

Ahsay Online Backup Manager v7 Microsoft Exchange 2007/2010/2013 (MAPI) Mail Level Backup & Restore Guide

Ahsay Systems Corporation Limited

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

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Revision History

Date	Descriptions	Type of modification
15 July 2016	First Draft	New
3 February 2017	Added instructions and screen shots for Encryption key handling in Ch. 4.1 & Ch. 6.2	New
5 April 2017	Added Encryption Type option in Ch. 4.1 & Ch. 6.2	New
26 Oct 2017	Ch 1.1, 2, 2.1, 2.2, 2.3, 2.4, 2.6, 2.8, 2.9, 2.11, 2.17, 3, 4.1, 6.2, 8	Updated
14 September 2018	Added requirement of Antivirus Exclusion for Ch.2.2	New
20 January 2020	Added the Advisory for the Supported Protocol for Microsoft Exchange Server 2013 in Ch. 2.1; Modified the Creation of Mail Level Backup Set in Ch. 4.1; Modified the Running of Mail Level Backup Set in Ch. 4.2; Modified the Restoring of Mail Level Backup Set in Ch. 5.1; Added the Appendix A: Creating Mail Level Backup Set for Microsoft Exchange 2013 using CBS Web Console;	New / Modifications

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1 Getting started

1.1 Introduction

This user guide aims to provide detailed information on backing up and restoring individual mail items and public folder items stored in Microsoft Exchange Server 2007/2010/2013 with AhsayOBM using the MS Exchange mail level backup set.

An MS Exchange mail level backup must be utilized in conjunction with full Information Store backup (Exchange Database backup set), as mail level backup for Microsoft Exchange Server is not designed to fully protect an Exchange Server, but to facilitate easy and fast recovery of emails, contacts, calendars for individual mailboxes and public folder items.

AhsayOBM supports backup of mailboxes on both MS Exchange server in backup option for Exchange Server deployed in standalone and Database Availability Group (DAG) setups.

1.2 What is this software?

Ahsay brings you specialized client backup software, namely AhsayOBM, to provide a set of tools to protect your mailboxes and public folders on Microsoft Exchange Server 2007/2010/2013. This includes backup and recovery of individual emails, contacts, calendars and other mail items in your mailboxes and public folders, with snapshots / versioning, and retention policy to protect even email that you may have accidentally deleted from your Exchange 2007/2010/2013 mailboxes or public folders.

1.3 System Architecture

Below is the system architecture diagram illustrating the major elements involved in the backup process among the Microsoft Exchange Server, AhsayOBM backup client, AhsayCBS backup server, and Cloud storage.



1.4 Why should I use AhsayOBM to back up my Exchange 2007/2010/2013 Mailboxes and Public Folders?

We are committed to bringing you a comprehensive Exchange 2007/2010/2013 mail level backup solution with AhsayOBM. Below are some key areas we can help make your backup experience a better one.



Easy Setup % Professional Services

Setup is a few clicks away-our enhanced AhsayOBM v7 can be easily downloaded and installed in just a few clicks. The refined user interface also provides user-friendly instruction to guide you through installation, configuration, backup and restore. The intuitive setup procedures together with instructions in this user guide makes the software installation and operation easy even for layman users. That being said, if you do run into any problems during setup, we are here to help out. Visit the URL below for details on technical assistance.

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

Professional Services

AhsayOBM Installation and Configuration Service

If you would like to save the time of reading through this document for setup, we have introduced this service to take care of all the installation and setup for you. On top of the installation and setup services, we also have a whole series of premium after-sales services to provide you with the best user experiences possible.

Valid Maintenance

Our Valid Maintenance provides you with professional and timely customer support along the way. You are entitled to the Valid Maintenance for free during the first year of your service subscription, and recurring annual fee at 20% of your annual subscription fee.

Refer to our Professional Services webpage for further details and subscription.

Fast and Efficient

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

AhsayOBM is designed with advanced technologies to make backup a fast and efficient process.

We also understand that you may wish to run backup at a specified time interval of your choice, that's why we also allow you to set your own backup schedules so that you can take full control of the time when to perform backup.

- Multi-threading-this technology utilizes the computing power of multiple CPU cores for creating multiple backup and restore threads to produce fast backup and restore performance.
- Block Level Incremental Backup–this technology breaks down the backup files into multiple blocks and only the changed blocks will be backed up each time.



Our enriched features on the centralized web console offers you a one-stop location for monitoring and managing your backup and restore, whether you are a system administrator or backup user. Below is an overview of what you can do with it. For more details regarding the setup and operations of the centralized management console, refer to the <u>AhsayCBS</u> <u>User's Guide</u> for details.

- O Create backup set
- Configure user settings
- Configure backup settings
- View and download backup and restore reports
- Monitor backup and restore live activities

Cloud Destination Backup

To offer you with the highest flexibility of backup destination, you can now back up mail objects to a wide range of cloud storage destinations. Below is a list of supported cloud destinations.

Aliyun (阿里云) *	CTYun (中国电信天翼云)*	Amazon S3	Amazon Cloud Drive
Google Cloud Storage	Google Drive	OneDrive	Microsoft OneDrive / OneDrive for Business
Rackspace	OpenStack	Microsoft Azure	Dropbox
FTP	SFTP	AWS S3 Compatible Cloud Storage	

Cloud backup gives you two major advantages:

- Cloud Backup for Extra Protection you can back up your MS Exchange mail objects to a cloud destination of your choice. Utilizing cloud backup gives you an extra layer of protection in the event of a local drive corruption, where you will still be able to retrieve data from the cloud destination.
- Eliminate Hardware Investment with the increasingly affordable cloud storage cost, you can deploy on cloud platform and utilize cloud storage as your centralized data repository, or simply expand your cloud storage as a backup destination without having to invest on hardware.



We understand your Exchange mail objects may contain sensitive information that needs to be protected, that is why 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, you can turn on the encryption feature which will be default encrypt the backup data locally with AES 256-bit truly 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. You 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.

1.5 About This Document

1.5.1 Document

The document is divided into two main parts.

Part 1: Preparation for Exchange Mail-Level Backup & Restore

Requirements Requirements for AhsayOBM, MS Exchange Server 2007/2010/2013, and Windows Operating System.

Part 2: Perform Mail-Level Backup and Restore on MS Exchange Server

Standalone Backup Option

Create mail-level backup set, run mail-level backup job and restore mail-level backup

Database Availability Group (DAG) Backup Option

Create mail-level backup set, run mail-level backup job and restore mail-level backup

1.5.2 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 make mail-level backup of Exchange Server 2007/2010/2013 on AhsayOBM, as well as to carry out an end-to-end backup and restore process.

1.5.3 Who should read this document?

This documentation is intended for backup administrators and IT professionals who are responsible for the Exchange Server 2007/2010/2013 mail-level backup and restore.

2 Preparation for Backup and Restore

2.1 Advisory on Supported Protocol for Microsoft Exchange Server 2013

This advisory will explain the supported protocol for the Microsoft Exchange Server 2013. It will also discuss the difference of the old and new protocol to allow users to understand more effectively.

Microsoft Exchange Server 2013 mail level backups which uses the protocol Messaging Application Programming Interface (MAPI) will no longer be supported as of MS Exchange 2013 Cumulative Update 23 and later due to limitations and functionality issues with MAPI, instead this will be replaced by EWS API.

What is the difference between Messaging Application Programming Interface (MAPI) and Exchange Web Service (EWS) API?

MAPI is a client protocol that lets users access their mailbox by using Outlook or other MAPI email clients originally designed by Microsoft in 1987.

EWS API is a newer protocol that allows programmers to access Microsoft Exchange items such as calendars, contacts, and email.

Both are protocols introduced by Microsoft intended for client applications to access information stored in MS Exchange. However, due to limitations with MAPI, it will be replaced by the EWS API.

WARNING:

If you continue to use the MAPI backup mode and the MS Exchange Server 2013 is updated to Cumulative Updated 23 and later, this will have an impact on the backup and restore:

- Microsoft Exchange 2013 Mail Level backups will stop working
- All items already backed will no longer be recoverable to Microsoft Exchange 2013

Furthermore, MAPI backup mode will not be fully functional after the MS Exchange 2013 Cumulative Update 20 or later is applied as MAPI is unable to access the Public Folder items from MS Exchange 2013 Database. The following are the result of the unfunctional MAPI:

- Inability to backup items in MS Exchange 2013 Public Folder Databases
- Inability to **restore** items in MS Exchange 2013 Public Folder Databases

It is highly recommended to use the EWS API to avoid the above inconveniences on your backup and restore process.

2.2 Requirements

You are strongly recommended to check all the settings below before you proceed with the MS Exchange Mail Level 2007/2010/2013 backup and restore.

2.2.1 Software Requirement

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

FAQ: Ahsay Software Compatibility List (SCL) for version 7.3 or above

2.2.2 Antivirus Exclusion Requirement

To optimize performance of AhsayOBM on Windows, and to avoid conflict with your antivirus software, refer to the following KB article the list of processes and directory paths that should be added to all antivirus software white-list / exclusion list: http://wiki.ahsay.com/doku.php?id=public:5352_suggestion_on_antivirus_exclusions

NOTE

For AhsayOBM version 7.17 or above, the bJW.exe process is automatically added to Windows Defender exclusion list for Windows 10 and 2016, during installation / upgrade via installer or upgrade via AUA.

2.2.3 AhsayOBM Installation

The latest version of AhsayOBM must be installed on the MS Exchange Server hosting the mailbox database.

For backup of mailboxes on MS Exchange Server 2010/2013 Database Availability Group (DAG), ensure the same AhsayOBM version is installed on all member servers.

For MS Exchange Server 2010/2013, Database Availability Group (DAG) backup option is available, please refer to <u>Performing Mail Level Backup for Microsoft Exchange 2010/2013</u> in Database Availability Group (DAG) for details.

2.2.4 AhsayOBM Licenses

AhsayOBM licenses are calculated on a per device basis.

- i. For backup of mailboxes on a standalone Microsoft Exchange 2007/2010/2013 Server, one AhsayOBM license is required.
- ii. For backup of mailboxes on a Microsoft Exchange Server 2010/2013 DAG setup, the number of AhsayOBM licenses required is equal to the number of members (nodes) in the DAG. For example, if there are three members then three AhsayOBM licenses are required.

Please contact your backup service provider for more details

2.2.5 Backup Quota Requirement

Make sure that your AhsayOBM user account has sufficient storage quota assigned to accommodate the storage of additional Exchange mailbox and public folder items for the new mail level backup set.

Please contact your backup service provider for more details.

2.2.6 Microsoft Exchange Mailbox Add-On Module

One Microsoft Exchange Mailbox license is required for the backup each user mailbox.

Make sure the Microsoft Exchange Mailbox feature has been enabled as an add-on module in your AhsayOBM user account and there is sufficient Microsoft Exchange Mailbox license quota to cover the backup of your mailboxes.

User Profile	General	Backup Client Settings Contact		
Backup Set	Settings of the	e client backup agent for this user.		
Settings				
Report	Backup C	lient		
Statistics	AhsayOE	M User 💿 AhsayACB User		
Effective Policy				
	Add-on M	odules		
	S	Microsoft Exchange Server		
	MySQL Database Server			
	🔽 Lotus Domino			
	✓ O	Windows System Backup		
		VMware Guest VM 👻 0		
	Image:	Microsoft Exchange Mailbox 20		
	MAL	NAS		
	<u>با</u>	Volume Shadow Copy		
		In-File Delta		
	E	Office 365 Exchange Online Backup 0		

Please contact your backup service provider for more details.

2.2.7 Scheduled Backup for Exchange Server in Data Availability Group (DAG) Option

Scheduled backup is required if you choose to backup MS Exchange server 2010/2013 setup in DAG option, as AhsayOBM on all DAG members will use the scheduled backup time to start backups on all individual DAG members at the same time.

An MS Exchange server 2010/2013 DAG backup cycle is considered complete only when scheduled backup on all DAG members have been run successfully. An backup report will be generated and email to the recipients when a complete MS Exchange server 2010/2013 DAG backup cycle has taken place.

Please keep in mind that manual backup will only be considered as individual mail level backup, and therefore will not be counted as part of the DAG backup cycle.

2.2.8 Temporary Directory Folder

The Temporary Directory folder is used by AhsayOBM for storing backup set index files and any incremental or differential delta files generated during a backup job. To ensure optimal backup/restoration performance, the temporary directory folder is located on a local drive with plenty of free disk space.

2.2.9 Backup Source

Ensure "Hide from Exchange address list" is unchecked for user mailboxes, otherwise the mailbox will not be visible in the AhsayOBM backup source and therefore cannot be selected for backup.

Peter Koo Properties	X
Mail Flow Settings Mailbox Features Member Of E-Mail Addresses General User Information Address and Phon	Calendar Settings Mailbox Settings Organization Account
Peter Koo	
Organizational unit: x2k10.local/Users	
Last logged on by: Total items:	
Size (KB): Mailbox database: Mailbox Database 0339251)	c70
Archive database:	0/0
Modified: Wednesday, October 25, 20	017 2:50:25 PM
Alia <u>s</u> : peter	
<u>H</u> ide from Exchange address lists	
View and modify custom attributes:	Custom Attributes
DK Cancel	Apply Help

2.2.10 Mailbox Access Permission

The Active Directory account used to authenticate the backup must have full access to the mailboxes. To grant full access right for the account, enter the following command in Exchange Management Shell.

Open the Exchange Management Shell by clicking Start > Microsoft Exchange Server > Exchange Management Shell.

Exchange Server 2007

Enter the following command in Exchange Management Shell

```
Get-MailboxServer | Add-ADPermission -User "%os_username%" -
AccessRights GenericAll -ExtendedRights ms-exch-store-
admin,receive-as,send-as -InheritanceType All
```

%os_username% is the username of the operating system account for backup.

Example: granting permission to local account "system"

```
Get-MailboxServer | Add-ADPermission -User "system" -
AccessRights GenericAll -ExtendedRights ms-exch-store-
admin,receive-as,send-as -InheritanceType All
```

Other useful commands:

To show added permission for an AD account

Get-MailboxServer | Get-ADPermission -User "%os username%"

Example, to show added permission for local account "system"

Get-MailboxServer | Get-ADPermission -User "system"

To remove permission from an AD account

```
Get-MailboxServer | Remove-ADPermission -User "%os_username%"
- AccessRights GenericAll -ExtendedRights ms-exch-store-
admin,receive-as,send-as -InheritanceType All
```

Example, to remove permission from local account "system"

```
Get-MailboxServer | Remove-ADPermission -User "system" -
AccessRights GenericAll -ExtendedRights ms-exch-store-
admin,receive-as,send-as -InheritanceType All
```

Reboot the Exchange Server after executing the command.

Exchange Server 2010 / 2013

Enter the following command in Exchange Management Shell

```
Get-Mailbox | Add-MailboxPermission -User "%os_username%" -
AccessRights FullAccess
```

%os_username% is the username of the operating system account for backup.

Example: granting permission to local account "system"

```
Get-Mailbox | Add-MailboxPermission -User "system" -
AccessRights FullAccess
```

Other useful commands:

Remove permission from an AD account

```
Get-Mailbox | Remove-MailboxPermission -User "%os_username%" -
AccessRights FullAccess
```

Example:

```
Get-Mailbox | Remove-MailboxPermission -User "system" - AccessRights FullAccess
```

To view the mailbox permission of a user

```
Get-Mailbox | Get-MailboxPermission -User "%os username%"
```

Example:

Get-Mailbox | Get-MailboxPermission -User "system"

Reboot the Exchange Server after executing the command.

2.2.11 Windows User Account Permission

The Active Directory account used to authenticate the backup must be a member of the following security groups.

Exchange Server 2007

- Microsoft Exchange Security \ Exchange Organization Administrators
- Microsoft Exchange Security \ Exchange Servers
- Users \ Domain Admins

Active Directory Users and	Administrator Properties	'×	
File Action View Help	Remote control Terminal Services Profile COM+ General Address Account Profile Telephones Organization Member Of Dial-in Environment Sessions	n	
Active billectory osers and con Saved Queries Saved Queries Saved Queries	Member of:	1	punt for admini
Builtin Computers Computers Compares Compares Compares Compares	Name Active Directory Domain Services Folder Administrators ahsayqa local/Buitin Domain Admins ahsayqa local/Users Domain Users ahsayqa local/Users		this group can
Users	Enterprise Admins ahsayqa.local/Users Exchange Organi ahsayqa.local/Microsoft Exchange Security Grou Group Policy Cre ahsayqa.local/Users		f this group are I this group can
	Remote Desktop ahsayga.local/Builtin Schema Admins ahsayga.local/Users Users ahsayga.local/Builtin		istrators Group who are permi I administrators
	Add Remove		tions and serve controllers in th guests
	Primary group: Domain Users		users
	Set Primary Group Interes is to need to change Primary group Unless you have Macintosh clients or POSIX-compliant applications.		l administrators f this group are i this group can bunt for quest
×	OK Cancel Apply Help		v v

Exchange Server 2010 / 2013

- Microsoft Exchange Security \ Organization Management
- Users \ Administrator
- Users \ Domain Admins
- Users \ Enterprise Admins

	Administrator Properties ? X	_ 🗆 X
File Action View Help	Remote control Remote Desktop Services Profile COM+ General Address Account Profile Telephones Organization Member Of Dial-in Environment Sessions Member of: Name Active Directory Domain Services Folder Administrators qa31 aftray.com/Butkin Domain Admins qa31 aftray.com/Users Domain Users qa31 aftray.com/Users Enterprise Admins qa31 aftray.com/Users Enterprise Admins qa31 aftray.com/Users Exchange Servers qa31 aftray.com/Users Organization Management qa31 aftray.com/Users Exchange Servers qa31 aftray.com/Users Coup Policy Creator Owners qa31 aftray.com/Users Set Min > Add Remove Remove Remove Set Primary group: Domain Users Set Primary Group There is no need to change Primary group unless you have Macintrash clients or POSIX-compliant applications.	Description Suilt-in account for ad Members in this group c Members of this group t. Members of this group t Members in this group c DNS Administrators Gro. DNS clients who are per. Designated administrato All domain guests All domain guests All domain users Designated administrato Members of this group Members of this group c Built-in account for gue. Y
< III	OK Cancel Apply Help	

Steps to check the current settings

- 1. Click Start > Control Panel > Administrative Tools, and then click Active Directory Users and Computers.
- 2. Browse to the organization unit containing the corresponding operating system account.
- 3. Right click on the user, and select **Properties**.
- 4. Select the **Member Of** tab to check on the membership setting.

2.2.12 Enabling Mailbox on Windows User Account

Make sure the Windows account used to authenticate the backup has a mailbox enabled.

Follow the steps below to verify.

Exchange Server 2007 / 2010

- 1. Click Start > Microsoft Exchange Server 2007/2010, and then click Exchange Management Console.
- 2. Click to expand the Recipient Configuration menu tree, and then select Mailbox.
- 3. Right click on the user and select **Properties**.
- 4. Select the **General** tab to check the settings.

Make sure the Hide from Exchange address lists box is not checked.

🔀 Exchange Management Console		
File Action View Help	Administrator Properties	×
 ◆ 2 ○ □ □ □ □ ○ ○ Organization Configuration 	Account Member Of E-Mail Addresses Mailbox Settings Mail Row Settings Mailbox Features General User Information Address and Phone Organization	Actions Mailbox
Server Configuration Mailbox Mailbox Hub Transport Hub Transport Mailbox Mailbox Mailbox Server Configuration Server Configuration Mailbox Server Configuration Server Configuration Server Configuration Server Configuration Mailbox Server Configuration Server Configuration	Administrator Organizational unit: ahsayqa Jocal/Users Last logged on by: AHSAYQA/vAdministrator Total kems: 8631	Modify the Maximum Num Image: Pind Image: Pind
Disconnected Malbox f	Size (KB): 20860 Exchange server: win2k8 Mailbox database: First Storage Group \Mailbox Database Modified: Thursday, May 05, 2011 7:33:16 PM 	
	Administrator Hide from Exchange address lists View and modify custom attributes. OK Cancel Apply Help	Enable Unified Messaging Manage Send As Permissi Manage Full Access Permi Properties Help

Note: A mailbox-enabled user is a Windows Active Directory user that has one or more Exchange Server mailboxes associated with it. Refer to the URL below for more information <u>http://support.microsoft.com/kb/275636/en-us</u>.

Exchange Server 2013

Refer to the following article from Microsoft for more details on how to check if an account is mailbox enabled.

https://technet.microsoft.com/en-us/library/jj991919(v=exchg.150).aspx

2.2.13 Remote Exchange Management Shell

For setup on MS Exchange Server 2010 / 2013, the Remote Exchange Management Shell must be enabled for the operating system account used for the backup.

Enter the following command in Exchange Management Shell to enable this feature. >Set-User "%os username%" -RemotePowerShellEnabled \$True

Reboot the Exchange Server after executing the command.

Note: Remote Shell in Microsoft Exchange Server enables you to manage your server running Exchange.

2.2.14 Collaboration Data Objects (CDO) 1.2.1

The latest version of CDO must be installed on the Exchange Server for the mail level backup job to work properly.

Download and install the latest version CDO via the URL below. If you already have CDO installed on the Exchange Server but are not sure if it is the latest version, you are recommended to uninstall the current version and re-install via the URL below.

Exchange Server 2007 / 2010

- Exchange Server with MS Outlook 2007 <u>https://www.microsoft.com/en-us/download/details.aspx?id=3671</u>
- Exchange Server without MS Outlook 2007 <u>https://www.microsoft.com/en-gb/download/details.aspx?id=42040</u>

Exchange Server 2013

https://www.microsoft.com/en-gb/download/details.aspx?id=42040

2.2.15 LAN Manager Authentication Level

Exchange Server 2013

The LAN Manager Authentication level configured on the Exchange Server must be level 3 or above. Follow the steps below to check the settings.

1. Click Start > Control Panel > Administrative Tools, and then click Local Security Policy.

b 🕞 🕕 = I		Shortcut Tools	Administrativ	e Tools		x
File Home S	hare	View Manage				~ (
🄄 🕘 – 🖈 🗟	▶ Cor	ntrol Panel 🔸 All Control Pa	nel Items 🔸 Administrative Tools	~ ¢	Search Administ	r ,P
🔆 Favorites	^	Name	•	Date modified	Туре	
Desktop		🗿 Internet Information Se	ervices (IIS) 6.0 Manager	8/22/2013 2:50 PM	Shortcut	
Downloads		🔠 Internet Information Se	ervices (IIS) Manager	8/22/2013 2:50 PM	Shortcut	
Recent places		🔝 iSCSI Initiator		8/22/2013 2:57 PM	Shortcut	
and receive proces	=	📩 Local Security Policy		8/22/2013 2:54 PM	Shortcut	
🛤 This PC		DDBC Data Sources (32	2-bit)	8/22/2013 7:56 AM	Shortcut	
Pesktop		🛐 ODBC Data Sources (64	4-bit)	8/22/2013 2:59 PM	Shortcut	
Documents		Performance Monitor		8/22/2013 2:52 PM	Shortcut	
Downloads		Resource Monitor		8/22/2013 2:52 PM	Shortcut	
Music		👼 Security Configuration	Wizard	8/22/2013 2:45 PM	Shortcut	
Pictures		🔁 Server Manager		8/22/2013 2:55 PM	Shortcut	
Videos		🗟 Services		8/22/2013 2:54 PM	Shortcut	
Local Disk (C:)	~		Ш	0/22/2012 2 52 514		>
36 items 1 item sele	cted 1	1.09 KB				

- 2. Under Security Settings, expand Local Policies > Security Options, then click Network security: LAN Manager authentication level.
- 3. Make sure that the setting is configured to use NTLMv2, for example:
 - Send NTLMv2 response only
 - Send NTLMv2 response only. Refuse LM
 - Send NTLMv2 response only. Refuse LM & NTLM



2.2.16 Windows PowerShell 2.0 Engine

Make sure the Windows PowerShell 2.0 Engine is installed.

Exchange Server 2013

To install the feature:

- 1. Navigate to **Server Manager** > **Manage**, then select **Add Roles and Features**.
- 2. On the **Select installation type** screen, select **Role-based or feature-based** installation.
- 3. Select the target server.
- 4. On the **Select features** screen, go to the **Features** option, check the box next to **Windows PowerShell 2.0 Engine**.

b	Add Roles and Features Wizard	_ _ ×
Select features Before You Begin Installation Type Server Selection Server Roles Features Confirmation Results	Select one or more features to install on the selected server. Features ✓ Windows Identity Foundation 3.5 (Installed) ✓ Windows Internal Database ✓ Windows PowerShell (2 of 5 installed) ✓ Windows PowerShell (2 of 5 installed) ✓ Windows PowerShell (2 of 5 installed) ✓ Windows PowerShell 120 Engine ✓ Windows PowerShell ISE (Installed) ✓ Windows PowerShell ISE (Installed) ✓ Windows PowerShell ISE (Installed) ✓ Windows PowerShell Set (Istalled) ✓ Windows PowerShell Set (Istalled) ✓ Windows PowerShell Web Access ✓ Windows Service Service (2 of 3 installe) ✓ Windows Server Backup	DESTINATION SERVER EX2013.exch2013.local Description Windows PowerShell 2.0 Engine includes the core components from Windows PowerShell 2.0 for backward compatibility with existing Windows PowerShell host applications.
	Windows Server Migration Tools Windows Standards-Based Storage Management Windows TIFF IFilter K K K K K K K K	> Install Cancel

2.2.17 MS Exchange related Windows Services

Ensure that all MS Exchange related services have been started, particularly the **MS Exchange Information Store** and **MS Exchange System Attendant Services.**

To verify this setting, launch the **Services** menu by clicking **Start** then typing "Services" in the search box. All Exchange related services should be started by default, in case if it is not, turn it on by right clicking the item and then select **Start**.



2.2.18 MS Exchange Database Status

Ensure the MS Exchange Mailbox and Public Folder databases are mounted.



2.2.19 IISAuthenticationMethods Setting

Verify if the IISAuthenticationMethods is set to **Basic** only. If so, change the setting with the commands below.

Exchange Server 2013

- 1. Click Start > Microsoft Exchange Server > Exchange Management Shell.
- 2. Enter the following command to check on the IISAuthenticationMethods setting: >Get-OutlookAnywhere
- 4. Reboot the Exchange server.

2.2.20 Connection to Exchange Management Shell (EMS) or Exchange Management Console (EMC)

Confirm on the connection to the Exchange Management Shell (EMS) or Exchange Management Console (EMC).

Ensure that the HTTP binding on the Default Web Site in Internet Information Services (IIS) is correctly configured by following the steps below.

- 1. Click Start > Control Panel > Administrative Tools, and then click Internet Information Services (IIS) Manager.
- 2. Navigate to Default Web Site, then right-click and select Edit Bindings.



3. Create a new binding that has no host name and a value of **All Unassigned** for the IP address.

	Site Bindings ?	x
Туре	Add Site Binding ? X	
http net.to net.p net.m msm https http https	Type: IP address: Port: http Image: Type: Type	e
	OK Cancel	

4. Restart IIS.

2.2.21 .Net Framework 3.5 Features

If you are using Exchange server 2013 on Windows server 2012, please install **.Net Framework 3.5 Features**.

This feature can enabled by accessing **Server Manager** > **Dashboard** > **Add Roles and Features Wizard** > **Feature Page**.

a	Add Roles and Features Wizard	
Select features Before You Begin	Select one or more features to install on the selected server.	DESTINATION SERVER w12x-7-23.qa25.ahsay.com
Installation Type	Features	Description
Server Selection Server Roles Features Confirmation Results	Image: NET Framework 3.5 Features (Installed) Image: NET Framework 4.5 Features (Installed) Image: NET Fram	.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.
	< Previous Next	> Install Cancel

3 Overview of MS Exchange Mail Level Backup Process

The following steps are performed during an MS Exchange mail level backup job:



4 Performing Mail Level Backup for Microsoft Exchange 2007/2010/2013 (MAPI Mode)

4.1 Creating Mail Level Backup Set for Microsoft Exchange 2007/2010/2013 (MAPI Mode)

IMPORTANT NOTE:

- Creation of MAPI Mail Level Backup Set for Microsoft Exchange 2013 Cumulative Update 23 or later is no longer supported, to backup MS Exchange 2013 Cumulative Update 23 or later, an EWS backup set must be created. Please refer to the <u>Microsoft Exchange 2013/2016/2019 (EWS) Mail</u> <u>Level Backup and Restore Guide</u>.
- Creation of MAPI Mail Level Backup Set for Microsoft Exchange 2013 Cumulative Update 23 or earlier is still is supported for AhsayOBM v7.17.2.114 or earlier.
- From AhsayOBM v7.17.2.120 or later the default backup mode for all versions of MS Exchange 2013 is EWS mode. There is no option on AhsayOBM to select MAPI mode. If MAPI mode is required for Microsoft Exchange 2013 Cumulative Update 23 or earlier, then the backup set can only be created using the AhsayCBS Web Console. Please see the instructions on <u>Appendix A: Creating Mail</u> Level Backup Set for Microsoft Exchange 2013 using CBS Web Console.
- 1. Click the **Backup Sets** icon on the main interface of AhsayOBM.



- 2. Create a new backup set by clicking the "+" icon next to Add new backup set.
- 3. Select the Backup set type as **MS Exchange Mail Level Backup.** The system will automatically detect and select the Exchange Server version, make sure the version

501	letted is context. Name you new backup set and then block next to proceed.	
O A	Ahsay08H	<u>- 0 ×</u>
	Croata Packup Sat	
	Create Backup Set	
	Name	
	Backup Set Name	
	Backup set type	
	🖂 MS Exchange Mail Level Backup 🗸	
	Version	
	Microsoft Exchange Server 2007	
	Next Cancel	Help

selected is correct. Name your new backup set and then click Next to proceed.

4. In the **Backup Source** menu, select the Mailbox Store for backup.

You can click to expand the mailbox store to select which mailbox to back up. You can also click **Show mails** to select individual mail to back up. Click **Next** to proceed when you are done.



5. In the Schedule menu, you can configure a backup schedule for backup job to run automatically at your specified time interval. Click **Add** to add a new schedule, then click **Next** to proceed when you are done setting.



Note: By default, a daily backup scheduled for 22:00 is created automatically.



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



7. Select the destination type and destination storage, then click **OK** to proceed.

O AhsayOBM				
	New Storage Destination / Destination Pool			
	New Storage Destination / Destination / Ool			
	Name			
	CBS			
	Туре			
	 Single storage destination 			
	 Destination pool 			
	Destination storage			
	G CBS 🗸			
		ок	Cancel	Help

8. Click **Next** on the Destination menu page to proceed.

O AhsayOBM						_ 🗆 🗡
		Destina	ition			
Existing	ntial v g storage destinations IBS Host: 10.3.1.8:443					
			[Previous	ext Cancel	Help

9. 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.

	Encry	yption	
Encrypt Backup Data On			
Encryption Type			
Default 🗸 🗸			
Default			
User password			
Custom			

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

- Default an encryption key with 44 alpha numeric characters will be randomly generated by the system
- User password the encryption key will be the same as the login password of your 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		
AES Encryption key ***** Re-enter encryption key ******		
Method ECB CBC Key length 128-bit 256-bit		

Note: For best practice on managing your encryption key, refer to the following KB article. <u>FAQ: Best practices for managing encryption key on AhsayOBM or AhsayACB version 7? (5034)</u>

Click Next when you are done setting.

10. 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.



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

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



- Copy to clipboard Click to copy the encryption key, then you can paste it in another location of your choice.
- > **Confirm** Click to exit this pop-up window and proceed to the next step
- 11. Enter the Windows login credentials for user authentication. Click Next to proceed.

Windows User Authentication	
Domain Name (e.g Ahsay.com) / Host Name	
qa17.ahsay.com	
User name	
username	
Password	





13. Click **Backup now** to start a backup immediately, or you can run a backup job later by following the instructions in <u>Running Mail Level Backup Job for Microsoft Exchange</u> 2007/2010/2013.

4.2 Running Mail Level Backup Job for Microsoft Exchange 2007/2010/2013

IMPORTANT NOTE:

- Due to limitations with MAPI, MAPI backup mode is no longer supported on the MS Exchange Server 2013 Cumulative Updated 23 and later, this will have an impact on the backup and restore:
 - Microsoft Exchange 2013 Mail Level backups will stop working.
 - All items already backed will no longer be recoverable to Microsoft Exchange 2013.
- Furthermore, MAPI backup mode will not be fully functional after the MS Exchange 2013 Cumulative Update 20 or later is applied as MAPI is unable to access the Public Folder items from MS Exchange 2013 Database. This will have an impact on the backup and restore of public folder items:
 - Inability to backup items in MS Exchange 2013 Public Folder Databases
 - Inability to restore items in MS Exchange 2013 Public Folder Databases
 - 1. Log in to AhsayOBM.
 - 2. Click the Backup icon on the main interface of AhsayOBM.



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



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

O AhsayOBM		
	Choose Your Backup	Options
	Backup Set Name	
	Backup set type Microsoft Exchange Mailbox Show advanced option	
		Previous Backup Cancel Help
Ahsay08M	Choose Your Backup	Options
Ahsayo8M	Choose Your Backup	
Alsay08M	Backup Cat Name	
Ahsayo8M	Backup Set Name Backup set type Microsoft Exchange Mailbox In-File Delta type	
Ahsay08M	Backup Set Name Backup set type Microsoft Exchange Mailbox In-File Delta type Full Differential O Incremental Destinations	
Ahsay08M	Backup Set Name Backup set type Microsoft Exchange Mallbox In-File Delta type Full Differential Outfinemental Destinations C GS (Host: 10.3.1.8:443) Retention Policy	
Ahsay08M	Backup Set Name Backup set type Microsoft Exchange Mailbox In-File Delta type Gull Differential O Incremental Destinations C ES (Host: 10.3.1.8:443)	
Ahsay08M	Backup Set Name Backup set type Microsoft Exchange Mailbox In-File Delta type Full Differential Originations CBS (Host: 10.3.1.8:443) Retention Policy Retention Policy after backup	

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

5 Performing Mail Level Restoration for Microsoft Exchange 2007/2010/2013

5.1 Restoring Mail Level Backup for Microsoft Exchange 2007/2010/2013

IMPORTANT NOTE:

- Due to limitations with MAPI, MAPI backup mode is no longer supported on the MS Exchange Server 2013 Cumulative Updated 23 and later, this will have an impact on the backup and restore:
 - Microsoft Exchange 2013 Mail Level backups will stop working.
 - All items already backed will no longer be recoverable to Microsoft Exchange 2013.
- Furthermore, MAPI backup mode will not be fully functional after the MS Exchange 2013 Cumulative Update 20 or later is applied as MAPI is unable to access the Public Folder items from MS Exchange 2013 Database. This will have an impact on the backup and restore of public folder items:
 - Inability to backup items in MS Exchange 2013 Public Folder Databases
 - Inability to restore items in MS Exchange 2013 Public Folder Databases
- 1. In the AhsayOBM main interface, click the **Restore** icon.
- 2. Select the backup set that you would like to restore mail from.

Please Select The Backup Set To Restore	
Backup Set Name Owner: w08x-1-22 Last Backup: 07-July-2016, Thursday, 14:37	
Close	Help

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(ml and

3. Select the backup destination that contains the mail(s) that you would like to restore.



4. Click to expand the menu tree to select which mailbox to restore. You can also select mail item(s) from a specific backup job or all mail items that you have backed up to restore. Click Next to proceed. - 🗆 X

Select Your Ma	ail Objects To Be Restored
Select what to restore	
Choose from files as of job 👻	10/25/2017 V Latest V
Choose from files as of job	
Choose from ALL files	Subject Date modified Size
	Items per page 50 V Page - V
	Previous Next Cancel Help

- 5. Select to restore the mail to their Original mailbox, or to an Alternate mailbox.
 - \odot **Restore to Original Mailbox**

O Abcav08M



Select the Original location option, then press Next to proceed.
• Restore to Alternate Mailbox

You can choose to restore mailbox item(s) to another mailbox in the same Exchange server. Select the **Alternate location** option and the desired mailbox destination, then press **Next** to proceed.

In addition, you can also restore mailbox item(s) to a different Exchange server of the same version. In this case, the restoration should be triggered by the AhsayOBM on the destination Exchange server.

Original location	0
Alternate location	Administrator (Administrator@qa15.ahsay.com)
	Administrator (Administrator@qa15.ahsay.com)
	Equipment Mailbox User (equipment-mailbox-user@qa15.ahsay.com)
	Room Mailbox User (room-mailbox-user@qa15.ahsay.com)
	Same Name User (same-alias-name2@qa15.ahsay.com)
	Same Name User (same-alias-name3@qa15.ahsay.com)
	Same Name User (same-alias-name@qa15.ahsay.com)
	Shared Mailbox User (shared-mailbox-user@qa15.ahsay.com)
	User Mailbox display_name 64char_456789D123456789E1234567_64char (User_

Limitation

If you are trying to restore the mailbox item to a destination mailbox which has a different language setting than the original mailbox, AhsayOBM will attempt to restore mailbox item(s) to their respective destination folder based on the translation listed below.

For folders such as 'Calendar' or 'Notes', a new folder 'Calendar' or 'Notes' will be created.

Backup source (English)	Action	Destination mailbox with Chinese as default language settings
Inbox	Merge	收件箱
Outbox	Merge	寄件匣
Sent Items	Merge	寄件備份
Deleted Items	Merge	刪除的郵件
Drafts	Merge	草稿
Junk E-Mail	Merge	垃圾電郵
Calendar	Create new folder	Calendar
Notes	Create new folder	Notes

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

O AhsayOBM		
Ter	mporary Directory	
Temporary directory for stor		
C:\Users\Administrator\tem	qr	Browse
	Previous	Restore Cancel Help

7. The following screen with the text **Restore Completed Successfully** shows when the restoration is completed.

O AhsayOBM			×
		Restore	
Backu	ip Set Name		
	ost: 10.3.1.8:443) fore Completed Succes	e effective	۲ <u>م</u>
	ed time left 0 sec	sstully	
Restore			
Elapsed)	
Transfe			
Trailsic	i late oblas		
			Close Help

6 Performing Mail Level Backup for Microsoft Exchange 2010/2013 (MAPI) in Database Availability Group (DAG)

6.1 License Requirement to Back up Exchange Mailboxes in DAG environment

Each member in the DAG requires separate license for Microsoft Exchange Mailbox Add-on Module. One license will be deducted from each installation of the AhsayOBM on the DAG environment. Please check with your backup service provider if more Microsoft Mailbox Add-On module is required.

6.2 Creating Mail Level Backup Set for Microsoft Exchange 2010/2013 (MAPI) in Database Availability Group (DAG)

IMPORTANT NOTE:

- Creation of MAPI Mail Level Backup Set for Microsoft Exchange 2013 Cumulative Update 23 or later is no longer supported, to backup MS Exchange 2013 Cumulative Update 23 or later, an EWS backup set must be created. Please refer to the <u>Microsoft Exchange 2013/2016/2019 (EWS) Mail</u> <u>Level Backup and Restore Guide</u>.
- Creation of MAPI Mail Level Backup Set for Microsoft Exchange 2013 Cumulative Update 23 or earlier is still is supported for AhsayOBM v7.17.2.114 or earlier.
- From AhsayOBM v7.17.2.120 or later the default backup mode for all versions of MS Exchange 2013 is EWS mode. There is no option on AhsayOBM to select MAPI mode. If MAPI mode is required for Microsoft Exchange 2013 Cumulative Update 23 or earlier, then the backup set can only be created using the AhsayCBS Web Console. Please see the instructions on <u>Appendix A: Creating Mail</u> <u>Level Backup Set for Microsoft Exchange 2013 using CBS Web Console</u>.
 - 1. Click the **Backup Sets** icon on the main interface of AhsayOBM.



- 2. Create a new backup set by clicking the "+" icon next to Add new backup set.
- 3. Select the Backup set type as **MS Exchange Mail Level Backup** and choose the correct Exchange Server version with "Database Availability Group". Name your new

O Ahsay08M	
Create Backup Set	
Name Backup Set Name	
Backup set type	
Version	
Microsoft Exchange Server 2010 (Database Availability Group) 🖌	
	Next Cancel Help

4. In the **Backup Source** menu, select the Mailbox Store for backup.

You can click to expand the mailbox store to select which mailbox to back up, and then click **Show mails** to select individual mail to back up. Click **Next** to proceed when you are done.

	<i>.</i>	Source			
Folders	From	Subject	Received	Size	
□	Backup	Reminder: Sche Fri	10/9/2015 9:	13k	
🗄 🔲 🔁 Mailbox Store	Backup	AhsayOBS Daily Fri	10/9/2015 9:	3k 🔨	
Administrator (Administrator		AhsayOBS Daily Fri		14k	
🕀 🗹 🥅 Calendar	Backup	AhsayOBS Daily Fri	10/9/2015 12	2k	
E 🗹 😼 Contacts	Backup	Reminder: Sche Th	u 10/8/2015 9	13k	
🕀 🗹 🚞 Conversation Action Settin	Backup	AhsayOBS Daily Th	u 10/8/2015 9	3k	
🕀 🗹 🗟 Deleted Items	🗌 📄 Backup	AhsayOBS Daily Th	u 10/8/2015 9	14k	
🗈 🗹 🔯 Drafts	🗆 📄 Backup	AhsayOBS Daily Th	u 10/8/2015 1	2k	
🕀 🗹 🔯 Inbox	🔲 📄 Backup	Reminder: Sche We	ed 10/7/2015	13k	
🕀 🗹 🌆 Journal	🗌 📄 Backup	AhsayOBS Daily We	ed 10/7/2015	3k	
🕀 🗹 🧓 Junk E-Mail	🔲 📄 Backup	AhsayOBS Daily We	ed 10/7/2015	11k	
🕀 🗹 🚞 News Feed	🗆 📄 Backup	AhsayOBS Daily We	ed 10/7/2015	2k	
🗉 🗹 👥 Notes		Reminder: Sche Tu		13k	
🗉 🗹 🔚 Outbox		Undeliverable: Tu		4k	
🕀 🗹 🚞 Quick Step Settings		Undeliverable: RTu		15k	
🕀 🗹 🚞 RSS Feeds	🗆 📄 Microso	Undeliverable: Tu	e 10/6/2015 1	16k	
🕀 🗹 🔄 Sent Items	🗌 📄 Microso	Undeliverable: RTu	e 10/6/2015 1	16k	
🗈 🗹 💵 Suggested Contacts		Undeliverable: Tu		5k	
🗄 🗹 Ż Tasks		AhsayOBS Daily Th		3k	
🕮 🗔 🧐 user01 (user01@qa17.ahsay.c♥		AhsayOBS Daily Th		14k	
😐 🗔 🧐 user02 (user02@ga17.ahsav.c		AhsayOBS Daily Th		2k 🗸	
(Backup	Reminder: Sche We	ed 9/23/2015	13k	
Show mails		Items per page	50		
Show mails		AhsayOBS Daily Th Reminder: Sche We Items per page	ed 9/23/2015		

5. In the Schedule menu, you can configure a backup schedule for backup job to run automatically at your specified time interval. Click **Add** to add a new schedule, then

click Next to	proceed	when	you are	done	setting.

O AhsayOBM		
	Schedule	
Run scheduled backup for this ba	selver set	
On On	ickup set	
Existing schedules		
Backup Schedule Daily (Everyday at 22:00)		
Add		
	Previous Next Cancel He	elp

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

💽 AhsayOBM		
	Destination	
	Backup mode Sequential Cisting storage destinations Add new storage destination / destination pool	
	Previous Next Cancel I	Help

7. Select the destination type and destination storage, then click **OK** to proceed.

💽 AhsayOBM		_ 🗆 🗡
	New Storage Destination / Destination Pool	
	Name	
	CBS	
	Туре	
	 Single storage destination Destination pool 	
	Destination storage	
	G CBS	
	ок	Cancel Help

8. Click **Next** on the Destination menu page to proceed.

O AhsayOBM				_ 🗆 🗙
		Destination		
	Backup mode Sequential Constraints Existing storage destinations CBS Host: 10.3.1.8:443 Add			
			Previous Next	Cancel Help

9. 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		

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.

	Encryption	ſ
Encrypt Backup Data On Encryption Type		
Algorithm AES ✓ Encryption key		
****** Re-enter encryption key ******		
Method ECB CBC Key length 128-bit 256-bit		

Note: For best practice on managing your encryption key, refer to the following KB article. FAQ: Best practices for managing encryption key on AhsayOBM or AhsayACB version 7? (5034)

Click Next when you are done setting.

10. 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 Backu On Encryption Typ		
Default 🤟	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.	
	•••••	
	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.



- 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
- 11. Enter the Windows login credentials for user authentication. Click Next to proceed.

Windows User Authentication	
Domain Name (e.g Ahsay.com) / Host Name	
qa17.ahsay.com	
User name	
username	
Password	

12. The following screen shows when the new backup set is created successfully. Backup will run automatically at the configured scheduled time.



You may click **Backup now** to start a backup immediately, however, manual backup will not be counted as part of the DAG backup cycle. For more information, refer to <u>Scheduled Backup for Data Availability Group (DAG) Option</u>.

13. On all other Exchange Servers within the same DAG, open the AhsayOBM and click the same backup set, and make sure the **Run scheduled backup for this backup set** is turned on in the **Backup Schedule** menu. Make sure you save the setting before exiting the application.



7 Performing Mail Level Restoration for Microsoft Exchange 2010/2013 (MAPI) in Database Availability Group (DAG)

IMPORTANT NOTE:

- Due to limitations with MAPI, MAPI backup mode is no longer supported on the MS Exchange Server 2013 Cumulative Updated 23 and later, this will have an impact on the backup and restore:
 - Microsoft Exchange 2013 Mail Level backups will stop working.
 - All items already backed will no longer be recoverable to Microsoft Exchange 2013.
- Furthermore, MAPI backup mode will not be fully functional after the MS Exchange 2013 Cumulative Update 20 or later is applied as MAPI is unable to access the Public Folder items from MS Exchange 2013 Database. This will have an impact on the backup and restore of public folder items:
 - Inability to backup items in MS Exchange 2013 Public Folder Databases
 - Inability to restore items in MS Exchange 2013 Public Folder Databases

7.1 Pre-restoration requirements

Refer to the following steps to restore individual items to the active database on the relevant Microsoft Exchange server within the DAG.

The mail level restoration should be performed on the active database only. You can identify the Exchange server with the active database from the Exchange Management Shell by following the steps below.

Type the following command in the Exchange Management Shell.

Get-MailboxDatabase ft name, server

It will show which Exchange server is hosting the active mailbox database. In the following case, Mailbox Database 01 and 03 are hosted on EX1, while Mailbox Database 02 and 04 are hosted on EX2.

[PS] C:\>Get-Mailk	boxDatabase ft name, server
Name	Server
Mailbox Database (02 EX2
Mailbox Database (D1 EX1
Mailbox Database (03 EX1
Mailbox Database (04 EX2

When you can identify which Exchange server hosted the active database, you can logon to that Exchange server to restore the database.

7.2 Restoring Mail for Exchange Server in DAG

1. In the AhsayOBM main interface, click **Restore**.



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

O AhsayOBM	<u>- 🗆 ×</u>
Please Select The Backup Set To Restore	
Backup Set Name Owner: w08x-1-22 Last Backup: 07-July-2016, Thursday, 14:37	
Close	Help

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



4. Click to expand the menu tree to select which mailbox to restore. You can also select mail item(s) from a specific backup job or all mail items that you have backed up to restore. Click **Next** to proceed.

O AhsayOBH	
Select Your Mail Objects To Be Restored	
Select what to restore	
Choose from files as of job 🗸 2016-07-11 🗸 Latest 🗸	
Choose from files as of job Choose from ALL files	
From/To Subject Received/Sent Size	
Mailbox Store Mailbox Store Mailbox Store Mailbox Store Mailbox Store Public Folder Store Value Store	
Items per page 50 V Page - V	
Previous Next Cancel	Help

- 5. Select to restore mail to their Original mailbox, or to an Alternate mailbox.
 - Restore to Original Mailbox

Select the **Original location** option, then press **Next** to proceed.

O AhsayOBM	_ 🗆 ×
Chaosa Whara Tha Mail Objects To Pa	Postor
Choose Where The Mail Objects To Be	RESLUI
Restore mail objects to Original location 	
Alternate location Administrator (Administrator@qa15.ahsay.com)	¥
Previous Next	Cancel Help

Restore to Alternate Mailbox

You can choose to restore mailbox item(s) to another mailbox in the same Exchange server. Select the Alternate location option and the desired mailbox destination, then press Next to proceed.

In addition, you can also restore mailbox item(s) to a different Exchange server with the same version of Exchange server installed. In this case, the restoration should be triggered by the AhsayOBM on the destination Exchange server.

	e The Mail Objects To Be Restor
Restore mail objects t	0
Alternate location	Administrator (Administrator@ga15.ahsay.com)
Ŭ	Administrator (Administrator@qa15.ahsay.com)
	Equipment Mailbox User (equipment-mailbox-user@qa15.ahsay.com)
	Room Mailbox User (room-mailbox-user@qa15.ahsay.com)
	Same Name User (same-alias-name2@qa15.ahsay.com)
	Same Name User (same-alias-name3@qa15.ahsay.com)
	Same Name User (same-alias-name@qa15.ahsay.com)
	Shared Mailbox User (shared-mailbox-user@qa15.ahsay.com)
	User Mailbox display_name 64char_456789D123456789E1234567_64char (User_
	Previous Next Cancel Help

Limitation

If you are trying to restore the mailbox item to a destination mailbox which has a different language setting than the original mailbox, AhsayOBM will attempt to restore item(s) to their respective destination folder based on the translation listed below.

For folders such as 'Calendar' or 'Notes', a new folder 'Calendar' or 'Notes' will be created.

Backup source (English)	Action	Destination mailbox with Chinese as default language settings
Inbox	Merge	收件箱
Outbox	Merge	寄件匣
Sent Items	Merge	寄件備份
Deleted Items	Merge	刪除的郵件
Drafts	Merge	草稿
Junk E-Mail	Merge	垃圾電郵
Calendar	Create new folder	Calendar
Notes	Create new folder	Notes

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

O AhsayOBM			
	Temporary Directory		
	Temporary directory for storing restore files		
	C:\Users\Administrator\temp	Browse	
	Previous	Restore Cancel	Help

7. The following screen with the text **Restore Completed Successfully** shows when the restoration is completed.

O AhsayOBM		_ _ _×
	Restore	
Backup Set Na	ne	
CBS (Host: 10.3.1.8	ne de la companya de	۵.
Estimated time left		
Restored	0 (0 file)	
Elapsed time	8 sec	
Transfer rate	0bit/s	
Transfer Face	00103	
		Close Help



8 Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the following website: https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Use our Ahsay Wikipedia for resources such as Hardware Compatibility List, Software Compatibility List, and other product information: <u>http://wiki.ahsay.com</u>

9 Documentation

Documentations for all Ahsay products are available at:

https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_document ation_guides

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

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

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

Appendix A: Creating Mail Level Backup Set for Microsoft Exchange 2013 using CBS Web Console

- 1. Log in to the User Web Console according to the instructions in <u>Login to AhsayCBS User Web</u> <u>Console</u>.
- 2. Click the User icon on the User Web Console landing page.



3. On the **Backup Set** menu, click the + icon highlighted to create a bcakup set.



4. Select the type as MS Exchange Mail Level Backup, then name the backup set

Add New Ba	ackup S	et
General		
Name		
Sample Backup Set 01		
Owner Type MS Exchange Mail Lev	rel Backup 🔻	
File Backup IBM Lotus Domino Bac		
IBM Lotus Notes Back MS Exchange Server B		
MS Exchange Mail Lev MS SQL Server Backu		▼
MS Hyper-V Backup MS Windows System E	Backup	
MySQL Backup Oracle Database Serve	n Doolaun	
StorageCraft ShadowF	rotect Backup	
MS Windows System S VMware Backup	зтате Васкир	
Cloud File Backup Office 365 Exchange C	Inline Backup	

5. Select the Exchange Server version. Make sure the version selected is correct.

Add New Backup Set
General
Name
Sample Backup Set 01
Owner
Туре
MS Exchange Mail Level Backup 🔹
Version
Microsoft Exchange Server 2013

For Microsoft Exchange Server 2013, you can pick a Mode, **EWS** and **MAPI (Deprecated)**. There are also available remarks for using the backup modes.

Mode
MAPI (Deprecated) <
EWS
MAPI (Deprecated)

If you pick the EWS backup mode, the following fields will be available:

- Host
- Username
- Password (Disabled)



Version Microsoft Exchange Server 2013
Microsoft Exchange Server 2013
Mode
EWS T
Remarks:
1. EWS backup mode is supported by v7 client in version 7.17.2.114 or above.
2. EWS backup mode is supported by v8 client in version 8.3.0.96 or above.
3. MAPI backup mode is not fully funtional (unable to load Public Folder items), after MS Exchange Server 2013 CU 20 or above is appli
4. MAPI backup mode is not supported, after MS Exchange Server 2013 CU 23 or above is applied.
Host
Username
Password
Access the Internet through Proxy
Access the internet through FT0Xy

However, if you pick the MAPI (Deprecated) the available fields for EWS will not be available.

Microsoft Exchange Server	
Version	
Microsoft Exchange Server 2013	
Mode MAPI (Deprecated) V	
Remarks:	
1. EWS backup mode is supported by v7 clier	t in version 7.17.2.114 or above.
2. EWS backup mode is supported by v8 clier	t in version 8.3.0.96 or above.
3. MAPI backup mode is not fully funtional (ur	able to load Public Folder items), after MS Exchange Server 2013 CU 20 or above is applied.
4. MAPI backup mode is not supported, after	VIS Exchange Server 2013 CU 23 or above is applied.

6. Select the Backup Source. Input the path on Other Select Source by clicking the [+] sign. On the other hand, if you want to include a path where it will not be included in the backup, input the path on the Deselected Source by clicking the [+].

Add New Backup Set	
Backup Source	
Other Selected Source	
+ •	
Path	
Deselected Source	
+ •	
Path	

Other Selected Source
Path
Deselected Source
Path

Press the Save button at the bottom right corner to proceed when you are done with the selection.

7. In the Schedule menu, you can configure a backup schedule for backup job to run automatically at your specified time interval. By default, the Run scheduled backup for this backup set option is disabled. Enable it, then click the "+" icon next to Add new schedule. Click Next to proceed when you are done setting.

dd New Backup Set	
Run scheduled backup for this backup set	
Manage schedule	
	Туре
Backup Schedule	Daily
Run scheduled backup on computers named *	

If you choose to turn this feature on, you may configure the following items.

- Name of the scheduled backup
- Backup schedule type
- Backup start time
- Run Retention Policy after backup

Backup Schedule			
Details			
Name			
Daily Backup Schedule 01			
Type Daily v			
Start backup at			
Stop until full backup completed			
Run Retention Policy after backup			
	+	Χ	?

Click 🛨 at the bottom right corner to confirm the backup schedule once you finish setting.

Schedule						
Run scheduled backup for this backup set						
Manage schedule						
÷ •						
Name		Туре				
Daily Backup Schedule 01		Daily				
	_					
			÷	→	X	?

8. If you have chosen to Run the backup set on Client.

estination		
Backup Mode		
Sequential 🔻		
Predefined Destination		
+ i		
Name		

To define the backup destination, there are two options:

 In this menu, you can choose the Predefined Destination set by your backup service provider. Click
to display the available destinations. Mark the checkbox of your desired destination.

Ad	d	Destination
Add p	orede	efined destination to this backup set below. If there are no predefined destinations created, you need to go to "AhsayCBS > Backup Server > Basic > Predefined Destination" and create the appropriate destinations first.
		Name
		G AhsarCBS
		Coldster
		AWSComSter
		Predefine1

Click + at the bottom right corner to confirm your selection.

 If you would like to choose other backup destination other than the Predefined Destination, proceed to the next step without making any setting here. You will have to complete this backup set creation first, then log in to the AhsayOBM and configure the backup destination from there. For further details, refer to <u>Appendix A Setting Backup</u> <u>Destination on AhsayOBM for Backup Created on User Web Console</u>.

Press at the bottom right corner to proceed when you are done with the setting.

9. Windows User Authentication

Windows User Authentication	
Domain Name (e.g. mycompany.com) / Host Name	
User name	
Password	