Google Drive - Online-Backup.dk v9 Cloud File Backup & Restore Guide for MacOS

Ahsay Systems Corporation Limited

4 maj 2022

www.onlinebackup.dk

Copyright Notice

© 2022 Ahsay Systems Corporation Limited. All rights reserved.

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

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

Trademarks

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

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

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

Dropbox is a registered trademark of Dropbox Inc.

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

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

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

MariaDB is a registered trademark of MariaDB Corporation AB.

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

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

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

OpenJDK is a registered trademark of Oracle America, Inc.

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

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

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

Ubuntu is a registered trademark of Canonical Ltd.

Debian is a registered trademark of Software in the Public Interest, Inc.

Rocky is a registered trademark of Rocky Brands.

ShadowProtect is a registered trademark of StorageCraft Technology Corporation.

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

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

Disclaimer

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

www.online-backup.dk

Revision History

Date	Descriptions	Version
25 January 2022	 Ch. 4 - added migrate data 	9.1.0.0

Table of Contents

1	Over	view	1
	1.1	What is this software?	1
	1.2	System Architecture	1
	1.3	Why should I use AhsayOBM (Agent-based) Solution to back up my cloud data?	2
	1.4	About This Document	6
2	Prep	aring for Backup and Restore	8
	2.1	Hardware Requirement	8
	2.2	Software Requirement	8
	2.3	Internet / Network Connection	8
	2.4	AhsayOBM Installation	8
	2.5	Valid AhsayOBM User Account	8
	2.6	Ahsay License Requirements	8
	2.7	Add-on Module Requirements	8
	2.8	Backup Quota Requirement	9
	2.9	Cloud Sources	9
	2.10	Login Credentials to Cloud Storage1	0
	2.11	Network Bandwidth1	0
	2.12	Best Practices and Recommendations1	0
	2.13	Limitations1	2
3	Crea	ting a Cloud File Backup Set1	5
4	Runr	ning a Backup	2
5	Rest	oring with a Cloud File Backup Set3	8
6	Cont	acting Ahsay	6
	6.1	Technical Assistance	6
	6.2	Documentation	6

1 Overview

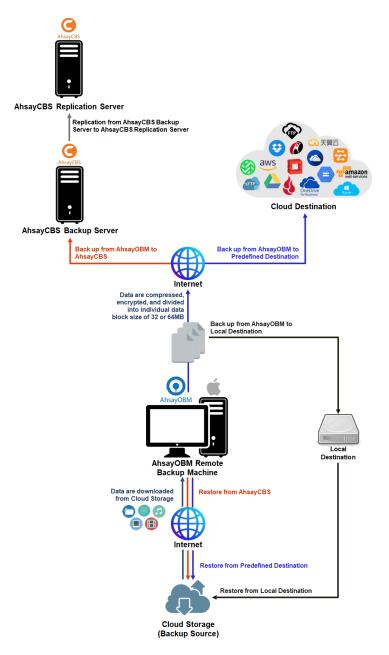
1.1 What is this software?

Ahsay brings you specialized client backup software, namely AhsayOBM, that allows you to back up your data stored on the cloud storage to either the AhsayCBS backup server, another cloud or predefined storage, and local destination. This provides set of tools that include backup and recovery of individual files with versioning and retention policy to protect your data on cloud storages.

1.2 System Architecture

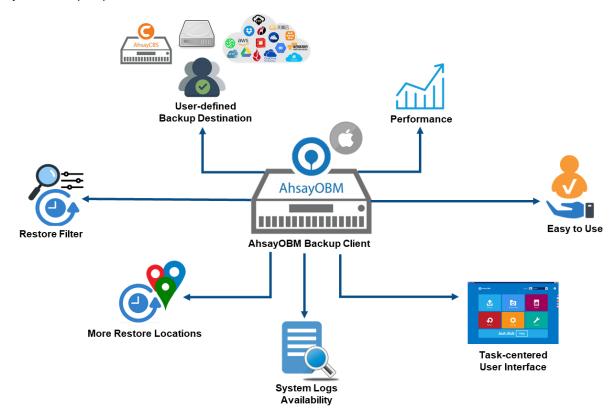
For agent-based backup and restore, the AhsayOBM initiates connection to the cloud storage (backup source) through the internet via the deployed backup agent on the customer's site.

Below is the system architecture diagram illustrating the major elements involved in the backup and restore process using the AhsayOBM Run on Client (Agent-based) backup configuration.



1.3 Why should I use AhsayOBM (Agent-based) Solution to back up my cloud data?

We are committed to bringing you a comprehensive Run on Client (Agent-based) cloud backup and recovery solution with AhsayOBM. Below are some key areas that we can help to make your backup experience a better one.



User-defined Backup Destination

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

Performance

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

Easy to Use

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

Task-centered User Interface

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

System Logs Availability

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

More Restore Locations

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

Restore Filter

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

High Level of Security

We understand that the data on your cloud storage may contain sensitive information that requires to be protected, that is why we ensure that your backup data will be encrypted with the highest level of security measure.

Un-hackable Encryption Key – to provide the best protection to your backup data, the encryption feature which will default encrypt the backup data locally with an AES 256-bit randomized encryption key.

Encryption Key Recovery – Furthermore, we have a backup plan for you to recover your encryption key in case you have lost it. Your backup service provider can make it mandatory for you to upload the encryption key to the centralized management console, the encryption key will be uploaded in hashed format and will only be used when you request for a recovery.

Cloud Destinations Backup

By default, the AhsayCBS is set as the storage destination in creating a cloud file backup set. However, you may add another storage destination(s) as provided by your backup service provider. Below is a list of supported cloud destinations:

2	Aliyun	Azure	Microsoft Azure
天翼云	CTYun		Microsoft OneDrive
aws	Amazon S3	OneDrive for Business	Microsoft OneDrive for Business
web services	AWS S3 Compatible Cloud Storage	Ø	Rackspace
	Wasabi		OpenStack
٩	Backblaze		Dropbox
	Google Cloud Storage		FTP
	Google Drive	SFTP	SFTP
		-	

NOTE

For more details, please contact your backup service provider.

Run on Client

A Run on Client Cloud File Backup Set provides you with an agent-based backup solution. Manual, scheduled, or continuous backup job is performed on the client computer. A backup agent needs to be installed on the client machine in order to back up your data on cloud storage(s).

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

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

Features/Functions	Run on Client Cloud File Backup Set	Run on Server Cloud File Backup Set
General Settings	\checkmark	\checkmark
Backup Source	\checkmark	\checkmark
Backup Schedule	\checkmark	\checkmark
Continuous Backup	AhsayOBM / AhsayACB for Windows only	\checkmark
Destination	AhsayCBS, Predefined Destinations, Standard and Local	AhsayCBS or Predefined Destinations only
Multiple Destinations	\checkmark	×
Deduplication	AhsayOBM	AhsayOBM
Retention Policy	\checkmark	AhsayOBM
Command Line Tool	AhsayOBM	×
Reminder	AhsayOBM / AhsayACB for Windows only	×
Restore Filter	\checkmark	×
Bandwidth Control	\checkmark	AhsayOBM
IP Allowed for Restore	\checkmark	×
System Logs of Data Integrity Check and Space Freeing Up	\checkmark	×
Others	\checkmark	\checkmark
To Run a Backup	AhsayOBM / AhsayACB	AhsayCBS User Web Console only
To Run a Restore	AhsayOBM / AhsayACB / AhsayOBR	AhsayCBS User Web Console only

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

Features/Functions	Run on Client Cloud File Backup Set	Run on Server Cloud File Backup Set
Data Integrity Check	\checkmark	\checkmark
Space Freeing Up	\checkmark	×
Delete Backup Data	\checkmark	\checkmark
Decrypt Backup Data	\checkmark	×

NOTE

For more details on the Run on Server backup option, please refer to the following guides: AhsayCBS v9 User Guide – Cloud File Run on Server (Agentless) Backup and Restore Guide

1.4 About This Document

What is the purpose of this document?

This document aims at providing all necessary information for you to get started with setting up your system for Run on Client Cloud File backup and restore, followed by step-by-step instructions on a creating a backup set, running a backup and restoring backup data using the AhsayOBM client.

The document can be divided into three (3) main parts.

Part 1: Preparing for Cloud File Backup & Restore

Requirements Requirements on hardware & software installation

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

Part 2: Performing a Cloud File Backup

Logging in to AhsayOBM client Log in to AhsayOBM

Creating a Backup Set Create a backup set using AhsayOBM

Running a Backup Set Run a backup set using AhsayOBM

Part 3: Restoring a Cloud File Backup

Restoring a Backup Set using AhsayOBM client Restore a backup set using AhsayOBM

What should I expect from this document?

www.online-backup.dk

After reading through this documentation, you can expect to have sufficient knowledge to set up your system to backup data on Cloud storage using the client agent, as well as to carry out an end-to-end backup and restore process.

Who should read this document?

This documentation is intended for backup administrators and IT professionals who are responsible for the Cloud File backup and restore.

2 Preparing for Backup and Restore

2.1 Hardware Requirement

To achieve the optimal performance when running AhsayOBM on your machine, refer to the following article for the list of hardware requirements. FAQ: Ahsay Hardware Requirement List (HRL) for version 9.1 or above

2.2 Software Requirement

Refer to the following article for the list of compatible operating systems and application version.

FAQ: Ahsay Software Compatibility List (SCL) for version 9.1 or above

2.3 Internet / Network Connection

In order to allow access to the cloud storage, a stable internet connection must be available on the computer where the AhsayOBM is installed. If large amounts of data are backed up from a cloud storage account then a fast internet connection is required.

2.4 AhsayOBM Installation

Make sure that AhsayOBM is installed on a computer with Internet access for connection to the cloud storage.

2.5 Valid AhsayOBM User Account

A valid AhsayOBM user account is required before you can log in to the AhsayOBM client.

2.6 Ahsay License Requirements

Licenses

The Cloud File Backup module is included in the basic AhsayOBM license. There is no limit on the number of Cloud File backup sets in an AhsayOBM user account.

For more details, please contact your backup service provider.

2.7 Add-on Module Requirements

In-File Delta

The In-File Delta add-on module must be added on the AhsayOBM user account if you would like to use this feature. This only applies to backup sets created using AhsayOBM v8 or before.

NOTE

This add-on module must be enabled on the AhsayOBM user account. Please contact your backup service provider for details.

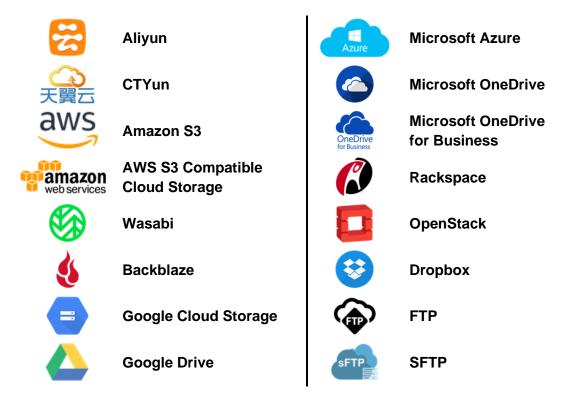
User Profile	General Backup Client Settings Contact User Group	Authentication
Backup Set	Settings of the client backup agent for this user.	
Settings		
Report	Backup Client	
Statistics	AhsayOBM User AhsayACB User	
Effective Policy		
	Add-on Modules	
	Microsoft Exchange Server	Microsoft SQL Server
	MySQL Database Server	Oracle Database Server
	Lotus Domino	Lotus Notes
	Windows System Backup	Windows System State Backup
	WMware Guest VM ~ 10	Hyper-V Guest VM V 10
	Microsoft Exchange Mailbox 10	🔲 😈 ShadowProtect System Backup
	NAS - QNAP	NAS - Synology
	Mobile (max. 10)	Continuous Data Protection
	Volume Shadow Copy	✓ In-File DeltaOnly apply to v8 or before
	OpenDirect / Granular Restore 10	Office 365 Backup 10
	MariaDB Database Server	Deduplication

2.8 Backup Quota Requirement

Make sure that your AhsayOBM user account has sufficient quota assigned to accommodate the storage for the cloud file backup set(s) and retention policy.

2.9 Cloud Sources

The AhsayOBM Run on Client (Agent-based) Backup Solution supports the following cloud sources to back up as provided by your backup service provider:



2.10 Login Credentials to Cloud Storage

To allow access to the cloud storage (backup source) in performing a backup, make sure to have the correct login credentials to the cloud storage service.

2.11 Network Bandwidth

10 Mbps or above connection speed.

2.12 Best Practices and Recommendations

The following are some best practices and recommendations we strongly recommend you follow for optimized backup and restore performance:

Backup Destination

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

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

Temporary Directory Folder Location

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

Performance Recommendations

Schedule backup jobs when system activity is low to achieve the best possible performance.

Bucket Management for Enterprise Cloud Storage Providers

If you have chosen to back up files from an enterprise cloud storage (e.g., Amazon S3, Wasabi, Microsoft Azure, Google Cloud Storage, etc.), you will have to select a bucket name during the creation of cloud file backup set. Each bucket has a single compartment, and an access key is associated with a single bucket. Therefore, each backup set can back up one bucket.

For account with multiple buckets, the backup should be organized into one bucket per backup set. For best practice, make sure to assign one bucket name per backup set so you can ensure that you are selecting the correct file(s) to back up.

Test Restore Operations

Perform test restores periodically to ensure your backup is setup and backed up properly. Performing recovery test can also help identify potential issues or gaps in your recovery plan. It is important that you do not try to make the test easier, as the objective of a successful test is not to demonstrate that everything is flawless, but to discover faults in your recovery plan. There might be flaws identified in the plan throughout the test and it is important to identify those flaws.

Periodic Backup Schedule

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

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

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

2.13 Limitations

For backup source selection:

 It is currently not possible to select the entire contents of the Cloud drive. Existing top level folders and/or files must be selected individually. If you need to back up the contents of the entire Cloud drive, then all top level folders and/or files must be selected.

	AhsayOBM	
	Backup Sou	rce
Folders	Name	Size Date modified
 ✓ ▲ Google Drive Ahsay ► Backup ► V ■ Test Files ► Ø ■ Work Files 	Ahsay Backup Work Files Source State Source State State Source Stat	281KB 03/05/202111:34 281KB 03/05/202111:34 281KB 03/05/202111:34
Show files	ltems pe	r page 50 🕶 Page 1/1 🕶
		Previous Next Cancel

2. If there are any top level folders and/or files added to the Cloud drive after the backup set is created, they will not be added in the backup source automatically. The backup set will have to be manually updated to include the new top level folders and/or files before they can be backed up.

Example:

If the "Latest version" and "New updates" folders were created after the creation of the backup set, and the contents of these folders must be backed up, then you must manually select these folders to be included in the backup.

• • •	AhsayOBM		
Cloud File	Backup Source		
General	Folders Coogle Drive Ahsay Backup	Name Ahsay Backup Latest version	Size Date modified
Source	 Latest version New updates 	New updates	
Backup Schedule Destination Show advanced settings	 ▶ Ø Test Files ▶ Ø Work Files 	 Work Files Image: wsake was was was was was was was was was was	281KB 03/05/2021 11:34 281KB 03/05/2021 11:34 281KB 03/05/2021 11:34
	Show files	Items per page 50	✔ Page 1/1 ♥
Delete this backup set			Save Cancel

3. If there are any top level folders and/or files which have been deleted from the Cloud drive since the last backup job, they will not be removed from the backup source automatically. The backup set will have to be manually updated to unselect the deleted top level folders and/or files. Otherwise, the backup job will be completed with warnings.

Example:

The following files were backed up but subsequently deleted from the top level backup source of the Cloud drive: **was_admin.png**, **vm_workstation_01.png**, **vSAN-hosts.png**. The next backup job will encounter the following warnings until these deleted files are unselected from the backup source.

The deleted files are highlighted in red on the backup source to indicate that they no longer exist on the Cloud storage account.

• •	AhsayOBM		
Cloud File Backup	Backup Source		
General	Folders	Name Ahsay Backup Test Files	Size Date modified
Source	Vertex Vertex	Work Files	
Backup Schedule		 wm_workstation_01.png was_admin.png 	
Destination			
Show advanced settings			
	Show files	Items per page 50	♥ Page 1 / 1 ♥
Delete this backup set			Save Cancel

Backup log

[2021/05/04 09:56:50] [warn] [1620092933022] Backup source "was_admin.png" does not exist ! [2021/05/04 09:56:50] [cbs] [1620092933022] warn,"Backup source \"was_admin.png\" does not exist !",0,0,0,,, [2021/05/04 09:56:50] [warn] [1620092933022] Backup source "vm_workstation_01.png" does not exist ! [2021/05/04 09:56:50] [cbs] [1620092933022] warn,"Backup source \"vm_workstation_01.png\" does not exist !",0,0,0,,, [2021/05/04 09:56:50] [warn] [1620092933022] Backup source "vSAN-hosts.png" does not exist ! [2021/05/04 09:56:50] [cbs] [1620092933022] warn,"Backup source "vSAN-hosts.png" does not exist !

3 Creating a Cloud File Backup Set

1. Log in to AhsayOBM.

For instructions on how to do this please refer to <u>Chapter 7</u> of the AhsayOBM v9 Quick Start Guide for Mac.

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



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

AhsayOBM	
De alvura Cata	
Backup Sets	
Sort by Creation Time	
Add new backup set	
Close	Help

4. Enter a Name for your backup set and select Cloud File Backup as the Backup set type.

•••	AhsayOBM
Create	Backup Set
Name Client Run Cloud File Backup Backup set type File Backup Cloud File Backup MySQL Backup MySQL Backup Office 365 Backup Withware Backup	
	Next Cancel Help

5. Select the **Cloud type** of the cloud storage that contain the data that you want to backup.

AhsayOBM
Create Backup Set
Name
Client Run Cloud File Backup
Backup set type
🕒 Cloud File Backup 🖌
Cloud type
CD 阿里云
CD 阿里云
○ 中国电信天翼云
Amazon S3
🔐 AWS S3 Compatible Cloud Storage
& Backblaze
O Google Cloud Storage
Coogle Drive
Next Cancel Help

6. Depending on the cloud type you have selected, you will be prompted to enter the cloud service login details.

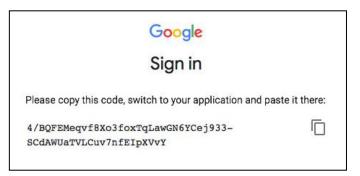
Click **Test** to get redirected to the login page of the cloud service provider on your default browser, then enter the login details there.

AhsayOBM
Create Backup Set
Name Client Run Cloud File Backup Backup set type Cloud File Backup Cloud type Cogle Drive Test
Next Cancel Help

Click **Allow** to permit AhsayOBM to access the cloud storage.

	Ahsay wants to access your
	Google Account
	() @gmail.com
This	will allow Ahsay to:
4	See, edit, create, and delete all of your Google (; Drive files
Mak	e sure you trust Ahsay
	nay be sharing sensitive info with this site or app.
	a about how Ahsay will handle your data by reviewing ivacy policies. You can always see or remove access
	ur Google Account.
Lear	n about the risks
Cano	Allow

Copy and paste the code generated by the cloud service provider to AhsayOBM, then click **OK** to confirm



AhsayOBM
Create Deckup Cat
Create Backup Set
Name
Client Run Cloud File Backup
Backup set type
🕒 Cloud File Backup 👻
In the browser, log in (if necessary), and click the "Allow" button to authorize this app. You will then be presented with an authorization
code. Please copy the authorization code and paste it here to continue.
!4XfWif-2JT_b6x1kdWmp7e1dyYMsTA_xbgKgh1JMqAWyBq8fo2dDXusJl
OK Cancel

7. Click Next to proceed.

• •	AhsayOBM
	Create Backup Set
	Name Client Run Cloud File Backup Backup set type Cloud File Backup Cloud type Cloud Example Cloud E
	Next Cancel Help

NOTE The authentication request will be opened in a new tab or window. Ensure that the pop-up window is not blocked, and pop-up blocker is disabled in your browser.

8. In the Backup Source menu, select the folder / files that you would like to backup.

•	AhsayOBM
	Backup Source
	Folders Absay Absay Absay Absay Absay Installer
	Show files
	Previous Next Cancel Help
	NOTE

There are limitations in selecting files and/or folders in the backup source menu. For further details, please refer to <u>Ch. 2.13 Limitations</u>.

Tick the **Show files** checkbox at the bottom left corner if you would like to choose individual file for backup. Click **Next** to proceed when you are done with the selection.

Folders ▼	With filter with filter 01 Arything.mp3 7 01 Arything.mp3 7 01 Highway to Heaven.mp3 7 190331 NCT127 'REPLAY (PM 01_27)' 18 10 Best Practices and Recommendations_dr 7 10 Gomparison between Incremental and Di 7 10 MG_0540.JPG 2 11 MG_0579.JPG 2 12 MG_05252.JPG 1 12 Office0365_02262020.pptx 4 12 Periodic DIC detailed flow.pptx 7 12 howofilenamestoexcel.txt 7	Size 7.36MB 7.75MB 8.62 9KB 19KB 2.72MB 1.89MB 4.71MB 140KB 1KB 1KB 286KB 24KB	Date modified 11/06/2012 10:51 27/06/2019 21:31 25/09/2019 21:58 17/11/2021 09:12 18/03/2020 10:59 13/07/2019 21:03 23/08/2019 22:56 02/06/2020 19:21 12/12/2019 00:00 09/06/2020 19:25 29/06/2020 19:26 21/06/2021 01:06 21/06/2018 11:49 25/06/2020 16:20	
✓ Show files	Items per page	50	✓ Page 1/1 ✓	

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

• •	AhsayOBM
	Schedule
	Run scheduled backup for this backup set On Add new schedule Add new schedule
	Previous Next Cancel Help

New Backup Name Daily-1 Type Daily v Start backup		
at V 13 V Stop until full backup cor Run Retention Po		
	ОК [Cancel Help
	Previous Next	Cancel Help

Name – the name of the backup schedule.

• **Type** – the type of the backup schedule. There are four (4) different types of backup schedule: Daily, Weekly, Monthly and Custom.

Daily – the time of the day or interval in minutes/hours when the backup job will run.

New Backup Schedule
Name
Daily-1
Type Daily V Start backup at V 18 V: 00 V Stop until full backup completed V
Run Retention Policy after backup

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



Weekly – the day of the week and the time of the day or interval in minutes/hours when the backup job will run.

New Backup Schedule	
Name	
Weekly-1	
Type Weekly V	
Backup on these days of the week □ Sun □ Mon □ Tue □ Wed □ Thu □ Fri ✔ S	Sat
at 19 00	
Stop	
until full backup completed 🖌	
Run Retention Policy after backup	

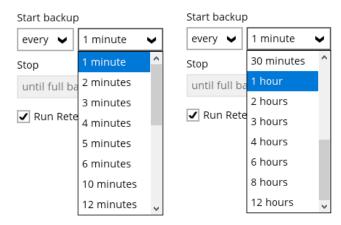
Monthly – the day of the month and the time of the day when the backup job will run.

New Backup Schedule
Name
Monthly-1
Type Monthly V
Backup on the following day every month
● Last ♥ Sunday ♥
Start backup at
20 🖌 : 00 🖌 on the selected days
Stop
until full backup completed 🖌
✓ Run Retention Policy after backup

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

New Backup Schedule
Name
Custom-1
Type Custom V Backup on the following day once 2022 December V 31 V
Start backup at
Stop
until full backup completed 🖌
✓ Run Retention Policy after backup

- Start backup the start time of the backup job.
 - at this option will start a backup job <u>at a specific time</u>.
 - every this option will start a backup job in intervals of minutes or hours.



Here is an example of backup set that has a daily and weekly backup schedule.

New Backup Schedule	New Backup Schedule
Name Weekly-1	Name Weekly-1
Type Weekly Backup on these days of the week	Type Weekly Backup on these days of the week
Sun I Mon I Tue V Wed I Thu I Fri Sat Start backup	Sun Mon Tue Wed Thu Fri Sat
every V 4 hours V	at 🗸 21 🗸 : 00 🗸
until full backup completed 🖌	Stop until full backup completed 🖌
Run Retention Policy after backup	✓ Run Retention Policy after backup

Figure 1.1

Figure 1.2

 $\label{eq:Figure 1.1} \textbf{Figure 1.1} - \textbf{Periodic scheduled every 4 hours Monday - Friday for business hours}$

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

Stop – the stop **time** of the backup job. This only applies to schedules with start backup "at" and is not supported for periodic backup schedule (start backup "every")

until full backup completed – this option will stop a backup job once it is complete. This is the configured stop time of the backup job by default.

• after (defined no. of hrs.) – this option will stop a backup job after a certain number of hours regardless of whether the backup job has completed or not. This can range from 1 to 24 hrs.

The number of hours must be enough to complete a backup of all files in the backup set. For small files in a backup, if the number of hours is not enough to back up all files, then the outstanding files will be backed up in the next

backup job. However, if the backup set contains large files, this may result in partially backed up files.

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

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

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

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

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

Multiple backup schedules can be created, as an example; the four types of backup schedules may look like the following.

AhsayOBM
Schedule
Run scheduled backup for this backup set On Existing schedules Daily 1 Daily (Everyday at 18:00) Weekly - 1 Weekly - 1 Weekly - Saturday (Every week at 19:00) Monthly - The Last Sunday (Every month at 20:00) Custom (31/12/2022 at 21:00) Add
Previous Next Cancel Help

Click Next to proceed.

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

Destination			
Backup mode Sequential Existing storage destinations Add new storage destination / destination pool			
	Previous	Next Cancel	Help

NOTE For more details on Backup Destination, refer to this article: <u>FAQ: Frequently Asked Questions on Backup Destination</u>

11. Select the Destination storage.

• •	AhsayOBM
	New Storage Destination / Destination Pool
	Name AhsayCBS
	Oestination storage
	G AhsayCBS
	PredefDest1 Local / Mapped Drive / Removable Drive
	Coogle Drive
	OK Cancel Help
	Previous Next Cancel Help

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

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

Ansayobm
New Storage Destination / Destination Pool
Name
Local-1
Destination storage
Second Joint Among
Local path
Change
Test
163(
OK Cancel Help
Previous Next Cancel Help

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

AhsayOBM
New Storage Destination / Destination Pool
Name GoogleDrive-1
Destination storage
Coogle Drive
Test
Sign up for Google Drive
OK Cancel Help
Previous Next Cancel Help

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

• • •	Ah	sayOBM				
	New Storage Destination / De Name FTP-1 Destination storage FTP FTP V Host Username Password (optional) FTP directory to store backup data (defa	Port				
	Connect with SSL/TLS (explicit only) Access the Internet through proxy					
						~
				ОК	Cancel	Help
			Previous	Next	Cancel	Help

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

AhsayOBM
Destination
Backup mode Sequential Existing storage destinations AbsavCBS
AbsayCBS Host: 1255.1184.164:80 Local-1 /Users/admin/Documents/Backup
Previous Next Cancel Help

www.online-backup.dk

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

Encryption
Encrypt Backup Data On Encryption Type Default User password Custom
Previous Next Cancel Help

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.

	Encryptic	on
Encrypt Backup Data On		
Encryption Type Custom		
Algorithm AES		
Encryption key		
Re-enter encryption key		
•••••		
Method ECB • CBC		
Key length 128-bit 256-bit 		

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

14. If you have enabled the Encryption Key feature in the previous step, the following popup window shows, no matter which encryption type you have selected.

Encryption	
Encrypt Backup Data On Encryption Type Default	
You are advised to write this encryption key down on paper and keep in a safe place. You will need it when you need to restore your files late Please confirm that you have done so.	
Unmask encryption key	Copy to clipboard Confirm

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

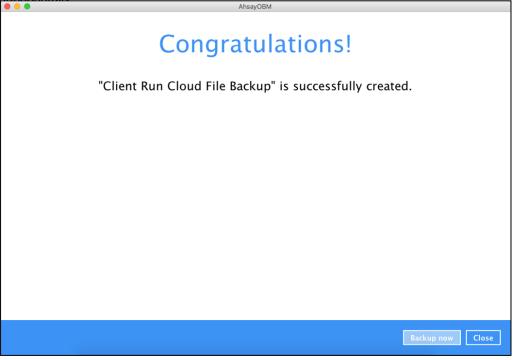
Unmask encryption key – The encryption key is masked by default. Click this option to show the encryption key.

You are advised to write this encryption key down on paper and keep in a safe place. You will need it when you need to restore your files late Please confirm that you have done so.		
ZPDWFyTrMWZ/o9MgcmOvWQAR9x8li367TAUfabDiR7I=		
Mask encryption key	_	
	Copy to clipboard	Confirm

- 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.

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

15. The following screen is displayed when the Cloud File backup set is created successfully



16. Based on <u>Best Practices and Recommendations</u>, it is highly recommended to change the **Temporary Directory**. Select another location with sufficient free disk space other than /Users/admin/temp.

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

Client Run Cloud	Temporary Directory
	Temporary directory for storing backup files
General	/Users/admin/temp Change 315.15GB free out of total 464.96GB space in /Users/admin/temp
Source	Remove temporary files after backup
Backup Schedule	Compressions
Destination	Select compression type
Deduplication	Fast with optimization for local
Retention Policy	Encryption
Command Line Tool	Encryption key •••••• Copy to clipboard Unmask encryption key
Bandwidth Control	Algorithm AES
Bandwidth Control	Method CBC Key length 256 bits
Others	
Hide advanced settings	
Delete this backup set	Save Cancel Help

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

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

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

	AhsayOBM
Client Run Cloud	Temporary Directory
General Source Backup Schedule Destination Deduplication Retention Policy Command Line Tool Bandwidth Control Others Hide advanced settings	Temporary directory for storing backup files /Users/admin/temp Change 315.15GB free out of total 464.96GB space in /Users/admin/temp 315.15GB free out of total 464.96GB space in /Users/admin/temp Image: Compression Size Image: Compression type Fast with optimization for local Image: Compression Normal Image: Compression for local Fast (Compressed size larger than normal) Image: Compression Algorithm AES Method CBC Key length 256 bits
Delete this backup set	Save Cancel Help

4 Running a Backup

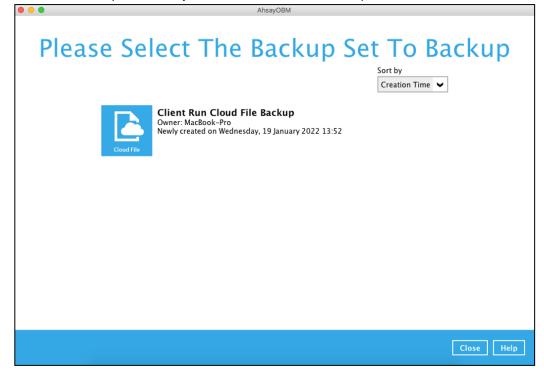
For an overview of the backup process, please refer to <u>Chapter 11</u> in the AhsayOBM v9 Quick Start Guide for Mac.

To start a backup, follow the steps below:

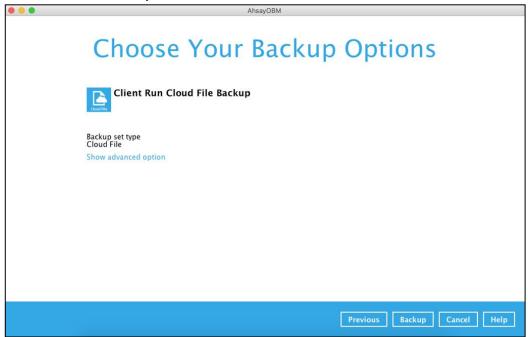
1. Click the **Backup** icon on the main interface of AhsayOBM.



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



3. If you would like to modify the Destinations, Migrate Data and Retention Policy settings, click **Show advanced option**.

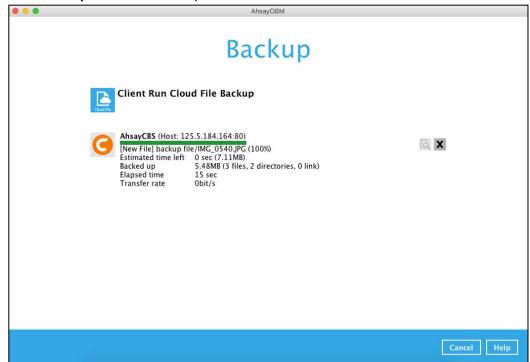


4. When advanced options are shown, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** in the Retention Policy section at the bottom. This will help you save hard disk quota in the long run.

	AhsayOBM
	Choose Your Backup Options
	Client Run Cloud File Backup
	Backup set type Cloud File
	Destinations
	AhsayCBS (Host: 125.5.184.164:80) Muse Local-1 (/Users/admin/Documents/Backup)
	Migrate Data
	Migrate existing data to latest version
	Retention Policy Run Retention Policy after backup
	Hide advanced option
	Previous Backup Cancel Help
	NOTE
The Mi	grate Data option will only be displayed if Deduplication is enabled for the backup set.

The Migrate Data option will only be displayed if Deduplication is enabled for the backup set. When the Migrate Data option is enabled, the existing data will be migrated to the latest version during a backup job. Backup job(s) for backup sets with Migrate Data enabled may take longer to finish. For more information about this feature, refer to <u>AhsayCBS v9 New Features</u> <u>Supplemental document</u>.

5. Click **Backup** to start the backup and wait until it is finished.



6. The backup through AhsayOBM has been successful.

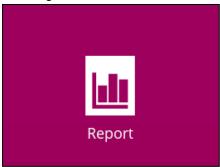
AhsavQBM	
AhsayOBM	
Backup	
Client Run Cloud File Backup	
AhsayCBS (Host: 125.5.184.164:80)	P
	IQ,
Estimated time left 0 sec Backed up 12.60MB (30 files, 2 directories, 0 link)	
Elapsed time 1 min 7 sec Transfer rate 1.43Mbit/s	
Transfer rate 1.43mbit/s	
	Close Help



Check the log of your backup by clicking this icon . It will show you the log of your 7. backup with corresponding date and time.

		Show	All	~
Туре	Log		Time	
0	Start [AhsayOBM v9.1.0.0]	19/01/	2022 14:04	:17
0	Saving encrypted backup set encryption keys to server		2022 14:04	
0	Start Backup [Deduplication: enabled, Deduplication scope: All files within the same backup set, Migrate Delta: disa	19/01/	2022 14:04	:19
0	Using Temporary Directory /Users/admin/temp/1642571575092/OBS@1642571970061		2022 14:04	
0	Start running pre-commands		2022 14:04	
0	Finished running pre-commands		2022 14:04	
0	Downloading server file list		2022 14:04	
0	Download valid index files from backup job "null" to "/Users/admin/temp/1642571575092/OBS@1642571970061/i		2022 14:04	
0	Downloading server file list Completed		2022 14:04	
0	Reading backup source from hard disk		2022 14:04	
0	[New Directory] backup file		2022 14:04	
0	[New Directory] backup file/with filter		2022 14:04	
0	Reading backup source from hard disk Completed		2022 14:04	
0	[New File] 100% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.docx"		2022 14:04	
0	[New File] 10% of "backup file/IMG_0579.JPG"		2022 14:04	
Ð	[New File] 20% of "backup file/IMG_0579.JPG"		2022 14:04	
0	[New File] 30% of "backup file/IMG_0579.JPG"		2022 14:04	
0	[New File] 40% of "backup file/IMG_0579.JPG"		2022 14:04	
0	[New File] 50% of "backup file/IMG_0579.JPG"		2022 14:04	
0				
	(New File)	19/01/	2022 14:04	:30

To view the backup report, return to the AhsayOBM main interface then click the following icon.



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

•••	AhsayOBM
Report	Backup Report
Backup	12 V Jan V 2022 V 19 V Jan V 2022 V Go
Restore	Backup set V Destination V Completion Status V
Usage	🔁 Client Run Clo 🥝 AhsayCBS Today 14:05 Completed
	No. of records per page 50 V Page 1 / 1 V
	No. of records per page 50 V Page 1 / 1 V
	Close Help



	AhsayOBM
Report	Backup Report
	From To
Backup	12 V Jan V 2022 V 19 V Jan V 2022 V Go
Restore	Backup set 💙 Destination 👻 Completion Status 👻
Users	Backup set 🕒 Client Run Cloud File Backup 🗙
Usage	Destination G AhsayCBS
	Job 19/01/2022 14:04
	Time Today 14:04 - 14:05 (PHT)
	Status
	New files * 30 [12MB/12.6MB (5%)]
	Updated files * 0
	Attributes Changed Files * 0
	Moved files * 0
	Deleted files * 0
	Dedupe Saving 0/12.6M [0.0%]
	* Unit = No of files [Total zipped size / Total unzipped size (compression ratio)]
	View log
	No. of records per page 50 V Page 1 / 1 V
	Close Help

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

Г		stination	AhsayCBS	
og	19/01/2022 14:04 🗸	Show	All	~
Туре			Time	
	Start [AhsayOBM v9.1.0.0]		022 14:04:17	
	Saving encrypted backup set encryption keys to server		022 14:04:17	^
	Start Backup [Deduplication: enabled, Deduplication scope: All files within the same backup set, Migrate Delta: disa		022 14:04:19	
	Using Temporary Directory /Users/admin/temp/1642571575092/OBS@1642571970061		022 14:04:19	
	Start running pre-commands		022 14:04:24	
	Finished running pre-commands		022 14:04:24	
	Downloading server file list		022 14:04:24	
	Download valid index files from backup job "null" to "/Users/admin/temp/1642571575092/OBS@1642571970061/i	19/01/2022 14:04:24		
	Downloading server file list Completed		022 14:04:24	
	Reading backup source from hard disk		022 14:04:26	
	[New Directory] backup file/with filter		022 14:04:27	
	Reading backup source from hard disk Completed		022 14:04:27	
	[New File] 100% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.docx"		022 14:04:29	
	[New File] 10% of "backup file/IMG_0579.JPG"		022 14:04:30	
	[New File] 20% of "backup file/IMG_0579.JPG"		022 14:04:30	
	[New File] 30% of "backup file/IMG_0579.JPG"		022 14:04:30	
0	[New File] 40% of "backup file/IMG_0579.JPG"		022 14:04:30	~
	[1]		14.04.30	
	per page 50 V		Page 1/3	M

You can also search for backup reports from a specific period of date. For example, we have the **From** date which is, **12 Jan 2022** and the To date which is, **18 Jan 2022**. Then click the Go button to generate the available reports.

From	Т	ō			
12 🗙 Jan 🖌	2022 🖌	18 🖌 🕽	Jan 🖌	2022 🗸	Go

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

	AhsayOBM
Report	Backup Report
Backup	12 V Jan V 2022 V 18 V Jan V 2022 V Go
Restore	Backup set V Destination V Completion Status V
Usage	No records round
	No. of records per page 50 V Page - V
	Close Help

5 Restoring with a Cloud File Backup Set

Using AhsayOBM to do the restoration has three (3) options. Through Local machine, Original location, and Alternate location. Below are brief descriptions of the said features. After this quick walkthrough you will see the step-by-step instructions with corresponding screen shots on how to restore your data using the following options below.

Local machine

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

Original location

Aside from the location machine option, you are also able to restore your data to your original location, on the cloud storage, where they are originally saved.

Alternate location

Besides the two options above, you can also restore your data to an alternate location on the same cloud storage but on a different folder.

NOTE	
Log in to AhsayOBM. For instructions on how to do this please refer to <u>Chapter 7</u> of the AhsayO Quick Start Guide for Mac.	3M v9

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



2. Select the backup set that you would like to restore from.



3. Select the backup destination that contains the data that you would like to restore.

AhsayOBM
Select From Where To Restore
Client Run Cloud File Backup
AhsayCBS Host: 125.5.184.164:80 Local-1 //Jsers/admin/Documents/Backup
Previous Cancel Help

www.online-backup.dk

4. Select to restore from a specific backup job, or the latest job available from the **Select** what to restore drop down menu.

Select Your Files To Be Restored
Choose from files as of job 👻 19/01/2022 👻 Latest 🐱
Folders Name Size Date modified AhsayCBS with filter Best Practices and Recommendations_dr 9KB 17/11/2021 09:12 Comparison between Incremental and Di 19KB 18/03/2020 10:59 MG_0540.JPC 2.72MB 13/07/2019 21:03 MG_05540.JPC 2.76MB 23/08/2019 22:56 MG_0555.02262020.pptx 4.71MB 29/06/2020 19:21 Office0356.502262020.pptx 4.71MB 29/06/2020 19:21 Credentials.txt KB 09/06/2020 10:06 ohowtofilenamestoexcel.txt KB 09/06/2020 10:06 ohowtofilenamestoexcel.txt KB 09/06/2020 10:06 ohowtofilenamestoexcel.txt KB 09/06/2020 16:20 v8.3.4.0-Release-Document-List_2506 24KB 25/06/2020 16:20 24KB 25/06/2020 16:20 25/06/2020 16:20 Stret Stre
Restore to local computer Items per page 50 V Page 1/1 V Search Previous Next Cancel He

Tick **Restore to local computer** if you want to restore the backed-up data to the local computer. Once done selecting the files and/or folders to restore, click **Next** to continue.

Select You Select what to restore Choose from files as of job	Ir Files To Be Restored
Folders ▼ ④ AhsayCBS ▼ ☑ backup file ▷ □ with filter ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑	Name Size Date modified with filter
Restore to local computer Search	Items per page 50 V Page 1 / 1 V
	Previous Next Cancel Help

If you want to search for directories, files and folders to be restored, click **Search** to use the restore filter.

For more information on how to use the restore filter please refer to <u>Chapter 13.3</u> of the AhsayOBM v9 Quick Start Guide for Mac.

5. The window that will be displayed will depend on the restore destination selected. Here are the three options:

Local computer

If you want to restore on your local computer, browse to the corresponding directory path on the local computer that you want the data to be restored to.

Choose Where The Files T	To Be Restored
Restore files to /Users/admin/Documents/Restore	Browse
Show advanced option	
	Previous Next Cancel He

Click Show advanced option to configure other restore settings.

/Users/admin/Documents/Resto	ore	Browse	
Verify checksum of in-file delt Hide advanced option	a files during restore		
			Cance

Verify checksum of in-file delta files during restore

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

Original location

If you have chosen this option, the backup data will be restored to the original location on the cloud storage.

• • •	AhsayOBM
Cho	ose Where The Files To Be Restored
	Restore files to Original location Alternate location Change
	 Verify checksum of in-file delta files during restore Hide advanced option
	Previous Next Cancel Help

Alternate location

If you have chosen this option, backup data will be restored to another location of your choice. Click **Change** to select the alternate path on the cloud storage.

	11 0001	
	AhsayOBM	
Choose Wh	iere The Files T	To Be Restored
Restore files to		
Original location		
Alternate location	n	Change
Verify checksum	of in-file delta files during restore	
Hide advanced optio	n	
		Previous Next Cancel Help

AhsayOBM
Change Path
Coogle Drive Ansay Alternate Location Dackup file Installer
OK Cancel
Previous Next Cancel Help
AhsayOBM
Choose Where The Files To Be Restored
Choose where the files to be Restored
Restore files to Original location • Alternate location Alternate Location Change
Restore files to Original location
Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore
Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore
Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore
Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore
Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore
Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore

Click Next to proceed.

NOTE

Data can only be restored to the local computer or to the original cloud storage where the data was backed up from (i.e. same cloud storage provider and same account). Restoring backup data to a different cloud storage provider or different account is NOT possible.

6. Select the temporary directory for storing temporary files.

• • •	AhsayOBM		
	Temporary Directory		
	Temporary directory for storing restore files		
	/Users/admin/temp	Browse	
	Previous	Restore Cancel	Help

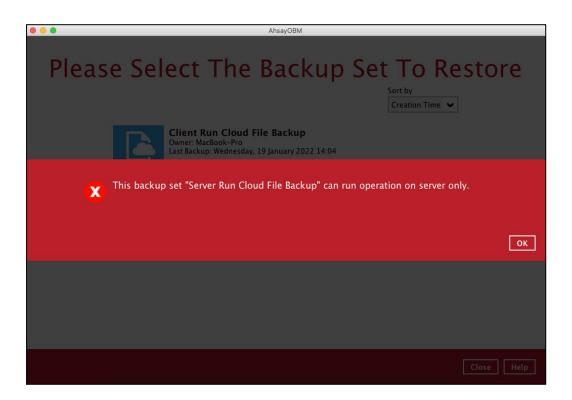
7. Click **Restore** to start the restoration. The following screen is displayed when the files are restored successfully.

AhsayOBM	
Restore	
Client Run Cloud File Backup	
AbsayCBS (Host: 125.5.184.164:80) Testore Completed Successfully Estimated time left 0 sec Restored 12.54MB (11 files)	E C
Elapsed time 15 sec Transfer rate 4.87Mbit/s	
	Close Help

www.online-backup.dk

IMPORTANT

Data of a **Run on Server** Cloud File backup set can only be restored via the AhsayCBS web console. The following error message will be displayed if you try to restore data of a **Run on Server** Cloud File backup set via the AhsayOBM user interface.



6 Contacting Ahsay

6.1 Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the Partner Portal: <u>https://www.ahsay.com/partners/</u>

Also use the Ahsay Wikipedia for resource such as Hardware Compatibility List, Software Compatibility List, and other product information: <u>https://wiki.ahsay.com/</u>

6.2 Documentation

Documentations for all Ahsay products are available at: https://www.ahsay.com/jsp/en/downloads/ahsay-downloads_documentation_guides.jsp

You can send us suggestions for improvements or report on issues in the documentation by contacting us at:

https://www.ahsay.com/partners/

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