

AhsayCBS v8.3.6.0 New Features Datasheet

Ahsay Systems Corporation Limited
16 October 2020

Revision History

Date	Descriptions	Type of modification
25 September 2020	Initial draft	New
6 October 2020	Added instructions on how to change the authentication of an existing Office 365 backup set	New
16 October 2020	Updated PDIC Key Features and PDIC Diagram	Modifications

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Support the Replication of up to Four Files Concurrently per Backup Set

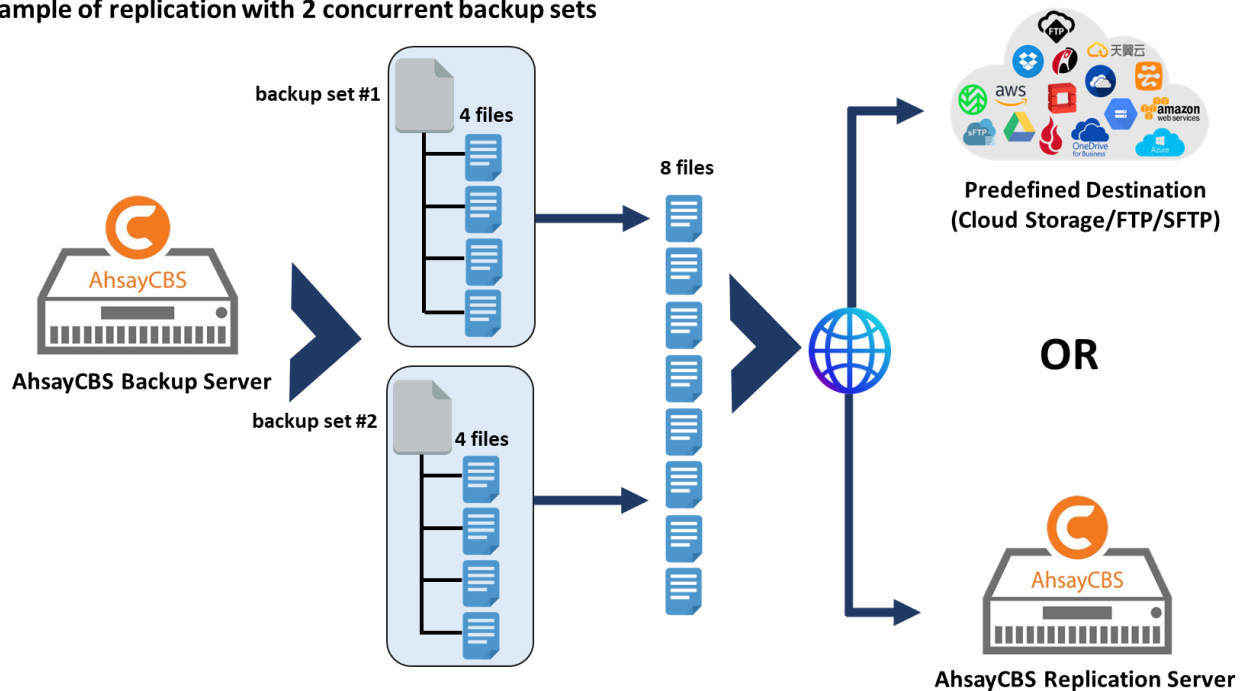
AhsayCBS v8.3.6.0 (or above) can now **replicate up to four files in each backup set concurrently**, compared with previous versions of AhsayCBS (i.e. v7, v8, and pre-v8.3.6.0) which can only replicate one file per backup set.

The maximum number of files that can be replicated for each backup set is fixed at four and cannot be configured by the user.



Although the number of concurrent files has increased, the actual replication performance will only increase if there is available network bandwidth and/or there is available hardware resources (i.e. CPU, memory, and disk I/O) on AhsayCBS backup server to support the additional load.

Example of replication with 2 concurrent backup sets



For more details on the Replication, refer to **Chapter 7** of the following guide:

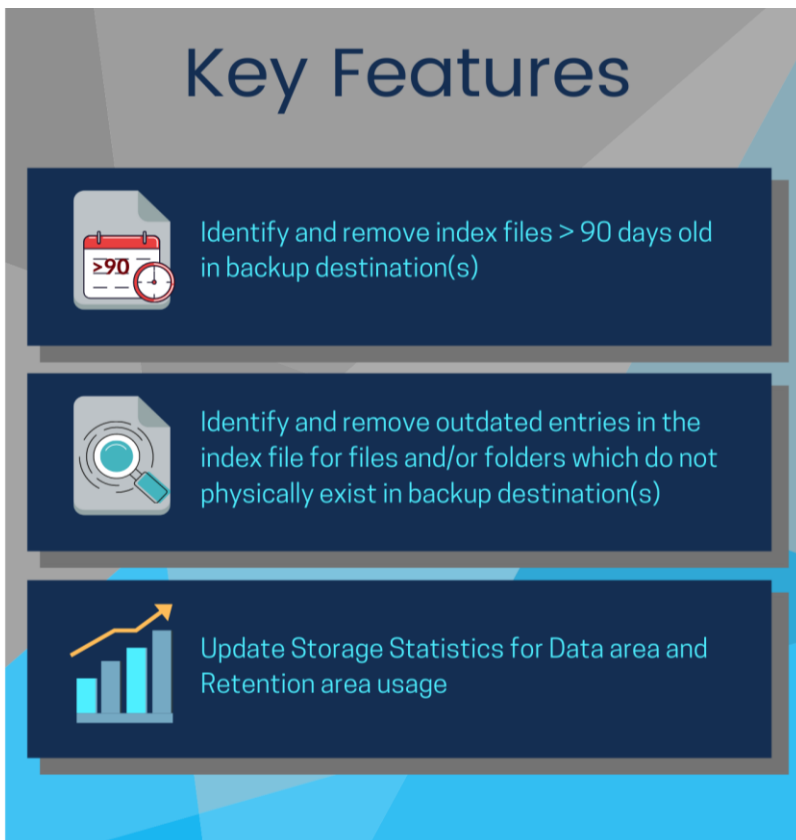
[AhsayCBS v8 Administrator's Guide](#)

Upgraded Periodic Data Integrity Check (PDIC)

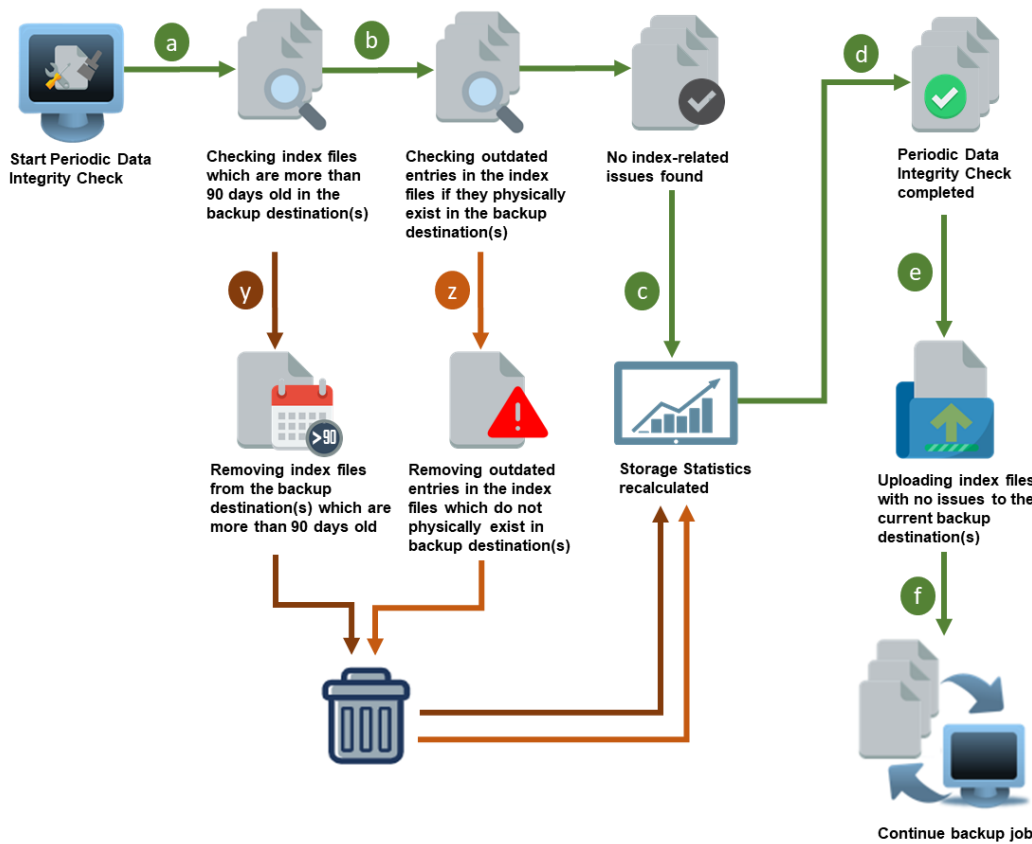
From **v8.3.6.0** onwards, the *periodic data integrity check* has been upgraded to provide clients with maximum security and integrity of backup data.

The latest enhancement will include a check to identify and remove index files > 90 days old in backup destination(s) to free up additional storage.

The new PDIC is capable to perform the following:



Updated Process of Periodic Data Integrity Check (PDIC) from v8.3.6.0 onwards



- a** Check the index files in the backup destination(s) to determine if they were more than 90 days old.
→ If **YES**, proceed to **y**
→ If **NO**, proceed to **b**

- b** Check the outdated entries in the index files for files and/or folders if they physically exist in the backup destination(s).
→ If **YES**, proceed to **c**
→ If **NO**, proceed to **z**

- c** Storage Statistics for Data area and Retention area usage will be recalculated.

- d** Periodic Data Integrity check is completed.

- e** Index files with no issues will be uploaded to the current backup destination(s).

- f** The backup job process will continue.

- y** Index files which are more than 90 days old will be removed from the backup destination(s).

- z** Outdated entries in the index files for files and/folders which do not physically exist in backup destination(s) will be removed.

On the AhsayOBM/AhsayACB v8.3.6.0, 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:

$$\text{PDIC schedule} = \% \text{BackupSetID} \% \text{ modulo } 5 \text{ or } \% \text{BackupSetID} \% \text{ mod } 5$$

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**
 $1594627447932 \bmod 5 = 2$

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.

! For backup sets on AhsayOBM/AhsayACB v6, v7, and pre-v8.3, the PDIC will run on the first backup job after AhsayOBM/AhsayACB is upgraded to v8.3.6.0 (or above).

VMware vCenter/ESXi CBT Bug Identification Check

To enhance critical notification to our customers using our VMware vCenter/ESXi backup solution, a VMware version check feature on each backup job has been added, as there is a known **Changed Block Tracking (CBT) bug** which exists on the following versions of VMware vCenter/ESXi:

VMware vCenter/ESXi v5.0	VMware vCenter/ESXi v5.5
VMware vCenter/ESXi v5.1	VMware vCenter/ESXi v6.0

This known CBT bug can sometimes return incorrect changed sectors on a guest virtual machine during a VMware backup. As the CBT is used by the AhsayOBM for VDDK backup modes, it affects the integrity of both incremental and differential backups.



For VMware vCenter/ESXi v5.0, v5.1, and v5.5, refer to <https://kb.vmware.com/s/article/2090639>.
For VMware vCenter/ESXi v6.0, refer to <https://kb.vmware.com/s/article/2136854>.

If a VMware VDDK mode backup is performed on any of the affected versions (i.e. v5.0, v5.1, v5.5 and v6.0), even if the VMware vCenter/ESXi was subsequently upgraded to a later version, AhsayOBM will not be able to restore the guest VMs due to the known CBT bug, even though all backup jobs are recorded as successful by the AhsayOBM. Furthermore, as it is a VMware bug, the Ahsay Periodic Data Integrity Check (PDIC) and Data Integrity Check (DIC) will not be able to detect this issue.

As part of the backup job, AhsayOBM v8.3.6.0 (or above) will check the current VMware version to identify if it is affected by the CBT bug. If the VMware version detected is related to the affected version (i.e. v5.0, v5.1, v5.5 and v6.0), then the AhsayOBM will show a warning in the backup report indicating that the VMware host is affected by the CBT bug.

Backup Report Sample for a VMware ESXi 5.1.0 host with the affected version:

Backup Logs			
No.	Type	Timestamp	Log
1	start	2020/09/07 17:08:13	Start [AhsayOBM v8.3.6.0]
2	info	2020/09/07 17:08:17	Using Temporary Directory D:\Temp\1599457814938\Local@1599457922832
3	info	2020/09/07 17:08:17	VMware ESXi 5.1.0 build-1157734@10.1.0.6:443(SSH:22)
4	warn	2020/09/07 17:08:17	Current backup source includes ESXi server(s) which could sometimes return incorrect changed sectors (KB2090639). Please upgrade the following ESXi server(s) to the fixed build to avoid backup incorrect backup data: [Name:localhost.localdomain (VMware ESXi 5.1.0 build-1157734), FixedBuildNo:2323236]. Reference: VMware ESXi 5.0.x, 5.1.x and 5.5.x (https://kb.vmware.com/s/article/2090639) and VMware ESXi 6.0.x (https://kb.vmware.com/s/article/2136854)
5	info	2020/09/07 17:08:17	VMware Backup User Name: root
6	info	2020/09/07 17:08:20	Start running pre-commands
7	info	2020/09/07 17:08:20	Finished running pre-commands
8	info	2020/09/07 17:08:23	Download valid index files from backup job "Current" to "D:\Temp\1599457814938\Local@1599457922832\index".
9	info	2020/09/07 17:08:25	Backup host: 10.1.0.6
10	info	2020/09/07 17:11:06	Backup virtual machine (VDDK Mode): Arch Linux
11	info	2020/09/07 17:11:28	Spooling file "Arch Linux/Arch Linux.nvram"...
12	info	2020/09/07 17:11:30	Spooling file "Arch Linux/Arch Linux.vmsd"...
13	info	2020/09/07 17:11:31	Spooling file "Arch Linux/Arch Linux.vmx"...
14	info	2020/09/07 17:11:33	Spooling file "Arch Linux/Arch Linux.vmxfs"...
15	info	2020/09/07 17:11:35	Taking snapshot of virtual machine "Arch Linux"...
16	info	2020/09/07 17:11:37	Backup snapshot created successfully. Virtual Machine = "Arch Linux"
17	info	2020/09/07 17:31:52	Removing backup snapshot from virtual machine "Arch Linux"...
18	info	2020/09/07 17:31:52	Backup snapshot removed successfully. Virtual Machine = "Arch Linux"
19	info	2020/09/07 17:31:52	Backing up virtual machine "Arch Linux" Completed

The warning message will also indicate the VMware version or build no. which contains the fix for the CBT issue:

VMware ESXi 5.1.0 build-1157734 is the current problematic version. The following patch needs to be applied: **FixedBuildNo: 2323236**.

Current backup source includes ESXi server(s) which could sometimes return incorrect changed sectors (KB2090639).

Please upgrade the following ESXi server(s) to the fixed build to avoid backup incorrect backup data: [Name:localhost.localdomain (**VMware ESXi 5.1.0 build-1157734**), **FixedBuildNo:2323236**]. Reference: VMware ESXi 5.0.x, 5.1.x and 5.5.x (<https://kb.vmware.com/s/article/2090639>) and VMware ESXi 6.0.x (<https://kb.vmware.com/s/article/2136854>)

Resolution

To resolve this problem, it is strongly recommended to perform the following:

1. Apply the VMware patch or upgrade the VMware vCenter/ESXi.
2. Perform a full backup of the affected guest VMs.



Although AhsayOBM v8.3.4.0 (or above) no longer supports the creation of new VMware backup set for VMware vCenter/ESXi v5.0 and v5.1, however, backup sets which are upgraded from the previous versions are still supported with the following workaround applied:

http://wiki.ahsay.com/doku.php?id=public:8082_issue:fail_to_connect_vm_disk_by_vddk_library_error_unknown.

Quick and Easy Multiple User and Item Selection in Office 365 Backup Sets

On v7, v8 and pre-v.8.3.6.0, it is required to manually click every single user account when selecting users to back up using the **Advanced Backup Source** option in an Office 365 backup set. If the backup set contains a large number of users (e.g. 1000-5000 users), this procedure will be very time consuming and strict concentration is required to select or unselect these items individually.

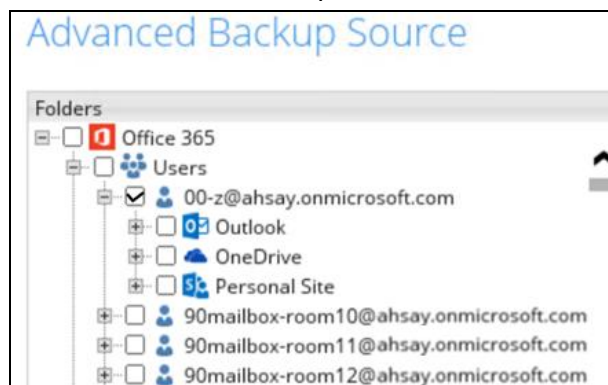
On the v.8.3.6.0 (or above), a new shortcut function is added to the Advanced Backup Source option which provides user a quick and easy way to select or unselect a large number of user accounts at once. This shortcut is done by clicking the first item, scrolling down to the last item to be backed up, holding the Shift key, then clicking the last item to be backed up. By doing so, the items are selected **simultaneously**.

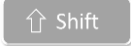
This function will enhance the creation and management of large Office 365 backup sets on both AhsayOBM and AhsayCBS web console for Run on Server (Agentless) backup sets.


Example Scenario: Selecting large number of users

The customer, AhsayCBS Administrator, or Managed Service Provider (MSP) would like to select 150 user accounts for backup in an Office 365 organization which contains 500 user accounts.

1. On the Advanced Backup Source window, select the first user to be backed up.



2. Scroll down to the 150th user, then hold the  key.

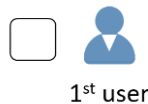
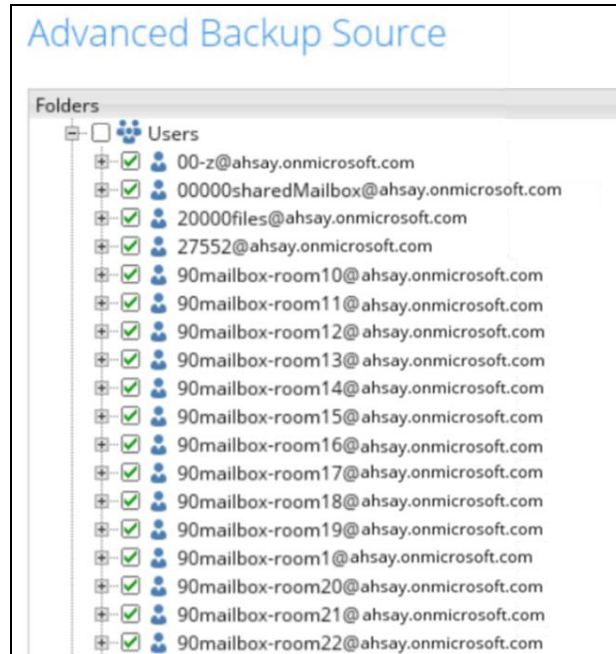
3. Select the 150th user. 
- 150th user

4. All 150 users are now selected at once.
5. Save and proceed to complete the backup set settings.

Example Scenario: Unselecting large number of users

A backup set was previously created which has all 500 user accounts selected for backup. The customer, AhsayCBS Administrator, or Managed Service Provider (MSP) would like to reduce the users for backup and unselect the 250 user accounts in the backup set.

1. On the Advanced Backup Source window, unselect the first user.



2. Scroll down to the 250th user, then hold the  key.

3. Unselect the 250th user.



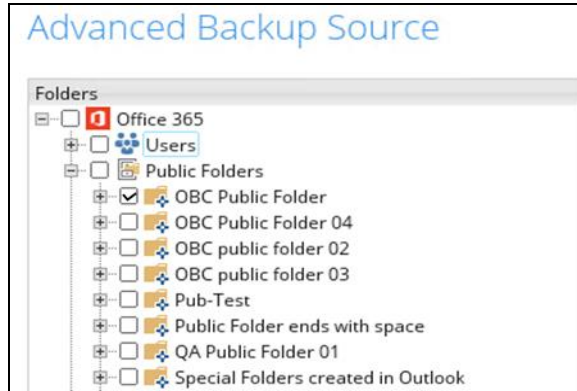
4. The 1st to 250th users are now unselected at once.
5. Save and proceed to complete the backup set settings.


Aside from using the new shortcut function on users, it can also be used on selecting/unselecting multiple folders for backup (i.e. Public Folders and Site Collections).

Example Scenario: Selecting multiple folders for backup

The customer, AhsayCBS Administrator, or Managed Service Provider (MSP) would like to select 200 folders for backup in an Office 365 organization which contains 1000 public folders.

1. On the Advanced Backup Source window, select the first folder.



2. Scroll down to the 200th folder, then hold the  Shift key.

3. Select the 200th folder.



4. All 200 folders are now selected at once.
5. Save and proceed to complete the backup set settings.

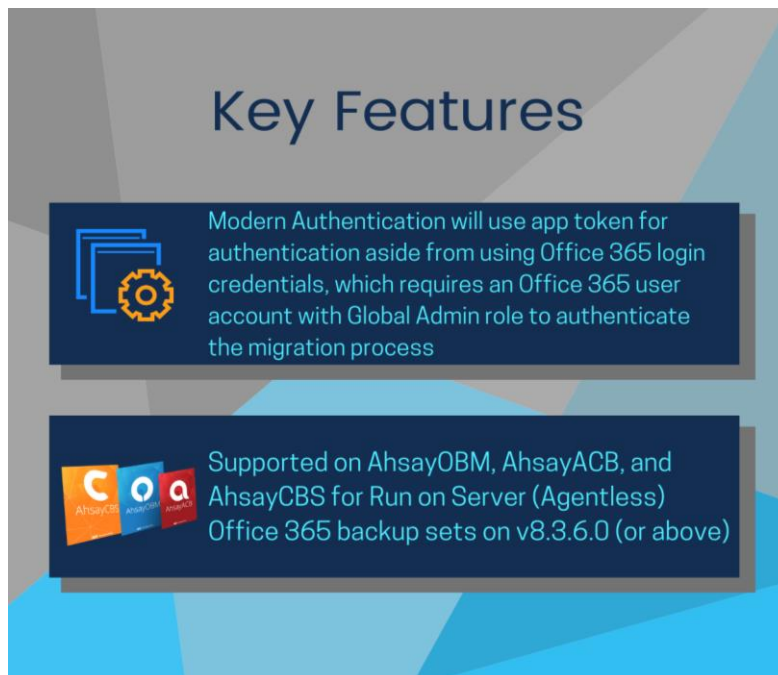
Office 365 Modern Authentication Support

As part of Microsoft's product roadmap for Office 365 to enhance overall security, the existing **Basic Authentication** which uses Office 365 login credentials (i.e. Username and Password) for client access requests will be phased out in favor of the more secure **Modern Authentication**.



It is expected that by 2021, Microsoft will block all Office 365 login requests which uses **Basic Authentication**. As a result, any Office 365 backup sets that have not migrated to **Modern Authentication** will no longer be able to perform any backups and/or restores.

To comply with this implementation:

- ▶ **Modern Authentication** or **Hybrid Authentication** will be used on newly created Office 365 backup sets starting **AhsayCBS v8.3.6.0** (or above)
- ▶ Existing Office 365 backup sets using **Basic Authentication** will need to migrate to either **Modern Authentication** or **Hybrid Authentication**
- ▶ By second half of 2021, it will be a **mandatory requirement** for organizations still using **Basic Authentication** and **Hybrid Authentication** to migrate to **Modern Authentication**



Key Features

-  Modern Authentication will use app token for authentication aside from using Office 365 login credentials, which requires an Office 365 user account with Global Admin role to authenticate the migration process
-  Supported on AhsayOBM, AhsayACB, and AhsayCBS for Run on Server (Agentless) Office 365 backup sets on v8.3.6.0 (or above)



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

Requirements

In order to use the Modern Authentication:

- ▶ The Office 365 account used to authenticate the backup set is registered under a Global region: or
- ▶ During the migration process, the Office 365 administration uses an account with Global Admin role to authenticate the migration

As both **Germany** and **China regions** do not support Modern Authentication, these backup sets will continue to use the Basic Authentication.



To assign the Office 365 account to a Global admin role, refer to the following guides:

[AhsayCBS v8 User's Guide](#)

[AhsayOBM v8 Office 365 Backup & Restore Guide for Windows](#)

[AhsayOBM v8 Office 365 Backup & Restore Guide for macOS](#)

[AhsayACB v8 Office 365 Backup & Restore Guide for Windows](#)

[AhsayACB v8 Office 365 Backup & Restore Guide for macOS](#)

Office 365 Authentication Migration

To ensure that no backup and restore issues will be encountered in the future, existing Office 365 backup sets are suggested to use the Modern Authentication starting v8.3.6.0 (or above). **The migration is only done once per Office 365 user account.**

Migration Scenarios

- ▶ **Basic Authentication → Hybrid Authentication**
- ▶ **Basic Authentication → Modern Authentication**
 - ▶ using an ordinary Office 365 account
 - ▶ using an ordinary Office 365 account with Global Admin role

Existing backup sets using **Basic Authentication** which are created prior to v8.3.6.0 (or above) can be migrated to **Modern Authentication** or **Hybrid Authentication**. However, the authentication type can no longer be reverted to **Basic Authentication** once the authentication process is complete.



After the upgrade to 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 the transition period since Modern Authentication is not yet enforced by Microsoft.

Limitations

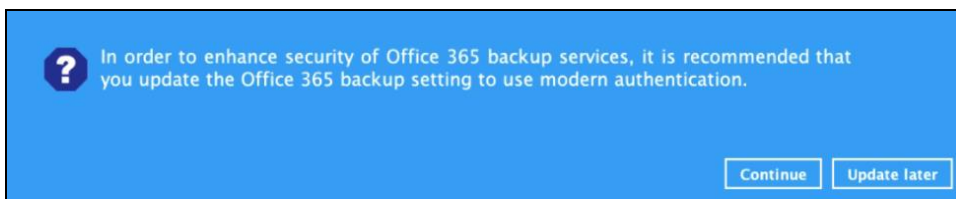
- ▶ Due to the limitations of Microsoft API, **Modern Authentication** does not fully support backup and restore of **SharePoint Web Parts and Metadata**.
- ▶ Backup and restore of the features setting for SharePoint Site Collection and/or Personal Site on Office 365 backup sets using Modern Authentication is not supported
Note: If the Office 365 backup set requires backup of SharePoint Site Collection and Personal Site, it is recommended to migrate or use the Hybrid Authentication as a temporary workaround until the Modern Authentication supports backup and restore of SharePoint Site Collection and Personal Site Metadata.
- ▶ Office 365 backup sets using Modern Authentication cannot back up SharePoint **.aspx** version files.
- ▶ Restore of some list settings (currently known as **Survey Options** on survey list) is not supported on Office 365 backup sets using Modern Authentication.
- ▶ Backup of external content types (through the linkage from selected lists) is not supported on Office 365 backup sets using Modern Authentication.
- ▶ 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 administration is not using an account with Global Admin role to authenticate the migration.

How to check the current authentication in an Office 365 backup set?

For AhsayOBM v8.3.6.0 (or above)

▶ Basic Authentication

If you click on the backup set and the following pop up authentication alert is displayed, then the backup set is using **Basic Authentication**.



► Hybrid Authentication

If there is no pop up authentication alert and the following settings is configured on the **Change settings**, then the backup set is using **Hybrid Authentication**.

Run on Client Office 365 Backup Set

General

Name
Run on Client Office 365 Backup Set

Owner
win08r2entbyol

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

Change settings:

1. Both username and password exist
2. Region is Global

Office 365

Username
@ahsay.onmicrosoft.com

Account password

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

Region
Global

☐ Access the Internet through proxy

► Modern Authentication

If there is no pop up authentication alert and the following settings is configured on the **Change settings**, then the backup set is using **Modern Authentication**.

Run on Client Office 365 Backup Set

General

Name
Run on Client Office 365 Backup Set

Owner
win08r2entbyol

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

Change settings:

1. Username exists but with no password
2. Region is Global

Office 365

Username
@ahsay.onmicrosoft.com

Account password

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

Region
Global

☐ Access the Internet through proxy

For AhsayCBS Run on Server (Agentless) v8.3.6.0 (or above)

Basic Authentication

If you click on the backup set and the following pop up authentication alert is displayed, then the backup set is using **Basic Authentication**.

User Profile
Backup Set
Settings
Report
Statistics
Effective Policy

Manage Backup Set ?

+
-
↺

<input type="checkbox"/>	Name	Type	Version	Owner	Timezone	Execute Job
<input type="checkbox"/>	Run on Client Office 365 Backup Set Basic DMFA GA (1600245360314)		--	Mac1014	GMT+08:00 (HKT)	--
<input type="checkbox"/>	Run on Client Office 365 Backup Set Basic EMFA GA (1600245468106)		--	Mac1014	GMT+08:00 (HKT)	--
<input type="checkbox"/>	Run on Client Office 365 Backup Set Basic DMFA NGA (1600245561471)		--	Mac1014	GMT+08:00 (HKT)	--
<input type="checkbox"/>	Run on Client Office 365 Backup Set Basic EMFA NGA (1600245690151)		--	Mac1014	GMT+08:00 (HKT)	--

General
Source
Backup Schedule
Destination
In-File Delta
Retention Policy
Command Line Tool
Reminder
Bandwidth Control
IP Allowed for Restore
Others

General

ID
1600245360314

Name
Run on Client Office 365 Backup Set Basic DMFA GA

Owner
Mac1014

Backup
Office 365

Run on
☐ Server ☐ Set

Office 365
Usermail
Region
Access the internet through Proxy

Change settings

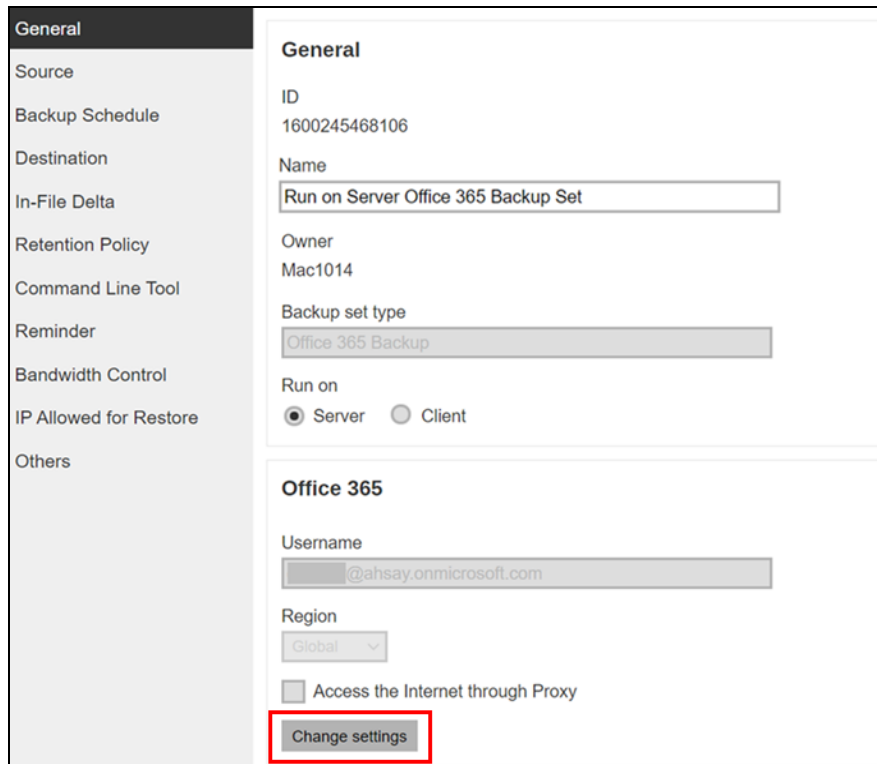
Authentication Code is required

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

Continue
Update later

► Hybrid Authentication

If there is no pop up authentication alert and the following settings is configured on the **Change settings**, then the backup set is using **Hybrid Authentication**.



General

Source

Backup Schedule

Destination

In-File Delta

Retention Policy

Command Line Tool

Reminder

Bandwidth Control

IP Allowed for Restore

Others

General

ID
1600245468106

Name
Run on Server Office 365 Backup Set

Owner
Mac1014

Backup set type
Office 365 Backup

Run on
☒ Server ☐ Client

Office 365

Username
@ahsay.onmicrosoft.com

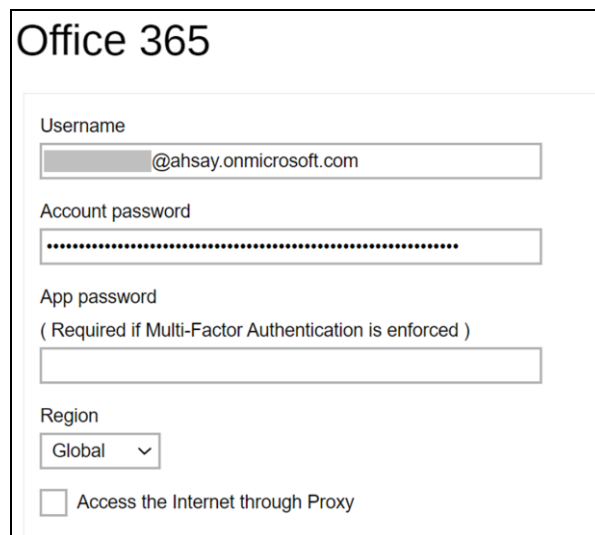
Region
Global

☐ Access the Internet through Proxy

Change settings

Change settings:

1. Both username and password exist
2. Region is Global



Office 365

Username
@ahsay.onmicrosoft.com

Account password
.....

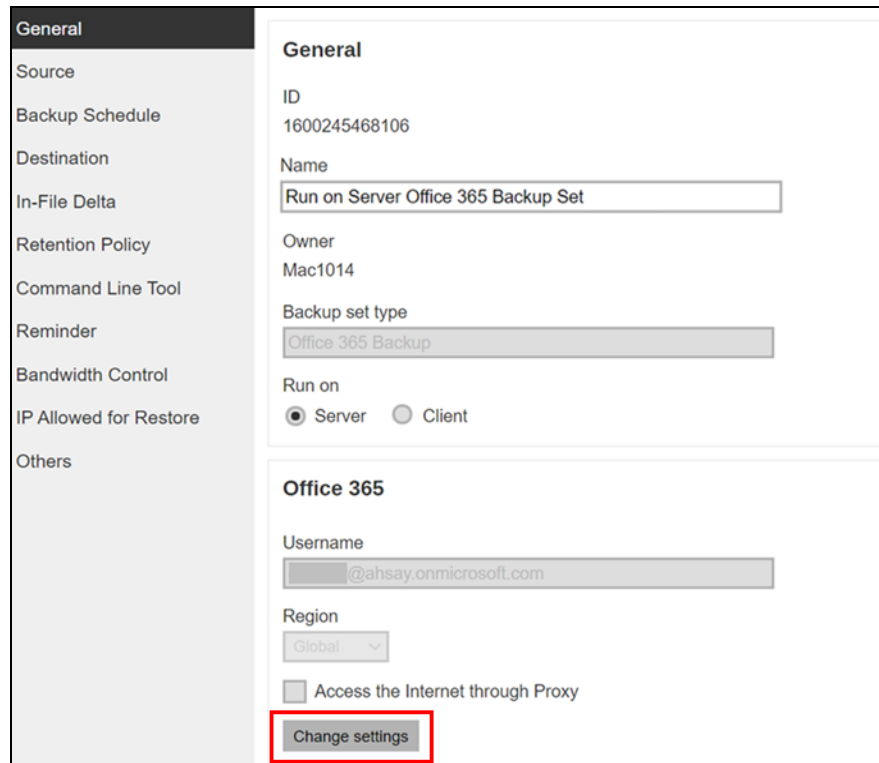
App password
(Required if Multi-Factor Authentication is enforced)

Region
Global

☐ Access the Internet through Proxy

► Modern Authentication

If there is no pop up authentication alert and the following settings is configured on the **Change settings**, then the backup set is using **Modern Authentication**.



General

Source

Backup Schedule

Destination

In-File Delta

Retention Policy

Command Line Tool

Reminder

Bandwidth Control

IP Allowed for Restore

Others

General

ID
1600245468106

Name
Run on Server Office 365 Backup Set

Owner
Mac1014

Backup set type
Office 365 Backup

Run on
☒ Server ☐ Client

Office 365

Username
[redacted]@ahsay.onmicrosoft.com

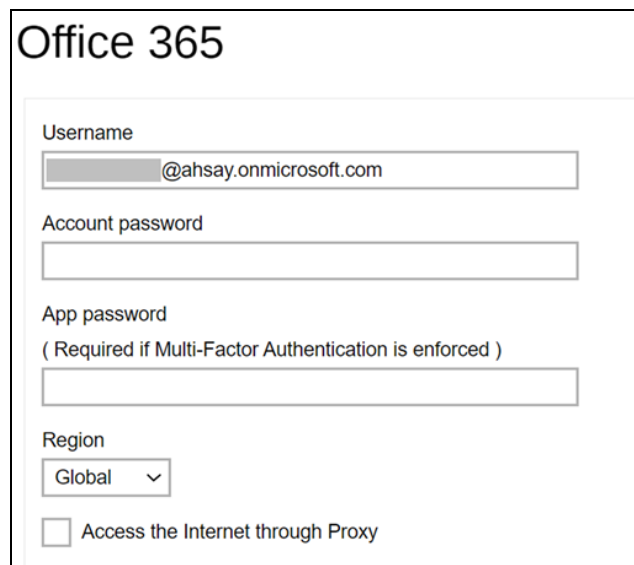
Region
Global

☐ Access the Internet through Proxy

Change settings

Change settings:

1. Username exists but with no password
2. Region is Global



Office 365

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

How to migrate the authentication of an Office 365 backup set?

In order to authorize the migration, the following criteria must be met:

- ▶ When migrating to **Modern Authentication**, if the existing Office 365 backup set was created using an ordinary Office 365 account, an Office 365 account with Global Admin role must be used to log in their credentials to authorize the migration of authentication.
- ▶ When migrating to **Hybrid Authentication**, any type of Office 365 account to authorize the migration of authentication can be used.



Due to the current limitations with Microsoft API, Office 365 backup sets with SharePoint Site Collection and/or Personal Site is recommended to use Hybrid Authentication.

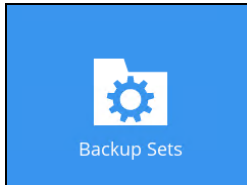
Two types of Migration Scenarios:

- ▶ [Basic Authentication → Hybrid Authentication](#)
- ▶ Basic Authentication → Modern Authentication
 - ▶ [using an ordinary Office 365 account](#)
 - ▶ [using an Office 365 account with Global Admin role](#)

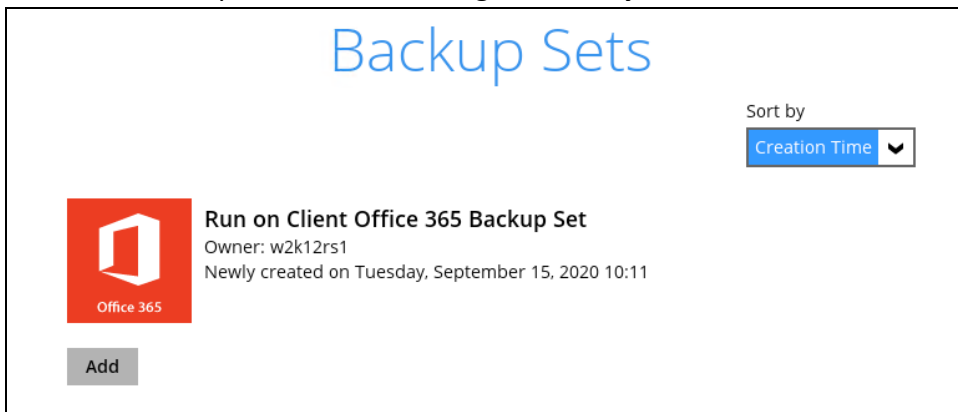
The following examples of Migration Scenarios are for AhsayOBM v8.3.6.0 (or above) running on Windows platform.

Basic Authentication → Hybrid Authentication

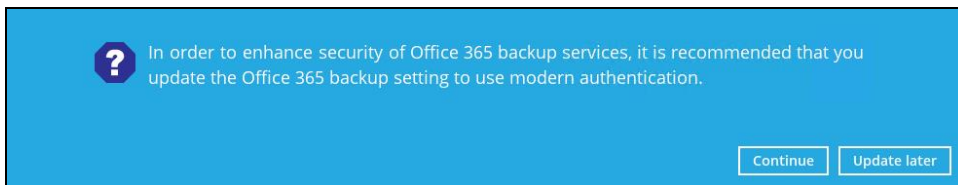
1. Log out all Office 365 account(s) on the default browser before starting the migration process.
2. On the AhsayOBM main interface, click **Backup Sets**.



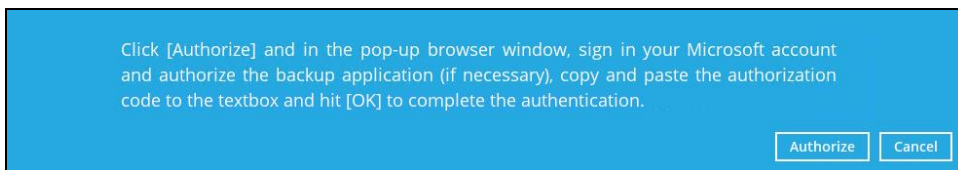
3. Select the backup set that will be migrated to **Hybrid Authentication**.



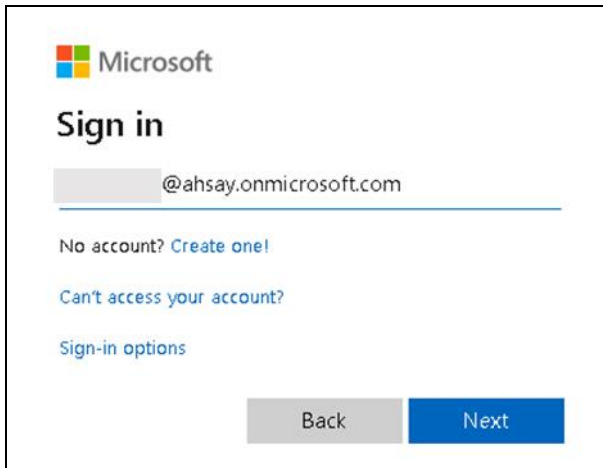
4. Select **Continue**.



5. Click **Authorize**.



6. Sign in your Office 365 account.



Microsoft

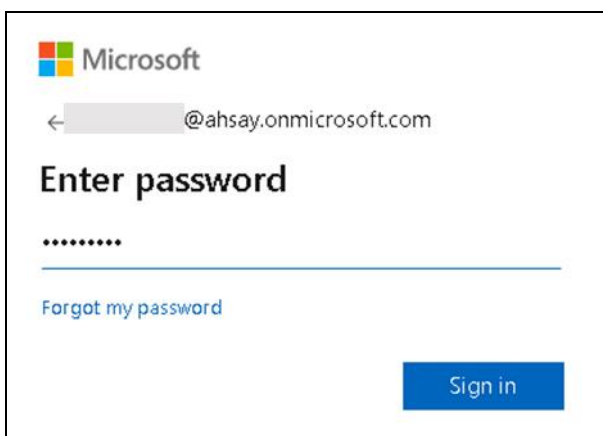
Sign in

[No account? Create one!](#)

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

[Sign-in options](#)

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



Microsoft

←

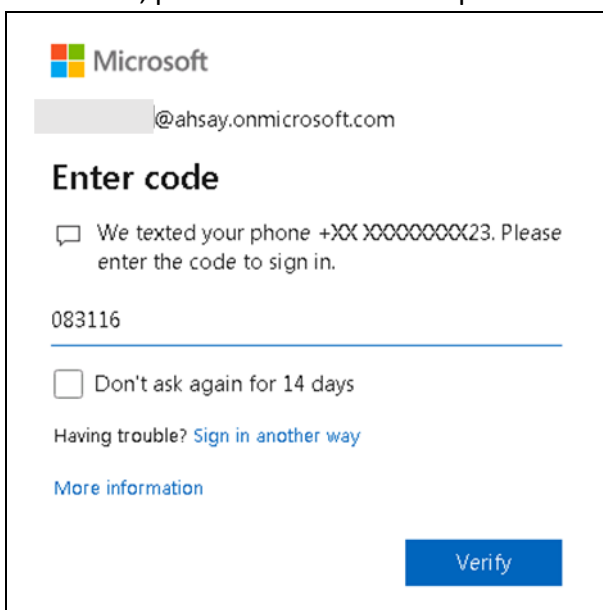
Enter password

.....

[Forgot my password](#)

[Sign in](#)

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



Microsoft

Enter code

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

☐ Don't ask again for 14 days

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

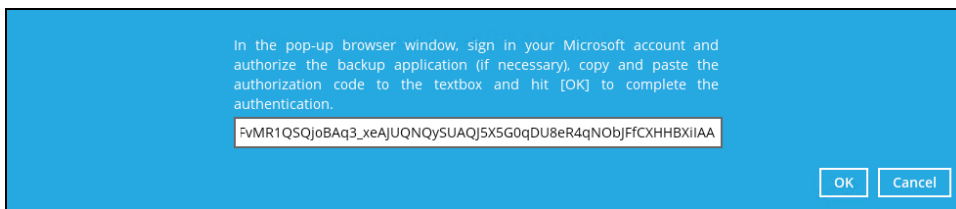
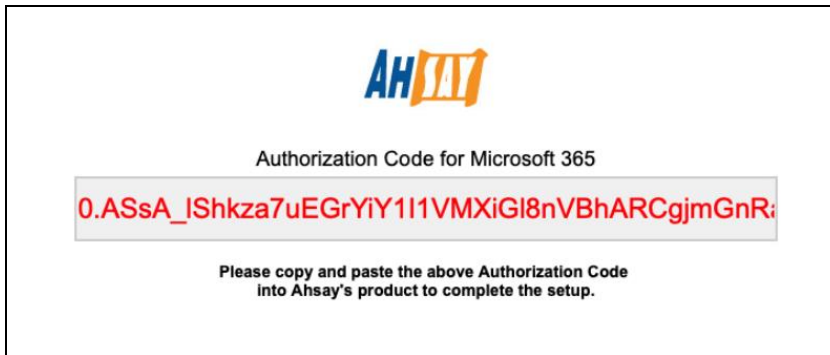
[More information](#)

[Verify](#)



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

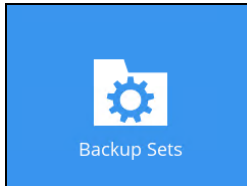
8. Copy and paste the authorization code to AhsayOBM, then click **OK** to complete the migration.



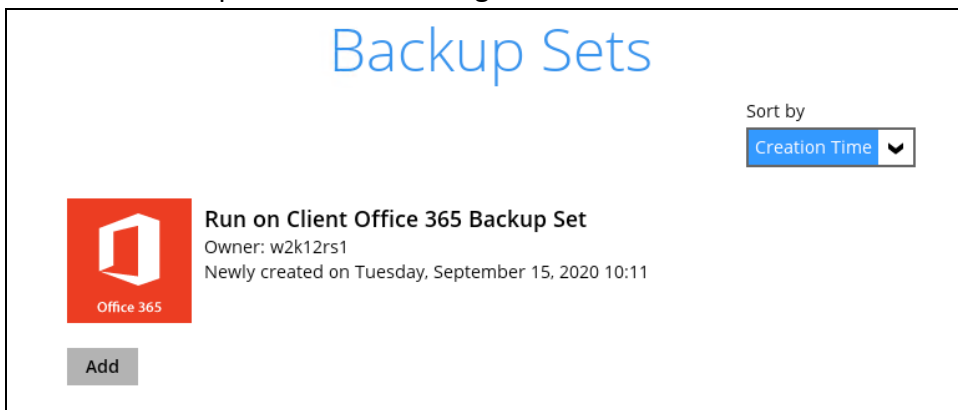
9. Office 365 backup set using **Basic Authentication** is now migrated to **Hybrid Authentication**.

Basic Authentication → Modern Authentication using an ordinary Office 365 account

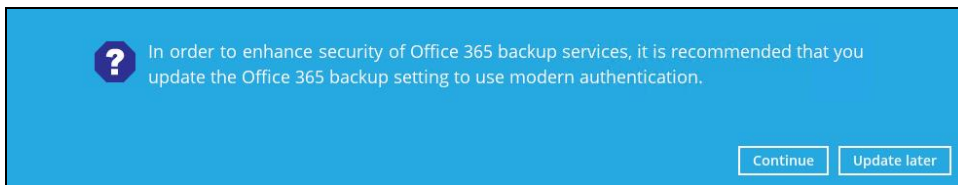
1. Log out all Office 365 account(s) on the default browser before starting the migration process.
2. On the AhsayOBM main interface, click **Backup Sets**.



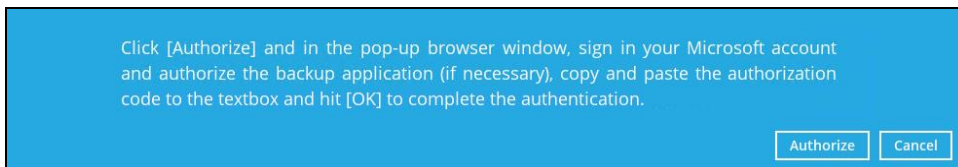
3. Select the backup set that will be migrated to **Modern Authentication**.



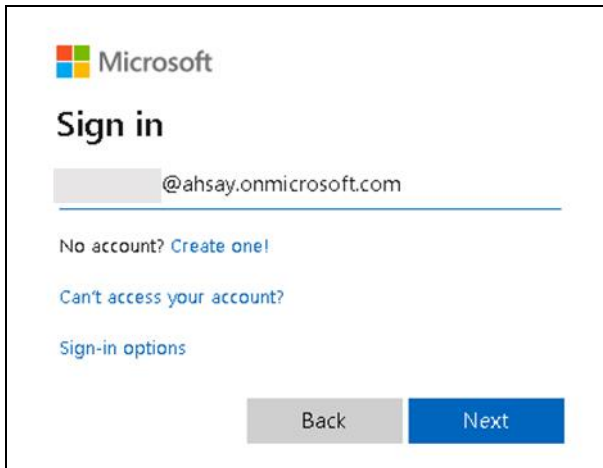
4. Select **Continue**.



5. Click **Authorize**.



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



Microsoft

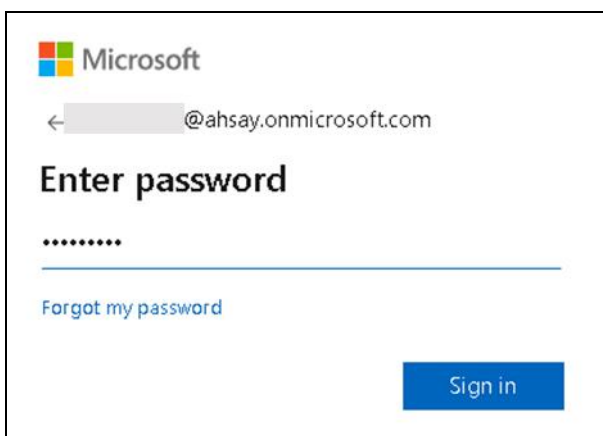
Sign in

[No account? Create one!](#)

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

[Sign-in options](#)

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



Microsoft

[←](#)

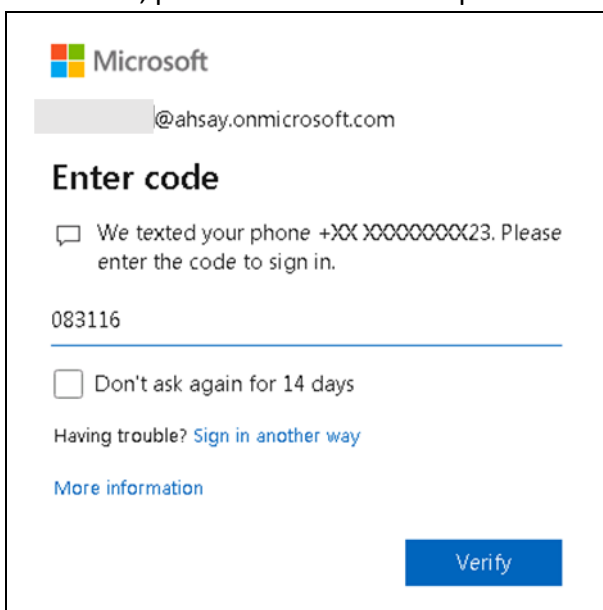
Enter password

.....

[Forgot my password](#)

[Sign in](#)

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



Microsoft

Enter code

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

☐ Don't ask again for 14 days

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

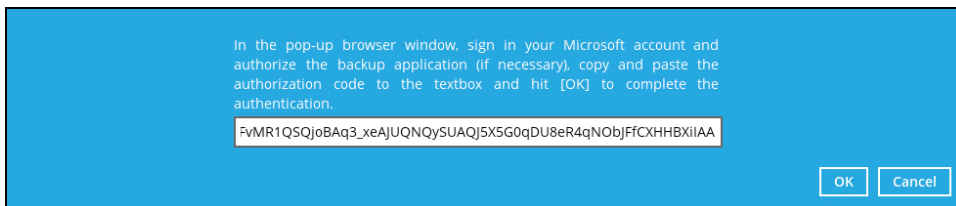
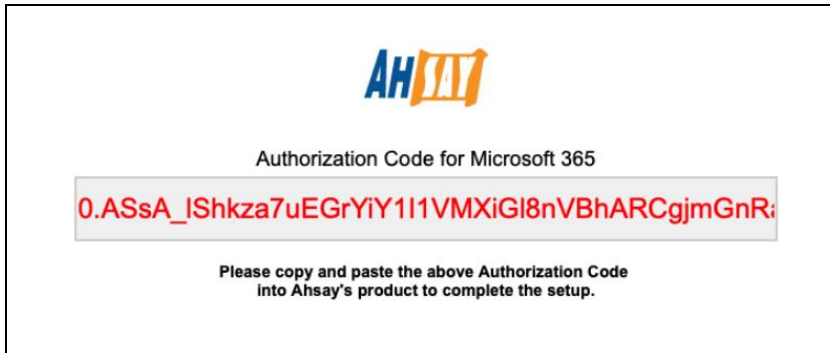
[More information](#)

[Verify](#)

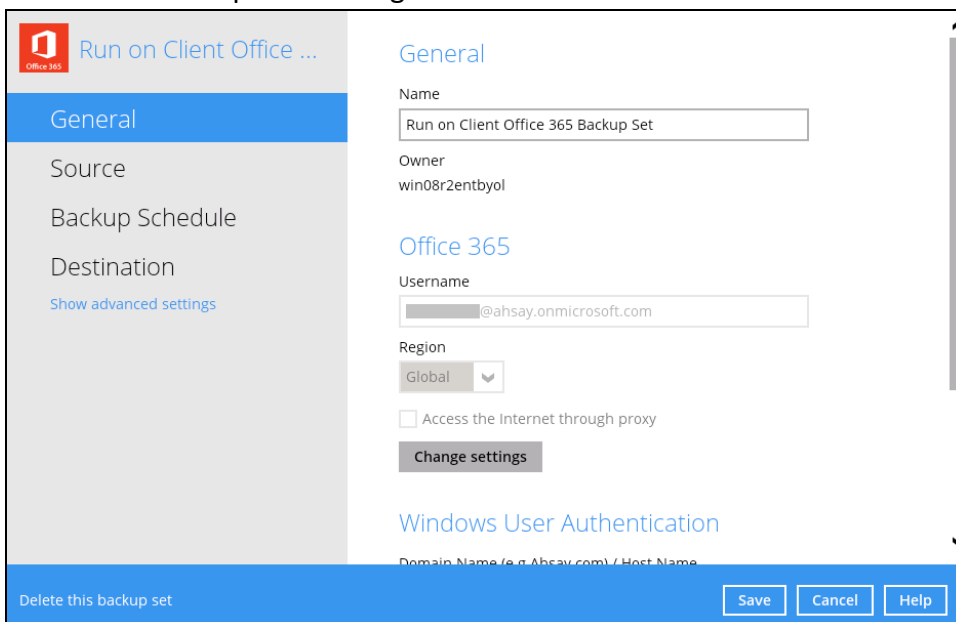


The verification code will only be required if the MFA status of an Office 365 account is enforced.

8. Copy and paste the authorization code to AhsayOBM, then click **OK** to proceed.



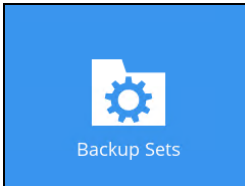
9. Click **Save** to complete the migration.



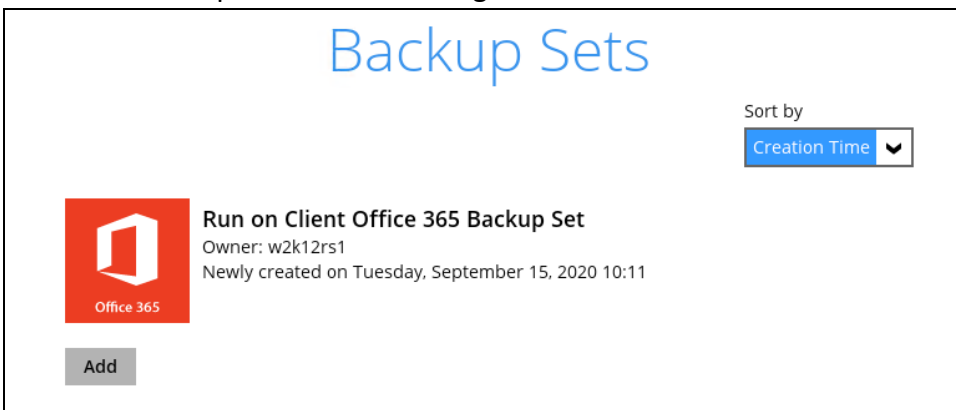
10. Office 365 backup set using **Basic Authentication** is now migrated to **Modern Authentication**.

Basic Authentication → Modern Authentication using an Office 365 account with Global Admin role

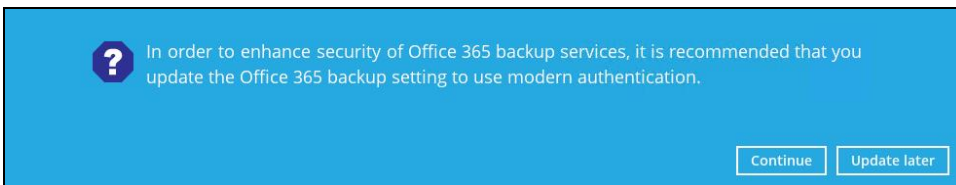
1. Log out all Office 365 account(s) on the default browser before starting the migration process.
2. On the AhsayOBM main interface, click **Backup Sets**.



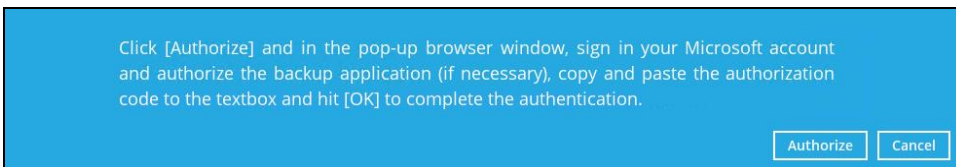
3. Select the backup set that will be migrated to **Modern Authentication**.



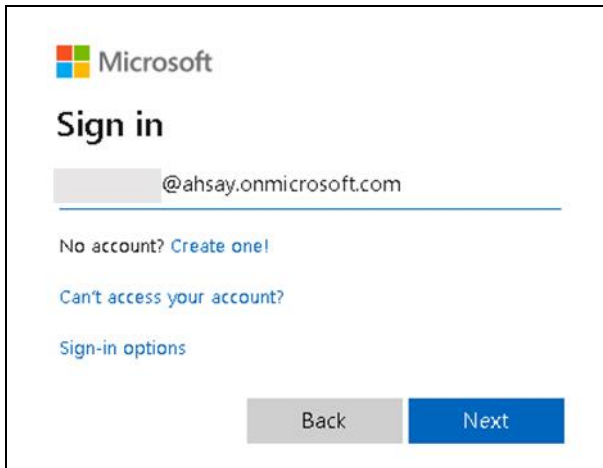
4. Select **Continue**.



5. Click **Authorize**.



6. Sign in your Office 365 account with Global Admin role.



Microsoft

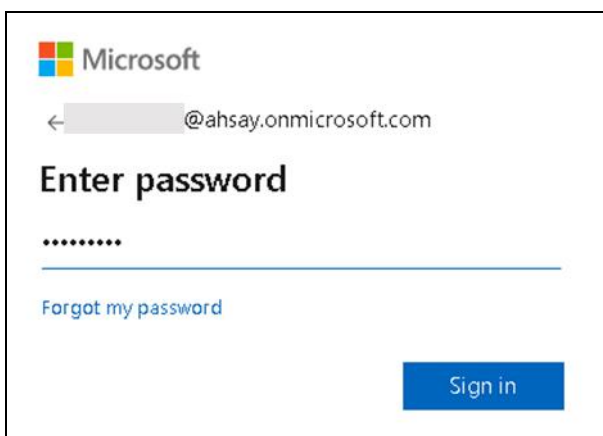
Sign in

[No account? Create one!](#)

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

[Sign-in options](#)

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



Microsoft

←

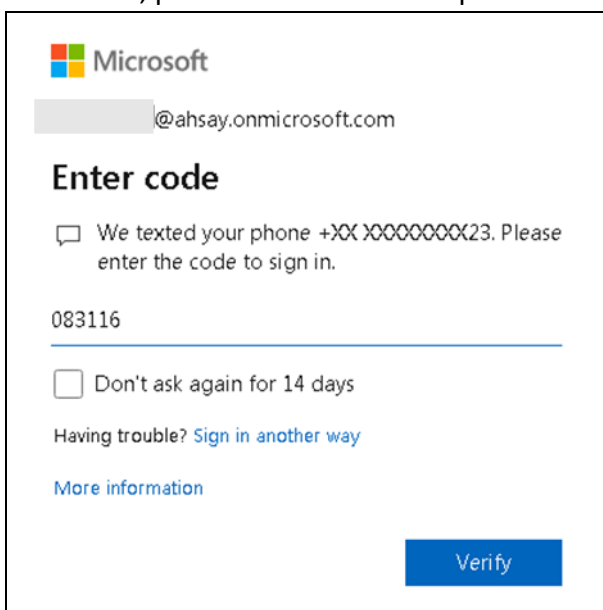
Enter password

.....

[Forgot my password](#)

[Sign in](#)

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



Microsoft

Enter code

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

☐ Don't ask again for 14 days

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

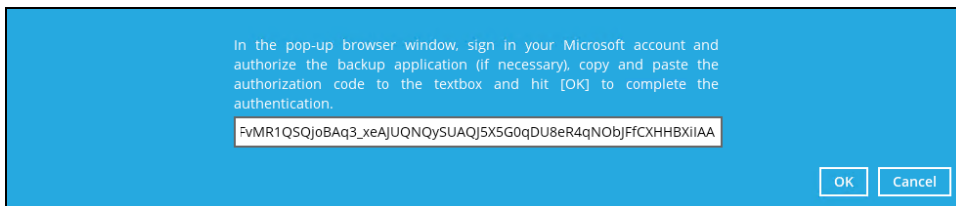
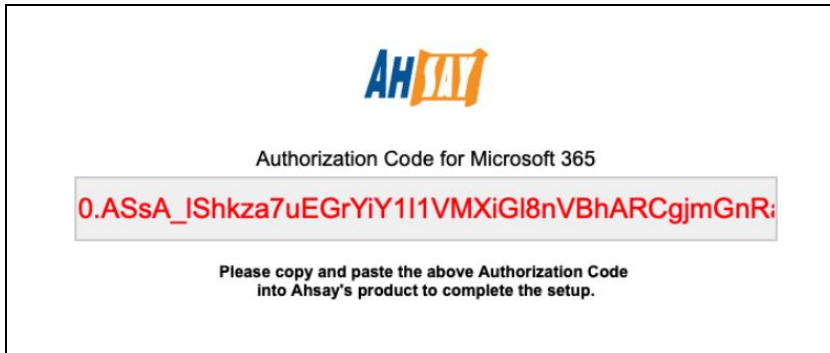
[More information](#)

[Verify](#)

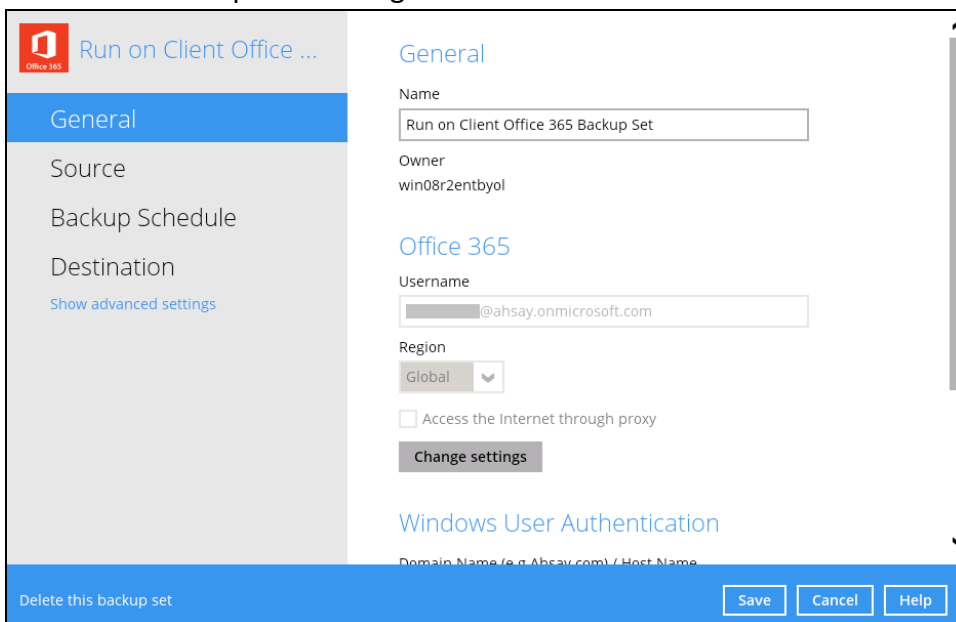


The verification code will only be required if the MFA status of an Office 365 account is enforced.

8. Copy and paste the authorization code to AhsayOBM, then click **OK** to proceed.



9. Click **Save** to complete the migration.



10. Office 365 backup set using **Basic Authentication** is now migrated to **Modern Authentication**.

How to change the authentication of an existing Office 365 backup set?

Once upgraded to v8.3.6.0 (or above), all newly created Office 365 backup sets are **automatically configured to use Modern Authentication**. However, due to limitations with Microsoft API, Office 365 backup sets with Personal Sites and/or SharePoint Sites selected for backup is not supported using Modern Authentication. Therefore, for Office 365 backup sets which require backup of Personal Sites and/or SharePoint Sites, an authentication change from Modern Authentication to Hybrid Authentication is needed as a solution.



For the complete list of backup and restore limitations using Modern Authentication, refer to [Limitations](#).

When 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.

Two types of authentication change:

- ▶ **Modern Authentication → Hybrid Authentication**
- ▶ **Hybrid Authentication → Modern Authentication**

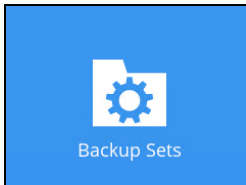
The following steps will show how to change the authentication of an existing Office 365 backup set on AhsayOBM and AhsayCBS Run on Server (Agentless) v8.3.6.0 (or above).

- ▶ **AhsayOBM v8.3.6.0 (or above)**
 - ▶ [Modern Authentication → Hybrid Authentication](#)
 - ▶ [Hybrid Authentication → Modern Authentication](#)
- ▶ **AhsayCBS Run on Server (Agentless) v8.3.6.0 (or above)**
 - ▶ [Modern Authentication → Hybrid Authentication](#)
 - ▶ [Hybrid Authentication → Modern Authentication](#)

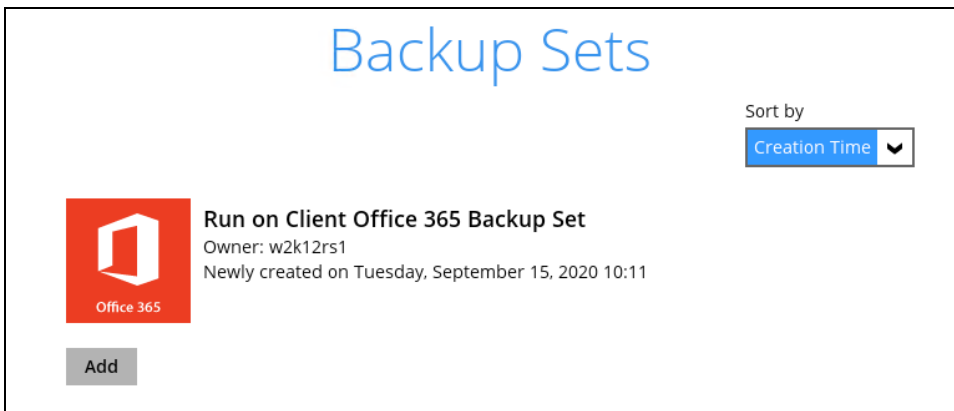
For AhsayOBM v8.3.6.0 (or above)

Modern Authentication → Hybrid Authentication

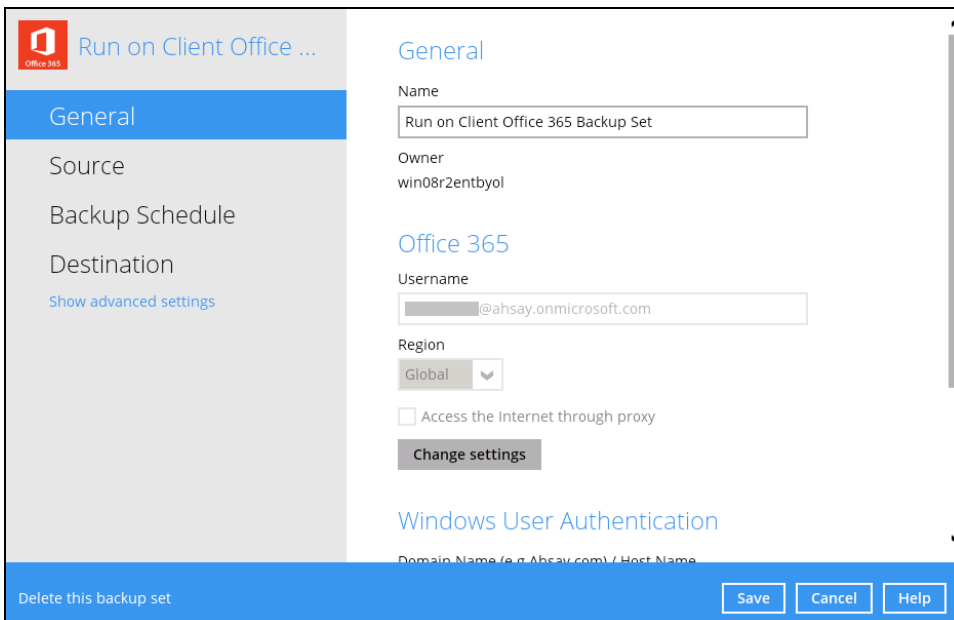
1. Log out all Office 365 account(s) on the default browser before starting the authentication change of the backup set.
2. In the AhsayOBM main interface, click **Backup Sets**.



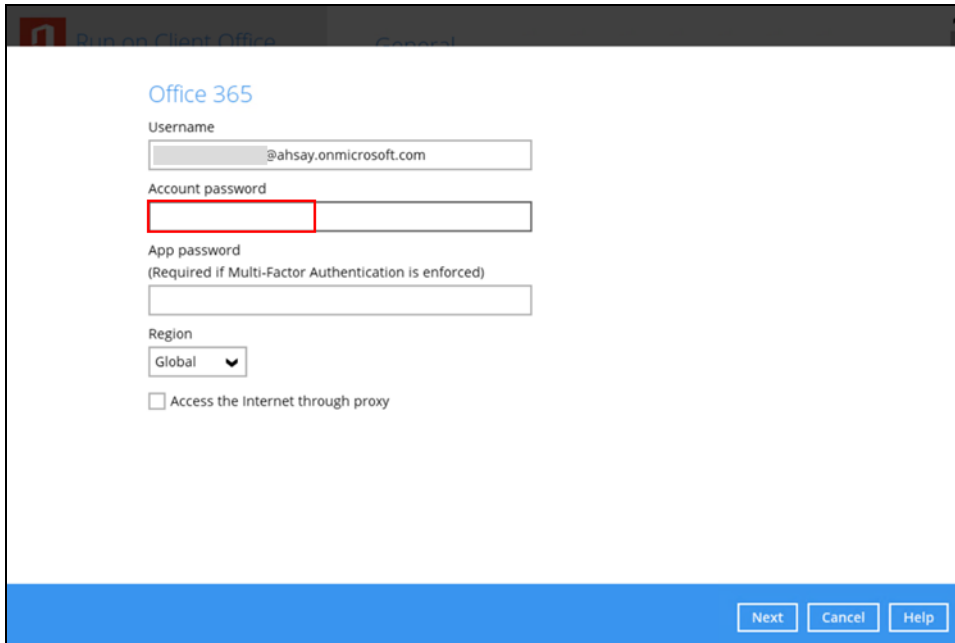
3. Select the backup set that you want to change to Hybrid Authentication.



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



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



Office 365

Username
@ahsay.onmicrosoft.com

Account password

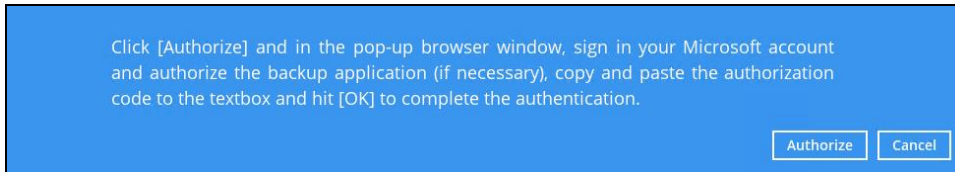
App password
(Required if Multi-Factor Authentication is enforced)

Region
Global

☐ Access the Internet through proxy

Next Cancel Help

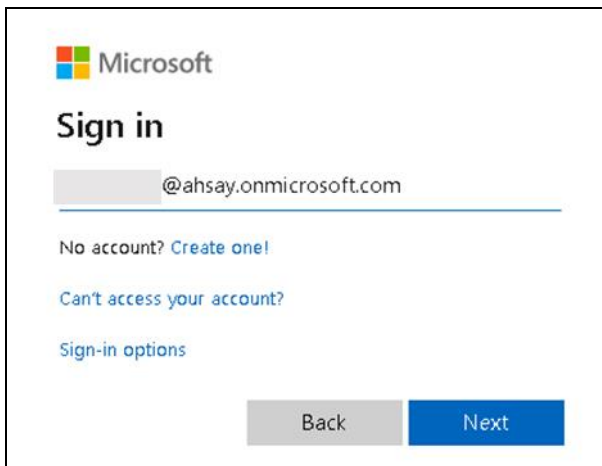
6. Click **Authorize** to start the authentication change process.



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

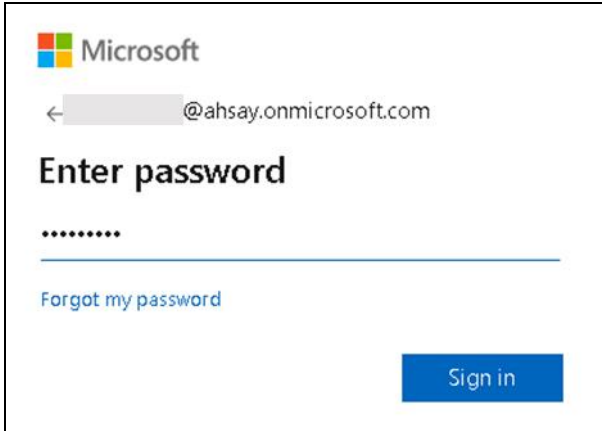
@ahsay.onmicrosoft.com

No account? [Create one!](#)

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

[Sign-in options](#)

Back Next



Microsoft

← @ahsay.onmicrosoft.com

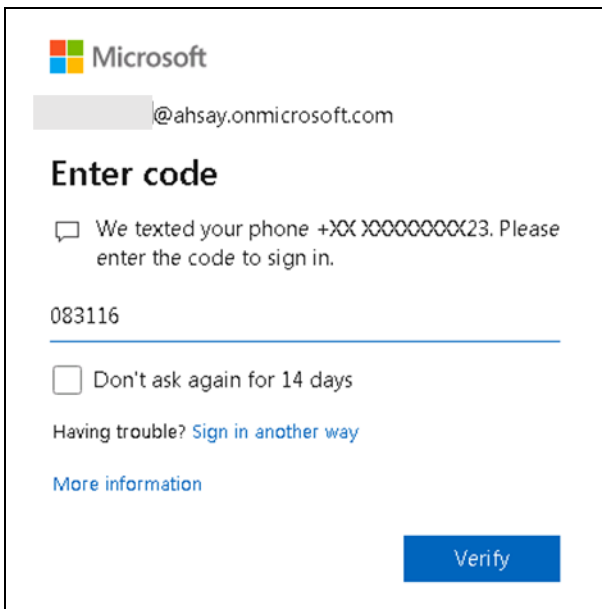
Enter password

.....

[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 XXXXXXXXXX23. Please enter the code to sign in.

083116

☐ Don't ask again for 14 days

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

[More information](#)

Verify

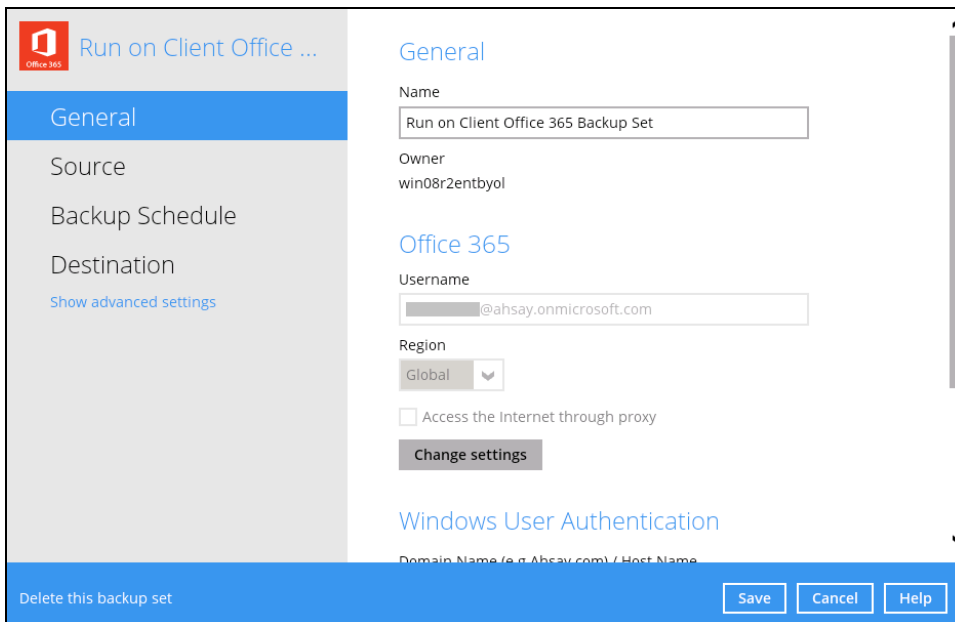


The verification code will only be required if the MFA status of an Office 365 account is enforced.

- Copy and paste the authorization code to AhsayOBM, then click **OK** to proceed.

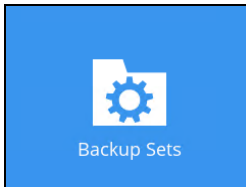


- Click **Save** to finish the authentication change of the backup set.

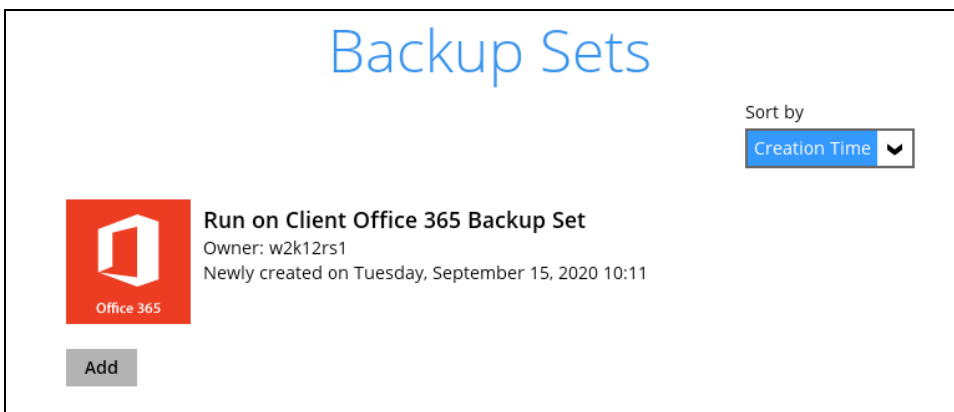


Hybrid Authentication → Modern Authentication

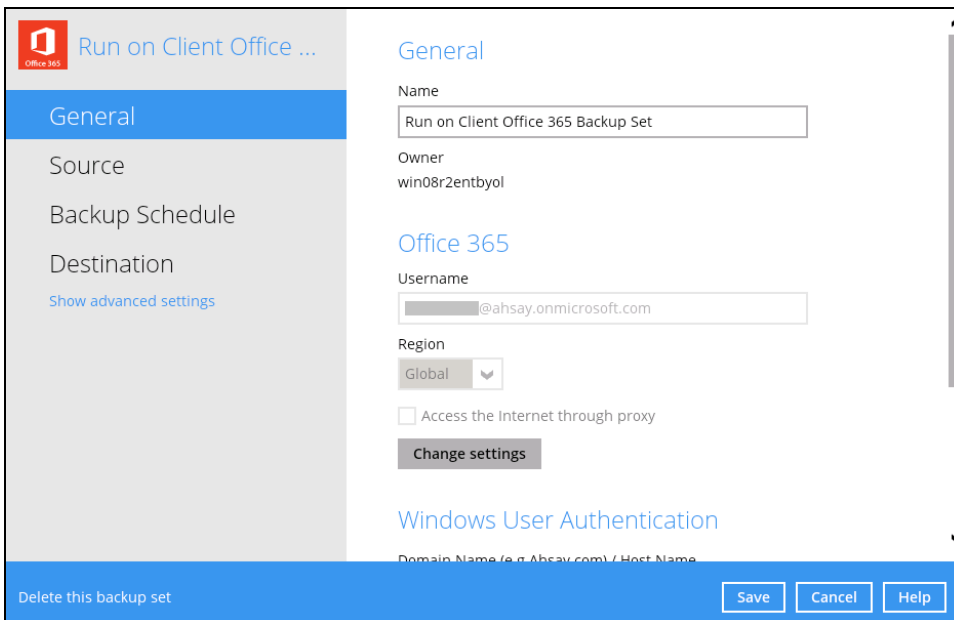
1. Log out all Office 365 account(s) on the default browser before starting the authentication change of the backup set.
2. In the AhsayOBM main interface, click **Backup Sets**.



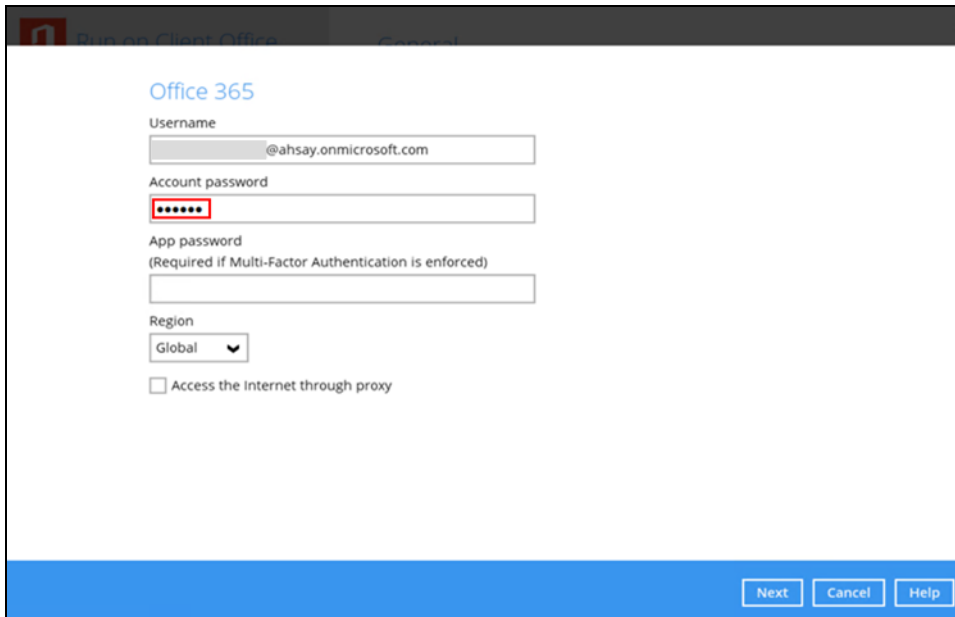
3. Select the backup set that you want to change to Modern Authentication.



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



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



Office 365

Username
@ahsay.onmicrosoft.com

Account password

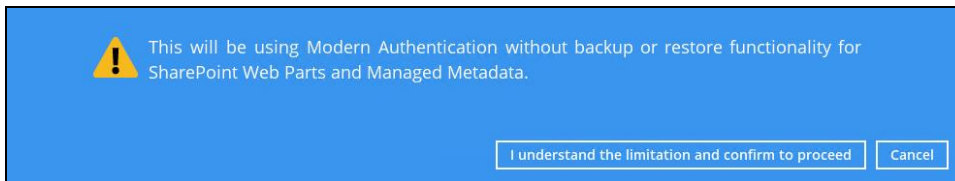
App password
(Required if Multi-Factor Authentication is enforced)


Region
Global

☐ Access the internet through proxy

Next Cancel Help

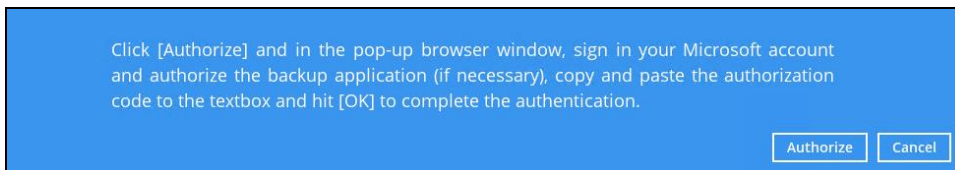
- Click **I understand the limitation and confirm to proceed**.



 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

- Sign in to your 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

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


Microsoft

Enter code

☐ We texted your phone +XX XXXXXXXXX23. Please enter the code to sign in.
☐ Don't ask again for 14 days

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

Verify



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

- Copy and paste the authorization code to AhsayOBM, then click **OK** to proceed.

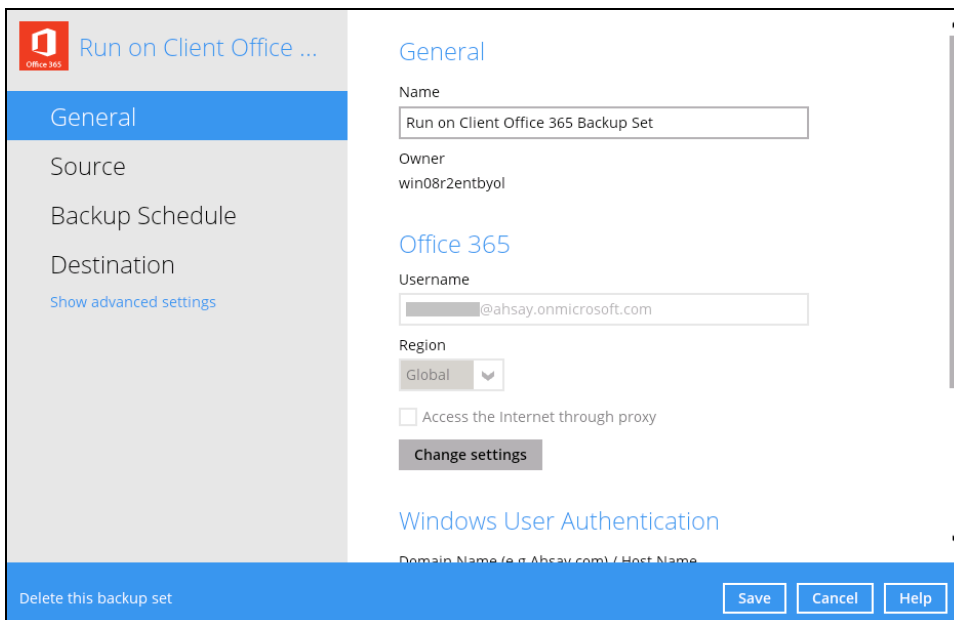


The screenshot shows a dialog box with the Ahsay logo at the top. Below the logo, it says "Authorization Code for Microsoft 365". In the center, there is a text box containing the authorization code: "0.ASSa_IShkza7uEGrYiY1I1VMXiGI8nVBhARCGjmGnR:". Below the text box, it says "Please copy and paste the above Authorization Code into Ahsay's product to complete the setup."



The screenshot shows a blue pop-up window with 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 the text is a text box containing the authorization code: "J6llWZxNETHJYgwVRKS8zoK82CjMghHtCzW7-xEdi4jN88quVnHTS5ULKIAA". At the bottom right, there are "OK" and "Cancel" buttons.

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

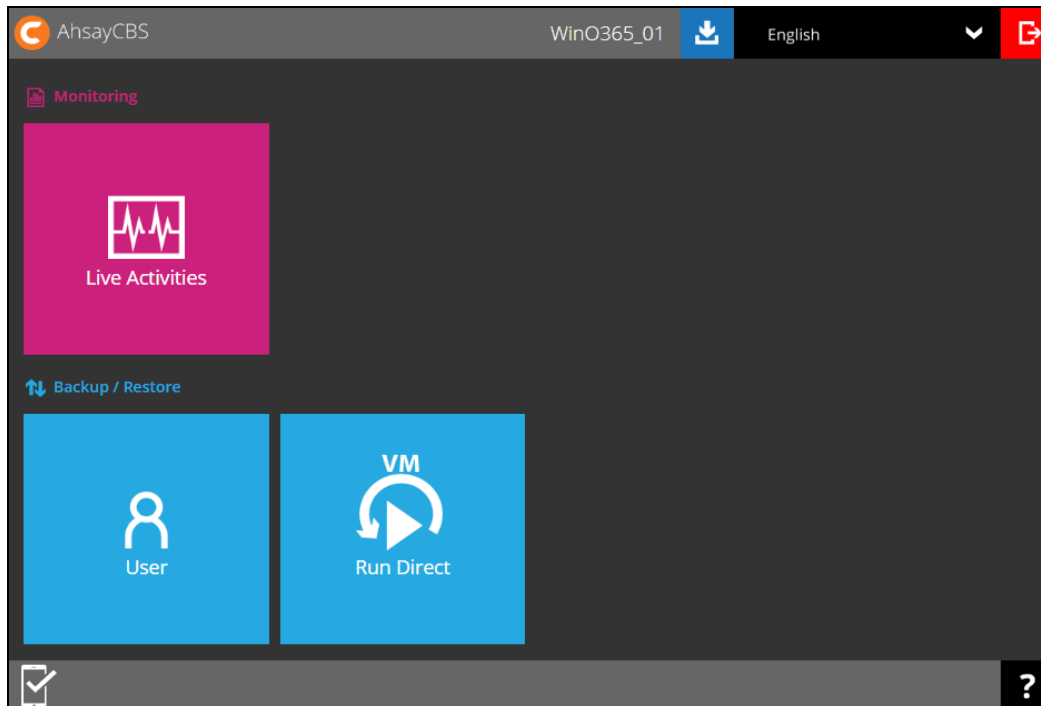


The screenshot shows a dialog box titled "Run on Client Office 365 Backup Set". On the left, there is a sidebar with tabs: "General", "Source", "Backup Schedule", and "Destination". The "General" tab is selected. The main area contains the following fields: "Name" (Run on Client Office 365 Backup Set), "Owner" (win08r2entbyol), "Office 365" section with "Username" (@ahsay.onmicrosoft.com) and "Region" (Global). There is a checkbox for "Access the Internet through proxy" which is unchecked. Below the checkbox is a "Change settings" button. At the bottom, there is a "Windows User Authentication" section with a "Domain Name (e.g. Ahsay.com) / Host Name" field. At the bottom right, there are "Save", "Cancel", and "Help" buttons. At the bottom left, there is a "Delete this backup set" button.

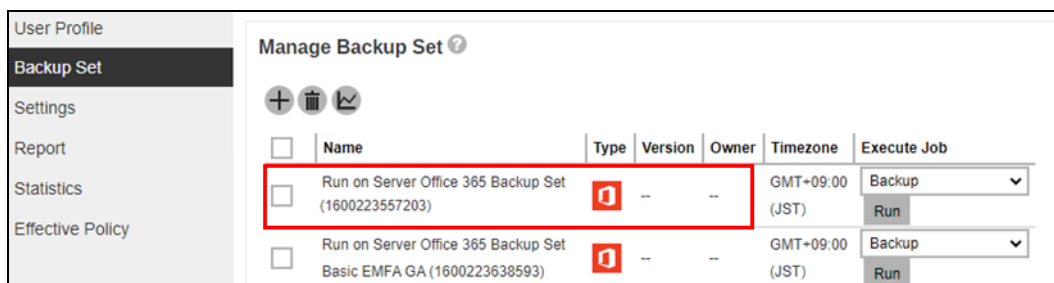
For AhsayCBS Run on Server (Agentless) v8.3.6.0 (or above)

Modern Authentication → Hybrid Authentication

1. Log out all Office 365 account(s) on the default browser before starting the authentication change of the backup set.
2. Log in to AhsayCBS User Web Console.
3. Once logged in, click the **User** icon on the landing page.



4. On the **Backup Set** menu, click the backup set that you want to change to Hybrid Authentication.



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

The screenshot shows the 'General' settings page for Office 365 backup. On the left is a sidebar with navigation links: Source, Backup Schedule, Destination, In-File Delta, Retention Policy, Bandwidth Control, and Others. The main content area is titled 'General' and contains the following fields:

- ID:** 1600223557203
- Name:** Run on Server Office 365 Backup Set
- Owner:** -
- Backup set type:** Office 365 Backup
- Run on:** ☒ Server ☐ Client

Below the 'General' section is the 'Office 365' section with the following fields:

- Username:** @ahsay.onmicrosoft.com
- Region:** Global (dropdown menu)
- ☐ Access the Internet through Proxy
- Change settings** button

At the bottom right of the window are 'X' and '?' icons.

6. In the Office 365 credentials page, **input the Office 365 login account and password** then click  to proceed.

The screenshot shows the 'Office 365' credentials page. It contains the following fields:

- Username:** @ahsay.onmicrosoft.com
- Account password:** (password field with a red border)
- App password:** (password field with a note: '(Required if Multi-Factor Authentication is enforced)')
- Region:** Global (dropdown menu)
- ☐ Access the Internet through Proxy

7. 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.

Microsoft

Sign in

@ahsay.onmicrosoft.com

No account? [Create one!](#)

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

[Sign-in options](#)

Back

Next

Microsoft

← @ahsay.onmicrosoft.com

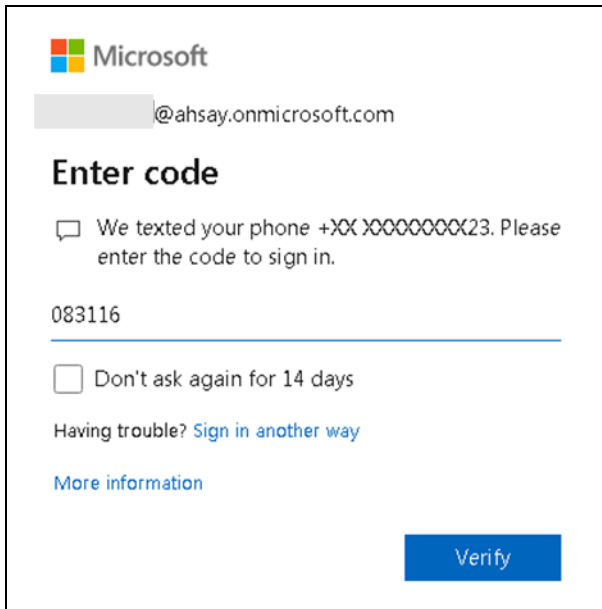
Enter password

.....

[Forgot my password](#)

Sign in

- If MFA is enforced, 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.

083116

☐ Don't ask again for 14 days

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

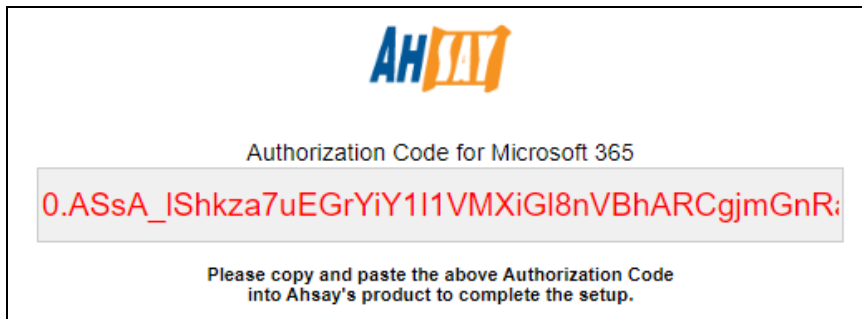
[More information](#)


Verify



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

- Copy and paste the authorization code to AhsayCBS, then click **OK** to proceed.

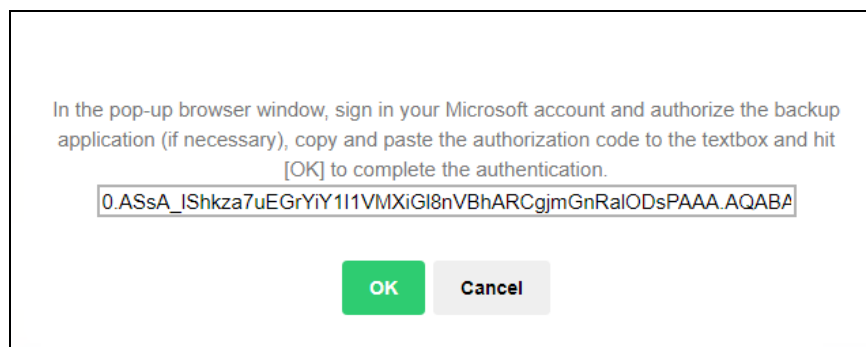




Authorization Code for Microsoft 365

0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCgjmGnR:

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



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.

0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCgjmGnRaIODsPAAA.AQABA

OK Cancel

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

General
Source
Backup Schedule
Destination
In-File Delta
Retention Policy
Bandwidth Control
Others

General

ID
1600223557203

Name
Run on Server Office 365 Backup Set

Owner
-

Backup set type
Office 365 Backup

Run on
☒ Server
☐ Client




Office 365

Username
@ahsay.onmicrosoft.com

Region
Global

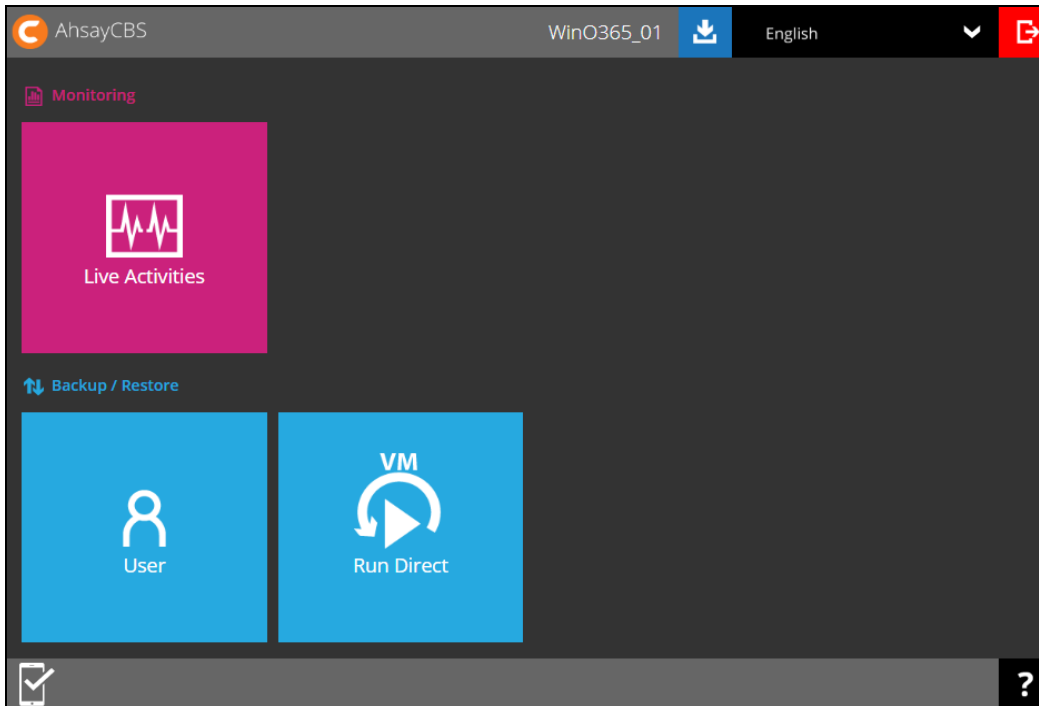
☐ Access the Internet through Proxy

Change settings

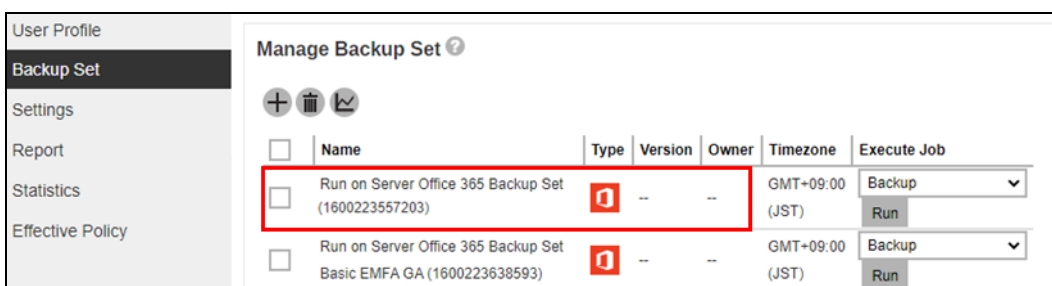




Hybrid Authentication → Modern Authentication

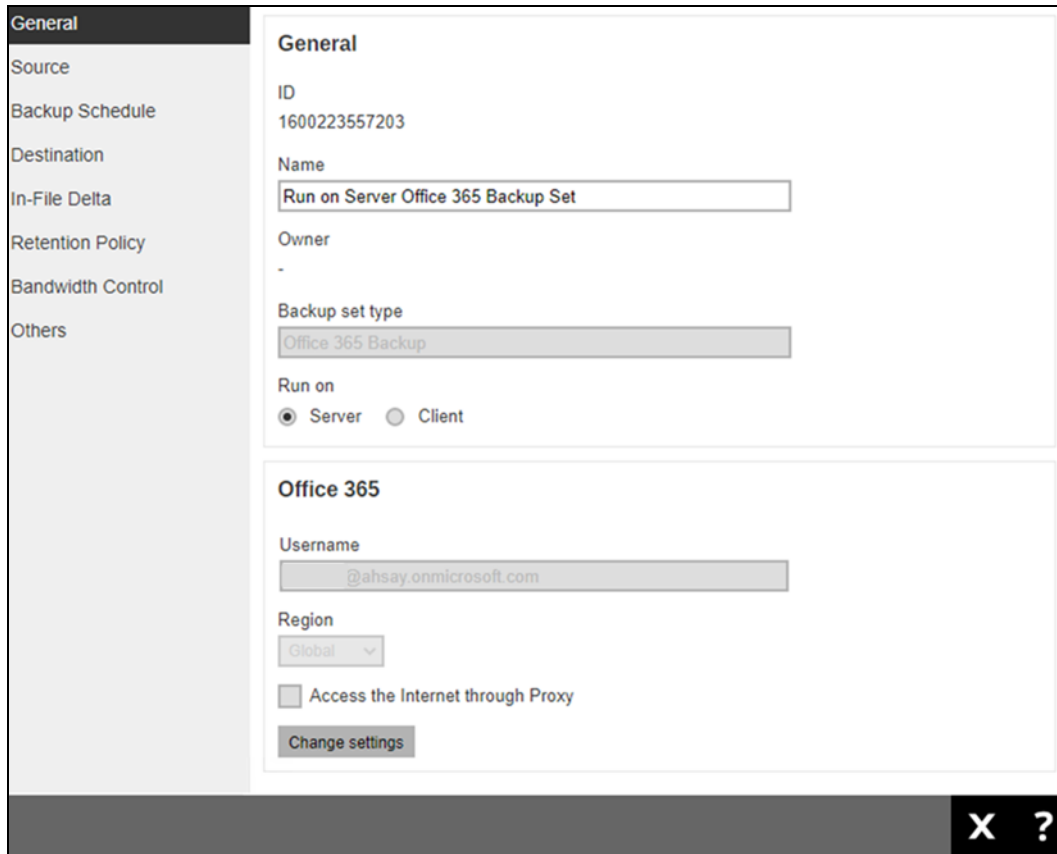
1. Log out all Office 365 account(s) on the default browser before starting the authentication change of the backup set.
2. Log in to AhsayCBS User Web Console.
3. Once logged in, click the **User** icon on the landing page.



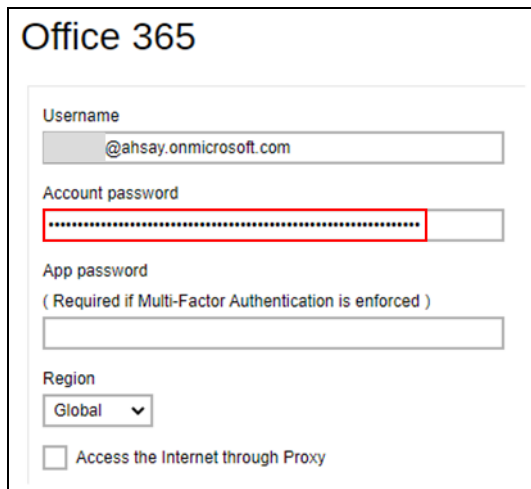
4. On the **Backup Set** menu, click the backup set that you want to change to Modern Authentication.



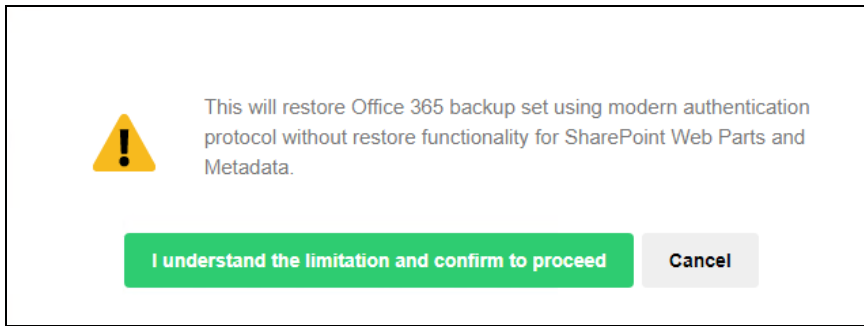
5. In the Backup Set Settings, click **Change settings** under the Office 365 screen.



6. In the Office 365 credentials page, **remove the Account password** then click  to proceed.

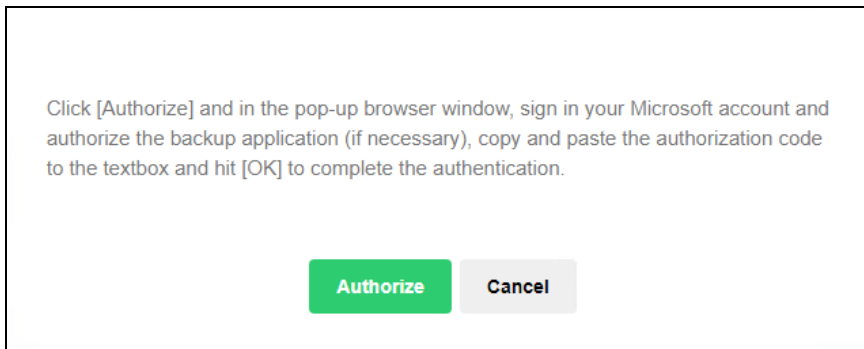


- Click **I understand the limitation and confirm to proceed**.



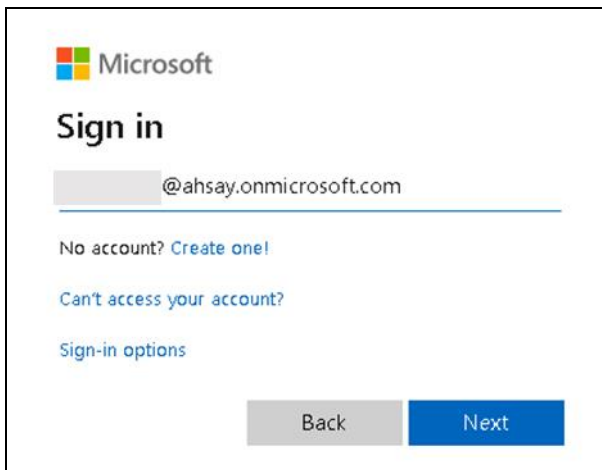
A warning dialog box with a yellow triangle icon containing an exclamation mark. The text inside reads: "This will restore Office 365 backup set using modern authentication protocol without restore functionality for SharePoint Web Parts and Metadata." At the bottom, there are two buttons: a green button labeled "I understand the limitation and confirm to proceed" and a grey button labeled "Cancel".

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

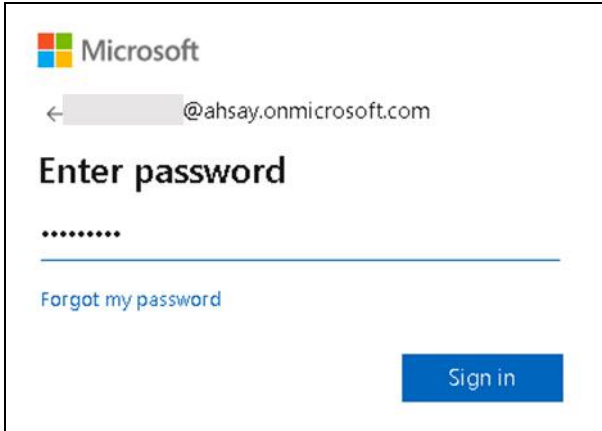


An authorization dialog box with a light grey background. The text inside reads: "Click [Authorize] and in the pop-up browser window, sign in your Microsoft account and authorize the backup application (if necessary), copy and paste the authorization code to the textbox and hit [OK] to complete the authentication." At the bottom, there are two buttons: a green button labeled "Authorize" and a grey button labeled "Cancel".

- Sign in to your account.



A Microsoft Sign in screen. At the top is the Microsoft logo. Below it is the text "Sign in". There is a text input field containing "@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, there are two buttons: a grey button labeled "Back" and a blue button labeled "Next".



Microsoft

← @ahsay.onmicrosoft.com

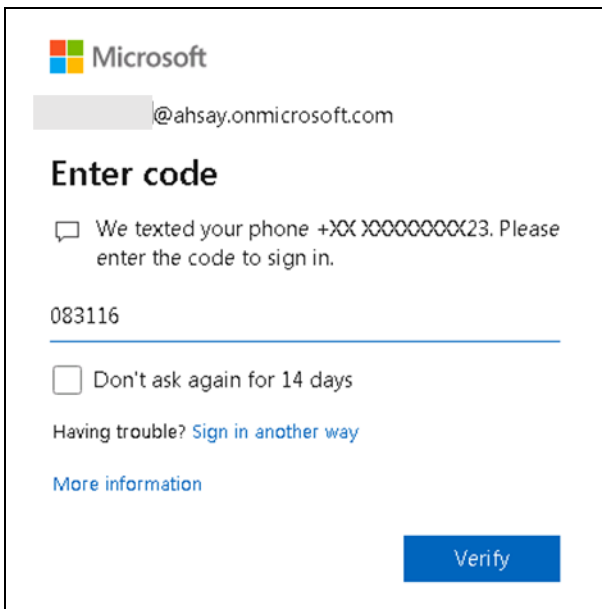
Enter password

.....

[Forgot my password](#)

Sign in

10. 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 XXXXXXXXXX23. Please enter the code to sign in.

083116

☐ Don't ask again for 14 days

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

[More information](#)

Verify



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

12. Copy and paste the authorization code to AhsayCBS, then click **OK** to proceed.



Authorization Code for Microsoft 365

0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCgjmGnR:

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

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.

0.ASsA_IShkza7uEGrYiY1I1VMXiGI8nVBhARCgjmGnRaIODsPAAA.AQABA

OK
Cancel

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

General

Source

Backup Schedule

Destination

In-File Delta

Retention Policy

Bandwidth Control

Others

General

ID
1600223557203

Name

Owner
-

Backup set type

Run on
☒ Server ☐ Client

Office 365

Username

Region

☐ Access the Internet through Proxy

Change settings

Save
X
?

FAQs Office 365 Modern Authentication Support

What are the affected versions?

- ▶ AhsayCBS v7.9.2.0 to v7.17.x and v8.1.x to v8.3.4.x
- ▶ AhsayOBM v7.9.2.0 to v7.17.x and v8.1.x to v8.3.4.x
- ▶ AhsayACB v7.9.2.0 to v7.17.x and v8.1.x to v8.3.4.x

Does this issue affect my customers?

- ▶ This issue will only affect customers with Office 365 backup sets running on AhsayCBS Run on Server (Agentless), and/or on AhsayOBM/AhsayACB which were created on a pre-v8.3.6.0 version (i.e. v7.9.2.0 to v7.17.x and v8.1.x to v8.3.4.x). If customers are not upgraded to v8.3.6.0 (or above), their Office 365 backups will stop working when the Basic (legacy) Authentication support is removed by Microsoft.

Please refer to the latest Microsoft update for further details:

<https://techcommunity.microsoft.com/t5/exchange-team-blog/basic-authentication-and-exchange-online-july-update/bc-p/1564199>

What action do I need to take to fix this problem?

- ▶ Partners are strongly advised to:
 - ▶ Upgrade to **AhsayCBS or AhsayOBM/AhsayACB v8.3.6.0 (or above)**.
 - ▶ Perform a one-time Authentication migration.

If your current version is not **AhsayCBS v8.3.6.0 (or above)**, please refer to the following KB articles for upgrade instructions:

For Windows/Linux/FreeBSD

http://wiki.ahsay.com/doku.php?id=public:8009_faq:how_to_install_the_latest_patch_set_for_ahsaycns

For AhsayUBS

http://wiki.ahsay.com/doku.php?id=public:8026_faq:how_to_install_the_latest_patch_set_for_ahsayubs

How to perform a one-time authentication migration?

Please refer to the following instructions for further details.

- ▶ AhsayCBS Run on Server (Agentless) Backup
Refer to **Appendix H** of our **AhsayCBS Office 365 Run on Server (Agentless) Backup and Restore Guide**
http://download.ahsay.com/support/document/v8/guide_cbs_user_O365_v8.pdf
- ▶ AhsayOBM on Windows
Refer to **Appendix K** of our **AhsayOBM Office 365 Backup & Restore Guide for Windows**
http://download.ahsay.com/support/document/v8/guide_obm_user_O365_win_v8.pdf
- ▶ AhsayOBM on macOS
Refer to **Appendix K** of our **AhsayOBM Office 365 Backup & Restore Guide for macOS**
http://download.ahsay.com/support/document/v8/guide_obm_user_O365_mac_v8.pdf
- ▶ AhsayACB on Windows
Refer to **Appendix G** of our **AhsayACB Office 365 Backup & Restore Guide for Windows**
http://download.ahsay.com/support/document/v8/guide_acb_user_O365_win_v8.pdf
- ▶ AhsayACB on macOS
Refer to **Appendix G** of our **AhsayACB Office 365 Backup & Restore Guide for Windows**
http://download.ahsay.com/support/document/v8/guide_acb_user_O365_mac_v8.pdf

How to perform an authentication change of an existing Office 365 backup set?

Please refer to the following instructions for further details.

- ▶ AhsayCBS Run on Server (Agentless) Backup
Refer to **Appendix I** of our **AhsayCBS Office 365 Run on Server (Agentless) Backup and Restore Guide**
http://download.ahsay.com/support/document/v8/guide_cbs_user_O365_v8.pdf
- ▶ AhsayOBM on Windows
Refer to **Appendix L** of our **AhsayOBM Office 365 Backup & Restore Guide for Windows**
http://download.ahsay.com/support/document/v8/guide_obm_user_O365_win_v8.pdf
- ▶ AhsayOBM on macOS
Refer to **Appendix L** of our **AhsayOBM Office 365 Backup & Restore Guide for macOS**
http://download.ahsay.com/support/document/v8/guide_obm_user_O365_mac_v8.pdf
- ▶ AhsayACB on Windows
Refer to **Appendix H** of our **AhsayACB Office 365 Backup & Restore Guide for Windows**
http://download.ahsay.com/support/document/v8/guide_acb_user_O365_win_v8.pdf

- ▶ AhsayACB on macOS

Refer to **Appendix H** of our **AhsayACB Office 365 Backup & Restore Guide for Windows**
http://download.ahsay.com/support/document/v8/guide_acb_user_O365_mac_v8.pdf

What if my maintenance has already expired? How do I upgrade?

- ▶ **Stop!** Do not upgrade until you contact a member of our Sales team sales-kb@ahsay.com for assistance with your maintenance renewal.

What if I require assistance with my AhsayCBS server upgrade?

- ▶ Our professional service team is ready to provide immediate assistance to partners with AhsayCBS v7 and AhsayCBS v8 upgrades.
Please contact a member of our Sales team sales-kb@ahsay.com to obtain a quotation for the AhsayCBS upgrade service.