



# Ahsay Online Backup Manager v7

## Quick Start Guide for Windows

Ahsay Systems Corporation Limited

1 November 2017

# Copyright Notice

© 2017 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 (<http://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 are trademarks of Ahsay Systems Corporation Limited.

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

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

Dropbox is registered trademark of Dropbox Inc.

Google Cloud Storage and Google Drive are registered trademarks of Google Inc.

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

Microsoft, Windows, Microsoft Exchange Server, Microsoft SQL Server, Microsoft Hyper-V, Microsoft Azure, One Drive and One Drive for Business 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, Oracle 10g, Oracle 11g 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](http://www.redhat.com) in the U.S. and other countries. Linux is a registered trademark of Linus Torvalds.

ShadowProtect is registered trademark of StorageCraft Technology Corporation.

VMware, ESX, ESXi and vCenter 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
30 Jun 2016	First Draft	New
25 Nov 2016	Added Restore Options to Ch 8 Restoring Data; Combined "Technical Assistance" and "Documentation" as Ch 9 Contacting Ahsay	Modification
16 Dec 2016	Modified Ch 3 Download and Install AhsayOBM, Ch 4 Start AhsayOBM, Ch 5 Creating a Backup Set, Ch 7 Running Backup Jobs, Ch 8 Restoring Data and Appendix Uninstall AhsayOBM;  Corrected typo in Copyright Notice and Trademarks;  Removed "-ing" verb form from all chapter titles for consistency	Modification
3 Jan 2017	Added instructions and screen shots for Encryption key handling in Ch. 5	New
10 Feb 2017	Added step in Appendix – Uninstall AhsayOBM; Modified step in Ch. 5 Create a Backup Set	New/Modification
5 Apr 2017	Added Encryption Type option in Ch. 5 Create a Backup Set section: Revised screen shot with larger field for entering backup sever IP at login	New
31 May 2017	Added Ch.4 OpenDirect restore section, added step in Create new backup set, added OpenDirect restore sub-section in the Restore section	New
7 Jul 2017	Update Ch.4, Ch. 7, Ch.10	
23 Oct 2017	Modified Software Requirements for Ch2.2; Added comparison of online and offline installation for Ch.5; Added Offline Mode Installation for Ch5.2	New/ Modification

# Table of Contents

<b>1</b>	<b>Overview .....</b>	<b>1</b>
	What is this software? .....	1
	System Architecture .....	1
<b>2</b>	<b>Requirements for AhsayOBM on Windows .....</b>	<b>2</b>
	Hardware Requirements .....	2
	Software Requirements.....	2
<b>3</b>	<b>Get Started with AhsayOBM .....</b>	<b>3</b>
<b>4</b>	<b>OpenDirect Restore.....</b>	<b>4</b>
	What is OpenDirect Restore? .....	4
	How does OpenDirect Restore work?.....	5
	Benefits of using OpenDirect Restore.....	6
	Requirements.....	7
	Supported Backup Modules.....	7
	License Requirements .....	7
	Backup Quota Storage.....	7
	Windows Operating System .....	7
	Temporary Directory Requirement .....	7
	Available Spare Drive Letter .....	7
	Network Requirements .....	7
	Other Dependencies .....	8
	Permissions .....	8
<b>5</b>	<b>Download and Install AhsayOBM .....</b>	<b>9</b>
	Download AhsayOBM .....	10
	Install AhsayOBM.....	11
	Option 1: Online Installation Option .....	11
	Option 2: Offline Installation Option .....	16
<b>6</b>	<b>Start AhsayOBM .....</b>	<b>21</b>
	Login to AhsayOBM .....	21
<b>7</b>	<b>Create a Backup Set.....</b>	<b>24</b>
<b>8</b>	<b>Overview on Backup Process .....</b>	<b>33</b>
<b>9</b>	<b>Run Backup Jobs .....</b>	<b>34</b>
	Login to AhsayOBM .....	34
	Start a Manual Backup.....	34
	Configure Backup Schedule for Automated Backup.....	36
<b>10</b>	<b>Restore Data .....</b>	<b>40</b>
	Restore Method.....	40
	Traditional Restore.....	40

OpenDirect Restore .....	47
<b>11 Contact Ahsay .....</b>	<b>53</b>
Technical Assistance .....	53
Documentation .....	53
<b>Appendix .....</b>	<b>54</b>
Uninstall AhsayOBM .....	54

# 1 Overview

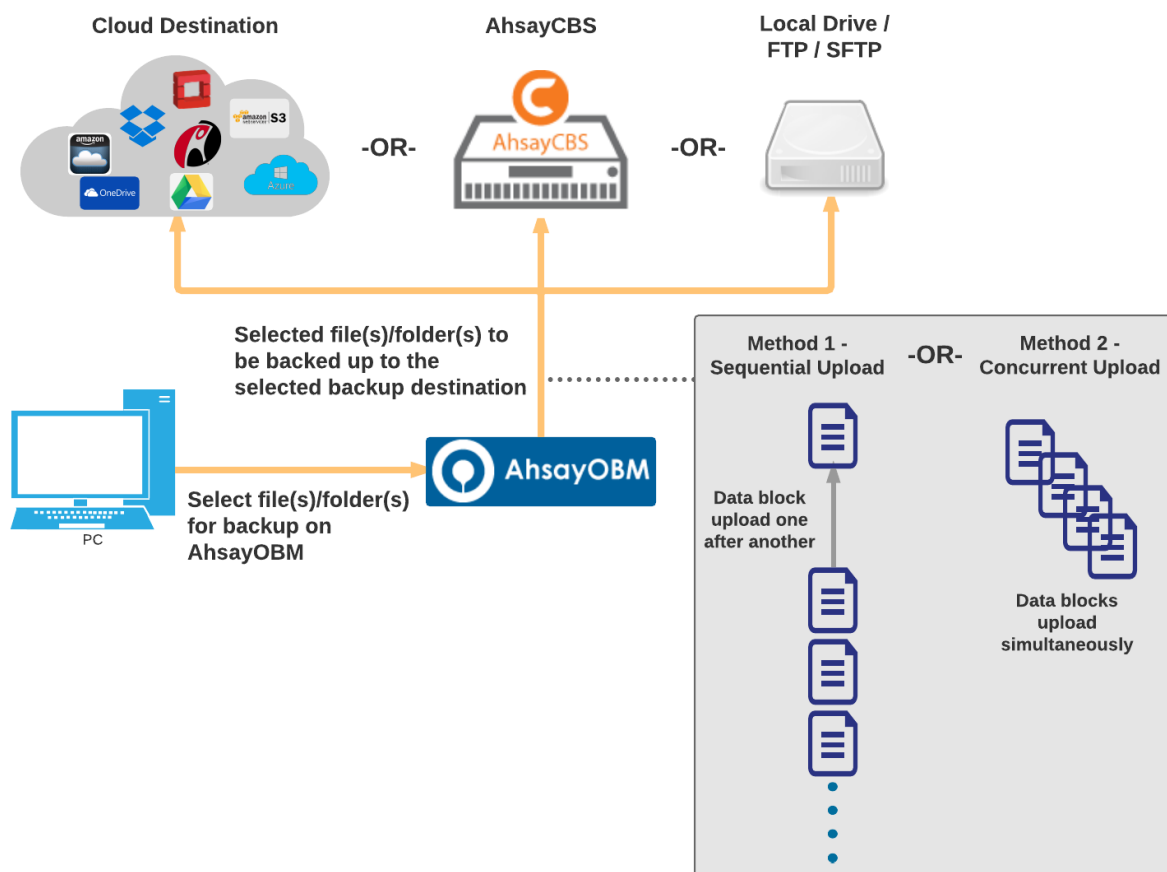
## What is this software?

Ahsay brings you specialized client backup software, namely AhsayOBM, to provide a comprehensive backup solution for protecting file(s) / folder(s) on your machine, with a wide variety of backup destinations (major cloud storage service providers, FTP/SFTP, local drive, etc.) of your choice.

## System Architecture

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

In this user guide, we will focus on the software installation, as well as the end-to-end backup and restore process using the AhsayOBM as a client backup software.



## 2 Requirements for AhsayOBM on Windows

### Hardware Requirements

Refer to the link below for details of the minimum and recommended requirements for installing AhsayOBM:

[FAQ: Ahsay Hardware Requirement List \(HRL\) for version 7.3 or above \(5000\)](#)

### Software Requirements

Refer to the following article for the list of compatible operating systems and Hyper-V platforms:

[FAQ: Ahsay Software Compatibility List \(SCL\) for version 7.3 or above \(5001\)](#)

Refer to the following article for the list of compatible operating system for OpenDirect and Granular Restore:

[FAQ: Ahsay Software Compatibility List \(SCL\) for Granular and OpenDirect Restore \(5250\)](#)

### 3 Get Started with AhsayOBM

This quick start guide will walk you through the following 5 major parts to get you started with using AhsayOBM.

#### **Download and Install**

Download and install  
AhsayOBM on your Windows

#### **Launch the App**

Launch and log in to AhsayOBM

#### **Create a Backup Set**

Create a backup set according to  
your preferences

#### **Run Backup Jobs**

Run the backup jobs to back up  
data

#### **Restore Data**

Restore backed up data to your  
system



## 4 OpenDirect Restore

### What is OpenDirect Restore?

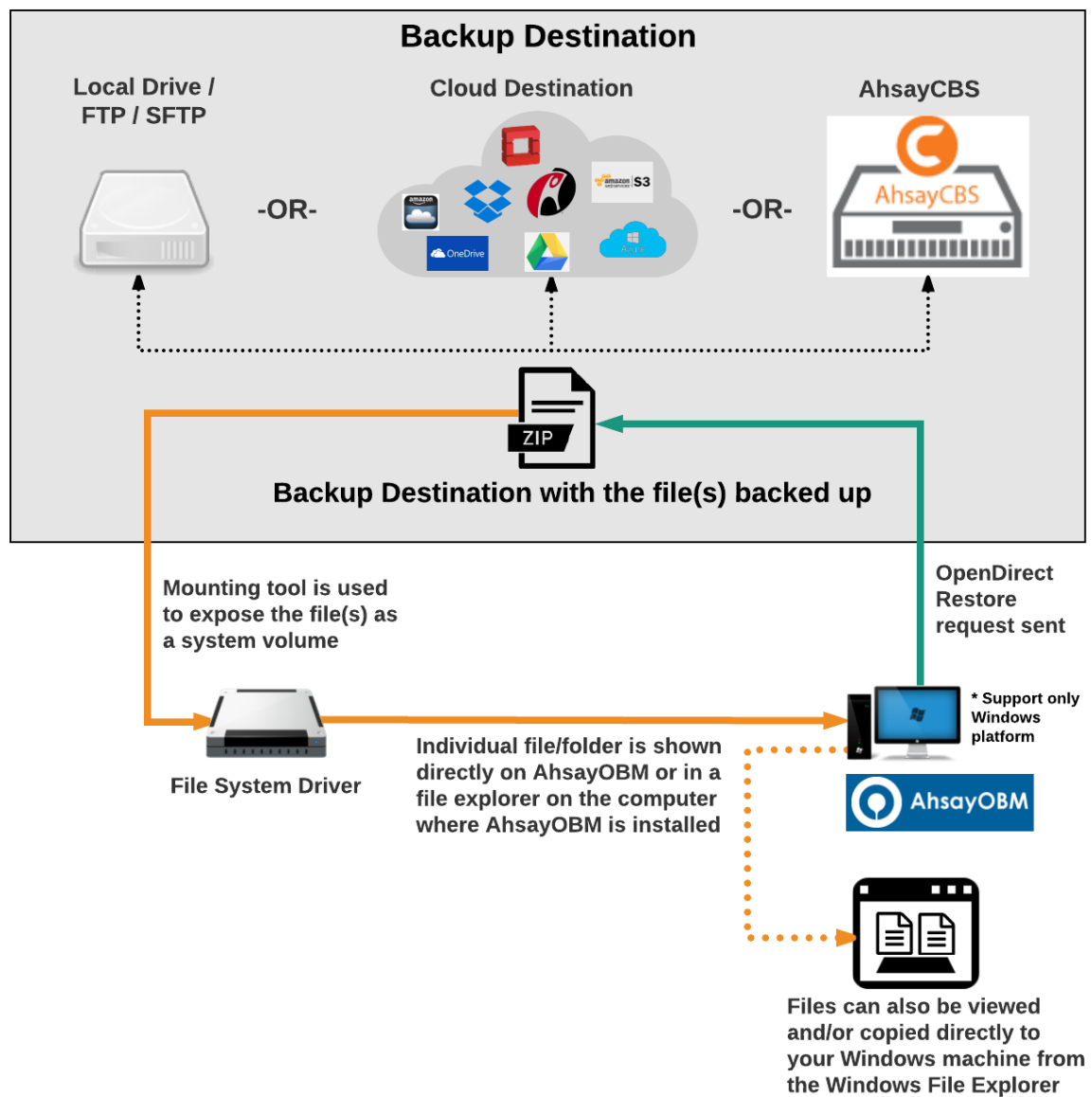
OpenDirect restore is an additional restore options for restoring files from a Windows File backup set available from AhsayOBM v7.13.0.0 or above. The OpenDirect restore method makes use of the granular restore technology to make selective restore of individual files from a large compressed or image file, for example zip, RAR, ISO files, without the need to restore the compressed or image file first, to give you a fast and convenient file restore solution.

During the OpenDirect restore process, the file(s)/folders can be viewed and/or copied from the Windows File Explorer on the Windows machine you are performing the restore. OpenDirect restore is only supported on File backup sets created and backed up using AhsayOBM v7.13.0.0 or above on Windows platform with OpenDirect restore feature enabled.

#### **Important**

OpenDirect restore requires an additional OpenDirect / Granular restore add-on module license to work. Contact your backup service provider for further details.

## How does OpenDirect Restore work?



## Benefits of using OpenDirect Restore

### Comparison between OpenDirect File Restore and Traditional File Restore

OpenDirect Restore	
Introduction	
OpenDirect restore allows you to quickly access individual files from a large compressed or image file by viewing and/or copying files from the file explorer on the Windows you are performing the restore, without having to fully restore the whole compressed or image file first.	
Pros	
<b>Restore of Entire Compressed File Not Required</b>	As opposed to the traditional restore where you have to restore the entire compressed or image file first before you can access any individual file in it, OpenDirect restore allows you to view and download individual files from a compressed or image file, without having to restore compressed file or image file first.
<b>Ability to Restore Selected Files</b>	When restoring a large compressed or image file, sometimes, you may only need to restore individual file(s) out of the entire file, therefore, OpenDirect restore gives you the flexibility to restore selective file(s) quickly, so it saves you time and effort to achieve your restore goal.
Cons	
<b>No Encryption and Compression</b>	To ensure optimal restore performance, the backup of the files in an OpenDirect file backup set will <b>NOT</b> be encrypted and compressed, therefore, you may have to take these factors in consideration when selecting this restore option.

Traditional Restore	
Introduction	
The traditional restore method restores the entire compressed file or image file. Backed up data can only be accessed when complete restore is performed.	
Pros	
<b>Backup with Compression and Encryption</b>	Backup file(s) are compressed, therefore in smaller file size, and encrypted before being uploaded to the backup destination.
Cons	
<b>Slower Recovery</b>	As the entire compressed or image file has to be restored before you can access any individual files, restore time could be long if the file size is large

## Requirements

### Supported Backup Modules

OpenDirect restore is only supported on File backup sets created and backed up using AhsayOBM v7.13.0.0 or above on Windows platform with OpenDirect restore feature enabled.

### License Requirements

An OpenDirect / Granular restore add-on module license is required per backup set for this feature to work. Contact your backup service provider for more details.

### Backup Quota Storage

As compression is not enabled for OpenDirect file backup sets, to optimize restore performance the storage quota required will be higher than non-OpenDirect file backup sets. Contact your backup service provider for details.

### Windows Operating System

AhsayOBM must be installed on a 32 bit or 64 bit Windows Operating System as libraries for OpenDirect only supports Windows platform.

Windows 2008 R2 SP1 or above	Windows 2012	Windows 2012 R2
Windows 2016	Windows 7 SP1 or above	Windows 8
Windows 8.1	Windows 10	

### Temporary Directory Requirement

The temporary directory folder should have at least the same available size as the compressed or image file to be restored and should be located on a local drive to ensure optimal performance.

### Available Spare Drive Letter

One spare drive letter must be available on the Windows machine for the granular restore process, as the compressed file or image is mounted on Windows as a logical drive. AhsayOBM will automatically take the next available drive letter in alphabetical order for the compressed or image file.

#### Note

1. The Windows drive letters A, B, and C are not used by OpenDirect restore.
2. The OpenDirect restore assigned drive letter(s) will be released once you exit from AhsayOBM UI.

### Network Requirements

Recommended minimum network speed is **at least 100Mbps download speed**.

The network bandwidth requirements will increase in proportion to the size of the compressed file/image and or the incremental delta chain length to ensure optimal performance. Working with limited network bandwidth may severely affect the granular restore performance.

You can use an online network speed test website (e.g. [www.speedtest.net](http://www.speedtest.net)) to get an idea of the actual bandwidth of the machine.

## Other Dependencies

The following dependencies are restore related and therefore they will be checked by AhsayOBM only when an OpenDirect restore is performed. Absence of these elements will not affect the backup job but would cause the restore to fail.

- ▶ Microsoft Visual C++ 2015 Redistributable (x86) / (x64)  
<https://www.microsoft.com/en-us/download/details.aspx?id=48145>
- ▶ Update for Universal C Runtime in Windows  
<https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>
- ▶ **For Windows 7 and Windows Server 2008 R2 only**  
Microsoft Security Advisory 3033929  
<https://technet.microsoft.com/en-us/library/security/3033929.aspx>

## Permissions

The Windows login account used for installation and operation of the AhsayOBM client machine requires Administrator privileges.

## 5 Download and Install AhsayOBM

From version 7.15.0.0 onwards, there are two installation modes of AhsayOBM, online installation and offline installation. Below is the table of comparison between online installation and offline installation.

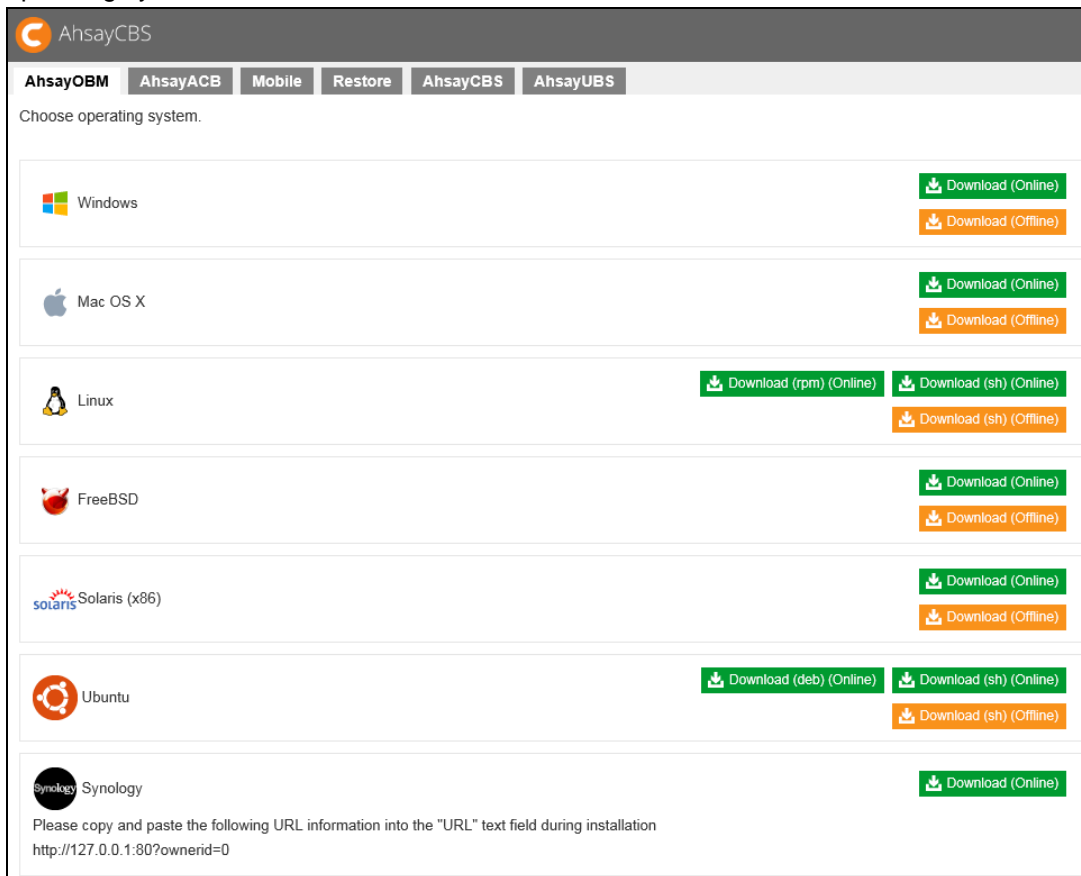
	Online Installation	Offline Installation
<b>Version Supported</b>	<ul style="list-style-type: none"><li>➤ From v7.3.2.0 onwards.</li></ul>	<ul style="list-style-type: none"><li>➤ From v7.15.0.0 onwards.</li></ul>
<b>Installation Time</b>	<ul style="list-style-type: none"><li>➤ Takes more time as it needs to download the binary and component files (80MB to 132MB depending on operating system) each time the installation is run.</li><li>➤ Online installer size is 6KB to 3.5MB depending on operating system as it contains only the initial installation package files.</li></ul>	<ul style="list-style-type: none"><li>➤ Takes less time as all the necessary binary and component files are already available in the offline installer and offline installer can be downloaded once but reused many times.</li><li>➤ Offline installer size is 80MB to 132MB depending on operating system as it contains all the necessary binary and component files.</li></ul>
<b>Deployments</b>	<ul style="list-style-type: none"><li>➤ Suitable for single or small amount of device installations.</li><li>➤ Suitable for sites with fast and stable internet connection as internet connection is needed each time when an installation is run.</li><li>➤ A slow internet connection will result in longer installation time and interrupted or unstable internet connection may lead to unsuccessful installation.</li><li>➤ Ensures the latest version of the product is installed.</li></ul>	<ul style="list-style-type: none"><li>➤ Suitable for multiple or mass device installations.</li><li>➤ Suitable for client sites with metered internet connections as once the offline installer is downloaded, internet connection is not needed each time when an installation is run.</li><li>➤ May need to update the product version after installation if an older offline installer is used.</li></ul>

## Download AhsayOBM

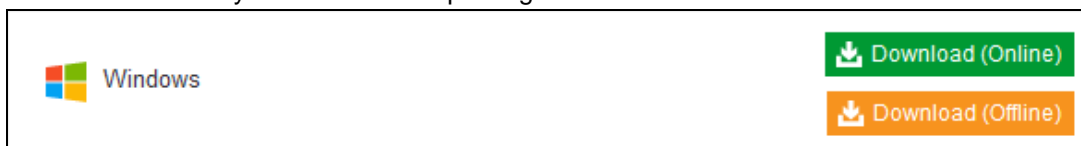
1. In a web browser, click the blue icon on the top right corner to open the download page for the AhsayOBM installation package file from your backup service provider's website.



2. In the **AhsayOBM** tab of the download page, you can choose the AhsayOBM installer by operating system.



3. In the **Windows** section, click on the **Download (Online)** or **Download (Offline)** button to download the AhsayOBM installation package.



## Install AhsayOBM

### Option 1: Online Installation Option

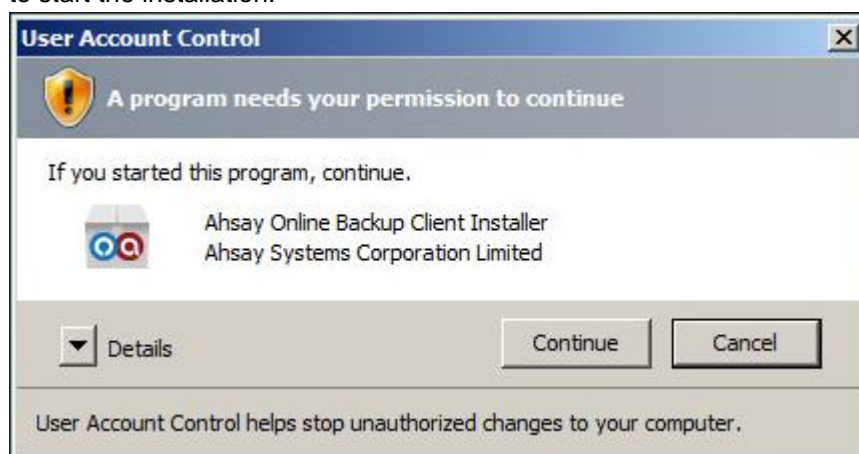
1. Launch the online installation package file you have downloaded from the download section above.



2. Click **Run** when you see this message.



3. The following dialog box will appear only if User Account Control is enabled. Click **Continue** to start the installation.

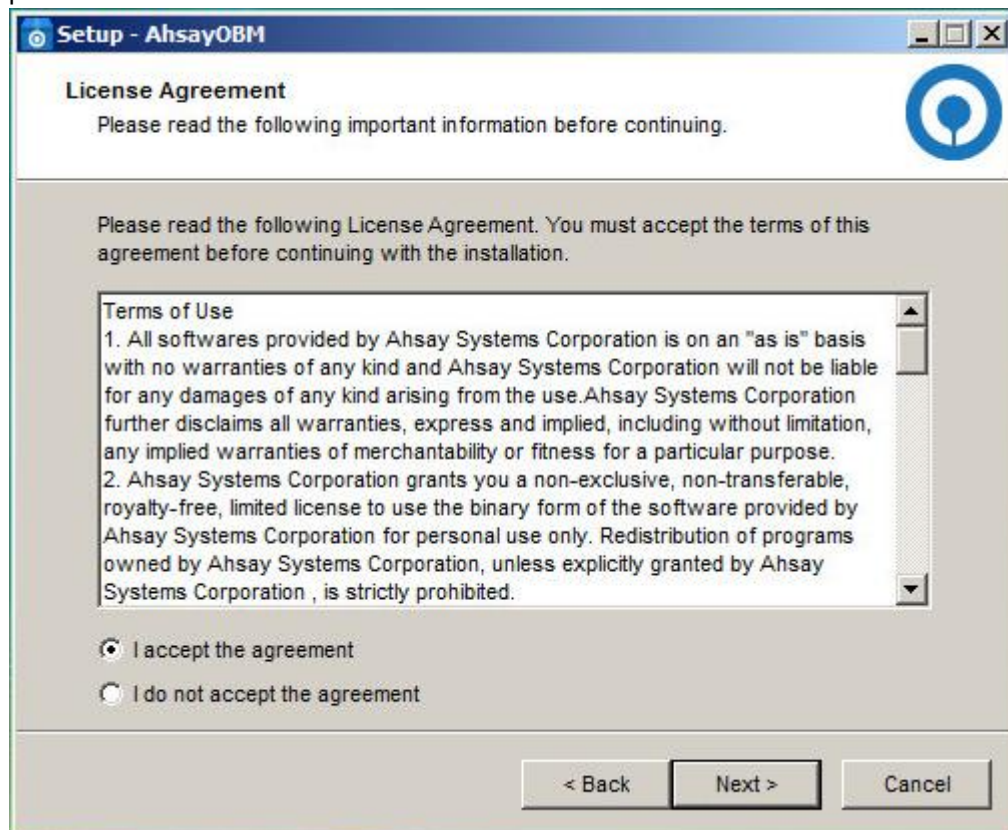




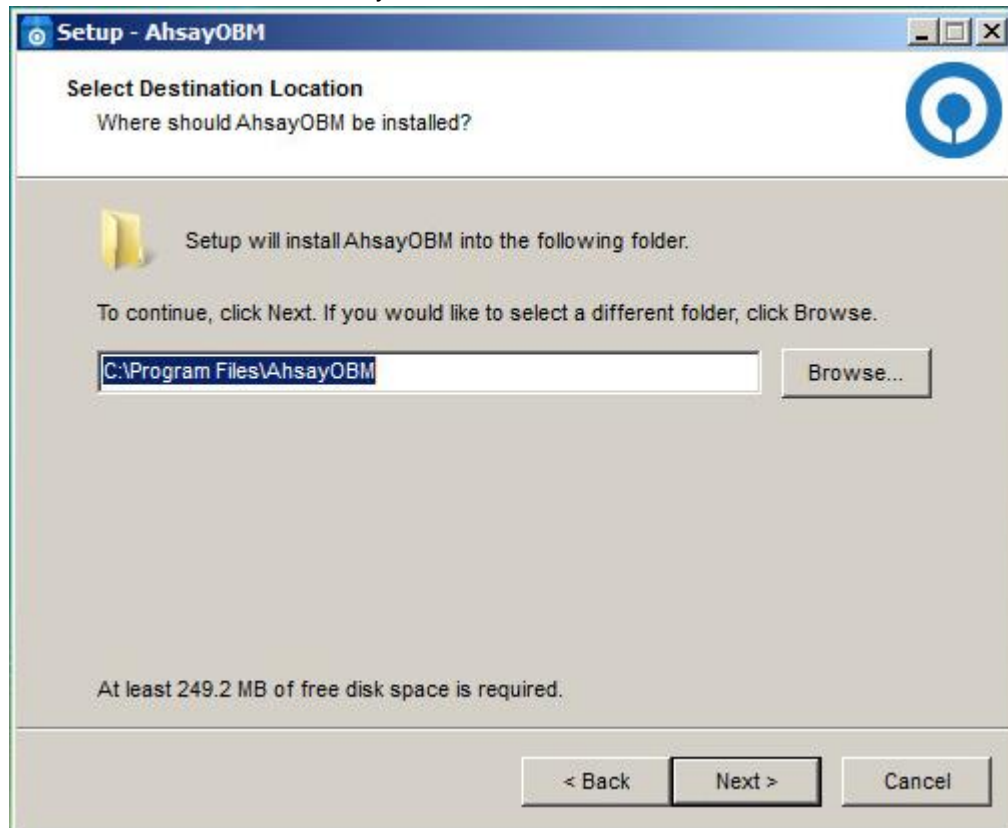
4. Click **Next** to continue.



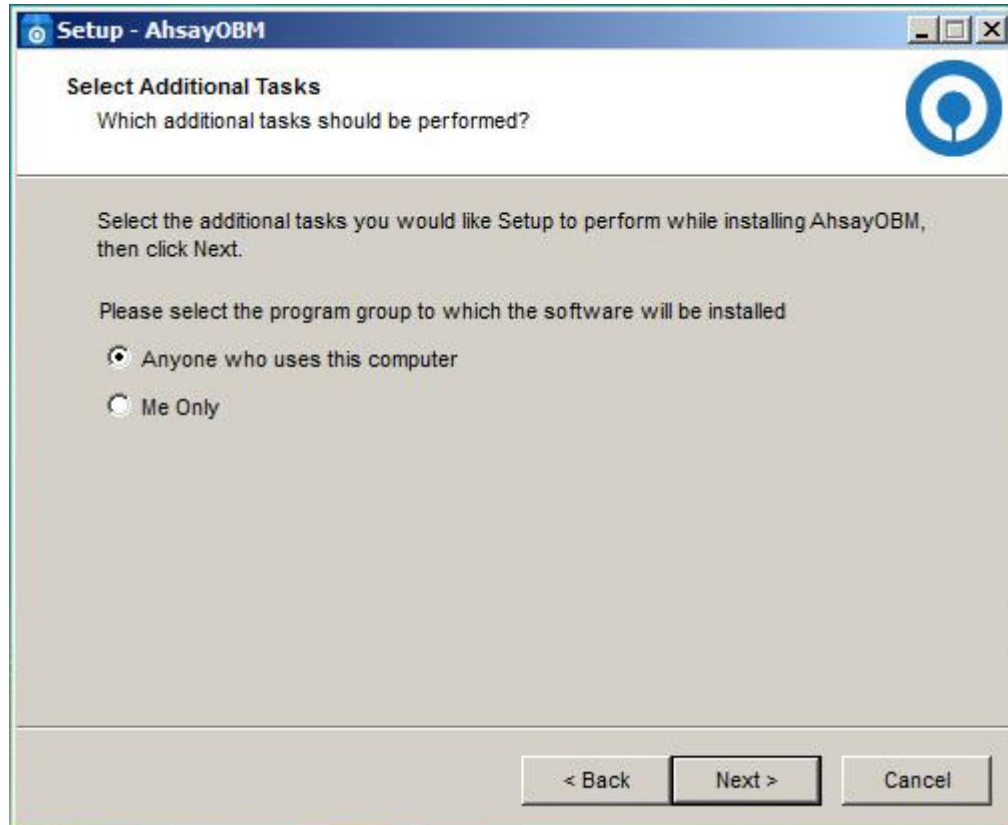
5. Select **I accept the agreement** after reading the license agreement. Then, click **Next** to proceed.



6. Choose the installation directory. Then, click **Next** to continue.



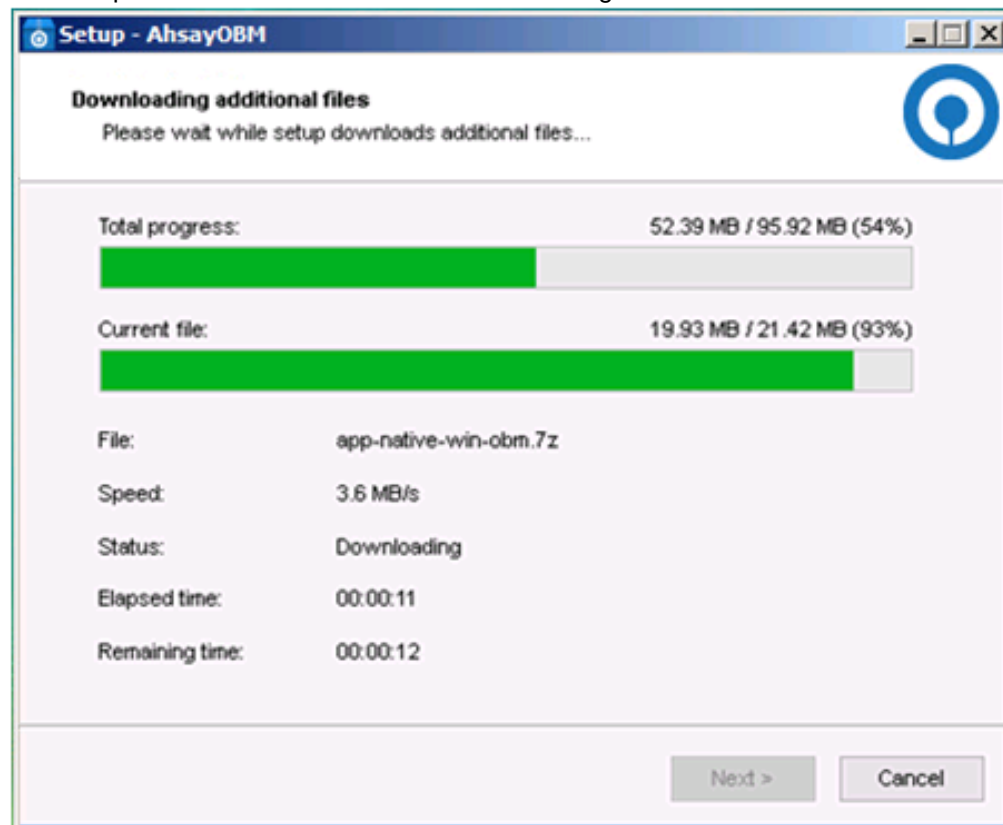
7. Select the program group to which the software will be installed. Then, click **Next** to proceed.



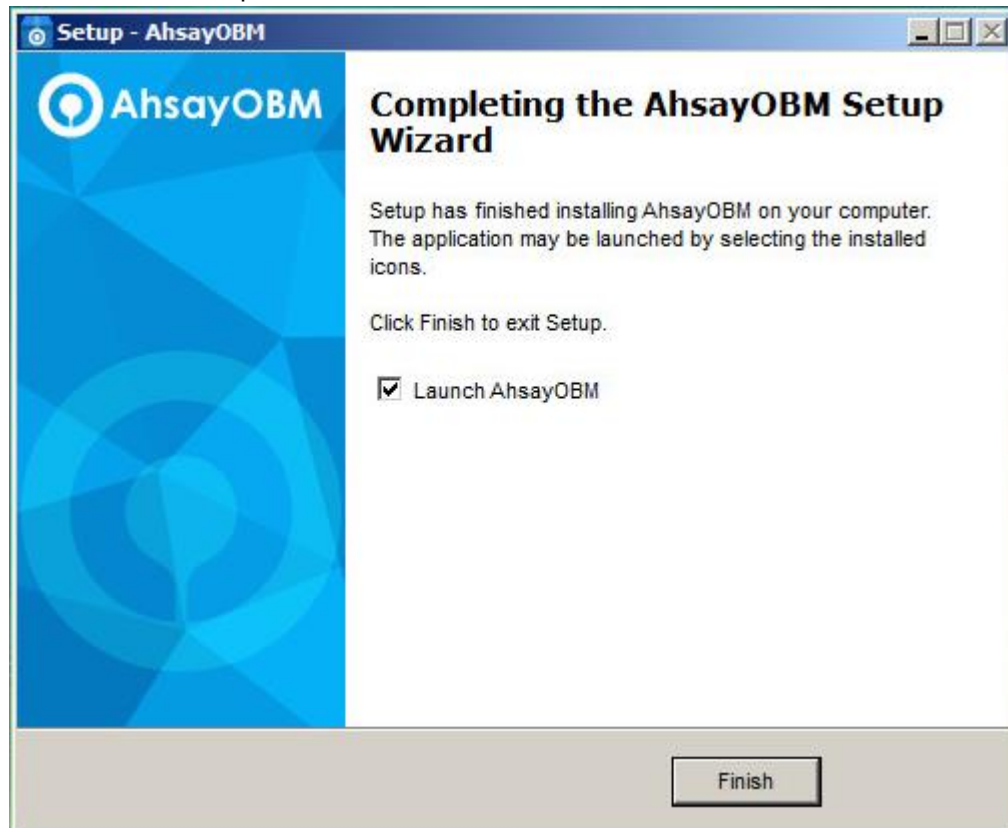
8. The installation will start after you click **Install**.



9. The component files will be downloaded first during installation.

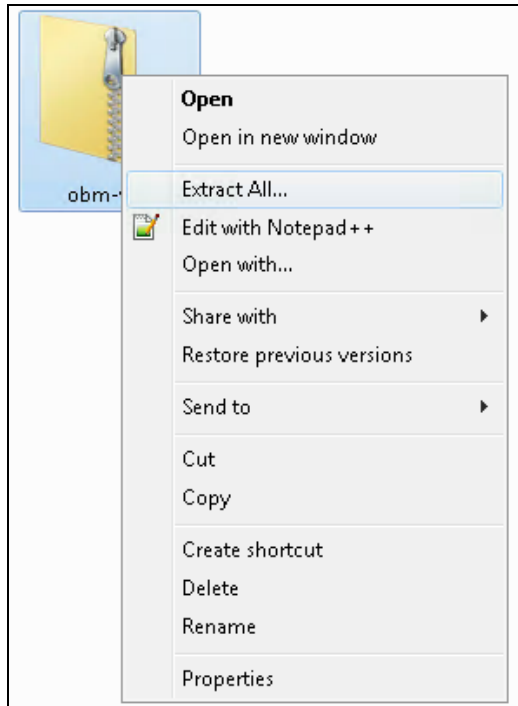


10. Click **Finish** to complete the installation.

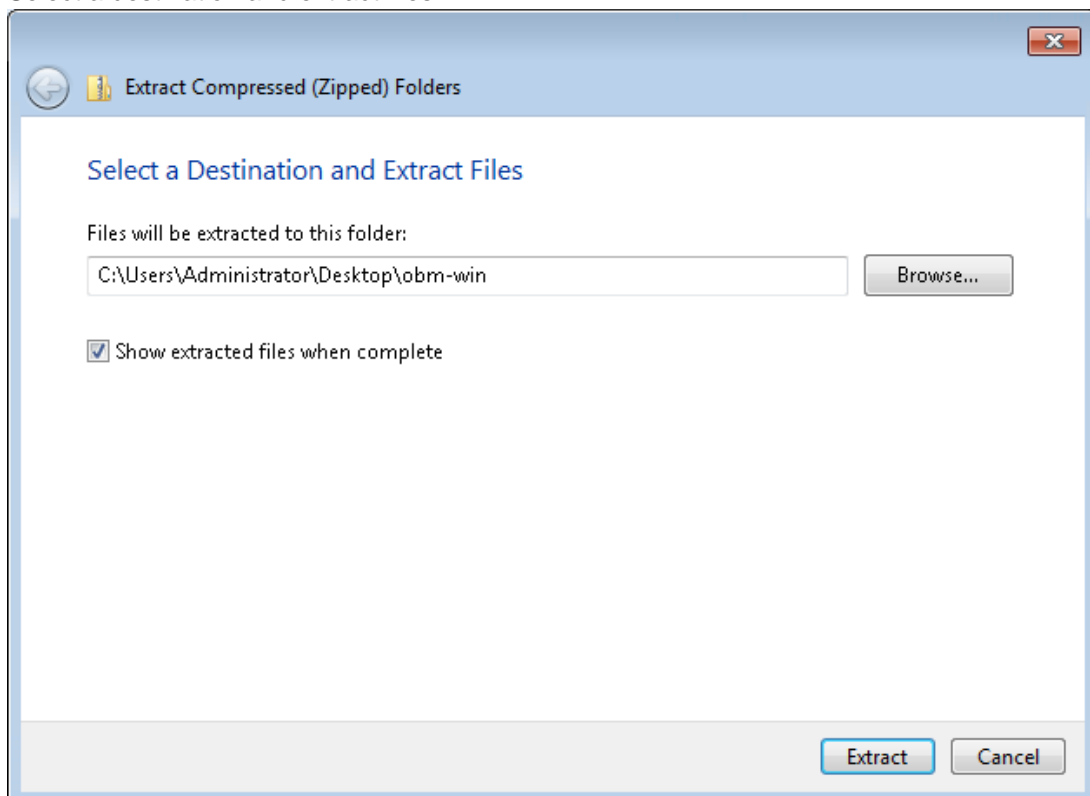


## Option 2: Offline Installation Option

1. Extract the offline installation package file (**obm-win.zip**) you have downloaded from the download section above.



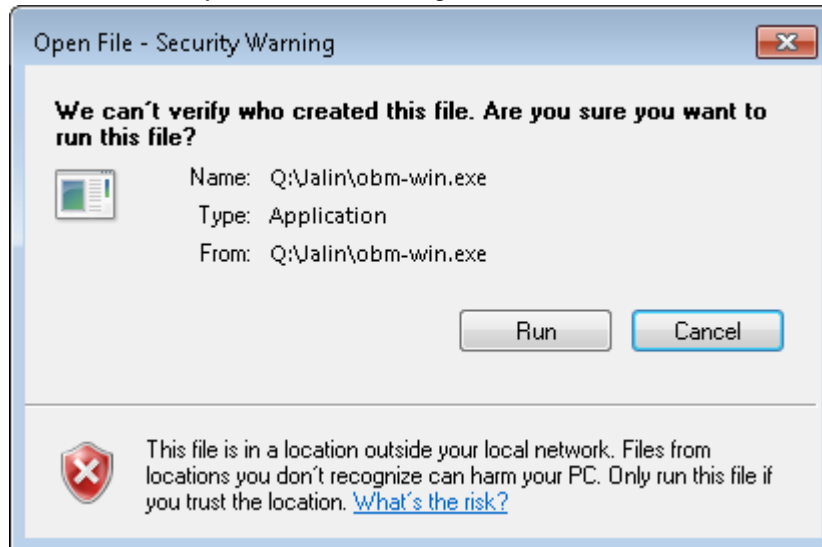
2. Select a destination and extract files.



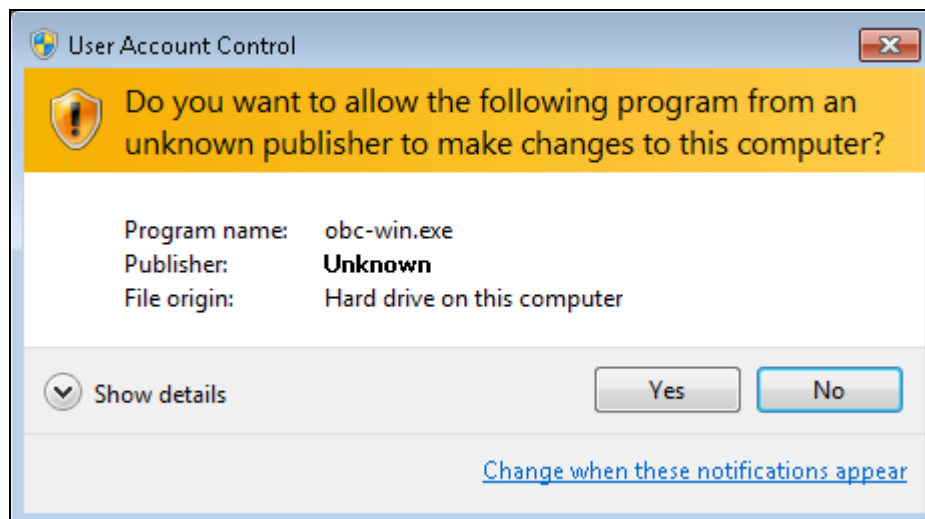
3. Launch the installer you have extracted from the zip format file.



4. Click **Run** when you see this message.



5. The following dialog box will appear only if User Account Control is enabled. Click **Yes** to start the installation.

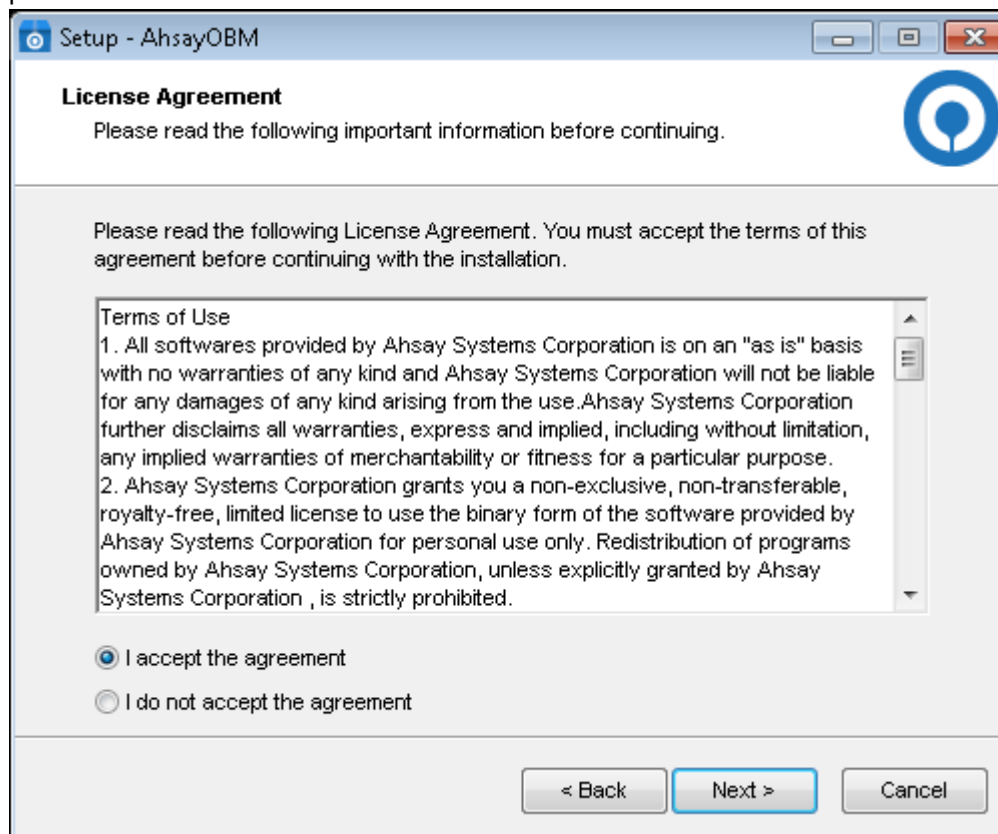




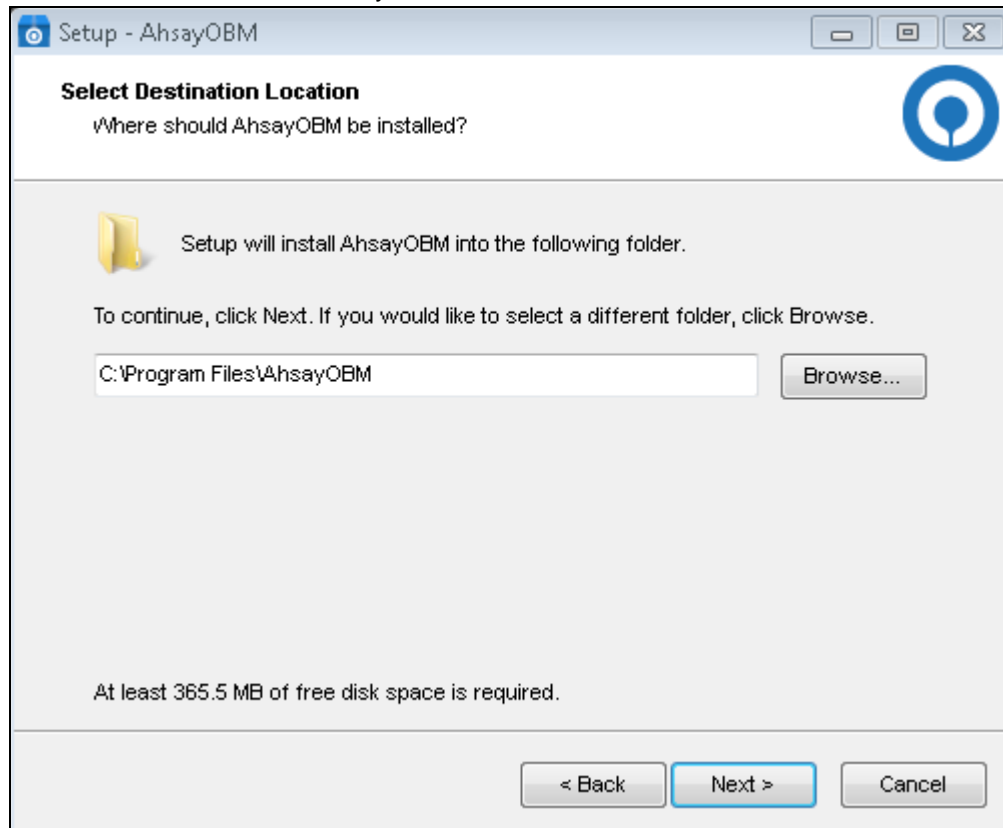
6. Click **Next** to continue.



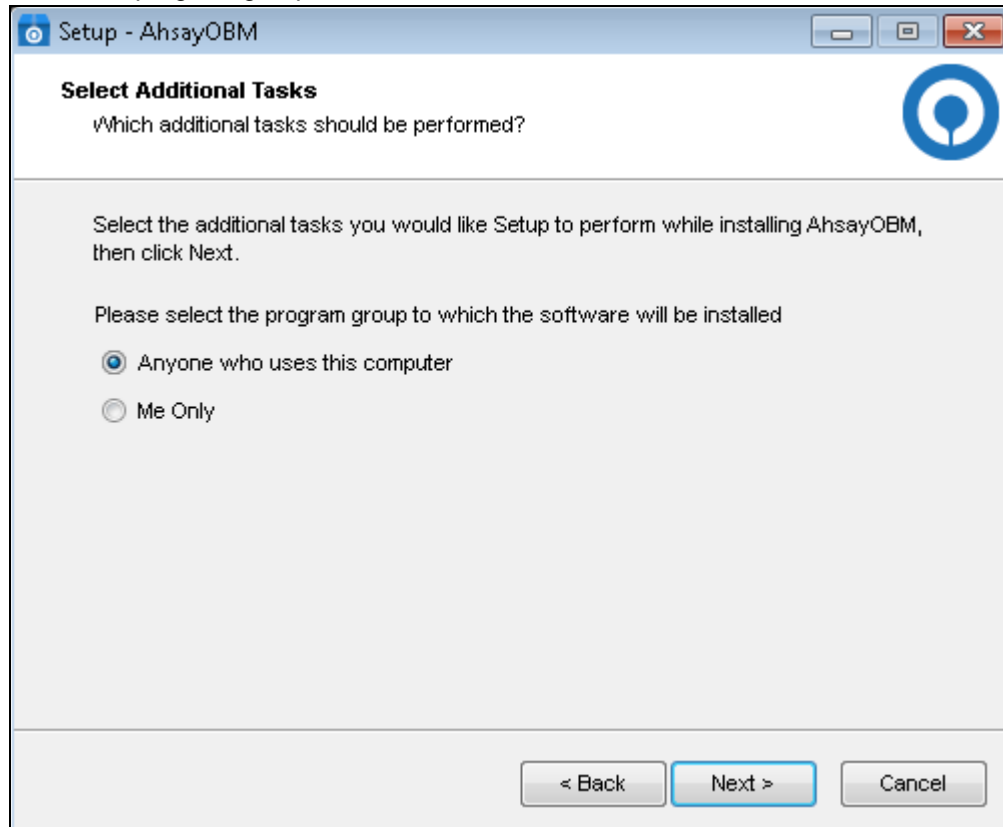
7. Select **I accept the agreement** after reading the license agreement. Then, click **Next** to proceed.



8. Choose the installation directory. Then, click **Next** to continue.

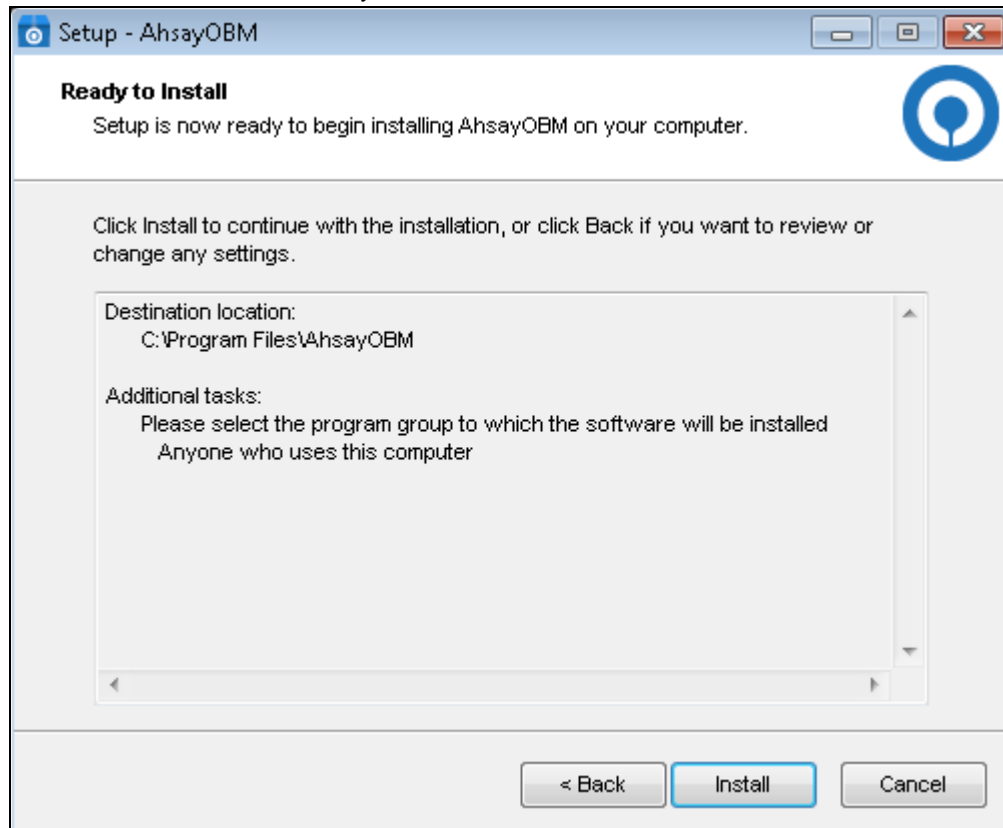


9. Select the program group to which the software will be installed. Then, click **Next** to proceed.

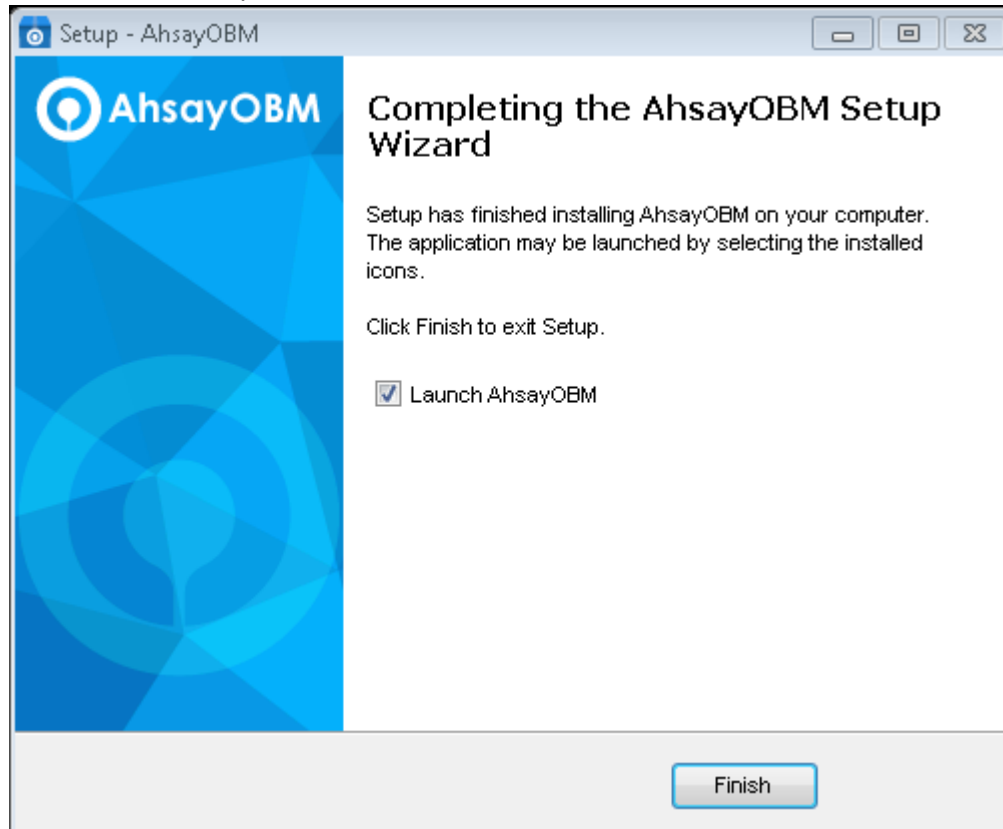




10. The installation will start after you click **Install**.



11. Click **Finish** to complete the installation.



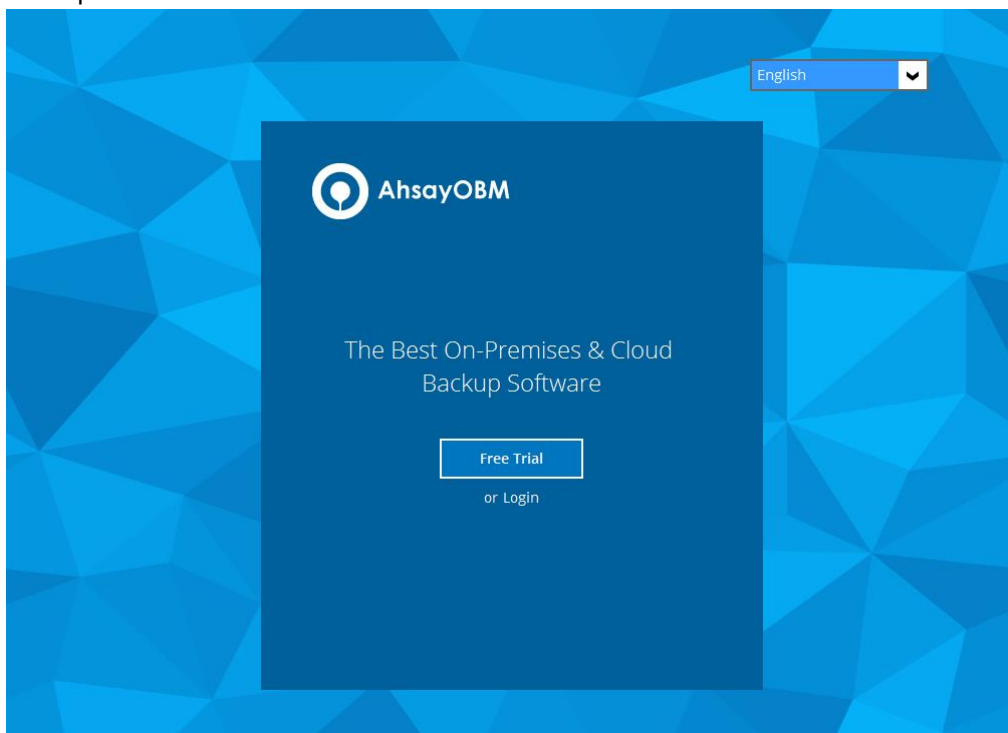
## 6 Start AhsayOBM

### Login to AhsayOBM

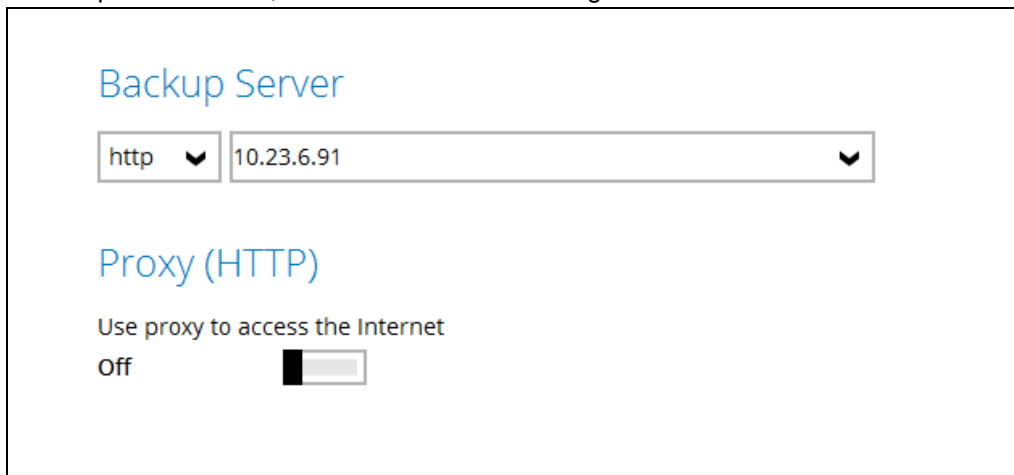
1. A shortcut icon of AhsayOBM will be available on your desktop after installation. Double-click the icon to launch the application.



2. The Free Trial Registration menu may be displayed when you login for the first time. Click **Login** if you already have an AhsayOBM account, or click **Free Trial** to register for a trial backup account.

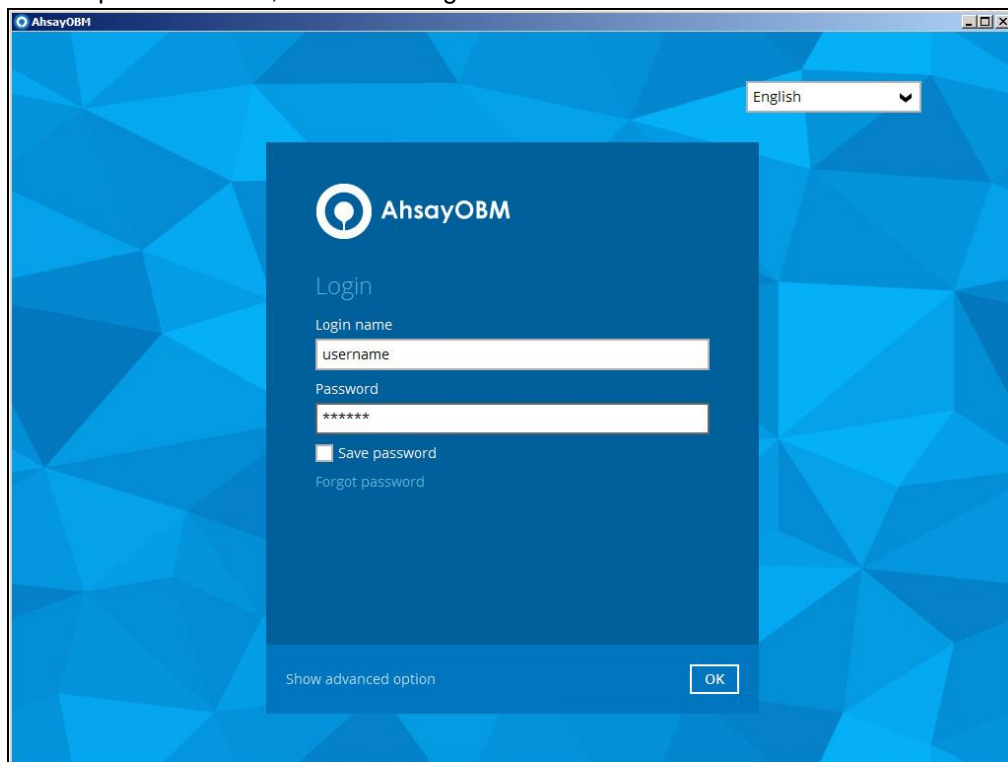


3. Click **Show advanced option** to enter the backup server settings provided by your backup service provider. Then, click **OK** to save the changes.



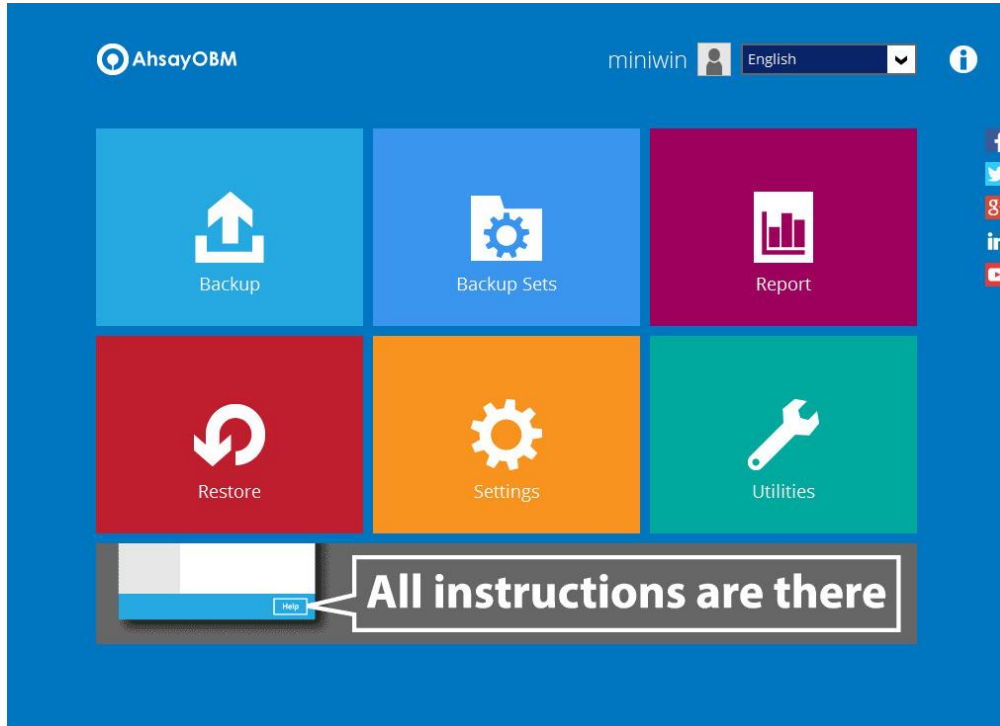
The screenshot shows a configuration window titled "Backup Server". It contains two input fields: a protocol dropdown menu set to "http" and an IP address field set to "10.23.6.91". Below these fields is a section titled "Proxy (HTTP)" with the text "Use proxy to access the Internet" and a toggle switch labeled "Off".

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



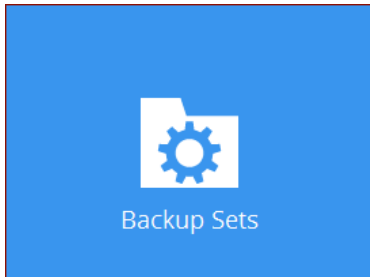
The screenshot shows the AhsayOBM login window. It features a blue background with a geometric pattern. In the center is a dark blue login box with the AhsayOBM logo and the text "Login". Below the logo are two input fields: "Login name" with the placeholder "username" and "Password" with the placeholder "\*\*\*\*\*". There is a checkbox labeled "Save password" and a link labeled "Forgot password". At the bottom of the login box are two buttons: "Show advanced option" and "OK". In the top right corner of the window, there is a language dropdown menu set to "English".

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

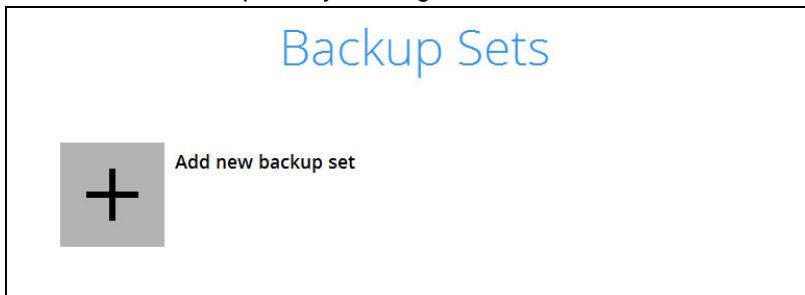


## 7 Create a Backup Set

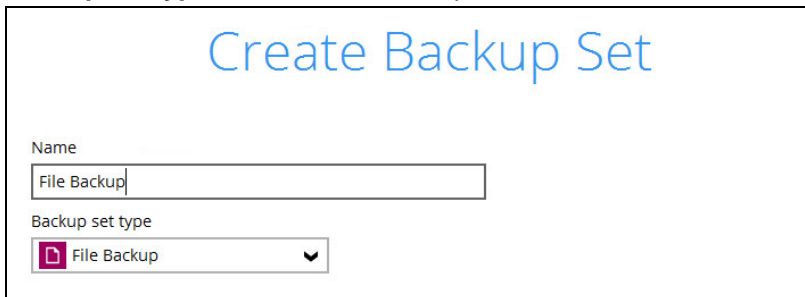
1. Click the **Backup Sets** icon on the AhsayOBM main interface.



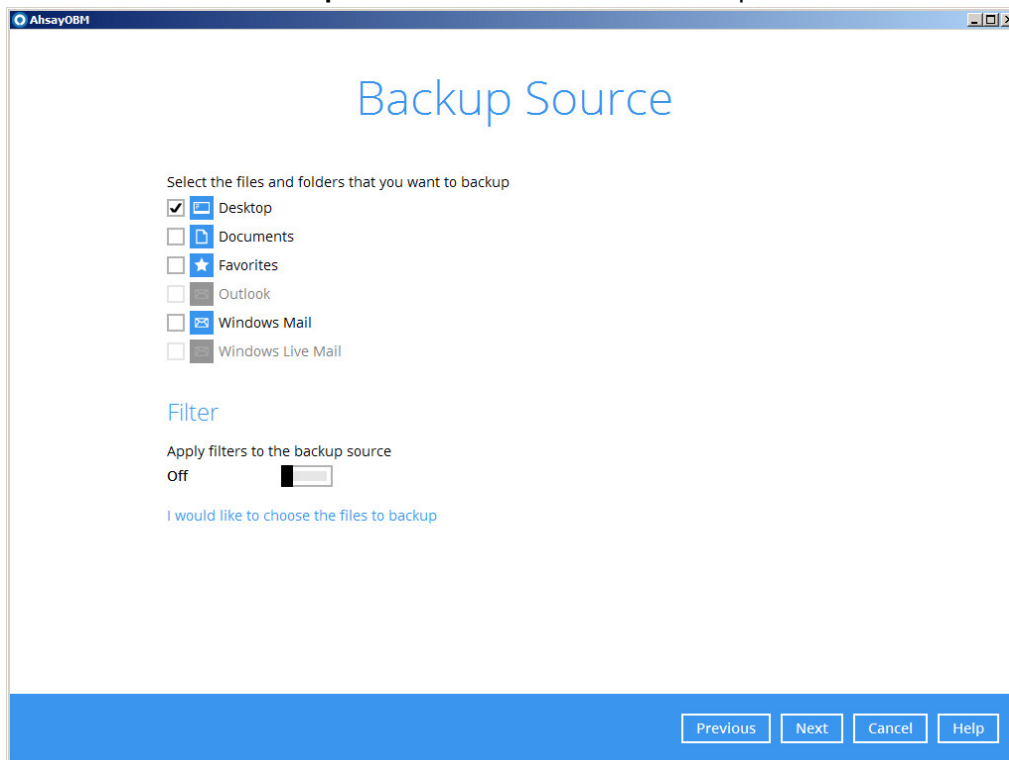
2. Create a new backup set by clicking the "+" icon next to **Add new backup set**.



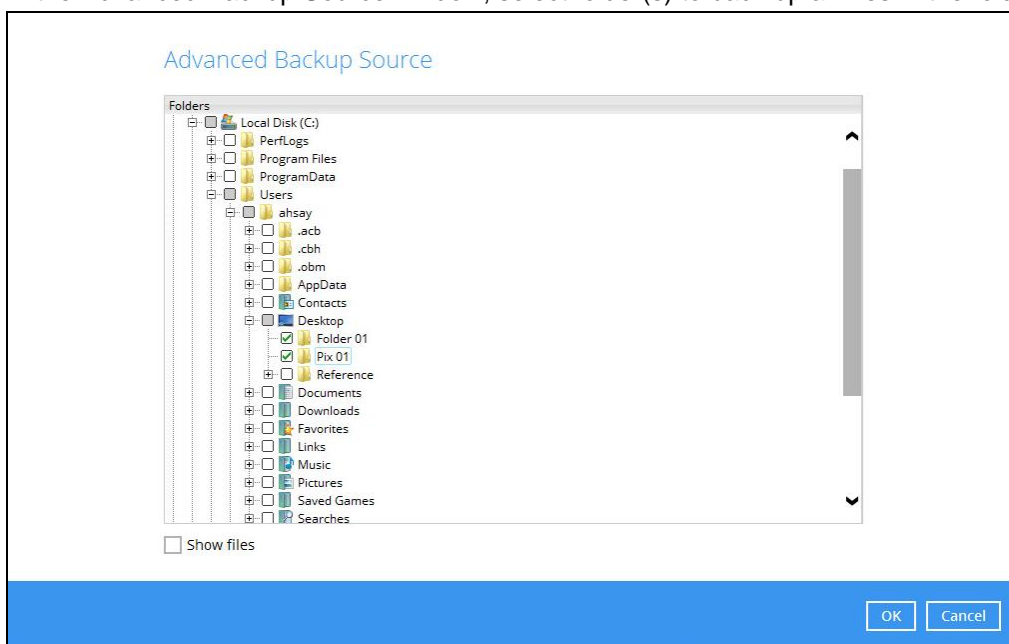
3. When the Create Backup Set window appears, name your new backup set and select the **Backup set type**. Then, click **Next** to proceed.

The "Create Backup Set" window has the title "Create Backup Set" in blue. It contains two input fields: a text box labeled "Name" with "File Backup" entered, and a dropdown menu labeled "Backup set type" with "File Backup" selected and a downward arrow icon.

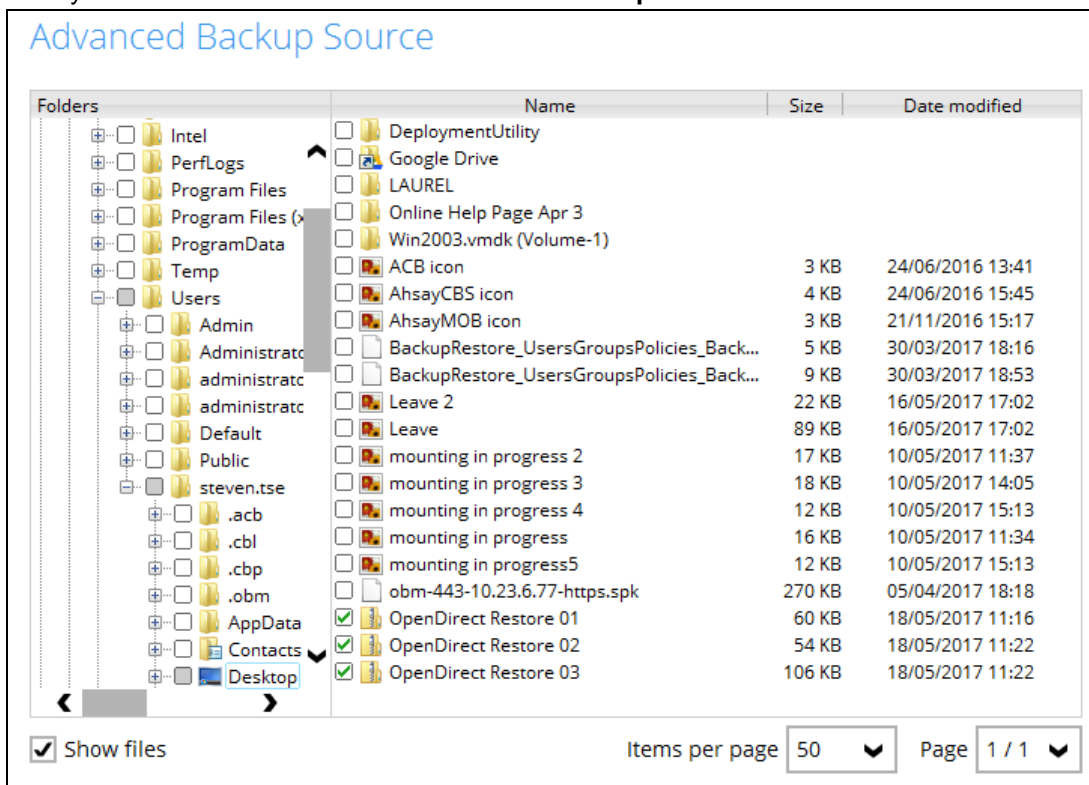
4. In the Backup Source window, select the files and folders for backup. Click **I would like to choose the files to backup** to select individual files for backup.



5. In the Advanced Backup Source window, select folder(s) to back up all files in the folder(s).

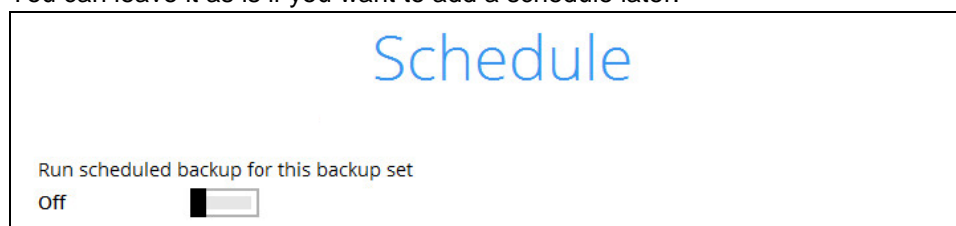


- Alternatively, if you want to back up only individual files instead of all files in your selected folder(s), select the **Show files** checkbox at the bottom of the screen. A list of files will appear on the right hand side. Select the checkbox(es) next to the file(s) to back up. Then, click **OK** to save your selections and close the **Advanced Backup Source** window.

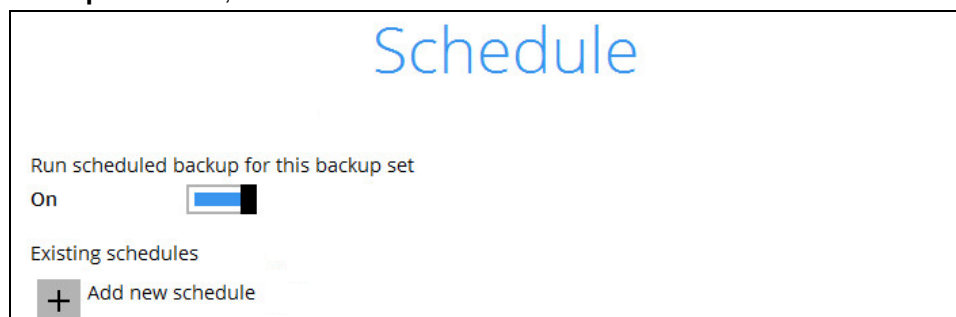


- In the Backup Source window, click **Next** to proceed.
- When the **Schedule** window appears, you can configure a backup schedule to automatically run a backup job at your specified time interval. In the Schedule window, the Run scheduled backup for this backup set is **Off** by default.

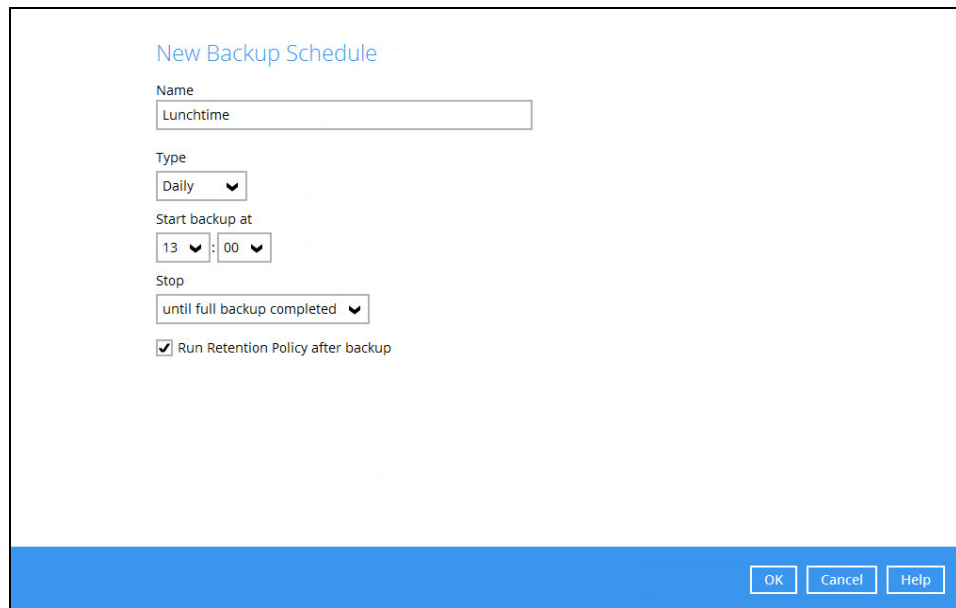
- You can leave it as is if you want to add a schedule later.



- If you want to add a schedule now, switch **On** Run scheduled backup for this backup set. Then, click **+** next to **Add new schedule**.

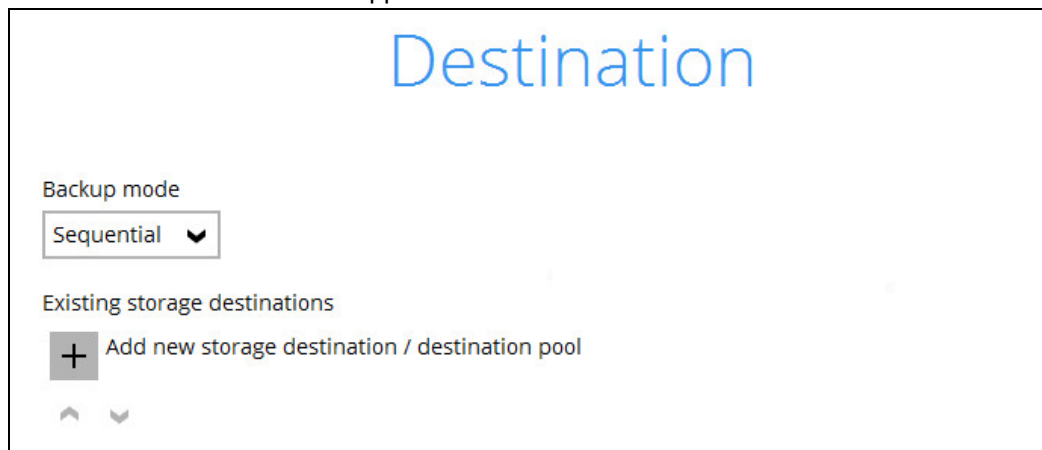


When the New Backup Schedule window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.




**Note:** For details about the options from the dropdown menus, please refer to chapter 9 [Configure Backup Schedule for Automated Backup](#).

9. In case you have added a schedule, it will be shown in the Schedule window. Click **Next** to proceed when you are done setting.
10. The **Destination** window will appear.



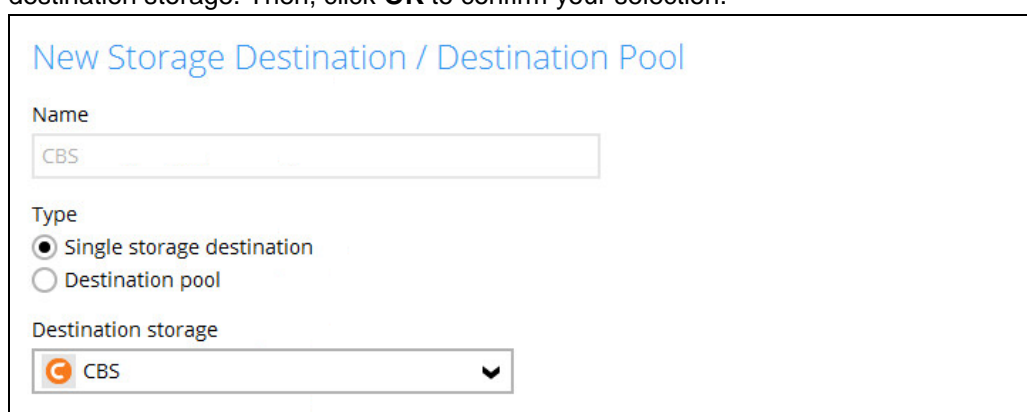
Select the appropriate option from the **Backup mode** dropdown menu.

- ☒ **Sequential** (default value) – run backup jobs to each backup destination one by one
- ☐ **Concurrent** – run backup jobs to all backup destinations at the same time

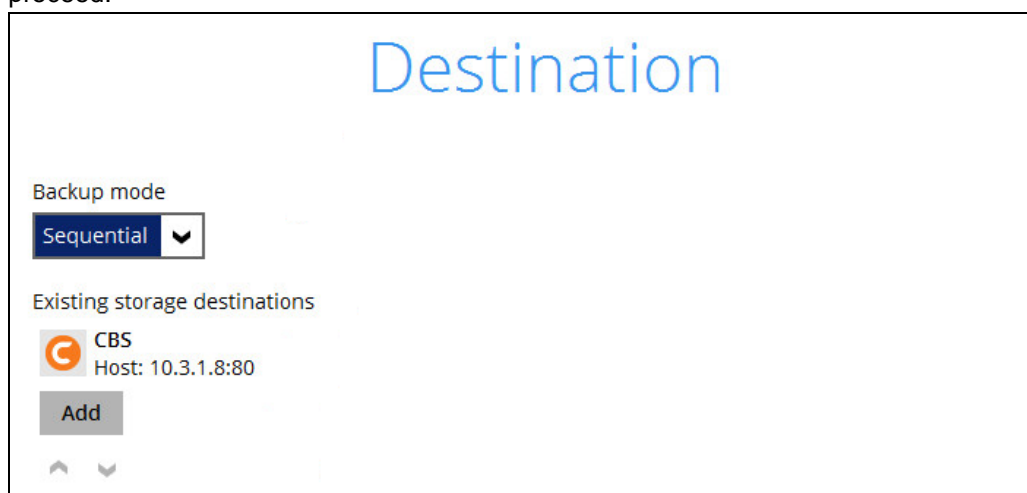
To select a backup destination for the backup data storage, click  next to **Add new storage destination / destination pool**.



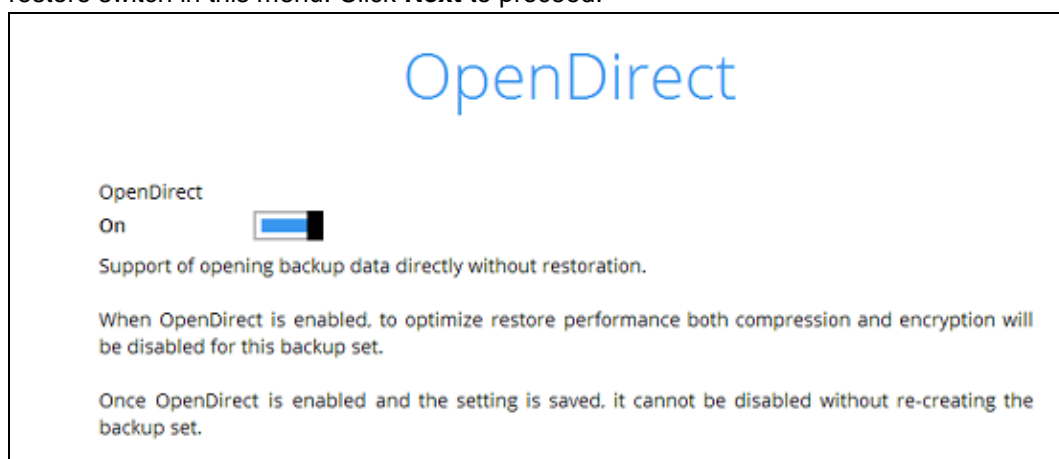
11. In the **New Storage Destination / Destination Pool** window, select the destination type and destination storage. Then, click **OK** to confirm your selection.



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



13. If you wish to enable the **OpenDirect Restore** feature, make sure you turn on the OpenDirect restore switch in this menu. Click **Next** to proceed.

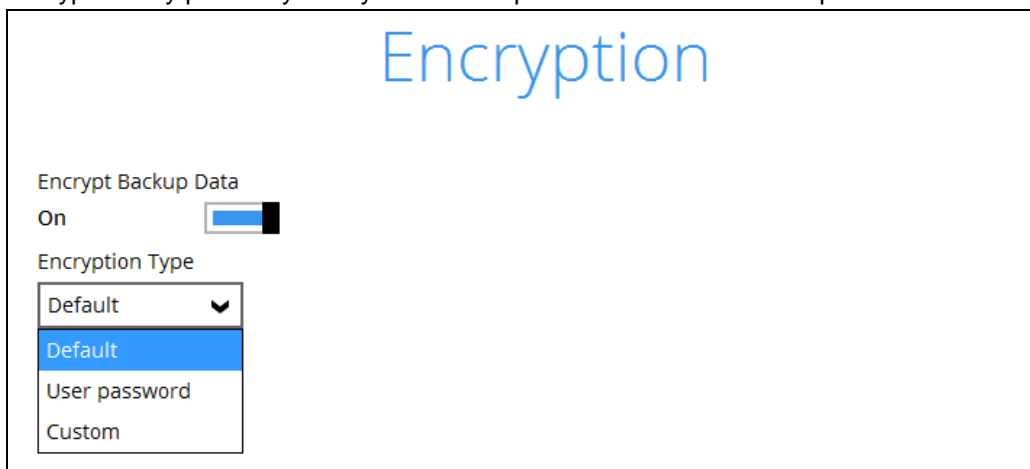


### Notes

1. Once the OpenDirect Restore feature is enabled and the backup set is saved, it is **NOT** possible to disable it afterwards, and vice versa. A new backup set will have to be created again if you wish to do so.
2. It is possible to enable both OpenDirect restore and Run Direct restore at the same time. However, AhsayOBM restore job will only allow either OpenDirect or Run Direct to run, but not both to run concurrently.
3. OpenDirect restore requires an additional OpenDirect restore module license to work. Contact your backup service provider for further details.

14. **IMPORTANT:** If you have enabled the OpenDirect Restore, backup data will not be compressed and encrypted to optimize restore performance, therefore you can skip to step 17.

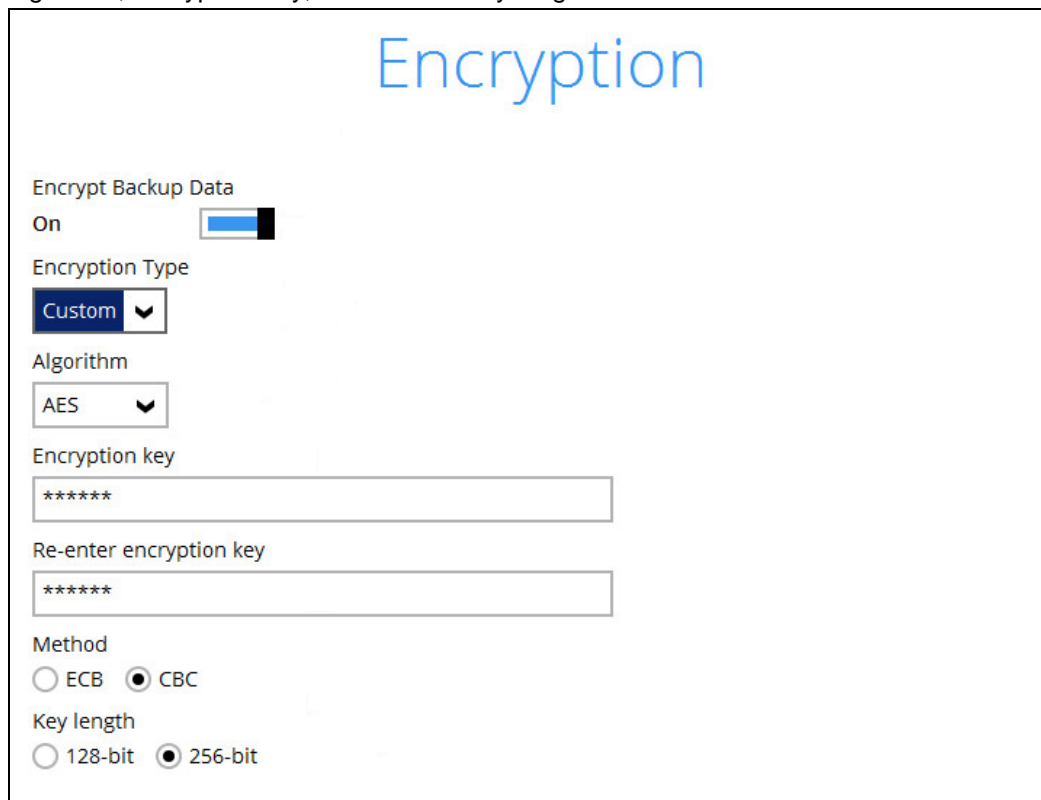
In the Encryption window, the default **Encrypt Backup Data** option is enabled with an encryption key preset by the system which provides the most secure protection.



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

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

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



The screenshot shows the 'Encryption' settings window. At the top, the title 'Encryption' is displayed in a large blue font. Below the title, there are several settings:

- Encrypt Backup Data:** A toggle switch set to 'On'.
- Encryption Type:** A dropdown menu with 'Custom' selected.
- Algorithm:** A dropdown menu with 'AES' selected.
- Encryption key:** A text input field containing '\*\*\*\*\*'.
- Re-enter encryption key:** A text input field containing '\*\*\*\*\*'.
- Method:** Two radio buttons, 'ECB' and 'CBC', with 'CBC' selected.
- Key length:** Two radio buttons, '128-bit' and '256-bit', with '256-bit' selected.

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

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

15. 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 pop-up window titled 'Encryption'. The background is dark grey. The title 'Encryption' is in a large, light blue font. Below the title, there are several settings:

- Encrypt Backup Data:** A toggle switch set to 'On'.
- Encryption Type:** A dropdown menu with 'Default' selected.

Below these settings, there is a blue rectangular area containing the following 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.

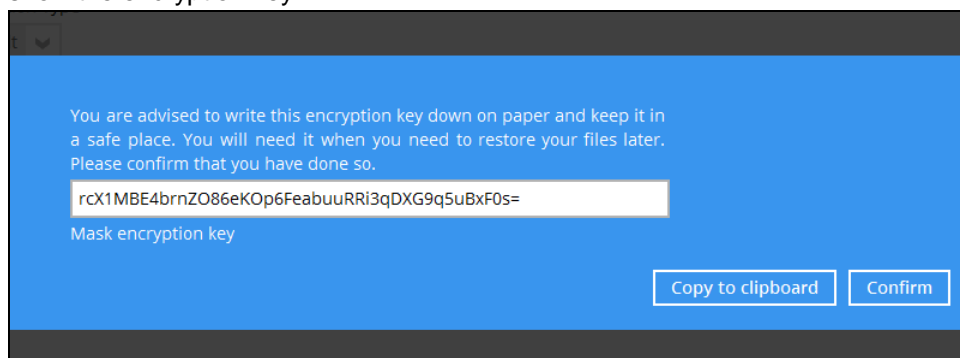
Below the text, there is a text input field containing '\*\*\*\*\*'.

Below the input field, there is a link 'Unmask encryption key'.

At the bottom right of the blue area, 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.



- **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.

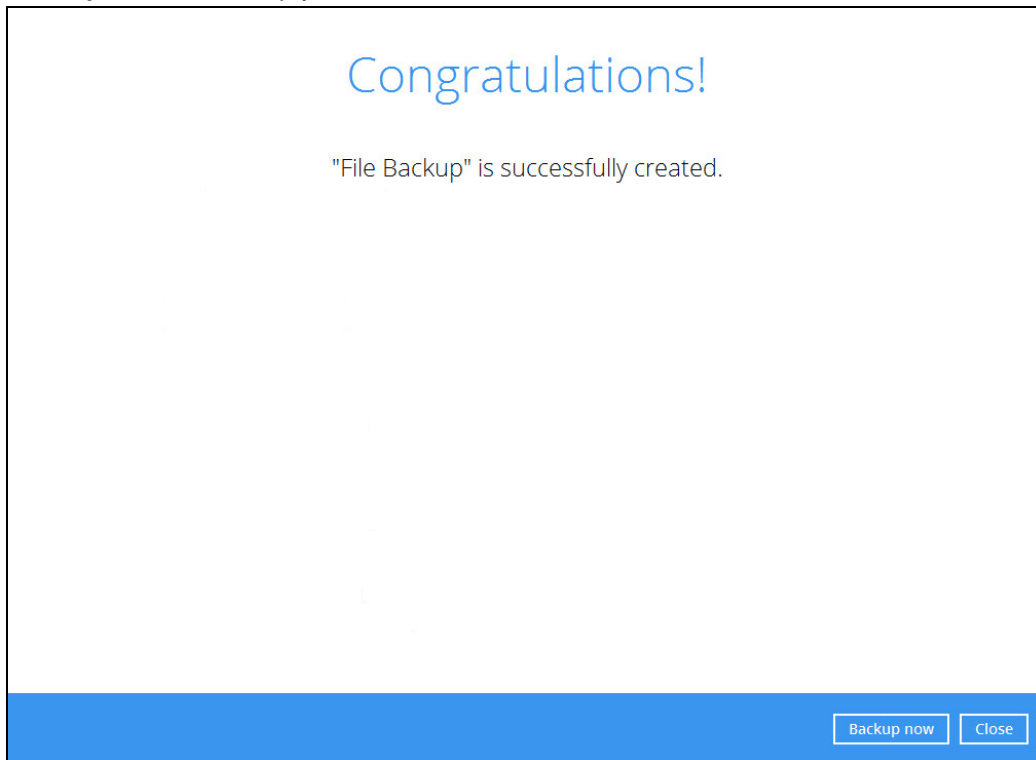
16. The following screen prompts you to enter the Windows login credentials for user authentication, if you have enabled the Schedule Backup feature in step 8.

A screenshot of a "Windows User Authentication" screen. It has a light blue header with the title "Windows User Authentication". Below the title, there are three input fields. The first is labeled "Domain Name (e.g Ahsay.com) / Host Name" and contains the text "domain name". The second is labeled "User name" and contains the text "user name". The third is labeled "Password" and contains six black dots. The entire form is enclosed in a thin black border.

#### Note

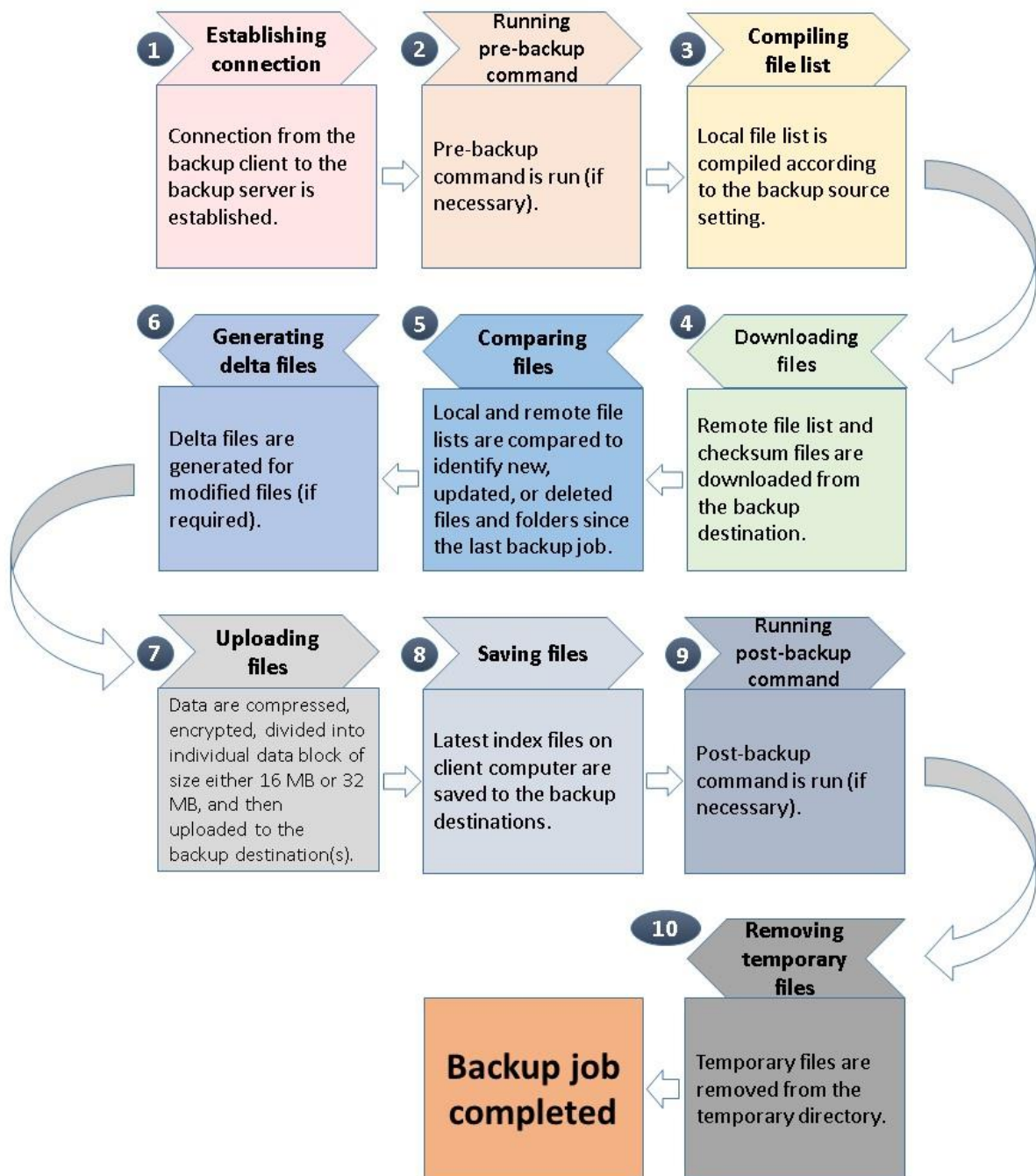
If you have selected to back up individual folder(s) / file(s) on your local computer's drive in step 5, the Windows User Authentication request will be bypassed and therefore the screen shown above will not display even though the Schedule Backup feature has been turned on.

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



## 8 Overview on Backup Process

The following steps are performed during a backup job:



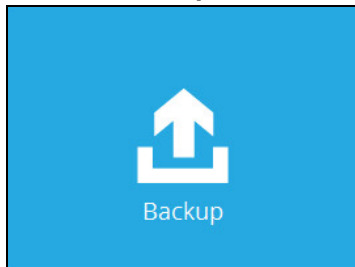
## 9 Run Backup Jobs

### Login to AhsayOBM

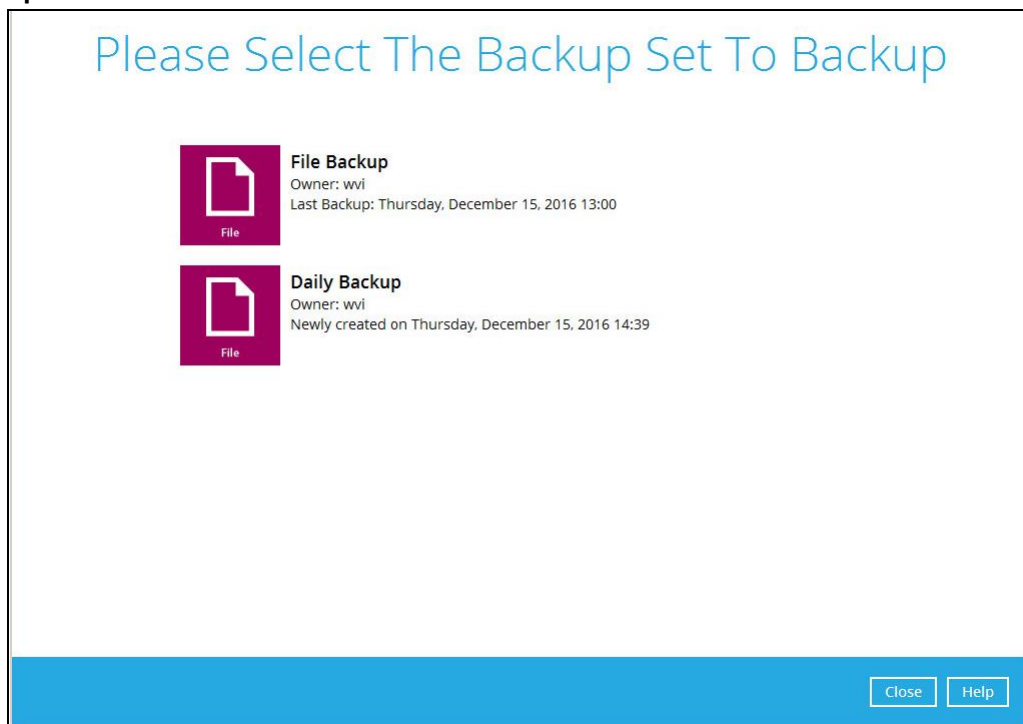
Login to the AhsayOBM application according to the instructions in section [6.1 Login to AhsayOBM](#).

### Start a Manual Backup

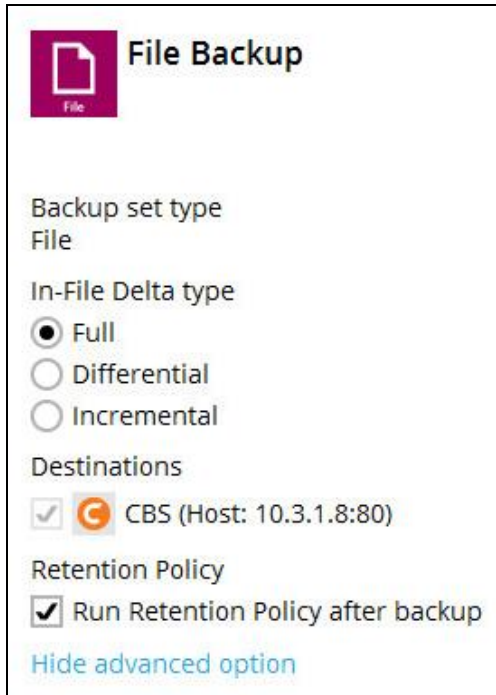
1. Click the **Backup** icon on the main interface of AhsayOBM.



2. Select the backup set which you would like to start a backup for. In case you want to modify the In-File Delta type, Destinations and Retention Policy settings, click **Show advanced option**.



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



**File Backup**

Backup set type  
File

In-File Delta type

☒ Full  
☐ Differential  
☐ Incremental

Destinations

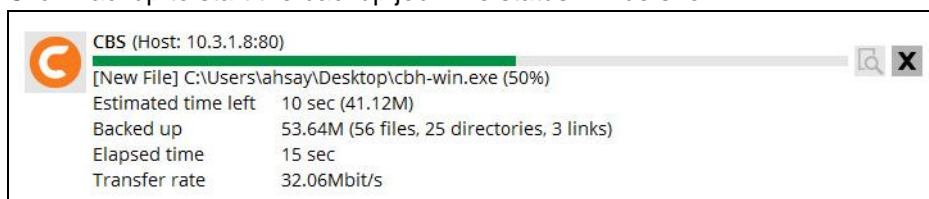
☒ CBS (Host: 10.3.1.8:80)

Retention Policy

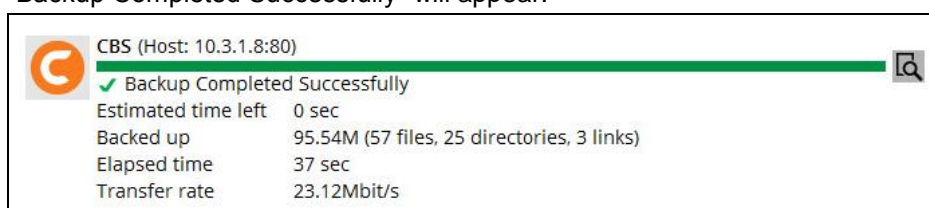
☒ Run Retention Policy after backup

[Hide advanced option](#)


- **Full** – A full backup captures all the data that you want to protect. When you run a backup job for the first time, AhsayOBM will run a full backup regardless of the in-file delta setting.
  - **Differential** – A differential backup captures only the changes made as compared with the last uploaded full file only (i.e. changes since the last full backup, not since the last differential backup).
  - **Incremental** – An incremental backup captures only the changes made as compared with the last uploaded full or delta file (i.e. changes since the last incremental backup).
4. Click Backup to start the backup job. The status will be shown.



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





- You can click the  **View** icon on the right hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.

Type	Log	Time
	Start [ Windows Vista (wvi), AhsayOBM v7.9.0.0 ]	12/15/2016 15:35:32
	Saving encrypted backup set encryption keys to server...	12/15/2016 15:35:32
	Start Backup ... [In-File Delta: Incremental]	12/15/2016 15:35:32
	Using Temporary Directory C:\Users\ahsay\temp\1481783966757\OBS@1481783999501	12/15/2016 15:35:32
	Start running pre-commands	12/15/2016 15:35:32
	Finished running pre-commands	12/15/2016 15:35:32
	Downloading server file list...	12/15/2016 15:35:32
	Downloading server file list... Completed	12/15/2016 15:35:33
	Start creating Shadow Copy Set...	12/15/2016 15:35:33
	Shadow Copy Set successfully created	12/15/2016 15:35:35
	Reading backup source from hard disk...	12/15/2016 15:35:35
	[New Directory]... C:\	12/15/2016 15:35:35
	[New Directory]... C:\Users	12/15/2016 15:35:36
	[New Directory]... C:\Users\Public	12/15/2016 15:35:36
	[New Directory]... C:\Users\Public\Desktop	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay\Desktop	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay\Documents	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay\Favorites	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay\Desktop\Folder 01	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay\Desktop\Reference	12/15/2016 15:35:36
	[New Directory]... C:\Users\ahsay\Desktop\Pix 01	12/15/2016 15:35:36
	[New File]... 100% of "C:\Users\Public\Desktop\AhsayOBM.Ink"	12/15/2016 15:35:36
	[New File]... 100% of "C:\Users\Public\Desktop\AhsayOBM.Ink"	12/15/2016 15:35:36

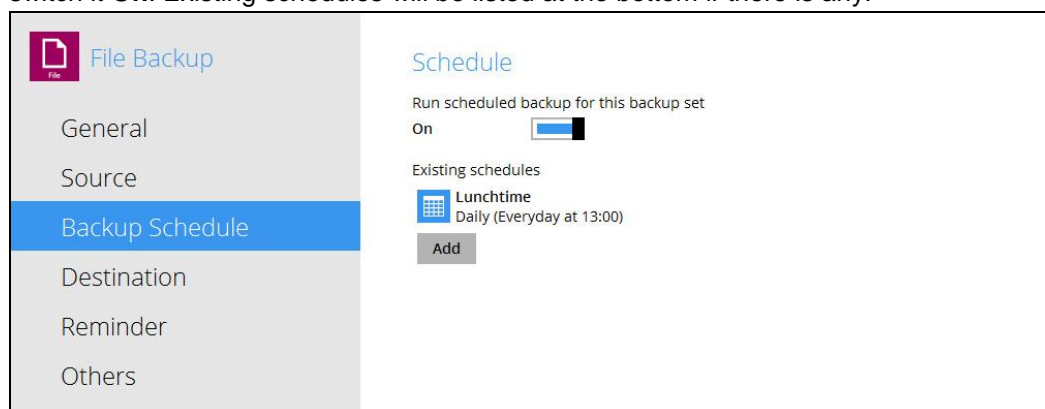
Logs per page 50 Page 1 / 3

## Configure Backup Schedule for Automated Backup

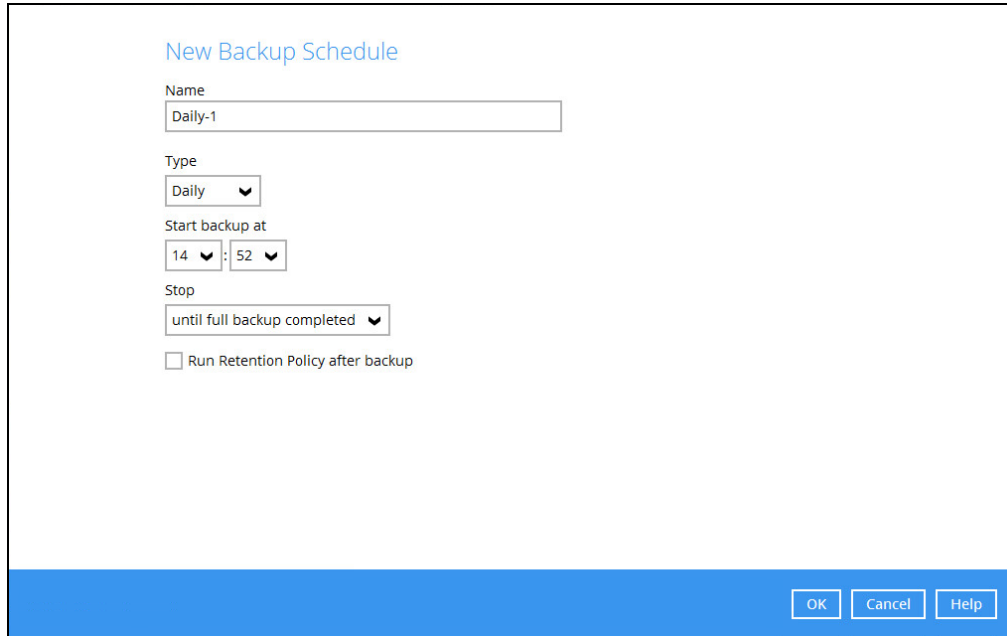
- Click the **Backup Sets** icon on the AhsayOBM main interface.



- All backup sets will be listed. Select the backup set that you would like to create a backup schedule for. A screen will pop up, showing the General tab.
- Go to the **Backup Schedule** tab. In case Run scheduled backup for this backup set is off, switch it **On**. Existing schedules will be listed at the bottom if there is any.

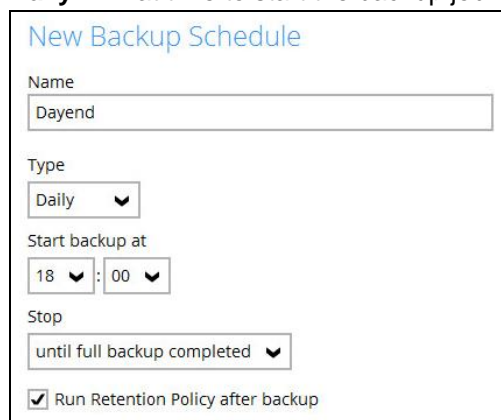


4. Click **Add** to add a backup schedule. The New Backup Schedule window will appear.

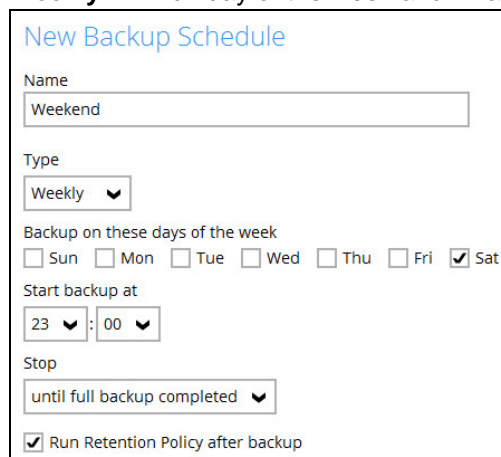


5. In the New Backup Schedule window, you can configure your backup schedule settings. To save hard disk quota in the long run, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** at the bottom. The rest of the setting options will vary by which option you choose from the **Type** dropdown menu:

• **Daily** – what time to start the backup job



• **Weekly** – which day of the week and what time that day to start the backup job



- **Monthly** – which day of the month and what time that day to start the backup job

**New Backup Schedule**

Name  
Monthly Closing

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** – which particular date to start a one-off backup job

**New Backup Schedule**

Name  
New Year Eve

Type  
Custom

Backup on the following day once

2016 December 31

Start backup at  
23 : 59

Stop  
until full backup completed

☒ Run Retention Policy after backup

The **Stop** dropdown menu offers two options:

- **until full backup completed** – in case you prefer a complete backup

**Stop**

until full backup completed

until full backup completed

after

- **after [how many] hr** – in case you prefer the backup job to stop after a certain number of hours regardless of whether or not the backup job is completed

Stop

after

▼

1

▼

hr

☒ Run Retention Policy after backup





As an example, the four types of backup schedules may look like the following.

## Schedule

Run scheduled backup for this backup set

On ☒

Existing schedules

- 
**Lunchtime**  
 Daily (Everyday at 13:00)
- 
**Dayend**  
 Daily (Everyday at 18:00)
- 
**Weekend**  
 Weekly - Saturday (Every week at 23:00)
- 
**New Year Eve**  
 Custom (2016-12-31 at 23:59)

Add

6. Click **Save** to confirm your settings. Then, click **Close** to exit Backup Sets.

## 10 Restore Data

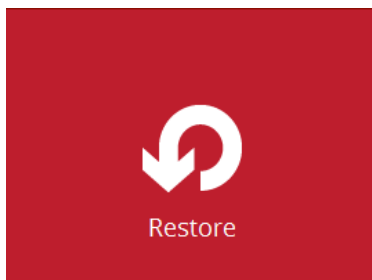
### Restore Method

There are two restore methods available, the traditional restore and OpenDirect restore. OpenDirect restore applies only to File backup sets with OpenDirect feature enabled.

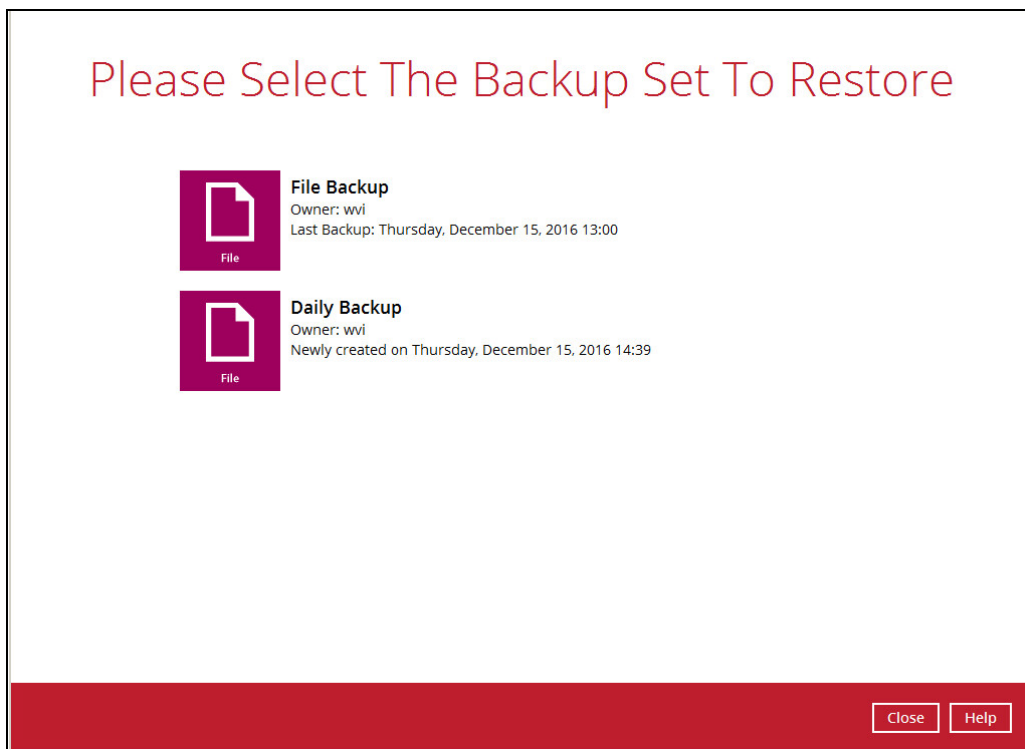
For more details on the differences of the two restore methods, refer to [Benefits of using OpenDirect Restore](#).

### Traditional Restore

1. Log in to the AhsayOBM application according to the instructions in section [Login to AhsayOBM](#).
2. Click the **Restore** icon on the AhsayOBM main interface.



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



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



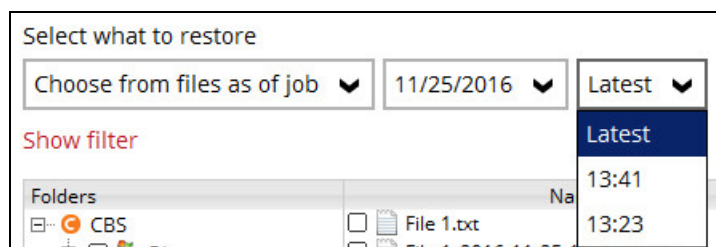
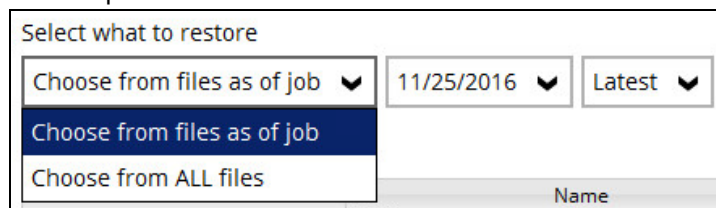
5. Select **Normal restore**.



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

There are two options from the **Select what to restore** dropdown menu:

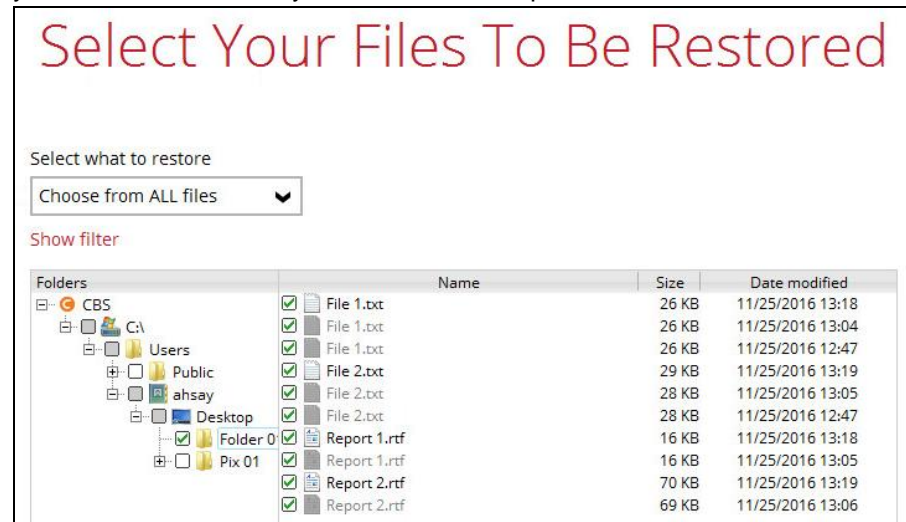
- **Choose from files as of job** – This option allows you to select a backup version from a specific date and time to restore.



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



you can even select only some of the backup versions of a file to restore.



The following is an example showing all the available backup versions of the file **File 1.txt**. The latest version is shown in solid black color and all the previous versions are shown in grey color. You can identify the file version from the **Date modified** column.

	Name	Size	Date modified
<input checked="" type="checkbox"/>	File 1.txt	26 KB	11/25/2016 13:18
<input checked="" type="checkbox"/>	File 1.txt	26 KB	11/25/2016 13:04
<input checked="" type="checkbox"/>	File 1.txt	26 KB	11/25/2016 12:47
<input checked="" type="checkbox"/>	File 2.txt	29 KB	11/25/2016 13:19
<input checked="" type="checkbox"/>	File 2.txt	28 KB	11/25/2016 13:05
<input checked="" type="checkbox"/>	File 2.txt	28 KB	11/25/2016 12:47
<input checked="" type="checkbox"/>	Report 1.rtf	16 KB	11/25/2016 13:18
<input checked="" type="checkbox"/>	Report 1.rtf	16 KB	11/25/2016 13:05
<input checked="" type="checkbox"/>	Report 2.rtf	70 KB	11/25/2016 13:19
<input checked="" type="checkbox"/>	Report 2.rtf	69 KB	11/25/2016 13:06

When the restore is done, you will see all the selected backup versions in the restore destination. The latest backup version has the file name as the original file, while the previous versions have the time stamps added to their file names for easy identification.

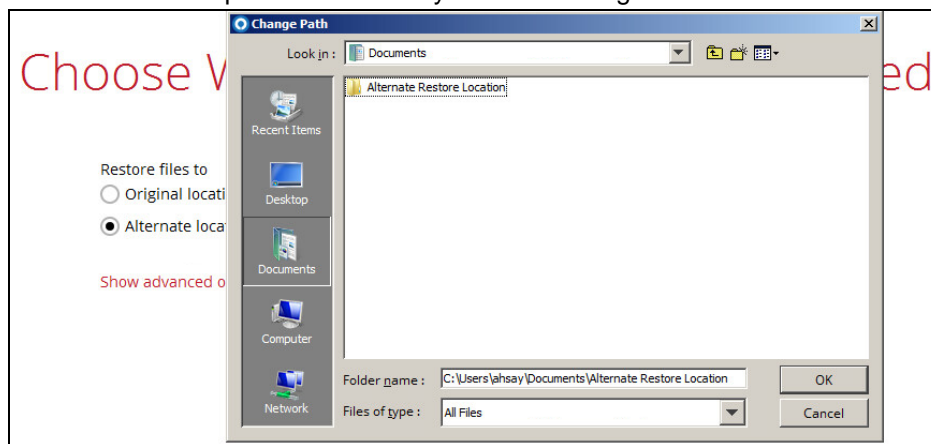
Name	Date modified	Type	Size
File 1.txt	11/25/2016 1:18...	Text Document	26 KB
File 1_2016-11-25-12-59-54.txt	11/25/2016 12:4...	Text Document	26 KB
File 1_2016-11-25-13-07-14.txt	11/25/2016 1:04...	Text Document	26 KB
File 2.txt	11/25/2016 1:19...	Text Document	29 KB
File 2_2016-11-25-12-59-54.txt	11/25/2016 12:4...	Text Document	28 KB
File 2_2016-11-25-13-07-14.txt	11/25/2016 1:05...	Text Document	28 KB
Report 1.rtf	11/25/2016 1:18...	Rich Text Docum...	16 KB
Report 1_2016-11-25-13-07-14.rtf	11/25/2016 1:06...	Rich Text Docum...	16 KB
Report 2.rtf	11/25/2016 1:19...	Rich Text Docum...	70 KB
Report 2_2016-11-25-13-07-14.rtf	11/25/2016 1:06...	Rich Text Docum...	69 KB

- Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.
- Select to restore the files to their **Original location**, or to an **Alternate location**. Then, click **Next** to proceed.

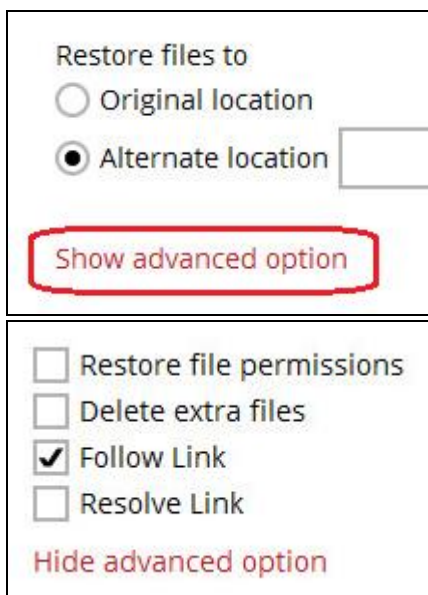
- **Original location** – The backed up data will be restored to the computer running AhsayOBM under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under **Users/[User's Name]/Downloads** folder, the data will be restored to **Users/[User's Name]/Downloads** as well on the computer running AhsayOBM.



- **Alternate location** – You can choose to restore the data to a location of your choice on the computer where AhsayOBM is running.



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



- **Restore file permissions**  
Restore file permissions are disabled by default. When you perform a file restore on shared files or folders using a shared computer, it is recommended that you





enable Restore file permissions by ticking the checkbox so that the files restored will not be fully accessible to everyone using the shared computer.

### 🔗 Delete extra files

By enabling this option, the restore process will attempt to synchronize the selected restore source with the restore destination, making sure the data in the restore destination is exactly the same as the restore source. Any data created after backup will be treated as “extra files” and will be deleted from the restore source if this feature is enabled.





#### Example:

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

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



- ii) A backup is performed for folder **Document folder 01**.

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

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

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

- v) Since doc 3 & doc 4 have never been backed up, therefore they will be deleted from **Document folder 01**, leaving only the two files that have been backed up.

Document folder 01	
Name	
 doc 1.docx	} Files remain after restore
 doc 2.docx	

### WARNING

Please exercise extra caution when enabling this feature. Consider what data in the restore destination has not been backed up and what impact it would cause if those data is deleted.

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

- ◉ **Follow Link (Enabled by default)**

When this option is enabled, not only the symbolic link or junction point will be restored, the directories and files that the symbolic link or junction point links to will also be restored.

The table below summarizes the behaviors when a restore is performed with different settings.

Follow Link	Restore to	Behavior
Enabled	Original location	Symbolic link or junction point is restored to the original backup location. Target directories or files are also restored to the original backup location.
	Alternate location	Symbolic link or junction point is restored to the location specified. Target directories or files are also restored to the alternate location specified.
Disabled	Original location	Symbolic link or junction point is restored to the original backup location. Target directories or files are <b>NOT</b> restored to the original backup location.
	Alternate location	Symbolic link or junction point is restored to the location specified. Target directories or files are <b>NOT</b> restored to the alternate location specified.

- ◉ **Resolve Link (Only for restoring to Alternate Location)**

This option must be used in conjunction with the **Follow Link** option. When this option is enabled, the symbolic link or junction point, as well as the directories and files that the symbolic link or junction point links to will also be restored in the alternate location you have chosen. That means the link or junction will point to the alternate location instead of the original location.

The table below summarizes the behaviors when a restore is performed with this option turned on and off.

Resolve Link	Behavior
Enabled	Symbolic link or junction point is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path. Target of the link or junction is updated to the new relative path. In other word, the link or junction now points to the new alternate location.

<b>Disabled</b>	<p>Symbolic link or junction point is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path.</p> <p>However, target of the link or junction is <b>NOT</b> updated to the new relative path. In other word, the link or junction still points to the original location.</p>
-----------------	--

Click **Next** to proceed.

10. Select the temporary directory for storing temporary files, such as delta files, when they are being merged.

By default, the temporary files are stored under the temp directory of the user profile directory. In case the same directory path does not exist in the computer you are running AhsayOBM, you have to click **Browse** to define a new location for storing the temporary files. Otherwise, you will not be able to perform a restore.

## Temporary Directory

Temporary directory for storing restore files

11. Click **Restore** to start the restore. The status will be shown.
12. When the restore is completed, the message “Restore Completed Successfully” will appear.

CBS (Host: 10.3.1.8:80)

✓ Restore Completed Successfully

Estimated time left    0 sec

Restored                540 (2 files)

Elapsed time           33 sec

Transfer rate           128bit/s

You can click the **View** icon on the right hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.

Type	Log	Time
	Start [ Windows Vista (wvi), AhsayOBM v7.9.0.0 ]	11/25/2016 14:27:41
	Initializing decrypt action...	11/25/2016 14:27:41
	Initializing decrypt action... Completed	11/25/2016 14:27:41
	Downloading... "C:\Users\ahsay\Desktop\Folder 01\File 1.txt" (Total 25k bytes)	11/25/2016 14:28:11
	Downloading... "C:\Users\ahsay\Desktop\Folder 01\Report 1.rtf" (Total 15k bytes)	11/25/2016 14:28:13
	Restore Completed Successfully	11/25/2016 14:28:14

13. In the Restore window, click **Cancel** to close the Restore window.
14. To exit AhsayOBM, click the “x” on the top right corner. A message will appear to ask for your confirmation. Click **Yes** to close the application. If you wish to use AhsayOBM again, you will then have to launch it again.

## OpenDirect Restore

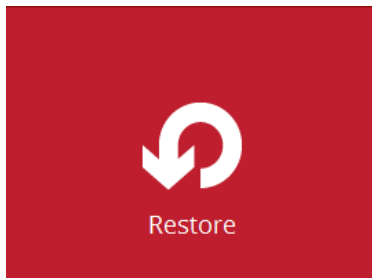
This restore method applies to backup sets created with OpenDirect restore enabled only.

### IMPORTANT

Before you proceed with the OpenDirect Restore, make sure the following dependencies are fulfilled. Failure to do so may cause the restore to fail.

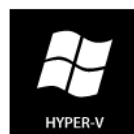
- Microsoft Visual C++ 2015 Redistributable (x86) / (x64)  
<https://www.microsoft.com/en-us/download/details.aspx?id=48145>
- Update for Universal C Runtime in Windows  
<https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>
- Microsoft Security Advisory 3033929 (for Windows 7 and Windows Server 2008 R2)  
<https://technet.microsoft.com/en-us/library/security/3033929.aspx>

1. Log in to the AhsayOBM application according to the instructions in section [Login to AhsayOBM](#).
2. Click the **Restore** icon on the AhsayOBM main interface.



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

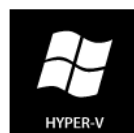
## Please Select The Backup Set To Restore



### OpenDirect Restore

Owner: w16-hvcl-cl02

Newly created on Thursday, 11 May 2017 16:02



### OpenDirect Restore 02

Owner: w16-hvcl-cl02

Newly created on Tuesday, 16 May 2017 16:11



### OpenDirect Restore 03

Owner: steven-tse

Last Backup: Tuesday, 16 May 2017 17:44

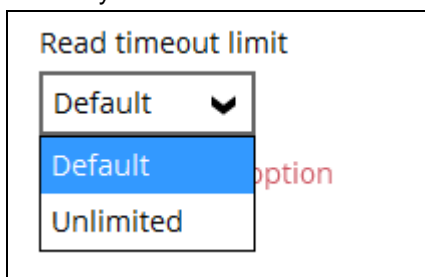
4. Select where you would like to restore your data from.



5. Select **Open backup data directly without restoration (OpenDirect)**.



You may select the **Read timeout limit** by clicking Show advanced option.



This selection defines the duration when the OpenDirect restore session will be disconnected if there is no response from the mounted compressed or image file.

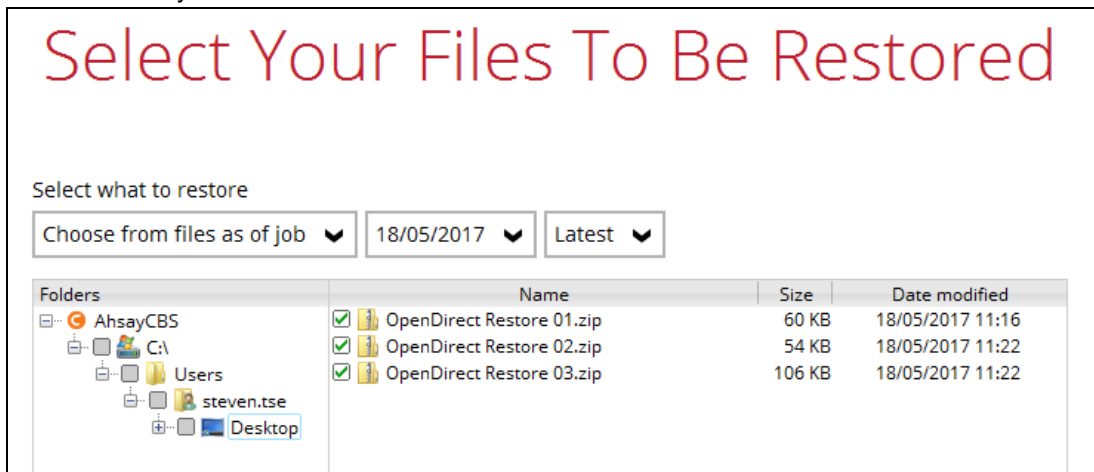
- **Default** – This setting should be suitable for compressed or image file located on a local, removable, or network drive. The time out value is 15 seconds.
- **Unlimited** – the connection will not be time out when this is selected. This selection is recommended under the following usage:
  - Backup destination is a cloud storage.
  - AhsayCBS over the Internet.
  - A large compressed or image file with large incremental delta chain.

#### Note

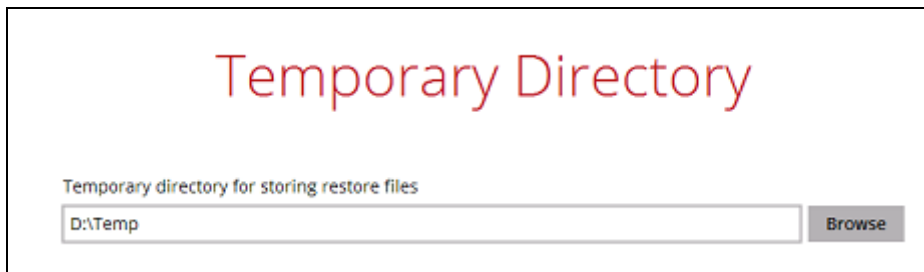
If in doubt or unsure about the compressed or image file size or network stability, it is recommended to use **Unlimited**.

Click **Next** to proceed when you are done with the selection.

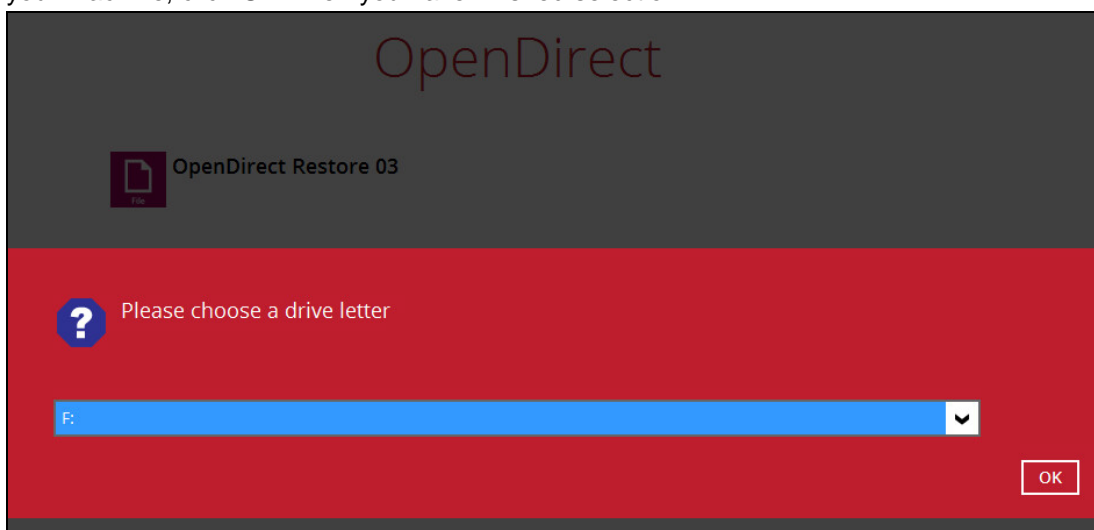
6. Select to restore files from a specific backup job, or from all files available, then select the files or folders that you would like to restore.



7. Select a temporary directory for storing restore files, then click Restore to start the OpenDirect restore.



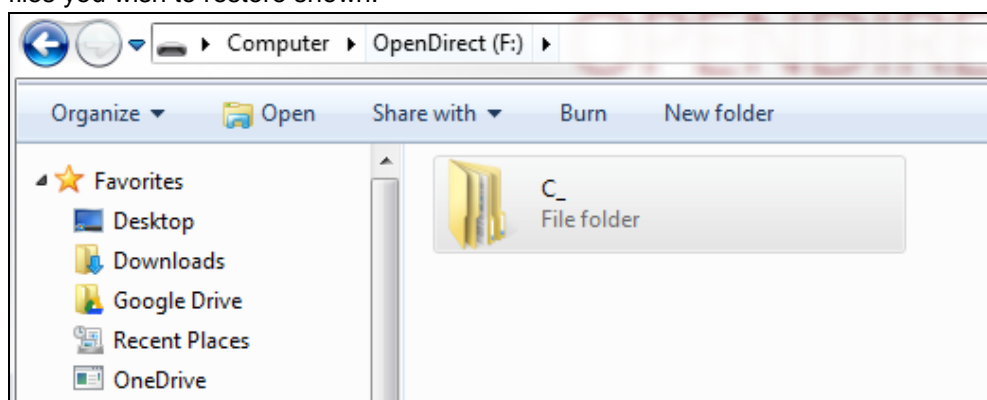
8. Click **Restore** to start the restore. The status will be shown.
9. You will be prompted to select drive letter where you wish the mounted files to be mapped on your machine, click **OK** when you have finished selection.



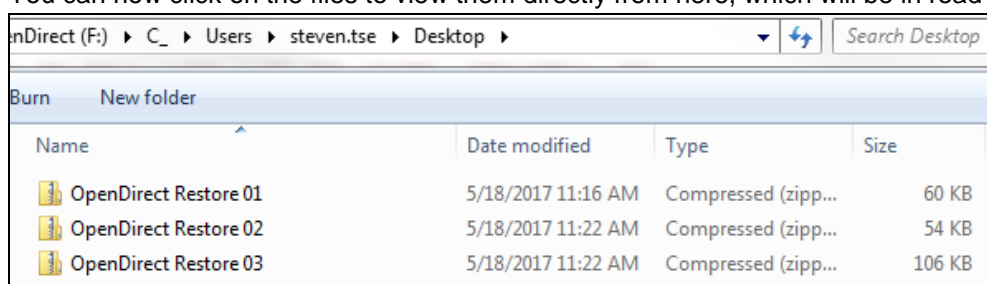
10. The following screen shows when you perform OpenDirect restore for this backup set on this machine for the first time only. Make sure you click **Yes** to confirm mounting the file(s) on this machine. Clicking **No** will exit the restore process.



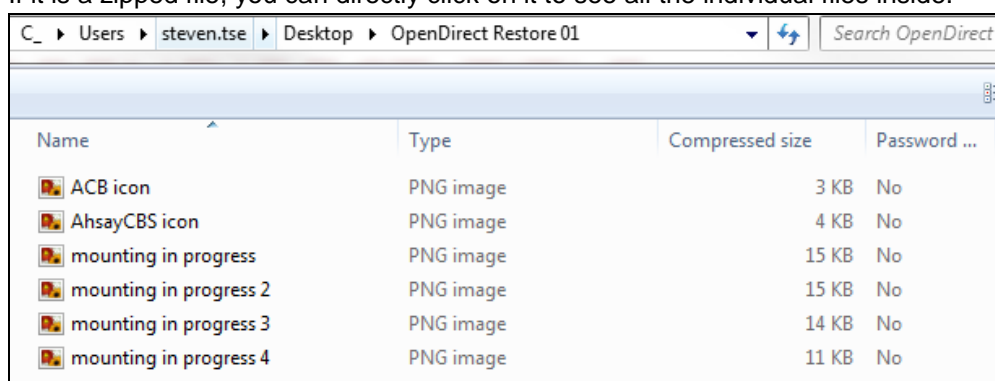
11. The selected drive letter will be mapped and prompted in the Windows Files Explorer with the files you wish to restore shown.



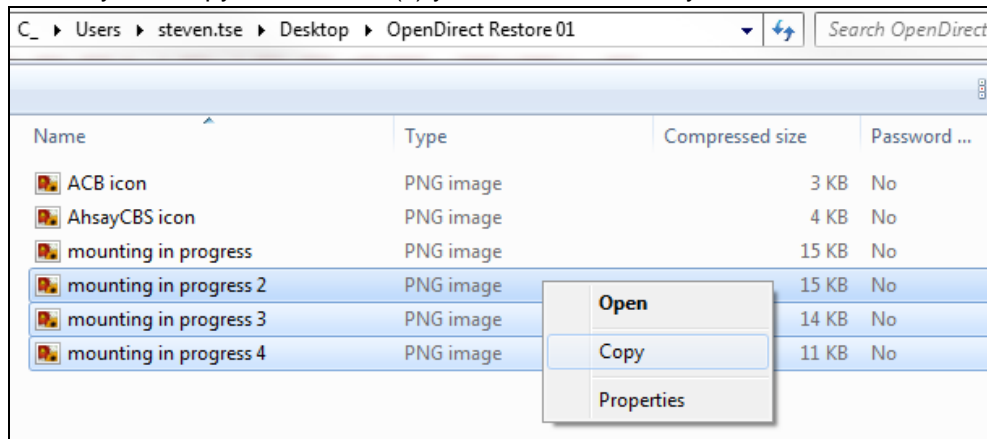
12. You can now click on the files to view them directly from here, which will be in read-only mode.



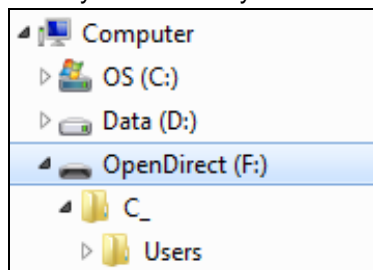
If it is a zipped file, you can directly click on it to see all the individual files inside.



You may also copy individual file(s) you wish to restore to your local machine.



13. The mounted drive letter cannot be ejected from the Windows File Explorer, it will only be closed when you exit AhsayOBM.



14. When you have finished restoring the necessary files, you can go back to AhsayOBM and click **Cancel** to exit the OpenDirect Restore.







### IMPORTANT

1. As a result of the limitation of the virtual file system library, the mapped drive will only be unmounted from your machine when you exit AhsayOBM. In other words, each OpenDirect restore session on AhsayOBM can only mount and unmount once.
2. **OpenDirect restore** of file backup sets:
  - Will not show up on the **Restore Status** tab in **Live Activities** of the backup service provider AhsayCBS. **Restore Status** tab in **Live Activities** only applies to the restore performed directly through AhsayOBM.
  - Will not generate restore reports or report email on backup service provider AhsayCBS.
  - Will not generate restore log on AhsayOBM.

## 11 Contact Ahsay

### Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the following website:

<https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp>

Also use the Ahsay Knowledge Base for resource such as Hardware Compatibility List, Software Compatibility List, and other product information:

<https://forum.ahsay.com>

### Documentation

Documentations for all Ahsay products are available at:

[https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay\\_downloads\\_documentation\\_guides](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>

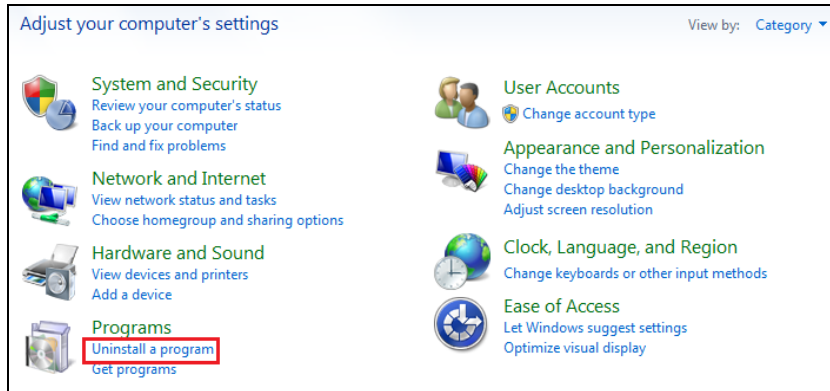
The specific document title as well as the change required/suggestion when contacting us.

## Appendix

### Uninstall AhsayOBM

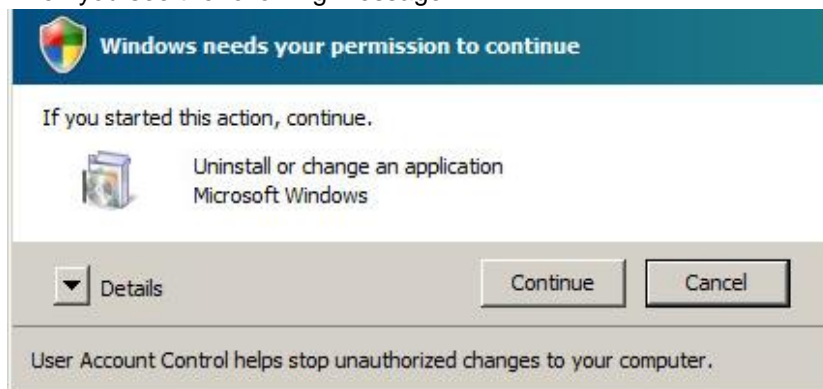
Follow the steps below to uninstall AhsayOBM from your Windows.

1. Go to **Control Panel > Programs and Features > Uninstall a program**, then look for AhsayOBM and double click on it.

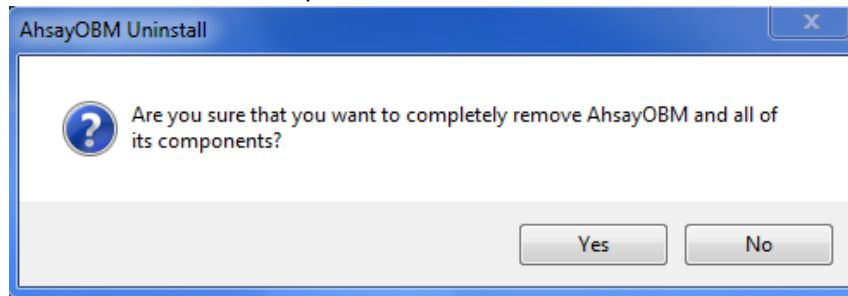


Uninstall or change a program				
To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.				
Organize Uninstall				
Name	Publisher	Installed On	Size	Version
7-Zip 15.14 (x64)	Igor Pavlov	3/18/2016	4.72 MB	15.14
Adobe Flash Player 16 ActiveX	Adobe Systems Incorporated	5/28/2015	6.00 MB	16.0.0.25
Adobe Reader XI (11.0.16) MUI	Adobe Systems Incorporated	5/31/2016	643 MB	11.0.16
AhsayACB	Ahsay Systems Corporation	2/3/2017	248 MB	7.9.2.0
AhsayOBM	Ahsay Systems Corporation	2/6/2017	248 MB	7.9.2.0

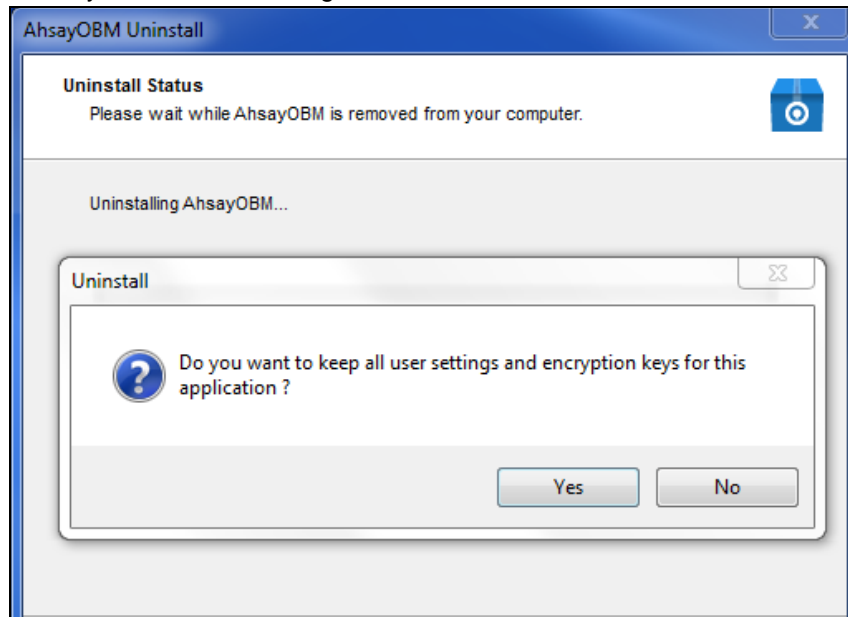
2. The following dialog box will appear only if User Account Control is enabled. Click **Continue** when you see the following message.



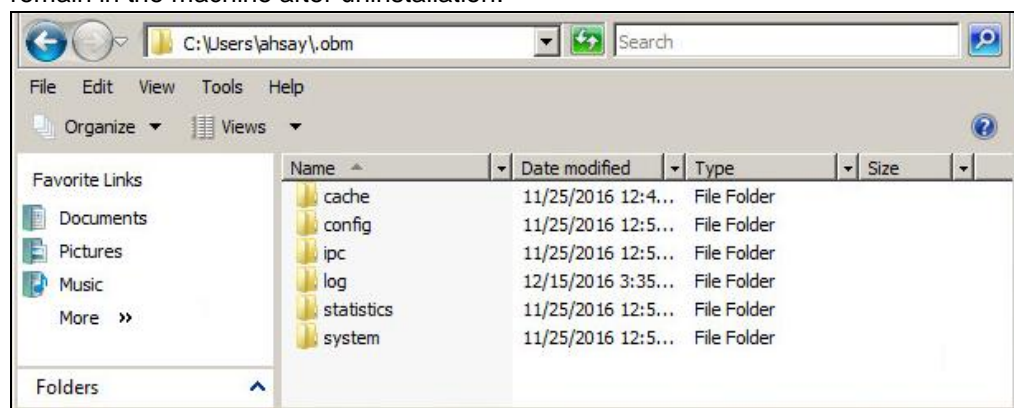
3. Click **Yes** to confirm and proceed with the uninstallation.



4. When you see the following screen:

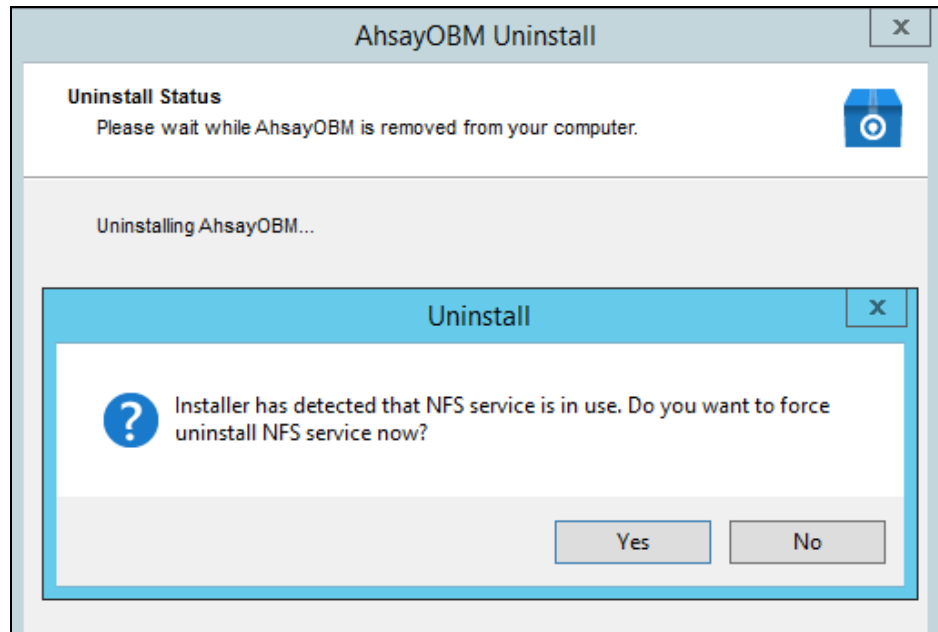


- Choose **Yes** to keep all user settings and the encryption keys associated with the users. If you are likely to install AhsayOBM on the same machine in the future again, the user settings, e.g. login details, backup sets and so forth will remain in **C:\Users\[username]\obm** by default. The screen capture below shows the folders remain in the machine after uninstallation.

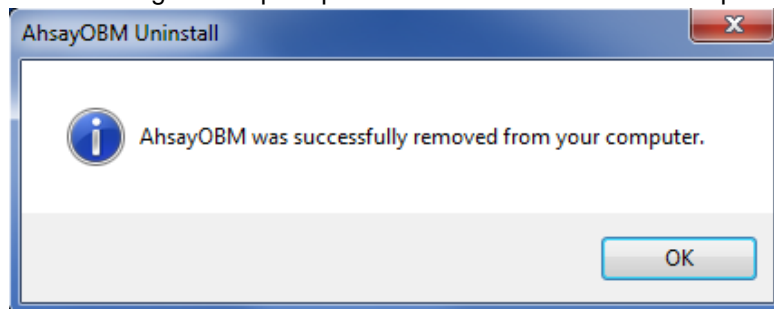


- Choose **No** to delete all user settings and encryption keys with this uninstallation. Please be reminded that the encryption keys are not retrievable once they have been deleted unless the encryption keys have been uploaded to AhsayCBS server, and therefore it will no longer be possible for backup user to recover their encryption key in case they do not have a separate written record.

5. If there is a Run Direct restore running at the time of the AhsayOBM uninstallation, the following screen prompts to alert you the NFS service is in use.
- Select **No** if you do not wish to force uninstall the NFS service. AhsayOBM will be uninstalled without affecting the NFS service, where the Run Direct restore will not be interrupted.
  - Select **Yes** to force uninstall the NFS service. Both AhsayOBM and NFS service will be uninstalled from the machine. The VM running Run Direct restore and the datastore are both unmounted from the VMware server.



6. The following screen prompts when the uninstallation is completed.



7. (Optional) For a complete removal of all AhsayOBM-related files in your machine, please go to **C:\Program Files** and manually remove the **AhsayOBM** folder.

