft 365" is displayed. A large red text box contains the authorization code: "0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCgjmGnR:". Below the code box, instructions read: "Please copy and paste the above Authorization Code into Ahsay's product to complete the setup."

Go back to AhsayACB and paste the authorization code. Click **OK** to proceed.



The image shows a blue confirmation dialog box from AhsayACB. It contains instructions: "In the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication." Below the text is a text box containing the authorization code: "yisXVO7lx1cZVnhIWB0HOn-0aNqVXqrEjfunUIN7VfEEnWEFH6LmhMuNIAA". At the bottom right are "OK" and "Cancel" buttons.

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

Create Backup Set

Name
Client Run Office 365 Backup Set

Backup set type
Office 365 Backup

Username
[redacted]@ahsay.onmicrosoft.com

Account password
[redacted]

App password
(Required if Multi-Factor Authentication is enforced)
[redacted]

Region
Global

☐ Access the Internet through proxy

✓ Test completed successfully

Next Cancel Help

Create Backup Set

Name
Client Run Office 365 Backup Set

Backup set type
Office 365 Backup

Username
[redacted]@ahsay.onmicrosoft.com

Account password
Verifying...

App password
(Required if Multi-Factor Authentication is enforced)
[redacted]

Region
Global

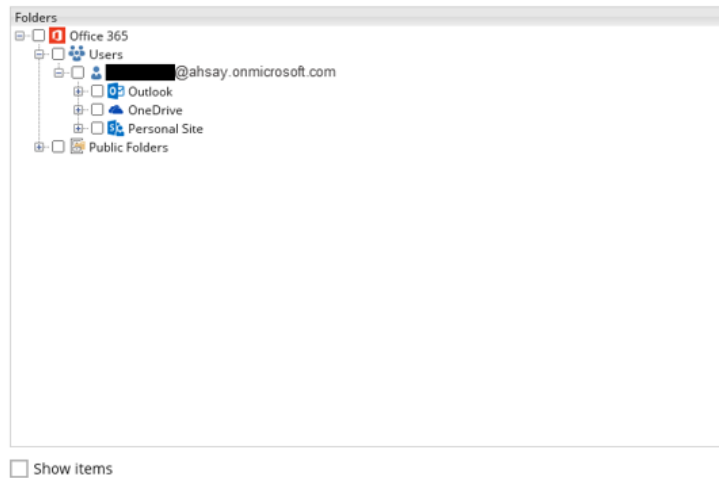
☐ Access the Internet through proxy

✓ Test completed successfully

Next Cancel Help

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

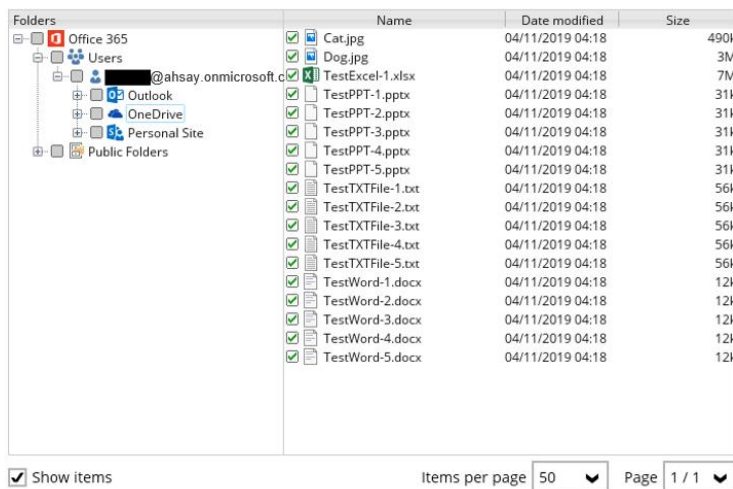
Backup Source



Previous Next Cancel Help

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

Backup Source



Items per page 50 Page 1 / 1

Previous Next Cancel Help

5. 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.

Schedule

Run scheduled backup for this backup set

Off ☐

Previous

Next

Cancel

Help

Schedule

Run scheduled backup for this backup set

On ☒

Existing schedules

Add new schedule

Previous

Next

Cancel

Help

New Backup Schedule

Name
Daily-2

Type
Daily

Start backup
at 01 : 11
every backup completed

☐ Run Retention Policy after backup

OK Cancel Help

Previous Next Cancel Help

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

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

New Backup Schedule

Name
Daily-1

Type
Daily

Start backup
at 15 : 41

Stop
until full backup completed

☒ Run Retention Policy after backup

OK Cancel Help

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

New Backup Schedule

Name
Weekly-1

Type
Weekly

Backup on these days of the week
☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☒ Sat

Start backup
 at 23 : 00

Stop
 until full backup completed

☒ Run Retention Policy after backup

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

New Backup Schedule

Name
Monthly-1

Type
Monthly

Backup on the following day every month
☒ Day Last ☐ First Sunday

Start backup at
 23 : 59 on the selected days

Stop
 until full backup completed

☒ Run Retention Policy after backup

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

New Backup Schedule

Name
Custom-1

Type
Custom

Backup on the following day once
 2019 December 31

Start backup at
 23 : 59

Stop
 until full backup completed

☒ Run Retention Policy after backup

- **Start backup** – the start time of the backup job.
 - **at** – this option will start a backup job at a specific time.
 - **every** – this option will start a backup job in intervals of minutes or hours.

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

Figure 1.1

Figure 1.1 – Periodic schedule every 4 hours Monday - Friday during business hours

Figure 1.2

Figure 1.2 – Normal schedule run at 21:00 or 9:00 PM daily on Saturday & Sunday on weekend during non-business hours

- **Stop** – the stop **time** of the backup job. This only applies to schedules with start backup “at” and is not supported for periodic backup schedule (start backup “every”)
 - **until full backup completed** – this option will stop a backup job once it is complete. This is the configured stop time of the backup job by default.
 - **after (defined no. of hrs.)** – this option will stop a backup job after a certain number of hours regardless of whether the backup job has completed or not. This can range from 1 to 24 hrs.

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

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

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

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

- **Run Retention Policy after backup** – if enabled, the AhsayACB will run a retention policy job to remove files from the backup destination(s) which have exceeded the retention policy after performing a backup job.

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

Click the **[Next]** button to proceed. Multiple backup schedules can be created.

Schedule

Run scheduled backup for this backup set

On ☒

Existing schedules

- Daily-1**
Daily (Every 4 hours)
- Weekly-1**
Weekly - Saturday (Every 6 hours)
- Monthly-1**
Monthly - The Last Day (Every month at 20:00)
- Custom-1**
Custom (12/31/2020 at 21:00)

Add

Previous Next Cancel Help

6. 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**.

AhsayACB

Destination

Backup mode
Sequential ▼

Existing storage destinations
+ Add new storage destination / destination pool

Previous Next Cancel Help

NOTE

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

7. Select storage destinations.

New Storage Destination / Destination Pool

Name
AhsayCBS

Destination storage

- AhsayCBS
- AhsayCBS
- Wasabi-1
- Local / Mapped Drive / Network Drive / Removable Drive
- AWS S3 Compatible Cloud Storage
- Google Drive

OK Cancel Help

Previous Next Cancel Help

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

- If you have chosen the **Local / Mapped Drive / Network 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.

New Storage Destination / Destination Pool

Name
Local-1

Destination storage
Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])
\\[redacted]\\Users\\Administrator\\Documents\\Sample: Change

☐ This share requires access credentials

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name
Local-1

Destination storage
Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])
\\[redacted]\\Users\\Administrator\\Documents\\Sample: Change

☒ This share requires access credentials

User name (e.g. domain\\username)
Administrator

Password
[redacted]

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name

Local-1

Destination storage

Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])

\\[REDACTED]\Users\Administrator\Documents\SampleS

Change

☒ This share requires access credentials

User name (e.g. domain\username)

Administrator

Password

Testing access to destination...

OK

Cancel

Help

Previous

Next

Cancel

Help

New Storage Destination / Destination Pool

Name

Local-1

Destination storage

Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])

\\[REDACTED]\Users\Administrator\Documents\SampleS

Change

☒ This share requires access credentials

User name (e.g. domain\username)

Administrator

Password

Test completed successfully

OK

Cancel

Help

Previous

Next

Cancel

Help

- If you have chosen the **AWS S3 Compatible Cloud Storage**, select from the destination storage then click **OK**. Enter the required details and click **Test** to validate. **Test completed successfully** shows when the validation is done.

New Storage Destination / Destination Pool

Name
AWSCompatible-1

Destination storage
AWS S3 Compatible Cloud Storage

Host Port

Access Key ID

Secret Access Key

Bucket Name (please create this bucket manually first)

☐ Connect with SSL/TLS

☐ Access the Internet through proxy

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name
AWSCompatible-1

Destination storage
AWS S3 Compatible Cloud Storage

Host Port
s3.us-west-1.wasabisys.com 443

Access Key ID
N8QKJZ39ELCJ9C3CINBW

Secret Access Key
••••••

Bucket Name (please create this bucket manually first)
kmtmanila

☒ Connect with SSL/TLS

☐ Access the Internet through proxy

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name

Destination storage

Host Port

Access Key ID

Secret Access Key

Bucket Name (please create this bucket manually first)

☒ Connect with SSL/TLS
☐ Access the Internet through proxy

Testing access to destination...

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name

Destination storage

Host Port

Access Key ID

Secret Access Key



Bucket Name (please create this bucket manually first)

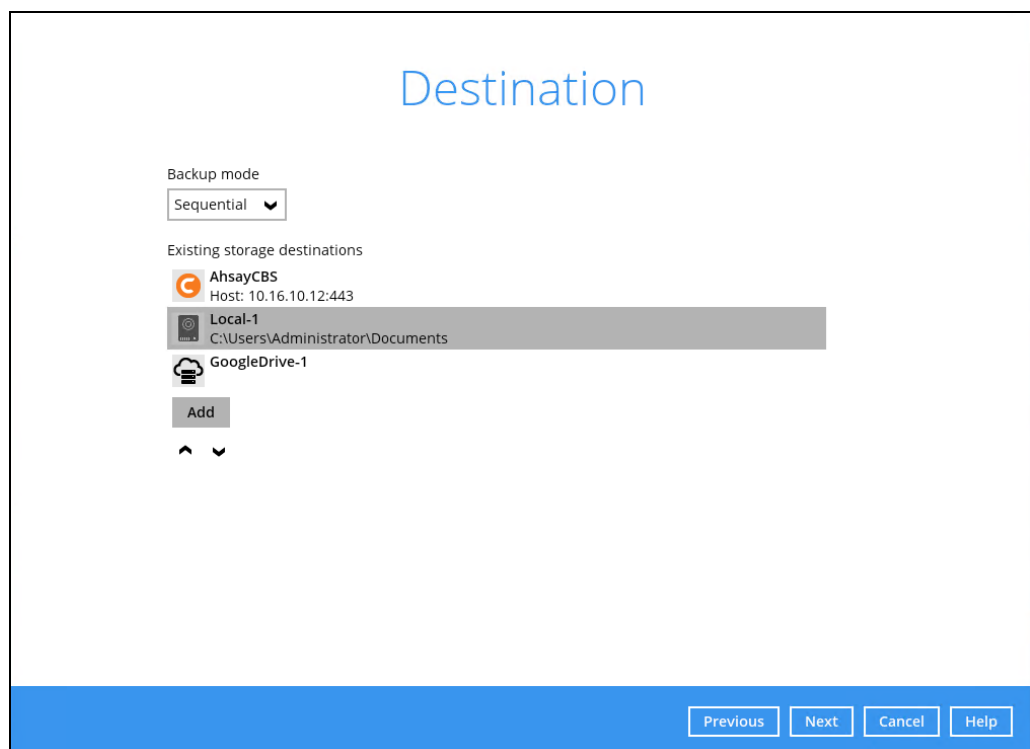
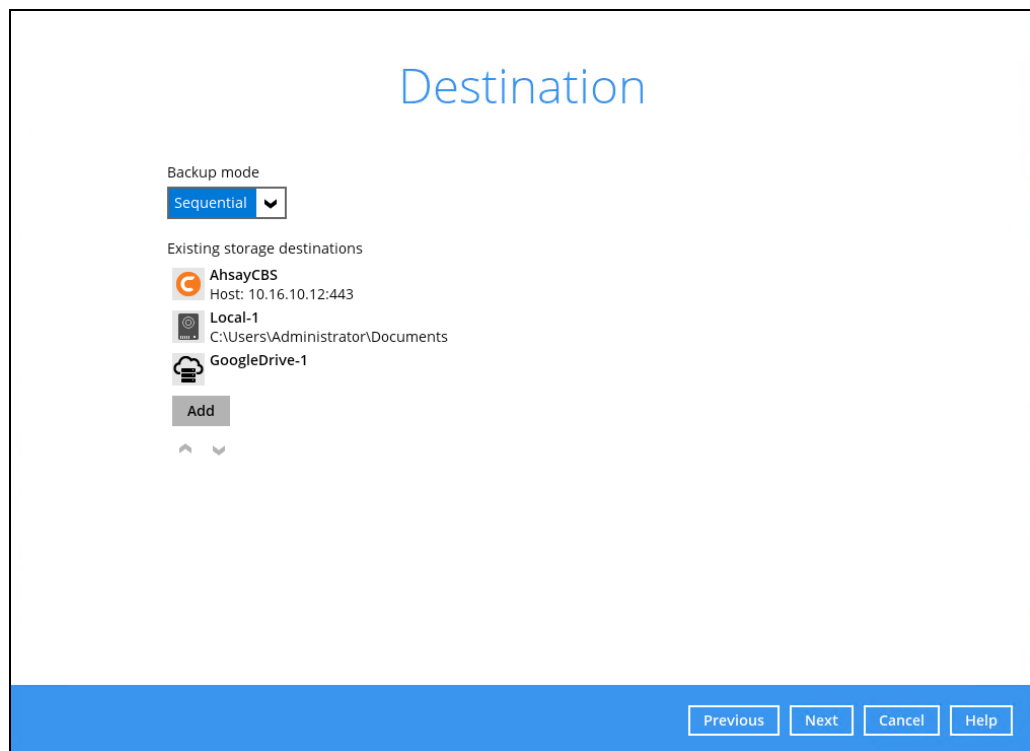
☒ Connect with SSL/TLS
☐ Access the Internet through proxy

Test completed successfully

OK Cancel Help

Previous Next Cancel Help

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.



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

Encryption

Encrypt Backup Data
On ☒

Encryption Type
 Default ▼
 Default
 User password
 Custom

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

- **Default** – an encryption key with 44 alpha numeric characters will be randomly generated by the system
- **User password** – the encryption key will be the same as the login password of your AhsayACB at the time when this backup set is created. Please be reminded that if you change the AhsayACB 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.
https://wiki.ahsay.com/doku.php?id=public:5034_best_practices_for_managing_encryption_key

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

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

The screenshot shows a dark-themed window titled "Encryption". At the top, it says "Encrypt Backup Data" with a toggle switch set to "On". Below that, "Encryption Type" is set to "Default". The main area has a blue background with white text: "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." Below this is a text input field containing seven black dots. Under the field is the label "Unmask encryption key". At the bottom right are two buttons: "Copy to clipboard" and "Confirm".

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

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

This screenshot shows the same "Encryption" window, but the text input field now displays a long alphanumeric string: "rcX1MBE4brnZO86eKOp6FeabuuRRI3qDXG9q5uBxF0s=". Below the field is the label "Mask encryption key". The "Copy to clipboard" and "Confirm" buttons remain at the bottom right.

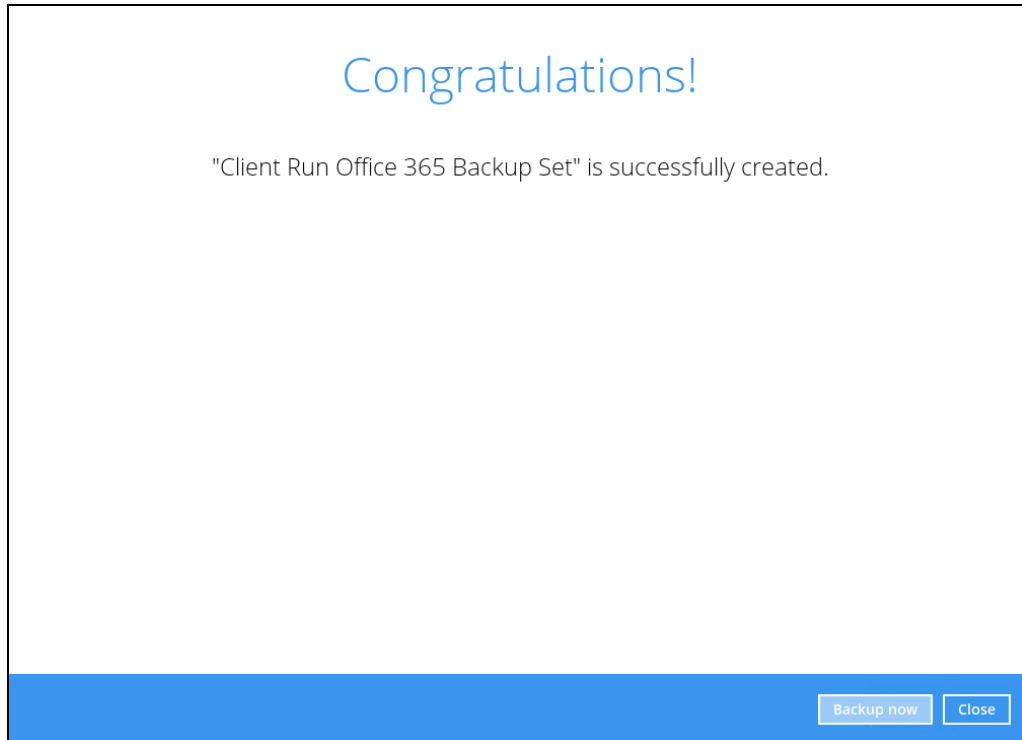
- **Copy to clipboard** – Click to copy the encryption key, then you can paste it in another location of your choice.
- **Confirm** – Click to exit this pop-up window and proceed to the next step.

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

The screenshot shows a "Windows User Authentication" dialog box. It has three input fields: "Domain Name (e.g Ahsay.com) / Host Name" with "local" entered, "User name" with "Administrator" entered, and "Password" with seven black dots. The dialog box has a white background and a thin black border.

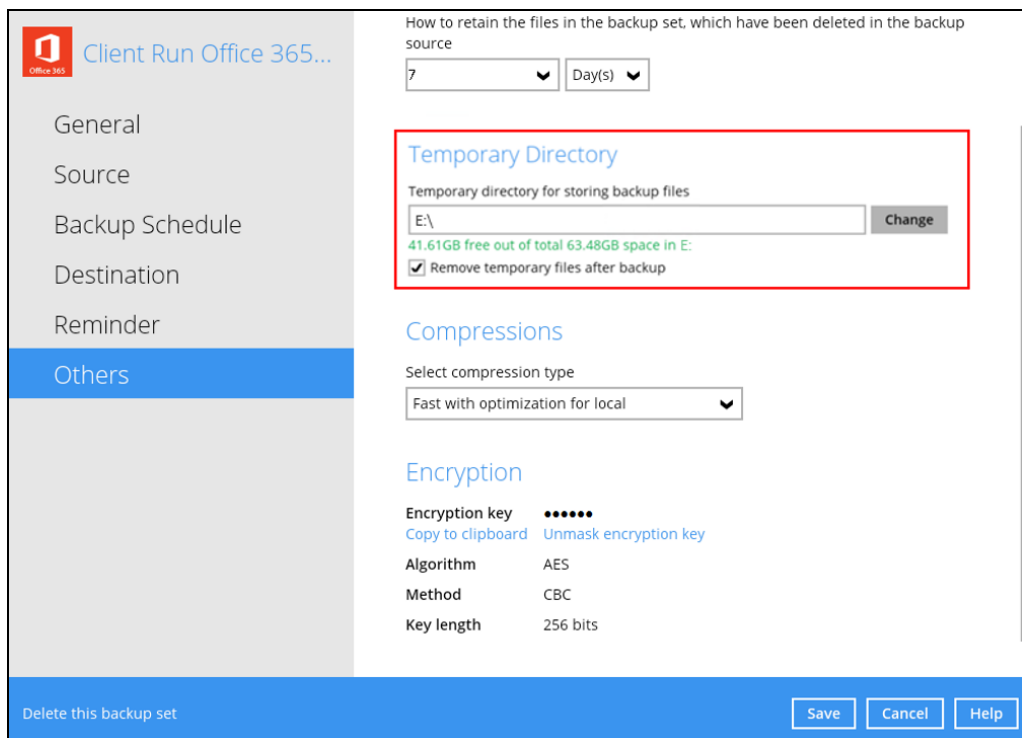
Click **Next** to create the backup set.

10. The following screen is displayed when the new Office 365 backup set is created successfully. Click Close to go back to main screen.



11. Based on [Best Practices and Recommendations](#), it is highly recommended to change the Temporary Directory. Select another location with sufficient free disk space other than Drive C.

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



12. Optional: Select your preferred **Compression** type. By default, the compression is Fast with optimization for local.

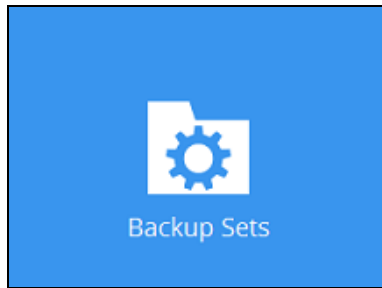
Go to **Others > Compressions**. Select from the following list:

- No Compression
- Normal
- Fast (Compressed size larger than normal)
- Fast with optimization for local

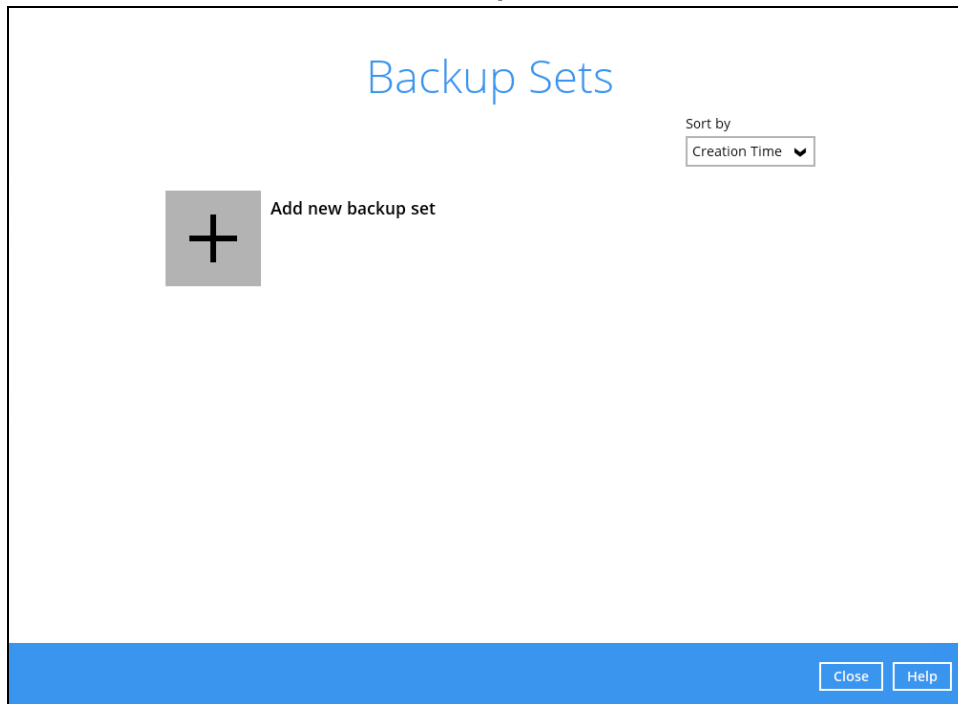
The screenshot shows the 'Client Run Office 365...' configuration window. On the left is a sidebar with tabs: General, Source, Backup Schedule, Destination, Reminder, Others (selected), and a bottom section for 'Delete this backup set'. The main area is titled 'How to retain the files in the backup set, which have been deleted in the backup source'. It includes a dropdown for '7' and a 'Day(s)' dropdown. Below is the 'Temporary Directory' section with a text box showing 'E:\' and a 'Change' button. A status message indicates '41.61GB free out of total 63.48GB space in E:'. A checkbox 'Remove temporary files after backup' is checked. The 'Compressions' section is highlighted with a red box, showing a dropdown menu with 'Fast with optimization for local' selected. Below this, the 'Algorithm' is 'AES', 'Method' is 'CBC', and 'Key length' is '256 bits'. At the bottom are 'Save', 'Cancel', and 'Help' buttons.

4.2 Hybrid Authentication

1. In the AhsayACB 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**.

Create Backup Set

Name

Backup set type

File Backup

File Backup

Cloud File Backup

IBM Lotus Notes Backup

MS Windows System Backup

Office 365 Backup

- ▶ If MFA is not enforced, enter the Username and Account password. Select the Region and click **Test**.

Create Backup Set

Name

Backup set type

Office 365 Backup

Username

Account password

App password
 (Required if Multi-Factor Authentication is enforced)

Region

Global

☐ Access the Internet through proxy

- ▶ If MFA is enforced, enter the Username, Account password and App password then click **Test**.

Create Backup Set

Name

Backup set type

Username

Account password

App password
 (Required if Multi-Factor Authentication is enforced)

Region

☐ Access the Internet through proxy

Enter the code sent to your mobile device and click **Verify**.

Office 365 Multi-Factor Authentication

A sms is sent to your mobile device, please type in the code shown in the sms message

or

If you click **Use another method to authenticate** link, select between Text or Call.

Office 365 Multi-Factor Authentication

Select an authentication method

- If Text is selected, enter the code sent to your mobile device and click **Verify** to proceed.

Office 365 Multi-Factor Authentication

A sms is sent to your mobile device, please type in the code shown in the sms message

358101

Use another method to authenticate

Verify Cancel Help

- If Call is selected, you will receive a call from a third-party app. From there follow the instructions to proceed with the authentication.

Office 365 Multi-Factor Authentication

Please answer the phone call to continue

⌂... Waiting for response...

Use another method to authenticate

Cancel Help

NOTE


- The App password is only required if the MFA status of an Office 365 account is enforced.
- If the MFA of the Office 365 user account will be enabled later on, it is highly advisable to login to AhsayACB and re-authenticate the Office 365 user account's credential using the MFA App password. Otherwise the scheduled backups of the Office 365 backup set will stop working.

Click **Authorize** to start the authentication process.

Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

Authorize Cancel

Sign in to your Microsoft account.




Sign in

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

BackNext



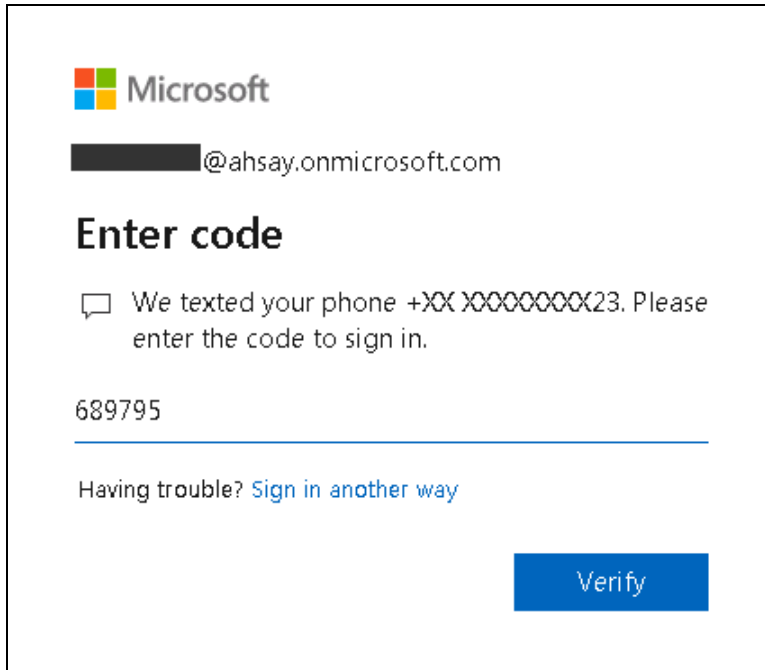
←

Enter password

[Forgot my password](#)

Sign in

If MFA is enforced for the Office 365 user account used to authenticate the backup set, enter the code and click **Verify**.




The image shows a Microsoft login interface. At the top is the Microsoft logo. Below it is a text input field containing an email address ending in @ahsay.onmicrosoft.com. The heading "Enter code" is displayed. A message states: "We texted your phone +XX XXXXXXXXX23. Please enter the code to sign in." Below this is a text input field containing the code "689795". At the bottom left is a link "Having trouble? Sign in another way". At the bottom right is a blue button labeled "Verify".

NOTE

The verification code is only required if the MFA status of an Office 365 account is enforced.

Copy the authorization code.



The image shows an Ahsay interface. At the top is the Ahsay logo. Below it is the heading "Authorization Code for Microsoft 365". A large text box displays the authorization code: "0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCgjmGnR:". Below the text box is the instruction: "Please copy and paste the above Authorization Code into Ahsay's product to complete the setup."

Go back to AhsayACB and paste the authorization code. Click **OK** to proceed.



The image shows a blue dialog box from AhsayACB. It contains the text: "In the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication." Below this text is a text input field containing a long alphanumeric string. At the bottom right are two buttons: "OK" and "Cancel".

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

Create Backup Set

Name

Client Run Office 365 Backup Set

Backup set type

Office 365 Backup

Username

██████████@ahsay.onmicrosoft.com

Account password

App password

(Required if Multi-Factor Authentication is enforced)

Region

Global

☐ Access the Internet through proxy

✓ Test completed successfully

Next

Cancel

Help

Create Backup Set

Name

Client Run Office 365 Backup Set

Backup set type

Office 365 Backup

Username

██████████@cloudbacko.biz

Account password

Verifying...

App password

(Required if Multi-Factor Authentication is enforced)

Region

Global

☐ Access the Internet through proxy

✓ Test completed successfully

Next

Cancel

Help

Create Backup Set

Name
Client Run Office 365 Backup Set

Backup set type
Office 365 Backup

Username
[redacted]@cloudbacko.biz

Account password
Please wait...

App password
(Required if Multi-Factor Authentication is enforced)

Region
Global

☐ Access the Internet through proxy

✓ Test completed successfully

Next Cancel Help

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

Backup Source

Folders

- Office 365
 - Users
 - [redacted]@ahsay.onmicrosoft.com
 - Outlook
 - OneDrive
 - Personal Site
 - Public Folders

☐ Show items

Previous Next Cancel Help

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

Backup Source

Folders	Name	Date modified	Size
Office 365	Cat.jpg	04/11/2019 04:18	490k
Users	Dog.jpg	04/11/2019 04:18	3M
@ahsay.onmicrosoft.com	TestExcel-1.xlsx	04/11/2019 04:18	7M
Outlook	TestPPT-1.pptx	04/11/2019 04:18	31k
OneDrive	TestPPT-2.pptx	04/11/2019 04:18	31k
Personal Site	TestPPT-3.pptx	04/11/2019 04:18	31k
Public Folders	TestPPT-4.pptx	04/11/2019 04:18	31k
	TestPPT-5.pptx	04/11/2019 04:18	31k
	TestTXTFile-1.txt	04/11/2019 04:18	56k
	TestTXTFile-2.txt	04/11/2019 04:18	56k
	TestTXTFile-3.txt	04/11/2019 04:18	56k
	TestTXTFile-4.txt	04/11/2019 04:18	56k
	TestTXTFile-5.txt	04/11/2019 04:18	56k
	TestWord-1.docx	04/11/2019 04:18	12k
	TestWord-2.docx	04/11/2019 04:18	12k
	TestWord-3.docx	04/11/2019 04:18	12k
	TestWord-4.docx	04/11/2019 04:18	12k
	TestWord-5.docx	04/11/2019 04:18	12k

☒ Show items Items per page 50 Page 1 / 1

[Previous](#) [Next](#) [Cancel](#) [Help](#)

5. 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.

Schedule

Run scheduled backup for this backup set
off ☐

[Previous](#) [Next](#) [Cancel](#) [Help](#)

Schedule

Run scheduled backup for this backup set

On ☒

Existing schedules

Add new schedule

New Backup Schedule

Name

Type

Start backup

☐ Run Retention Policy after backup

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

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

New Backup Schedule

Name
Daily-1

Type
Daily

Start backup
at 15 : 41

Stop
until full backup completed

☒ Run Retention Policy after backup

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

New Backup Schedule

Name
Weekly-1

Type
Weekly

Backup on these days of the week
☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☒ Sat

Start backup
at 23 : 00

Stop
until full backup completed

☒ Run Retention Policy after backup

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

New Backup Schedule

Name
Monthly-1

Type
Monthly

Backup on the following day every month
☒ Day Last
☐ First Sunday

Start backup at
23 : 59 on the selected days

Stop
until full backup completed

☒ Run Retention Policy after backup

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

New Backup Schedule

Name
Custom-1

Type
Custom

Backup on the following day once
2019 December 31

Start backup at
23 : 59

Stop
until full backup completed

☒ Run Retention Policy after backup

• **Start backup** – the start time of the backup job.

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

Start backup
every 1 minute

Stop
until full ba

☒ Run Rete

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

Start backup
every 1 minute

Stop
until full ba

☒ Run Rete

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

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

New Backup Schedule

Name
Weekly-1

Type
Weekly

Backup on these days of the week
☐ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☐ Sat

Start backup
every 4 hours

Stop
until full backup completed

☒ Run Retention Policy after backup

New Backup Schedule

Name
Weekly-2

Type
Weekly

Backup on these days of the week
☒ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☒ Sat

Start backup
at 21 : 00

Stop
until full backup completed

☒ Run Retention Policy after backup

Figure 1.1

Figure 1.2

Figure 1.1 – Periodic schedule every 4 hours Monday - Friday during business hours

Figure 1.2 – Normal schedule run at 21:00 or 9:00 PM daily on Saturday & Sunday on weekend during non-business hours

- **Stop** – the stop **time** of the backup job. This only applies to schedules with start backup “at” and is not supported for periodic backup schedule (start backup “every”)
- **until full backup completed** – this option will stop a backup job once it is complete. This is the configured stop time of the backup job by default.
- **after (defined no. of hrs.)** – this option will stop a backup job after a certain number of hours regardless of whether the backup job has completed or not. This can range from 1 to 24 hrs.

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

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

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

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

- **Run Retention Policy after backup** – if enabled, the AhsayACB will run a retention policy job to remove files from the backup destination(s) which have exceeded the retention policy after performing a backup job.

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





Click the **[Next]** button to proceed. Multiple backup schedules can be created.

Schedule

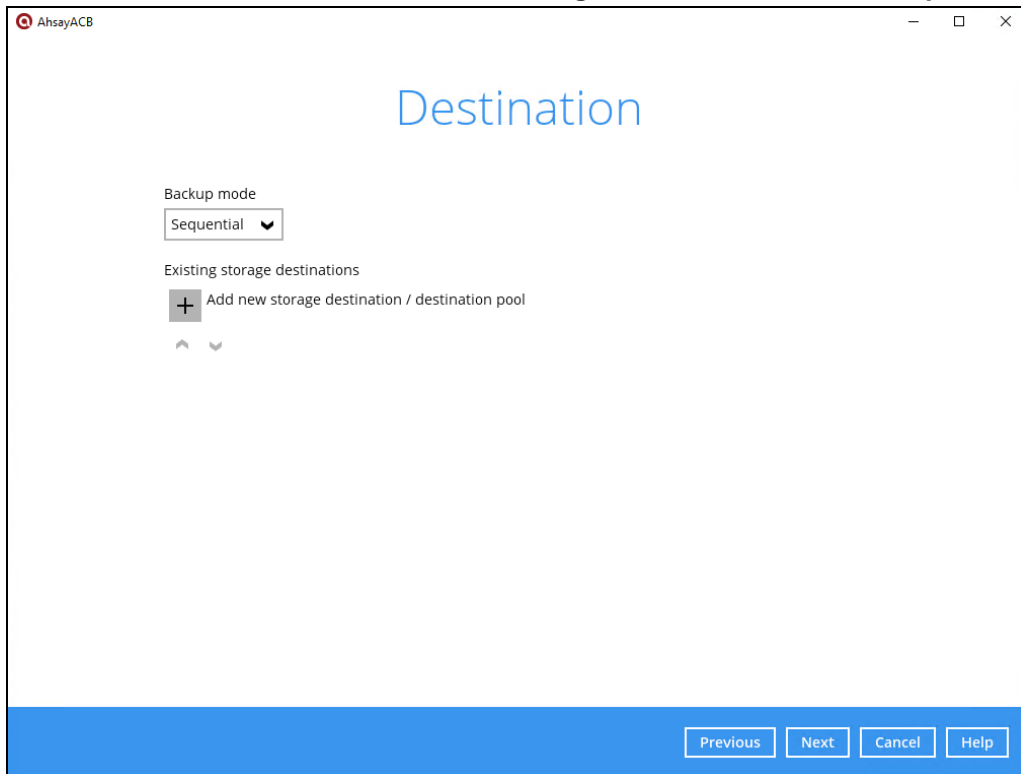
Run scheduled backup for this backup set

On ☒

Existing schedules

-  **Daily-1**
Daily (Every 4 hours)
-  **Weekly-1**
Weekly - Saturday (Every 6 hours)
-  **Monthly-1**
Monthly - The Last Day (Every month at 20:00)
-  **Custom-1**
Custom (12/31/2020 at 21:00)

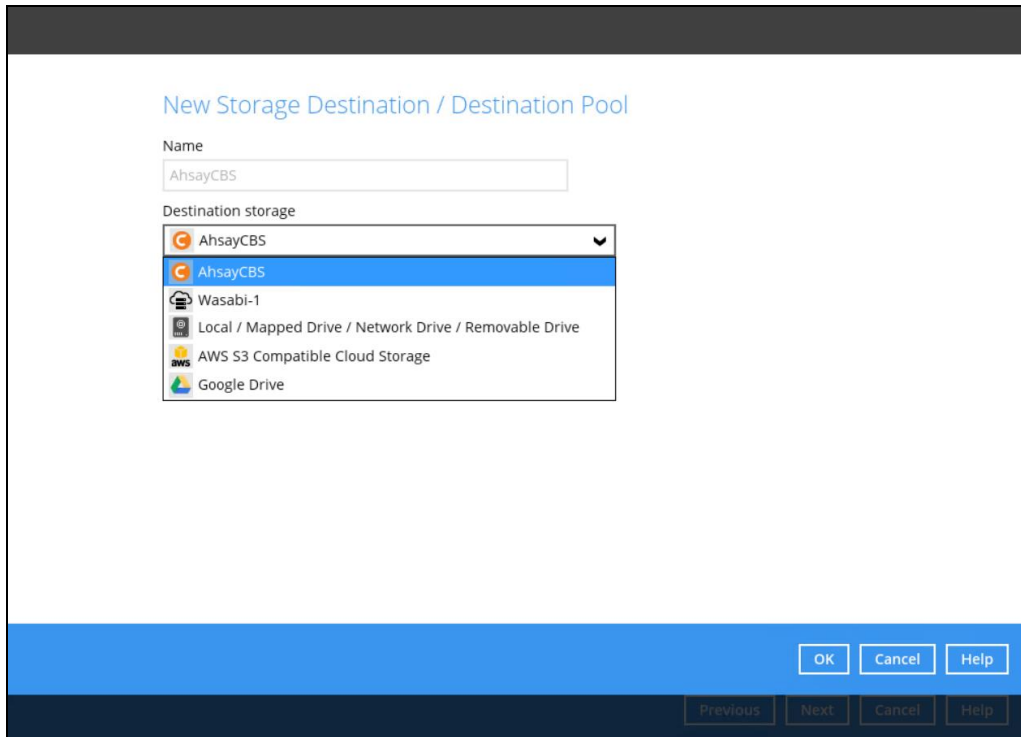
6. In the Destination menu, select a backup destination where the backup data will be stored. Click the “+” icon next to **Add new storage destination / destination pool**.



NOTE

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

7. Select storage destinations.



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

- If you have chosen the **Local / Mapped Drive / Network 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.

New Storage Destination / Destination Pool

Name
Local-1

Destination storage
Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])
\\[redacted]\\Users\\Administrator\\Documents\\Sample: Change

☐ This share requires access credentials

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name
Local-1

Destination storage
Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])
\\[redacted]\\Users\\Administrator\\Documents\\Sample: Change

☒ This share requires access credentials

User name (e.g. domain\\username)
Administrator

Password
.....

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name

Local-1

Destination storage

Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])

\\[REDACTED]\Users\Administrator\Documents\SampleS

Change

☒ This share requires access credentials

User name (e.g. domain\username)

Administrator

Password

Testing access to destination...

OK

Cancel

Help

Previous

Next

Cancel

Help

New Storage Destination / Destination Pool

Name

Local-1

Destination storage

Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])

\\[REDACTED]\Users\Administrator\Documents\SampleS

Change

☒ This share requires access credentials

User name (e.g. domain\username)

Administrator

Password

Test completed successfully

OK

Cancel

Help

Previous

Next

Cancel

Help

- If you have chosen the **AWS S3 Compatible Cloud Storage**, select from the destination storage then click **OK**. Enter the required details and click **Test** to validate. **Test completed successfully** shows when the validation is done.

New Storage Destination / Destination Pool

Name
AWSCompatible-1

Destination storage
AWS S3 Compatible Cloud Storage

Host Port

Access Key ID

Secret Access Key

Bucket Name (please create this bucket manually first)

☐ Connect with SSL/TLS

☐ Access the Internet through proxy

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name
AWSCompatible-1

Destination storage
AWS S3 Compatible Cloud Storage

Host Port
s3.us-west-1.wasabisys.com 443

Access Key ID
N8QKJZ39ELCJ9C3CINBW

Secret Access Key
••••••

Bucket Name (please create this bucket manually first)
kmtmanila

☒ Connect with SSL/TLS

☐ Access the Internet through proxy

Test

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name

Destination storage

Host Port

Access Key ID

Secret Access Key

Bucket Name (please create this bucket manually first)

☒ Connect with SSL/TLS
☐ Access the Internet through proxy

Testing access to destination...

OK Cancel Help

Previous Next Cancel Help

New Storage Destination / Destination Pool

Name

Destination storage

Host Port

Access Key ID

Secret Access Key



Bucket Name (please create this bucket manually first)

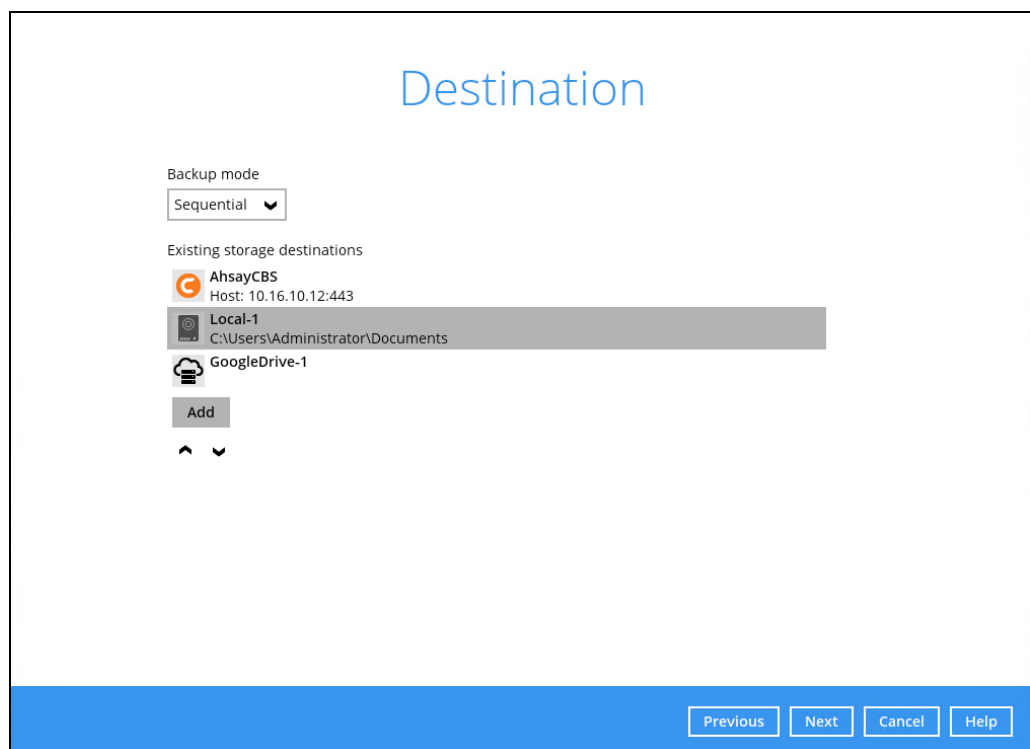
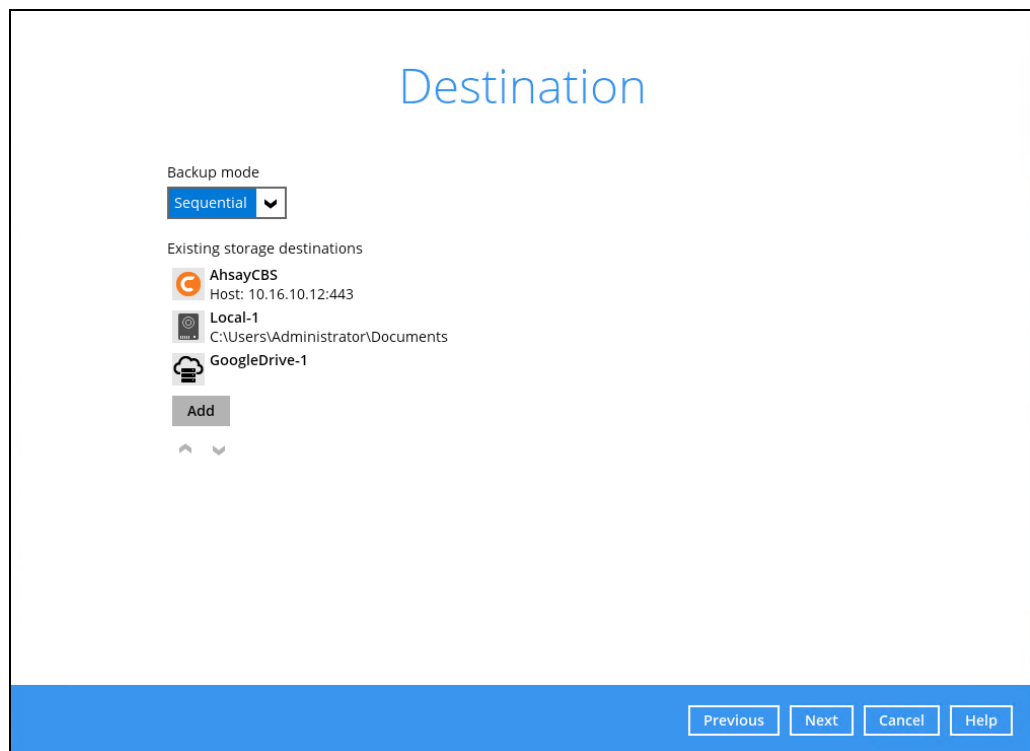
☒ Connect with SSL/TLS
☐ Access the Internet through proxy

Test completed successfully

OK Cancel Help

Previous Next Cancel Help

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.



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

Encryption

Encrypt Backup Data
On ☒

Encryption Type
 Default ▼
 Default
 User password
 Custom

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

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

https://wiki.ahsay.com/doku.php?id=public:5034_best_practices_for_managing_encryption_key

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

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

The screenshot shows a dark-themed window titled "Encryption". Below the title, there are two settings: "Encrypt Backup Data" set to "On" and "Encryption Type" set to "Default". The main content area is light blue and contains a warning message: "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." Below the message is a text input field with masked characters (dots). Underneath the field is the label "Unmask encryption key". At the bottom right, there are two buttons: "Copy to clipboard" and "Confirm".

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

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

This screenshot shows the same "Encryption" pop-up window, but with the "Mask encryption key" option selected. The text input field now displays the actual encryption key: "rcX1MBE4brnZO86eKOp6FeabuuRRI3qDXG9q5uBxF0s=". The label "Mask encryption key" is visible below the field. The "Copy to clipboard" and "Confirm" buttons remain at the bottom right.

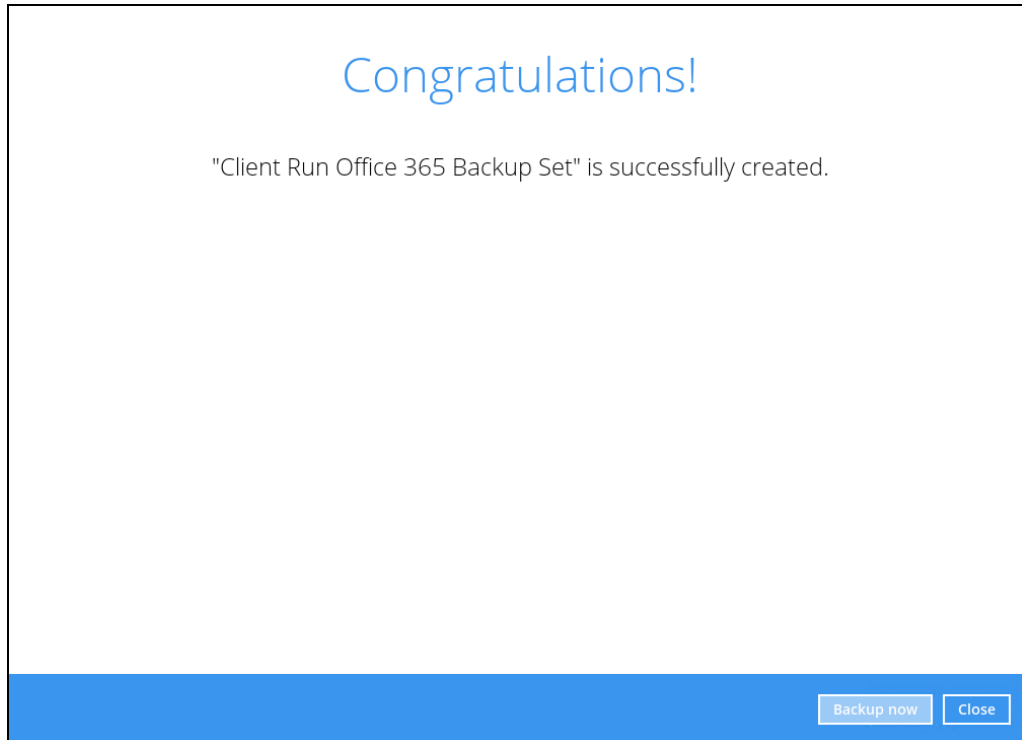
- **Copy to clipboard** – Click to copy the encryption key, then you can paste it in another location of your choice.
- **Confirm** – Click to exit this pop-up window and proceed to the next step.

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

The screenshot shows a "Windows User Authentication" dialog box. It has three input fields: "Domain Name (e.g. Ahsay.com) / Host Name" with the value "local", "User name" with the value "Administrator", and "Password" which is masked with dots. The dialog box has a simple white background with a black border.

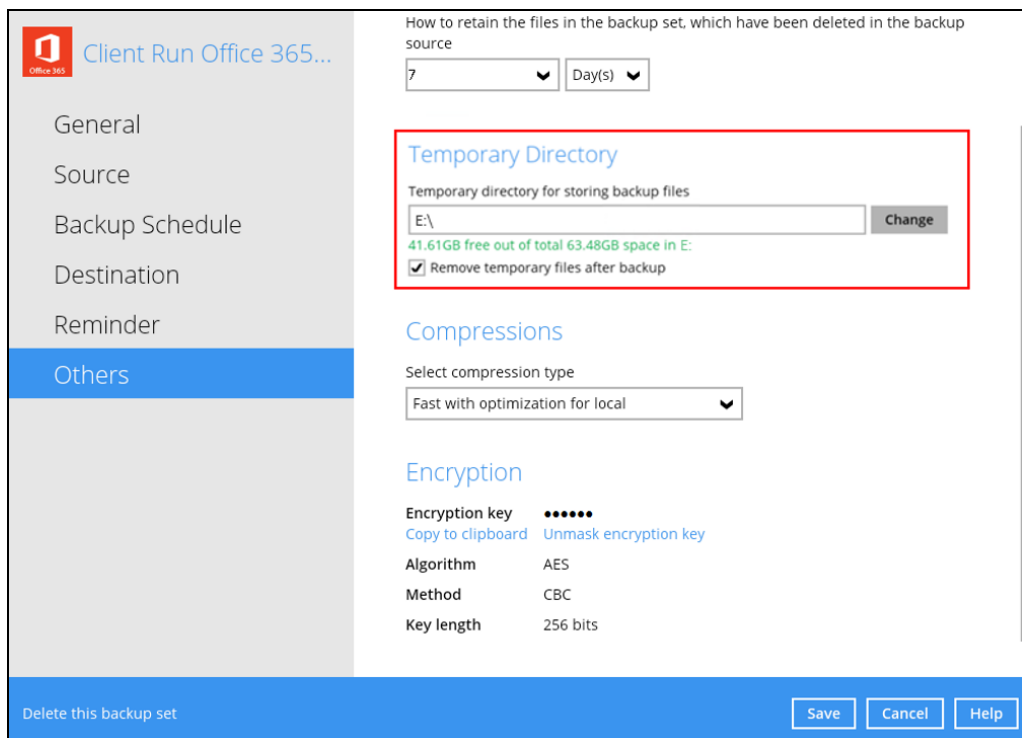
Click **Next** to create the backup set.

10. The following screen is displayed when the new Office 365 backup set is created successfully. Click Close to go back to main screen.



11. Based on [Best Practices and Recommendations](#), it is highly recommended to change the Temporary Directory. Select another location with sufficient free disk space other than Drive C.

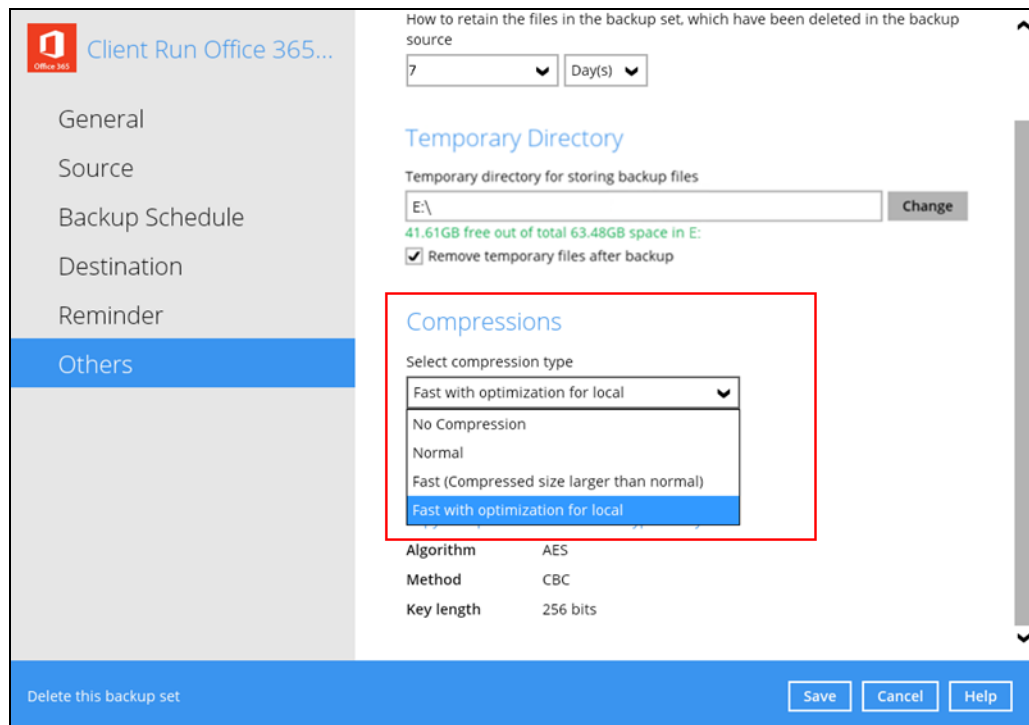
Go to **Others** > **Temporary Directory**. Click **Change** to browse for another location.



12. Optional: Select your preferred **Compression** type. By default, the compression is Fast with optimization for local.

Go to **Others > Compressions**. Select from the following list:

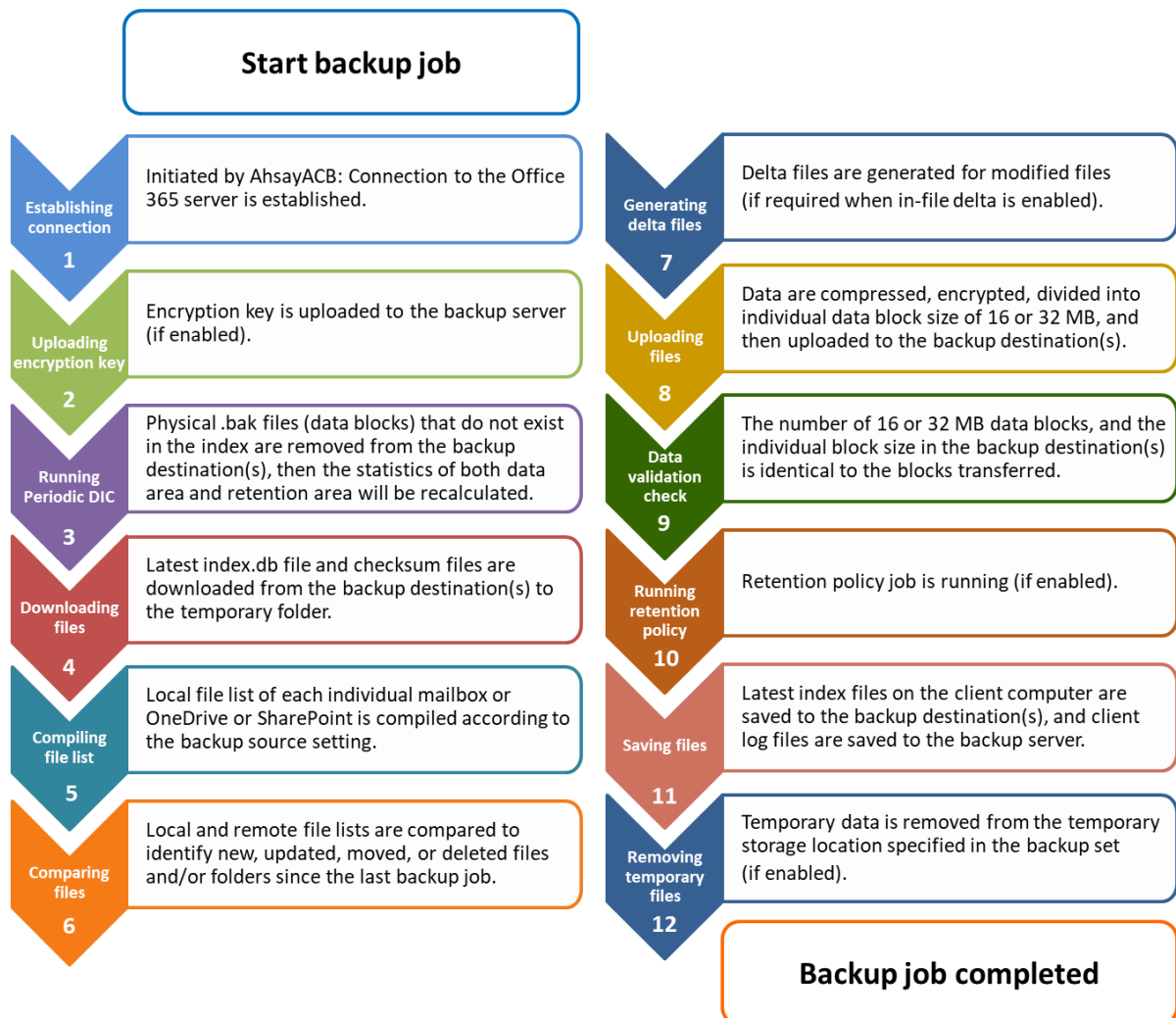
- No Compression
- Normal
- Fast (Compressed size larger than normal)
- Fast with optimization for local



5 Overview of Office 365 Backup Process

The following steps are performed during a backup job. For an overview of the detailed process for Steps 3, 4, 9, and 11, please refer to the following chapters.

- [Periodic Data Integrity Check \(PDIC\) Process \(Step 3\)](#)
- Backup Set Index Handling Process
 - [Start Backup Job \(Step 4\)](#)
 - [Completed Backup Job \(Step 11\)](#)
- [Data Validation Check Process \(Step 9\)](#)



5.1 Periodic Data Integrity Check (PDIC) Process

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

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

PDIC schedule = %BackupSetID% modulo 5

or

%BackupSetID% mod 5

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

0	Monday
1	Tuesday
2	Wednesday
3	Thursday
4	Friday

NOTE: The PDIC schedule cannot be changed.

Example:

Backup set ID: 1594627447932

Calculation: $1594627447932 \bmod 5 = 2$

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

In this example:

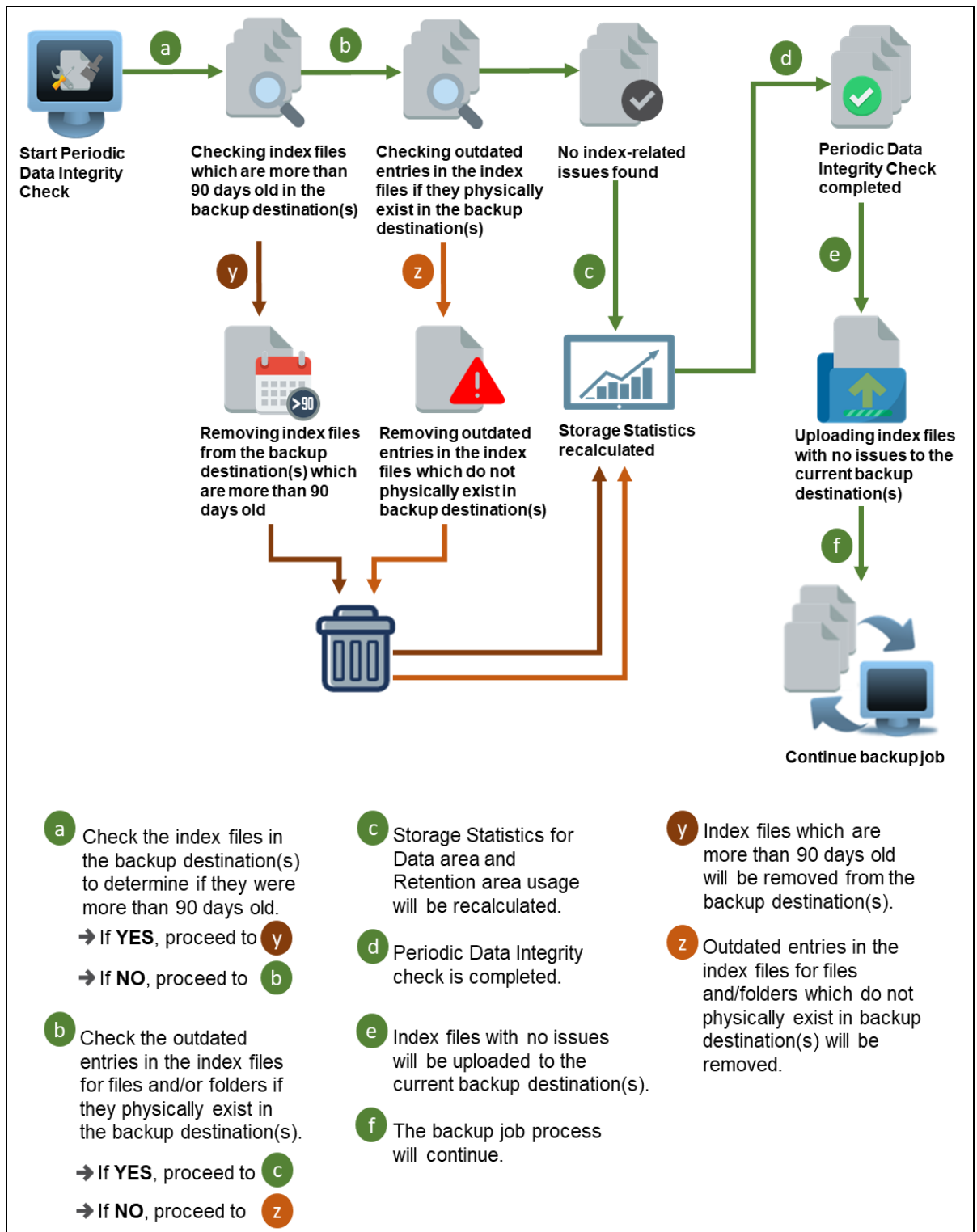
- the PDIC will run on the first backup job that falls on Wednesday; or
- if there is no active backup job(s) running from Monday to Friday, then the PDIC will run on the next available backup job.

NOTE

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

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

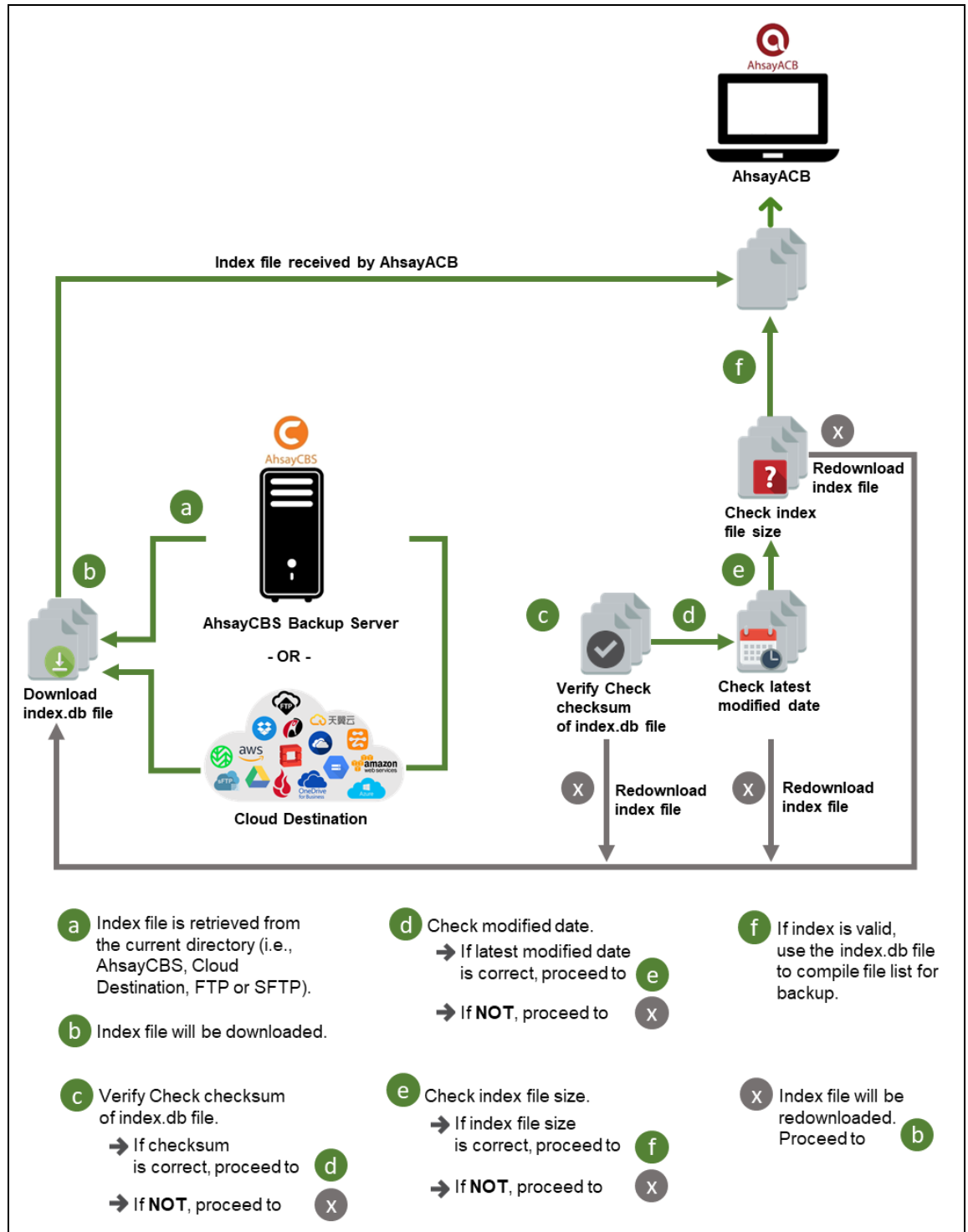
1. If AhsayACB was upgraded to v8.5 (or above) from an older version v6, v7, or pre-8.3.6.0 version. In this case, the PDIC job will run on the first backup job after upgrade.
2. If backup jobs for a backup set are not run on a regular daily backup schedule (for example: on a weekly or monthly schedule), then the PDIC job will run if it detects that the previous PDIC job was run more than 7 days ago.



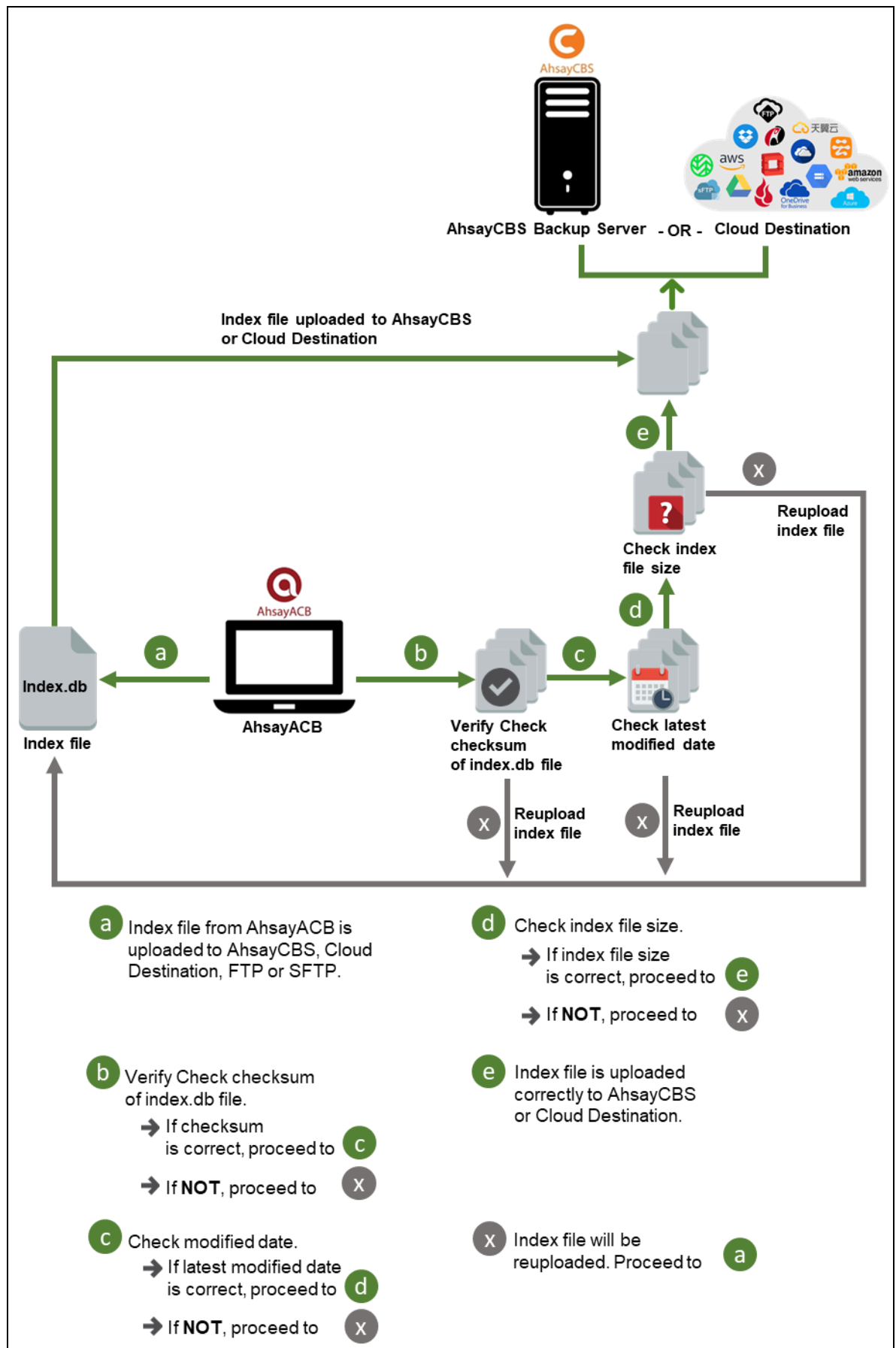
5.2 Backup Set Index Handling Process

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

5.2.1 Start Backup Job

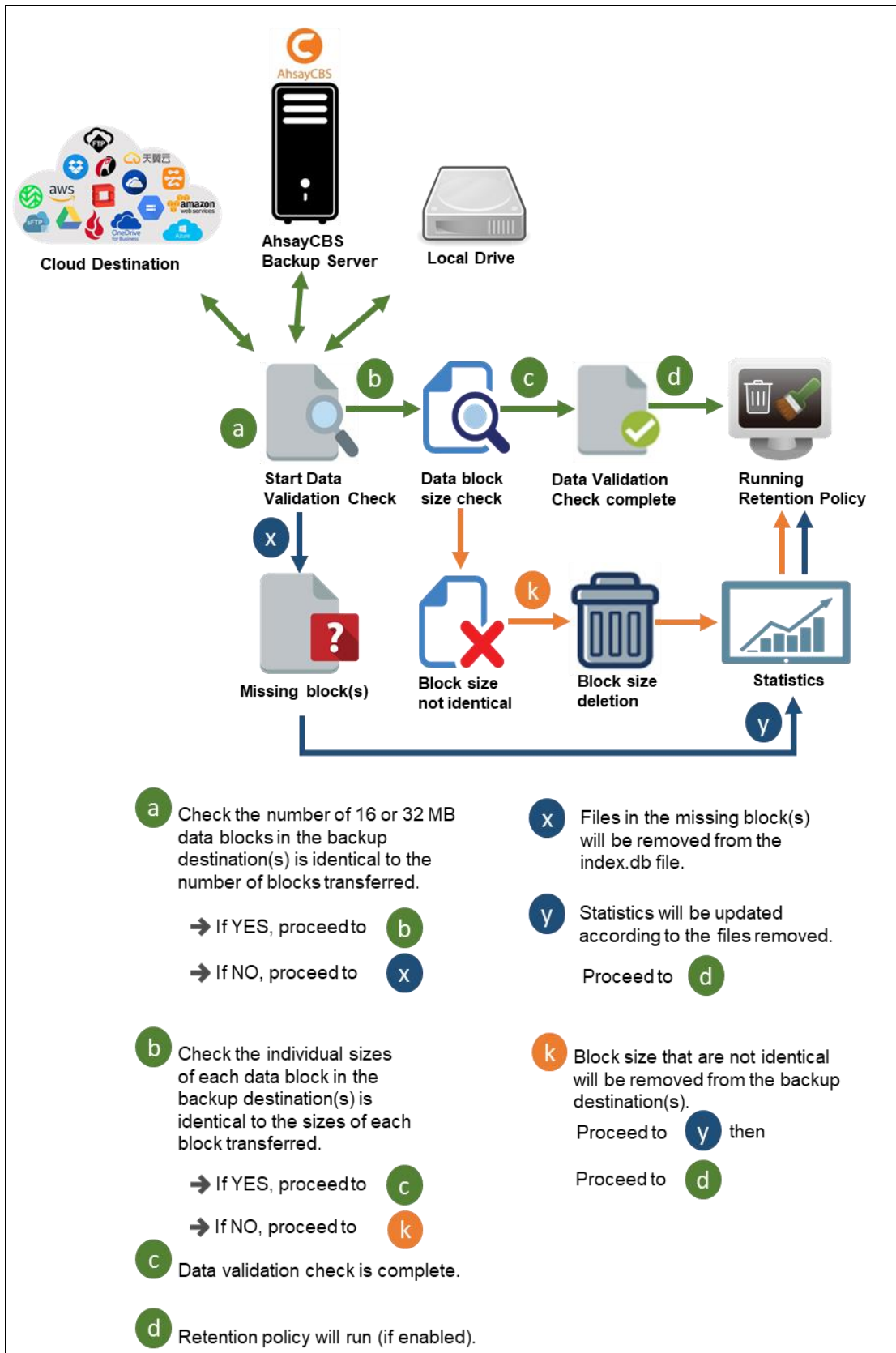


5.2.2 Completed Backup Job



5.3 Data Validation Check Process

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

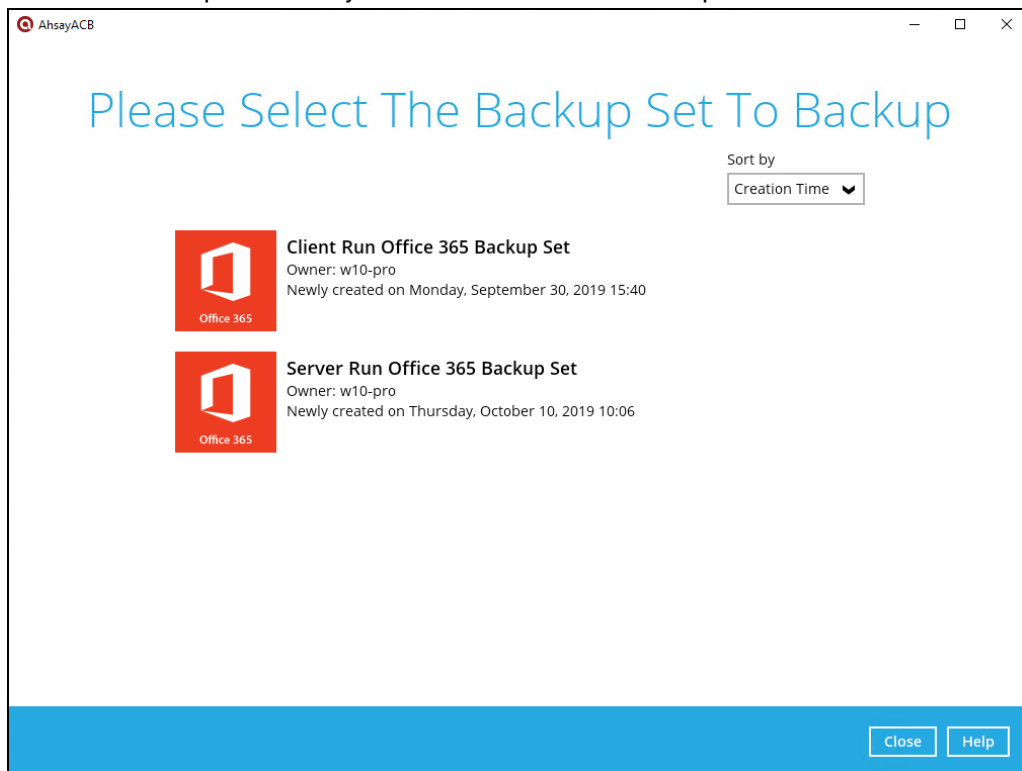


6 Running Backup Job

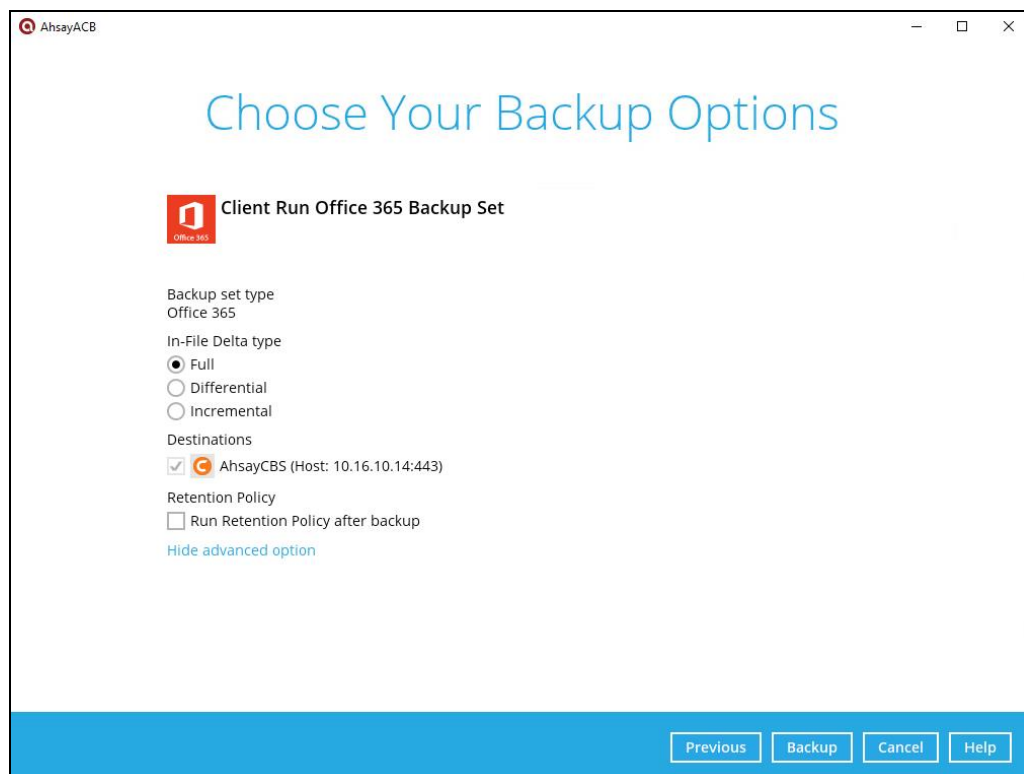
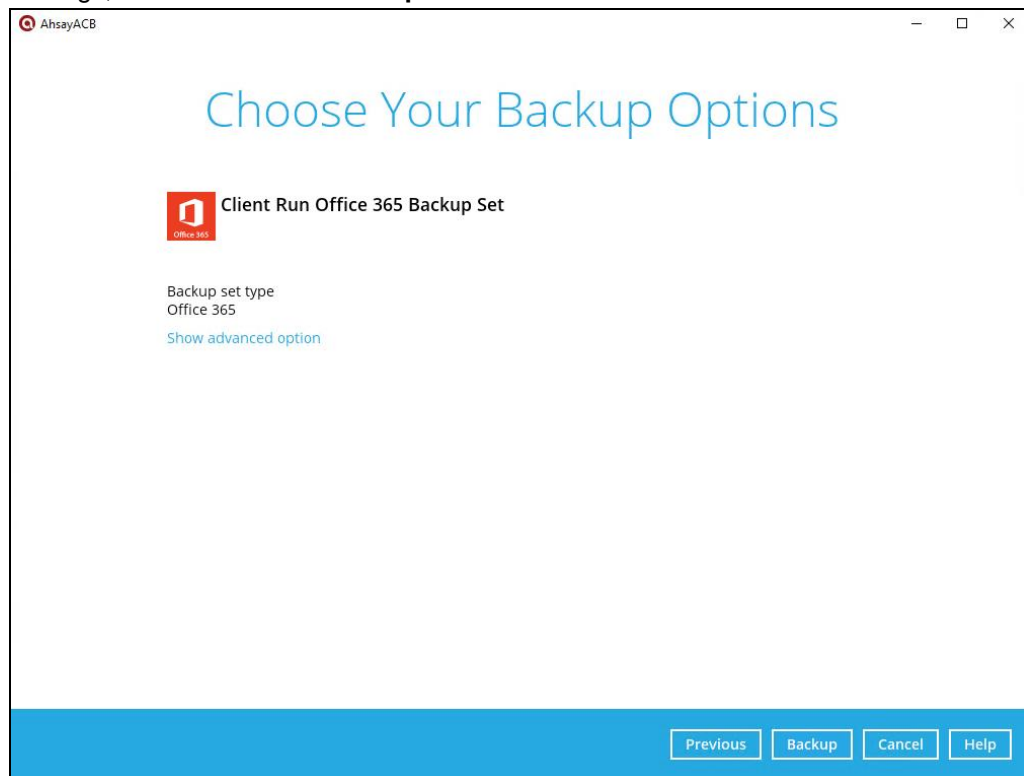
1. Login to AhsayACB according to the instructions in [Login to AhsayACB](#).
2. Click the **Backup** icon on the main interface of AhsayACB.



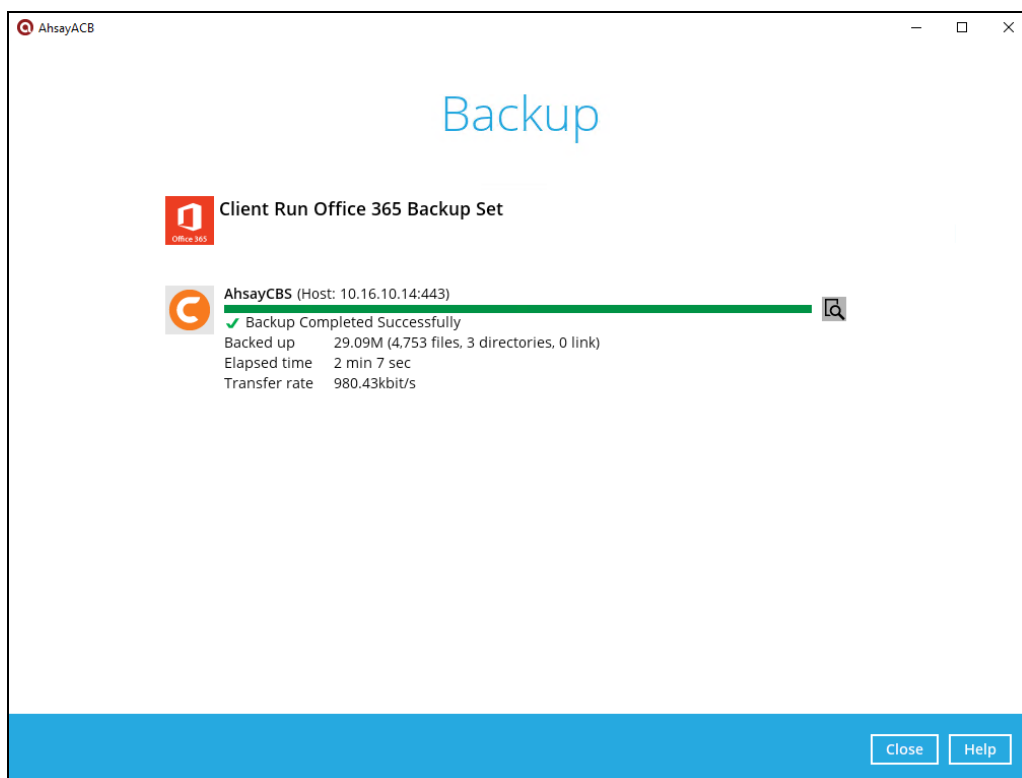
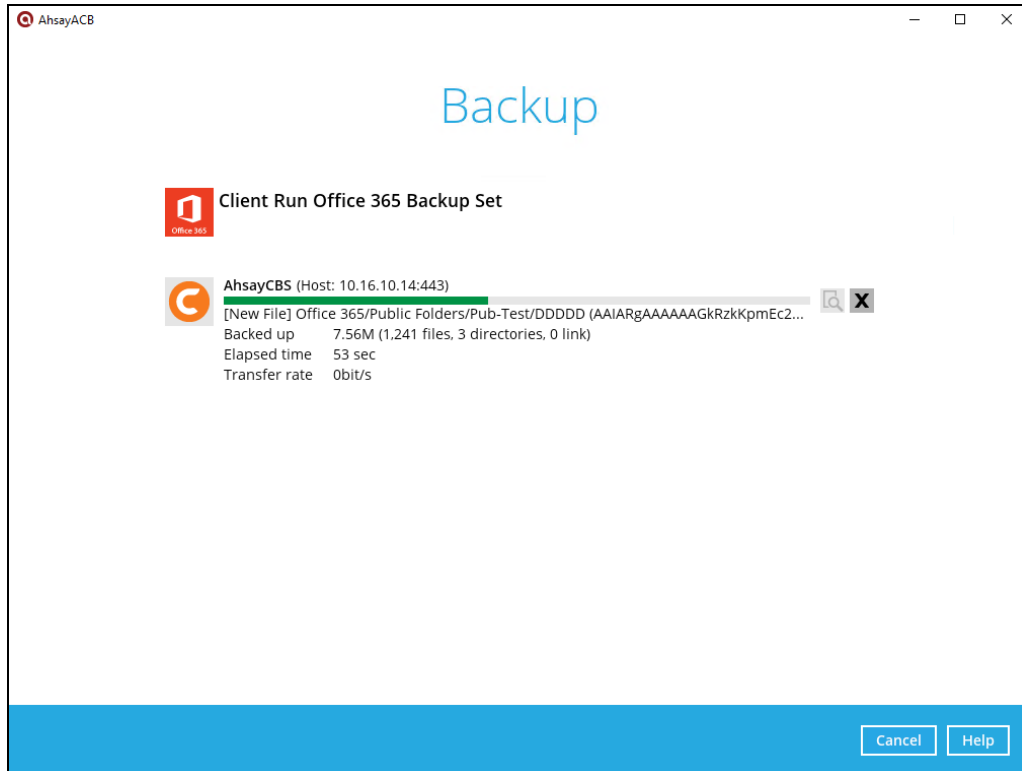
3. Select the backup set which you would like to start a backup for.




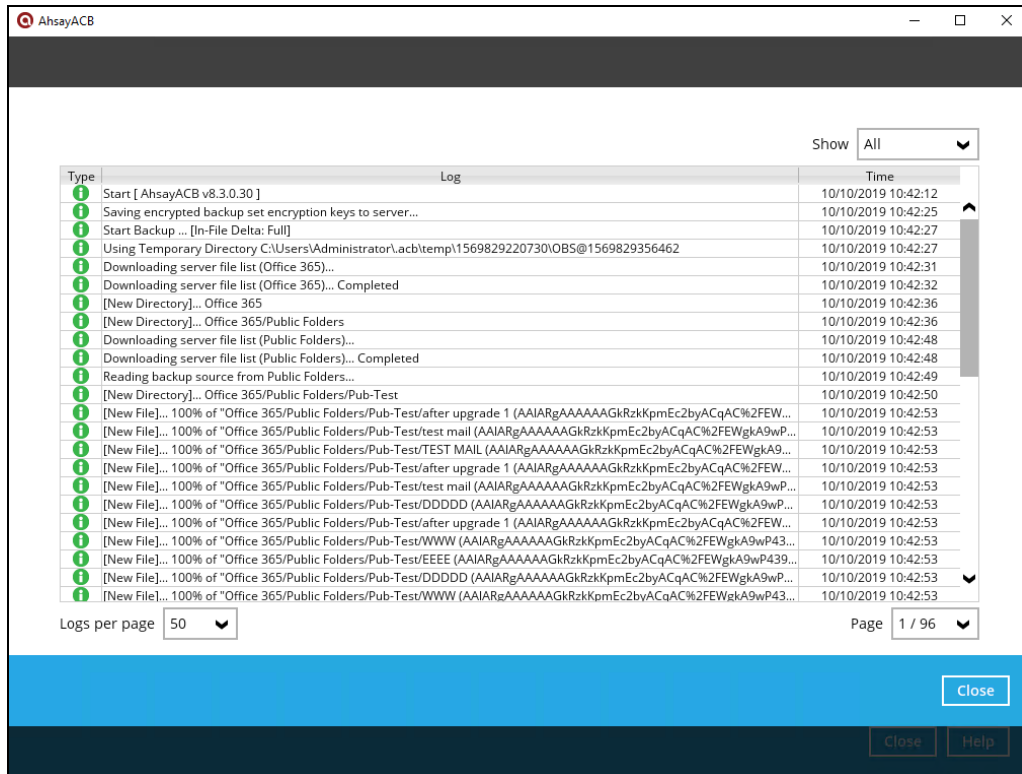
4. If you would like to modify the In-File Delta type, Destinations and Retention Policy Settings, click **Show advanced option**.



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

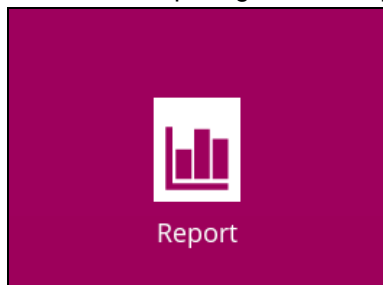


6. Check the log of your backup by clicking this icon . It will show you the log of your backup with corresponding date and time.



Type	Log	Time
[i]	Start [AhsayACB v8.3.0.30]	10/10/2019 10:42:12
[i]	Saving encrypted backup set encryption keys to server...	10/10/2019 10:42:25
[i]	Start Backup ... [In-File Delta: Full]	10/10/2019 10:42:27
[i]	Using Temporary Directory C:\Users\Administrator\acb\temp\1569829220730\OBS@1569829356462	10/10/2019 10:42:27
[i]	Downloading server file list (Office 365)...	10/10/2019 10:42:31
[i]	Downloading server file list (Office 365)... Completed	10/10/2019 10:42:32
[i]	[New Directory]... Office 365	10/10/2019 10:42:36
[i]	[New Directory]... Office 365/Public Folders	10/10/2019 10:42:36
[i]	Downloading server file list (Public Folders)...	10/10/2019 10:42:48
[i]	Downloading server file list (Public Folders)... Completed	10/10/2019 10:42:48
[i]	Reading backup source from Public Folders...	10/10/2019 10:42:49
[i]	[New Directory]... Office 365/Public Folders/Pub-Test	10/10/2019 10:42:50
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/test mail (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/TEST MAIL (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/test mail (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/DDDDD (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/WWW (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/EEEE (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/DDDDD (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53
[i]	[New File]... 100% of "Office 365/Public Folders/Pub-Test/WWW (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439...)	10/10/2019 10:42:53

To view the report, go to the **Report > Backup**



In this Backup Report screen, you can see the backup set with corresponding destination, completion date and time, and status.

The screenshot shows the AhsayACB Backup Report interface. On the left is a sidebar with 'Report' (selected), 'Backup', 'Restore', and 'Usage'. The main area is titled 'Backup Report' and contains a date range selector (From: 03 Oct 2019, To: 10 Oct 2019) and a 'Go' button. Below this is a table with columns: Backup set, Destination, Completion, and Status. The table shows one entry: 'Client Run Offi...' with destination 'AhsayCBS', completion time 'Today 10:44', and status 'Completed'. At the bottom, there are controls for 'No. of records per page' (set to 50) and 'Page' (1 / 1), along with 'Close' and 'Help' buttons.

Backup set	Destination	Completion	Status
Client Run Offi...	AhsayCBS	Today 10:44	Completed

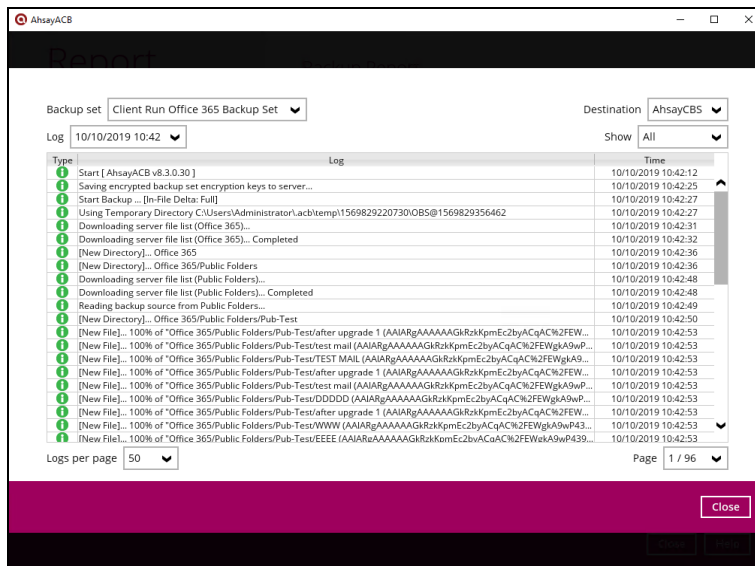
Click the backup report and the summary of the backup will be displayed. You can also click the **View Log**; this will redirect you to the log summary of your backup.

This screenshot shows the detailed backup summary for the selected backup set. The sidebar is the same. The main area displays the following details:

- Backup set:** Client Run Office 365 Backup Set
- Destination:** AhsayCBS
- Job:** 10/10/2019 10:42
- Time:** Today 10:42 - 10:44 (CST)
- Status:** Completed successfully
- New files *:** 4753 [29.1M/29.1M (0%)]
- Updated files *:** 0
- Attributes Changed Files *:** 0
- Moved files *:** 0
- Deleted files *:** 0

* Unit = No of files [Total zipped size / Total unzipped size (compression ratio)]

A 'View log' button is located at the bottom of the summary box. The bottom of the screen features the same pagination and action buttons as the first screenshot.



You can also search for backup reports from a specific period of date. For example, we have the **From** date which is, **01 Oct 2019** and the **To** date which is, **31 Oct 2019**. Then click the **Go** button to generate the available reports.

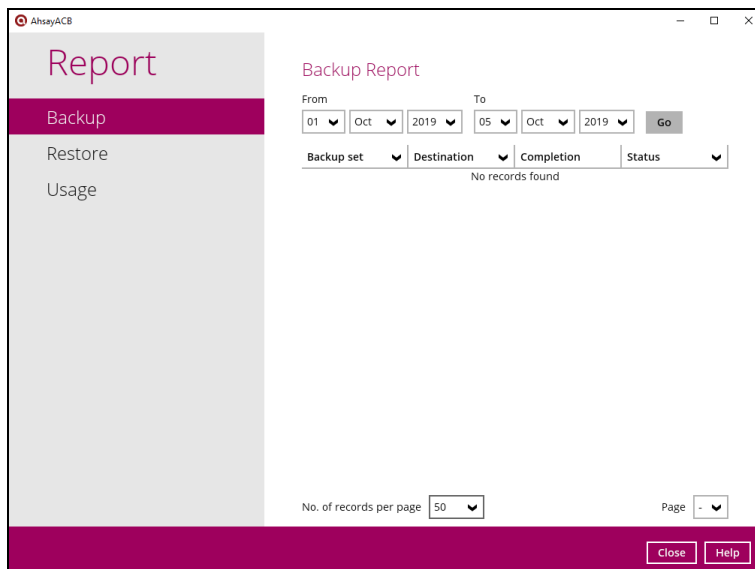
From To

01 Oct 2019 31 Oct 2019 Go

If this is a valid range of dates then backup reports will be displayed unless there were no backup running on the specified dates. A message of **No records found** will also be displayed.

From To

01 Oct 2019 05 Oct 2019 Go



7 Restoring Office 365 Backup Set

Prior to performing the restoration, it is best to be knowledgeable on the options that AhsayACB can offer. Below are brief descriptions of the said features for you to be familiar with and utilize each function. After this quick walkthrough you will see the step-by-step instructions with corresponding screen shots on how to restore your data using the following options below.

For Office 365, you can restore items from,

Outlook

OneDrive

Personal Site

Public Folders

Those items can be restored to,

Local Machine

Restore your data to your local computer where the AhsayACB is running.

Note: This option only applies to restore of items such as files, images, videos, music and more from OneDrive and not items from Outlook mailbox.

Original Location

Restore your data to the original Office 365 account.

Alternate Office 365 Account

Last but not the least, you can restore your data to an alternate Office 365 account that has a different domain.

Example:

Original Office 365 Account: TestAccountABC@onecompany

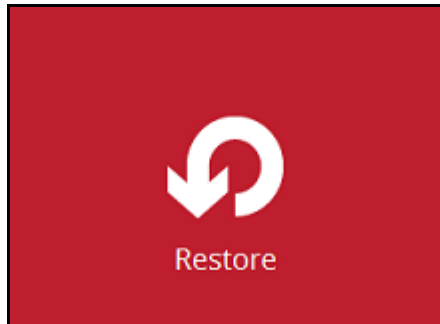
Alternate Office 365 Account: SampleAccountXYZ@twosquaretower

Explanation:

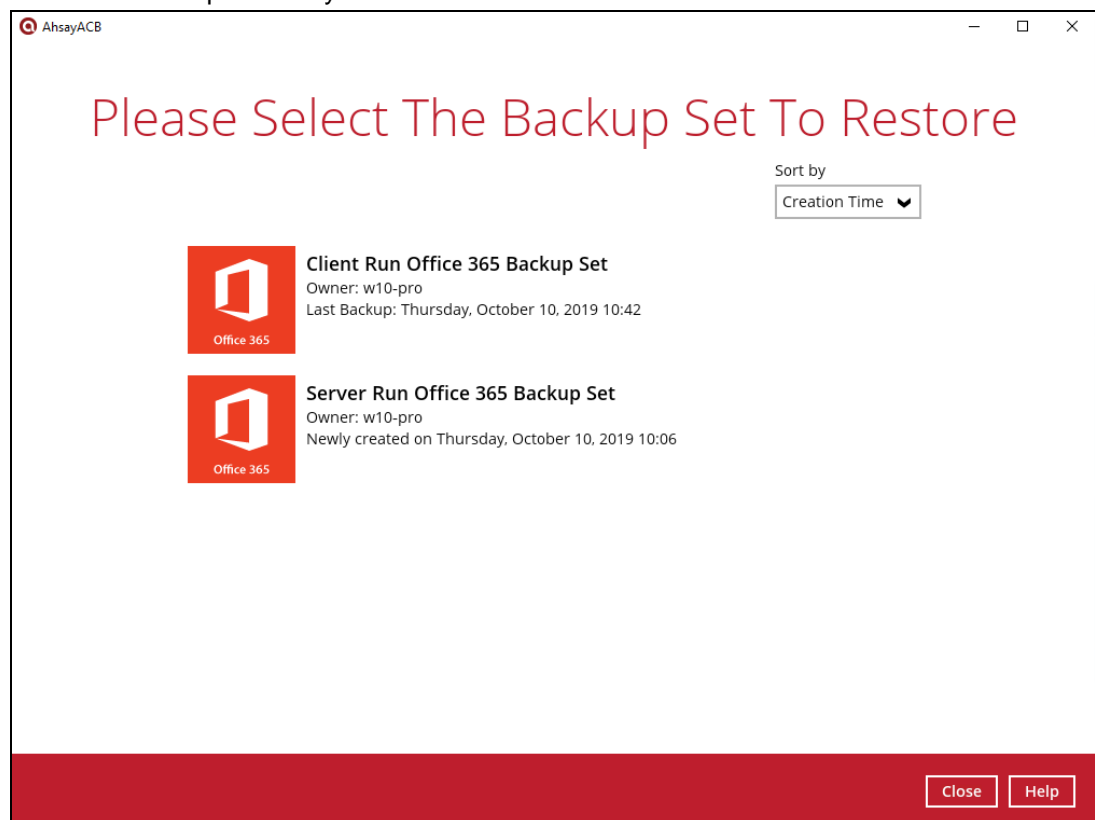
As you can see on the above example, we have two (2) Office 365 accounts with different domain. The Original Office 365 account is what we used as the source of our backup and can also use as the original location for restoration. For the alternate Office 365 account, we need to use another Office 365 account that has a different domain.

7.1 Restore Backup with AhsayACB

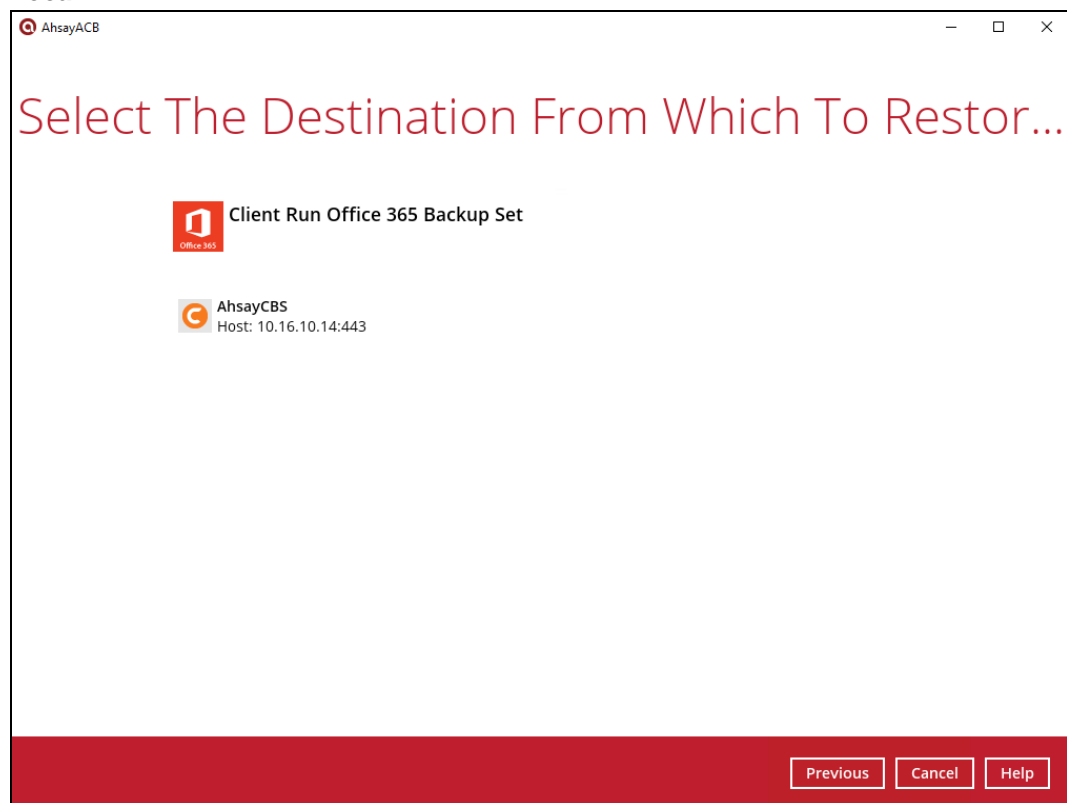
1. Login to AhsayACB according to the instructions in [Login to AhsayACB](#).
2. Click the **Restore** icon on the main interface of AhsayACB.



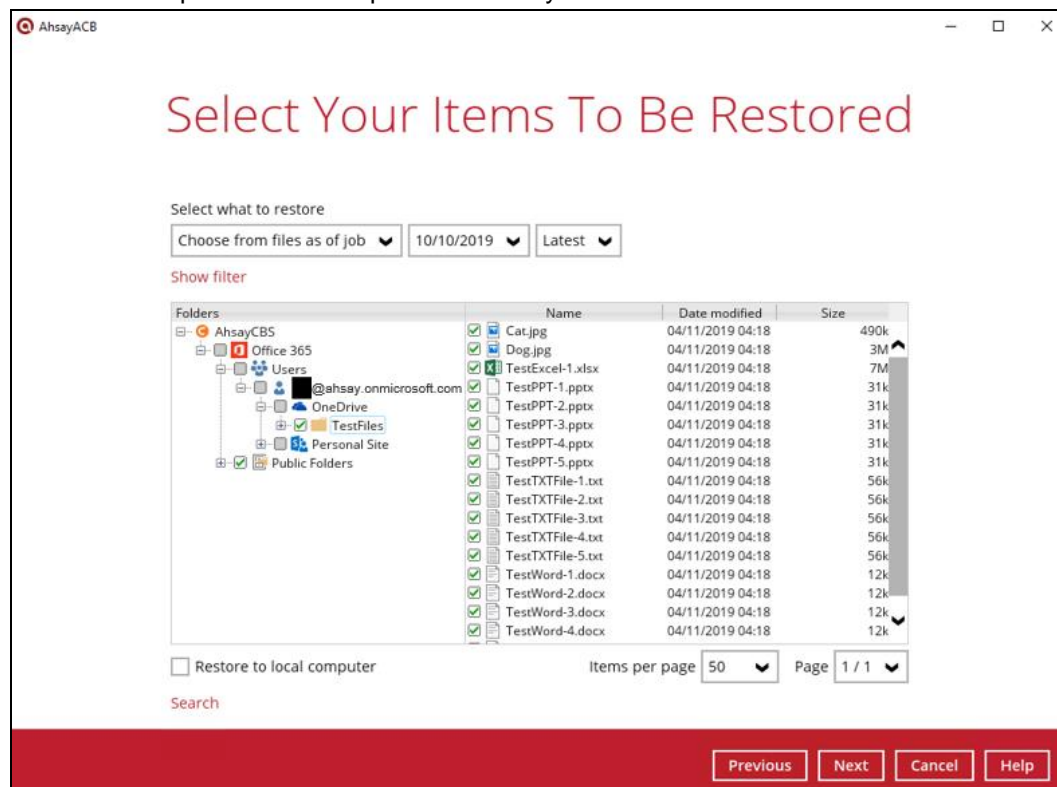
3. Select the backup set that you would like to restore.



4. Select the backup destination that you would like to restore backed-up items to. In our screenshot below, we have three (3) options namely, **AhsayCBS**, **GoogleDrive-1**, and **Local-1**.



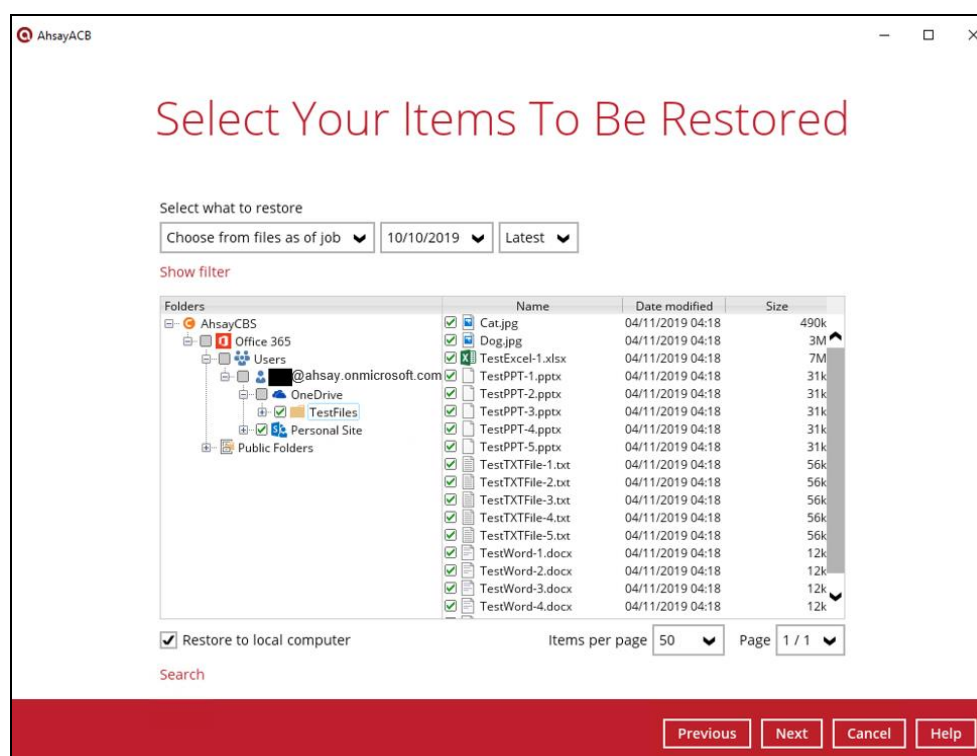
5. Select the item(s) you would like to restore. You can also choose to restore backed up file from a specific backup job of your choice using the **Select what to restore** drop-down menu at the top. Click **Next** to proceed when you are done with the selection.



6. Select the destination you would like the items to be restored.

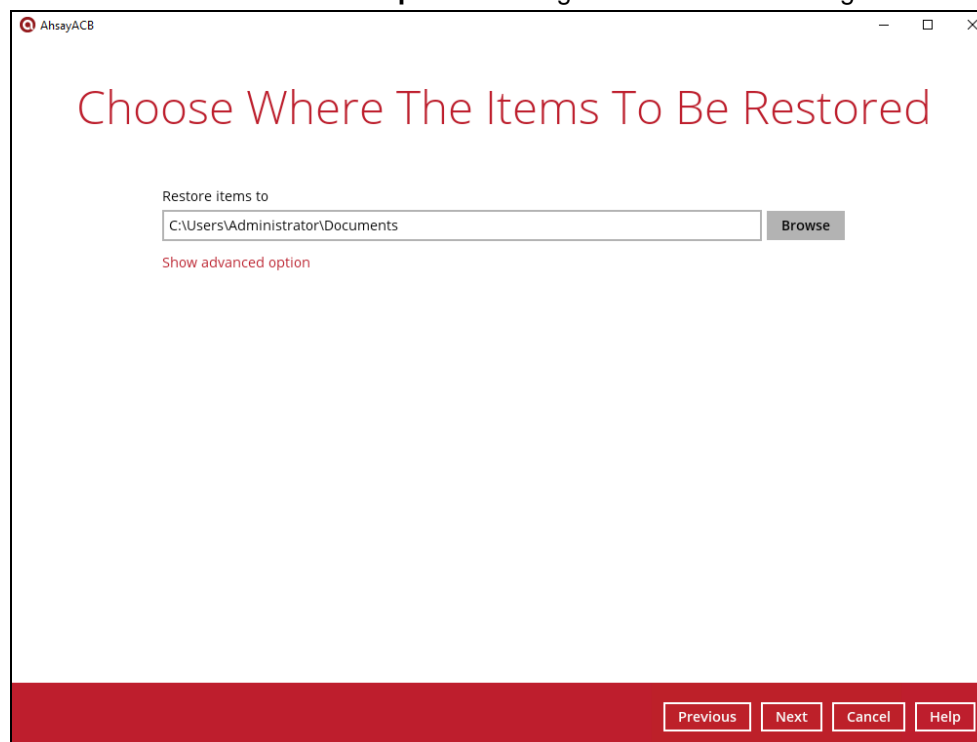
7.1.1 Local machine

Tick the **Restore to local computer** checkbox and click **Next** to proceed.



Click the **Browse** button to select a path on where you want the items to be restored on your local computer. Make sure it has enough space to accommodate your restoration.

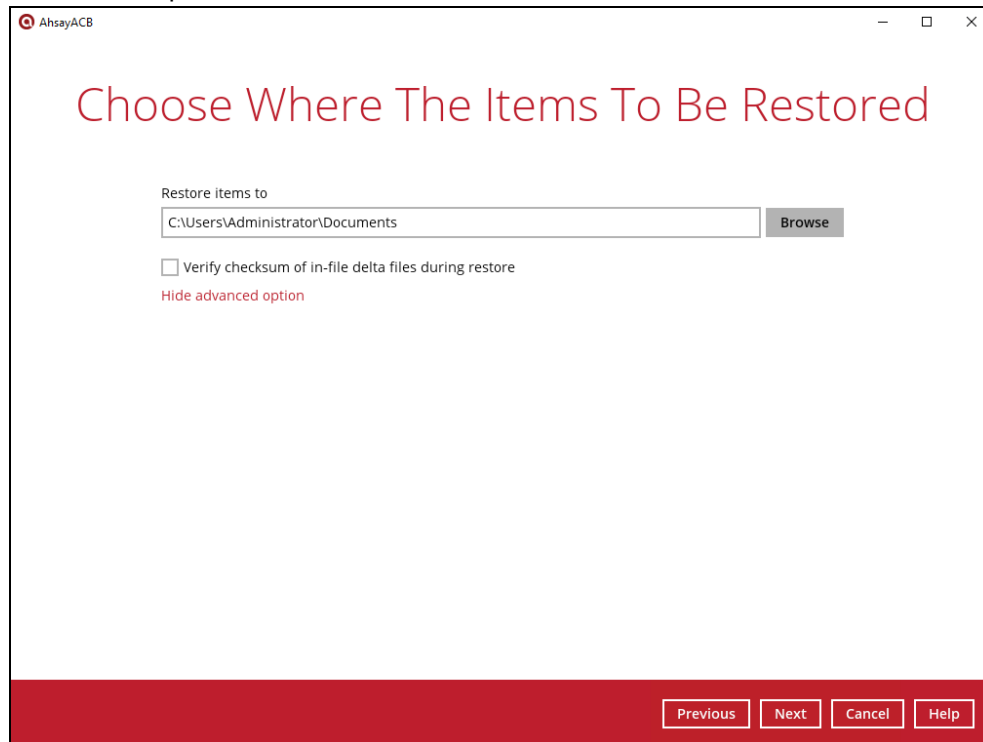
Also click the **Show advanced option** to configure other restore settings.



Verify checksum of in-file delta files during restore

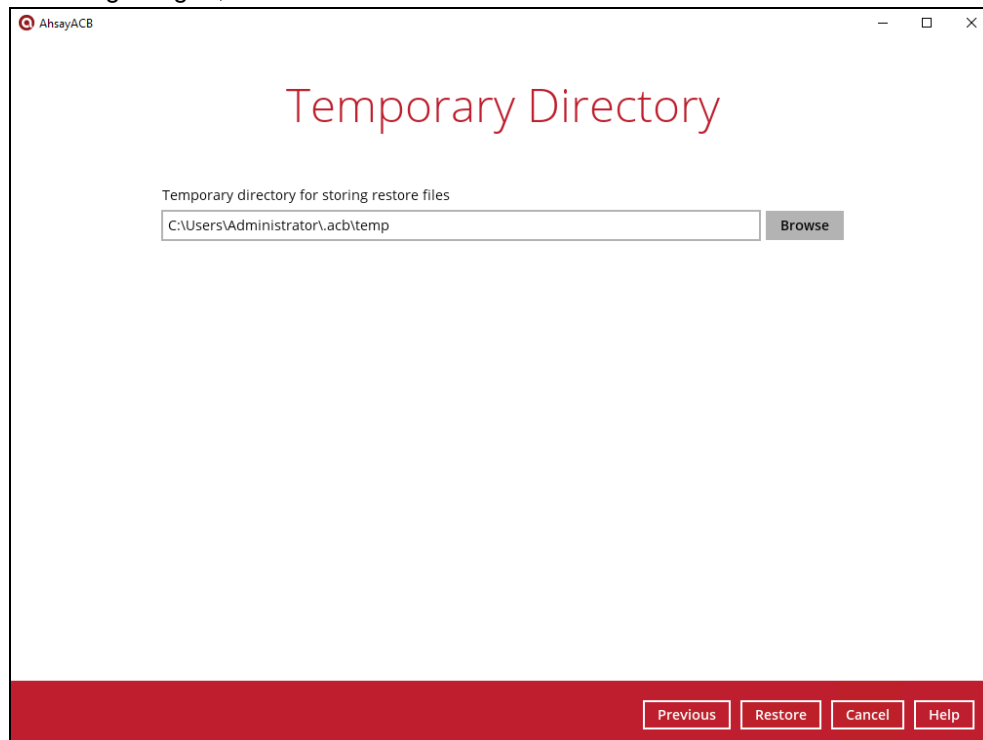
By enabling this option, the checksum of in-file delta files will be verified during the restore process. This will check the data for errors during the restore process and create a data summary of the in-file delta files which will be included in the report.

Click **Next** to proceed.



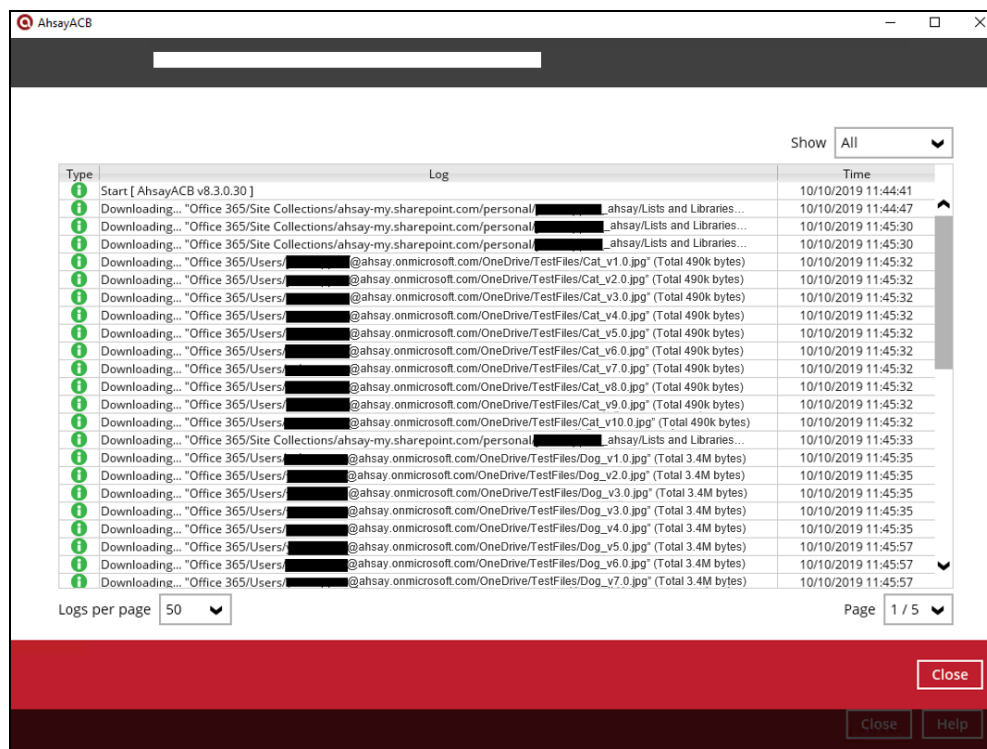
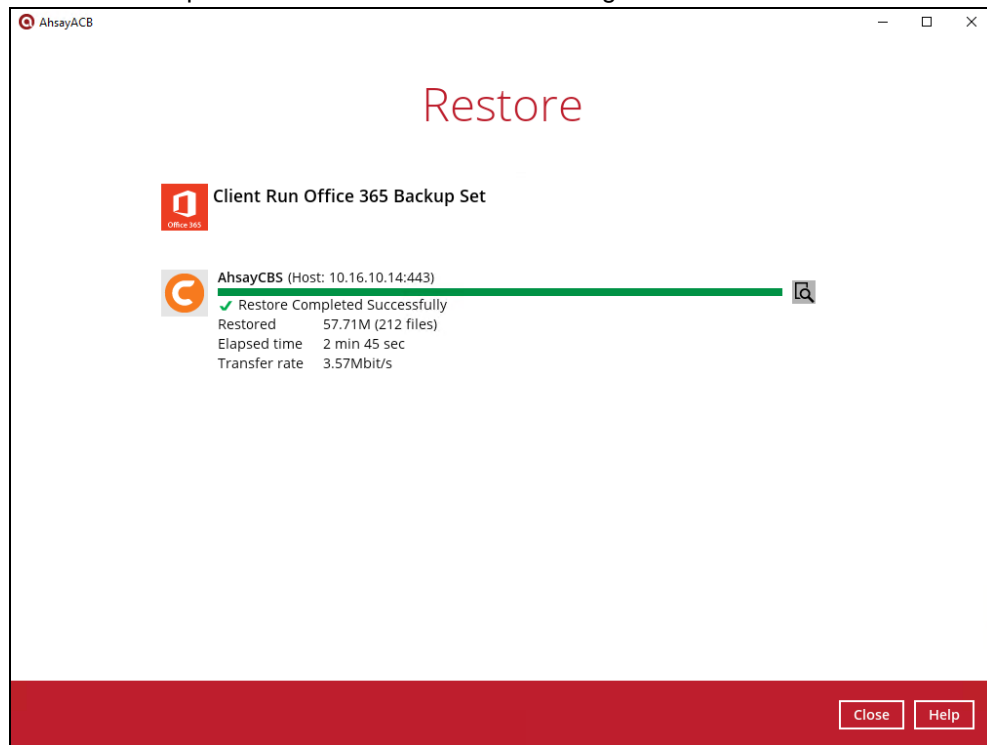
The screenshot shows a window titled "AhsayACB" with the heading "Choose Where The Items To Be Restored". Below the heading, there is a text box labeled "Restore items to" containing the path "C:\Users\Administrator\Documents". To the right of this text box is a "Browse" button. Below the text box, there is a checkbox labeled "Verify checksum of in-file delta files during restore" which is currently unchecked. Below the checkbox is a link labeled "Hide advanced option". At the bottom of the window, there is a red bar containing four buttons: "Previous", "Next", "Cancel", and "Help".

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

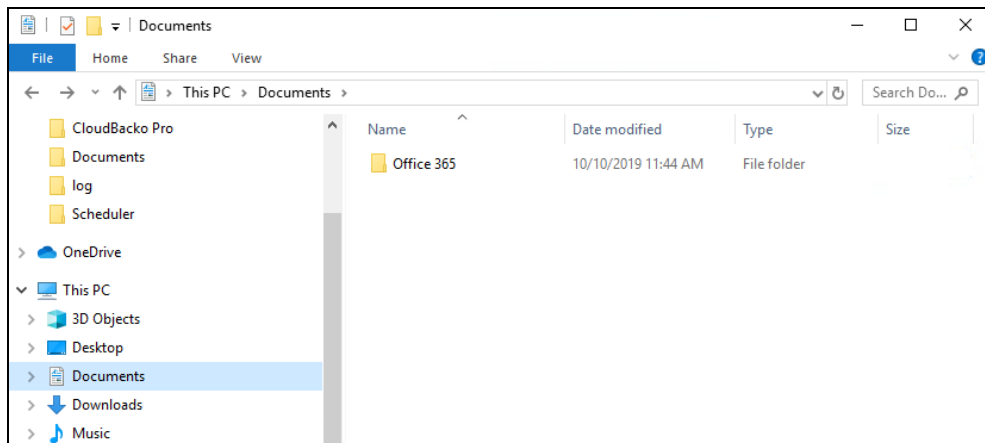


The screenshot shows a window titled "AhsayACB" with the heading "Temporary Directory". Below the heading, there is a text box labeled "Temporary directory for storing restore files" containing the path "C:\Users\Administrator\acb\temp". To the right of this text box is a "Browse" button. At the bottom of the window, there is a red bar containing four buttons: "Previous", "Restore", "Cancel", and "Help".

Restore is completed. Click the  to show the log of the restoration.

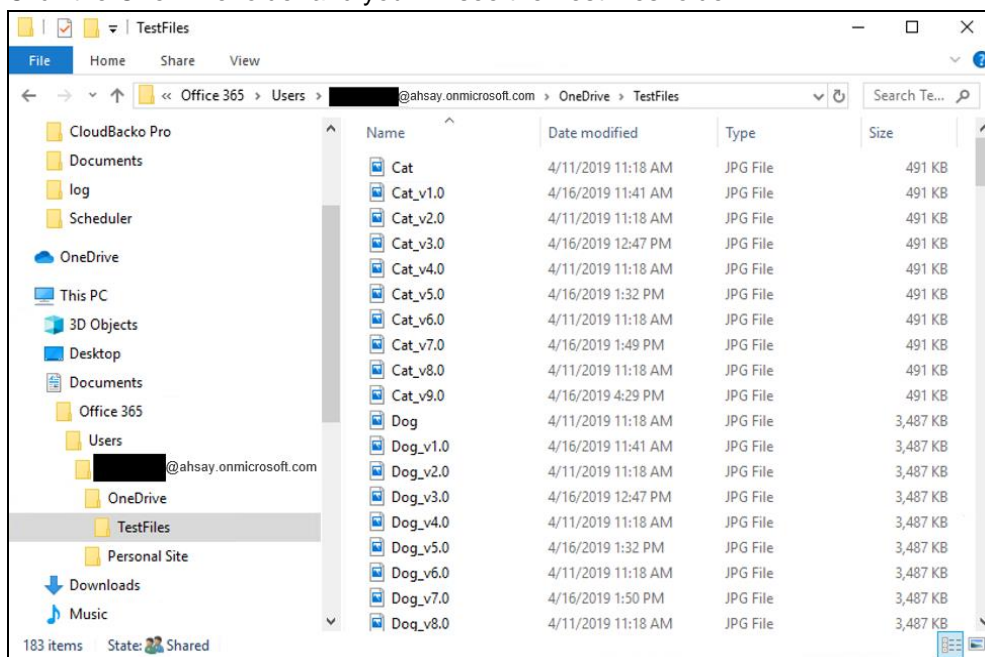


To check if the files from OneDrive are fully restored in the location machine on the selected directory which is **C:\Users\Administrator\Documents**, go to the Documents folder. There should be an available **Office 365** folder.

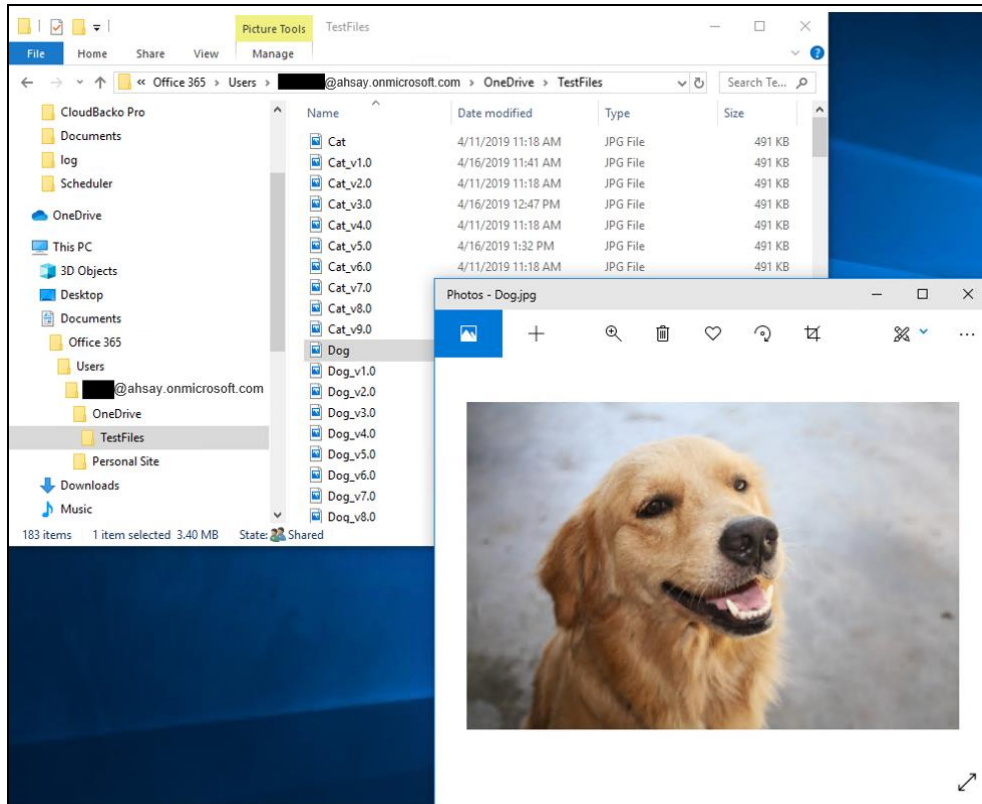


Open the Office 365 folder and you will see a “Users” folder. This includes the selected Office 365 user account which is abc@ahsay.onmicrosoft.com. When you open the Office 365 user account folder, you will see the OneDrive folder.

Click the OneDrive folder and you will see the TestFiles folder.

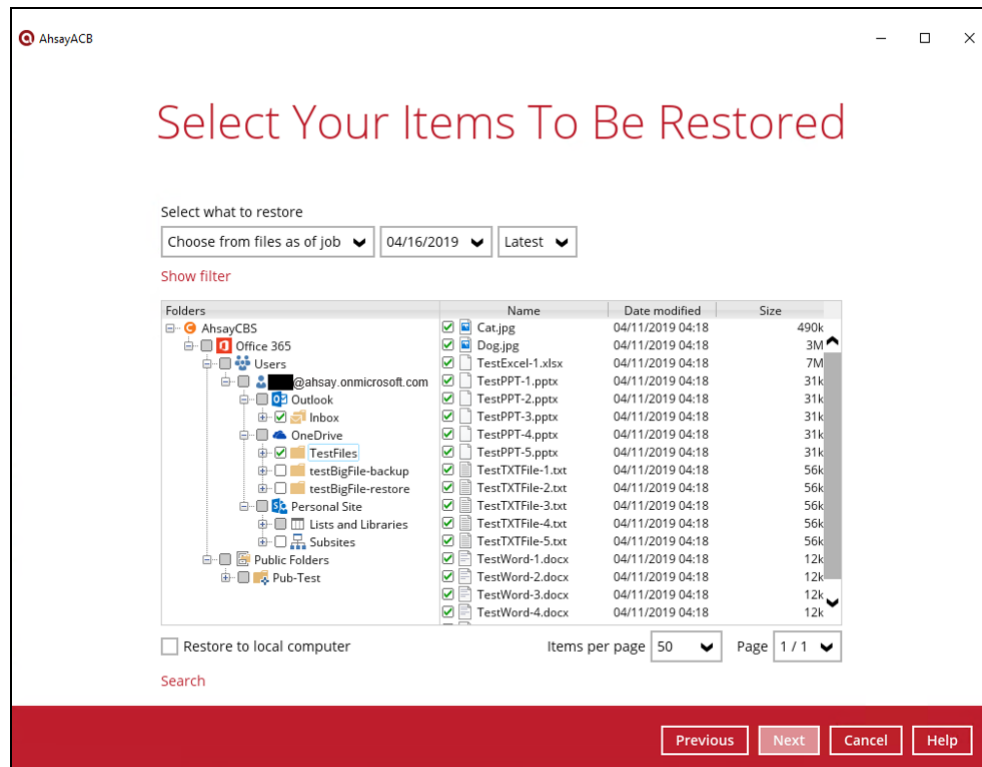


Here is a preview of one of restored files from OneDrive.



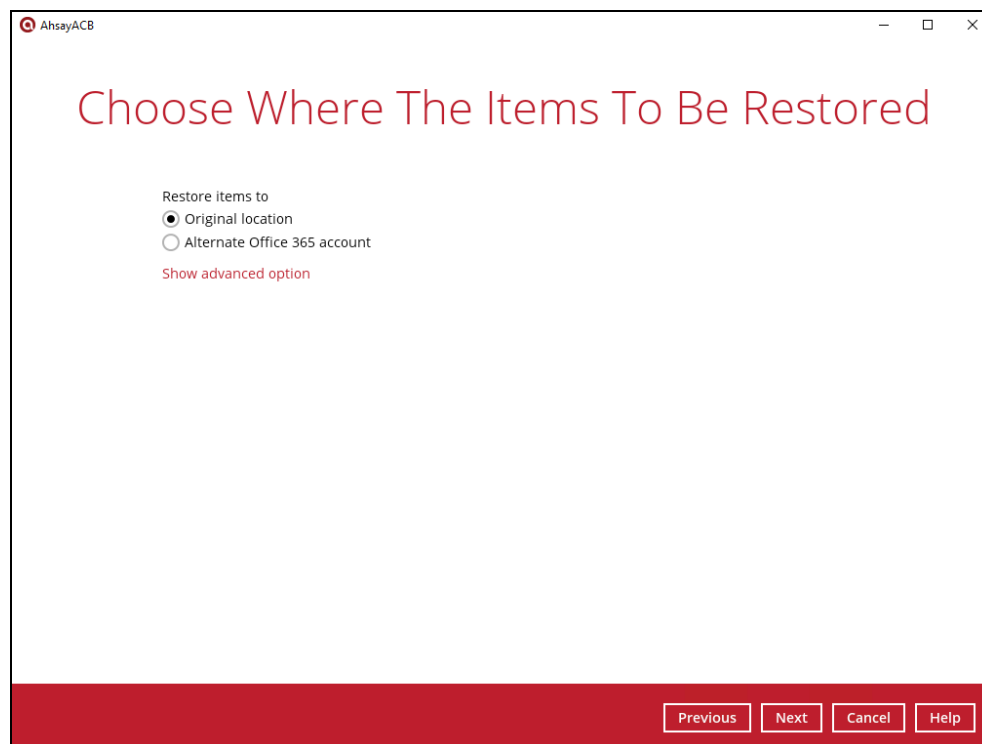
7.1.2 Original Location

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.



Choose from the following two (2) options on where you want your items to be restored. Select the **Original location**.

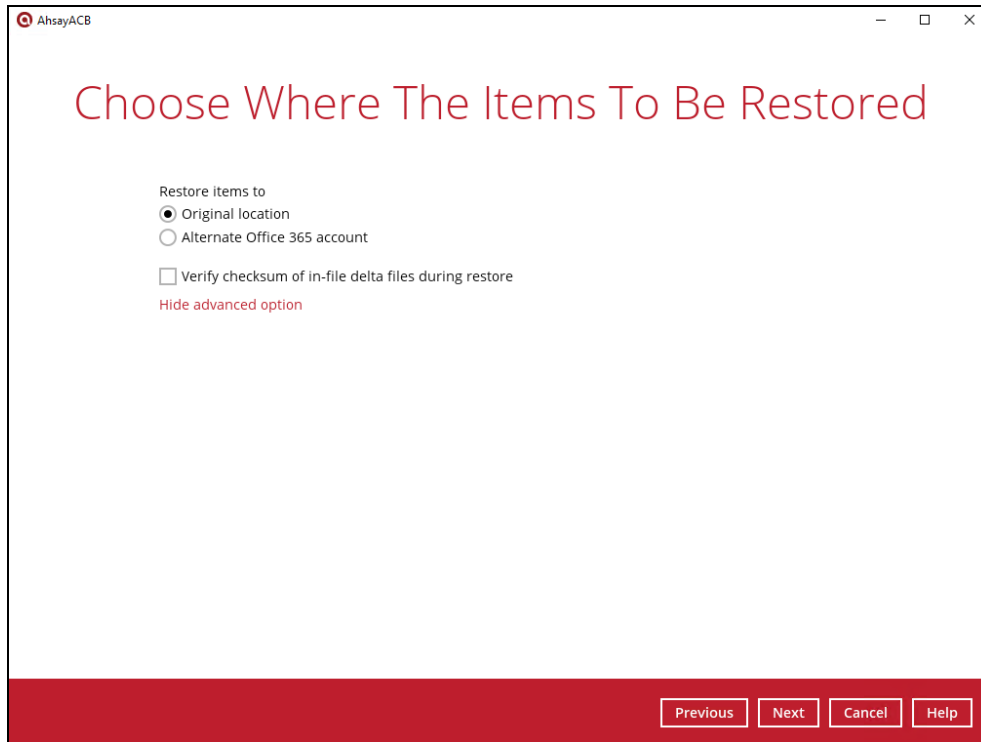
Also click the **Show advanced option** to configure other restore settings.



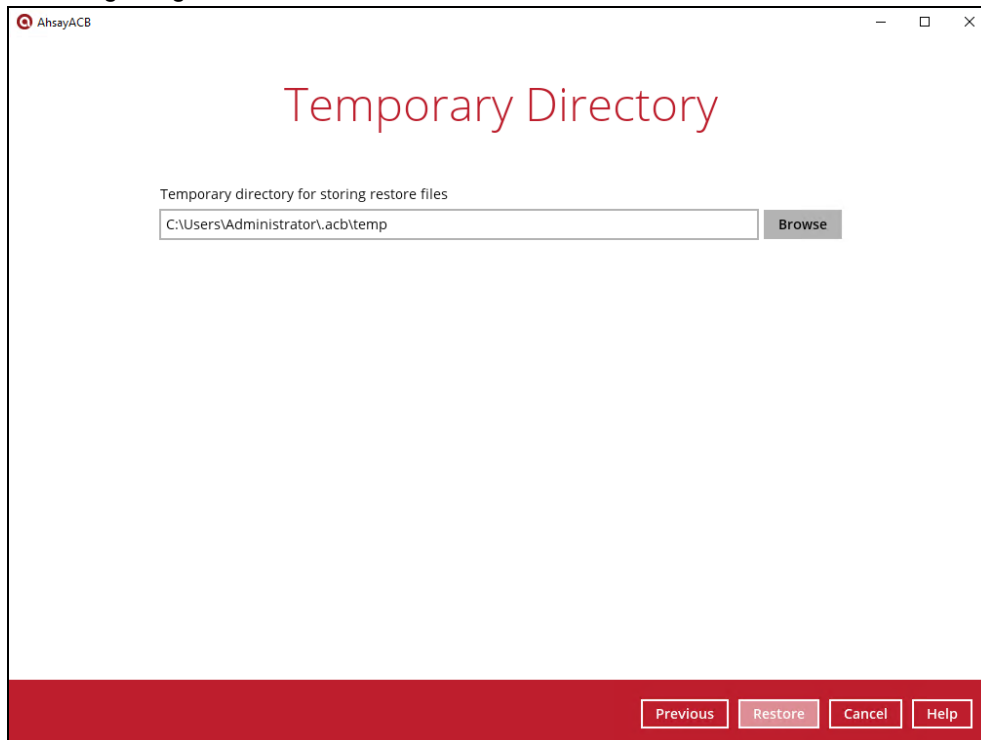
Verify checksum of in-file delta files during restore


By enabling this option, the checksum of in-file delta files will be verified during the restore process. This will check the data for errors during the restore process and create a data summary of the in-file delta files which will be included in the report.


Click **Next** to proceed.






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





Restore is completed. Click the  to show the log of the restoration.


 AhsayACB






Restore




 Client Run Office 365 Backup Set

 AhsayCBS (Host: 10.16.10.12:443)
✓ Restore Completed Successfully
Estimated time left 0 sec
Restored 24.03M (291 files)
Elapsed time 12 min 7 sec
Transfer rate 1.26Mbit/s



 Close  Help




 AhsayACB



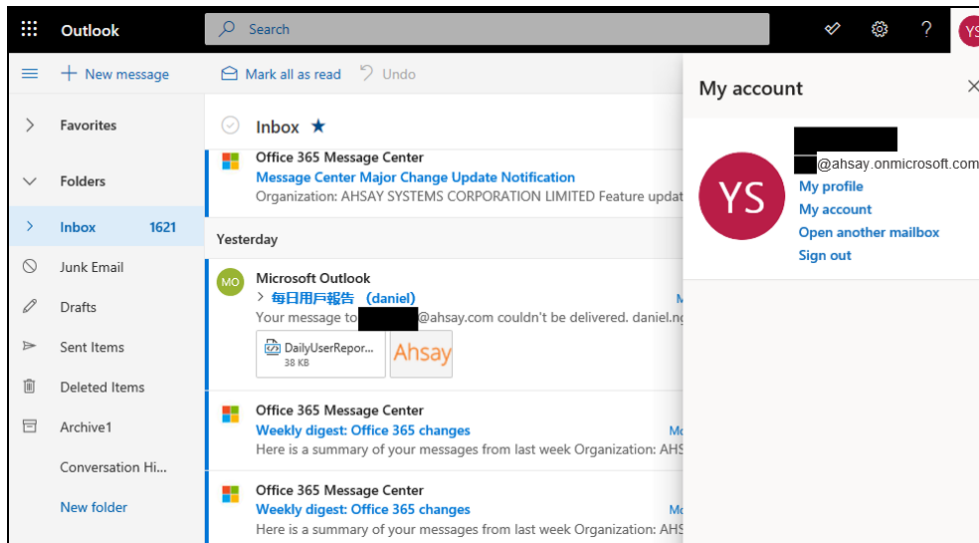
Show All

Type	Log	Time
Start [AhsayACB v8.1.1.50]		04/16/2019 13:38:13
Initializing decrypt action...		04/16/2019 13:38:13
Initializing decrypt action... Completed		04/16/2019 13:38:13
Downloading... "Office 365/Public Folders/Pub-Test/DDDDD (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 13:38:16
Downloading... "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9...		04/16/2019 13:38:22
Downloading... "Office 365/Public Folders/Pub-Test/WWW (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 13:38:23
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/Message Center Major Update Notifica...		04/16/2019 13:38:56
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/Request to Reset Microsoft Online Servi...		04/16/2019 13:39:29
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/welcome to the ahsay onmicrosoft...		04/16/2019 13:39:29
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/Re: Testing 123 (AAMkAGM0ZDI4MTVILWnjZmYt...		04/16/2019 13:39:29
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/Test (AAMkAGM0ZDI4MTVILWnjZmYt...		04/16/2019 13:39:30
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/new 7 (AAMkAGM0ZDI4MTVILWnjZmYt...		04/16/2019 13:39:30
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/new 8 (AAMkAGM0ZDI4MTVILWnjZmYt...		04/16/2019 13:39:31
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/new 9 (AAMkAGM0ZDI4MTVILWnjZmYt...		04/16/2019 13:39:31
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/You've joined the R0_Restore group (AA...		04/16/2019 13:40:44
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/Weekly digest: Office 365 changes (AAM...		04/16/2019 13:41:39
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/New or modified user account information.		04/16/2019 13:41:39
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/New or modified user account information.		04/16/2019 13:41:40
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/Message Center Major Update Notifica...		04/16/2019 13:41:40
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/SharePoint Intranet tool for effective kno...		04/16/2019 13:41:41
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/New or modified user account information.		04/16/2019 13:41:42
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/New or modified user account information.		04/16/2019 13:41:42
Downloading... "Office 365/Users/...@ahsay.onmicrosoft.com/Outlook/Inbox/New or modified user account information.		04/16/2019 13:41:43

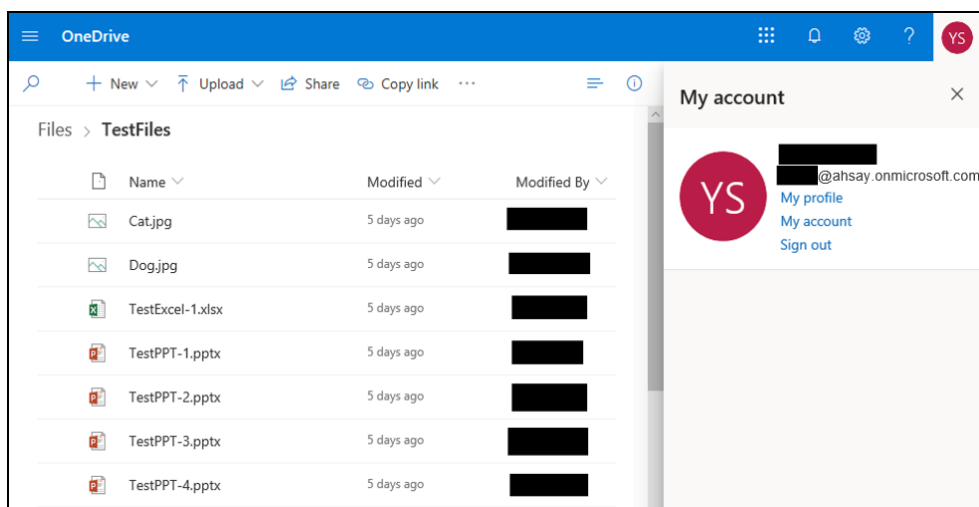
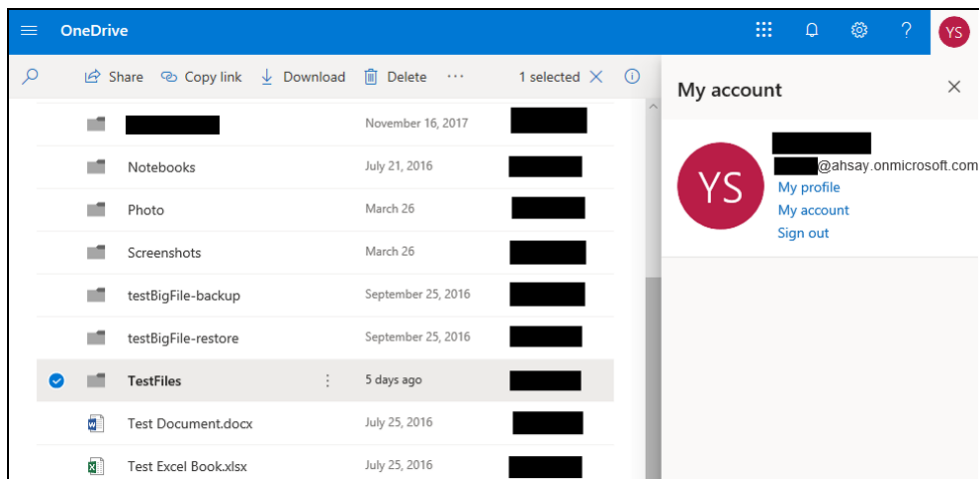
Logs per page 50 Page 1 / 8

 Close  Close  Help

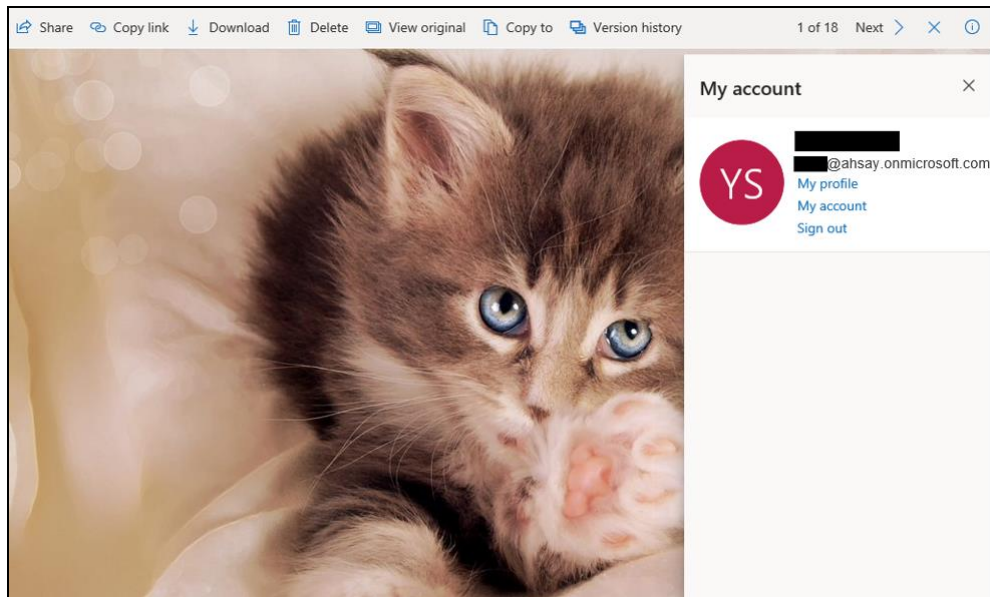
To check if the mails from Outlook, files from OneDrive, sites from Personal Sites, and files and folders from Public Folder are fully restored in the original location, login and check the files. As you can see on our example screen shot below, **YS** is logged in and the **Inbox** from Outlook, **TestFiles** folder from OneDrive, **testfolder** under Personal Sites, and **Pub-Test** folder under Public Folder are available.



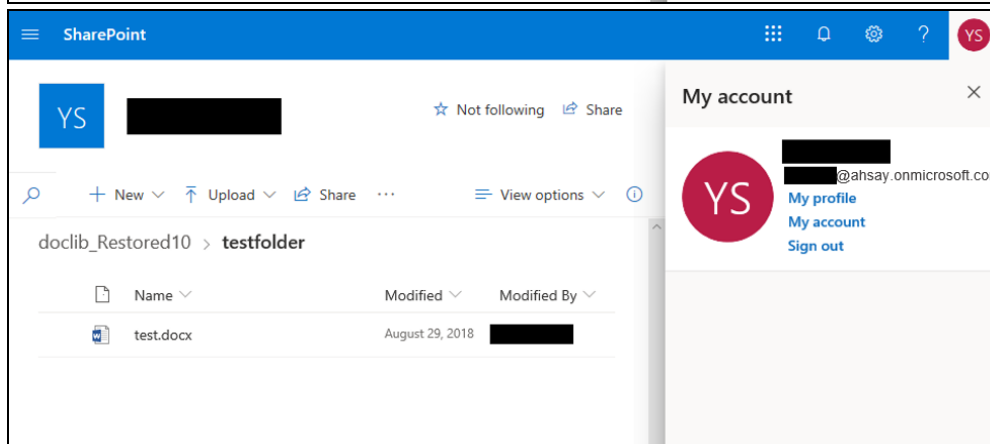
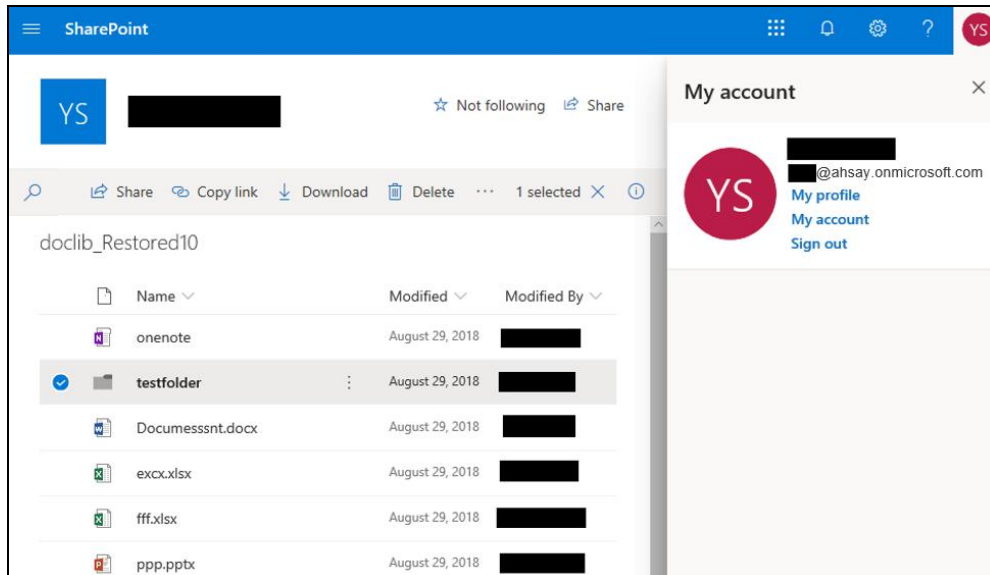
Open the TestFiles folder to check if the files are completely restored.



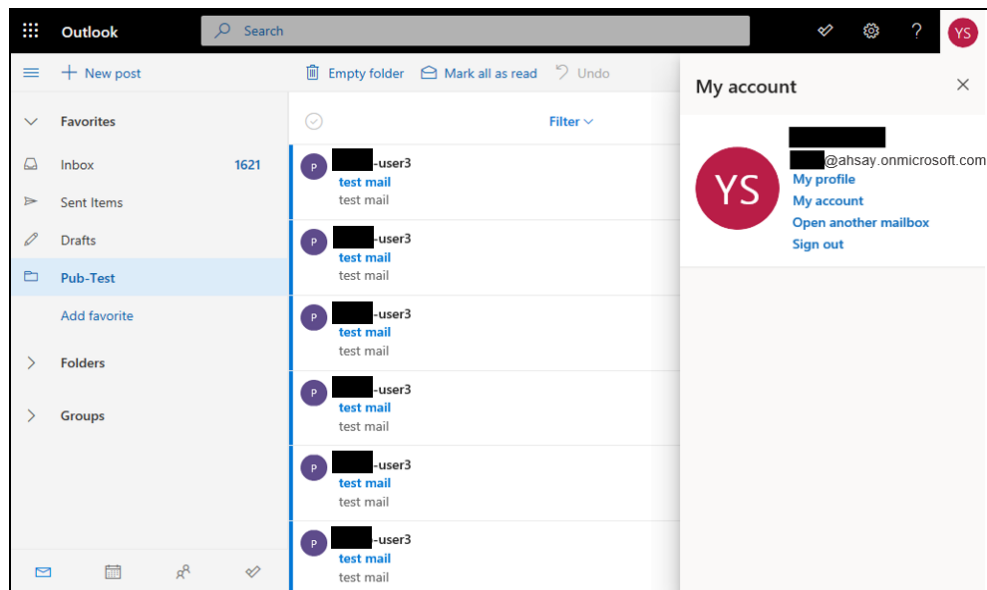
Here is a preview of one of the restored files from OneDrive.



Here is the testfolder from the Personal Site. Open the testfolder to see the content.

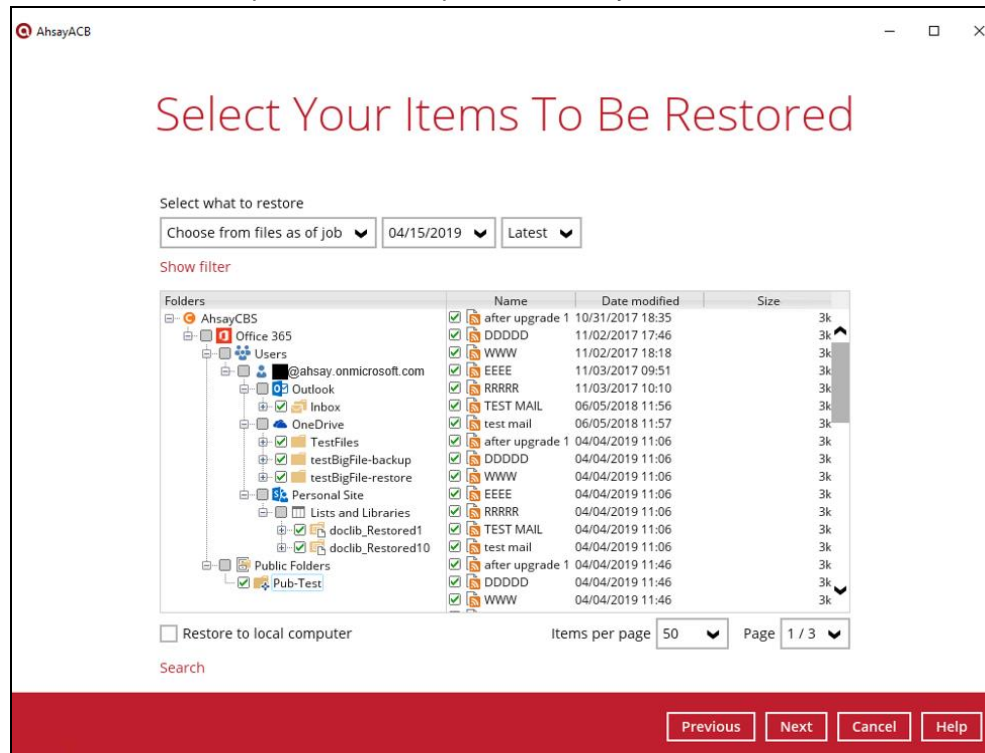


Here is the Pub-Test folder from the Public Folder.



7.1.3 Alternate Office 365 Account

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.



Choose from the following three (3) options on where you want your items to be restored. Select the **Alternate 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.

AhsayACB

Choose Where The Items To Be Restored

Restore items to

☐ Original location

☒ Alternate Office 365 account

Username

.....@ahsay.onmicrosoft.com

Password

.....

Region

Global

☐ Access the Internet through proxy

Test

Show advanced option

Previous Next Cancel Help

Choose from the following **Region**:

Region

Global

Global

China

Germany

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

Also, click the **Show advanced option** to configure other restore settings.

Choose Where The Items To Be Restored

Restore items to

☐ Original location

☒ Alternate Office 365 account

Username

Account password

App password
 (Required if Multi-Factor Authentication is enforced)

Region

☐ Access the Internet through proxy

[Show advanced option](#)

Verify checksum of in-file delta files during restore

By enabling this option, the checksum of in-file delta files will be verified during the restore process. This will check the data for errors during the restore process and create a data summary of the in-file delta files which will be included in the report.

Choose Where The Items To Be Restored

Restore items to

☐ Original location

☒ Alternate Office 365 account

Username

Account password

App password
 (Required if Multi-Factor Authentication is enforced)

Region

☐ Access the Internet through proxy

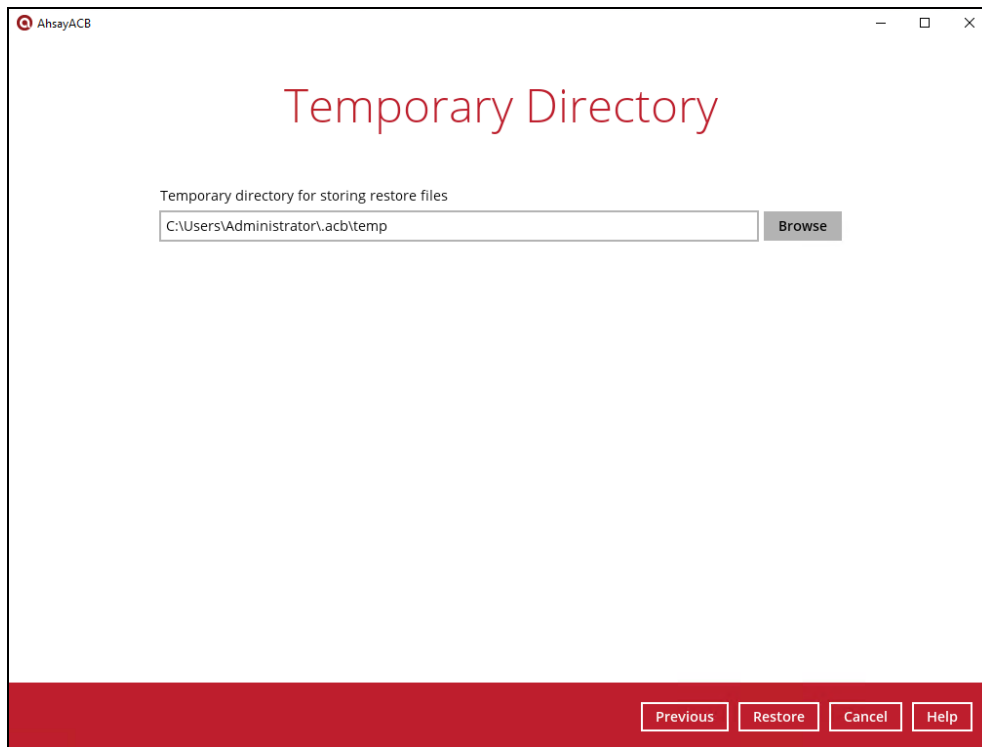
✓ Test completed successfully

☐ Verify checksum of in-file delta files during restore

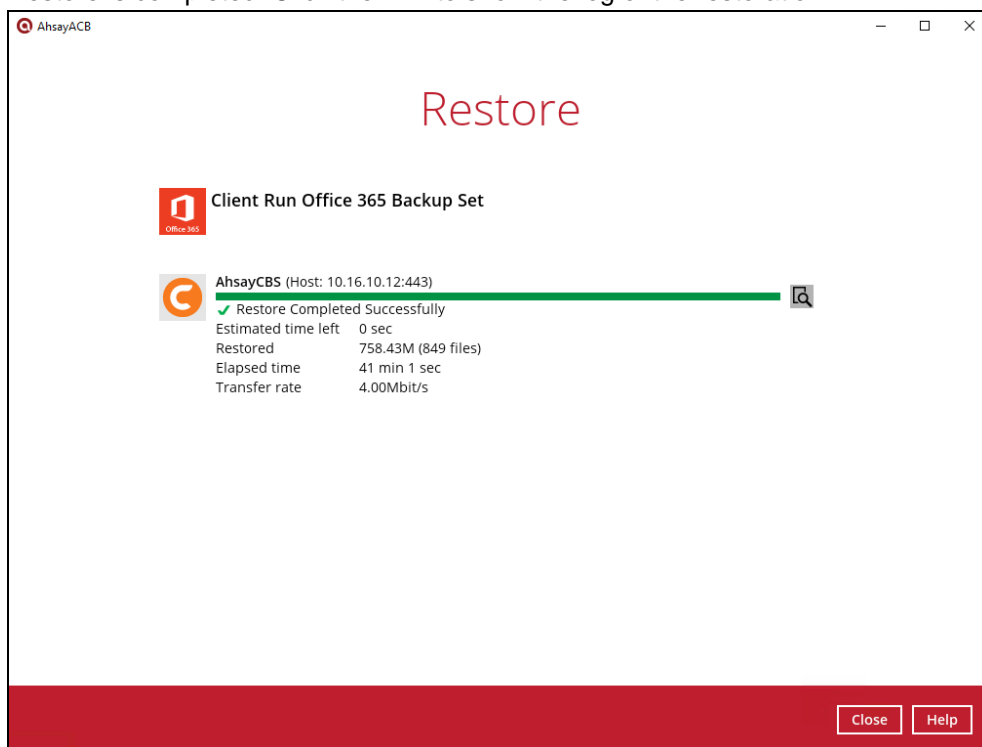
[Hide advanced option](#)

Click **Next** to proceed.

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



Restore is completed. Click the  to show the log of the restoration.



AhsayACB

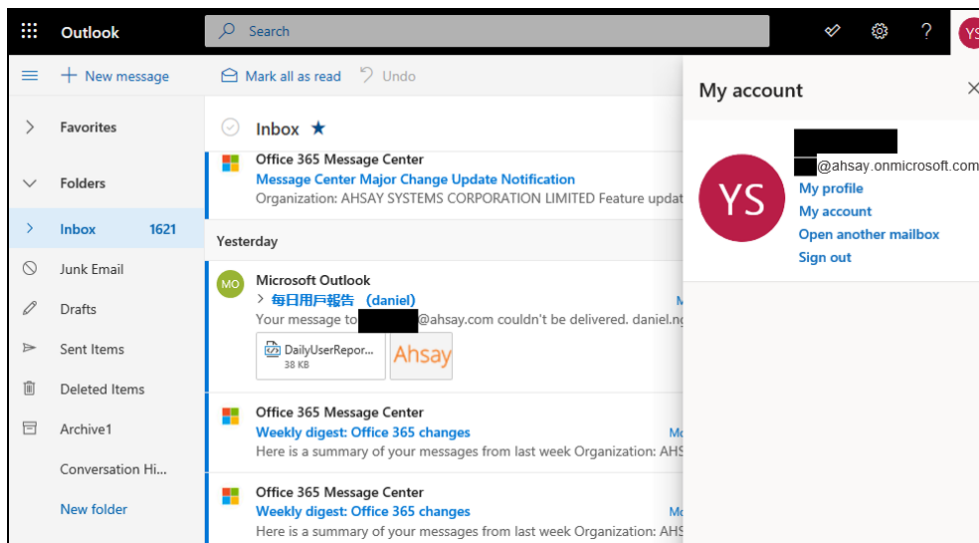
Show All

Type	Log	Time
Start [AhsayACB v8.1.1.50]		04/16/2019 11:24:15
Initializing decrypt action...		04/16/2019 11:24:18
Initializing decrypt action... Completed		04/16/2019 11:24:18
Downloading... "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:28
Downloading... "Office 365/Public Folders/Pub-Test/DDDDD (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:33
Downloading... "Office 365/Public Folders/Pub-Test/WWW (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:34
Downloading... "Office 365/Public Folders/Pub-Test/EEEE (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:36
Downloading... "Office 365/Public Folders/Pub-Test/RRRRR (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:37
Downloading... "Office 365/Public Folders/Pub-Test/TEST MAIL (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP43...		04/16/2019 11:24:38
Downloading... "Office 365/Public Folders/Pub-Test/test mail (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:40
Downloading... "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9...		04/16/2019 11:24:41
Downloading... "Office 365/Public Folders/Pub-Test/DDDDD (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:43
Downloading... "Office 365/Public Folders/Pub-Test/WWW (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:45
Downloading... "Office 365/Public Folders/Pub-Test/EEEE (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:46
Downloading... "Office 365/Public Folders/Pub-Test/RRRRR (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:47
Downloading... "Office 365/Public Folders/Pub-Test/TEST MAIL (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP43...		04/16/2019 11:24:50
Downloading... "Office 365/Public Folders/Pub-Test/test mail (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:51
Downloading... "Office 365/Public Folders/Pub-Test/after upgrade 1 (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9...		04/16/2019 11:24:53
Downloading... "Office 365/Public Folders/Pub-Test/DDDDD (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:54
Downloading... "Office 365/Public Folders/Pub-Test/WWW (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:55
Downloading... "Office 365/Public Folders/Pub-Test/EEEE (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:24:57
Downloading... "Office 365/Public Folders/Pub-Test/RRRRR (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP439b...		04/16/2019 11:25:00
Downloading... "Office 365/Public Folders/Pub-Test/TEST MAIL (AAIARgAAAAAGkRzkKpmEc2byACqAC%2FEWgkA9wP43...		04/16/2019 11:25:01

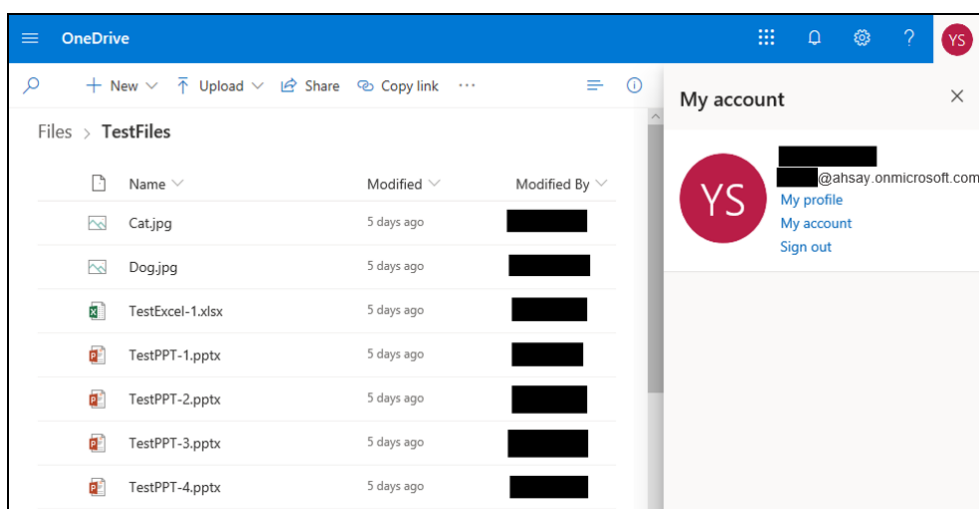
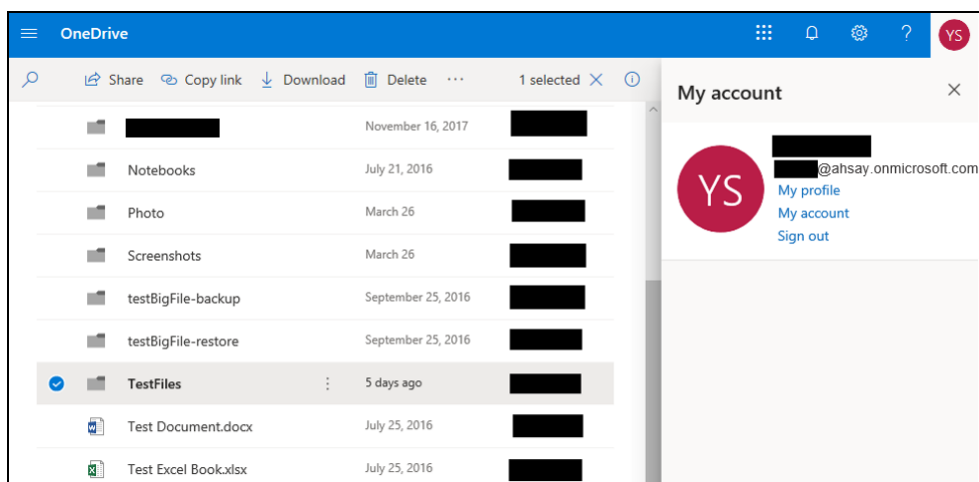
Logs per page 50
 Page 1 / 21

Close

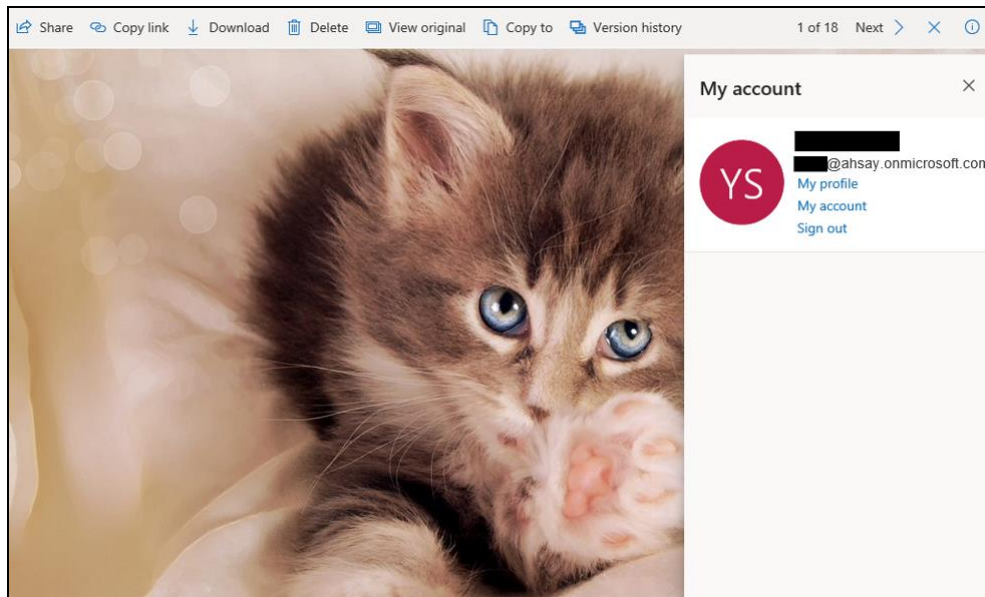
To check if the mails from Outlook, files from OneDrive, sites from Personal Sites, and files and folders from Public Folder are fully restored in the alternate Office 365 account, login and check the files. As you can see on our example screen shot below, **YS** is logged in and the **Inbox** from Outlook, **TestFiles** folder from OneDrive, **testfolder** under Personal Sites, and **Pub-Test** folder under Public Folder are available.



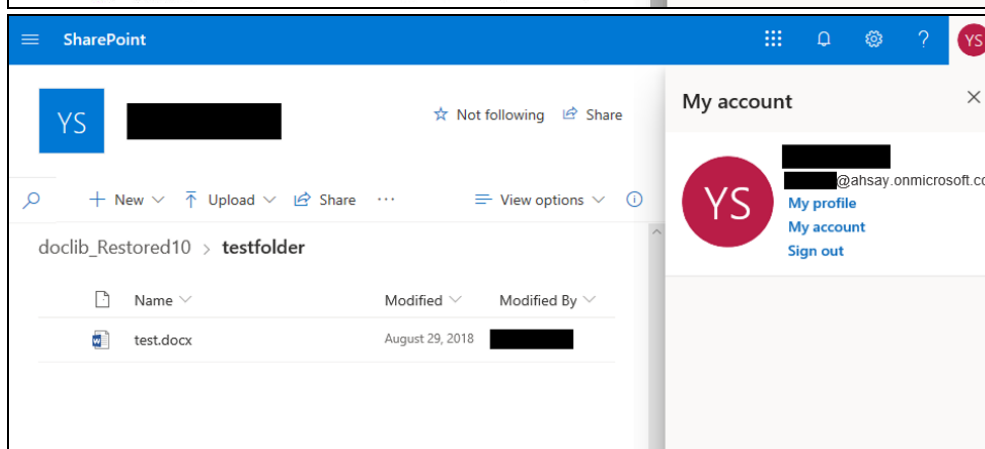
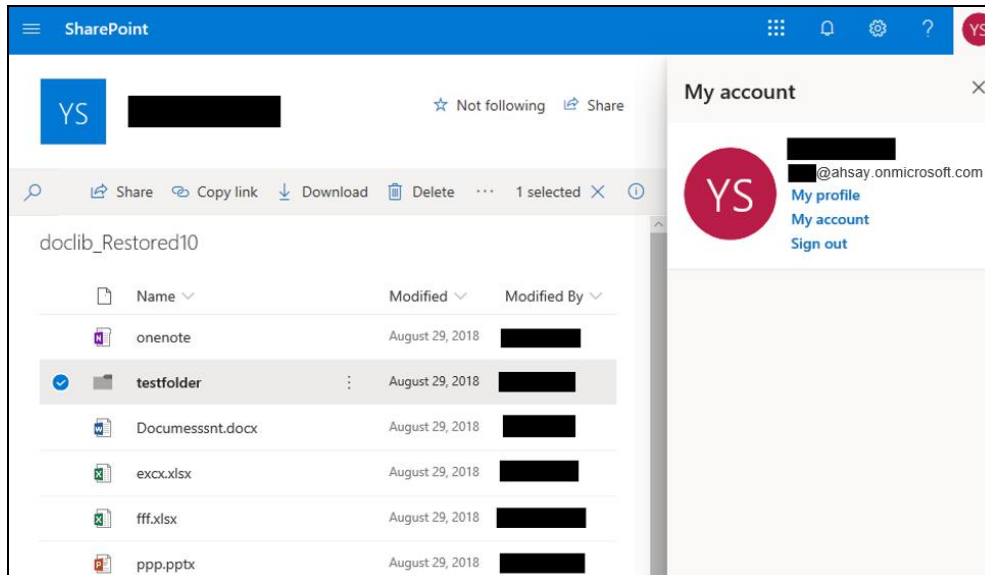
Open the TestFiles folder to check if the files are completely restored.



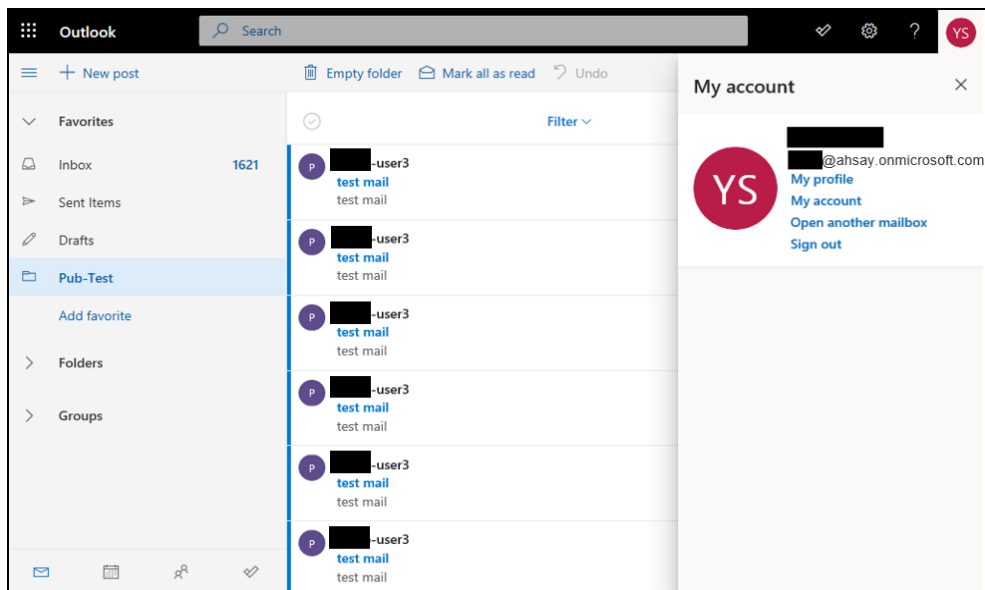
Here is a preview of one of the restored files from OneDrive.



Here is the testfolder from the Personal Site. Open the testfolder to see the content.



Here is the Pub-Test folder from the Public Folder.



7.2 Restore Filter with AhsayACB

This search feature allows you to search files, folders, and mails. For Office 365, these items can be search from **Users** and **Public Folders**.

For Users, you can search from Outlook, OneDrive, and Personal Site.

To make it more flexible, the search feature offers filtering. You can add additional pattern upon searching. Pattern includes the following criteria:

Contains

These are Directories, Files, Folders, and Mails with the name **containing** the specific letter or word.

Exact

These are Directories, Files, Folders, and Mails with the **exact** or **accurate** name.

Start With

These are Directories, Files, Folders, and Mails with the name **starting** with a specific letter or word.

Ends With

These are Directories, Files, Folders, and Mails with the name **ending** with a specific letter or word.

It also has the **Match Case** function, which serves as an additional accuracy when searching for any specific directories, files, folders, and mails.

For more detailed examples using the restore filter on AhsayACB, refer to [Appendix B: Example Scenarios for Restore Filter using AhsayACB](#).

1. Login to AhsayACB according to the instructions in [Login to AhsayACB](#).
2. Click the Restore icon on the main interface of AhsayACB.
3. Select the backup set that you would like to restore.
4. Select the backup destination that you would like to restore backed-up items to.
5. Select the item(s) you would like to restore. You can also choose to restore backed-up file from a specific backup job of your choice using the Select what to restore drop-down menu at the top. Click Next to proceed.

Select Your Items To Be Restored

Select what to restore

Choose from files as of job ▼ 03/05/2020 ▼ Latest ▼

Show filter

Folders	Name	Date modified	Size
<ul style="list-style-type: none"> AhsayCBS <ul style="list-style-type: none"> Office 365 Users Public Folders 			

☐ Restore to local computer

Items per page 50 ▼ Page - ▼

Search

Previous Next Cancel Help

Click the Search located below the Restore to local computer checkbox.

☐ Restore to local computer

Search

Change the path if you want to restore items from other location. Click the Change button then click OK to proceed.

Search

Look in

Change

☐ Search subfolders

Kind

Files and Folders

Type

contains

Pattern

☐ Match case

Search

Name	In Folder	Size	Date modified
------	-----------	------	---------------

Items per page

50

Page

-

OKCancelHelp

PreviousNextCancelHelp

Change Path

Backup Server

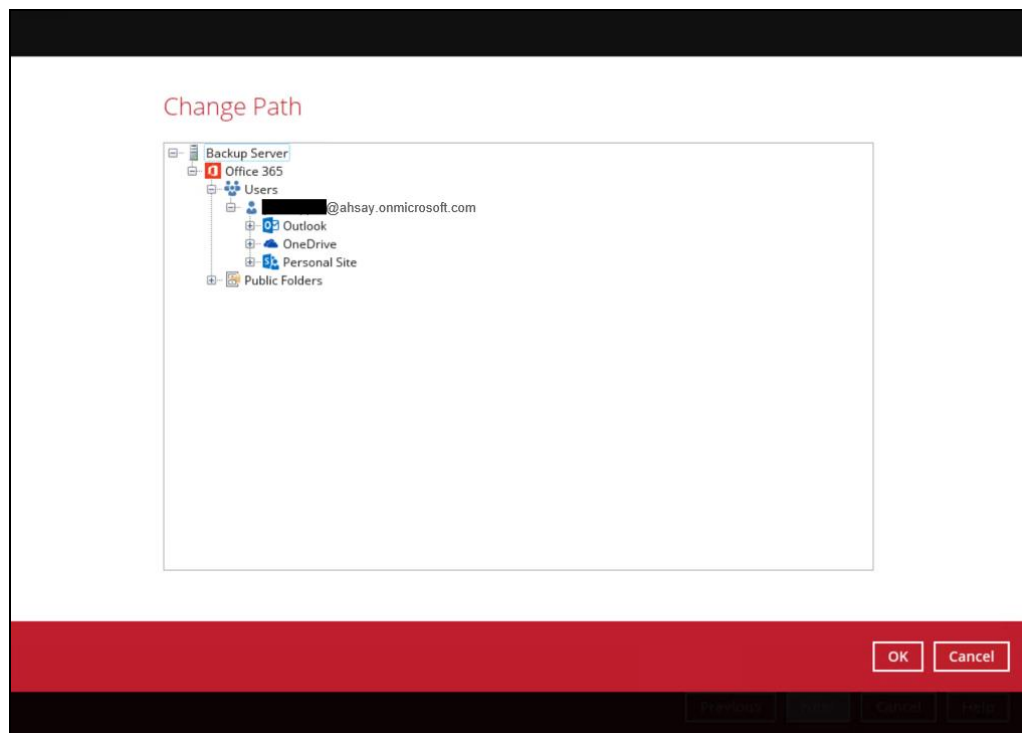
Office 365

Users

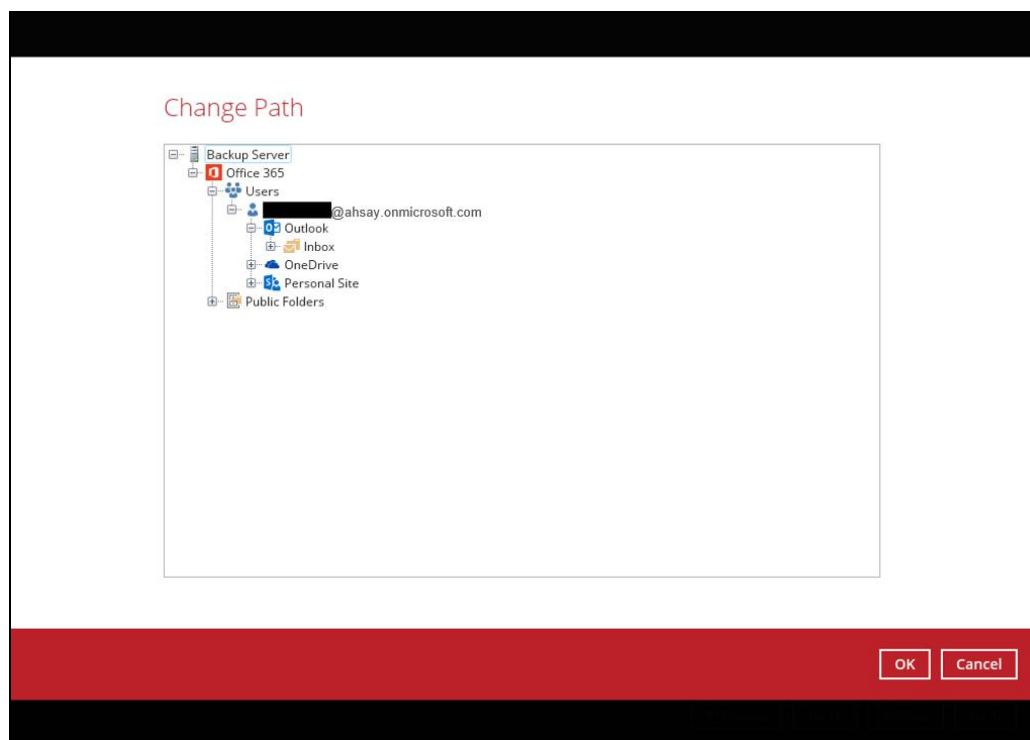
Public Folders

OKCancel

PreviousNextCancelHelp



If you are going to search for specific mails, then click the Outlook to expand for more selection. In our example below, **Inbox** of **abc@ahsay.onmicrosoft.com** is selected.



Search

Look in
 Change

☐ Search subfolders

Kind Type Pattern ☐ Match case

Mail - Subject contains

Files and Folders

Files only

Folders only

Mail - Subject

Mail - From

Mail - To

Mail - CC

Mail - BCC

In Folder	Size	Date modified
-----------	------	---------------

Items per page 50 Page -

OK Cancel Help

Previous Next Cancel Help

Select from the following type of filtering you want to search.

- Contains
- Exact
- Starts With
- Ends With

Search

Look in
 Change

☐ Search subfolders

Kind Type Pattern ☐ Match case

Mail - Subject contains

Search

contains

exact

starts with

ends with

Name	Size	Date modified
------	------	---------------

Items per page 50 Page -

OK Cancel Help

Previous Next Cancel Help

Enter a pattern you want and Tick the Match Case checkbox if you want to accurately search for a specific file.

Kind	Type	Pattern	
Mail - Subject ▼	contains ▼	Office 365 changes	<input type="checkbox"/> Match case

Kind	Type	Pattern	
Mail - Subject ▼	contains ▼	Office 365 changes	<input checked="" type="checkbox"/> Match case

Click the Search button and the result will be displayed.

Search

Look in
Office 365/Users Change

☒ Search subfolders

Kind	Type	Pattern	
Files and Folders ▼	contains ▼	arch	<input checked="" type="checkbox"/> Match case

Search

Name	In Folder	Size	Date modified
------	-----------	------	---------------

Items per page 50 ▼ Page - ▼

OK Cancel Help

Previous Next Cancel Help

Search

Look in
Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlook/Inbox Change

☒ Search subfolders

Kind: Mail - Subject Type: contains Pattern: Office 365 changes ☒ Match case

Searching ... Stop

	Name	In Folder	Size	Date modified
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	71k	05/07/2018 12:05
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	77k	05/07/2018 12:05
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	62k	05/07/2018 12:12
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	67k	05/07/2018 12:12
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	63k	05/07/2018 12:06
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	72k	07/09/2018 04:14
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	74k	07/16/2018 03:44
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	68k	05/07/2018 12:04
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	70k	05/11/2018 10:52
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	66k	05/11/2018 10:52

Items per page: 50 Page: 1 / 2

OK Cancel Help

Previous Next Cancel Help

Search

Look in
Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlook/Inbox Change

☒ Search subfolders

Kind: Mail - Subject Type: contains Pattern: Office 365 changes ☒ Match case

Search

	Name	In Folder	Size	Date modified
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	71k	05/07/2018 12:05
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	77k	05/07/2018 12:05
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	62k	05/07/2018 12:12
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	67k	05/07/2018 12:12
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	63k	05/07/2018 12:06
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	72k	07/09/2018 04:14
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	74k	07/16/2018 03:44
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	68k	05/07/2018 12:04
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	70k	05/11/2018 10:52
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlo	66k	05/11/2018 10:52

Items per page: 50 Page: 1 / 2

OK Cancel Help

Previous Next Cancel Help

Choose files by ticking each checkbox that you wanted to restore and click the OK button.

Search

Look in

Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlook/Inbox

Change

☒ Search subfolders

Kind

Type

Pattern

Mail - Subject



contains



Office 365 changes

☒ Match case

Search

	Name	In Folder	Size	Date modified
<input checked="" type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	71k	05/07/2018 12:05
<input checked="" type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	77k	05/07/2018 12:05
<input checked="" type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	62k	05/07/2018 12:12
<input checked="" type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	67k	05/07/2018 12:12
<input checked="" type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	63k	05/07/2018 12:06
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	72k	07/09/2018 04:14
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	74k	07/16/2018 03:44
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	68k	05/07/2018 12:04
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	70k	05/11/2018 10:52
<input type="checkbox"/>	Weekly digest: Office 365 changes	Office 365/Users/[REDACTED]@ahsay.onmicrosoft.com/Outlo	66k	05/11/2018 10:52

Items per page 50

Page 1 / 2

OK

Cancel

Help

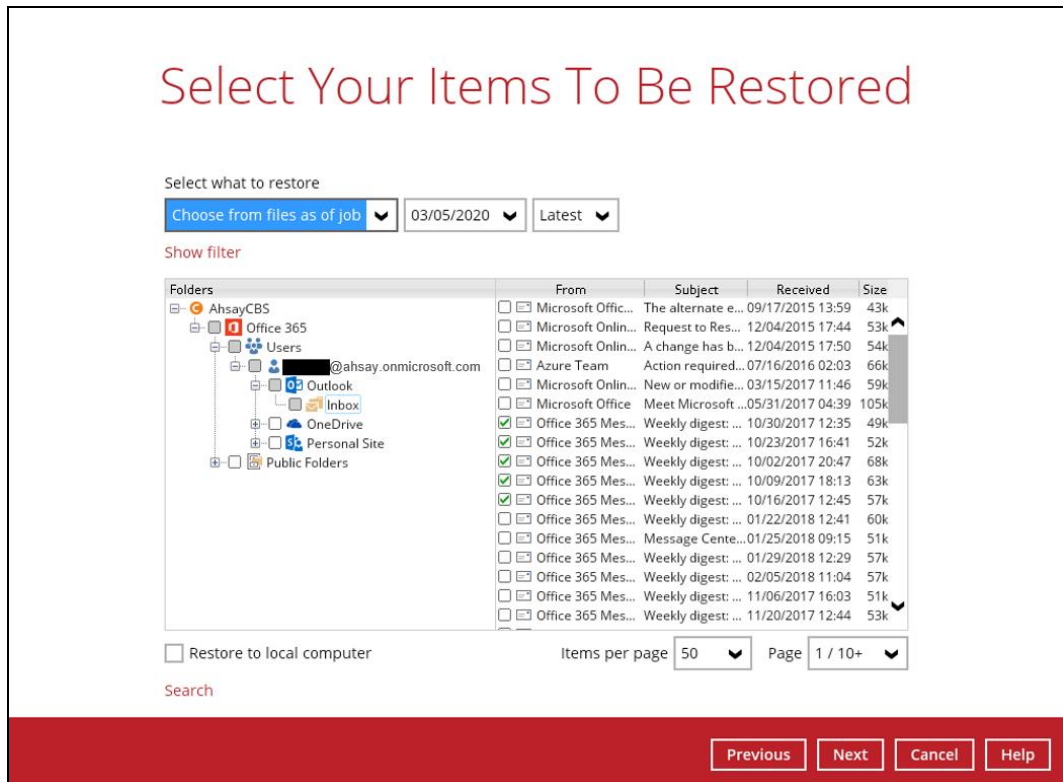
Previous

Next

Cancel

Help

The selected files will reflect on the Restore main screen. Click the Next button to proceed.



Select which location the items will be restored. Choose from the following options:

- Local machine – this option is located on the Restore main screen, lower left part.
- Original location
- Alternate Office 365 account

Click the Next button to proceed.

Choose Where The Items To Be Restored

Restore items to

- ☐ Original location
☒ Alternate Office 365 account

Username

[Redacted]@ahsay.onmicrosoft.com

Account password

[Redacted]

App password

(Required if Multi-Factor Authentication is enforced)

Region

Global ▼

☐ Access the Internet through proxy

✓ Test completed successfully

[Show advanced option](#)

Previous

Next

Cancel

Help

Input the temporary directory or click the Browse button to browse for the path. Click the Restore button to start.

Temporary Directory

Temporary directory for storing restore files

C:\Users\Administrator\temp

Browse

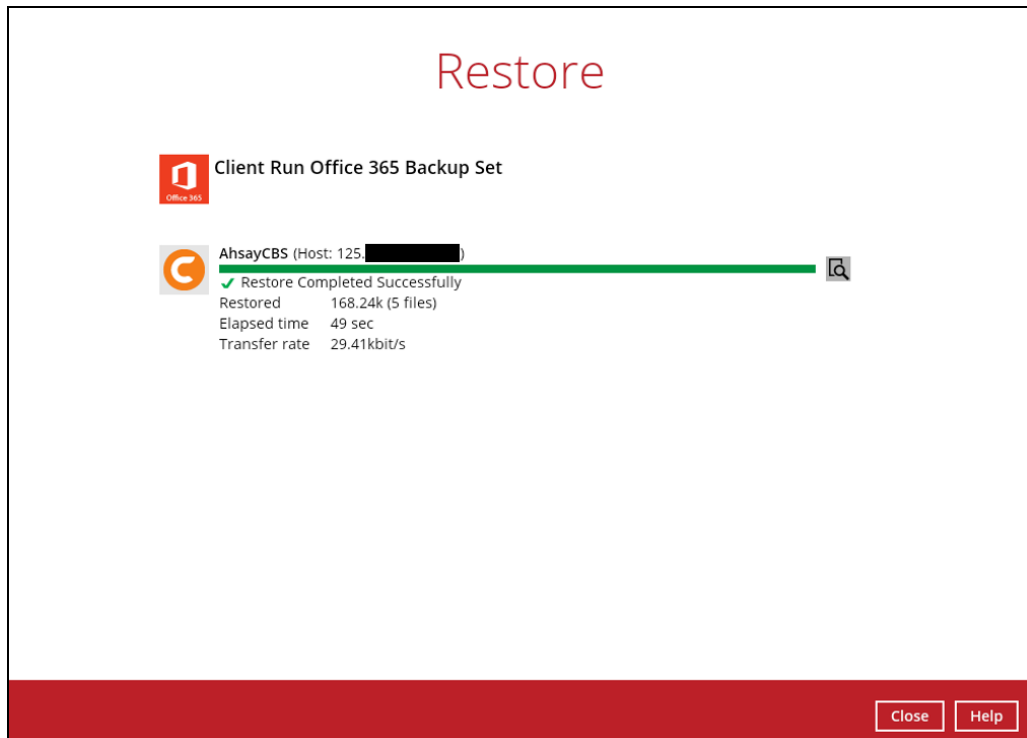
Previous

Restore

Cancel

Help

If restore is completed, the status of the activity should be, Restore Completed Successfully.



8 Contacting Ahsay

8.1 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:

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

8.2 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 Example Scenarios for Office 365 License Requirement and Usage

Note that maximum of two (2) Office 365 accounts are only allowed for Office 365 Backup on AhsayACB. Each AhsayACB Office 365 backup set is limited to one Office 365 user account. Therefore, when you backup two Office 365 user accounts it will require two separate backup sets.

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 back up.

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
Backup Set B	user02@company-office365.com

Scenario No. 2: 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">○ microsoftword01.docx○ powerpointpresentation01.pptx○ spreadsheet01.xls○ notepad01.txt○ picture01.jpg○ picture02.jpg
Backup Set B	Folder01 <ul style="list-style-type: none">○ microsoftword01.docx○ powerpointpresentation01.pptx○ spreadsheet01.xls○ notepad01.txt○ picture01.jpg○ picture02.jpg
	Folder02
	Folder03
Backup Set C	Folder01 <ul style="list-style-type: none">○ microsoftword01.docx○ powerpointpresentation01.pptx○ spreadsheet01.xls○ notepad01.txt○ picture01.jpg○ picture02.jpg
	Folder02
	Folder03 <ul style="list-style-type: none">○ microsoftword02.docx○ powerpointpresentation02.pptx○ spreadsheet02.xls○ notepad02txt○ picture05.jpg○ picture06.jpg

Scenario No. 3: Backing up Office 365 User Accounts and files and/or folders under Public Folder 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 two (2) Office 365 user accounts and files and/or folders under Public Folder on multiple backup sets, two (2) 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	Folder01 <ul style="list-style-type: none">○ microsoftword01.docx○ powerpointpresentation01.pptx○ spreadsheet01.xls○ notepad01.txt○ picture01.jpg○ picture02.jpg
Backup Set C	Folder01 <ul style="list-style-type: none">○ microsoftword01.docx○ powerpointpresentation01.pptx○ spreadsheet01.xls○ notepad01.txt○ picture01.jpg○ picture02.jpg

Appendix B Example Scenarios for Restore Filter using AhsayACB

Scenarios No. 1: Items from Users

Example No. 1: Restore filter setting from an Office 365 user account's outlook inbox

Location:	Office 365/Users/abc@ahsay.onmicrosoft.com/Outlook/Inbox
Search subfolders:	True
Kind:	Mail – Subject
Type:	Contains
Pattern:	Office 365 changes
Match Case:	True

Follow the step-by-step procedure indicated on [Restore Filter with AhsayACB](#).

Search

Look in
Office 365/Users/[redacted]@ahsay.onmicrosoft.com/Outlook/Inbox Change

☒ Search subfolders

Kind: Mail - Subject ▼ Type: contains ▼ Pattern: Office 365 changes ▼ ☒ Match case

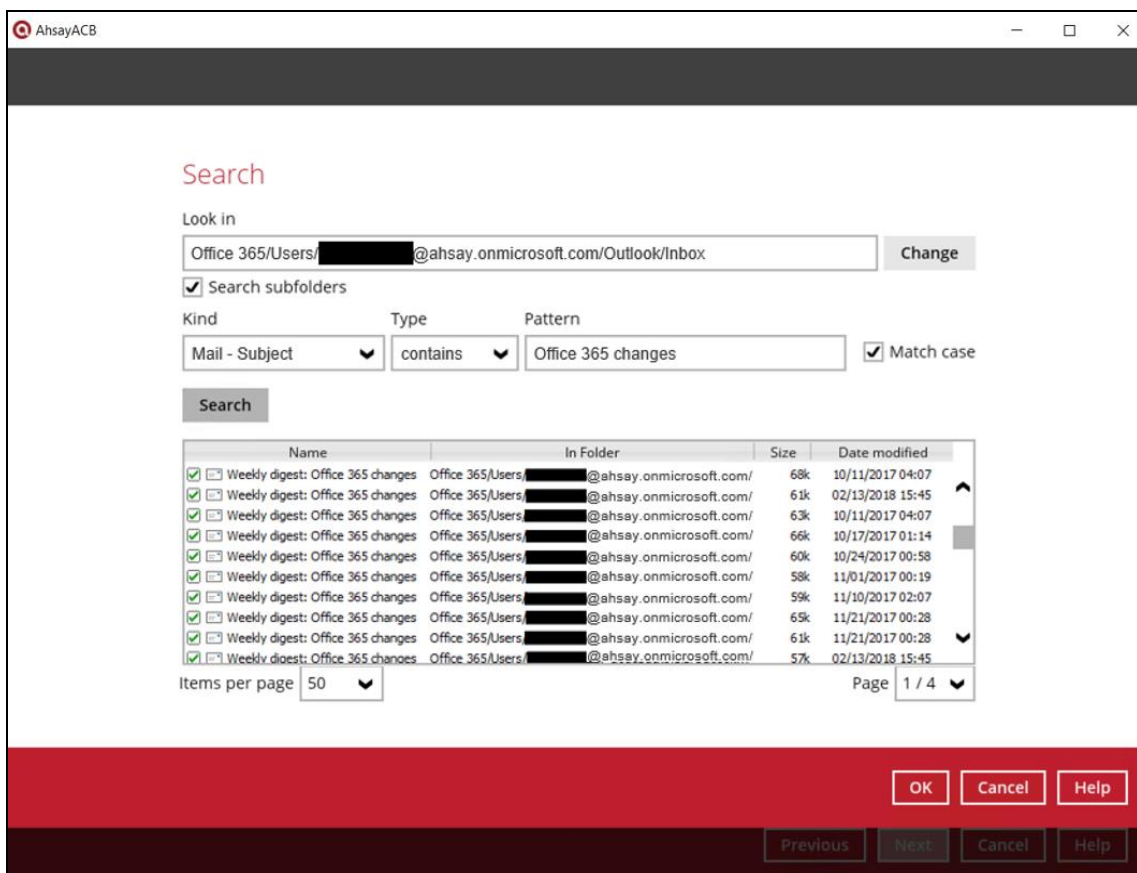
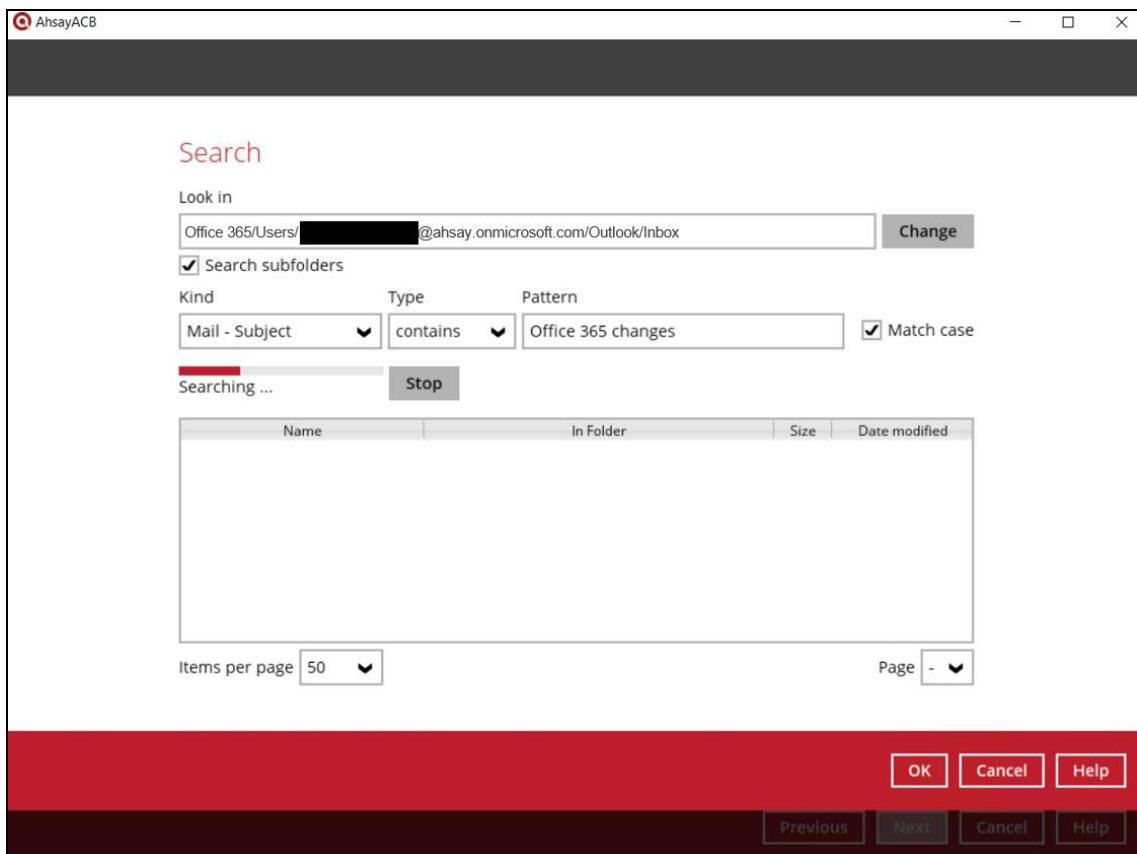
Search

Name	In Folder	Size	Date modified
------	-----------	------	---------------

Items per page: 50 ▼ Page: 1 ▼

OK Cancel Help

Previous Next Cancel Help



Explanation:

All mails under Office 365/Users/abc@ahsay.onmicrosoft.com/Outlook/Inbox that has a subject and contains 'Office 365 changes' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the mail, Directory of the mails which are indicated In-Folder column, Size of each mails, and Date Modified.

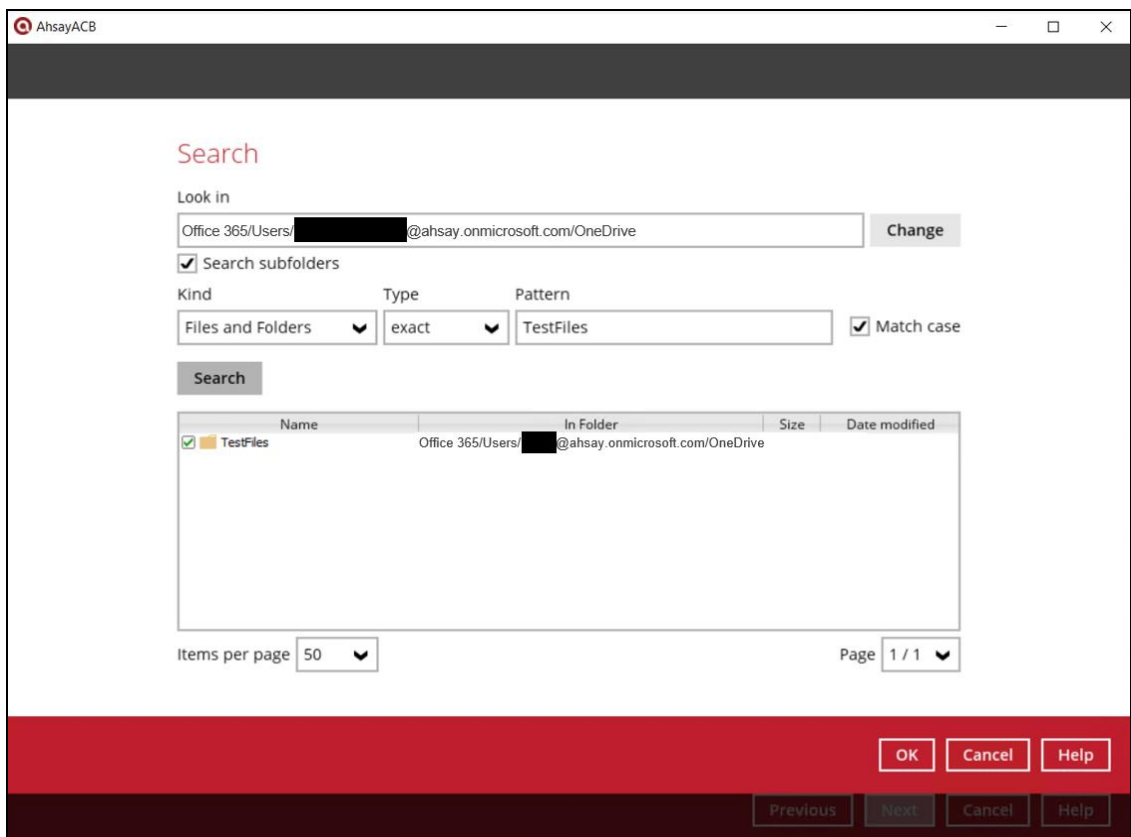
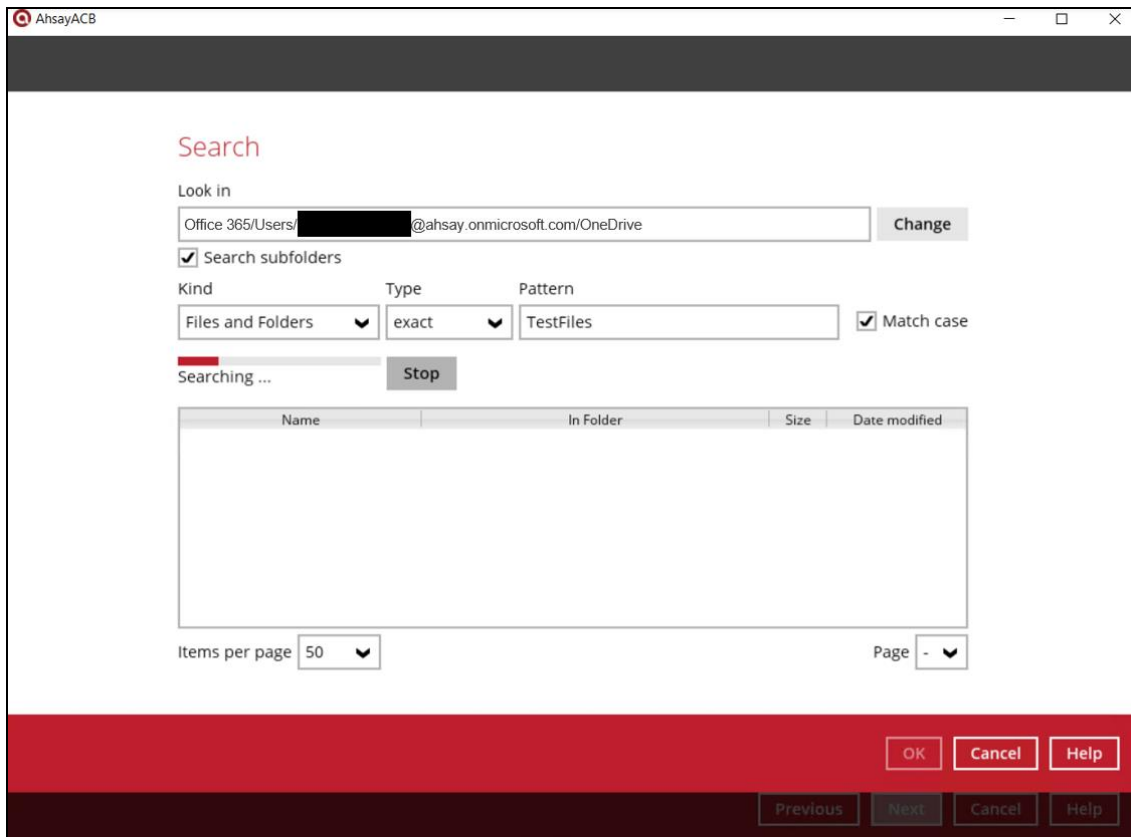
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in the Outlook Inbox upon searching. And it will strictly search only the specified pattern and case which is the 'Office 365 changes'.

Example No. 2: Restore filter setting from an Office 365 user account's OneDrive

Location:	Office 365/Users/abc@ahsay.onmicrosoft.com/OneDrive
Search subfolders:	True
Kind:	Files and Folders
Type:	Exact
Pattern:	TestFiles
Match Case:	True

Follow the step-by-step procedure indicated on [Restore Filter with AhsayACB](#).

The screenshot shows the AhsayACB Search window. The title bar reads 'AhsayACB'. The main area is titled 'Search'. Below the title, there is a 'Look in' section with a text box containing 'Office 365/Users/[redacted]@ahsay.onmicrosoft.com/OneDrive' and a 'Change' button. Below this is a checked checkbox for 'Search subfolders'. Further down are three dropdown menus: 'Kind' set to 'Files and Folders', 'Type' set to 'exact', and 'Pattern' set to 'TestFiles'. To the right of these is a checked checkbox for 'Match case'. A 'Search' button is located below the filters. Below the button is a table with the following headers: 'Name', 'In Folder', 'Size', and 'Date modified'. The table body is currently empty. At the bottom left of the table area, there is a label 'Items per page' followed by a dropdown menu set to '50'. At the bottom right, there is a label 'Page' followed by a dropdown menu set to '-'. The bottom of the window has a red bar with 'OK', 'Cancel', and 'Help' buttons. Below this bar, there are 'Previous', 'Next', 'Cancel', and 'Help' buttons.



Explanation:

All files and folders under Office 365/Users/abc@ahsay.onmicrosoft.com/OneDrive that has the exact pattern of 'TestFiles' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the mail, Directory of the mails which are indicated In-Folder column, Size of each mails, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in OneDrive upon searching. And it will strictly search only the specified pattern and case which is the 'TestFiles'.

Example No. 3: Restore filter setting from an Office 365 user account's personal site

Location:	Office 365/Users/abc@ahsay.onmicrosoft.com/Personal Site
Search subfolders:	True
Kind:	Files and Folders
Type:	contains
Pattern:	ppp
Match Case:	True

Follow the step-by-step procedure indicated on [Restore Filter with AhsayACB](#).

Search

Look in
Office 365/Users/abc@ahsay.onmicrosoft.com/Personal Site Change

☒ Search subfolders

Kind: Files and Folders Type: contains Pattern: ppp ☒ Match case

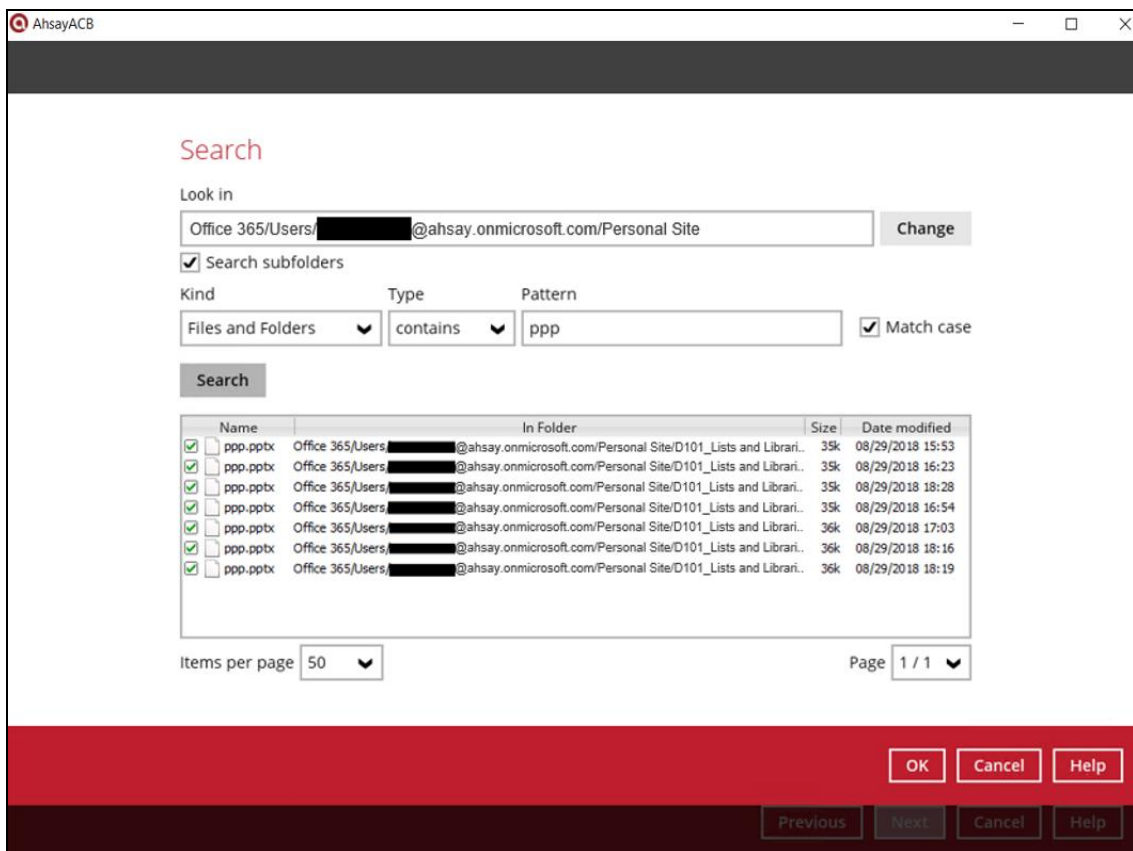
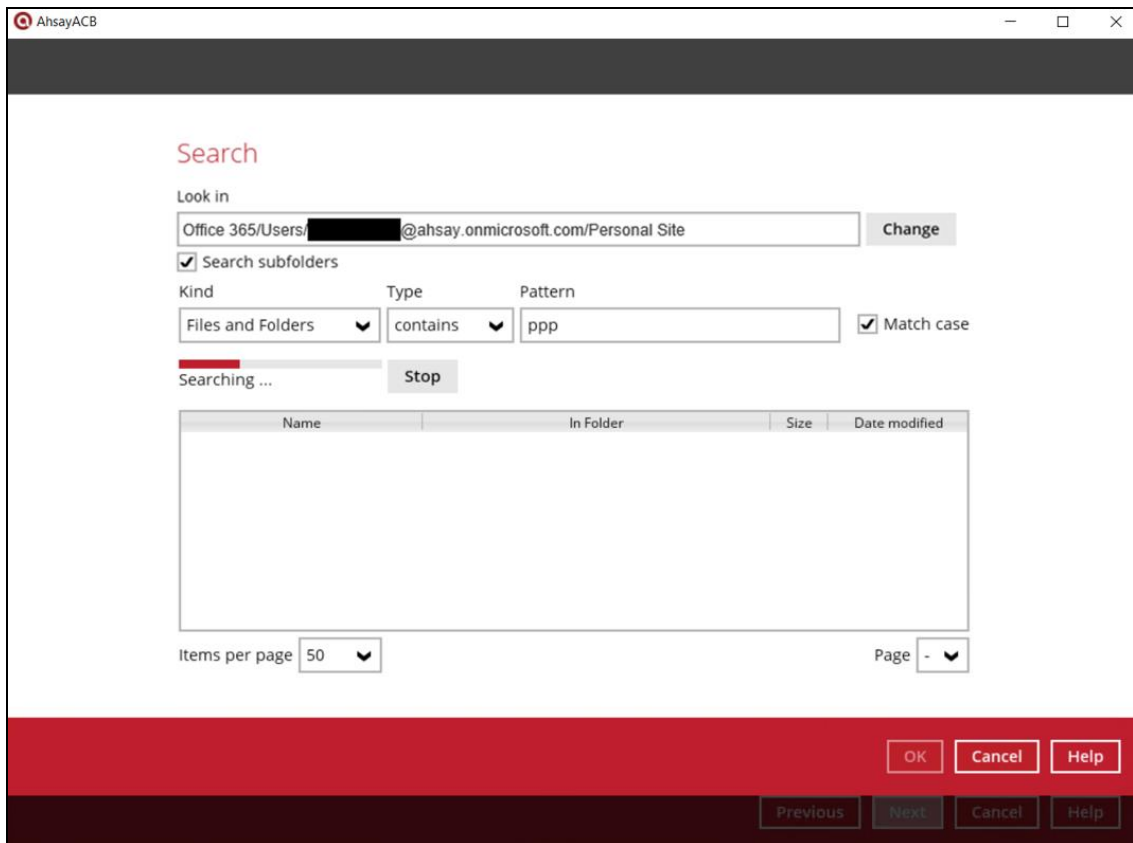
Search

Name	In Folder	Size	Date modified
------	-----------	------	---------------

Items per page: 50 Page: -

OK Cancel Help

Previous Next Cancel Help



Explanation:

All personal site under Office 365/Users/@ahsay.onmicrosoft.com/Personal Site that has the pattern that contains with 'ppp' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the mail, Directory of the mails which are indicated In-Folder column, Size of each mails, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in Personal Site upon searching. And it will strictly search only the specified pattern and case which starts with 'ppp'.

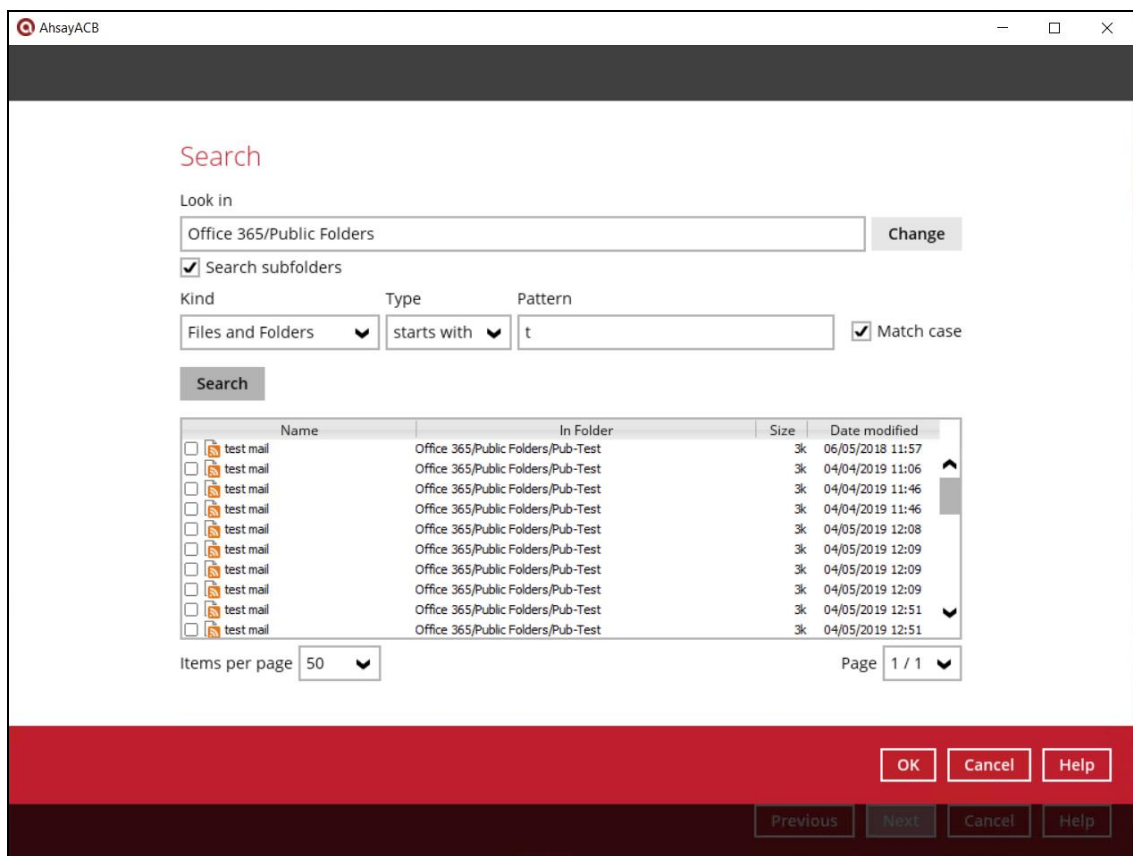
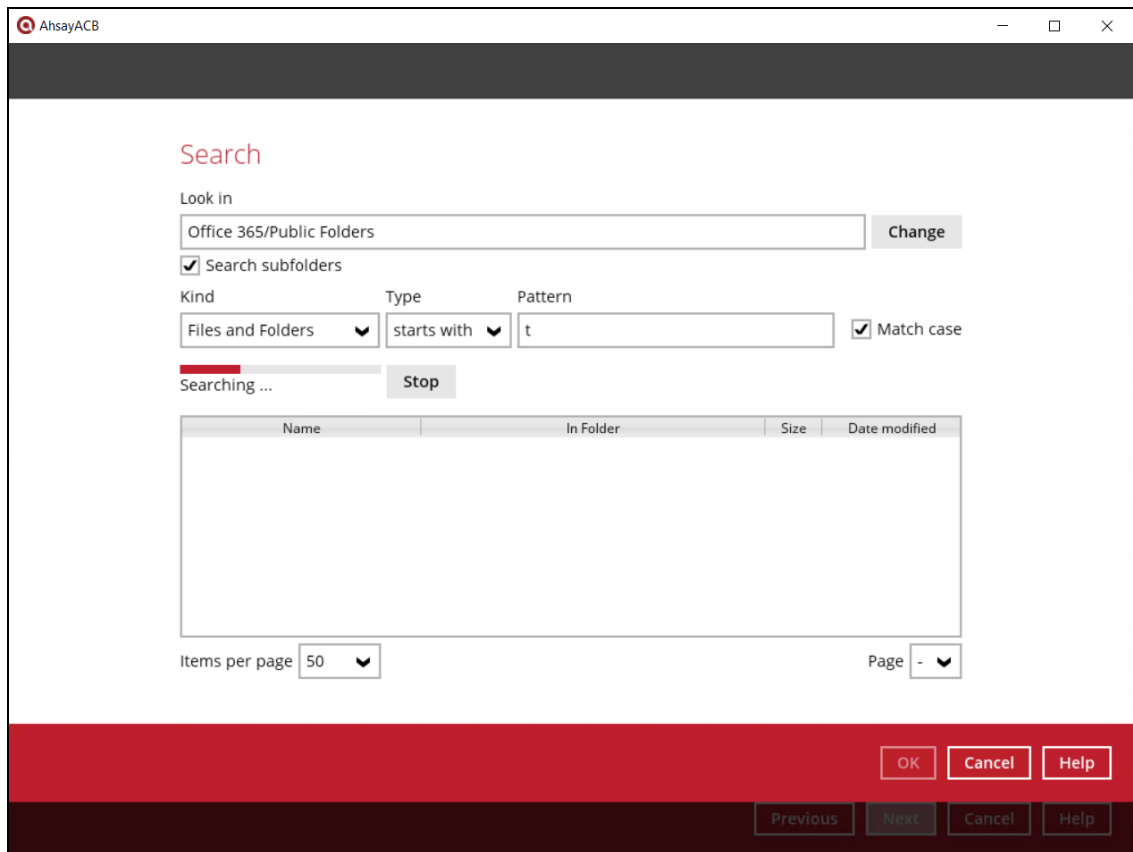
Scenarios No. 2: Items from Public Folders

Example No. 1: Restore filter setting from Public Folders

Location:	Office 365/Public Folder
Search subfolders:	True
Kind:	Files and Folders
Type:	Starts With
Pattern:	t
Match Case:	True

Follow the step-by-step procedure indicated on [Restore Filter with AhsayACB](#).

The screenshot shows the AhsayACB Search window. The title bar reads 'AhsayACB'. The main content area is titled 'Search' in red. Below the title, there is a 'Look in' section with a text box containing 'Office 365/Public Folders' and a 'Change' button. A checkbox labeled 'Search subfolders' is checked. Below this, there are three sections: 'Kind' with a dropdown menu showing 'Files and Folders', 'Type' with a dropdown menu showing 'starts with', and 'Pattern' with a text box containing 't'. A 'Match case' checkbox is also checked. A 'Search' button is located below these filters. Below the search button is a table with the following headers: 'Name', 'In Folder', 'Size', and 'Date modified'. The table body is currently empty. At the bottom of the search results area, there are two dropdown menus: 'Items per page' set to '50' and 'Page' set to '-'. At the bottom of the window, there is a red bar containing 'OK', 'Cancel', and 'Help' buttons. Below this bar, there is a dark bar containing 'Previous', 'Next', 'Cancel', and 'Help' buttons.



Explanation:

All SharePoint Personal Sites under Office 365/Public Folders that has the pattern that starts with 'A' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the mail, Directory of the mails which are indicated In-Folder column, Size of each mails, and Date Modified.

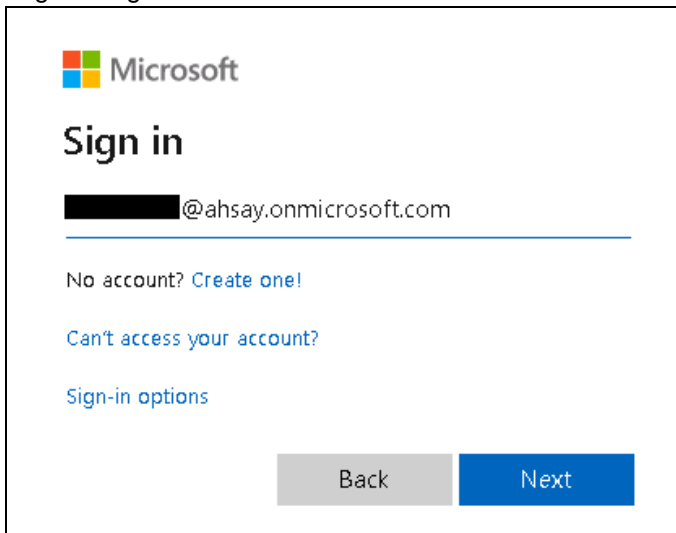
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in Public Folders upon searching. And it will strictly search only the specified pattern and case which starts with 't'.

Appendix C Setting Multi-Factor Authentication (MFA) in Microsoft 365 Admin Center

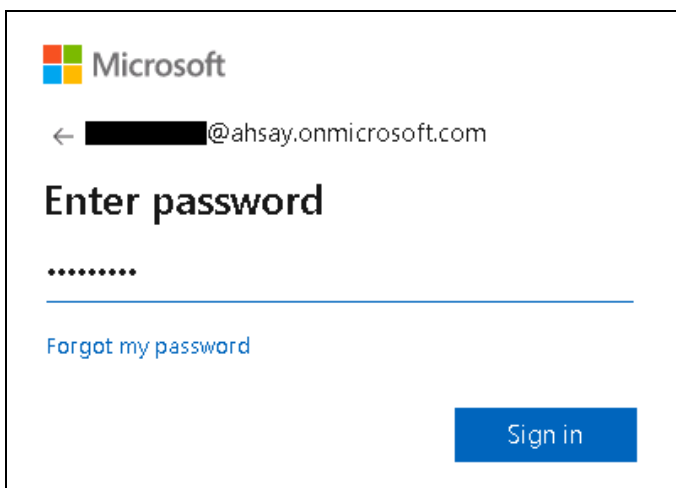
What is a Multi-Factor Authentication (MFA)? It is an authentication method wherein a user will be granted an access only after successfully presenting two or more evidences or proof of personal information or identification. It also adds second layer of security to users upon logging in.

To enable MFA to any Office 365 user accounts, follow the steps below:

1. Login using an Office 365 Administrator credentials.

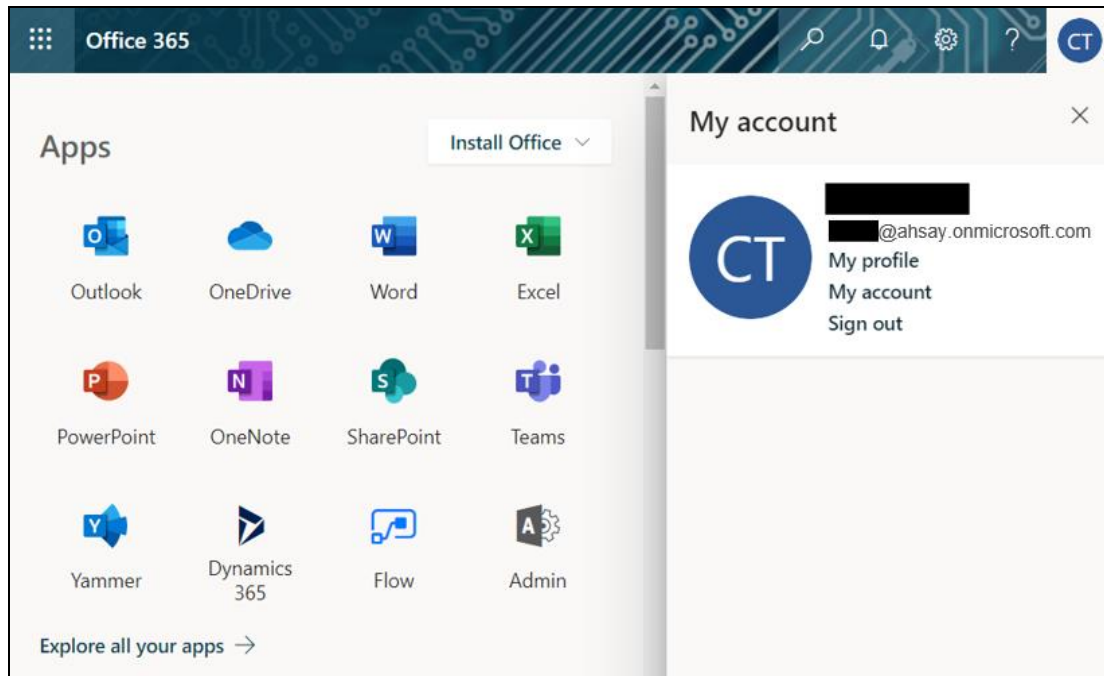
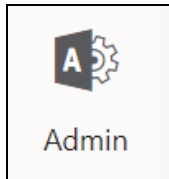


The image shows the Microsoft sign-in page. At the top is the Microsoft logo. Below it is the text "Sign in". A text input field contains the email address "██████████@ahsay.onmicrosoft.com". Below the input field are three links: "No account? [Create one!](#)", "[Can't access your account?](#)", and "[Sign-in options](#)". At the bottom right are two buttons: a grey "Back" button and a blue "Next" button.

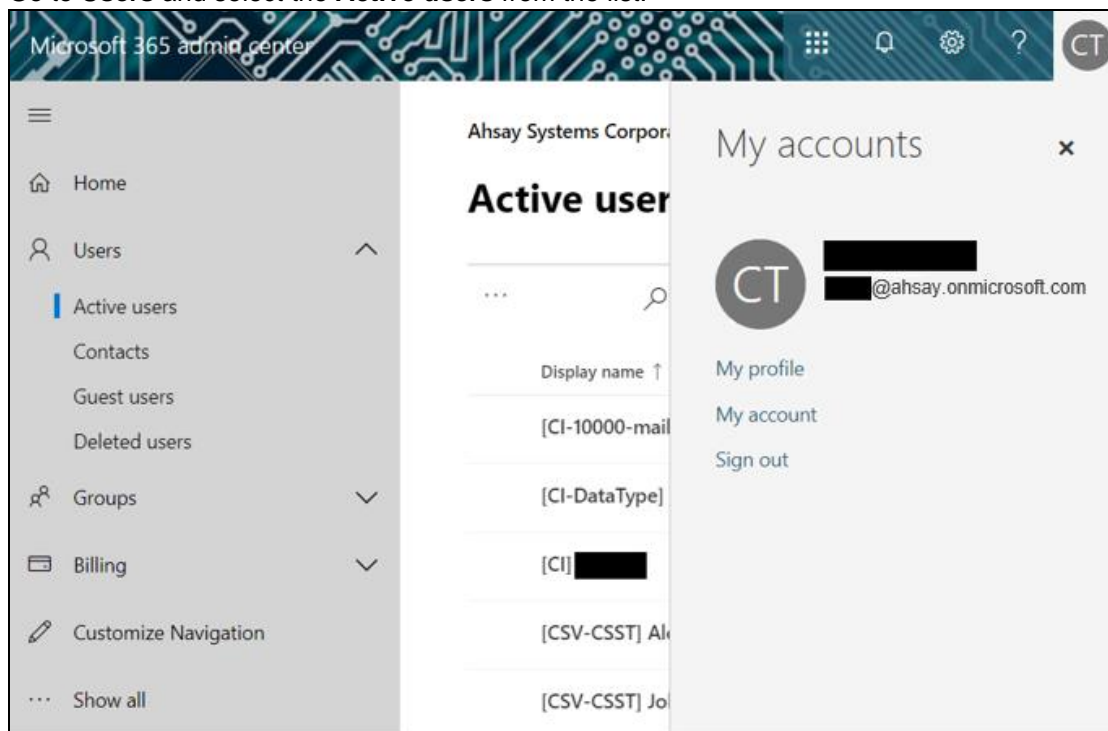


The image shows the Microsoft "Enter password" screen. At the top is the Microsoft logo. Below it is a back arrow followed by the email address "██████████@ahsay.onmicrosoft.com". The text "Enter password" is displayed. Below it is a password input field with dots. At the bottom left is a link "[Forgot my password](#)". At the bottom right is a blue "Sign in" button.

2. Click the **Admin Center** icon.

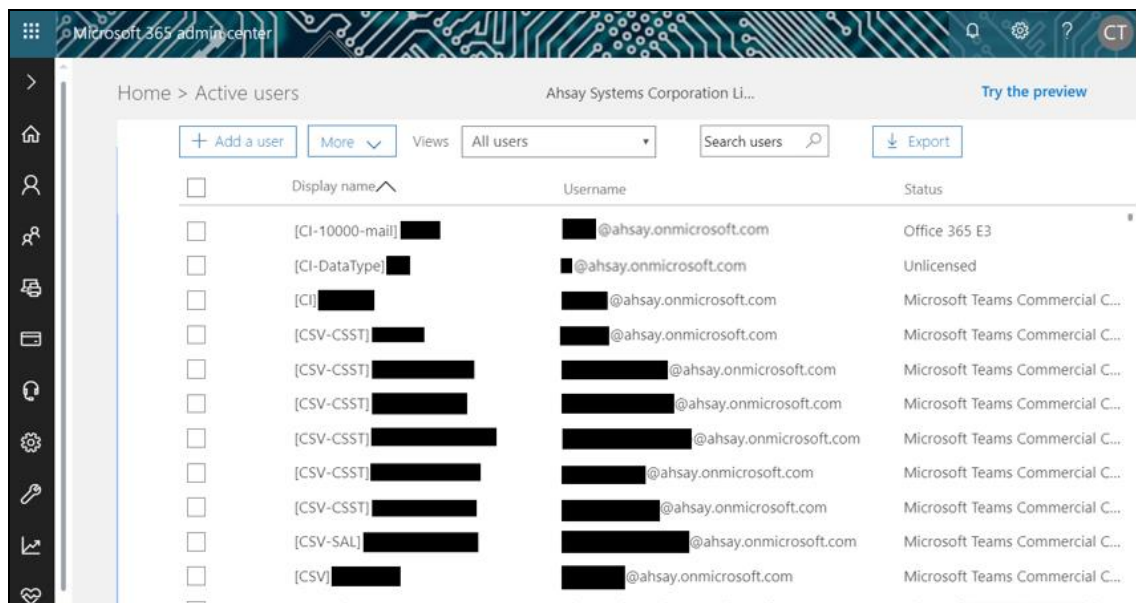


3. Go to **Users** and select the **Active users** from the list.

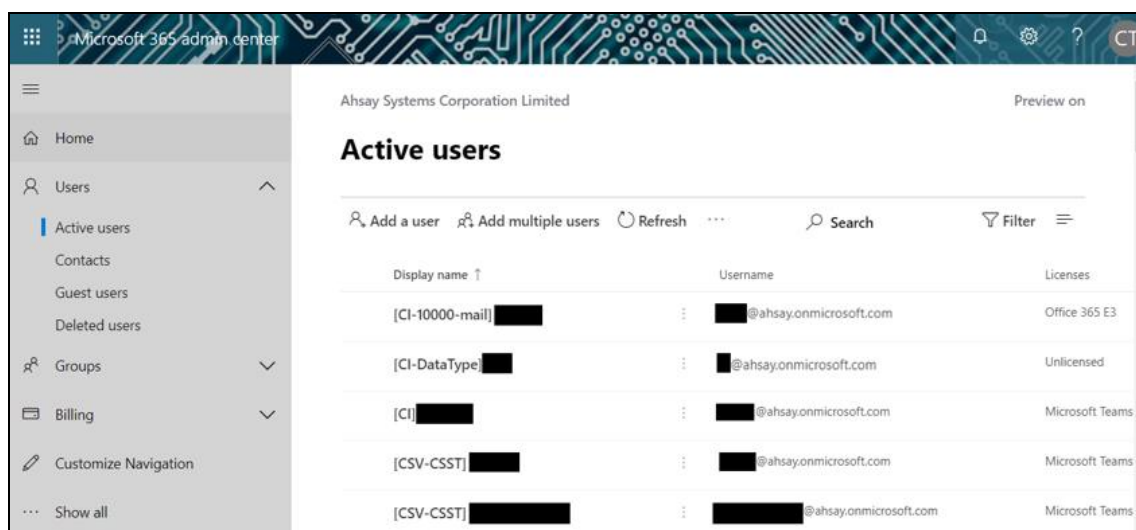


4. There are two (2) modes of viewing the Active users.

Classic Mode – This is the default mode upon entering the Active users screen.



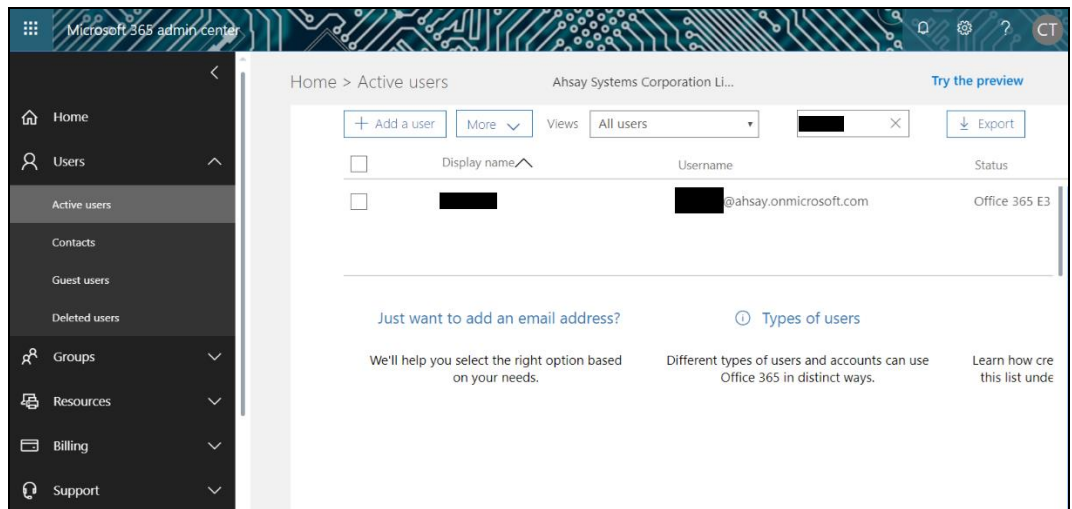
Preview Mode – This is a new feature in the Office 365 Admin Center that offers simplification to manage your Microsoft 365 and Office 365 services. It also has all the capabilities of the classic mode.



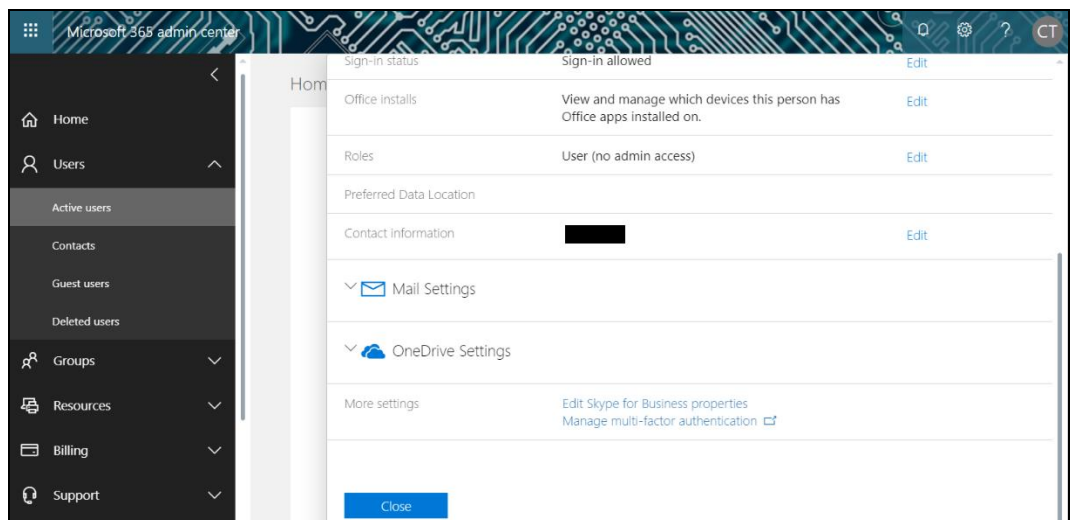
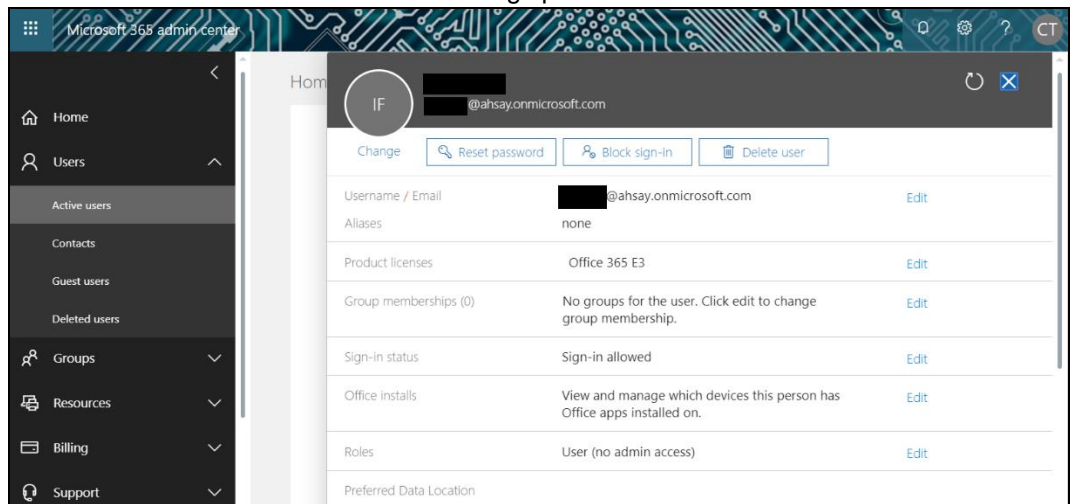
5. To go to the Multifactor Authentication screen, below are the steps for classic and preview mode.

For the Classic Mode:

- Search and select an Office 365 user account. The user's information will be displayed.



- In the lower part of the user's information screen, look for the **Manage multi-factor authentication** link. It is in the More settings portion.



More settings

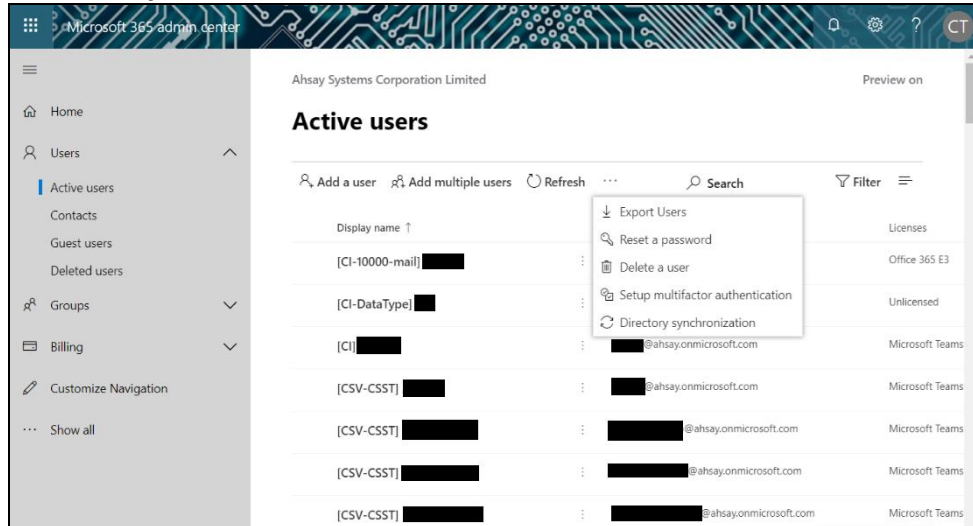
Edit Skype for Business properties
Manage multi-factor authentication [↗](#)

For the Preview Mode:

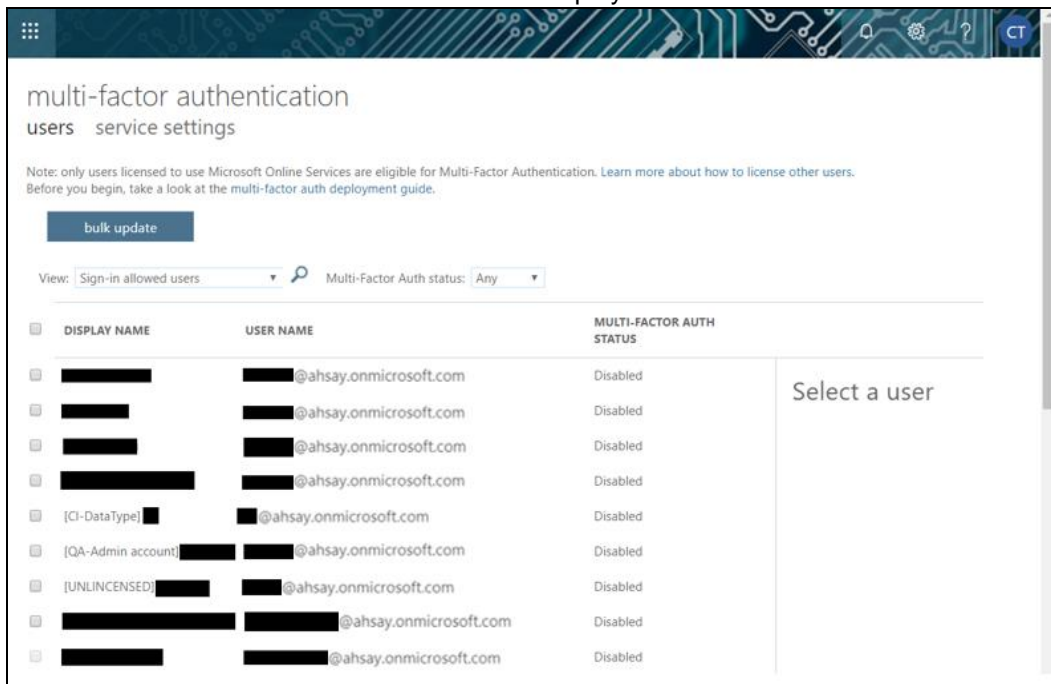
- In the Active users screen, click the [...] ellipses.



- Select **Setup multifactor authentication** from the list.

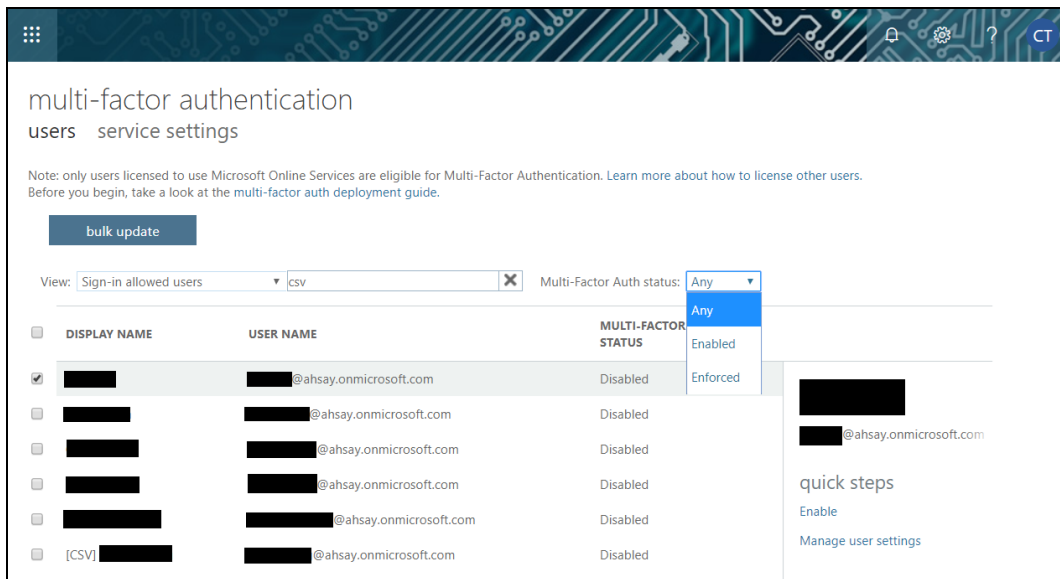


- The multi-factor authentication screen will be displayed.

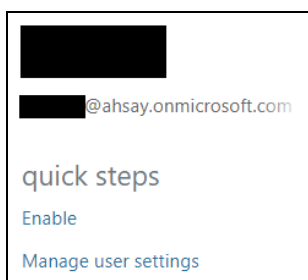
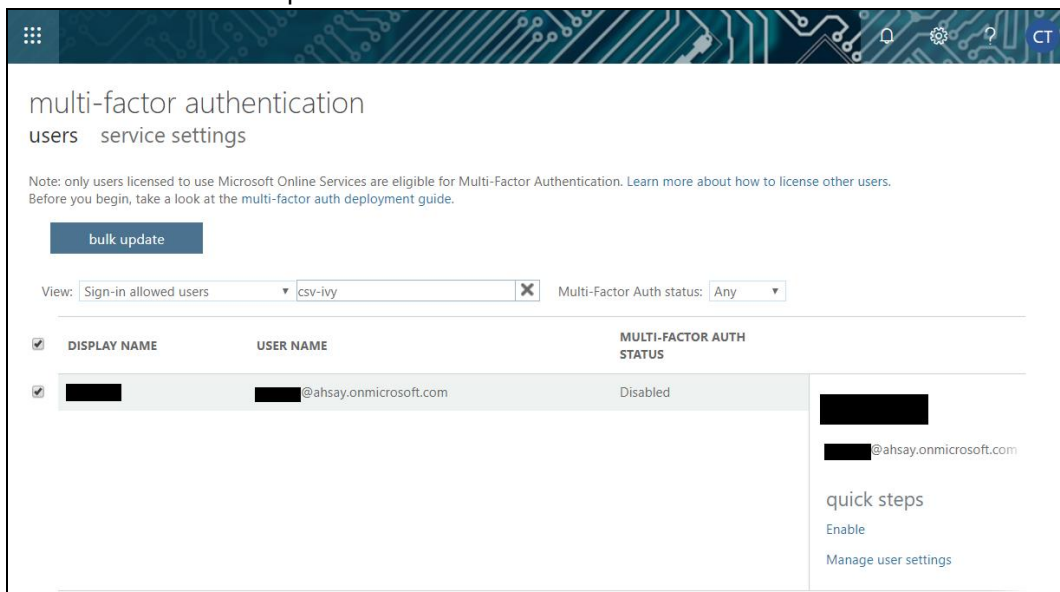


Note: The two (2) modes will go to the same screen.

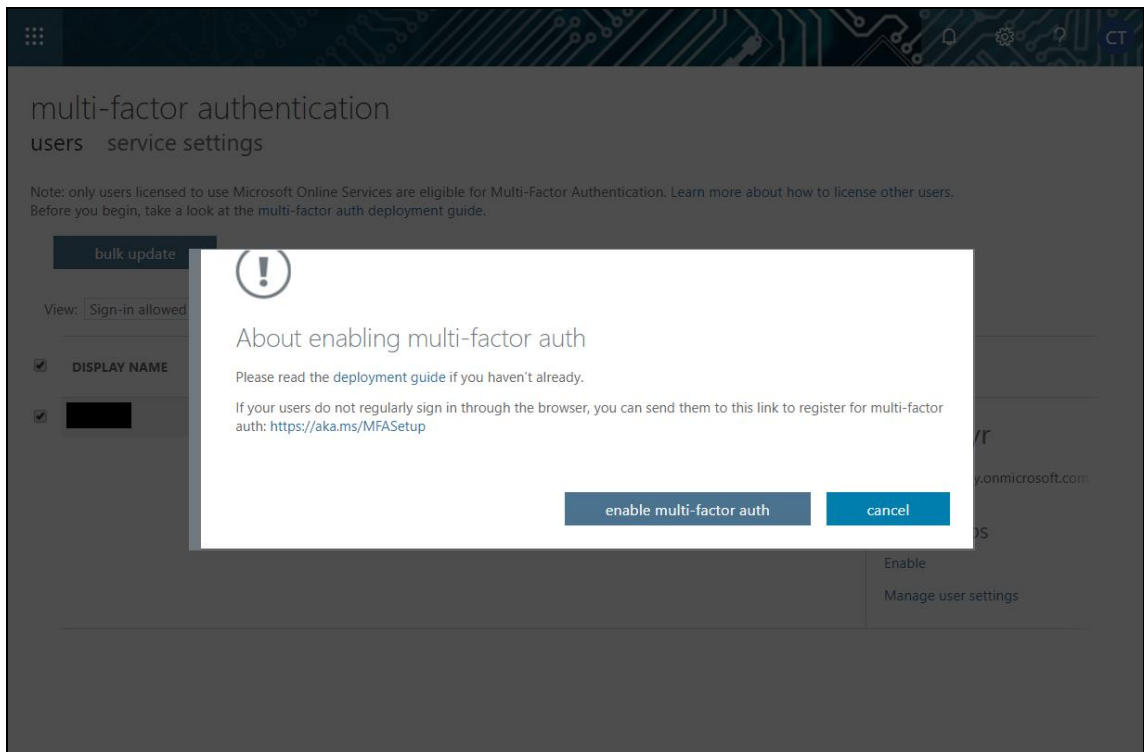
- You can search and select one or more Office 365 user accounts. There is also a drop-down list available for multi-factor authentication status namely, **Disabled**, **Enabled**, and **Enforced**.



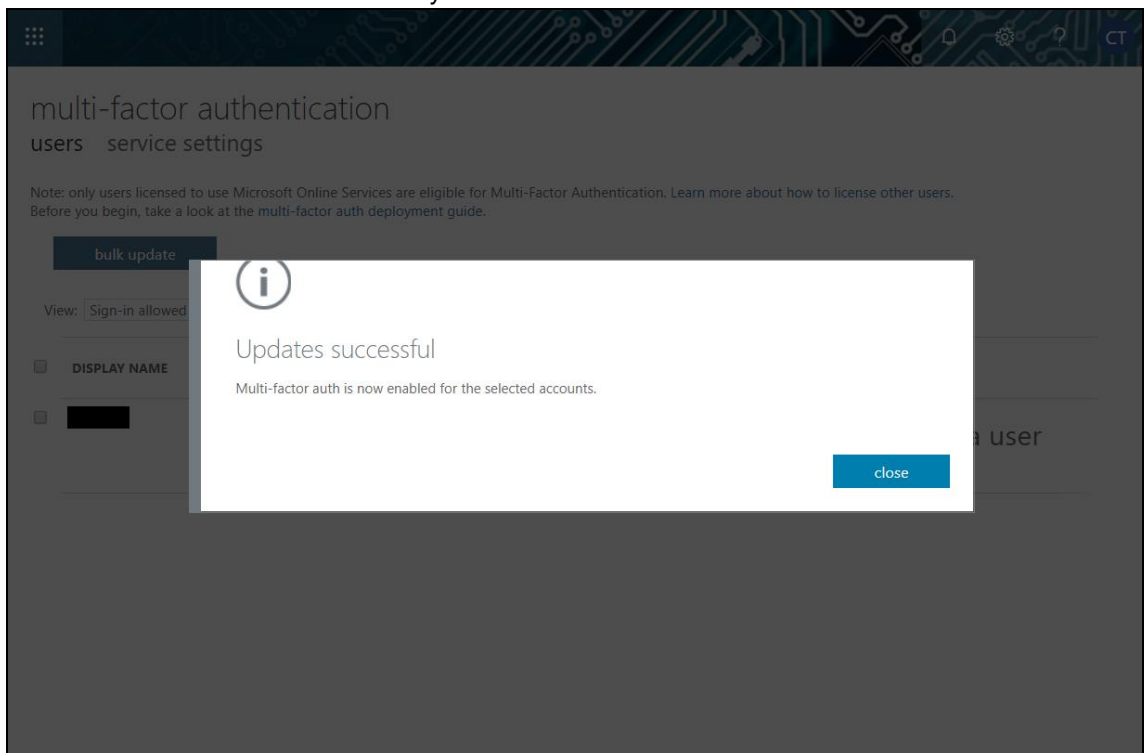
- Disabled – This status refers to the users who are not yet enrolled in the MFA. This is the default status.
 - Enabled – This status refers to the users who are enrolled in the MFA, but changes have not yet taken effect.
 - Enforced – This status refers to the users who are enrolled in the MFA has completed the registration process.
8. Upon selecting a user, on the right side of the screen it will show you a link to enable the MFA. Click the **Enable** link to proceed.



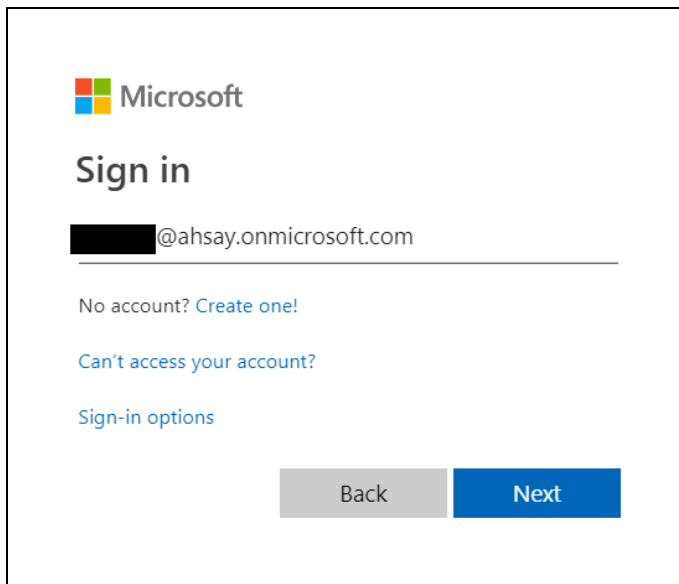
9. A warning message will be displayed. Click the **enable multi-factor auth** button to proceed. Otherwise, click the **cancel** button to abort.



10. If you select enable multi-factor auth, the screen below shows the successful enabling of MFA for the Office 365 user account that you selected.



11. To finish the setup for the MFA, login using the MFA enabled Office 365 user account.



Microsoft

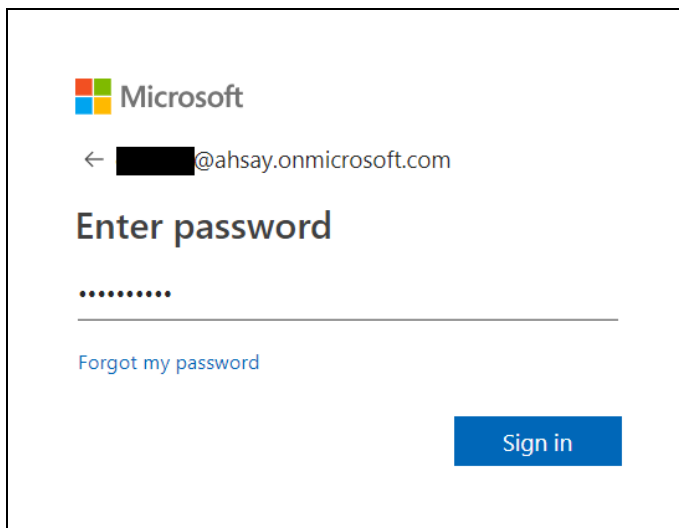
Sign in

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

[Back](#) [Next](#)



Microsoft

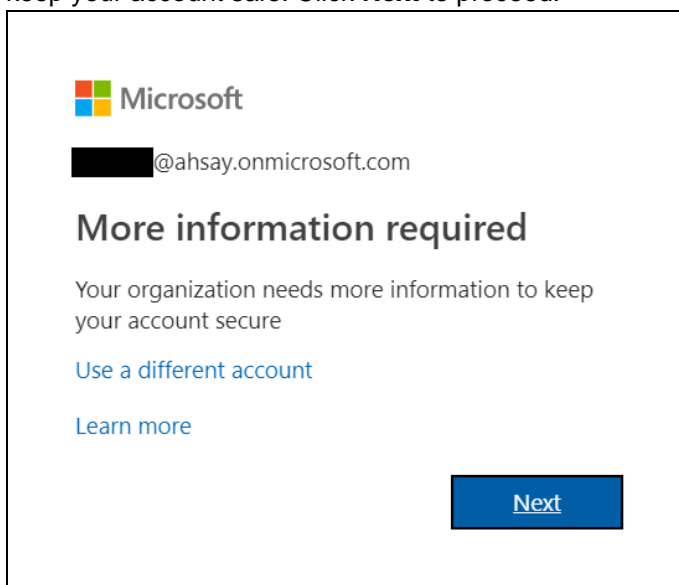
←

Enter password

[Forgot my password](#)

[Sign in](#)

12. Upon logging in, there will be a message that will require you to provide more information to keep your account safe. Click **Next** to proceed.



Microsoft

More information required

Your organization needs more information to keep your account secure

[Use a different account](#)

[Learn more](#)

[Next](#)

13. The **Additional security verification** screen will be displayed. Select one (1) option you want for the security of your account. You can choose from the three (3) options, **Authentication phone**, **Office phone**, and **Mobile app**.

Microsoft

Additional security verification

Secure your account by adding phone verification to your password. [View video to know how to secure your account](#)

Step 1: How should we contact you?

Authentication phone ▼

Select your country or region ▼

Phone number can contain only the digits 0-9, dash, space, period and parentheses.

Method

☐ Send me a code by text message

☒ Call me

Next

Your phone numbers will only be used for account security. Standard telephone and SMS charges will apply.

©2019 Microsoft Legal | Privacy

- Authentication phone
 - Enter valid mobile number.
 - Select a method
 - Send me a code by text message
 - Call me

Microsoft

Additional security verification

Secure your account by adding phone verification to your password. [View video to know how to secure your account](#)

Step 1: How should we contact you?

Authentication phone ▼

Philippines (+63) ▼

Method

☒ Send me a code by text message

☐ Call me

Next

Your phone numbers will only be used for account security. Standard telephone and SMS charges will apply.

©2019 Microsoft Legal | Privacy

- Office phone – This option is disabled. Please ask your administrator if you need to update your office phone number.

Microsoft

Additional security verification

Secure your account by adding phone verification to your password. [View video to know how to secure your account](#)

Step 1: How should we contact you?

Office phone

Select your country or region Extension

Contact your admin if you need to update your office number. Do not use a Lync phone.

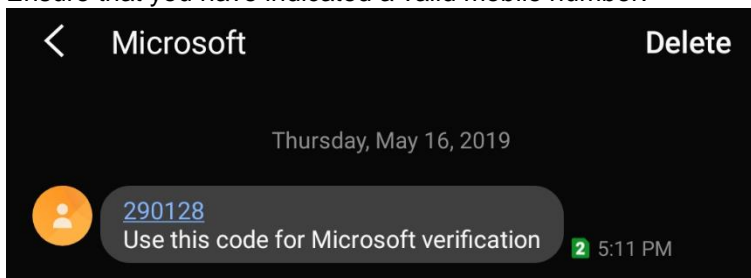
[Next](#)

Your phone numbers will only be used for account security. Standard telephone and SMS charges will apply.

©2019 Microsoft Legal | Privacy

- Mobile app
 - Select which option you like upon using the mobile app
 - Receive notifications for verification
 - Use verification code

14. If you have selected the first option which is the **Authentication phone** with a method of **Send me a code by text**, you will receive a text message containing the verification code. Ensure that you have indicated a valid mobile number.



Microsoft

Additional security verification

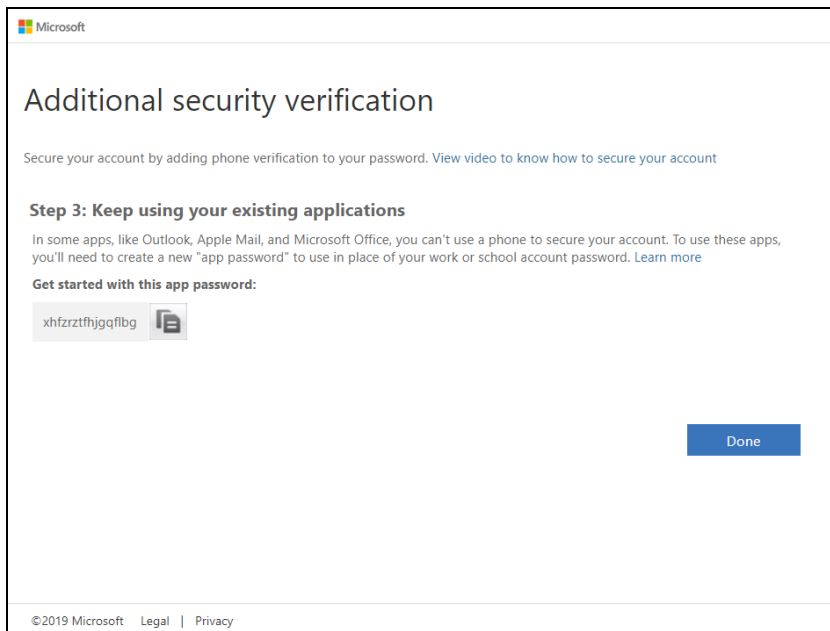
Secure your account by adding phone verification to your password. [View video to know how to secure your account](#)

Step 2: We've sent a text message to your phone at +[REDACTED]

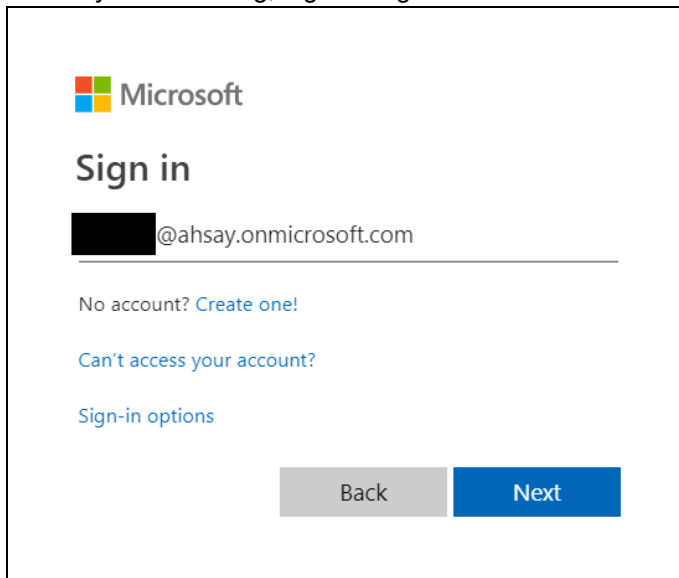
When you receive the verification code, enter it here

[Cancel](#) [Verify](#)

©2019 Microsoft Legal | Privacy



15. To verify if it's working, login using the MFA enabled Office 365 user account.



16. Upon logging in, there will be a message that will require you to provide the code that have been sent to your personal mobile number. Click **Verify** to proceed.



██████████@ahsay.onmicrosoft.com

Enter code

💬 We texted your phone +XX XXXXXXXX79. Please enter the code to sign in.

Code

Having trouble? [Sign in another way](#)

[More information](#)

Verify



Microsoft

Delete

Thursday, May 16, 2019



501311

Use this code for Microsoft verification

2 5:23 PM



██████████@ahsay.onmicrosoft.com

Enter code

💬 We texted your phone +XX XXXXXXXX79. Please enter the code to sign in.

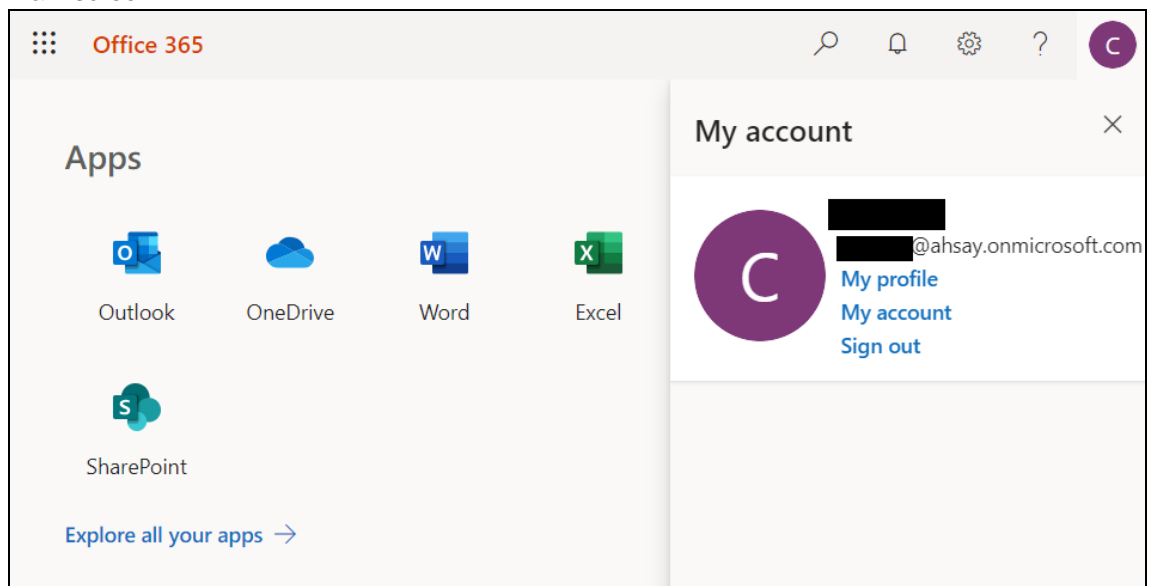
501311

Having trouble? [Sign in another way](#)

[More information](#)

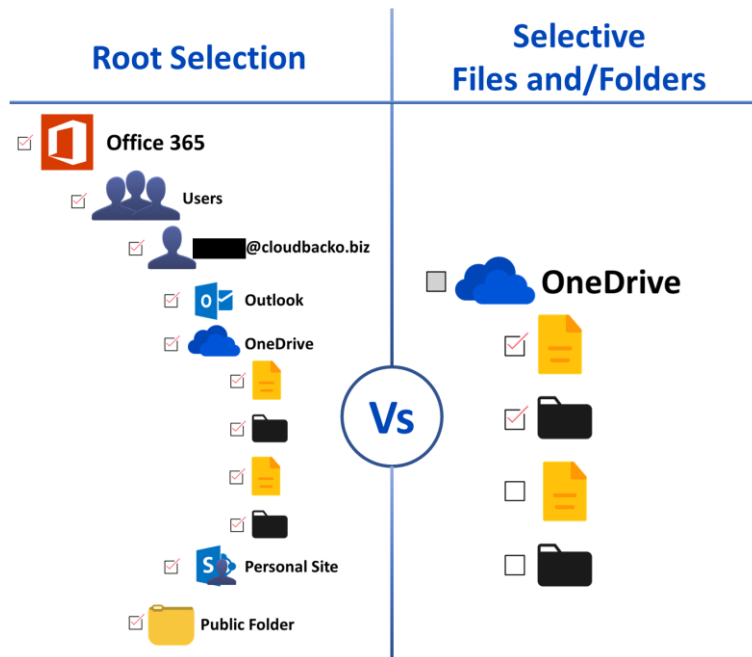
Verify

17. After the verification process, the screen will be automatically redirected to the Office 365 Main screen.



Appendix D Example Scenario for Data Synchronization Check (DSC) with sample backup logs

Selection of root folder vs Selective files and/folders

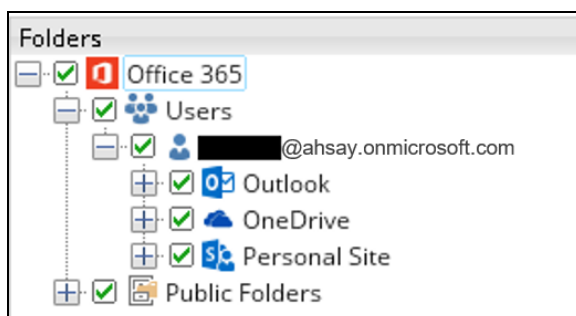


Root Selection

Selecting the root folder automatically selects all the files and/or folders under the Office 365 user account including the Public Folder. On the comparison image above, the checkbox for the root folder "Office 365" is ticked.

Data synchronization check is not required when using root selection backed up. As during a backup job any deleted files in the backup source will be automatically move to retention area.

Below is a sample screenshot of the backup source with root selection.

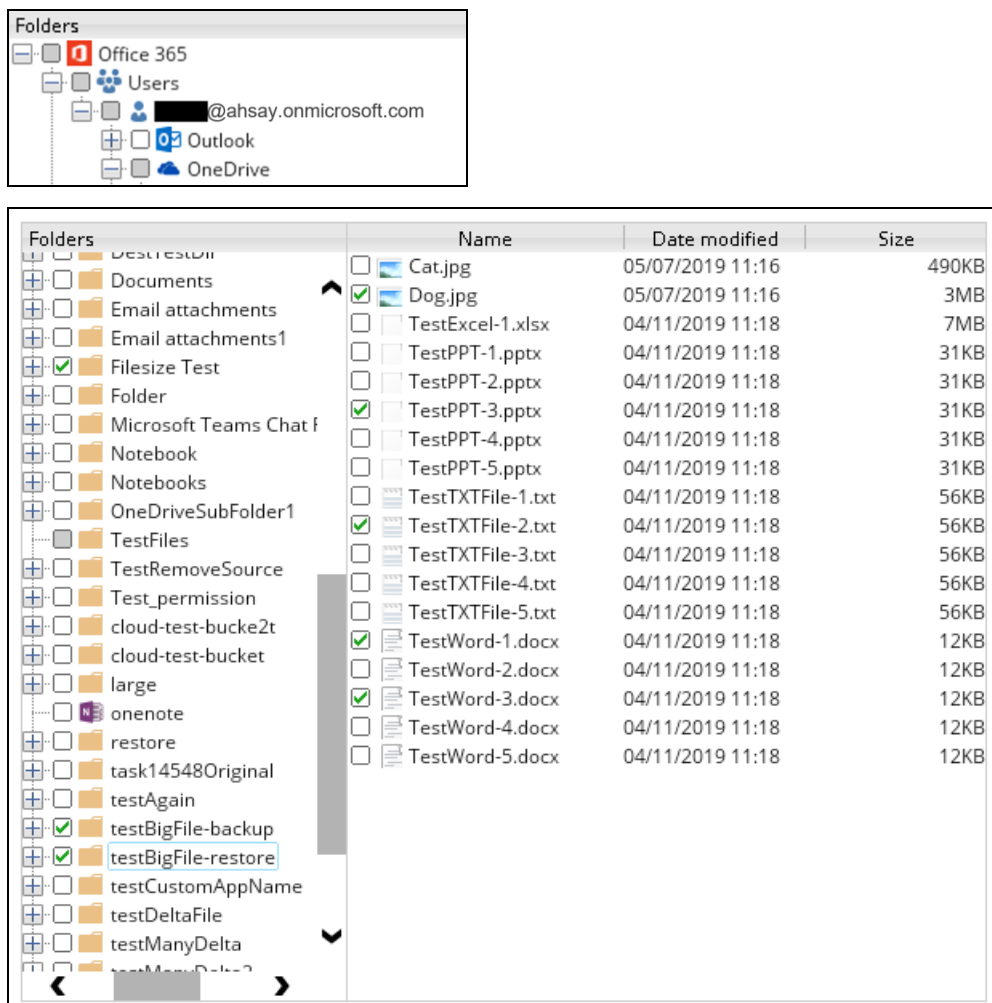


Selective Files and/or Folders

When the root folder is not selected, and the files and/or folders are selected individually. If the files and/or folders are subsequently un-selected from the backup source. The backup job will not pick up the changes of the de-selected files and/or folders, they will not be moved the retention area but remain in the data area. In the long run this could result in a build-up of data in the backup destinations(s).

Data synchronization check is highly recommended to perform to synchronize de-selected files and/folders in the backup source with the backup destination(s). This will ensure that there will be no data build up on the backup destination(s).

Below is the sample screenshot of the backup source with selective files and/or folders.



Only selected files and/or folders are selected in OneDrive. Also, the Office 365 user account is greyed out as this indicates that not all items are selected.

On the sample backup log, it shows that data synchronization check is enabled and runs for the first time.

Type	Log	Time
i	Start [AhsayACB v8.3.3.20]	07/02/2020 22:12:49
i	Saving encrypted backup set encryption keys to server...	07/02/2020 22:12:49
i	Start Backup ... [In-File Delta: Full]	07/02/2020 22:12:50
i	Using Temporary Directory C:\Users\Administrator\temp\1592968150490\OBS@1592969625624	07/02/2020 22:12:50
i	Downloading server file list (Office 365)...	07/02/2020 22:12:56
i	Downloading server file list (Office 365)... Completed	07/02/2020 22:12:56
i	Run Office 365 Data Synchronization Check (1st time)	07/02/2020 22:13:00
i	[New Directory]... Office 365	07/02/2020 22:13:00
i	[New Directory]... Office 365/Users	07/02/2020 22:13:00
i	[New Directory]... Office 365/Site Collections	07/02/2020 22:13:00
i	[New Directory]... Office 365/Users	07/02/2020 22:13:00
i	[New Directory]... Office 365/Users	07/02/2020 22:13:00
i	[New Directory]... Office 365/Site Collections	07/02/2020 22:13:00
i	Downloading server file list (Office 365)...	07/02/2020 22:13:02
i	Downloading server file list (Office 365)... Completed	07/02/2020 22:13:02
i	Reading backup source from [redacted]@ahsay.onmicrosoft.com...	07/02/2020 22:13:03
i	Backup E-mail Account: [redacted]@ahsay.onmicrosoft.com...	07/02/2020 22:13:03

On the sample backup log, it shows the countdown until the next data synchronization check which is in two (2) days. The interval set is three (3) days.

Type	Log	Time
i	Start [AhsayACB v8.3.3.20]	07/03/2020 22:28:41
i	Saving encrypted backup set encryption keys to server...	07/03/2020 22:28:41
i	Start Backup ... [In-File Delta: Full]	07/03/2020 22:28:42
i	Using Temporary Directory C:\Users\Administrator\temp\1592968150490\OBS@1592969625624	07/03/2020 22:28:42
i	Downloading server file list (Office 365)...	07/03/2020 22:28:45
i	Download valid index files from backup job "Current" to "C:\Users\Administrator\temp\1592968150490\OBS@1592969625624"	07/03/2020 22:28:46
i	Downloading server file list (Office 365)... Completed	07/03/2020 22:28:46
i	Office 365 Data Synchronization Check will be run after 2 day(s)	07/03/2020 22:28:49
i	Downloading server file list (Office 365)...	07/03/2020 22:28:54
i	Download valid index files from backup job "Current" to "C:\Users\Administrator\temp\1592968150490\OBS@1592969625624"	07/03/2020 22:28:55
i	Downloading server file list (Office 365)...	07/03/2020 22:28:55
i	Reading backup source from [redacted]@ahsay.onmicrosoft.com...	07/03/2020 22:28:56
i	Reading backup source from [redacted]@ahsay.onmicrosoft.com... Completed	07/03/2020 22:28:56
i	Start validating the presence and size of backup data in destination "AhsayCBS"...	07/03/2020 22:28:57
i	Finished validating the presence and size of backup data in destination "AhsayCBS"	07/03/2020 22:28:57

On the sample backup log, it shows the countdown is done and data synchronization check is running.

Type	Log	Time
i	Start [AhsayACB v8.3.3.20]	07/05/2020 22:32:58
i	Saving encrypted backup set encryption keys to server...	07/05/2020 22:32:59
i	Start Backup ... [In-File Delta: Full]	07/05/2020 22:33:00
i	Using Temporary Directory C:\Users\Administrator\temp\1592968150490\OBS@1592969625624	07/05/2020 22:33:00
i	Downloading server file list (Office 365)...	07/05/2020 22:33:02
i	Download valid index files from backup job "Current" to "C:\Users\Administrator\temp\1592968150490\OBS@1592969625624"	07/05/2020 22:33:03
i	Downloading server file list (Office 365)... Completed	07/05/2020 22:33:03
i	Run Office 365 Data Synchronization Check	07/05/2020 22:33:06
i	Downloading server file list (Office 365)...	07/05/2020 22:33:10
i	Download valid index files from backup job "Current" to "C:\Users\Administrator\temp\1592968150490\OBS@1592969625624"	07/05/2020 22:33:11
i	Downloading server file list (Office 365)...	07/05/2020 22:33:11
i	Reading backup source from [redacted]@ahsay.onmicrosoft.com...	07/05/2020 22:33:12
i	Reading backup source from [redacted]@ahsay.onmicrosoft.com... Completed	07/05/2020 22:33:12
i	Start validating the presence and size of backup data in destination "AhsayCBS"...	07/05/2020 22:33:13
i	Finished validating the presence and size of backup data in destination "AhsayCBS"	07/05/2020 22:33:13

On the sample backup log, it shows that data synchronization check is **disabled**.

Type	Log	Time
i	Start [AhsayACB v8.3.3.20]	07/05/2020 22:39:11
i	Saving encrypted backup set encryption keys to server...	07/05/2020 22:39:11
i	Start Backup ... [In-File Delta: Full]	07/05/2020 22:39:13
i	Using Temporary Directory C:\Users\Administrator\temp\1592968150490\OBS@1592969625624	07/05/2020 22:39:13
i	Downloading server file list (Office 365)...	07/05/2020 22:39:14
i	Download valid index files from backup job "Current" to "C:\Users\Administrator\temp\1592968150490\OBS@15929696...	07/05/2020 22:39:15
i	Downloading server file list (Office 365)... Completed	07/05/2020 22:39:15
i	Office 365 Data Synchronization Check is disabled (Debug option - Office365.DSCInterval = -1)	07/05/2020 22:39:18
i	Downloading server file list (Office 365)...	07/05/2020 22:39:22
i	Download valid index files from backup job "Current" to "C:\Users\Administrator\temp\1592968150490\OBS@15929696...	07/05/2020 22:39:23
i	Downloading server file list ([REDACTED]@ahsay.onmicrosoft.com)... Completed	07/05/2020 22:39:23
i	Reading backup source from [REDACTED]@ahsay.onmicrosoft.com)...	07/05/2020 22:39:24
i	Reading backup source from [REDACTED]@ahsay.onmicrosoft.com)... Completed	07/05/2020 22:39:24
i	Start validating the presence and size of backup data in destination "AhsayCBS"...	07/05/2020 22:39:25

Appendix E Setting the Data Synchronization Check (DSC)

Data Synchronization Check (DSC) is enabled by default and will run every 60 days.

Assumption: AhsayACB Installation path is **C:\Program Files\AhsayACB**

To disable the data synchronization check, follow the instructions below:

1. Make sure there are no active backup or restore job running.
2. Close AhsayACB UI.
3. Stop the Ahsay A-Click Backup Manager services.
4. Go to C:\Program Files\AhsayACB\ folder.
5. Open **cb.opt** file using a text editor such as Notepad or Notepad++.
6. Add this line, *Office365.DSCInterval=-1*
The **-1** value represents the disabled data synchronization check.
7. Start the Ahsay A-Click Backup Manager services.

To check if the data synchronization check is enabled, follow the instructions below:

1. Go to C:\Program Files\AhsayACB\ folder.
2. Open **cb.opt** file using a text editor such as Notepad or Notepad++.
3. Look for this line, *Office365.DSCInterval=xx*.

Note:

If **xx** is a positive value this indicates the data synchronization check is enabled and represents the interval number of days until the next run of data synchronization check.

-OR-

If the interval value is not -1.

To adjust the interval number of days, follow the instructions below:

1. Make sure there are no active backup/restore job running.
2. Close AhsayACB UI.
3. Stop the Ahsay A-Click Backup Manager services.
4. Go to C:\Program Files\AhsayACB\ folder.
5. Open **cb.opt** file using a text editor such as Notepad or Notepad++.
6. Change the interval number.

For example:

Current interval: *Office365.DSCInterval=60*

Updated interval: *Office365.DSCInterval=10*

Explanation:

On the current interval, the number of days is 60. While, the updated interval, the number of days is reduced to 10.

WARNING

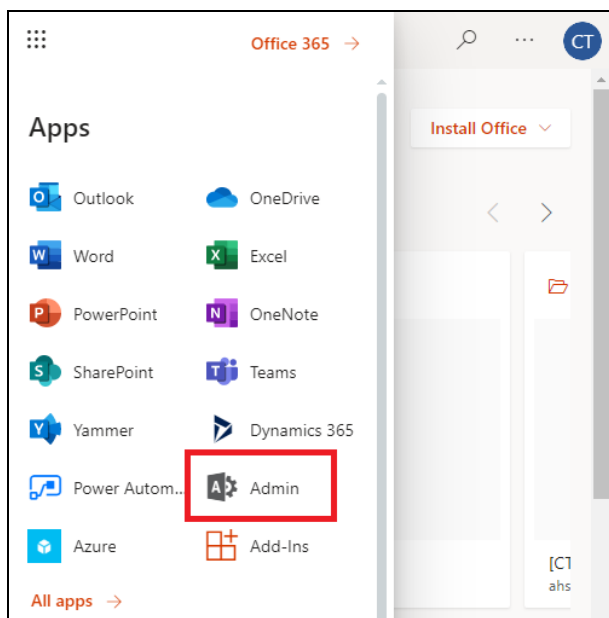
If the interval value is 0, *Office365.DSCInterval=0*, then the Data Synchronization Check (DSC) will run for every backup job.

7. Start the Ahsay A-Click Backup Manager services.

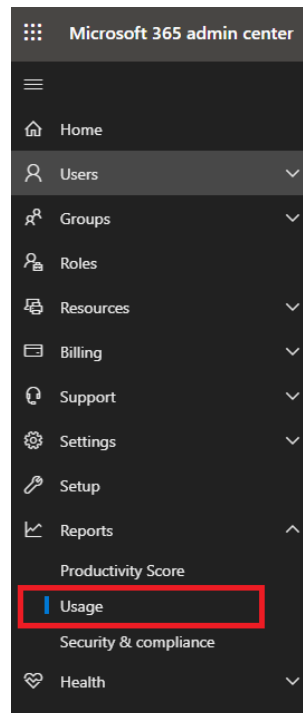
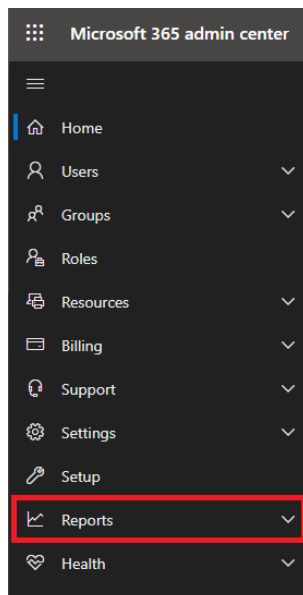
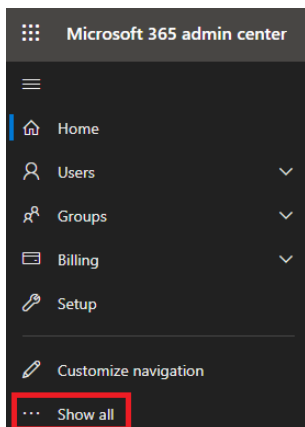
Appendix F Steps on How to view Item count and Storage used in Microsoft 365 Admin Center

To view the item count and storage size of Office 365 user account based on the usage for Exchange (Outlook) and OneDrive, follow the instructions below:

1. Login to the Office 365 (<https://login.microsoft.com>).
2. Go to Microsoft 365 admin center.

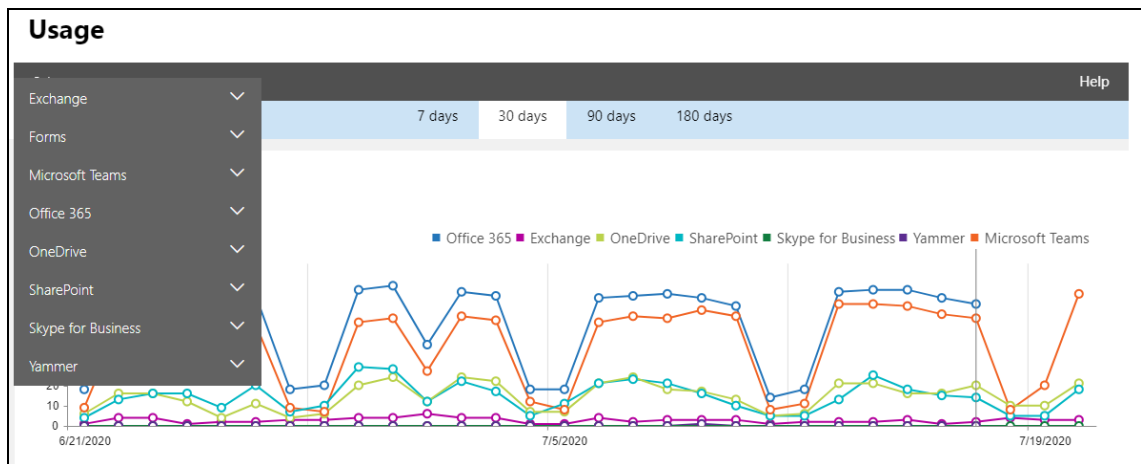
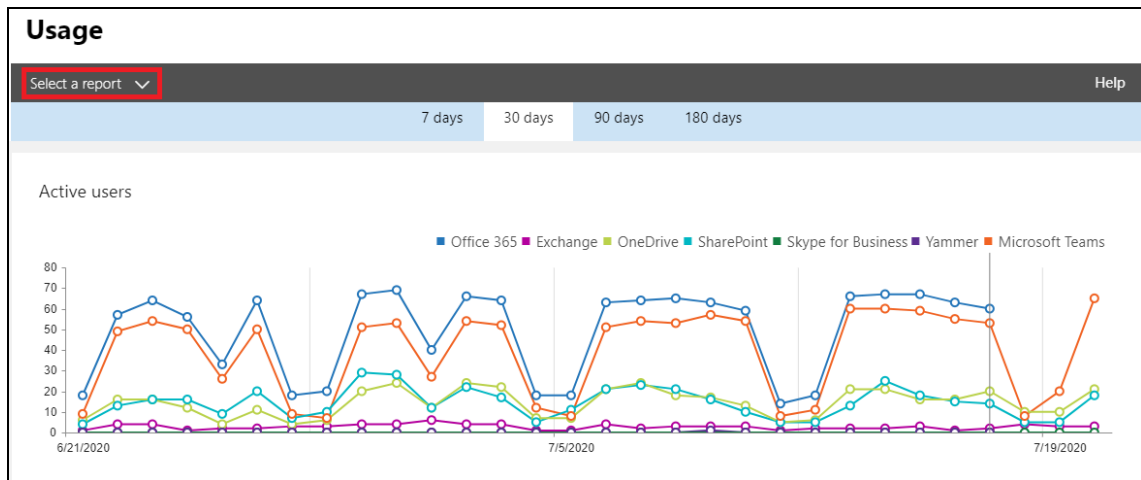


3. On the Microsoft 365 admin center, click **Show all** then click the dropdown arrow for the **Reports** and select **Usage**.



4. On the Usage screen, select a report you want to view.

Select a report ▼



5. For Exchange, go to Mailbox usage.

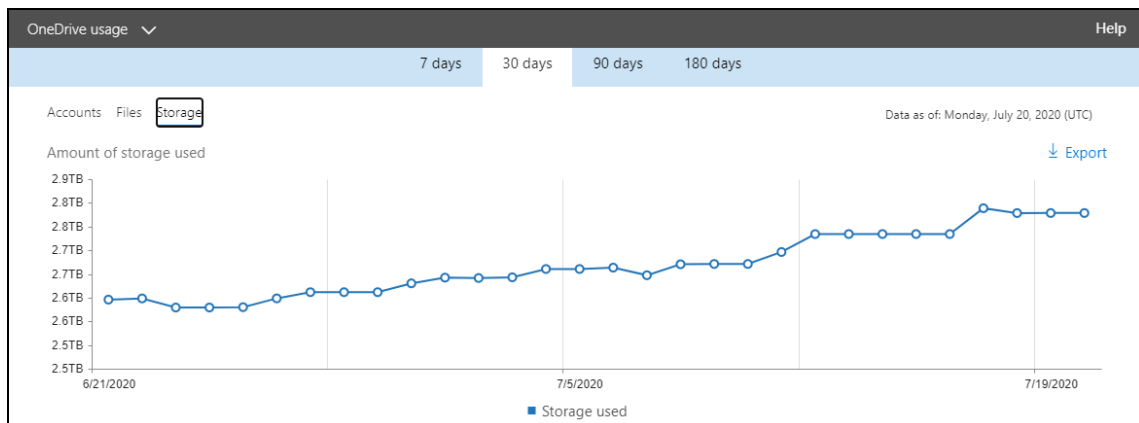
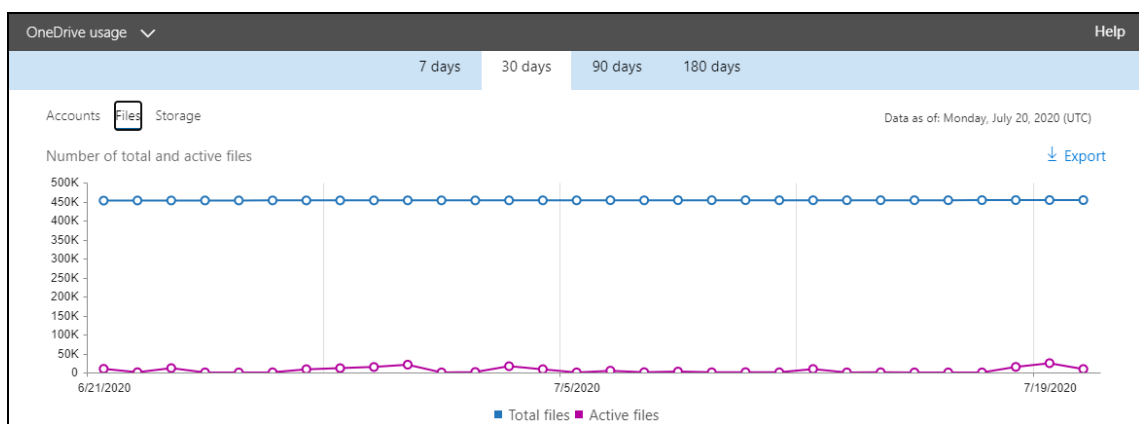
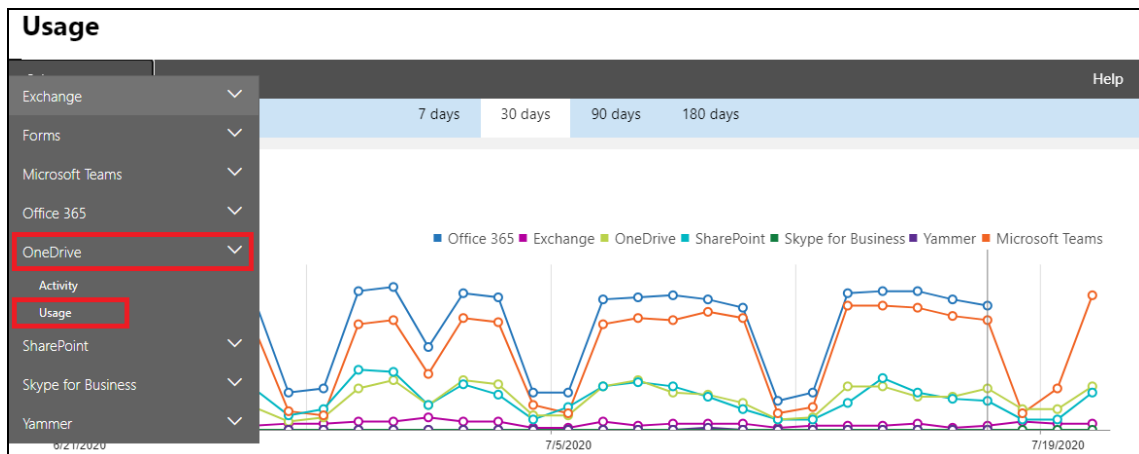


Highlighted columns are, Item count and Storage used (MB).

- Item count – number of mailbox items in Outlook per Office 365 user account
- Storage used (MB) – storage used in MB size per Office 365 user account

Details		Last activity date (UTC)		Item count	Storage used (MB)	Quota status
@ahsay.onmicrosoft.com				9,597	1,383	Good (under limits)
@ahsay.onmicrosoft.com				9,607	1,383	Good (under limits)
@ahsay.onmicrosoft.com				9,634	1,383	Good (under limits)
@ahsay.onmicrosoft.com				9,597	1,383	Good (under limits)
@ahsay.onmicrosoft.com				9,597	1,383	Good (under limits)
@ahsay.onmicrosoft.com				9,585	1,384	Good (under limits)

6. For OneDrive, go to Usage



Highlighted columns are, Files and Storage used (MB).

- 🔵 **Files** – number of files in OneDrive per Office 365 user account
- 🔵 **Storage used (MB)** – storage used in MB size per Office 365 user account

Details							Export
URL	Owner principal name	Last activity date (UTC)	Files	Active files	Storage used (MB)		
https://ahsay-my.sharepoint.com/personal/...	@ahsay.onmicrosoft.com	Tuesday, July 14, 2020	8	48	52		
https://ahsay-my.sharepoint.com/personal/...	@ahsay.onmicrosoft.com	Monday, February 17, 2020	11,021	0	5,697		
https://ahsay-my.sharepoint.com/personal/...	@ahsay.onmicrosoft.com	Tuesday, July 14, 2020	0	29	2		
https://ahsay-my.sharepoint.com/personal/...	@ahsay.onmicrosoft.com	Monday, July 20, 2020	28,226	694	47,882		
https://ahsay-my.sharepoint.com/personal/...	@ahsay.onmicrosoft.com	Tuesday, July 07, 2020	32	226	45		

Appendix G Migrating Authentication of Office 365 Backup Set

Starting with AhsayACB v8.3.6.0 or above, existing backup sets are suggested to be migrated to use Modern Authentication. This will ensure that moving forward there will be no backup and restore issues to be encountered once Microsoft implements its product roadmap for Modern Authentication. This only needs to be done once per Office 365 user account.

There are two methods in migrating existing Office 365 backup sets, one is to migrate to Hybrid Authentication, and another is to migrate to Modern Authentication. The following are the required Office 365 account that must be used to authorize the migration of authentication of existing Office 365 backup sets:

- When migrating to Hybrid Authentication, the users Office 365 account may be used to authorize the migration of authentication.
- When migrating to Modern Authentication, an Office 365 account with a Global Admin role is required to be used to login their credentials to authorize the migration of authentication.

The following are the two (2) migration scenarios:

- [Basic Authentication to Hybrid Authentication](#)
- [Basic Authentication to Modern Authentication](#)

NOTE

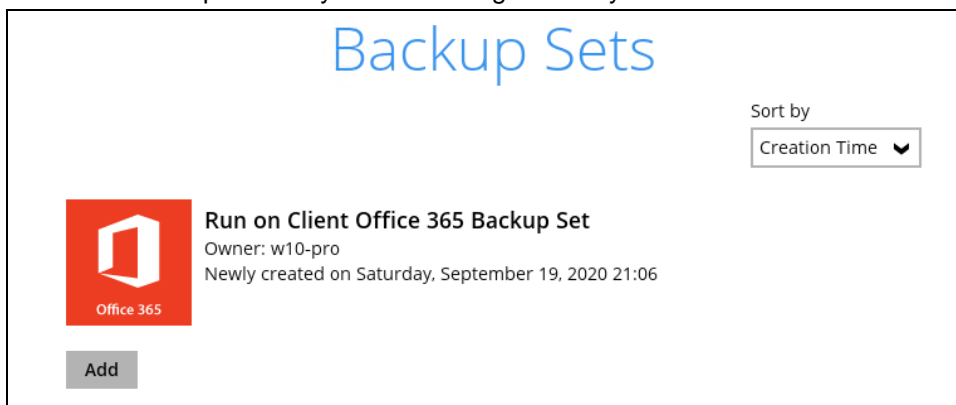
Due to the current limitation with Microsoft API, Modern Authentication is currently not suitable for backup sets with Personal Sites selected. As a temporary workaround for Office 365 backup sets which require backup of Personal Sites should migrate to Hybrid Authentication until the issue has been resolved by Microsoft.

To migrate a backup set from **Basic Authentication to Hybrid Authentication**, follow the instructions below:

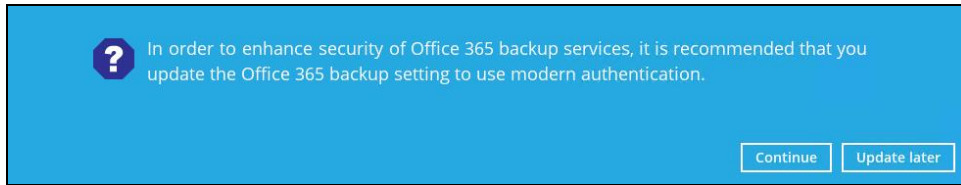
1. Logout all Office 365 account on the default browser before starting the migration of backup set.
2. In the AhsayACB main interface, click **Backup Sets**.



3. Select the backup set that you want to migrate to Hybrid Authentication.



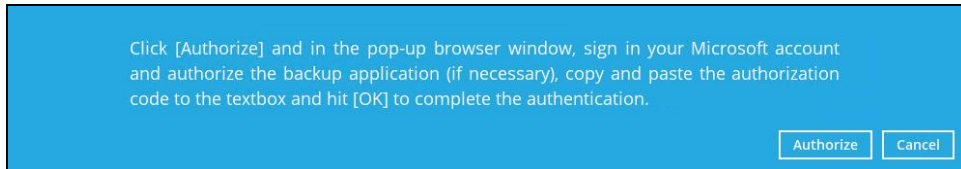
4. Click **Continue**.



In order to enhance security of Office 365 backup services, it is recommended that you update the Office 365 backup setting to use modern authentication.

Continue Update later

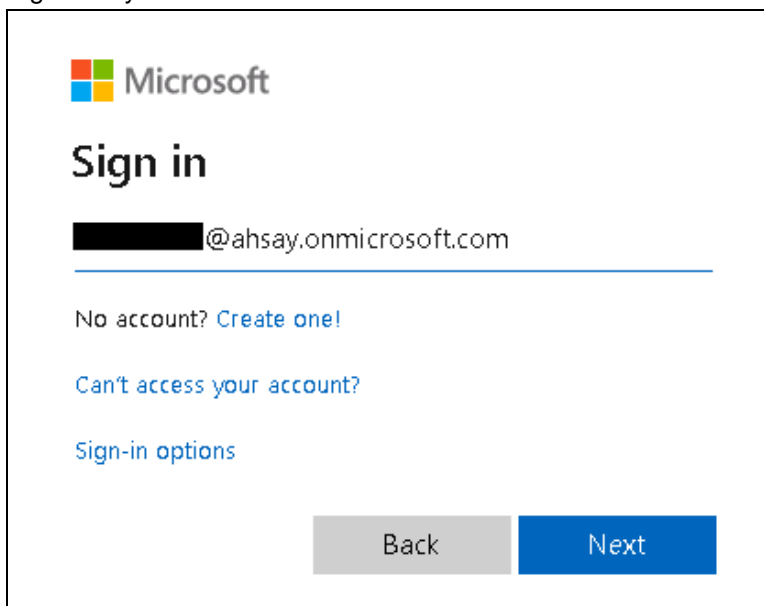
5. Click **Authorize**.



Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

Authorize Cancel

6. Sign in to your account.



Microsoft

Sign in

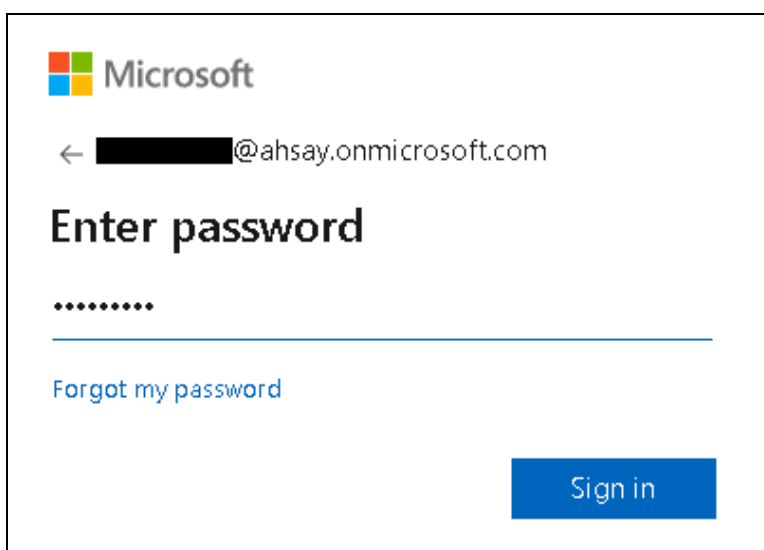
██████████@ahsay.onmicrosoft.com

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

Back Next



Microsoft

← ██████████@ahsay.onmicrosoft.com

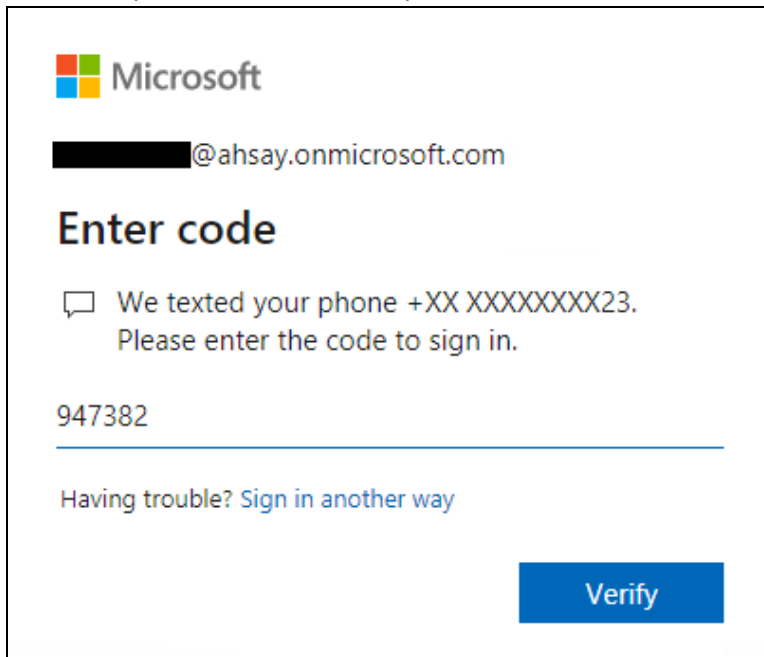
Enter password

.....

[Forgot my password](#)

Sign in

7. If MFA is enforced, enter the verification code sent to your mobile device and click **Verify**. Otherwise proceed to the next step.



The image shows a Microsoft login interface. At the top is the Microsoft logo. Below it is a placeholder email address ending in @ahsay.onmicrosoft.com. The heading "Enter code" is followed by a message: "We texted your phone +XX XXXXXXXX23. Please enter the code to sign in." A text input field contains the code "947382". Below the input field is a link: "Having trouble? Sign in another way". At the bottom right is a blue button labeled "Verify".

NOTE

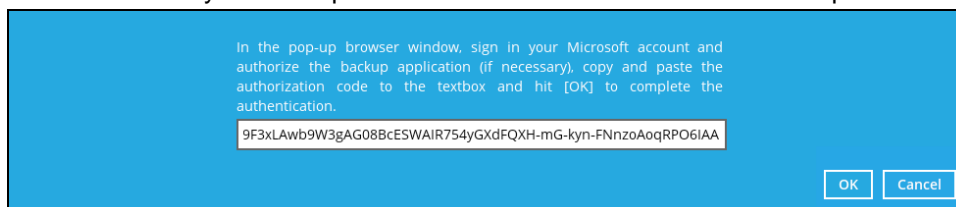
The verification code will only be required if the MFA status of an Office 365 account is enforced.

8. Copy the authorization code.



The image shows an Ahsay authorization screen. At the top is the Ahsay logo. Below it is the text "Authorization Code for Microsoft 365". A large text box displays the authorization code: "0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCGjmGnR:". Below the text box is the instruction: "Please copy and paste the above Authorization Code into Ahsay's product to complete the setup."

9. Go back to AhsayACB and paste the authorization code. Click **OK** to proceed.



The image shows a blue dialog box from AhsayACB. It contains the following text: "In the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication." Below this text is a text input field containing the authorization code: "9F3xLAWb9W3gAG08BcESWAIR754yGXdfQXH-mG-kyn-FNnz0A0qRPO6IAA". At the bottom right are two buttons: "OK" and "Cancel".

10. Click **Save** to finish the migration.

Run on Client Office 365 Backup Set

General

Name
Run on Client Office 365 Backup Set

Owner
w10-pro

Office 365

Username
[redacted]@ahsay.onmicrosoft.com

Region
Global

☐ Access the Internet through proxy

Change settings

Windows User Authentication

Domain Name (e.g. Ahsay.com) / Host Name

Delete this backup set Save Cancel Help

To migrate a backup set from **Basic Authentication to Modern Authentication**, follow the instructions below:

1. Logout all Office 365 account on the default browser before starting the migration of backup set.
2. In the AhsayACB main interface, click **Backup Sets**.



3. Select the backup set that will be migrated.

Backup Sets

Sort by
Creation Time

Run on Client Office 365 Backup Set
Owner: w10-pro
Newly created on Saturday, September 19, 2020 21:06

Add

4. Click **Continue**.


In order to enhance security of Office 365 backup services, it is recommended that you update the Office 365 backup setting to use modern authentication.

Continue Update later

5. Click **Authorize**.

Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

6. Ask your administrator to sign in using an Office 365 account with Global Admin role in order to migrate the backup set.


 Microsoft

Sign in

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

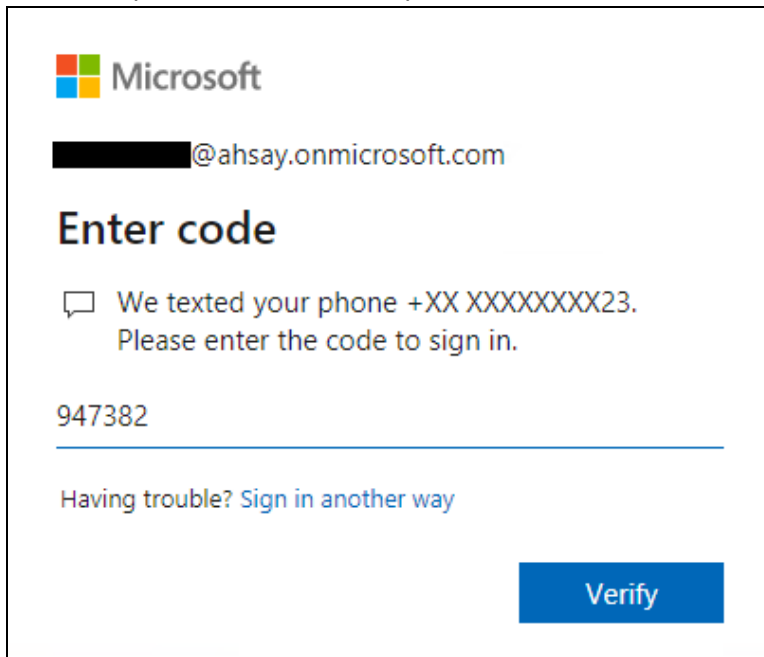
 Microsoft

←

Enter password

[Forgot my password](#)

7. If MFA is enforced, enter the verification code sent to your mobile device and click **Verify**. Otherwise proceed to the next step.

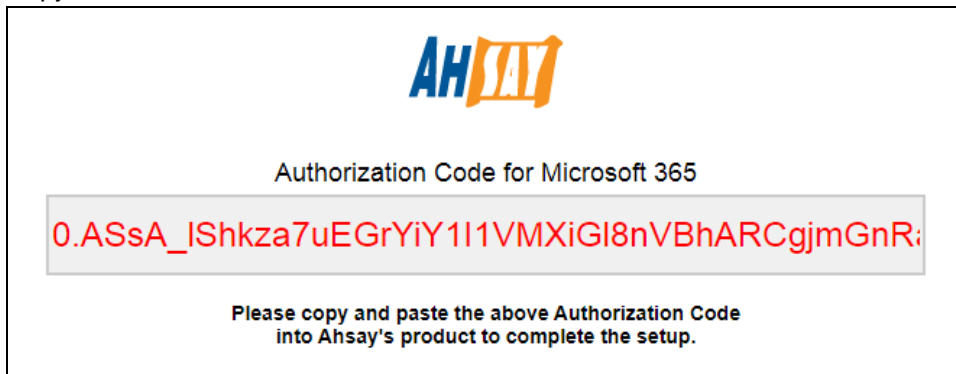


The image shows a Microsoft login interface. At the top is the Microsoft logo. Below it is a blacked-out email address followed by '@ahsay.onmicrosoft.com'. The heading 'Enter code' is prominent. A message states: 'We texted your phone +XX XXXXXXXX23. Please enter the code to sign in.' Below this is a text input field containing the code '947382'. At the bottom left is a link: 'Having trouble? Sign in another way'. At the bottom right is a blue button labeled 'Verify'.

NOTE

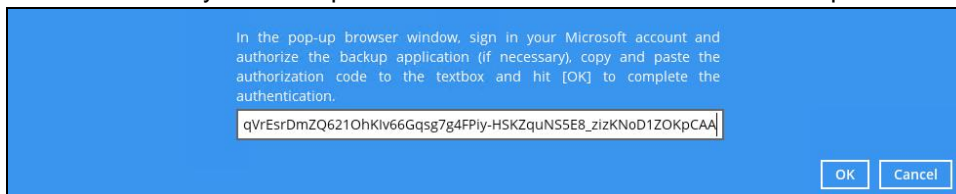
The verification code will only be required if the MFA status of an Office 365 account is enforced.

8. Copy the authorization code.



The image shows a screen with the Ahsay logo at the top. Below the logo, it says 'Authorization Code for Microsoft 365'. In the center, a red authorization code is displayed: '0.ASSA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCGjmGnR:'. At the bottom, a message reads: 'Please copy and paste the above Authorization Code into Ahsay's product to complete the setup.'

9. Go back to AhsayACB and paste the authorization code. Click **OK** to proceed.



The image shows a blue dialog box from AhsayACB. It contains instructions: 'In the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.' Below the text is a text input field containing the code: 'qVrEsRdmZQ621OhKiv66Gqsg7g4FPly-HSKZquNS5E8_zizKNoD1ZOKpCAA'. At the bottom right are two buttons: 'OK' and 'Cancel'.

10. Click **Save** to finish the migration.

Office 365 Run on Client Office ...

General

Source

Backup Schedule

Destination

Reminder

Others

General

Name
Run on Client Office 365 Backup Set

Owner
w10-pro

Office 365

Username
[redacted]@ahsay.onmicrosoft.com

Region
Global

☐ Access the Internet through proxy

Change settings

Windows User Authentication

Domain Name (e.g. Ahsay.com) / Host Name

Delete this backup set

Save Cancel Help

Appendix H Steps on How to Change the Office 365 Authentication

After upgrading to AhsayACB v8.3.6.0 or above, all newly created Office 365 backup sets will automatically start using Modern Authentication. However, if the user has selected Personal Sites for Office 365 backup, this will not be possible on an Office 365 backup set using Modern Authentication due to limitations with Microsoft API. To resolve this issue, a change from Modern Authentication to Hybrid Authentication is needed. Please refer to Chapters [2.17.1](#) and [2.17.2](#) for the complete list of backup and restore limitations using Modern Authentication.

Once the backup and restore of SharePoint Web Parts and Metadata is fully supported using Modern Authentication, Office 365 backup sets using Hybrid Authentication can be changed back to Modern Authentication.

The following are the two (2) types of authentication change:

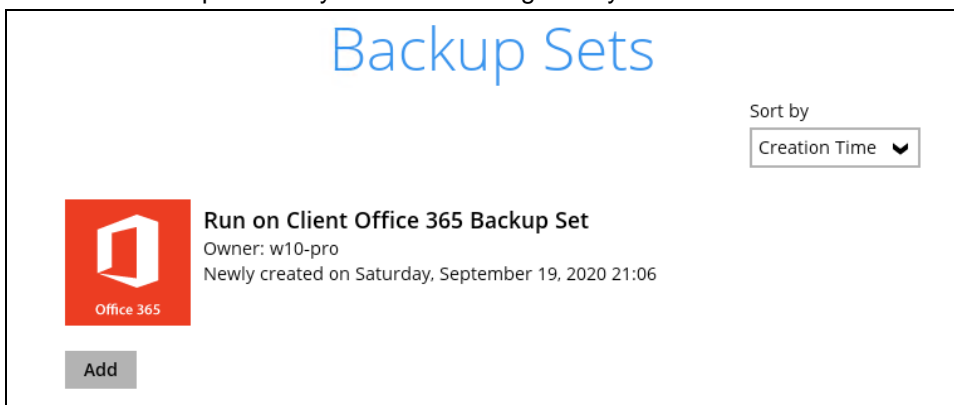
- [Modern Authentication to Hybrid Authentication](#)
- [Hybrid Authentication to Modern Authentication](#)

To change the authentication from **Modern Authentication to Hybrid Authentication**, follow the instructions below:

1. Logout all Office 365 account on the default browser before starting the authentication change of the backup set.
2. In the AhsayACB main interface, click **Backup Sets**.



3. Select the backup set that you want to change to Hybrid Authentication.



4. In the Backup Set Settings, click **Change settings** under the Office 365 screen..

Run on Client Office 365 Backup Set

General

Name
Run on Client Office 365 Backup Set

Owner
w10-pro

Office 365

Username
[Redacted]@ahsay.onmicrosoft.com

Region
Global

☐ Access the Internet through proxy

Change settings

Windows User Authentication

Domain Name (e.g. Ahsay.com) / Host Name

Delete this backup set

Save Cancel Help

5. In the Office 365 credentials page, **input the Office 365 login account and password** then click **Next**.

Office 365

Username
[Redacted]@ahsay.onmicrosoft.com

Account password
[Redacted]

App password
(Required if Multi-Factor Authentication is enforced)

Region
Global

☐ Access the Internet through proxy

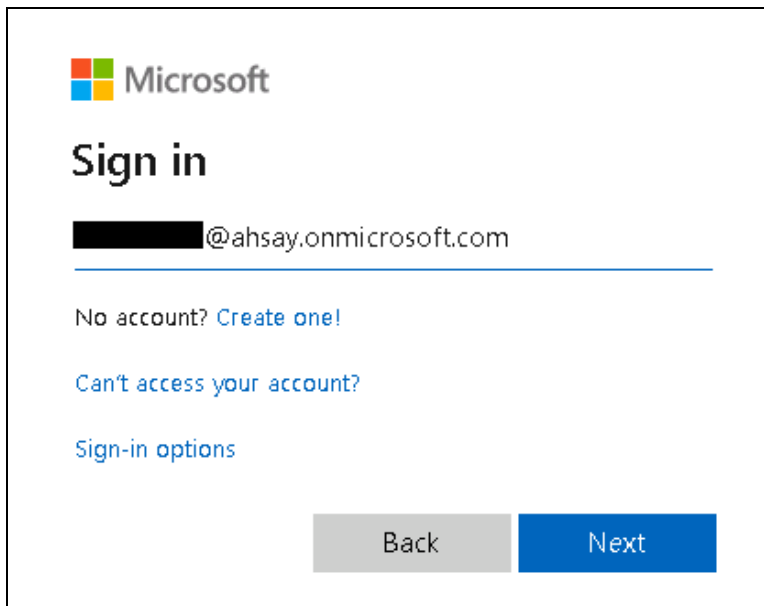
Next Cancel Help

6. Click **Authorize** to start the authentication change process.

Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

Authorize Cancel

7. Sign in to your account.



Microsoft

Sign in

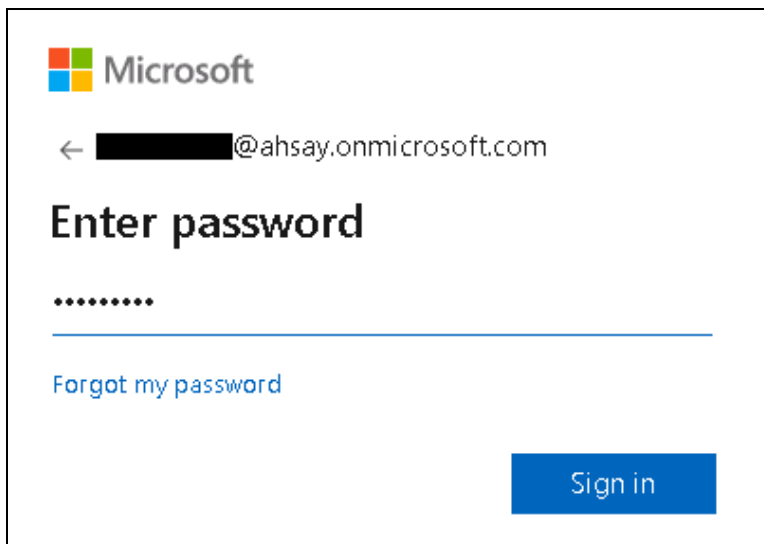
██████████@ahsay.onmicrosoft.com

No account? [Create one!](#)

[Can't access your account?](#)

[Sign-in options](#)

[Back](#) [Next](#)



Microsoft

← ██████████@ahsay.onmicrosoft.com


Enter password

.....

[Forgot my password](#)

[Sign in](#)

8. If MFA is enforced, enter the verification code sent to your mobile device and click **Verify**. Otherwise proceed to the next step.



Microsoft

██████████@ahsay.onmicrosoft.com

Enter code

📱 We texted your phone +XX XXXXXXXXX23.
Please enter the code to sign in.

947382


Having trouble? [Sign in another way](#)

Verify

NOTE

The verification code will only be required if the MFA status of an Office 365 account is enforced.

- Copy the authorization code.



Authorization Code for Microsoft 365

0.ASSa_IShkza7uEGrYiY1I1VMXiGI8nVBhARCGjmGnR:

Please copy and paste the above Authorization Code into Ahsay's product to complete the setup.

- Go back to AhsayACB and paste the authorization code. Click **OK** to proceed.

In the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

J6IIWZxNethLjYgWVRKS8zoK82CJMghHTCzW7-xEdi4jN88quVnHT5SULKIAA

OK **Cancel**

- Click **Save** to finish the authentication change of the backup set.

To change the authentication from **Hybrid Authentication to Modern Authentication**, follow the instructions below:

1. Logout all Office 365 account on the default browser before starting the authentication change of the backup set.
2. In the AhsayACB main interface, click **Backup Sets**.



3. Select the backup set that you want to change to Modern Authentication.

4. In the Backup Set Settings, click **Change settings** under the Office 365 screen..

Run on Client Office 365 Backup Set

General

Source

Backup Schedule

Destination

Reminder

Others

Name

Run on Client Office 365 Backup Set

Owner

w10-pro

Office 365

Username

@ahsay.onmicrosoft.com

Region

Global

☐ Access the Internet through proxy

Change settings

Windows User Authentication

Domain Name (e.g. Ahsay.com) / Host Name

Delete this backup set

Save Cancel Help

- In the Office 365 credentials page, **remove the Account password** then click **Next**.

Office 365

Username

@ahsay.onmicrosoft.com

Account password

App password

(Required if Multi-Factor Authentication is enforced)

Region

Global

☐ Access the Internet through proxy

Next Cancel Help

- Click **I understand the limitation and confirm to proceed**.

! This will be using Modern Authentication without backup or restore functionality for SharePoint Web Parts and Managed Metadata.

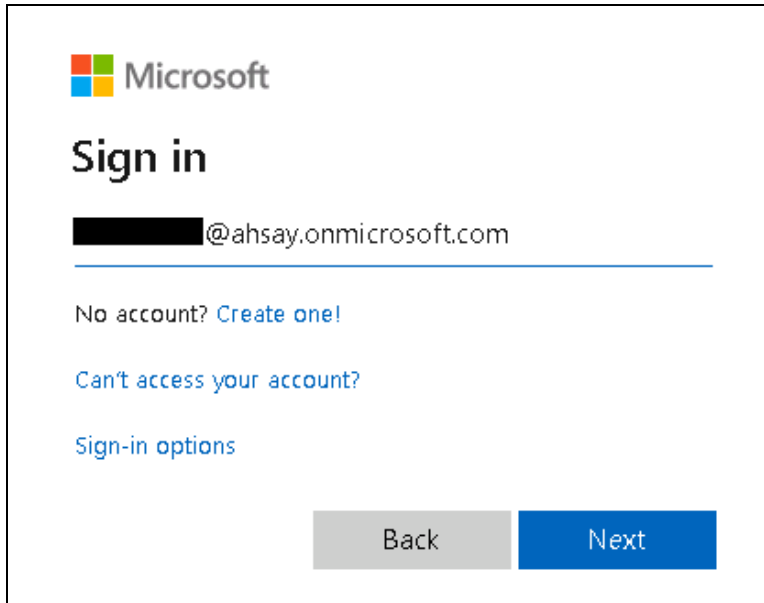
I understand the limitation and confirm to proceed Cancel

- Click **Authorize** to start the authentication change process.

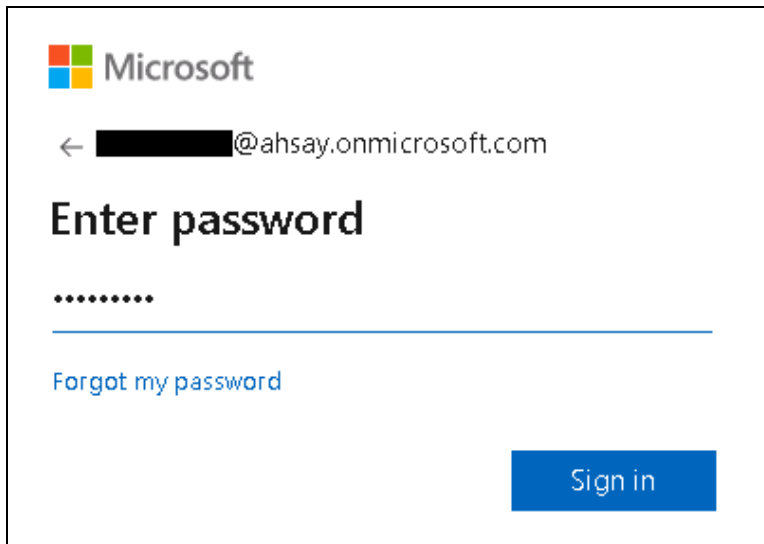
Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

Authorize Cancel

8. Sign in to your account.




The screenshot shows the Microsoft sign-in page. At the top is the Microsoft logo. Below it is the heading "Sign in". A text input field contains an email address with the domain "@ahsay.onmicrosoft.com". Below the input field are three links: "No account? Create one!", "Can't access your account?", and "Sign-in options". At the bottom are two buttons: "Back" (grey) and "Next" (blue).



The screenshot shows the Microsoft "Enter password" screen. At the top is the Microsoft logo. Below it is a back arrow and the email address "@ahsay.onmicrosoft.com". The heading "Enter password" is followed by a password input field with masked characters. Below the input field is a link "Forgot my password". At the bottom right is a blue "Sign in" button.

9. If MFA is enforced, enter the verification code sent to your mobile device and click **Verify**. Otherwise proceed to the next step.



Microsoft

██████████@ahsay.onmicrosoft.com

Enter code

📱 We texted your phone +XX XXXXXXXXX23.
Please enter the code to sign in.

947382


Having trouble? [Sign in another way](#)

Verify

NOTE

The verification code will only be required if the MFA status of an Office 365 account is enforced.

- Copy the authorization code.



Authorization Code for Microsoft 365

0.ASSa_IShkza7uEGrYiY1I1VMXiGI8nVBhARCGjmGnR:

**Please copy and paste the above Authorization Code
into Ahsay's product to complete the setup.**

- Go back to AhsayACB and paste the authorization code. Click **OK** to proceed.

In the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication.

J6IIWZxNethLjYgWVRKS8zoK82CJMghHTCzW7-xEdi4jN88quVnHT5SULKIAA

OK **Cancel**

- Click **Save** to finish the authentication change of the backup set.

Office 365

Run on Client Office ...

General

Source

Backup Schedule

Destination

Reminder

Others

General

Name

Run on Client Office 365 Backup Set

Owner

w10-pro

Office 365

Username

██████████@ahsay.onmicrosoft.com

Region

Global

☐ Access the Internet through proxy

Change settings

Windows User Authentication

Domain Name (e.g. Ahsay.com) / Host Name

Delete this backup set

Save

Cancel

Help