

# Best Practices and Strategies for Backing Up and Restoring Exchange 2010 Environment

## Exchange 2010 Can Only Be Backed Up Using VSS Writers

### Microsoft:

- Windows Server Backup
- System Center Data Protection Manager

### Third parties who integrate Exchange VSS Writers

- Symantec Backup Exec
- Asigra
- CommVault Simpana

# Recovering Exchange 2010 Server

## Setup /m:RecoverServer

- Used to rebuild and re-create a lost server by using the settings and configuration information stored in Active Directory.
- Not used to recover Edge Transport server

## Prerequisites

- Reset computer account in AD
- Install same OS using same computer name, IP address
- Use same drive letters
- Join computer to domain

# Recovering Exchange 2010 Server

- Recovery Databases replace “Recovery Storage Group”
- Use Microsoft or third party software to perform restore
- Then use Exchange Management Shell to recover items
  - Restore-Mailbox
  - Export-Mailbox

## High Availability

### Database Availability Groups (DAGs)

- Combine and improve the replication options from Exchange 2007 into one easily administered solution
- Maintain multiple, continuously updated copies of mailbox database without the requirement of shared storage
- Can contain up to 16 mailbox servers across physical locations

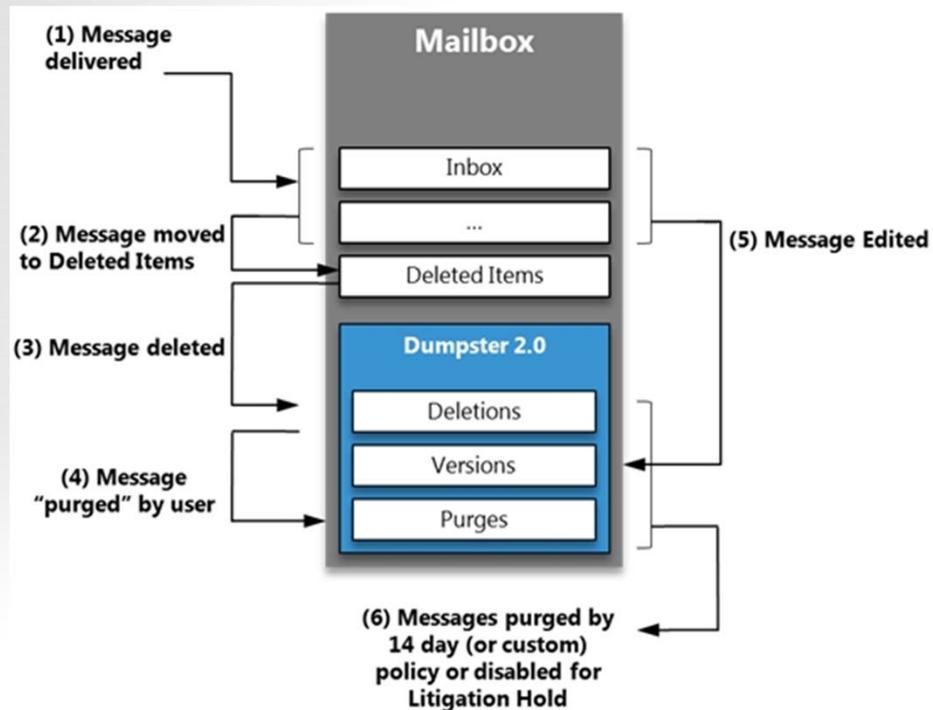
## How to Create a Database Availability Group

- 1) Create the Database Availability Group
  - 1) In EMC, under Organization select Mailbox
  - 2) Select DAG tab, right click and select “New DAG”
  - 3) Name it, select Witness Server and Witness Directory
  
- 2) Add Mailbox Servers to DAG
  - 1) Right click new DAG and select “Manage DAG Membership”
  - 2) Select servers to add to the DAG
  
- 3) Create Mailbox Database Copies
  - 1) Right click a database and select “Add Mailbox Database Copy”
  - 2) Select DAG Member(s) to host database copy
  - 3) Set activation preference number

## Single Item Recovery

### “Dumpster 2.0”

- Set-Mailbox -Identity MBX01 -SingleItemRecoveryEnabled \$True



Source: <http://msexchange.com/archive/2009/09/25/452632.aspx>

### Recovering a message that has been purged...

- 1) Use Exchange Control Panel to run a new search
- 2) Under **Search Name and Storage Location**, type the name of your search, and browse to select the Discovery Search Mailbox
- 3) Results will now be in the “Discovery Search Mailbox”
- 4) Open mailbox in Outlook/OWA or run cmdlet
- 5) Export-Mailbox –Identity “Discovery Search Mailbox” –IncludeFolders \Recovered –TargetMailbox user –TargetFolder targetedfolder

### Going “backup-less” with Exchange 2010

Three copies of a database across physical locations

Use a lagged database copy to prevent corruption in a database from being written to the copies

- Maximum lag time is 14 days

Enable Single Item Recovery at database level

- Can increase mailbox sizes by 350MB or more

## Continuous Replication Circular Logging (CRCL)

- Performed and managed by Microsoft Exchange Replication Service
- Unlike Circular Logging in older versions, current log files are not overwritten
- Closed log files are generated for the log shipping and replay process

### What's new in Exchange 2010 SP1?

1. Continuous Replication - Block Mode
  - New method of shipping logs
  
2. Active Mailbox Database Redistribution
  - SP1 Includes a new script called `RedistributeActiveDatabases.ps1`
  - Balance the distribution of active database copies across a database availability group (DAG)
  
3. Improved Failover Performance

## Best Practices for Backing up and Restoring Exchange

- Back up both Database and Mailbox level
- Store versions locally and offsite
- Monitor backups daily
- Review backup schema on an ongoing basis
- Test your backups!

Questions?  
Comments?