

Ahsay Online Backup Manager v9 Cloud File Backup & Restore Guide for Windows

Ahsay Systems Corporation Limited

27 January 2023

A wholly owned subsidiary of Ahsay Backup Software Development Company Limited HKEx Stock Code: 8290

Copyright Notice

© 2023 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.

Revision History

Date	Descriptions	Version
25 January 2022	 Ch. 4 – added Migrate Data 	9.1.0.0
7 March 2022	 Ch. 4 – updated note for Migrate Data 	9.1.0.0
6 May 2022	 Ch. 2 – removed limitations Ch. 3 – updated screenshot to show root folder selection is supported 	9.1.4.0
27 January 2023	 Ch. 5 – updated Restore instructions 	9.5.2.0

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 dat	ia?2
	1.4	About This Document	6
2	Prepa	aring for Backup and Restore	7
	2.1	Hardware Requirement	7
	2.2	Software Requirement	7
	2.3	Antivirus Exclusion Requirement	7
	2.4	Upgrade VMware Tools Requirement	7
	2.5	Internet / Network Connection	7
	2.6	Valid AhsayOBM User Account	7
	2.7	Ahsay License Requirements	8
	2.8	Add-on Module Requirements	8
	2.9	Backup Quota Requirement	8
	2.10	Cloud Sources	9
	2.11	Login Credentials to Cloud Storage	9
	2.12	Network Bandwidth	9
	2.13	Best Practices and Recommendations	9
3	Creat	ting a Cloud File Backup Set	. 11
4	Runn	ning a Backup Job	. 27
5	Rest	oring a Cloud File Backup Set	. 33
6	Cont	acting Ahsay	. 40
	6.1	Technical Assistance	. 40
	6.2	Documentation	. 40
Ар	pendix	x	. 41
	Appe	endix A Example Scenarios for Restore Filter	. 41

1 Overview

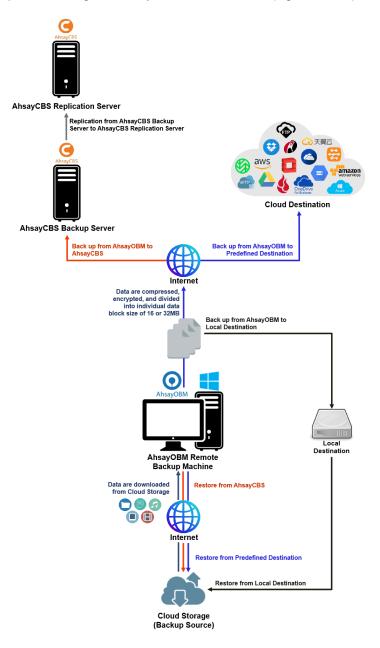
1.1 What is this software?

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

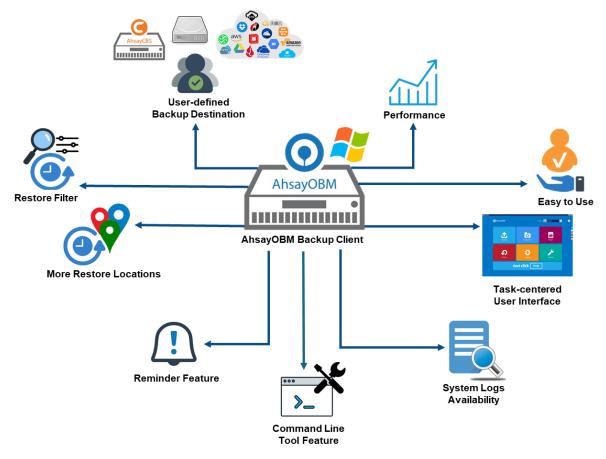
For agent-based backup and restore, the AhsayOBM initiates connection to the cloud storage (backup source) through the internet via the deployed backup agent on the customer's site.

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.

Command Line Tool

Agent-based backup solution has a feature that allows user to configure a pre and/or post-backup command which can be an operating system level command, script or batch file, or third-party utilities that will run before and/or after a backup job.

Reminder Feature

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

More Restore Locations

Agent-based backup offers you three (3) restore locations such as the local machine, original location (or the cloud storage where your backed up files are located) 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** a last resort 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:

8	Aliyun	Azure	Microsoft Azure
て、大翼云	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	\mathbf{i}	Dropbox
=	Google Cloud Storage		FTP
	Google Drive	SFTP	SFTP
	NOT	E	
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	✓	×
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 guide: <u>AhsayCBS v9 User Guide – Cloud File Run on Server (Agentless) Backup and Restore Guide</u>

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?

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

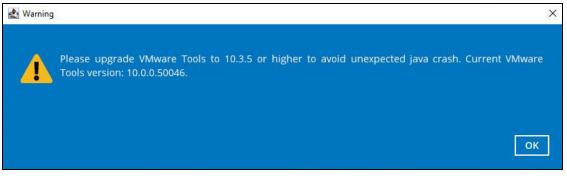
2.3 Antivirus Exclusion Requirement

To optimize performance of AhsayOBM on Windows, and to avoid conflict with your antivirus software, refer to the following KB article for the list of processes and directory paths that should be added to all antivirus software white-list / exclusion list. FAQ: Suggestion on antivirus exclusions to improve performance of Ahsay software on Windows

2.4 Upgrade VMware Tools Requirement

To avoid unexpected java crash, if the Windows machine is a guest VM hosted on a VMware Host, then it is highly recommended that the VMware Tools version installed on the guest VM is 10.3.5 or higher.

Below is the warning message that will be displayed if the version of the VMware Tools is earlier than 10.3.5.



For more information about the upgrade of VMware Tools, refer to the following article. <u>ISSUE: AhsayOBM / ACB crash when performing backup or restore on a VMware virtual</u> <u>machine with VMware Tools pre-10.3.5 installed</u>

2.5 Internet / Network Connection

In order to allow access to the cloud storage, an internet connection must be available on the computer where the AhsayOBM is installed.

2.6 Valid AhsayOBM User Account

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

2.7 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.

2.8 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.

For AhsayOBM user account

User Profile	General Backup Client Settings Contact L	Iser Group Authentication
Backup Set	Settings of the client backup agent for this user.	
Settings		
Report	Backup Client	
Statistics	AhsayOBM 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
	UMware Guest VM V	Hyper-V Guest VM V 0
	Microsoft Exchange Mailbox	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 0	Microsoft 365 Backup 0
	MariaDB Database Server	Deduplication

2.9 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.

2.10 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:

8	Aliyun	Azure	Microsoft Azure
て、大翼云	CTYun		Microsoft OneDrive
aws	Amazon S3	OneDrive for Business	Microsoft OneDrive for Business
web services	AWS S3 Compatible Cloud Storage	Ø	Rackspace
	Wasabi		OpenStack
Ś	Backblaze	*	Dropbox
	Google Cloud Storage		FTP
\bigtriangleup	Google Drive	SFTP	SFTP

2.11 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.

2.12 Network Bandwidth

10 Mbps or above connection speed.

2.13 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.
- Perform test restores periodically to ensure your backup is set up 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.

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.

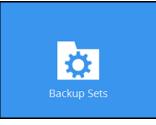
For account with multiple buckets, the backup should be organized into one bucket per backup set. For best practice, make sure to assign one bucket name per backup set so you can ensure that you are selecting the correct file(s) to back up.

3 Creating a Cloud File Backup Set

1. Log in to AhsayOBM.

For instructions on how to do this please refer to <u>Chapter 8</u> of the AhsayOBM v9 Quick Start Guide for Windows.

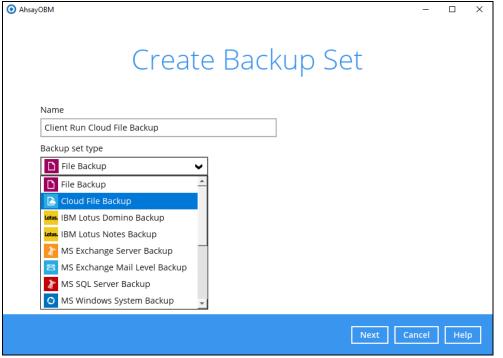
2. In the AhsayOBM main interface, click the following icon.



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

 AhsayOBM 		– 🗆 X
	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.



5. Select the **Cloud type** of the cloud storage that contains the data that you want to back up. For example, Google Drive.

AhsayOBM	-		×
Create Backup Set			
Name			
Client Run Cloud File Backup			
Backup set type			
Cloud File Backup			
Cloud type			
🙆 Google Drive 🖌			
 ご 阿里云 			
👔 Amazon S3 🄐 AWS S3 Compatible Cloud Storage			
🍪 Wasabi			
🔥 Backblaze			
Google Cloud Storage			
Coogle Drive			
Next	ancel	Hel	>

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

7. 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			
▲ Google Drive			
Test			
Next	ancel	Hel	р

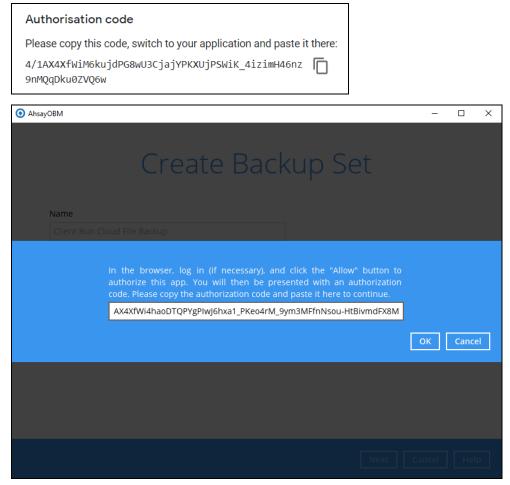
NOTE

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

G Sign in with Google
AH[11]
Ahsay wants to access your Google Account
This will allow Ahsay to:
See, edit, create and delete all of your Google (j) Drive files
Make sure that you trust Ahsay
You may be sharing sensitive info with this site or app. You can always see or remove access in your Google Account.
Learn how Google helps you share data safely.
See Ahsay's privacy policy and Terms of Service.
Cancel Allow

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



10. Click **Next** to proceed.

AhsayOBM	_		×
Create Backup Set			
Name			
Client Run Cloud File Backup			
Backup set type			
Cloud File Backup			
Cloud type			
🝐 Google Drive 🗸 🗸			
✓ Test completed successfully			
Next	Cancel	Hel	р

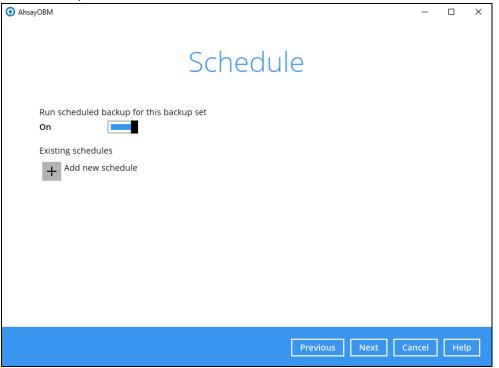
11. In the **Backup Source** window, select the files and/or folders that you would like to back up.

AhsayOBM		-		×
	Backup Source			
Folders				
	Previous Next Ca	incel	Hel	р

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

AhsayOBM	Backup Sourc	e	_		×
Folders	Name	Size	Date modified		
🖃 🔲 📥 Google Drive	🗹 💼 AhsayACB_UserGuideforWindows_versi	14KB	07/10/2018 17:24		
🖶 🗌 📊 Ahsay	🗹 💼 AhsayCBS_version7_UserGuide.docx	14KB	07/10/2018 17:24	^	
🖨 🔲 🔄 backup file	🗹 醇 AhsayCloudFileBackupSolution_v10.pptx	38KB	03/18/2019 15:06		
🕮 🗖 🔂 Archive	🗹 醇 AhsayCloudFileBackupSolution_v7.pptx	38KB	03/18/2019 15:06		
🕀 🗖 🔂 Documents	🗹 醇 AhsayCloudFileBackupSolution_v8.pptx	38KB	03/18/2019 15:06		
🕸 🗔 📙 Excel	🗹 🔁 AhsayCloudFileBackupSolution_v9.pptx	38KB	03/18/2019 15:06		
🖶 🗖 🔂 Photo	🗹 💼 AhsayOBM_version7_QuickStartGuide.d	14KB	07/10/2018 17:24		
filtersamples	🗹 📄 AlertMessageFive.png	2KB	02/28/2019 12:10		
🖮 🗌 📙 installer	🗹 🖹 AlertMessageFour.png	2KB	02/28/2019 12:10		
	🗹 📄 AlertMessageOne.png	2KB	02/28/2019 12:10		
	🗹 🖹 AlertMessageThree.png	2KB	02/28/2019 12:10		
	🗹 🖹 AlertMessageTwo.png	2KB	02/28/2019 12:10		
	🗹 💼 BackupSet_2018.docx	14KB	07/10/2018 17:24	~	
	RackupSet 2019 docx	14KR	07/10/2018 17:24		
✓ Show files	ltems per pa	age 50	✔ Page 1 / 1	~	
	Previou	s N	ext Cancel	Не	lp

12. In the **Schedule** window, configure a backup schedule for backup job to run automatically at your specified time interval. If enabled, click **Add new schedule** to add a new schedule, then click **Next** to proceed.



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

AhsayOBM	_		\times
New Backup Schedule			
Name			
Daily-1			
Туре			
Daily 🖌			
Start backup			
Stop until full backup completed 🖌			
Run Retention Policy after backup			
0	K Cancel	Help	
Previous Nex	ct Cancel	Help	

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

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

New Backup Schedule
Name
Daily-1
Type Daily V
Start backup
Stop until full backup completed 🖌
Run Retention Policy after backup

• 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	t
Start backup	
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
Туре
Monthly 🖌
Backup on the following day every month
● Day Last ▼
🔿 First 🖌 Sunday 🖌
Start backup at
23 \checkmark : 00 \checkmark 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 23 V : 59 V
Stop
until full backup completed 🖌
🖌 Run Retention Policy after backup

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

Start backup)		Start backup)	
every 🖌	1 minute	✓	every 🖌	1 minute	~
Stop	1 minute	^	Stop	30 minutes	^
until full ba	2 minutes	~	until full ba	1 hour	V
	3 minutes			2 hours	
Run Rete	4 minutes	backup	Run Rete	3 hours	backup
	5 minutes			4 hours	
	6 minutes			6 hours	
	10 minutes			8 hours	
	12 minutes	>		12 hours	~

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

New Backup Schedule	New Backup Schedule
Name	Name
Weekly-1	Weekly-2
Type Weekly 🖌	Type Weekly 🖌
Backup on these days of the week	Backup on these days of the week
Sun 🖌 Mon 🖌 Tue 🖌 Wed 🖌 Thu 🖌 Fri 🗌 Sat	🖌 Sun 🔄 Mon 🔄 Tue 🔄 Wed 🔄 Thu 🔄 Fri 🖌 Sat
Start backup	Start backup
every 🗸 4 hours 🗸	at 🖌 21 🖌 : 00 🗸
Stop	Stop
until full backup completed 🖌	until full backup completed 🖌
✓ Run Retention Policy after backup	Run Retention Policy after backup

Figure 1.1

Figure 1.2

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

Figure 1.2 – Normal schedule run at 21:00 or 9:00 PM on Saturday & Sunday during 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 AhsayACB will run a retention policy job to remove files from the backup destination(s) which have exceeded the retention policy after performing a backup job.

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

Multiple backup schedules can be created, 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
Daily-1 Daily (Everyday at 15:00)
Weekly-1 Weekly - Saturday (Every week at 23:00)
Monthly-1 Monthly - The Last Day (Every month at 23:00)
Custom (12/31/2022 at 23:59)
Add

Click Next to proceed.

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

nsayOBM					_		×
	_						
	Desti	natio	on				
Backup mode							
Sequential 🖌							
Existing storage destinations							
+ Add new storage desti		ol					
$\wedge \vee$							
			Previous	Next	Cancel	Hel	n
			Treffous		canaci		12

15. Select the Destination storage.

AhsayOBM			_		×
New Storage Destination / Destination P	001				
Name					
AhsayCBS					
Destination storage					
G AhsayCBS	~				
G AhsayCBS					
Local / Mapped Drive / Network Drive / Removable Drive					
👃 Google Drive					
OneDrive					
FTP FTP					
		ок	Cancel	Hel	C
	Previous	Next	Cancel	Hel	2 I

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

If you have chosen the Local / Mapped Drive / Network Drive / Removable Drive option, click Change to browse to a directory path where backup data will be stored. Check "This share requires access credentials" if credentials are needed to access the directory path. Click Test to validate the path, Test completed successfully shows when the validation is done.

AhsayOBM			—		×
New Storage Destination / Destination D					
New Storage Destination / Destination Po	JOI				
Name					
Local-1					
Destination storage					
📓 Local / Mapped Drive / Network Drive / Removable Drive 🥆	•				
Path (Input local / network address or click [Change])					
Change					
This share requires access credentials					
Test					
		ОК	Cancel	Hel	p
	Previous	Next	Cancel	Hel	р

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

AhsayOBM	_		×
New Storage Destination / Destination Pool			
Name			
OneDrive-1			
Destination storage			
ConeDrive			
Access the Internet through proxy			
Test			
Sign up for OneDrive			
0	K Cancel	Не	lp

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

• AhsayOBM	_		×
New Storage Destination / Destination Pool			
Name			
FTP-1			
Destination storage			
FTP FTP			
Host Port			
Username			
Password			
(optional) FTP directory to store backup data (default to ~/Ahsay)			
Connect with SSL/TLS (explicit only)			
Access the Internet through proxy			
Test			
ОКС	ancel	He	lp
Previous Next Ca	ancel	He	lp

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

O AhsayOBM	-		×
Destination			
Backup mode Sequential Existing storage destinations AhsayCBS Host: 10.3.121.17:80			
C:\backup C:\backup C:\backup	i.		
Add			
Previous Next C	ancel	Hel	p

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.

	Encryption	
Encrypt Backup Data On		
Encryption Type		
Default User passwork Custom		

You can choose from one of the following three (3) Encryption Type options:

- **Default (Machine Generated Random)** an encryption key with 44 alpha numeric characters will be randomly generated by the system.
- User password the encryption key will be the same as the login password of your AhsayOBM at the time when this backup set is created. Please be reminded that if you change the AhsayOBM login password later, the encryption keys of the backup sets previously created with this encryption type will remain unchanged.
- **Custom** you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length.

Encryption
Encrypt Backup Data On Encryption Type Custom Algorithm AES
Encryption key
Re-enter encryption key
Method ECB OCBC Key length 128-bit O 256-bit

18. 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.

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

V			
	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.		
	rcX1MBE4brnZO86eKOp6FeabuuRRi3qDXG9q5uBxF0s=		
	Mask encryption key		
	[Copy to clipboard	Confirm

- **Copy to clipboard** Click this to copy the encryption key, then you can paste it on another location of your choice for your reference (e.g. notepad).
- **Confirm** Click this to exit this pop-up window and proceed to the next step.

19. Enter the **Domain Name / Host Name**, **User name** and **Password** of the Windows account that will be running the backup.

sayOBM	-		
Windows User Authenticatio	n		
Domain Name (e.g Ahsay.com) / Host Name			
example.com			
User name			
Administrator			
Password			
•••••			
Previous Next Ca	ancel	Не	
Previous Next Ca	incer	Ене	ł

20. The cloud file backup set is created succesfully.

AhsayOBM		-		×
	Congratulations!			
	"Client Run Cloud File Backup" is successfully created.			
	Backup i	now	Clos	e

21. 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 Drive C.

Go to Others >	Temporar	y Directory.	Click Change to	browse for	another location.
----------------	----------	--------------	-----------------	------------	-------------------

AhsayOBM		– 🗆 ×
Client Run Cloud File	Temporary Directory	
	Temporary directory for storing backup files	
General	D:\	Change
Source	119.89GB free out of total 120GB space in D: 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	
Reminder	Algorithm AES	
Bandwidth Control	Method CBC	
Bandwidth Control	Key length 256 bits	
Others		
Hide advanced settings		
Delete this backup set	Save	Cancel Help

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

Go to Others > Compressions. Select from the following:

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

Backup Schedule	Compressions			
Destination	Select compression type			
Deduplication	Fast with optimization for local			
	No Compression			
Retention Policy	Normal			
Command Line Tool	Fast (Compressed size larger than normal)			
Command Line 100	Fast with optimization for local			

4 Running a Backup Job

For an overview of the backup process, please refer to <u>Chapter 12</u> in the AhsayOBM v9 Quick Start Guide for Windows.

To start a backup, follow the steps below:

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



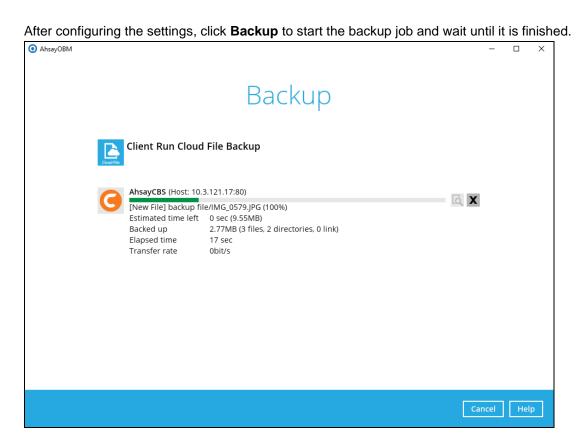
2. Select the backup set which you would like to start a backup on.

AhsayOBM					-		×
		Backup Sets	S				
				Sort by Creation Time			
	Cloud File	Client Run Cloud File Backup Owner: AM017L Newly created on Tuesday, November 16, 2021 16:2	1				
	Cloud File	Server Run Cloud File Backup Owner: - Newly created on Tuesday, November 16, 2021 17:3	3				
	Add						
					Close	Hel	р

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

AhsayOBM	-		×
Choose Your Backup Options			
Client Run Cloud File Backup			
Backup set type Cloud File			
Destinations			
AhsayCBS (Host: 10.3.121.17:80)			
Local-1 (C:\backup)			
🖌 🤷 OneDrive-1 (Account:			
Migrate Data			
Migrate existing data to latest version			
Retention Policy			
Run Retention Policy after backup			
Hide advanced option			
		_	_
Previous Backup C	Cancel	Hel	р
NOTE			

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>.



4. The backup job through AhsayOBM completed successfully.

AhsayOBM				-		Х
		Backup				
Cloud File	Client Run Cloud	File Backup				
G	AhsayCBS (Host: 10.3 Backup Completer Estimated time left Backed up Elapsed time Transfer rate	d Successfully	<u>م</u>			
				lose	Hel	р

5. corresponding date and time.

AhsayOBM × Show All v Time 11/16/2021 17:39:54 11/16/2021 17:39:55 Log Start [AhsayOBM v9.0.0.46] A Saving encrypted backup set encryption keys to server... ~ 0 0 0 0 0 Start Backup ... [Migrate Delta: Incremental] 11/16/2021 17:39:57 Using Temporary Directory Ci\Users\admin\.obm\temp\1637050903813\0BS@1637051254368 Start running pre-commands 11/16/2021 17:39:57 11/16/2021 17:40:01 0000000 Finished running pre-commands 11/16/2021 17:40:01 11/16/2021 17:40:01 Downloading server file list.. Downloading server file list... Completed 11/16/2021 17:40:02 Reading backup source from hard disk... 11/16/2021 17:40:04 000 11/16/2021 17:40:05 [New Directory]... backup file [New Directory]... backup file/with filter 11/16/2021 17:40:05 Reading backup source from hard disk... Completed 11/16/2021 17:40:05 [New File]... 10% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" 11/16/2021 17:40:06 [New File]... 20% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" [New File]... 31% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" 11/16/2021 17:40:06 11/16/2021 17:40:06 [New File]... 42% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" 11/16/2021 17:40:06 [New File]... 53% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" [New File]... 64% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" 11/16/2021 17:40:06 11/16/2021 17:40:06 [New File]... 75% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" [New File]... 85% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" Ŏ 11/16/2021 17:40:06 11/16/2021 17:40:06 Logs per page 50 🗸 Page 1/5 🗸

To view the backup logs, click the button. This will display the backup job process with

In order to view the backup report, go back to the main interface and click the following icon.



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

O AhsayOBM	- 🗆 X
Report	Backup Report
Backup	From To 09 Nov 2021 16 Nov 2021 Go
Restore	Backup set 🗸 Destination 🖌 Completion Status 🗸
Usage	Client Run Cl G AhsayCBS Today 17:41 Completed
	No. of records per page 50 V Page 1/1 V
	Close Help

Click the backup report to display the summary of the backup job. You can also click the **View Log** button that will redirect you to the log summary of your backup.

AhsayOBM	- D X
Report	Backup Report
	From To
Backup	09 V Nov V 2021 V 16 V Nov V 2021 V Go
Restore	Backup set 🗸 Destination 🖌 Completion Status 🗸
Usage	Backup set 🕒 Client Run Cloud File Backup
00000	Destination G AhsayCBS
	Job 11/16/2021 17:39
	Time Today 17:39 - 17:41 (SGT)
	Status Completed successfully
	New files * 26 [12.3MB/12.3MB (0%)]
	Updated files * 0
	Attributes Changed Files * 0
	Moved files * 0
	Deleted files * 0
	Dedupe Saving 0/12.3M [0.0%]
	* Unit = No of files [Total zipped size / Total unzipped size (compression ra
	View log
	No. of records per page 50 V Page 1 / 1 V
	Close Help
AhsayOBM	×
Report	

Log	11/16/2021 17:39 🖌	Show	All
		311000	
Туре	Log		Time
0	Start [AhsayOBM v9.0.0.46]		/2021 17:39:54
O	Saving encrypted backup set encryption keys to server		/2021 17:39:55
Ø	Start Backup [Migrate Delta: Incremental]		/2021 17:39:57
0	Using Temporary Directory C:\Users\admin\.obm\temp\1637050903813\OBS@1637051254368		/2021 17:39:57
0	Start running pre-commands		/2021 17:40:01
0	Finished running pre-commands		/2021 17:40:01
0	Downloading server file list		/2021 17:40:01
0	Downloading server file list Completed		/2021 17:40:02
0	Reading backup source from hard disk		/2021 17:40:04
0	[New Directory] backup file		/2021 17:40:05
0	[New Directory] backup file/with filter		/2021 17:40:05
0	Reading backup source from hard disk Completed		/2021 17:40:05
0	[New File] 10% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc"		/2021 17:40:06
ŏ	[New File] 20% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc"	11/16/2021 17:40:06 11/16/2021 17:40:06	
ŏ	[New File] 31% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc"		/2021 17:40:06
ŏ	[New File] 42% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc" [New File] 53% of "backup file/Best Practices and Recommendations draft 03162020-updated-ivy.doc"		/2021 17:40:06
ŏ	[New File] 55% of "backup file/Best Practices and Recommendations_draft_03162020-updated-ivy.doc"		/2021 17:40:06
	per page 50 V		Page 1/5

You can also search for backup reports from a specific period of date using the **From** and **To** date filter. Set this and available backup report will be displayed.



5 Restoring a Cloud File Backup Set

AhsayOBM provided three (3) options in restoring a backup such as through the **Local machine**, **Original location**, and **Alternate location**. 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, you can also restore your data to your original location, on the cloud storage, where you backed up them.

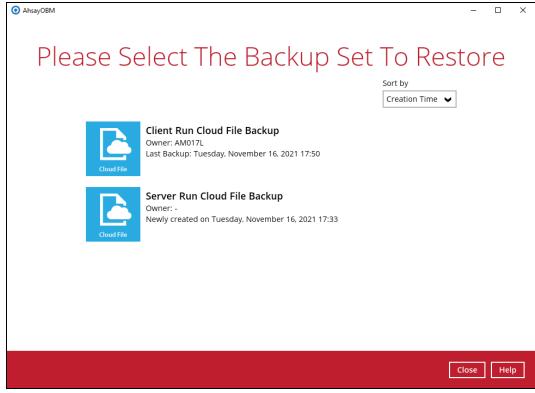
Alternate location

Besides the two (2) options above, you can also restore your data to an alternate location which is through the same cloud storage but on a different folder.

1. On the main interface, click the following icon.

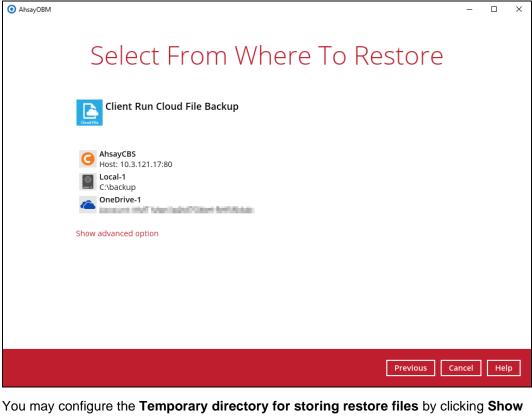


2. Select the backup set that you would like to restore.





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



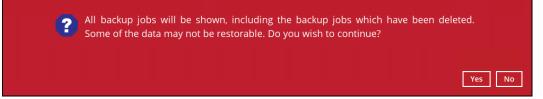
advanced option. By default, the temporary files are stored under the temp directory of the user profile directory. In case the same directory path does not exist in the computer where AhsayOBM is running, you have to click **Browse** to define a new location for storing the temporary files. Otherwise,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

Temporary directory for storing restore files	
C:\Users\Administrator\temp	Browse
Hide advanced option	

4. Tick **Show backup job(s) outside retention** if you want all backup jobs to be displayed, even the deleted ones.

Show backup job(s) outside retention

Once ticked, this message will be displayed. Click **Yes** if you want all backup jobs to be displayed, otherwise click **No.**





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

уОВМ			- 0
	$C = 1 = -\pm M$		l
	Select Y	our Files To Be Resto	rea
	Select what to restore		
	Choose from files as of jo	b V 11/16/2021 V Latest V Show backup job(s) out	tside retention
	Folders	Name Size Date m	odified
	⊡ 🕒 AhsayCBS	Monitoring_AdministrationLogs_Activitie 4KB 06/25/202	20 14:44
	🖻 🔲 📙 backup file	Monitoring_AdministrationLogs_AuditTra 4KB 06/25/202	20 15:21
	🗄 🗹 🔜 with filter	🗹 🗋 Monitoring_AdministrationLogs_Messag 1KB 06/25/202	20 14:44
		Monitoring_AdministrationLogs_SNMPLo 3KB 06/25/202	20 14:17
		Monitoring_BackupRestoreLogs_Activitie 4KB 06/25/202	20 15:31
		Monitoring_BackupRestoreLogs_Backup 2KB 06/25/202	20 15:08
		Monitoring_BackupRestoreLogs_Backupl 4KB 06/25/202	20 15:50
		Monitoring_BackupRestoreLogs_Backup 3KB 06/25/202	20 15:13
		Monitoring_BackupRestoreLogs_Restore 3KB 06/25/202	20 15:09
		Monitoring_LiveActivities_Backup.jsp 4KB 06/25/202	20 14:18
		Monitoring_LiveActivities_Backup_Backu 3KB 06/22/202	20 17:33
		Monitoring_LiveActivities_Receiver.jsp 2KB 06/25/202	20 14:19
		Monitoring_LiveActivities_Redirection.jsp 3KB 06/25/202	20 14:19
		Monitoring_LiveActivities_Replication.jsp 2KB 06/25/202	20 14:19
		Monitoring_LiveActivities_Restore.jsp 4KB 06/25/202	20 14:20 🗸
		✓ Monitoring_RedirectionLogs_ActivitiesLo 3KB 06/25/202	20 15:48
	Restore to local comput	ter Items per page 50 🗸 Pa	age 1/1 🖌
	Search		
		Previous	Next Cancel H
			والمتحديق والتقتيل

Tick **Restore to local computer** if you want to restore the backup data to the local drive. Once done selecting the files and/or folders to restore, click **Next** to proceed.

Select Yo	our Files To Be	e Re	estored	Ł
Select what to restore				
Choose from files as of job	• ♥ 11/16/2021 ♥ Latest ♥ □ Sho	w backuj	p job(s) outside reten	ition
Folders	Name	Size	Date modified	
E. G AhsayCBS	Marne	4KB	06/25/2020 14:44	
🗄 🔲 📙 backup file	Monitoring_AdministrationLogs_AuditTra	4KB	06/25/2020 15:21	^
	Monitoring_AdministrationLogs_Messag	1KB	06/25/2020 14:44	
	Monitoring AdministrationLogs SNMPLo	3KB	06/25/2020 14:17	
	Monitoring_BackupRestoreLogs_Activitie	4KB	06/25/2020 15:31	
	Monitoring_BackupRestoreLogs_Backup	2KB	06/25/2020 15:08	
	Monitoring BackupRestoreLogs Backup	4KB	06/25/2020 15:50	
	Monitoring_BackupRestoreLogs_Backup	3KB	06/25/2020 15:13	
	Monitoring_BackupRestoreLogs_Restore	3KB	06/25/2020 15:09	
	Monitoring_LiveActivities_Backup.jsp	4KB	06/25/2020 14:18	
	Monitoring_LiveActivities_Backup_Backu	3KB	06/22/2020 17:33	
	Monitoring_LiveActivities_Receiver.jsp	2KB	06/25/2020 14:19	
	Monitoring_LiveActivities_Redirection.jsp	3KB	06/25/2020 14:19	
	Monitoring_LiveActivities_Replication.jsp	2KB	06/25/2020 14:19	
	Monitoring_LiveActivities_Restore.jsp	4KB	06/25/2020 14:20	U
	Monitoring_RedirectionLogs_ActivitiesLo	3KB	06/25/2020 15:48	-
🖌 Restore to local comput	er Items per pa	ge 50	✔ Page 1 / 1	•
Search				

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 14.2</u> of the AhsayOBM v9 Quick Start Guide for Windows.

For more detailed examples using the restore filter, refer to <u>Appendix A: Example</u> <u>Scenarios for Restore Filter</u>.

- 6. 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 the corresponding directory path on the local drive where you want the backup data to be restored.

AhsayOBM	,	×
Ch	oose Where The File	es To Be Restored
	Restore files to	
	C:\restored	Browse
	Show advanced option	
		Previous Restore Cancel Help

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

Choose Where The Files
Restore files to C:\restored
Verify checksum of in-file delta files during restore Hide advanced option

Verify checksum of in-file delta files during restore

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

Original location

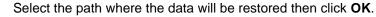
If you have chosen this option, the backup data will be restored to the computer running the AhsayOBM under the same directory path.

	•
AhsayOBM	- 🗆 X
Choose Where The Files	To Bo Postarad
	TO DE RESLOTEU
Restore files to	
 Original location 	
Alternate location	Change
	change
Verify checksum of in-file delta files during restore	
Hide advanced option	
	Previous Restore Cancel Help
	Restore Cancer Incip

• 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.

O AhsayOBM − □ ×
Choose Where The Files To Be Restored
choose where the thes to be restored
Restore files to Original location
Alternate location Change
Verify checksum of in-file delta files during restore
Hide advanced option
Previous Restore Cancel Help



 AhsayOBM 				
	Change Path			
	□ – Google Drive			
	Ahsay			
	CloudBacko			
	a journy me			
İ				_
		ж	Canc	el
	Previous Restore Ca	ncel	He	
• AhsayOBM		_		P
		-		
	oose Where The Files To Be Resto	-		
		-		
	oose Where The Files To Be Resto Restore files to Original location	-		
	Restore files to	- or		
	Restore files to Original location Image: Alternate location Change	- or		
● AhsayOBM	Restore files to Original location	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Olivity Alternate Location Change Verify checksum of in-file delta files during restore	- or		
	Restore files to Original location Alternate location Change Verify checksum of in-file delta files during restore Hide advanced option	- or		

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.

NOTE

7. Click the **Restore** button to start the restoration process.

AhsayOBM			- 0	×
Choose Where Th	o Eilos To Bo P	octo	rod	
CHOOSE WHELE H	IE FIIES TO DE IN	ESIO	leu	
Restore files to				
Original location		_		
Alternate location Alternate Location		Change		
Show advanced option				
	Previous	Restore	Cancel H	lelp

8. The following screen will be displayed after the restore process is complete.

			-	
	Restore			
Client Run Clou	d File Backup			
Cloud File	·			
AhsayCBS (Host: 10).3.121.17:80)			
			là	
Transfer rate	4.08Mbit/s			
			Close	Help
			ciose	help
	AhsayCBS (Host: 10 Restore Comple Estimated time left Restored Elapsed time	AbsayCBS (Host: 10.3.121.17:80) Restore Completed Successfully Estimated time left 0 sec Restored 11.93MB (2 files) Elapsed time 26 sec	Client Run Cloud File Backup AhsayCBS (Host: 10.3.121.17:80) Restore Completed Successfully Estimated time left 0 sec Restored 11.93MB (2 files) Elapsed time 26 sec	Restore Client Run Cloud File Backup Image: Client Run Cl

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.

Appendix

Appendix A Example Scenarios for Restore Filter

Example No. 1: Restore filter setting - Files and Directories

Location:	Photos/TestFiles/Photos
Search subfolders:	True
Kind:	Files and Directories
Туре:	Contains
Pattern:	Test
Match Case:	True

Search				
Look in				
Photos/TestFiles/Photos			Change	
Search subfolders				
Kind	Туре	Pattern		
Files and Directories 🖌	contains 🖌 🖌	Test	✓ Match case	
Search				
Name	In Folder	Size	Date modified	
Items per page 50 🗸			Page - 🗸	
			OK Cancel Help	

Search						
Look in						
Photos/TestFiles/Photos					Change	
 Search subfolders 						
Kind	Туре	Pattern				
Files and Directories 🖌	contains 🗸 🗸	Test		✓ M	latch case	
Searching	Stop					
Name	In Folder		Size	Date modified		
	Photos/TestFiles/Photos Photos/TestFiles/Photos		517 KB 517 KB	10/16/2019 03:02 10/16/2019 03:02		
	Photos/TestFiles/Photos		517 KB	10/16/2019 03:03	2	
	Photos/TestFiles/Photos		517 KB	10/16/2019 03:0-		
	Photos/TestFiles/Photos		517 KB	10/16/2019 03:04		
	Photos/TestFiles/Photos Photos/TestFiles/Photos		517 KB 517 KB	10/16/2019 03:0 10/16/2019 03:0		
	Photos/TestFiles/Photos		517 KB	10/16/2019 03:00		
🗹 風 TestPNG-4.png	Photos/TestFiles/Photos		517 KB	10/16/2019 03:06	6 🗸	
V 🛤 TestPNG-5.png	Photos/TestFiles/Photos		517 KB	10/16/2019 03:0	7	
Items per page 50 🗸	·			Page	1/1 🖌	
				Г	OK Cancel	Help
						Help
Gaanah						
Search						
Search Look in						
					Change	
Look in Photos/TestFiles/Photos					Change	
Look in Photos/TestFiles/Photos		Dattern			Change	
Look in Photos/TestFiles/Photos Search subfolders Kind	Туре	Pattern				
Look in Photos/TestFiles/Photos	Type	Pattern Test			Change Natch case	
Look in Photos/TestFiles/Photos Search subfolders Kind		1				
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories		1	Size		latch case	
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories Search Search Name TestPG-1.jpg	In Folder Photos/TestFiles/Photos	1	517 KB	Date modified 10/16/2019 03:02	latch case	
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories Search Search Name TestPG-1.jpg F TestPG-2.jpg	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0:	latch case	
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories Search Search Name © InstPG-1.jpg © InstPG-2.jpg V InstPG-3.jpg	In Folder Photos/Testriles/Photos Photos/Testriles/Photos Photos/Testriles/Photos	1	517 KB 517 KB 517 KB	Date modified 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00	latch case	
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories Search Search Name Search Interpolyce TestDPG-3.jpg For TestDPG-3.jpg For TestDPG-4.jpg For TestDPG-4.jpg	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0:	latch case	
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories Search Search Search Interpret TestPG-1.jpg Interpret TestPG-2.jpg Interpret TestPG-3.jpg Interpret TestPG-3.jpg Interpret TestPG-5.jpg Interpret TestPG	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0:	latch case	
Look in Photos/TestFiles/Photos Search subfolders Kind Files and Directories Search Search V TestDPG-1.jpg V TestDPG-2.jpg V TestDPG-3.jpg	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00	latch case	
Look in Photos/TestFiles/Photos Kind Files and Directories Search	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0:	latch case	
Look in Photos/TestFiles/Photos Kind Files and Directories Search Search Name Files and Directories TestPG-1.jpg Files TestPG-2.jpg FilestDG-4.jpg FilestDG-4.jpg FilestDG-4.pg F	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00 10/16/2019 03:00	latch case	
Look in Photos/TestFiles/Photos Kind Files and Directories Search Search Name Files and Directories TestPG-1.jpg Files TestPG-2.jpg FilestDG-4.jpg FilestDG-4.jpg FilestDG-4.pg F	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 0/16/2019 03:0:	latch case	
Look in Photos/TestFiles/Photos Kind Files and Directories Search	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 0/16/2019 03:0:	latch case	
Look in Photos/TestFiles/Photos Kind Files and Directories Search	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 10/16/2019 03:0: 0/16/2019 03:0:	latch case	Help
Look in Photos/TestFiles/Photos Kind Files and Directories Search	In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	1	517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB 517 KB	Date modified 10/16/2019 03:0: 10/16/2019 03:0: Page	latch case	Help

Explanation:

All files and directories under <u>/Photos/TestFiles/Photos</u> that has the exact pattern of 'Test" with matchcase set to true will be included upon performing search.

As you can see on the screenshot above, the result panel contains the Name of the Files and/or Directories, Directory of the files and/or directories which are indicated in Folder column, Size of each files and/or directories, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. Meaning the filter will include all available subfolders in /Photos folder upon searching. And it will strictly search only the specified pattern and case which contains with 'Test'.

Location:	Photos/TestFiles/Photos
Search subfolders:	True
Kind:	Files only
Туре:	Starts with
Pattern:	Т
Match Case:	True

Example No. 2: Restore filter setting - Files only

Search					
Look in					
Photos/TestFiles/Photos				Change	
Search subfolders					
Kind	Туре	Pattern			
Files only 🗸 🗸	starts with $~ullet$	Т	1	Match case	
Search					
Name	In Folder	Size	Date mo	Page - 🖌	
				ОК Сапсе	Help
			Previous	Next Cance	l Help

Search				
Look in				
Photos/TestFiles/Photo	05			Change
 Search subfolders 				
Kind	Type Patte	ern		
Files only	✓ starts with ✓ T			✓ Match case
				_
Searching	Stop			
Name	In Folder	Size	Date m	
TestJPG-1.jpg	Photos/TestFiles/Photos		517 KB 10/16/201	
 TestJPG-2.jpg TestJPG-3.jpg 	Photos/TestFiles/Photos Photos/TestFiles/Photos		517 KB 10/16/201 517 KB 10/16/201	19 03:02
V E TestJPG-4.jpg	Photos/TestFiles/Photos		517 KB 10/16/201	
V E TestJPG-5.jpg	Photos/TestFiles/Photos		517 KB 10/16/201	
TestPNG-1.png	Photos/TestFiles/Photos		517 KB 10/16/201	
🖌 🏽 TestPNG-2.png	Photos/TestFiles/Photos	5	517 KB 10/16/201	9 03:05
🗹 🛤 TestPNG-3.png	Photos/TestFiles/Photos	5	517 KB 10/16/201	
🗹 風 TestPNG-4.png	Photos/TestFiles/Photos		517 KB 10/16/201	•
V 🔍 TestPNG-5.png	Photos/TestFiles/Photos	5	517 KB 10/16/201	9 03:07
Items per page 50	•		Р	age 1/1 ♥
				OK Cancel
			Provious	Next Cancel
General				
Search				
Search				
	05			Change
Look in Photos/TestFiles/Photo	05			Change
Look in Photos/TestFiles/Photo				Change
Look in Photos/TestFiles/Photo Search subfolders Kind	Type Patt	ern		
Look in Photos/TestFiles/Photo		ern		Change ✓ Match case
Look in Photos/TestFiles/Photo Search subfolders Kind	Type Patt	ern		
Look in Photos/TestFiles/Photo Search subfolders Kind Files only	Type Patt	ern	Date m	Match case
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search	Type Patte	Size	517 KB 10/16/201	Match case
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search V TestPG-1.jpg V TestPG-2.jpg	Type Patter Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/201 517 KB 10/16/201	Match case
Look in Photos/TestFiles/Photo ✓ Search subfolders Kind Files only Search Name ✓ ■ TestPG-1,pg ✓ ■ TestPG-2,pg ✓ ■ TestPG-3,pg	Type Patter Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/201 517 KB 10/16/201 517 KB 10/16/201	Match case
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search Name V E TestPG-1.pp V E TestPG-2.pp V E TestPG-3.pp V E TestPG-3.pp V E TestPG-4.pp	Type Patter starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/201	Match case
Look in Photos/TestFiles/Photo Kind Files only Search Search V IN TestPG-1.jpg V IN TestPG-2.jpg V IN TestPG-3.jpg V IN TestPG-4.jpg V IN TestPG-4.jpg V IN TestPG-5.jpg V IN TestPG-5.jpg	Type Patt Starts with T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/20 1	Match case
Look in Photos/TestFiles/Photo Kind Files only Search Search V TestPG-1.jpg V TestPG-2.jpg V TestPG-3.jpg V TestPG-4.jpg V TestPG-5.jpg V	Type Patt Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/201	Match case Match case 903:02 903:02 903:04 903:04 903:04 903:05
Look in Photos/TestFiles/Photo Kind Files only Search Search V IN TestPG-1.jpg V IN TestPG-2.jpg V IN TestPG-3.jpg V IN TestPG-4.jpg V IN TestPG-4.jpg V IN TestPG-5.jpg V IN TestPG-5.jpg	Type Patt Starts with T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/20 1	Match case Match case 903:02 903:02 903:03 903:04 903:04 903:05
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search Name V E TestPG-1,pg V E TestPG-3,pg V E TestPG-3,pg V E TestPG-5,pg V E TestPG-5,pg V E TestPG-5,pg V E TestPG-2,pg	Type Patter Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/201	Match case
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search V E TestPG-1,pg V E TestPG-1,pg V E TestPG-3,pg V E TestPG-3,pg	Type Patt Starts with V T Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/20 i	Match case
Look in Photos/TestFiles/Photo Kind Files only Search Search V TestPG-1,pg V TestPG-2,pg V TestPG-3,jg V TestPG-4,pg V TestPG-5,jgg V TestPG-5,jgg V TestPG-5,jgg V TestPG-2,pg V TestPG-2,pg V TestPG-2,pg V TestPG-2,pg V TestPG-4,pg V TestPNG-1,pg V TestPNG-4,pg V TestPNG-4,pg	Type Patt Starts with T In Folder Photos/TestFiles/Photos Photos/TestFiles	Size	517 KB 10/16/20 i 517 KB 10/16/20 i	Match case
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search V = TestPG-1.jpg V = TestPG-3.jpg V = TestPG-3.jpg	Type Patt Starts with V T Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/20 i 517 KB 10/16/20 i	Match case
Look in Photos/TestFiles/Photo Search subfolders Kind Files only Search V = TestPG-1.jpg V = TestPG-3.jpg V = TestPG-3.jpg	Type Patt Starts with V T Starts with V T In Folder Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos Photos/TestFiles/Photos	Size	517 KB 10/16/20 i 517 KB 10/16/20 i	Match case

Explanation:

All files only under <u>/Photos/TestFiles/Photos</u> that has the exact pattern of 'T" with match-case set to true will be included upon performing search.

As you can see on the screenshot above, the result panel contains the Name of the files, Directory of the files which are indicated in Folder column, Size of each files, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. Meaning the filter will include all available subfolders in /Photos folder upon searching. And it will strictly search only the specified pattern and case which starts with 'T'.

Location:	Photos/TestFiles
Search subfolders:	True
Kind:	Directories only
Туре:	Ends with
Pattern:	S
Match Case:	True

Example No. 3: Restore filter setting - Directories only

Search			
Look in			
Photos/TestFiles			Change
Search subfolders			
Kind	Type Patterr	I	
Directories only	✓ ends with ✓ s		✓ Match case
Search			
Name	In Folder	Size	Date modified
Items per page 50	✓		Page - 🖌
			OK Cancel Help
			Previous Next Cancel Help

Search
Look in
Photos/TestFiles Change
Search subfolders
Kind Type Pattern
Directories only V ends with V s Atch case
Searching Stop
Name In Folder Size Date modified Value Photos/TestFiles
Photos Photos/TestFiles
Items per page 50 V Page 1 / 1 V
OK Cancel Help
Previous Next Cancel Help
Search
Search
Look in
Look in Photos/TestFiles Change
Look in Photos/TestFiles Change Search subfolders
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern
Look in Photos/TestFiles Change Search subfolders
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only ends with s Match case Search
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only Pattern In Folder Size Date modified
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only ends with s Match case Search
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only ends with s Match case Search
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only Padders Search Name In Folder Size Date modified Photos/TestFiles
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only ends with s Match case Search
Look in Photos/TestFiles Change Search subfolders Kind Type Pattern Directories only Padders Search Name In Folder Size Date modified Photos/TestFiles
Look in Photos/TestFiles Change Search

Explanation:

All directories only under <u>/Photos/TestFiles</u> that has the exact pattern of 's" with match-case set to true will be included upon performing search.

As you can see on the screenshot above, the result panel contains the Name of the directories, Directory which are indicated in Folder column, Size of each directories, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. Meaning the filter will include all available subfolders in /TestFiles folder upon searching. And it will strictly search only the specified pattern and case which ends with 's'.