



# Agency Delegated Administrator Guide

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## Summary

The delegation model in the State of Washington is broken into three roles that are granted to agencies to manage their environments.

### ***Delegation Model***

<u>Delegated Recipient Admin</u>	<u>Delegated Security Admin</u>	<u>Discovery Admin</u>
Agency Delegated Mail Recipient Creation	Agency Delegated AD Permissions	Mailbox Search
Agency Delegated Mail Recipients	Agency Delegated Audit Logs	
Agency Delegated Public Folders	Agency Delegated Security Mail Recipients	
Distribution Groups	Mailbox Import Export	
Mail Enabled Public Folders	Security Group Creation and Membership	
Migration		
Move Mailboxes		
User Options		
View-Only Recipients		

The first role provides basic recipient administration. Most Exchange 2010 functions delegated to agencies are delegated through this role. The delegated security administration role is a slightly more advanced role. To be effective, it generally requires the Recipient Admin role as well. It provides a higher level of permissions into mailbox properties as well as content.

Most agencies will likely have one group of administrators with both roles. However, if your agency has security concerns around the privacy of mailbox content, or simply has a need to centralize security related functions, this role makes possible that demarcation.

The third role is the discovery administration role. It is intended for (but not restricted to) non-technical people responsible for performing legal discovery or Freedom of Information Act (FOIA) requests. The Discovery Admin role will be scoped so that users can only see their own agency's mailbox data.

As depicted above, each of these statewide roles uses a combination of standard and customized roles from the Exchange 2010 Role Based Access Control (RBAC) model. Those management roles beginning with "Agency Delegated" have been modified from the out-of-box configuration to more appropriately fit the state model. Those management roles in black are unmodified standard roles that ship with Exchange 2010.

### ***Training Resources***

Agencies accustomed to managing their own servers within the scope of their own environment should find the transition to the 2010 environment fairly straight-forward. Although objects have been restructured to reflect architectural changes in the product, management of Exchange 2010 objects is mostly the same as in 2003. For agency staff, most of the administrative focus will be around mailboxes, distribution groups, and their respective attributes. Server administration, transport and other common features are managed centrally at CTS.

For purposes of product readiness, agency administrators should be familiar with the following:

- [Management coexistence with Exchange 2010 and 2003](#)
- [Discontinued features](#) in Exchange 2010
- [Features in the shell versus console](#)
- Manage recipient objects, including migrating recipients from previous versions of Exchange Server to Exchange Server 2010.

- 
- [Managing bulk changes with PowerShell](#)
  - Understanding [Single Item Recovery](#) and [Litigation Hold](#)
  - Understanding [Mailbox Move Requests](#)
  - [Automatic processing](#) for [resource mailboxes](#)
  - Distribution group ([DG](#)) [membership](#)
  - DG [membership approval and moderation](#)
  - Configure Exchange [mailbox security](#)
  - User [self-service tools](#) and [message tracking](#)
  - Become familiar with [messaging policy and compliance](#)
  - Plan and configure [retention features](#) in Exchange 2010
  - Understanding [multi-mailbox search](#)
  - [Managing public folders](#)

The links above reflect information about the Exchange 2010 product in general. This document highlights some of the specific implementation decisions in the State of Washington deployment and provides additional guidance for agency administrators.

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## Administrative Workstation

Exchange 2010 is administered entirely by PowerShell sessions on Windows Remote Management (WinRM). Even when running PowerShell or the Graphical User Interface (GUI) locally on the Exchange server, a remote session is created and used for administration. This means that the administration tools will run identically on remote workstations or local servers. Microsoft Consulting Services recommends that all delegated Exchange administration be limited to separate privileged accounts running either on a separate workstation or separate security context on a standard workstation. The administrative tools can also be installed on any Windows Server 2008 R2 x64 operating system.

### **Workstation Connectivity to Exchange Servers**

Exchange 2010 administration tools all run on Remote PowerShell which is built on WinRM. WinRM travels over port 80 as Hyper Text Transport Protocol (HTTP) traffic. The Exchange Server environment is located in its own virtual routing & forwarding (VRF) network, which is protected by a firewall. The firewall allows port 80 and 443 traffic to traverse it to all Exchange servers behind it. This allows any GUI or PowerShell-based administration tools to connect to the Exchange environment. Each agency should ensure that they have sufficient connectivity over ports 80 and 443 to the Exchange VRF.

### **Setup**

The basic setup for the agency delegate administration workstation requires a 64-bit operating system running Windows 7.<sup>1</sup> The information summarized below is available in more detail at <http://technet.microsoft.com/en-us/library/bb232090.aspx>.

1. Contact CTS for the current patch version of Exchange 2010.
2. Exchange Administration workstations must be configured with Windows 7 x64 Edition.
3. Install the Exchange 2010 Prerequisites:
  - .NET framework version 3.5 SP1
  - Windows PowerShell V2
  - IIS 6 Management Console and metabase compatibility components (not required until SP1 for Exchange 2010) – this is handled in the control panel: add/remove windows components on Windows Vista/7 workstations and the server manager interface for Server 2008 R2.
4. Install the Exchange Language Packs from the Digital Video Disc (DVD).
5. Choose Install Exchange 2010:
  - Accept the license agreement and choose error reporting preferences
  - For installation type, choose Custom Exchange Server Installation.
  - Choose the Management Tools Checkbox under Server Role Selection
6. Install the latest service pack and update rollup as specified in Step 1.

Steps 4-6 can be replaced by running setup from the command line with the following switches.

Setup.com /R:MT

### **GUI versus PowerShell**

Both the Exchange Management Shell and Management Console will be installed by following the installation script above. The GUI tools operate normally, with one exception from the 2003 environment. Because the delegation can occur at the attribute level, property pages may open, but individual form components will be disabled or locked. This is normal behavior and looks similar to that depicted in Figure 1. In some cases, Exchange attributes and actions will appear functional, but err out upon submission of the change.

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<sup>1</sup> Windows Vista x64 with SP2 or later is also supported with additional requirements found here: <http://technet.microsoft.com/en-us/library/bb691354.aspx>

Most delegate administrators should be able to carry out their day-to-day activities using only the GUI administration tools. Complex operations (bulk changes, for example) are much easier performed through PowerShell cmdlets or scripts.

When PowerShell initially starts, it loads the appropriate modules that expose the Exchange 2010 cmdlets to the shell. A series of checks are made during this startup phase and delegate administrators may see any of the following warnings during startup.

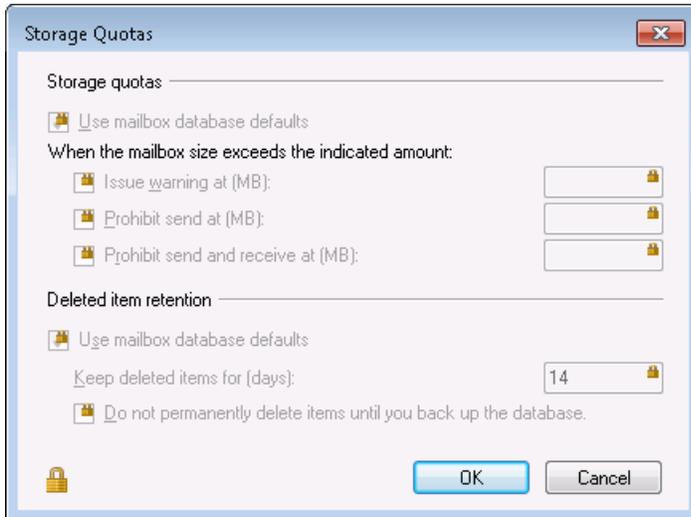


Figure 1 - Screen Shot of Locked Attributes

```
WARNING: No Exchange servers are available in the Active Directory site AGYLOC001.
Connecting to an Exchange server in another Active Directory site.
```

```
WARNING: No Exchange servers are available in the Active Directory site AGYLOC001.
Connecting to an Exchange server in another Active Directory site.
```

This is expected behavior that always occurs, but has been hidden by the GUI. These warnings mean that some cmdlets won't function properly because of a scope and site mismatch. The easiest way to solve the problem is to always initiate PowerShell sessions with a cmdlet to set the scope for your agency.

```
Set-ADServerSettings -RecipientViewRoot "agy.wa.lcl"
```

You may want to modify the shortcut for the Exchange Management Shell to redirect to your agency's recipient view root at start up. Open the properties of the shortcut and change the target as shown below.

```
C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe -noexit -command ".
'C:\Program Files\Microsoft\Exchange Server\V14\bin\RemoteExchange.ps1'; Connect-
ExchangeServer -auto;Set-ADServerSettings -RecipientViewRoot agy.wa.lcl"
```

Another consideration with the PowerShell environment is the noise factor. PowerShell's error reporting is far more verbose than what you might be accustomed to in the GUI. Errors always appear in red, whereas warnings are in yellow. Sometimes, errors are produced in a script, even though the script behaves as expected. This is mostly commonly attributed to replication problems. Some cmdlets will issue a read request immediately following their write request, so as to display the results of a newly created or changed object.

The easiest way to combat the false positives is to use the `-DomainController` parameter with any cmdlet that executes a change. This ensures that writing and reading are happening from the same global

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catalog server. The server you specify should be your agency's domain controller in the CTS-hosted Exchange site, for best results.

Finally, like the GUI, PowerShell locks out those parameters and cmdlets that are not scoped for delegation. In the shell, this means that attributes simply won't show up during the tab expansion process. The best way to determine if your attribute is failing is to check the cmdlet at microsoft.com to see whether the attribute is available by default. If so, but it doesn't show up in the tab expansion process, it is blocked for delegation.

A complete list of cmdlets and attributes is included in the "Exchange 2010 Agency Delegation Management Role.xlsx" document.

### ***Interoperability with Exchange 2003 System Manager***

As documented at <http://technet.microsoft.com/en-us/library/dd638174.aspx>, you can't manage Exchange 2010 objects using the Exchange Server 2003 System Manager. You can use the Exchange Management Console (EMC) in Exchange 2010 to view certain properties and objects, like the routing group connector in Exchange Server 2003. You can't perform message tracking configuration tasks between Exchange 2010 and Exchange 2003. You must use Exchange 2003 messaging tracking tools within your Exchange 2003 organization, and Exchange 2010 messaging tracking tools can be handled either through the self-service tool in Exchange Control Panel (ECP) or by submitting a ticket with the CTS Service Desk.

Also note that Exchange 2010 management tools are 64-bit only and Exchange 2003 tools are 32 bit only on Windows Server 2003<sup>2</sup> and not supported on Windows Vista and later versions. This makes it difficult to manage both environments from the same machine.<sup>3</sup>

Since most agencies will be migrated over a weekend, supporting multiple Exchange environments is not necessarily a problem. Those agencies that must extend their deployments over extended periods will need to manage the legacy clients with the legacy applications and the new clients with the 2010 tools.

Any changes made using the Active Directory Users and Computers (ADU&C) Snap-in will affect objects in both the 2003 and 2010 environments. Mailboxes are attributes of users and users are still manageable by tools like Active Directory Users & Computers or Active Directory System Interface Editor (ADSI Edit). The permission model in Active Directory is separate from that in Exchange 2010. Therefore, it is possible to make changes in Active Directory to objects or properties that would be prohibited in the Exchange GUI or PowerShell environment. While Microsoft supports managing the objects using either tool, the administration model employed at the State of Washington does not. Avoid using ADU&C or ADSI Edit to manipulate Exchange-based properties unless specifically advised. Once all users are migrated to the 2010 environment, Microsoft recommends that the Exchange 2003 extensions for Active Directory Users & Computers be removed from all affected servers. This will prevent unintentional issues down the road.

Lab tests showed that domain administrators (or Organizational Units [OU] administrators with full control over their objects) with access to Exchange 2003 extensions for Active Directory Users & Computers will continue to have access to Exchange attributes and some Exchange tasks. For example, it is possible to remove the 2010 mailbox from a user with the 2003 management tools. Other known attributes include mailbox size limits and standard user attributes. Some functions allowed by 2003 management tools are not allowed by the Exchange 2010 delegation model. It is highly recommended that only 2010

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<sup>2</sup> More information available at [http://technet.microsoft.com/en-us/library/aa995785\(EXCHG.65\).aspx](http://technet.microsoft.com/en-us/library/aa995785(EXCHG.65).aspx)

<sup>3</sup> It is possible to use 32-bit Windows PowerShell 2.0 and remotely access your Exchange 2010 environment. Virtualization would also be a possibility on a 64-bit host machine.

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management tools be used to manage 2010 objects and 2003 tools for 2003 objects. This is important for two reasons:

- 2003 tools are not designed to work with Exchange 2010 stores and may produce unpredictable results that affect end user mailboxes.
- 2010 management processes and procedures might overwrite or otherwise conflict with changes made by the 2003 tools.

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## Administration Issues

This section looks at several administration and coexistence issues that will be part of the consolidated Exchange environment.

### **Domain Controller Virtualization**

For Exchange 2010 to function properly, it requires Active Directory (AD). AD is used for object lookups, the global address list, and authentication, among other things. Under the Exchange 2003 model, each agency hosted their own Exchange Servers and maintained their own domain controllers. To best facilitate the switchover from Exchange 2003 to 2010, CTS will host a virtual domain controller (DC) for each agency's domain in the forest. These DCs will be located in the same site as the Exchange 2010 servers.

The DCs will be backed up and managed by CTS. No object creation or modification is expected. All domain controllers will be configured to replicate with the domain controllers on the premises of the agencies. All changes made within the agency will be replicated to the Exchange 2010 environment. Changes made by Exchange administrators will take effect first on the virtualized domain controllers, but replicated back to the agencies as well.

- **Create Delegation OU:** Under the domain controllers OU in your agency's domain, an OU will be created and titled "Exchange 2010 Domain Controllers." Group policy object (GPO) inheritance will be blocked and new GPOs introduced to allow the domain controller to work within the Exchange 2010 environment.
- **Create Exchange 2010 DC GPOs:** Internet Protocol Security (IPSEC) GPO: This GPO will be created so that the 2008 domain controllers can talk IPsec to the 2003 domain controllers in the statewide environment. A bug was discovered in the Windows Server 2008 product that prevents the NoDefaultExempt registry key from behaving the way it does in Windows Server 2003. The 2008 IPsec policy adds an additional rule to permit Kerberos traffic (IN or OUT).

Note that a local IPsec policy will need to be configured for some agencies prior to running DCPromo on the virtualized domain controller. This is necessary to allow communication through the firewalls during the DCPromo process. Once established as a domain controller, the new GPO could be applied and the local policy lifted.

- **Windows Update GPO:** This GPO will be created to use the forest's designated Windows Update Service. The domain controllers hosted by CTS will be updated according to the enterprise update schedule.
- **DNS Delegation**  
All virtualized domain controllers will be configured with two roles: domain services and domain name services (DNS). The servers' Internet Protocol (IP) settings will be configured to point to themselves first for DNS name resolution, and secondarily to the agency's current primary DNS server. Additionally, the DNS delegation in the WA.LCL forest root will point to the newly created domain controller as primary and the agency's current primary as secondary.

The reason for the delegation change is to ensure that authentication to Exchange continues to function in the event of a local connectivity problem. For example, agency A loses power in their building (or network connectivity). Having the localized DNS delegations will allow users to still send and receive email (from mobile devices or home-based machines accessing Outlook Web App [OWA]).

- **Domain Controller Replication**  
As stated above, it is critical that the CTS-hosted domain controllers be active members in each agency's replication topology. Because the Exchange servers will be writing directly to the hosted domain controller, changes made by Exchange will take longer to replicate through the state

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environment, in some cases. To ensure replication is handled as quickly as possible, a site link between each agency's primary site and the Exchange 2010 site will be created and the Knowledge Consistency Checker will be activated. This is handled as part of the migration process and will be coordinated with your agency's directory services personnel.

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## Functional Technical Reference

This section outlines selected specific commands available to delegate agencies. The management roles, role groups and cmdlets mentioned are specific to the default roles that ship with Exchange Server 2010. A complete list of all role groups, management roles, cmdlets and parameters is provided in the spreadsheet, "Agency Delegation Model v2.xlsx." Additional details are available in Chapters 1 through 3 of this document.

### ***Litigation Hold***

Litigation hold is a new feature in Exchange 2010 for which policies and procedures currently do not exist. Litigation hold prevents a user from purging the contents of his mailbox. It also tracks changes to mail items, keeping the previous versions in the same location as the "purged" items.

Because litigation hold has legal consequences and potential consequences to the storage subsystem, Microsoft Consulting Services (MCS) recommends that it be implemented only with a functioning ticket system. Litigation hold requests would come into the CTS Service Desk. A ticket would be assigned to the case and the mailbox placed on hold. The ticket system will ensure that someone is responsible for eventually removing the hold from the mailbox as well as providing a separation of duties and activity trail that can provide legal protections.

### ***Multi-Mailbox Search & Legal Discovery***

Multi-mailbox discovery allows delegates to search one or more mailboxes for specific keywords or other properties using Advanced Query Syntax (AQS). Although Washington has the Enterprise Vault product from Symantec to handle legal discovery requests, multi-mailbox search is necessary to search those items not yet archived and those items presumed deleted but retained.

Multi-mailbox search, like litigation hold, is designed for centralized delegation. The model used in Exchange 2010 does not accommodate an environment where multiple separate legal departments require simultaneous access to the function. As such, the current product allows legal departments at one agency to view the search object properties of all agencies.

This function requires the enterprise client access license for Exchange or the enterprise Client Access License (CAL or eCAL) suite. Contact your Microsoft representative or Department of Enterprise Services Technology Acquisition representative with any questions regarding client access licenses, CAL, or eCAL suites.

Agencies wishing to take advantage of multi-mailbox search functions must do the following:

- Provide CTS with a mail-enabled security group(s) that contains all the members of the agency. This will be used for all agency searches. Most agencies already have these groups established (e.g., DL CTS AllStaff).
- Ensure all members of the search team are included in the U-S-[Agency Identifier] Delegated Discovery Administrators group created during *Pre-Cutover Guide* role delegation activities.
- If you require multiple search mailboxes, provide CTS with the security subgroups that should be associated with each of the required mailboxes.

### ***The Delegate Recipient Management Role***

Recipient management allows for the administration within the following roles: Distribution Groups, Mail Enabled Public Folders, Mail Recipient Creation, Mail Recipients, and **Recipient Policies**. The following roles will not be enabled: Message Tracking.

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- **Help Desk Role Group**

All features of both management roles are enabled as part of the delegation. The two management roles are User Options, which is primarily user-side mailbox functionality (inbox rules, basic calendar configuration, etc.) and the view-only recipient management functions.

- **Distribution Group Management**

All capabilities of the *Distribution Groups* management role will be enabled. The Distribution Group Management role allows for the creation, management and removal of mail-enabled distribution groups. In addition, permissions will be delegated to manage security groups in Active Directory through the PowerShell and Exchange 2010 interfaces.

- **Public Folders & Mail Enabled Public Folders**

All capabilities of the *Mail Enabled Public Folders* management role will be enabled. These permissions allow the delegate to make a public folder a recipient in the Exchange global address list.

In order for the delegated power to mailbox enable public folders to be effective, some of the get-cmdlets associated with public folder management must also be granted. 15 of the 25 cmdlets in the Public Folders management role will be delegated to the agencies: Get-PublicFolderStatistics, Get-Mailbox, Set-ADServerSettings, Set-MailPublicFolder, Get-Recipient, Get-PublicFolderItemStatistics, Get-PublicFolderDatabase, Get-PublicFolderClientPermission, Get-PublicFolderAdministrativePermission, Get-PublicFolder, Get-MailboxDatabase, Get-MailUser, Get-MailPublicFolder, Get-ExchangeServer, Get-DomainController.

In addition to granting these RBAC permissions, it will be necessary to grant each agency's management role read access to the Exchange object and the specific right ms-Exch-Mail-Enabled-Public-Folder on the organization top-level object. This is necessary to facilitate backwards compatibility with the public folder administration interface.

- **Mail Recipient Creation**

28 of the 32 PowerShell cmdlets available under this role will be delegated to agency administrators. New-LinkedUser, New-RemoteMailbox, Remove-LinkedUser, and Remove-RemoteMailbox will be disabled completely from the delegates.

The New-Mailbox cmdlet will be available for creating new mailboxes, but the following parameters will be disabled: Archive, ArchiveDatabase, ArchiveDomain, Database, Discovery, LinkedCredential, LinkedDomainController, LinkedMasterAccount, ManagedFolderMailboxPolicy, ManagedFolderMailboxPolicyAllowed, RemoteArchive, RetentionPolicy, RoleAssignmentPolicy, and ThrottlingPolicy.

- **Mail Recipients**

All capabilities of the *Mail Recipients* role will be enabled except as follows. The following cmdlets will not be available to agency delegates: Connect-Mailbox, Disable-RemoteMailbox, Disable-ServiceEmailChannel, Enable-RemoteMailbox, Enable-ServiceEmailChannel, New-MailboxRepairRequest, New-OwaMailboxPolicy, New-PublicFolderDatabaseRepairRequest, Remove-OwaMailboxPolicy, Set-LinkedUser, Set-OwaMailboxPolicy, and Set-RemoteMailbox. The following cmdlets will be enabled, but with some restrictions.

- **Set-Mailbox** will not allow the following parameters to be used: ArchiveDomain, ArchiveName, ArchiveQuota, ArchiveStatus, ArchiveWarningQuota, EndDateForRetentionHold, IssueWarningQuota, LinkedCredential, LinkedDomainController, LinkedMasterAccount, LitigationHoldDate, LitigationHoldEnabled, LitigationHoldOwner, ManagedFolderMailboxPolicy, ManagedFolderMailboxPolicyAllowed, MaxReceiveSize, MaxSendSize, ProhibitSendQuota,

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ProhibitSendReceiveQuota, RecipientLimits, RecoverableItemsQuota, RecoverableItemsWarningQuota, RetainDeletedItemsFor, RetainDeletedItemsUntilBackup, RetentionComment, RetentionHoldEnabled, RetentionPolicy, RetentionUrl, RoleAssignmentPolicy, SingleItemRecoveryEnabled, StartDateForRetentionHold, ThrottlingPolicy, UseDatabaseQuotaDefaults, and UseDatabaseRetentionDefaults.

- **Enable-Mailbox** will not allow the following parameters to be used: ArchiveDatabase, ArchiveDomain, ArchiveGuid, ArchiveName, Database, Discovery, LinkedCredential, LinkedDomainController, LinkedMasterAccount, ManagedFolderMailboxPolicy, ManagedFolderMailboxPolicyAllowed, RemoteArchive, and RetentionPolicy.

- **Message Tracking**

This management role is not delegated.

- **Migration**

All capabilities of the *migration* role will be delegated to agency administrators during the time of migration. These tasks are typically only used during the transition between two different mail systems where contacts are required during the migration. The migration role handles all the tasks except for the actual movement of the mailbox data.

- **Move Mailboxes**

All capabilities of the *Move Mailboxes* management role will be enabled. It is expected, however, that these capabilities may be removed after the agency's migration is complete. Mailbox load balancing should typically be handled by a single entity and is believed to be best handled by tier 3 support at CTS.

- **Recipient Policies**

None of the functionality in the *Recipient Policies* management role will be enabled.

- **AD Permissions**

The following capabilities of the AD Permissions group are granted to agencies for purposes of recipient management. This role is specifically required for granting access to mailboxes (such as third party tools, or delegates). The cmdlets included in the AD Permissions group are: Add-ADPermission, Get-ADPermission, Get-DomainController, Get-Group, Get-RoleGroup, Get-SecurityPrincipal, Get-User, Remove-ADPermission, Write-AdminAuditLog.

- **Audit Logs**

The audit logs role is necessary for viewing and generating mailbox audit log reports. The cmdlets included in the audit logs group are: Get-AdminAuditLogConfig, Get-CmdletExtensionAgent, Get-DomainController, Get-Mailbox, Get-MailboxAuditBypassAssociation, Get-SecurityPrincipal, New-AdminAuditLogSearch, New-MailboxAuditLogSearch, Search-AdminAuditLog, Search-MailboxAuditLog, Set-ADServerSettings, Set-Mailbox, Set-User, Write-AdminAuditLog.

- **Mailbox Import and Export**

While this role is generally designed for mailbox recovery procedures, some organizations have found its capabilities useful for other administrative areas. If your agency chooses not to purchase enterprise client access licenses, this role can be used to individually search mailboxes and manually aggregate the search results. Cmdlets included in this role are: Export-Mailbox, Get-Mailbox, Get-MailboxExportRequest, Get-MailboxExportRequestStatistics, Get-MailboxImportRequest, Get-MailboxImportRequestStatistics, Import-Mailbox, New-MailboxExportRequest, New-MailboxImportRequest, Remove-MailboxExportRequest, Remove-MailboxImportRequest, Resume-MailboxExportRequest, Resume-MailboxImportRequest, Search-Mailbox, Set-ADServerSettings, Set-

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MailboxExportRequest, Set-MailboxImportRequest, Suspend-MailboxExportRequest, Suspend-MailboxImportRequest, Write-AdminAuditLog.

---

## Installing Microsoft Exchange 2010 Tools

IMPORTANT: Microsoft Exchange 2010 mailboxes are no longer managed by Microsoft Active Directory Users and Computers (ADUC). All Microsoft Exchange 2010 mail enabled objects must be managed with Microsoft Exchange 2010 management tools such as the Exchange Management Console (EMC), Exchange Management Shell (PowerShell for Exchange) (EMS) or Exchange 2010 Control Panel (ECP).

### Requirements

The Exchange 2010 management tools **can only be installed on 64-bit version** of Windows 7, Windows Vista SP2, Windows Server 2008 SP2 and Windows Server 2008 R2. Please review the following system prerequisites:

- Windows 7:
  - ✓ Microsoft Framework 3.5.1
  - ✓ IIS 6 Management Compatibility
  - ✓ IIS6 Management Console
  
- Windows Vista SP2:
  - ✓ Microsoft Framework 3.5 SP1
  - ✓ Microsoft Framework 3.5 Family Updates
  - ✓ Windows Remote Management 2.0
  - ✓ Powershell v2
  - ✓ IIS 6 Management Compatibility
  - ✓ IIS 6 Management Console
  
- Windows Server 2008 SP2
  
- Windows Server 2008 R2

### Software

Links to downloads from Microsoft are available on the CTS SSEP Technical Resources webpage:  
[http://cts.wa.gov/projects/shared\\_email/technical\\_resources.aspx](http://cts.wa.gov/projects/shared_email/technical_resources.aspx)

**NOTE: The patch level of the Exchange 2010 tools installed on a workstation must match the level installed on the server.**

### Installation

#### **Microsoft Exchange Server 2010**

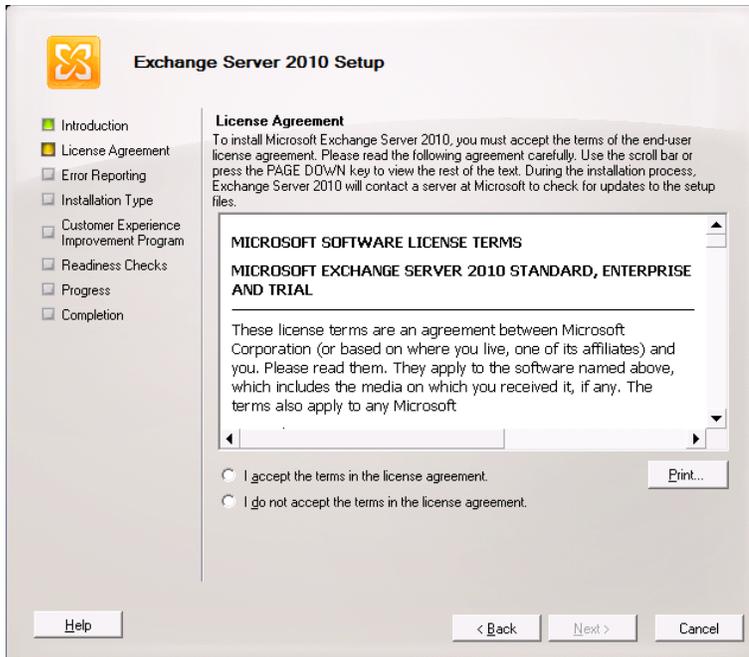
1. Run setup.exe
2. The Exchange Server 2010 setup wizard will startup. If .NET Framework 3.5 or PowerShell aren't installed, start at step 1 or 2. Otherwise proceed to step 3 and select **Install only languages from the DVD**.



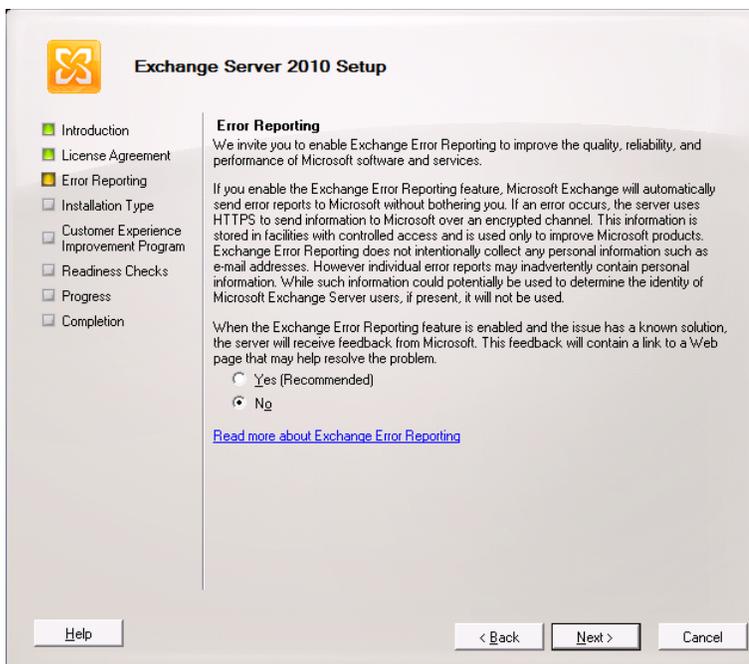
3. Next click, **Install Microsoft Exchange**.
4. Click **Next** on the Introduction page.



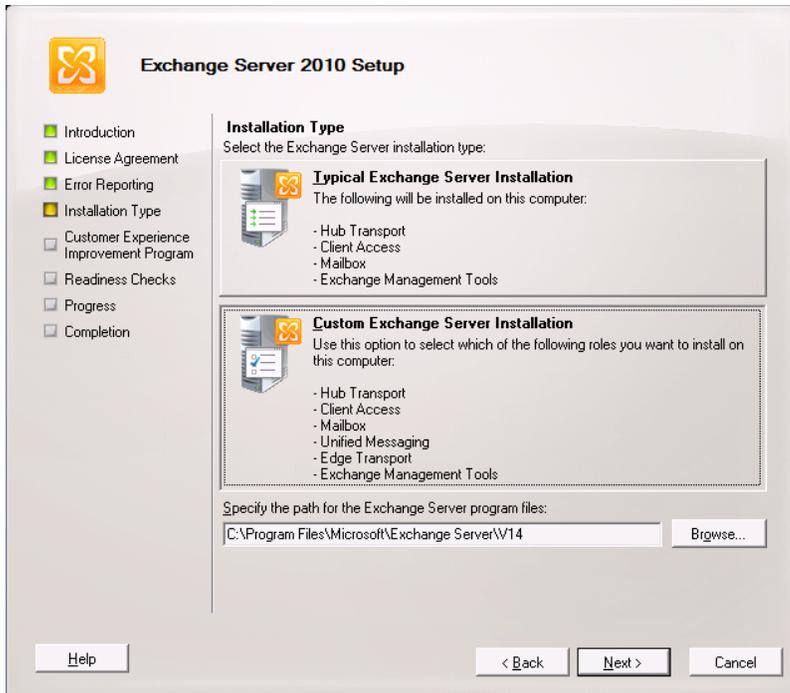
5. Accept the license agreement and click **Next**



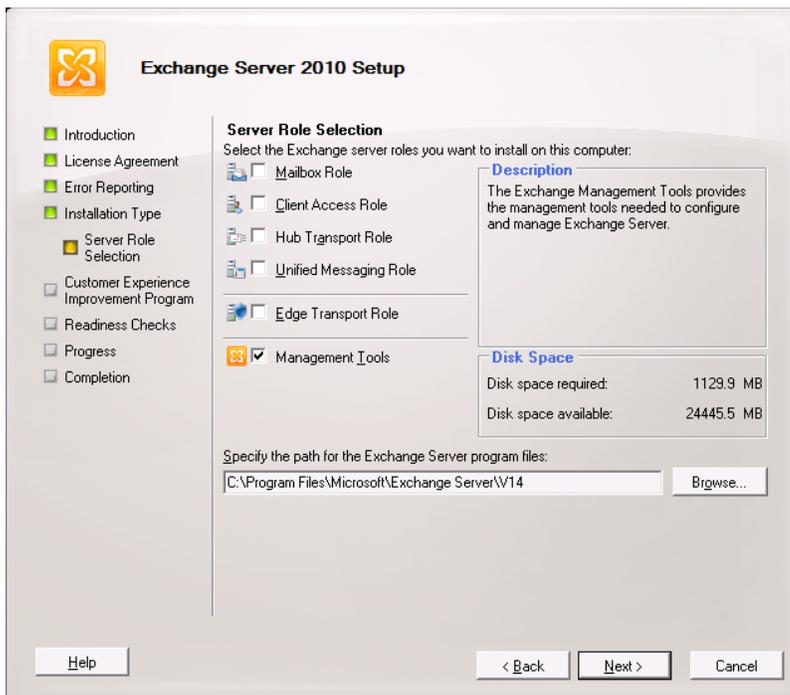
6. Accept the default, which is **No** on the Error Reporting page and click **Next**



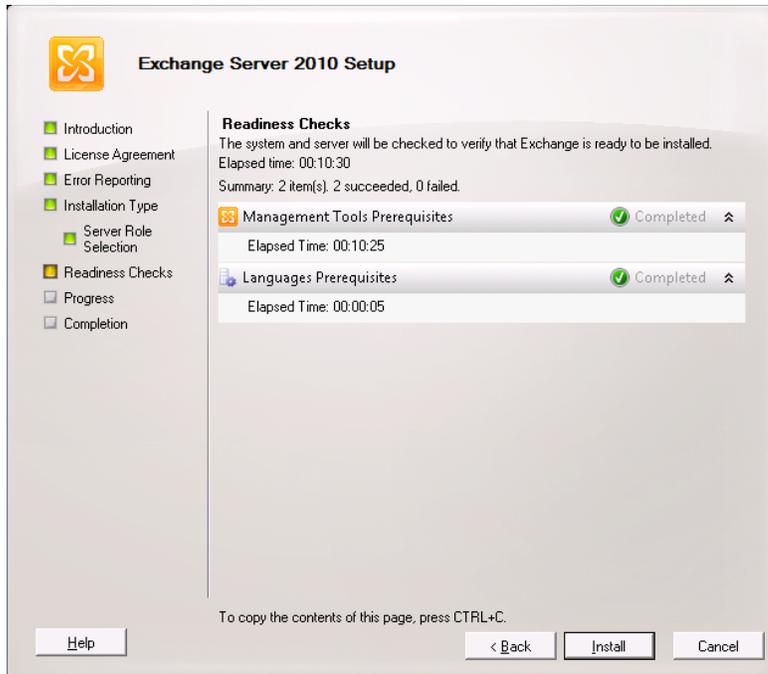
## 7. Select Custom Exchange Server Installation



## 8. From the Server Role Selection page, select Management Tools and click Next

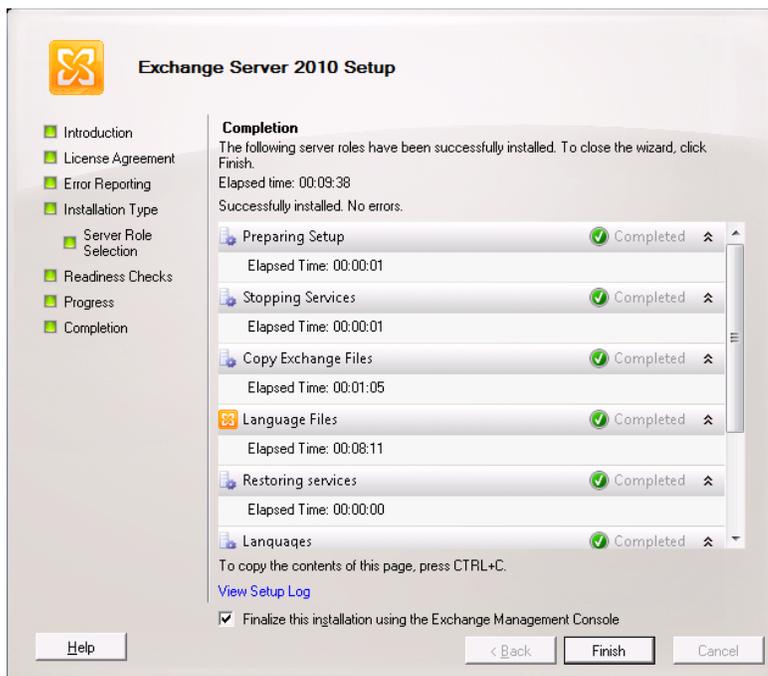


9. After the readiness check, click **Install**.



**Note: If the readiness check fails with the error “A reboot from a previous installation is pending”, delete the following registry key HKLM\System\CurrentControlSet\Control\Session Manager\PendingFileRenameOperations.**

10. When the installation is complete, check the status to verify the installation was successful and click **Finish**.



11. Close the Exchange Management Console and the installation wizard. When prompted to install updates, click **Yes** to ignore it.

---

## Exchange Server 2010 SP1

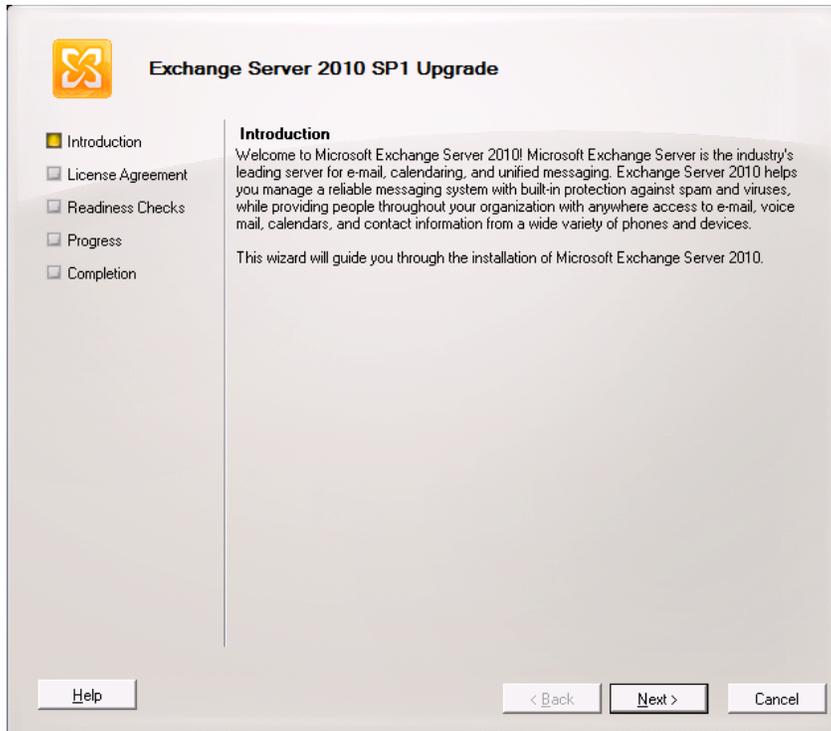
1. Run Exchange2010-Sp1-64.exe
2. Extract the installation files to a desired location.
3. Browse to the directory that SP1 files were saved and run **setup.exe**
4. Select **Upgrade only languages from the DVD**



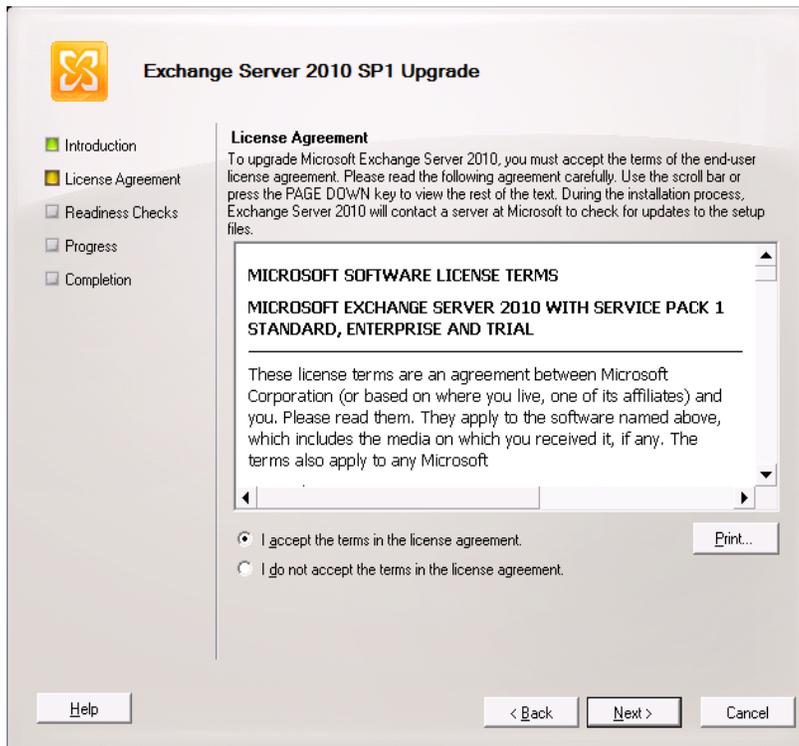
5. Select **Install Microsoft Exchange Server upgrade**



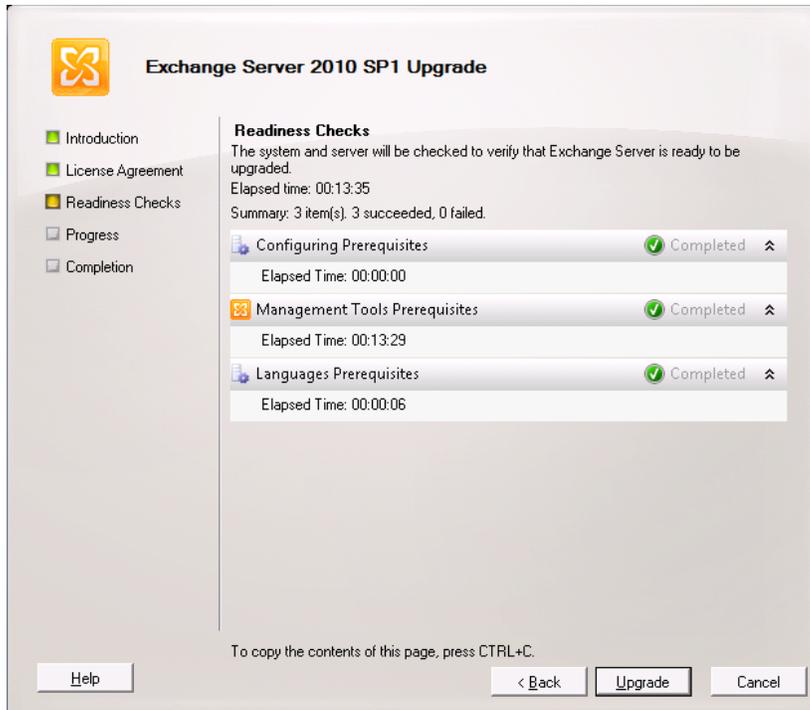
6. Click **Next** on the Introduction page



7. Accept the license agreement and click **Next**



- After the readiness check, click **Upgrade**



- When the upgrade is complete, check the status to verify the installation was successful and click **Finish**.

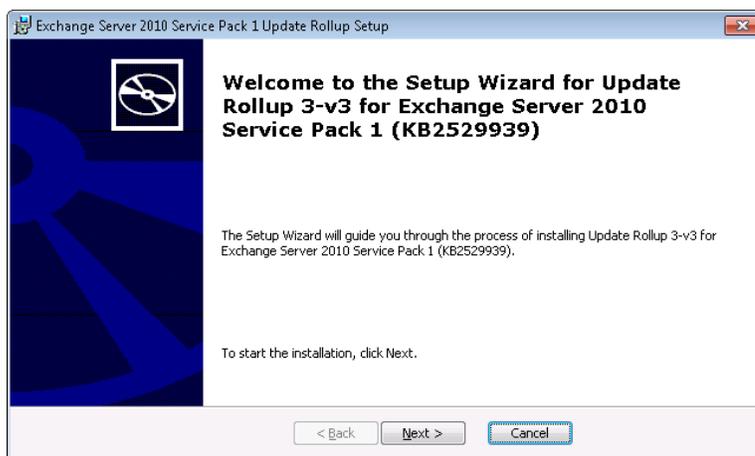
**Note: If the Exchange Management Console installation fails with the error “error 800706d9”, enable firewall service and disable the settings. Before continuing, Exchange will need to be uninstalled.**

- Close the upgrade wizard.

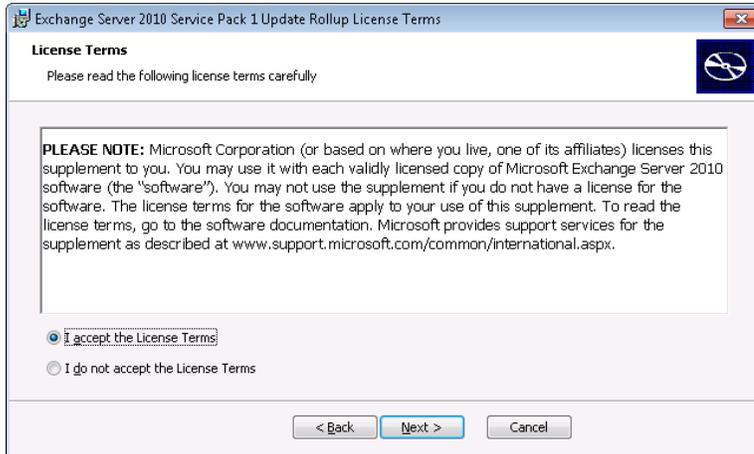
### **Microsoft Exchange 2010 Rollup Updates**

**Note: This section was written for Rollup Update 3, and may be outdated when you are installing updates. Please check the CTS SSEP Technical Resource page online for the current version: [http://cts.wa.gov/projects/shared\\_email/technical\\_resources.aspx](http://cts.wa.gov/projects/shared_email/technical_resources.aspx)**

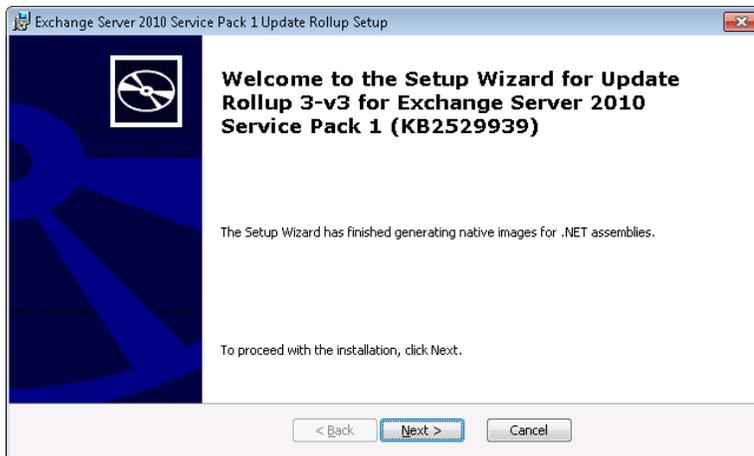
- Run Exchange2010-KB2529939-v3-x64-en.msp
- Click **Next** on the Update Rollup Welcome page



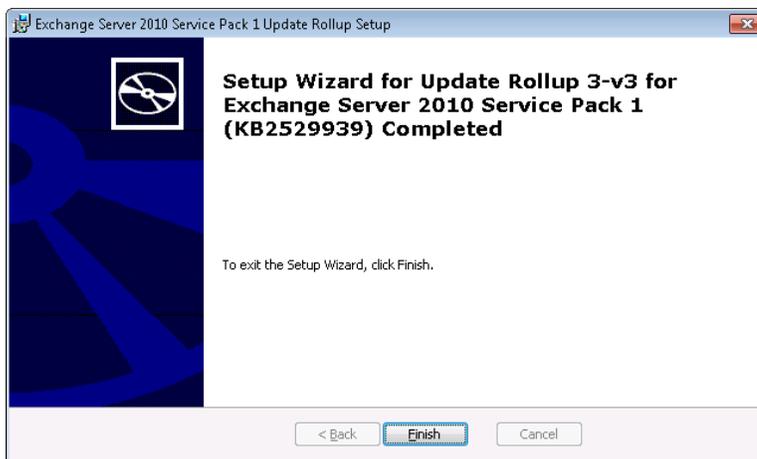
3. Accept the license agreement and click **Next**



4. Click **Next** to start the installation



5. Click **Finish** when installation is complete



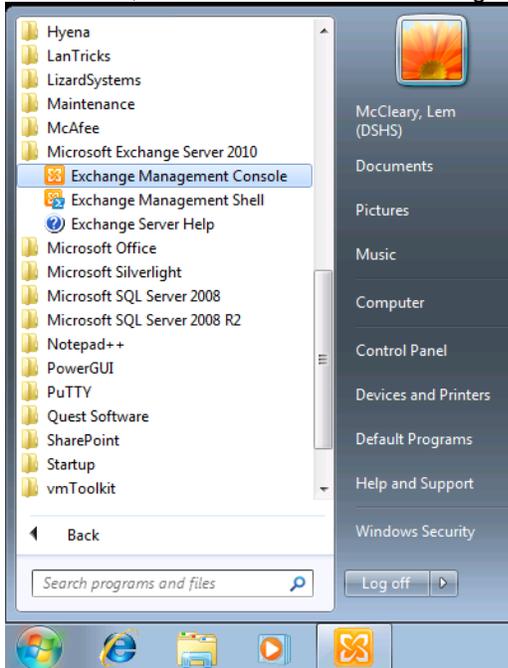
---

## Microsoft Exchange 2010 Tools

For the most part, Exchange 2010 recipient management duties will be performed in the Exchange Management Console (**EMC**). When bulk modifications are needed or commands that aren't available in the EMC, those tasks must be completed in the Exchange Management Shell (**EMS**).

### How to open Exchange Management Console

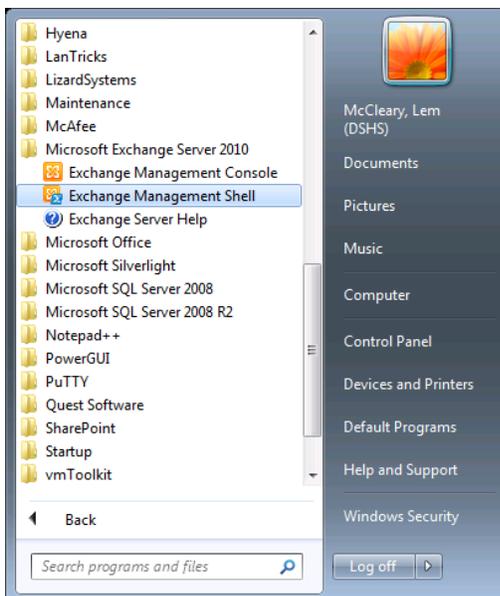
Click **Start**, browse to Microsoft Exchange Server 2010 and select **Exchange Management Console**.



### How to open Exchange Management Shell

Click **Start**, browse to Microsoft Exchange Server 2010 and select **Exchange Management Shell**.

**NOTE: It is normal to get a series of warnings about an Exchange server not available in several Active Directory sites. A connection will be made to an Exchange server in the WAX domain.**



---

Use caution when running commands in EMS because some commands might run against an entire OU unless a mailbox is specified. The **-whatif** command can be placed at the end of commands to see results without actually running the command.

**Example:** *Disable-Mailbox -Identity DSHS\Bille -whatif*

# Chapter 1: Delegated Security Admin Role

Prepared by:  
The CTS Shared Services Email Project Team

## Agency Delegated AD Permissions

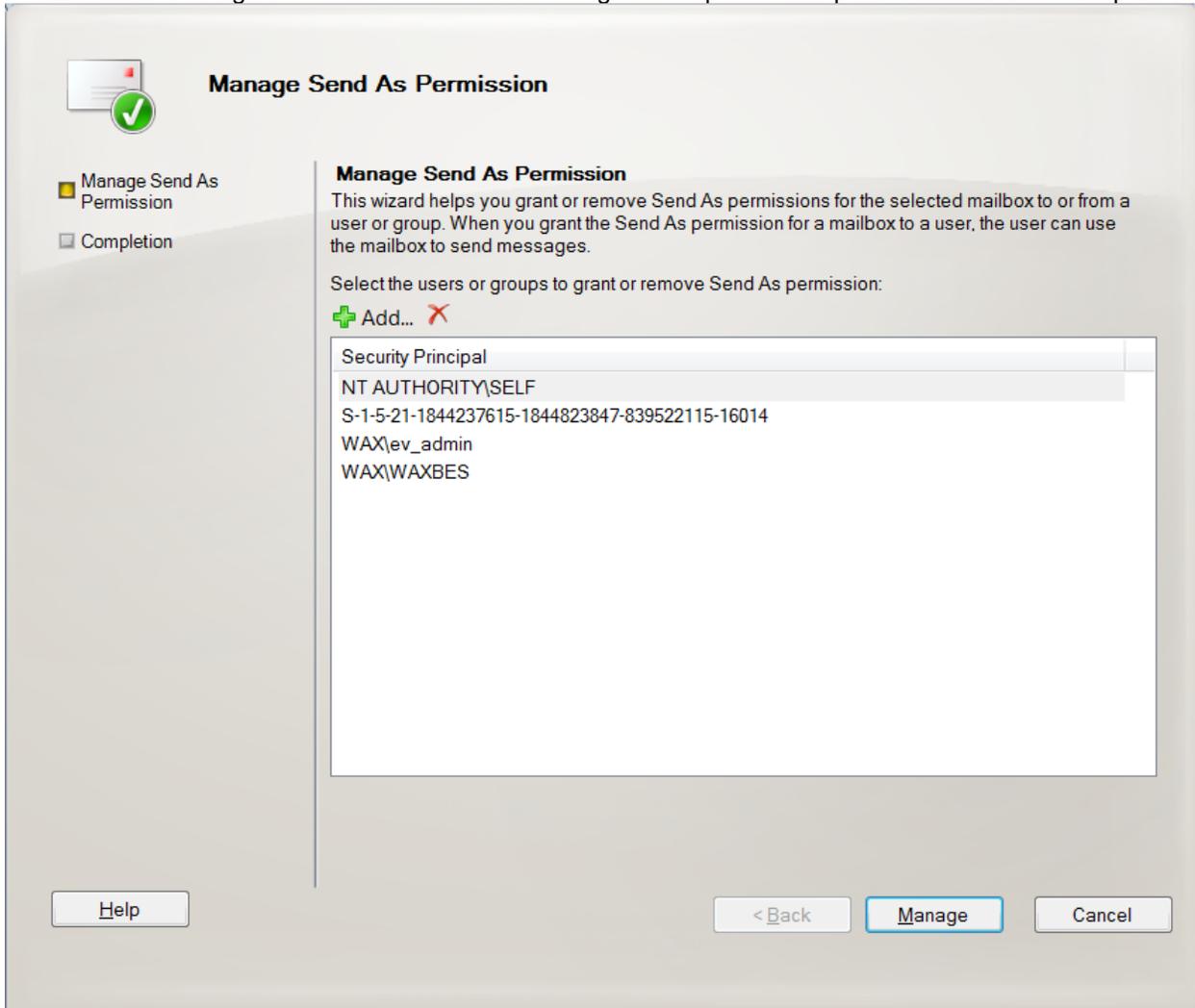
### Add-ADpermission

Synopsis: Adding 'Send-As' rights to a user

Method: Exchange Management Console – or – Exchange Management Shell

#### EMC method:

1. Select the mailbox within the EMC to which you want to add Send-As rights
2. Click "Manage Send As Permission" in the right-hand pane. The permission window will open.



3. Click the Add button.  Add...
4. Select the name you are adding Send-As rights to
5. The name will be added to the list
6. Click Manage to complete this task. 

#### EMS method:

Granting WilliamC 'Send-As' rights to Bill Example's mailbox

1. Open EMS  
**Note: To limit the focus to CTS.WA.LCL, use the following command: `Set-ADServerSettings -RecipientViewRoot "cts.wa.lcl"`**

- 
2. Type the following command:  
*Add-ADPermission -Identity 'CN=Example\, Bill (CTS),CN=Users,DC=cts,DC=wa,DC=icl' -User 'CTS\WilliamC' -ExtendedRights 'Send-as'*

### **Get-ADpermission**

Synopsis: Retrieve permissions on an Active Directory Object

#### **Examples:**

*Get-ADPermission -Identity 'CN=Doe\, John (CTS),CN=Users,DC=cts,DC=wa,DC=icl'*

Or

*Get-ADPermission -Identity 'Doe, John (CTS)'*

### **Get-DomainController**

Synopsis: Retrieve a list of Domain Controllers that exist in your organization.

#### **Examples:**

*Get-DomainController -DomainName cts.wa.icl*

The following example will display the Domaincontroller and AD Site in a formatted table.

*Get-DomainController -DomainName dis.wa.icl | Format-Table -AutoSize Name, ADSite*

### **Get-Group**

Synopsis: Query for existing groups.

#### **Examples:**

This example returns all groups that begin with "CTS DL"

*Get-Group -Anr 'cts dl'*

This example returns a formatted list about a particular group

*Get-Group -identity 'cts dl all staff'*

This example returns all groups in Active Directory

*Get-Group*

### **Get-User**

Synopsis: Returns a list of users that match the specified condition.

#### **Examples:**

This example returns all users with "Manager" in their Title

*Get-User -Filter "Title -like '\*Manager\*'"*

This example returns all available parameters for a user. ( fl = Format List )

*Get-User JohnD |fl*

This example returns all users in the Payroll OU

*get-user -OrganizationalUnit "Payroll" -DomainController CTSGCOLY2010*

This example returns all users in the organization

*Get-User*

### **Remove-ADPermisson**

Synopsis: Remove permissions from an Active Directory object.

#### **Example:**

This example removes the Send As permission from user WilliamC on the user Example, Bill (CTS)

*Remove-ADPermission -Identity 'CN=Example\, Bill (CTS),CN=Users,DC=cts,DC=wa,DC=icl' -User 'CTS\WilliamC' -ExtendedRights 'Send-as'*

### **Write-AdminAuditLog**

Synopsis: Write a comment to the administrator audit log.

#### **Example:**

This example writes a comment to the administrator audit log.

*Write-AdminAuditLog -Comment "Ran custom script."*

---

## Agency Delegated Audit Logs

### Get-AdminAuditLogConfig

Synopsis: View the administrator audit logging configuration settings.

**Example:**

This example lists the audit logging configuration settings.

***Get-AdminAuditLogConfig***

### Get-DomainController

Synopsis: View a list of domain controllers that exist in your organization.

**Examples:**

This example returns all Domain Controllers in your organization

***Get-DomainController -DomainName cts.wa.lcl***

This example returns all Domain Controllers in a formatted table by Name and AD Site

***Get-DomainController -DomainName cts.wa.lcl |Format-Table -AutoSize Name,ADSite***

### Get-Mailbox

Synopsis: View mailbox objects and attributes, populate property pages, or supply mailbox information to other tasks.

**Examples:**

This example returns a list of all mailboxes in your organization

***Get-Mailbox***

This example returns a list of all mailboxes that resolve from the ambiguous name resolution search on the string "chr"

***Get-Mailbox -Anr "Chr" -DomainController CTSGCOLY2010***

This example returns a list of all available attributes for the mailbox JohnD

***Get-Mailbox JohnD |fl***

### New-AdminAuditLogSearch

Synopsis: Search the contents of the administrator audit log and send the results to one or more mailboxes that you specify.

**Example:**

This example searches the administrator audit logs for entries that contain the New-RoleGroup or New-ManagementRoleAssignment and sends the results to the specified mailbox

***New-AdminAuditLogSearch -Name "Role Group Change Audit" -Cmdlets New-RoleGroup, New-ManagementRoleAssignment -StatusMailRecipients john.doe@cts.wa.gov***

### New-MailboxAuditLogSearch

Synopsis: Search mailbox audit logs and have search results sent via e-mail to specified recipients.

**Example:**

This example will create a mailbox audit log search to search DISlantest's mailbox and send to the specified recipient.

***New-MailboxAuditLogSearch -Mailboxes dislantest -LogonTypes Owner -ShowDetails -StartDate 1/12/2010 -EndDate 5/12/2011 -StatusMailRecipients You.User@cts.wa.gov***

*(It will take some time for the search to run and for the results to be e-mailed)*

### Search-AdminAuditLog

Synopsis: Search the contents of the administrator audit log.

**Example:**

This example searches the administrator audit log for New-RoldGroup and New-ManagementAssignment cmdlets

***Search-AdminAuditLog -cmdlets New-RoleGroup, New-ManagementRoleAssignment***

### Search-MailboxAuditLog

Synopsis: Search the contents of the mailbox audit log entries matching the specified search terms.

**Example:**

---

This example

**Search-MailboxAuditLog -Mailboxes**

**"Thomas.thomason@des.wa.gov","Alfred.alfredson@des.wa.gov" -LogonTypes Admin,Delegate -StartDate 7/1/2011 -EndDate 9/16/2011 -ResultSize 2000**

**Set-ADServerSettings**

Synopsis: Manage the Active Directory Domain Services (AD DS) environment in the current Exchange Management Shell session.

**Examples:**

This example sets the RecipientViewRoot to the local domain

**Set-ADServerSettings -RecipientViewRoot cts.wa.lcl**

This example sets the scope to the entire forest

**Set-ADServerSettings -ViewEntireForest \$true**

This example sets the scope to the entire forest and designates a preferred global catalog server

**Set-ADServerSettings -ViewEntireForest \$true -PreferredGlobalCatalog CTSGCOLY2010**

**Set-Mailbox**

Synopsis: Modify the settings of an existing mailbox. You can use this cmdlet for one mailbox at a time. To perform bulk management, you can pipeline the output of various Get- cmdlets and configure several mailboxes in a single-line command.

**Example:**

This example sets delivery of HarveyC's e-mail messages to Harvey's mailbox and also forwards them to Steven Jacobs mailbox.

**Set -Mailbox -Identity HarveyC -DeliverToMailboxAndForward \$true -ForwardingAddress [Steven.Jacobs@cts.wa.gov](mailto:Steven.Jacobs@cts.wa.gov)**

**Write-AdminAuditLog**

See *Write-AdminAuditLog* under 'Agency Delegated AD Permissions' above

---

## Agency Delegated Security Mail Recipients

### Add-MailboxFolderPermission

Synopsis: Manage folder-level permissions for all folders within a user's mailbox.

**Example:**

This example assigns permission for Barney to access Fred's Customers folder and applies the 'Owner' role to his access of that folder in his mailbox.

**Add-MailboxFolderPermission -Identity [Fred.Flanders@cts.wa.gov](mailto:Fred.Flanders@cts.wa.gov):\Customers -user [Barney.Rogers@cts.wa.gov](mailto:Barney.Rogers@cts.wa.gov) -AccessRights Owner**

### Add-MailboxPermission

Synopsis: Add permissions to a mailbox.

**Examples:**

This example grants CharlieB full access to LucyV's mailbox.

**Add-MailboxPermission -Identity [LucyV@cts.wa.gov](mailto:LucyV@cts.wa.gov) -user [CharlieB@cts.wa.gov](mailto:CharlieB@cts.wa.gov) -AccessRights FullAccess**

This example grants NapoleonD Read permission on the resource mailbox CTSRoom342.

**Add-MailboxPermission -Identity [CTSRoom342@cts.wa.gov](mailto:CTSRoom342@cts.wa.gov) -user [NapoleonD@cts.wa.gov](mailto:NapoleonD@cts.wa.gov) -AccessRights ReadPermission**

### Get-MailboxFolderPermission

Synopsis: View the folder-level permissions for a folder or a specific user's permissions for a folder.

**Examples:**

This example returns the current list of user permissions for Thomas' Reports folder under the Mainframe folder.

**Get-MailboxFolderPermission -Identity [Thomas.Easton@cts.wa.gov](mailto:Thomas.Easton@cts.wa.gov):\Mainframe\Reports**

This example returns the permissions that Zack has to view Thomas' Mainframe Reports folder.

**Get-MailboxFolderPermission -Identity [Thomas.Easton@cts.wa.gov](mailto:Thomas.Easton@cts.wa.gov):\Mainframe\Reports -user [Zack.Tylor@cts.wa.gov](mailto:Zack.Tylor@cts.wa.gov)**

### Get-MailboxPermission

Synopsis: Retrieves permission on a mailbox.

**Examples:**

This example returns a list of all permissions on Jimmy's mailbox

**Get-MailboxPermission -Identity [Jimmy.Carlson@cts.wa.gov](mailto:Jimmy.Carlson@cts.wa.gov)**

This example returns permissions that Alfred has on Jimmy's mailbox

**Get-MailboxPermission -Identity [Jimmy.Carlson@cts.wa.gov](mailto:Jimmy.Carlson@cts.wa.gov) -User [Alfred.Newhart@cts.wa.gov](mailto:Alfred.Newhart@cts.wa.gov)**

This example returns the owner information for the resource mailbox Room222

**Get-MailboxPermission -Identity [Room222](mailto:Room222) -Owner**

### Remove-MailboxFolderPermission

Synopsis: Remove folder level permissions for a user.

**Example:**

This example removes Zack's permissions for Thomas' Reports folder under the Mainframe folder.

**Remove-MailboxFolderPermission -Identity [ThomasE@cts.wa.gov](mailto:ThomasE@cts.wa.gov):\Mainframe\Reports -User [ZackT@cts.wa.gov](mailto:ZackT@cts.wa.gov) -AccessRights "Publishing Editor"**

### Remove-MailboxPermission

Synopsis: Remove permissions from a user's mailbox.

**Example:**

This example removes David's full access rights for Paul's mailbox.

**Remove-MailboxPermission -Identity [DavidL@cts.wa.gov](mailto:DavidL@cts.wa.gov):\Mainframe\Reports -User [PaulS@cts.wa.gov](mailto:PaulS@cts.wa.gov) -AccessRights "FullAccess" -InheritanceType All**

---

**Set-Mailbox**

See Set-Mailbox in the 'Agency Delegated Audit Logs' section above

---

## Mailbox Import Export

### Export-Mailbox

This command has been replaced by the below “New-MailboxExportRequest” in SP1. This change also requires the admin to be in the “U-S-AGY Exchange 2010 Discovery Admins” security group.

### New-MailboxExportRequest

Synopsis: Use the New-MailboxExportRequest cmdlet to begin the process of exporting contents of a primary mailbox or archive to a .pst file.

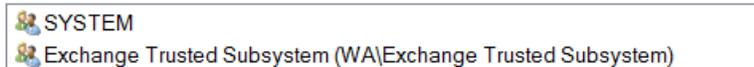
#### **Example:**

This example exports the specified mailbox to a PST file on the specified server and share.

**New-MailboxExportRequest -Mailbox dislantest -MRSServer waxmxolyhtcas08.wax.wa.lcl -FilePath [\lctsgcoly2010\myshare\antest.pst](#)**

(The WA\Exchange Trusted Subsystem will need access on the file share)

Group or user names:



The CAS server will need a connection path with the system hosting the fileshare. If there is a firewall between the two it will need to be addressed.

### Get-Mailbox

See Get-Mailbox in the ‘Agency Delegated Audit Logs’ section above

### Get-MailboxExportRequest

Synopsis: View the detailed status of an ongoing export request that was initiated

#### **Examples:**

This example returns a list of export requests and their current status

**Get-MailboxExportRequest**

This example returns a list of export requests that have a status of ‘Completed’.

**Get-MailboxExportRequest -Status Completed**

This example returns a list of export requests where the export has been suspended

**Get-MailboxExportRequest -Suspend \$true**

---

## Security Group Creation and Membership

### Add-DistributionGroupMember

Synopsis: Add a recipient to a distribution group.

**Example:**

This example adds Tom Smith to the distribution group CTSDLCoffeeClub

**Add-DistributionGroupMember -Identity "CTSCoffeeClub" -Member Tom.Smith@cts.gov**

### Get-DistributionGroup

Synopsis: Query for existing distribution groups.

**Examples:**

This example retrieves the group CTSDLCoffeeClub and pipelines to the Format-List command to display information about the distribution list.

**Get-DistributionGroup -Identity "CTSCoffeeClub" |fl**

This example retrieves all distribution groups whose names begin with the string "CTS DL Web" and pipelines the object for the Format-Table command to display the distribution group names and who they are managed by.

**Get-DistributionGroup -anr "CTS DL Web" |ft Name, ManagedBy**

### Get-DistributionGroupMember

Synopsis: Find existing distribution group members.

**Example:**

This example returns the existing distribution group members for the distribution group "CTSDLLibrary"

**Get-DistributionGroupMember -Identity "CTSDLLibrary"**

### Get-Mailbox

See Get-Mailbox in the 'Agency Delegated Audit Logs' section above

### Get-Recipient

Synopsis: Return a list of recipient objects from Active Directory.

**Examples:**

This example retrieves information about all the recipients in your organization.

**Get-Recipient -ResultSize Unlimited**

This example retrieves information about all the mail contacts in your organization and sorts them by name.

**Get-Recipient -RecipientType MailContact -SortBy Name**

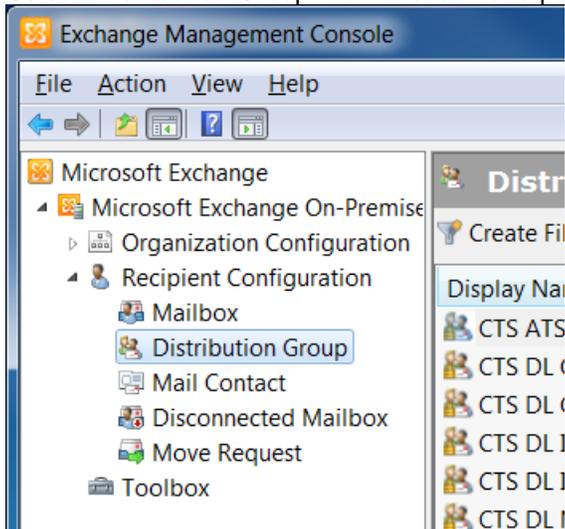
This example retrieves information about all the Public Folders in your organization.

**Get-Recipient -RecipientType PublicFolder**

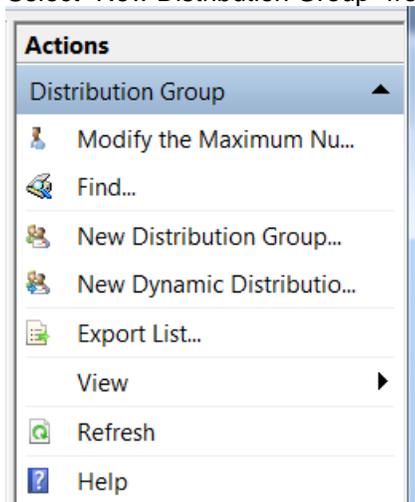
## New-DistributionGroup

Synopsis: Create a new distribution group.

1. Open the Exchange Management Console
2. Select "Distribution Group" from the left hand pane



3. Select "New Distribution Group" from the right hand pane



4. Select "Next" at the New Distribution Group Wizard screen

**New Distribution Group**

Introduction  
 Group Information  
 New Distribution Group  
 Completion

**Introduction**  
This wizard helps you create a distribution group or mail-enable an existing group.  
Select the type of group that you want to create the distribution group for:

New group  
 Existing group

5. New Distribution Group Screen
  - a. Select Distribution or Security for "Group Type"
  - b. If you want the DL created in a specific OU then browse to that OU and select it
  - c. Enter the Distribution Group name
  - d. Enter the Alias (Spaces are not valid characters)

**New Distribution Group**

Introduction  
Group Information  
New Distribution Group  
Completion

**Group Information**  
Enter account information for the distribution group.

Group type:  
 Distribution  
 Security

Specify an Organizational Unit rather than using a default one:  
cts.wa.lcl/Distribution Lists

Name:  
CTS DL Coffee Club

Name (pre-Windows 2000):  
CTS DL Coffee Club

Alias:  
CTSDLCoffeeClub

6. Click Next
7. Verify everything looks correct on the New Distribution Group Configuration Summary screen
8. Click New to create the new Distribution Group
9. If you want a copy of the Powershell script that ran you can press CTRL-C to copy the page contents.
10. Click Finish to complete the process

Powershell for the above actions

```
new-DistributionGroup -Name 'CTS DL Coffee Club' -OrganizationalUnit  
'cts.wa.lcl/Distribution Lists' -SamAccountName 'CTS DL Coffee Club' -Alias  
'CTSDLCoffeeClub'
```

---

## Remove-DistributionGroup

Synopsis: Delete an existing distribution group from Active Directory.

### **Example:**

This example retrieves information about all the recipients in your organization. You will be prompted to confirm the deletion.

#### ***Remove-DistributionGroup –Identity “CTS DL Coffee Club”***

Confirm

Are you sure you want to perform this action?

Removing distribution group "CTS DL Coffee Club" will remove the Active Directory group object.

[Y] Yes [A] Yes to All [N] No [L] No to All [?] Help (default is "Y"): Y

## Remove-DistributionGroupMember

Synopsis: Remove an existing recipient from a distribution group.

### **Example:**

This example removes Thomas Spyre from the distribution group “CTS DL Coffee Club”. You will be prompted to confirm the removal.

#### ***Remove-DistributionGroupMember –Identity “CTS DL Coffee Club” –Member “Spyre, Thomas (CTS)”***

Confirm

Are you sure you want to perform this action?

Removing distribution group member "Spyre, Thomas (CTS)" from distribution group "CTS DL Coffee Club".

[Y] Yes [A] Yes to All [N] No [L] No to All [?] Help (default is "Y"): Y

## Set-DistributionGroup

Synopsis: Modify the settings of an existing distribution group.

### **Examples:**

This example changes the display name of an existing distribution group from “Accounting” to “Accounting Group”

#### ***Set-DistributionGroup –Identity “Accounting” –DisplayName “Accounting Group”***

This example converts the 1500 Jeff Rooms distribution group to a room list

#### ***Set-DistributionGroup –Identity “1500 Jeff Rooms” –RoomList***

# Chapter 2: Delegated Recipient Admin Role

Prepared by:  
DSHS and the CTS Shared Services Email Project Team

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## **Introduction**

This document assumes you have followed and met the requirements and installation procedures found in the Recipient Administration Guide for the configuration of the Exchange Administration workstation and the installation of the Exchange Administration tools.

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## Security Group Configuration

In order to perform the operations in this guide, you must be a member of Exchange *Delegated Recipient Admin* role group. Group membership allows access to different administrative functions through the Exchange Management Console (**EMC**) or the Exchange Management Shell (**EMS**). Below is a list of functions:

### Delegation Recipient Admins

- Agency Delegated Mail Recipient Creation
- Agency Delegated Mail Recipients
- Agency Delegated Public Folders
- Distribution Groups
- Mail Enabled Public Folders
- Migration
- Move Mailboxes
- User Options
- View-Only Recipients

**To perform Exchange 2010 administrative task, users must be members of appropriate “Administration Membership” group.**

---

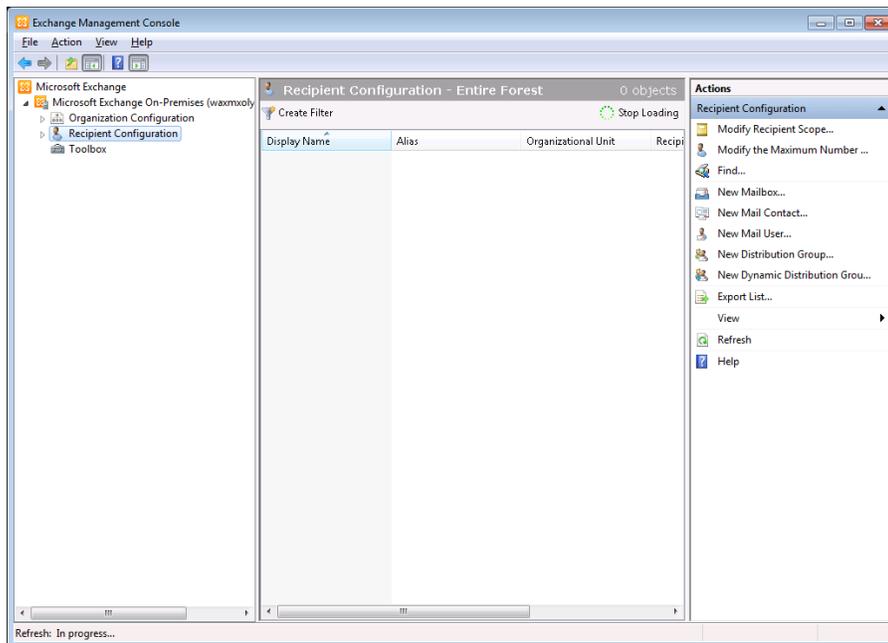
## Create an Active Directory User Object with an Exchange 2010 Mailbox

Exchange 2010 mailboxes can be created by using the Exchange 2010 Management Console (**EMC**) or with Exchange Management Shell (**EMS**). The creation of a single mailbox can easily be done using the EMC. When creating several mailboxes at a time, EMS might be a better option.

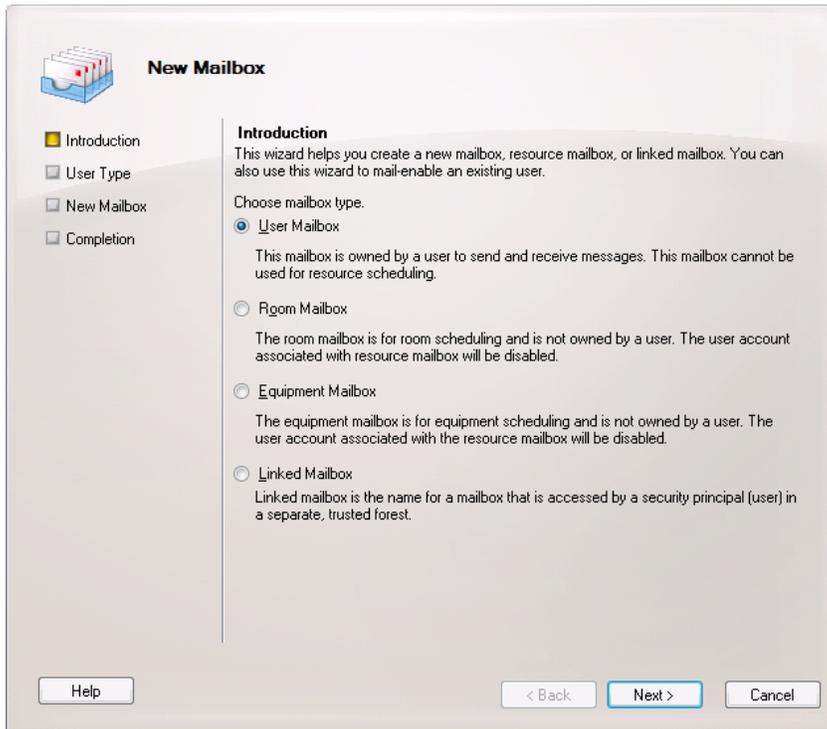
### Mailbox creation

#### **EMC method:**

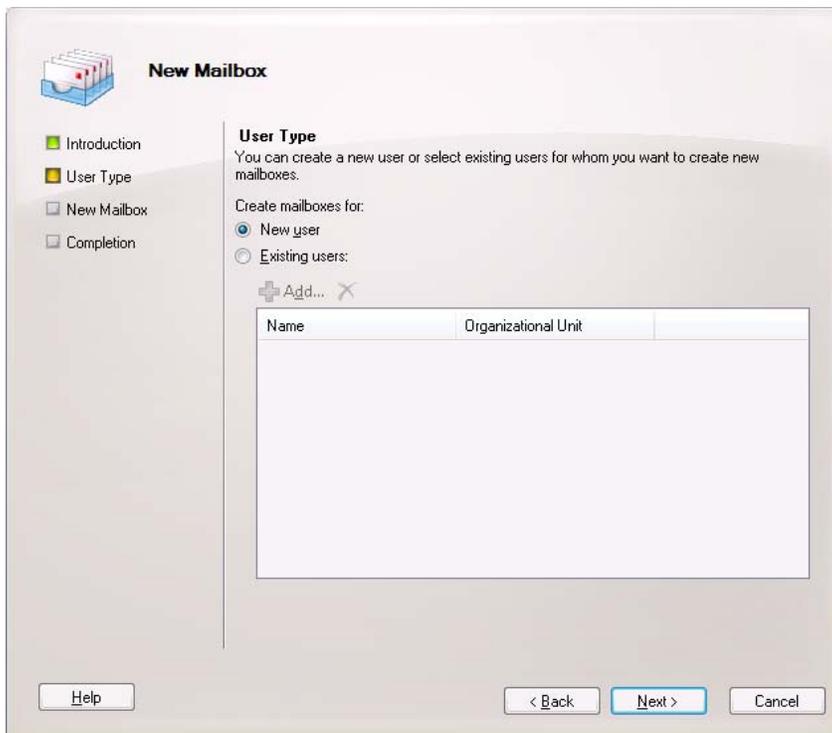
1. Open the EMC
2. From the console tree, click **Recipient Configuration**



3. Click **New Mailbox**. The New Mailbox wizard will open. Select the type of mailbox that needs to be created. In this case, select **User Mailbox** and click **Next**.



4. Select **New User** and click **Next**



- The New User Information page will display. Browse to the organizational unit that the user object will reside and populate all the rest of the fields on the page.

**NOTE: The name in the Name field should be populated last name, first name. This is how the name will be displayed in AD and in the Global Address Book.**

The screenshot shows the 'New Mailbox' wizard in the 'User Information' step. The left sidebar has 'User Information' selected. The main area contains the following fields and options:

- User Information**: Enter the user name and account information.
- Specify the organizational unit rather than using a default one:
  - Text field: dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users
  - Button: Browse...
- First name:** Bill
- Initials:** [Empty]
- Last name:** Example
- Name:** Example, Bill
- User logon name (User Principal Name):** BillE
- Domain:** @dshs.wa.lcl
- User logon name (pre-Windows 2000):** BillE
- Password:** [Masked]
- Confirm password:** [Masked]
- User must change password at next logon

Buttons at the bottom: Help, < Back, Next >, Cancel.

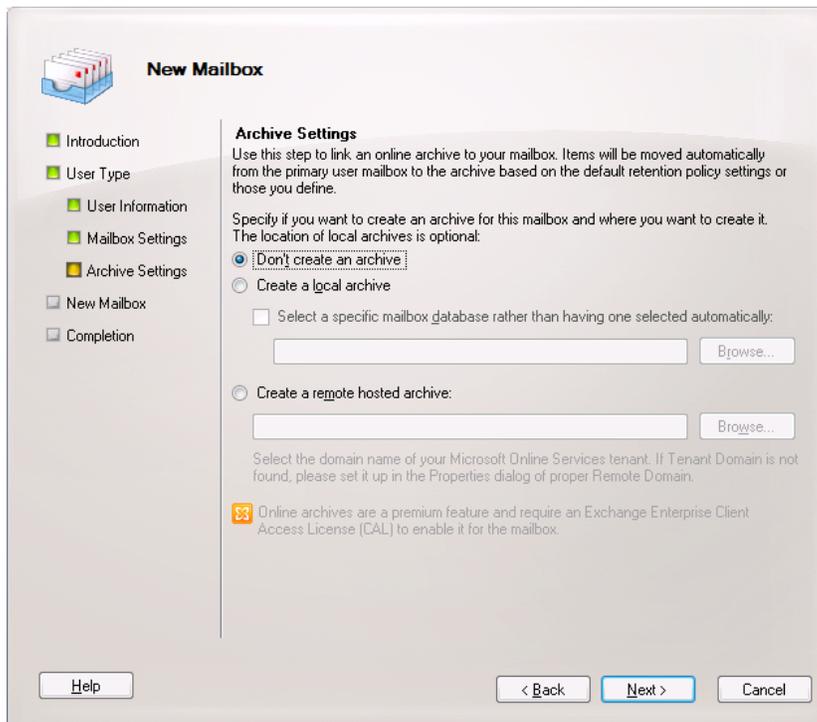
- The Mailbox Settings page will display. Complete the appropriate fields.

The screenshot shows the 'New Mailbox' wizard in the 'Mailbox Settings' step. The left sidebar has 'Mailbox Settings' selected. The main area contains the following fields and options:

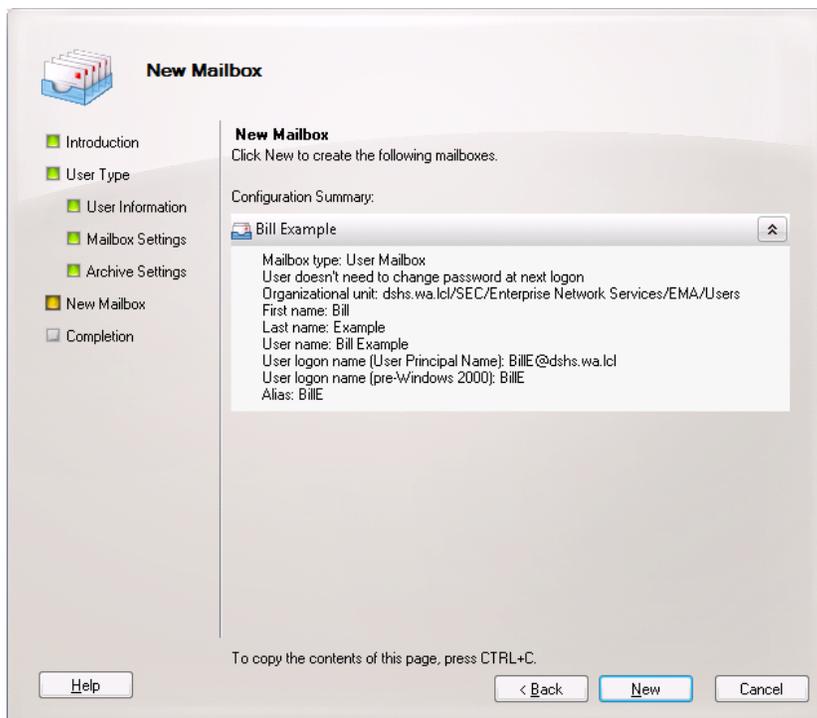
- Mailbox Settings**: Enter the alias for the mailbox user, and then select the mailbox location and policy settings.
- Alias:** BillE
- Specify the mailbox database rather than using a database automatically selected:
  - Text field: [Empty]
  - Button: Browse...
- Retention policy:
  - Text field: [Empty]
  - Button: Browse...
- Exchange ActiveSync mailbox policy:
  - Text field: [Empty]
  - Button: Browse...
- Personal Tags** are a premium feature. Mailboxes with policies that contain these tags require an Exchange Enterprise Client Access License (EAL).

Buttons at the bottom: Help, < Back, Next >, Cancel.

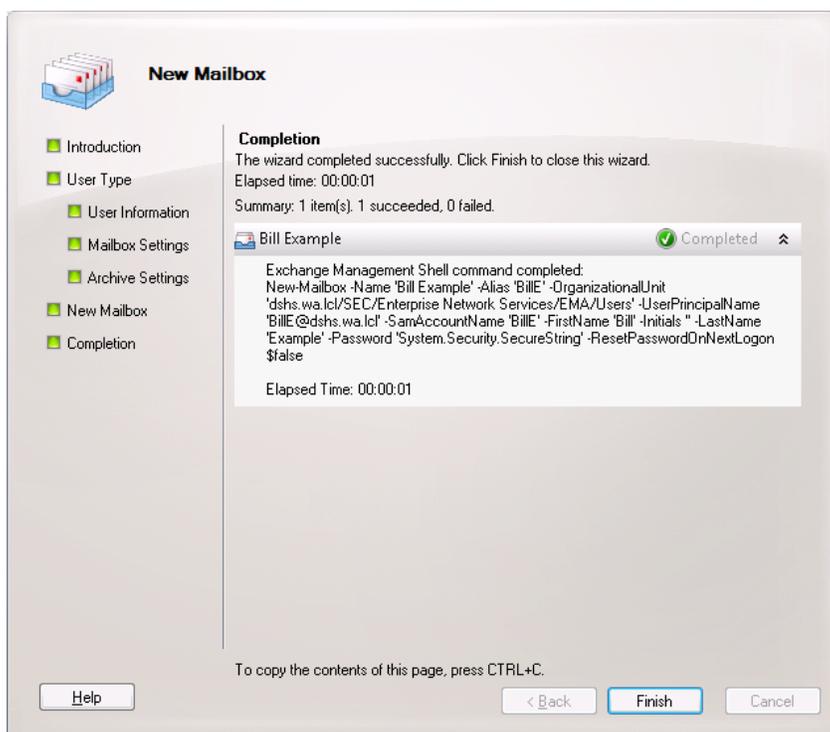
- The Archive Settings will display. The State uses a third-party solution, WASERV, to archive mail therefore these settings don't apply.



- The New Mailbox page will open. Review the configurations. If changes need to be made, click the **Back** button or click **New** to create the mailbox.



- The Completion page will display. Upon completion, a status of Completed or Failed will indicate if the mailbox was successfully created. Click **Finish** to close the wizard.



#### EMS method:

- Open EMS
- Type the following command:

```
New-Mailbox -Name "Example, Bill" -DisplayName "Example, Bill (DSHS)" -Alias BILLE -
OrganizationalUnit "dshs.wa.lcl/SEC/Users" -UserPrincipalName "Bille@dshs.wa.lcl" -
SamAccountName "BILLE" -FirstName "Bill" -LastName "Example" -Password (ConvertTo-
SecureString "#password1" -AsPlainText -Force) -ResetPasswordOnNextLogon $true
```

```
Machine: WAXMXOLYCAS02.WAX.wa.lcl
Tip of the day #4:
Did you know that the Identity parameter is a "positional parameter"? That means you can use:
  Get-Mailbox "user" instead of: Get-Mailbox -Identity "user"
It's a neat usability shortcut!
WARNING: No Exchange servers are available in the Active Directory site DSHS0196030. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSCen6044. Connecting to an Exchange server
in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.
[PS] C:\Windows\system32>Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"
[PS] C:\Windows\system32>New-Mailbox -Name "Example, Bill" -Alias "BILLE" -OrganizationalUnit "dshs.wa.lcl/SEC/Enterpris
e Network Services/EMA/Users" -UserPrincipalName "Bille@dshs.wa.lcl" -SamAccountName "BILLE" -FirstName "Bill" -LastName
"Example" -Password (ConvertTo-SecureString "#password1" -AsPlainText -Force) -ResetPasswordOnNextLogon $true
Name                Alias                ServerName            ProhibitSendQuota
-----                -
Example, Bill        BILLE                waxmxolymb010        unlimited
[PS] C:\Windows\system32>
```

The example above creates an AD user object and a mailbox for the user Bill Example with the following details:

- The mailbox's alias is Bill

- The user's first name is Bill and the last name is Example
- The name is Bill Example
- The display name is Example, Bill (DSHS)
- The user principal name (UPN) is BillExample@dshs.wa.gov
- The mailbox will be created in the Users container of the organizational unit

### Parameter Changes Required for All New Mailboxes

Whether a mailbox is created in EMC or PowerShell additional work must be done once the mailbox object has been created. These parameters cannot be set until after the mailbox is created and by default may not be optimal for your agency's needs.

The first parameter to change is "ActiveSyncEnabled", by default ActiveSync is enabled on new mailboxes.

List information about the user ActiveSyncEnabled property by using the Get-CasMailbox command and substituting the users samaccountname where "JohnD" appears in the example below.

```
Get-CasMailbox "JohnD" | ft SamAccountName,ActiveSyncEnabled -AutoSize
```

```
SamAccountName  ActiveSyncEnabled
```

```
-----
```

```
JohnD           True
```

Now modify the properties using Set-CasMailbox command substituting the users samaccountname where "samaccountname"

```
Set-CasMailbox "samaccountname" -ActiveSyncEnabled: $false
```

Take time to review change using get command substituting the users samaccountname where "samaccountname"

```
Get-casMailbox "samaccountname" | ft SamAccountName,ActiveSyncEnabled -AutoSize
```

```
SamAccountName  ActiveSyncEnabled
```

```
-----
```

```
samaccountname  False
```

The second parameter to change is "SingleItemRecoveryEnabled", by default this is set to false.

List information about the user SingleItemRecovery property by using get command and substituting the users samaccountname where "samaccountname"

```
Get-Mailbox "samaccountname" | ft SamAccountName,SingleItemRecoveryEnabled -AutoSize
```

```
SamAccountName SingleItemRecoveryEnabled
```

```
-----
```

```
samaccountname          False
```

Now modify properties using set command substituting the users samaccountname where "samaccountname"

```
set-Mailbox "samaccountname" -SingleItemRecoveryEnabled: $true
```

WARNING: The single item recovery setting may take up to 60 minutes to take effect.

---

Again, take time to review change using get command substituting the users samaccountname where "samaccountname"

```
Get-Mailbox "samaccountname" | ft SamAccountName,SingleItemRecoveryEnabled -AutoSize
```

```
SamAccountName      SingleItemRecoveryEnabled
```

```
-----
```

```
samaccountname      True
```

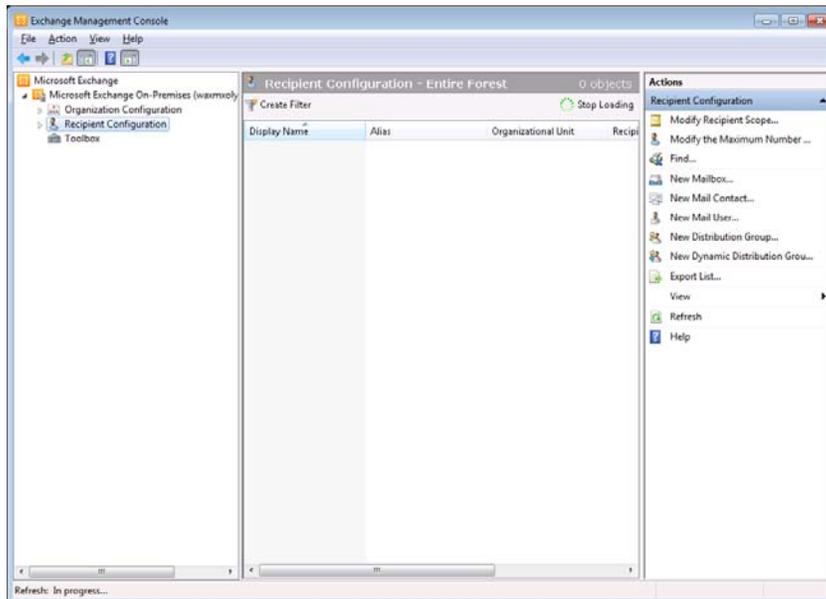
---

## Create an Exchange 2010 Mailbox for an Existing Active Directory User Object

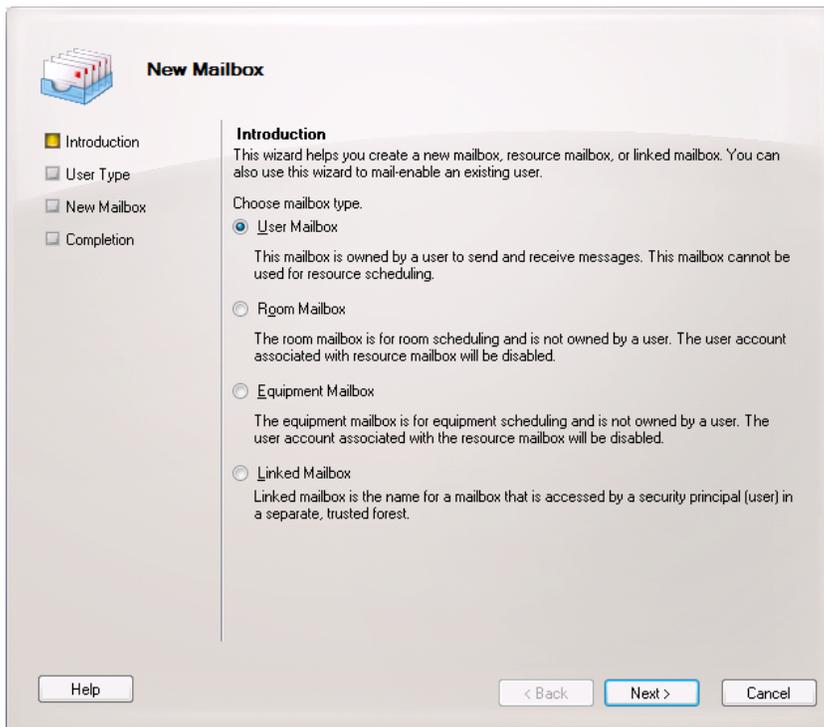
Exchange 2010 mailboxes can be created for an existing Active Directory (AD) user by using the Exchange 2010 Management Console (**EMC**) or with Exchange Management Shell (**EMS**).

### **EMC method:**

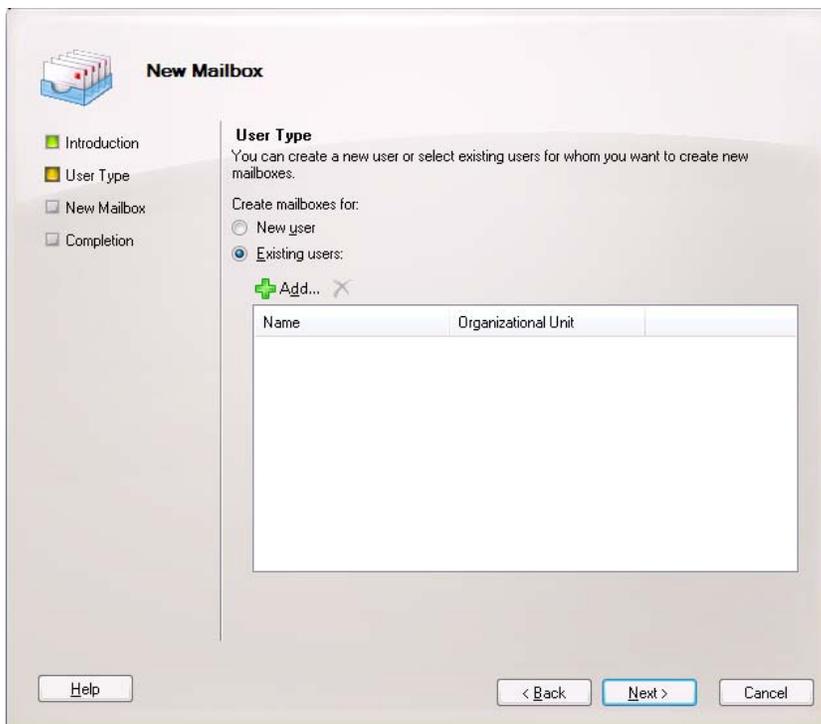
1. Open the EMC
2. From the console tree, click **Recipient Configuration**



3. Click **New Mailbox**. The New Mailbox wizard will open. Select the type of mailbox that needs to be created. In this case, select **User Mailbox** and click **Next**.



4. Select Existing User. Click **Add** to display a list of AD users without mailboxes



- Browse or search to the user(s) that need mailboxes created. Select the user object that needs to be mail-enabled and click Next

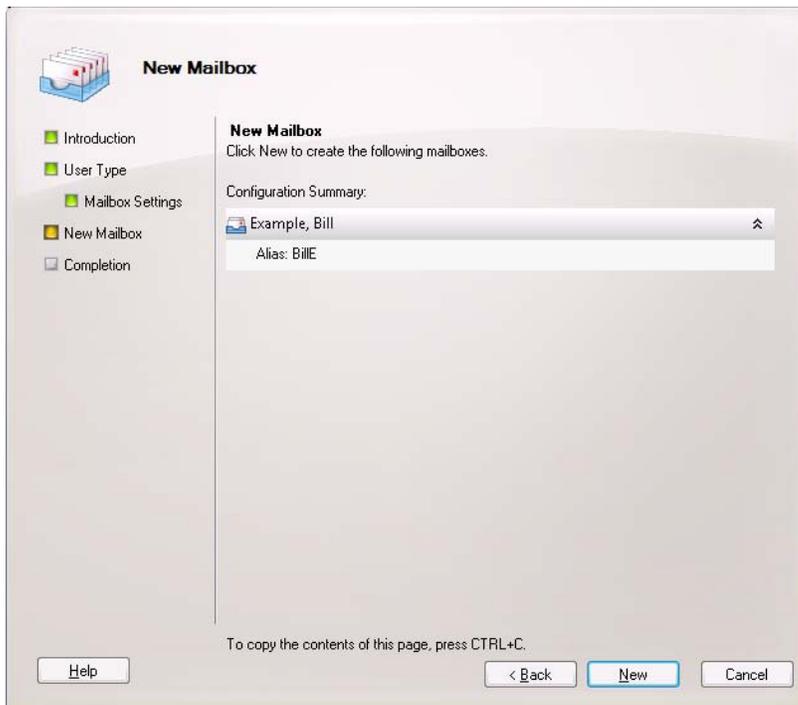
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**

The screenshot shows the 'New Mailbox' wizard in the 'User Type' step. On the left, a navigation pane shows 'Introduction', 'User Type' (selected), 'Mailbox Settings', 'New Mailbox', and 'Completion'. The main area is titled 'User Type' and contains the text: 'You can create a new user or select existing users for whom you want to create new mailboxes.' Below this, there are two radio buttons: 'New user' (unselected) and 'Existing users:' (selected). Under 'Existing users:', there is a '+ Add...' button and a table with two columns: 'Name' and 'Organizational Unit'. The table contains one entry: 'Example, Bill' and 'dshs.wa.lcl/SEC/Enterpris...'. At the bottom, there are 'Help', '< Back', 'Next >', and 'Cancel' buttons.

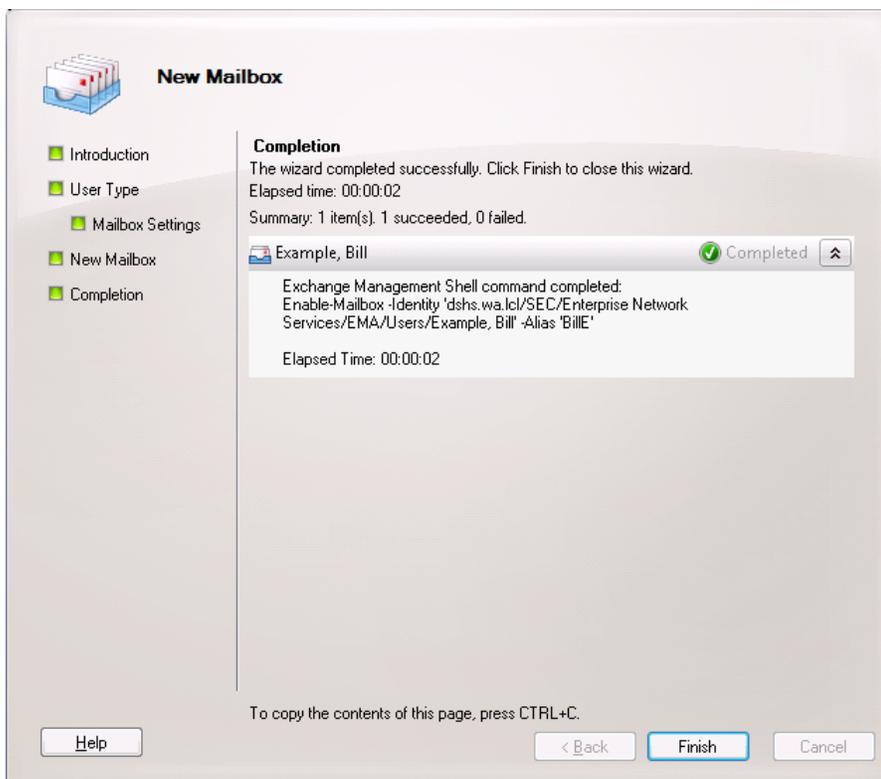
- The Mailbox Settings page will display. Complete the appropriate fields.

The screenshot shows the 'New Mailbox' wizard in the 'Mailbox Settings' step. On the left, the navigation pane shows 'Introduction', 'User Type', 'User Information', 'Mailbox Settings' (selected), 'Archive Settings', 'New Mailbox', and 'Completion'. The main area is titled 'Mailbox Settings' and contains the text: 'Enter the alias for the mailbox user, and then select the mailbox location and policy settings.' Below this, there is an 'Alias:' label and a text box containing 'BillE'. There are three checkboxes, each followed by a text box and a 'Browse...' button: 1) 'Specify the mailbox database rather than using a database automatically selected.' 2) 'Retention policy:' 3) 'Exchange ActiveSync mailbox policy:'. At the bottom, there is a warning icon and text: 'Personal Tags are a premium feature. Mailboxes with policies that contain these tags require an Exchange Enterprise Client Access License (CAL)'. At the bottom of the wizard, there are 'Help', '< Back', 'Next >', and 'Cancel' buttons.

7. The New Mailbox page will open. Review the configurations. If changes need to be made, click the **Back** button or click **New** to create the mailbox.



8. The Completion page will display. Upon completion, a status of Completed or Failed will indicate if the mailbox was successfully created. Click **Finish** to close the wizard.

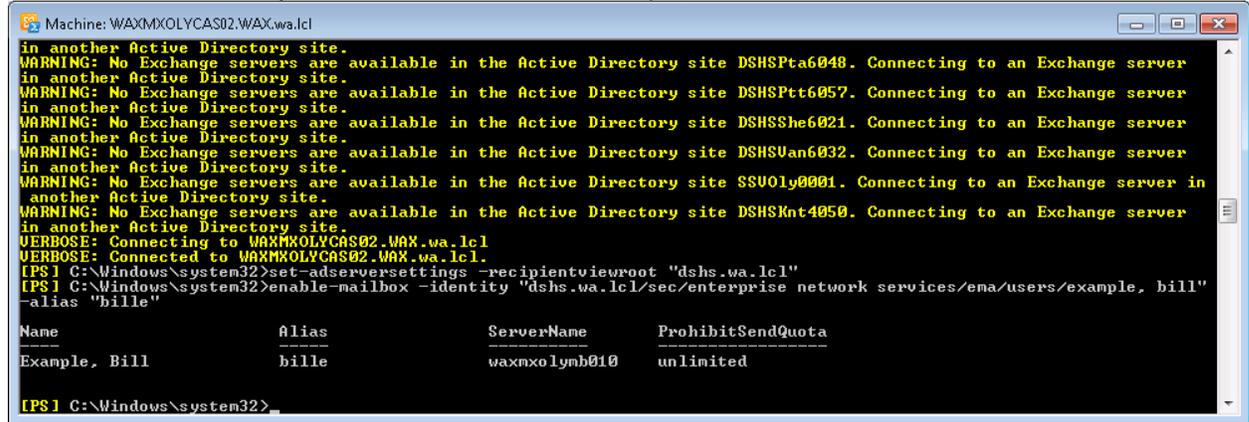


**EMS method:**

1. Open EMS
2. Type the following command:

**Note: To limit the focus to DSHS.WA.LCL, use the following command `Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"`**

**Enable-Mailbox -Identity "dshs.wa.lcl/SEC/users/Example, Bill" -Alias "BillE"**



```
Machine: WAXMXOLYCAS02.WAX.wa.lcl
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSPta6048. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSPtt6057. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSShe6021. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSVan6032. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site SSU01y0001. Connecting to an Exchange server in
another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSKnt4050. Connecting to an Exchange server
in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.
[PS] C:\Windows\system32>set-adserversettings -recipientviewroot "dshs.wa.lcl"
[PS] C:\Windows\system32>enable-mailbox -identity "dshs.wa.lcl/sec/enterprise network services/ema/users/example, bill"
-alias "bille"

Name                Alias                ServerName           ProhibitSendQuota
-----                -
Example, Bill        bille                waxmxolymb010       unlimited

[PS] C:\Windows\system32>
```

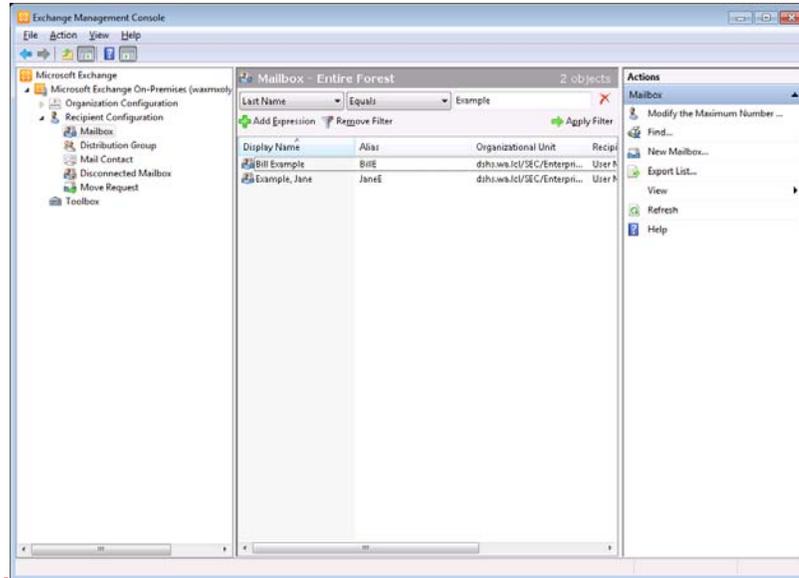
## Delete an Exchange 2010 Mailbox

Exchange 2010 mailboxes can be deleted by using the Exchange 2010 Management Console (**EMC**) or with Exchange Management Shell (**EMS**).

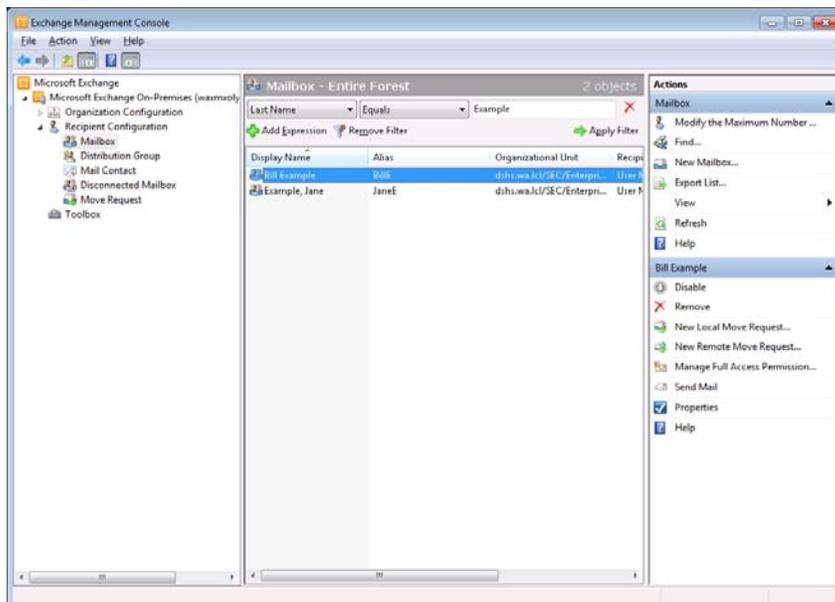
### **EMC method:**

1. Open the EMC
2. From the console tree, click **Recipient Configuration**
3. Click **Mailbox**. A list of mailboxes will be displayed. Select the mailbox that needs to be deleted

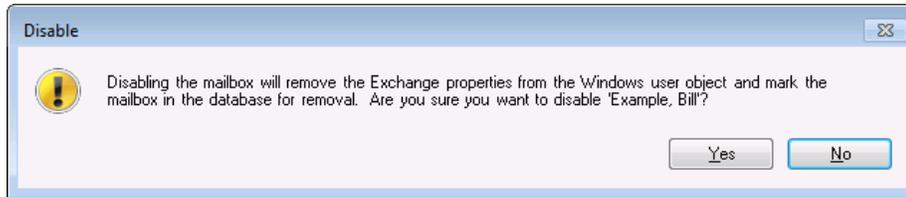
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results**



4. From the actions pane, click **Disable**



5. Click **Yes** to acknowledge the deletion warning



**EMS method:**

1. Open EMS
2. Type the following command:

**NOTE: This EMS command disconnects the Exchange Mailbox from the AD user object and the AD user object isn't deleted. The mailbox will exist in the Exchange database for XX days, which is based on the mailbox retention policy.**

*Disable-Mailbox -Identity DSHS\BillE*

3. When prompted to confirm action, press **Enter** to perform the action.

```
Machine: WAXMXOLYCAS02.WAX.wa.lcl
Exchange 2010 uses management role groups and management role assignment policies to manage permissions.
Role groups enable you to grant permissions to groups of administrators and specialist end users. These are people who manage your organization or perform special tasks, like mailbox searches for compliance reasons.
Role assignment policies enable you to grant permissions to your end users. These permissions include whether users can manage their own distribution groups, edit their own profile information, access voice mail, and more.

WARNING: No Exchange servers are available in the Active Directory site DSHS01y6030. Connecting to an Exchange server in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSCen6044. Connecting to an Exchange server in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.
[PS] C:\Windows\system32>set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"
[PS] C:\Windows\system32>disable-mailbox -identity DSHS\BillE

Confirm
Are you sure you want to perform this action?
Disabling mailbox "DSHS\BillE" will remove the Exchange properties from the Active Directory user object and mark the mailbox in the database for removal. If the mailbox has an archive or remote archive, the archive will also be marked for removal. In the case of remote archives, this action is permanent. You can't reconnect this user to the remote archive again.
[Y] Yes [A] Yes to All [N] No [L] No to All [?] Help (default is "Y"): y
[PS] C:\Windows\system32>
[PS] C:\Windows\system32>
```

---

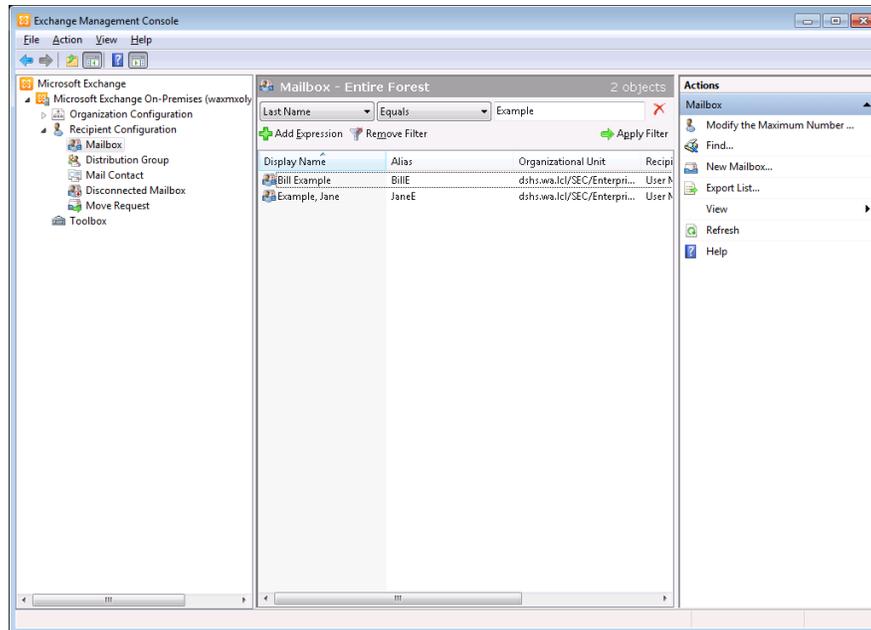
## Delete Exchange 2010 Mailbox and Active Directory User Object

Exchange 2010 mailboxes and Active Directory user objects can be deleted by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS).

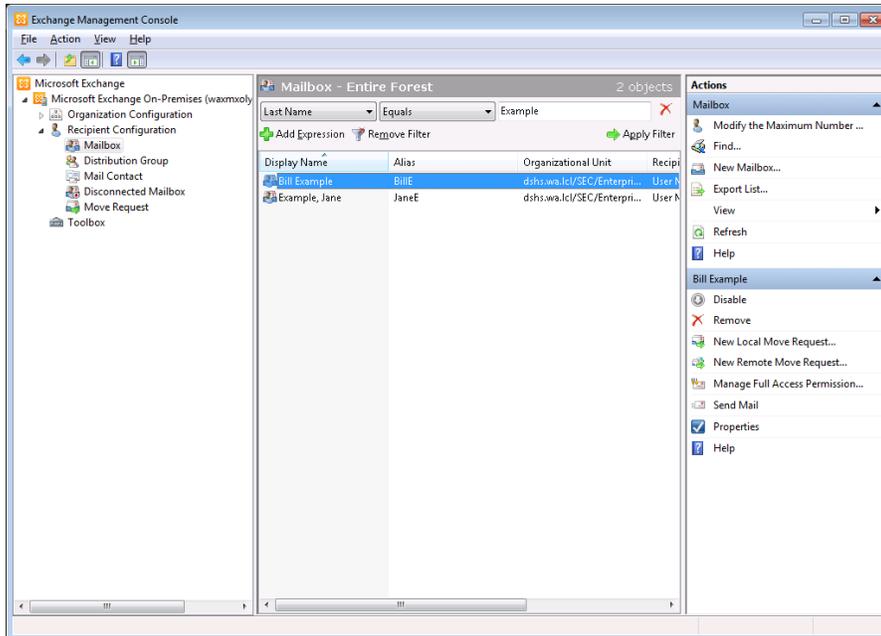
### **EMC method:**

1. Open the EMC
2. From the console tree, click **Recipient Configuration**
3. Click **Mailbox**. A list of mailboxes will be displayed. Select the mailbox that needs to be deleted

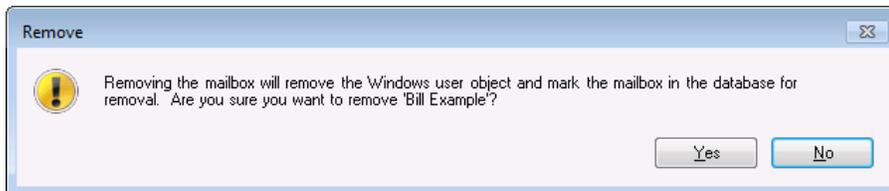
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



- From the actions pane, click **Remove**



- Click **Yes** to acknowledge the deletion warning



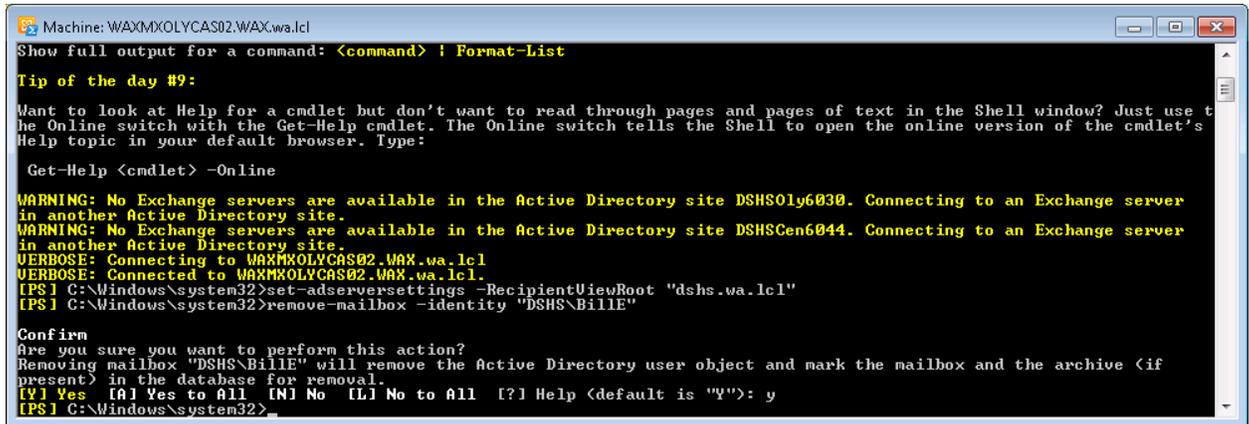
**EMS method:**

- Open EMS
- Type the following command:

**NOTE: This EMS command deletes the Exchange Mailbox and AD user object. Although the user object is immediately deleted, the mailbox will exist in the Exchange database for 21 days, which is based on the mailbox retention policy.**

*Remove-Mailbox -Identity DSHS\BillE*

- When prompted to confirm action, press **Enter** to perform the action.



```
Machine: WAXMXOLYCAS02.WAX.wa.lcl
Show full output for a command: <command> | Format-List

Tip of the day #9:
Want to look at Help for a cmdlet but don't want to read through pages and pages of text in the Shell window? Just use the Online switch with the Get-Help cmdlet. The Online switch tells the Shell to open the online version of the cmdlet's Help topic in your default browser. Type:

    Get-Help <cmdlet> -Online

WARNING: No Exchange servers are available in the Active Directory site DSHS01y6030. Connecting to an Exchange server in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSCen6044. Connecting to an Exchange server in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.
[PS] C:\Windows\system32>set-adserversettings -RecipientViewRoot "dshs.wa.lcl"
[PS] C:\Windows\system32>remove-mailbox -identity "DSHS\Billie"

Confirm
Are you sure you want to perform this action?
Removing mailbox "DSHS\Billie" will remove the Active Directory user object and mark the mailbox and the archive (if present) in the database for removal.
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [?] Help (default is "Y"): y
[PS] C:\Windows\system32>
```

---

## Configure Delivery Settings

Delivery options such as message delivery restrictions and delivery options can be configured by using the Exchange 2010 Management Console (EMC) or with the Exchange Management Shell (EMS). Options such as message size restrictions can only be configured by the E-mail Shared Services provider.

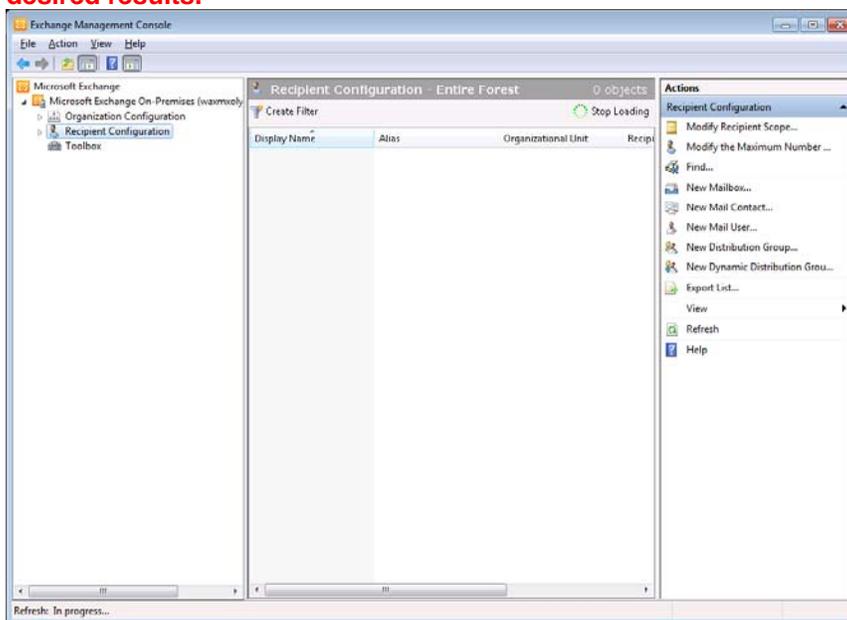
### Delivery restrictions

In some instances, a mailbox or distribution list should only accept mail from specific senders.

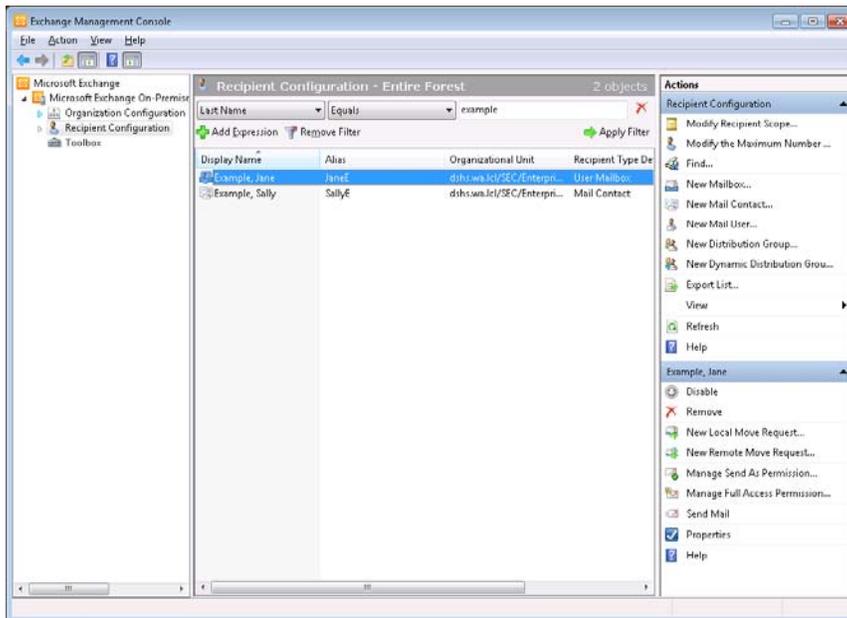
#### **EMC Method:**

1. Open EMC
2. From the console tree, click **Recipient Configuration**

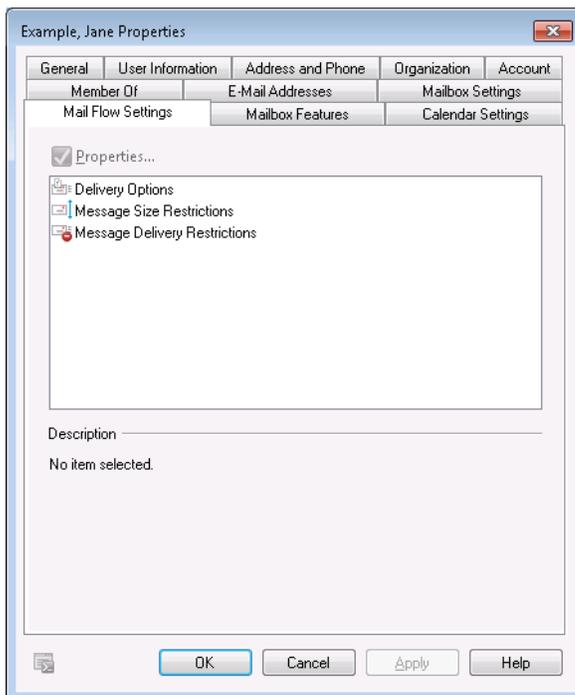
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



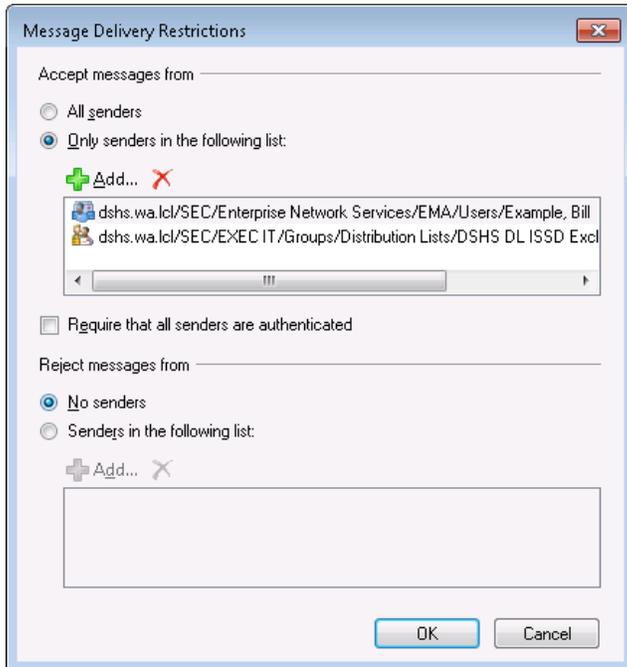
3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



4. Click the **Mail Flow Settings** tab and double-click **Message Delivery Restrictions**



5. Add a user account or distribution list to accept message from specific e-mail addresses

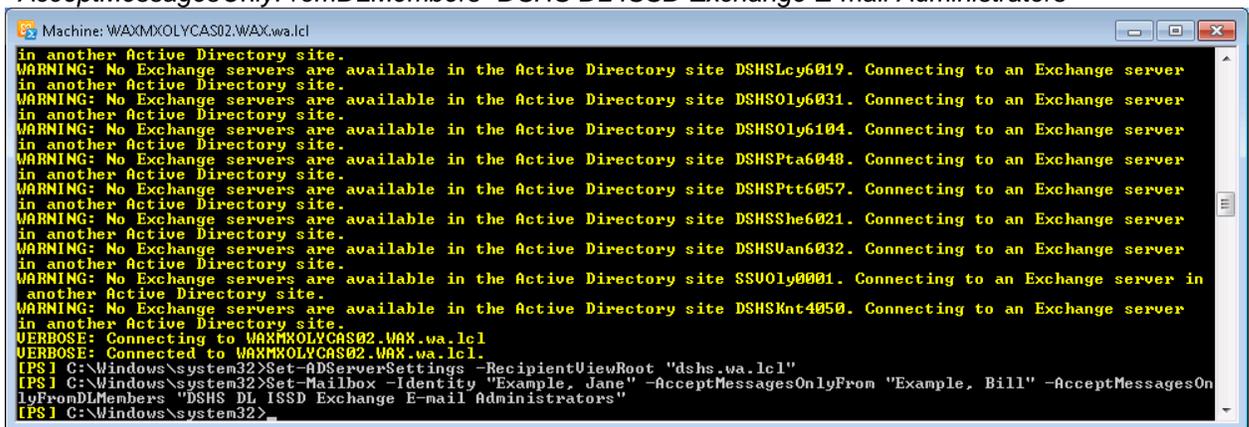


**EMS method:**

1. Open EMS
2. Type the following command:

**Note: To limit the focus to DSHS.WA.LCL, use the following command `Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"`**

`Set-Mailbox -Identity "Example, Jane" -AcceptMessagesOnlyFrom "Example, Bill" -AcceptMessagesOnlyFromDLMembers "DSHS DL ISSD Exchange E-mail Administrators"`



**Note:-AcceptMessagesOnlyFrom is used when you want to explicitly add a single user and -AcceptMessagesOnlyFromDLMembers is used when adding a distribution list.**

3. Changes can be verified through the EMC

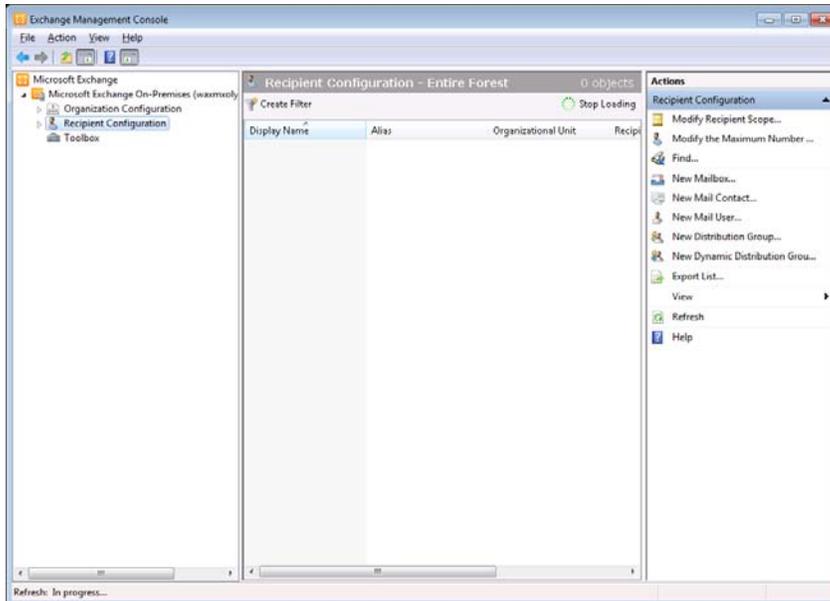
### Delivery options

In some instances, a mailbox or distribution list require other user objects to send on their behalf or all messages that are sent to a mailbox need to be automatically forwarded to another mailbox.

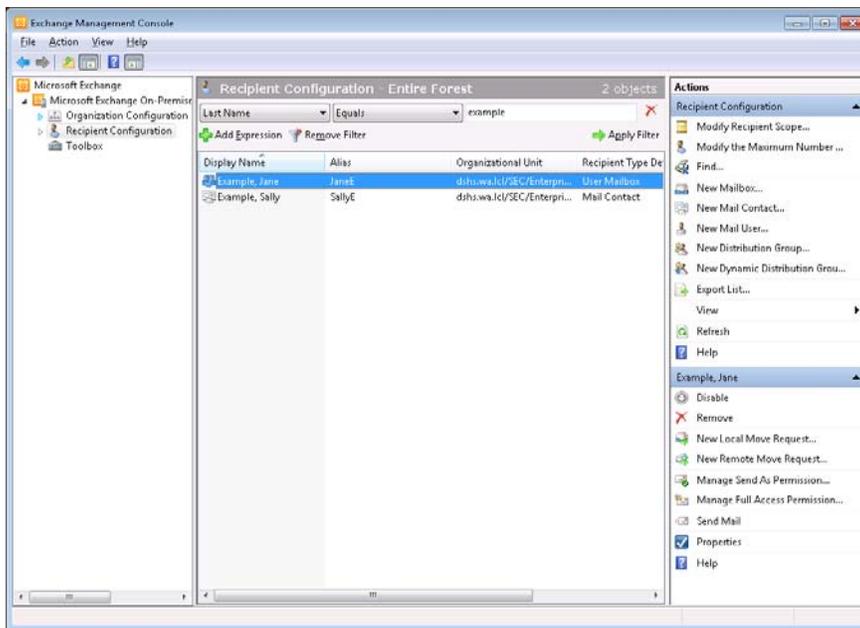
#### **EMC Method:**

1. Open EMC
2. From the console tree, click **Recipient Configuration**

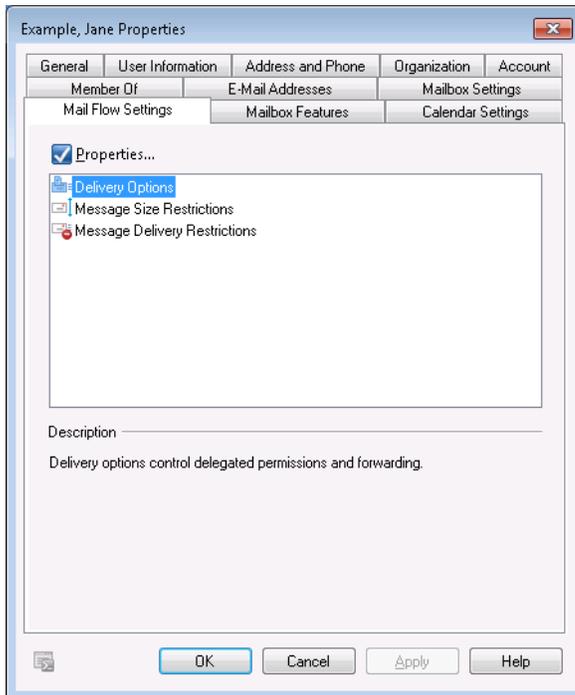
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



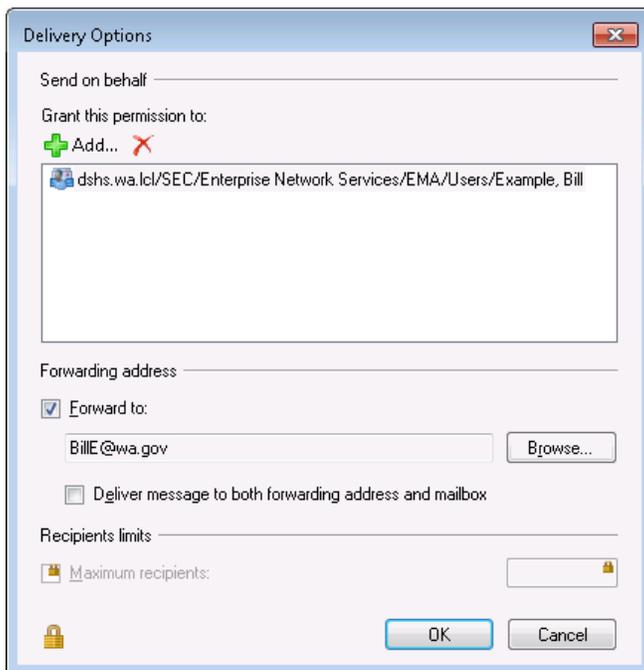
3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



4. Click the **Mail Flow Settings** tab and double-click Delivery Options



5. If granting send on behalf permissions, add the appropriate user object. If the messages sent to this mailbox need to be forwarded to another e-mail address, check **Forward** to and select the address to configure the setting.

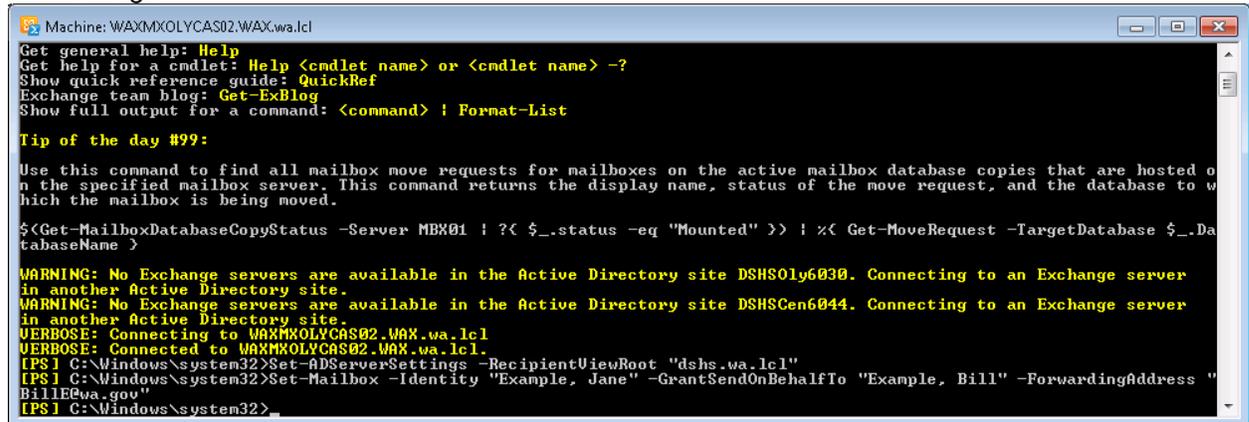


**EMS method:**

1. Open EMS
2. Type the following command:

**Note: To limit the focus to DSHS.WA.LCL, use the following command `Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"`**

`Set-Mailbox -Identity "Example, Jane" -GrantSendOnBehalfTo "Example, Bill" -ForwardingAddress BillE@wa.gov`



```
Machine: WAXMXOLYCAS02.WAX.wa.lcl
Get general help: Help
Get help for a cmdlet: Help <cmdlet name> or <cmdlet name> -?
Show quick reference guide: QuickRef
Exchange team blog: Get-ExBlog
Show full output for a command: <command> ! Format-List

Tip of the day #99:
Use this command to find all mailbox move requests for mailboxes on the active mailbox database copies that are hosted on the specified mailbox server. This command returns the display name, status of the move request, and the database to which the mailbox is being moved.
$(Get-MailboxDatabaseCopyStatus -Server MBX01 | ?< $_.status -eq "Mounted" >> | %< Get-MoveRequest -TargetDatabase $_.DatabaseName >

WARNING: No Exchange servers are available in the Active Directory site DSHS01y6030. Connecting to an Exchange server in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSCen6044. Connecting to an Exchange server in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.
[PS] C:\Windows\system32>Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"
[PS] C:\Windows\system32>Set-Mailbox -Identity "Example, Jane" -GrantSendOnBehalfTo "Example, Bill" -ForwardingAddress "BillE@wa.gov"
[PS] C:\Windows\system32>
```

---

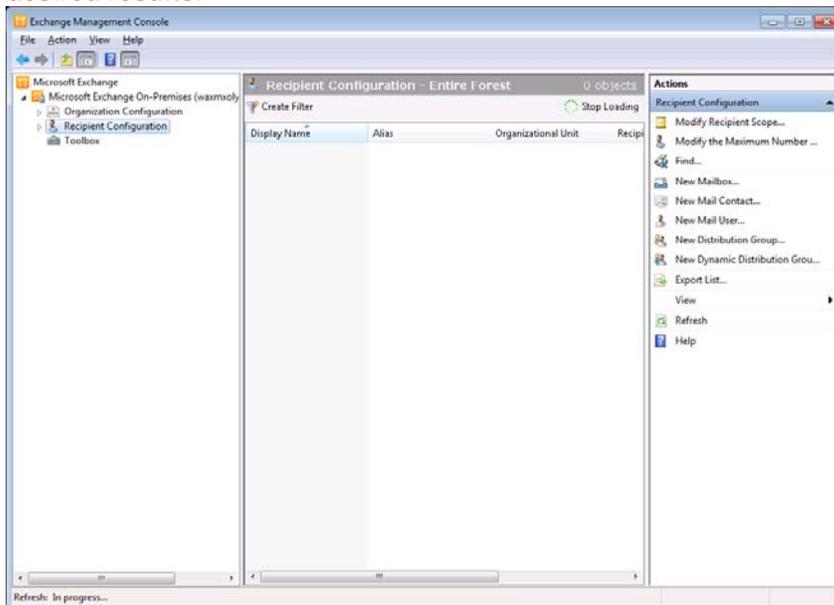
## Edit/Create New SMTP Email Address

SMTP email addresses for Exchange 2010 mailboxes can be created by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS).

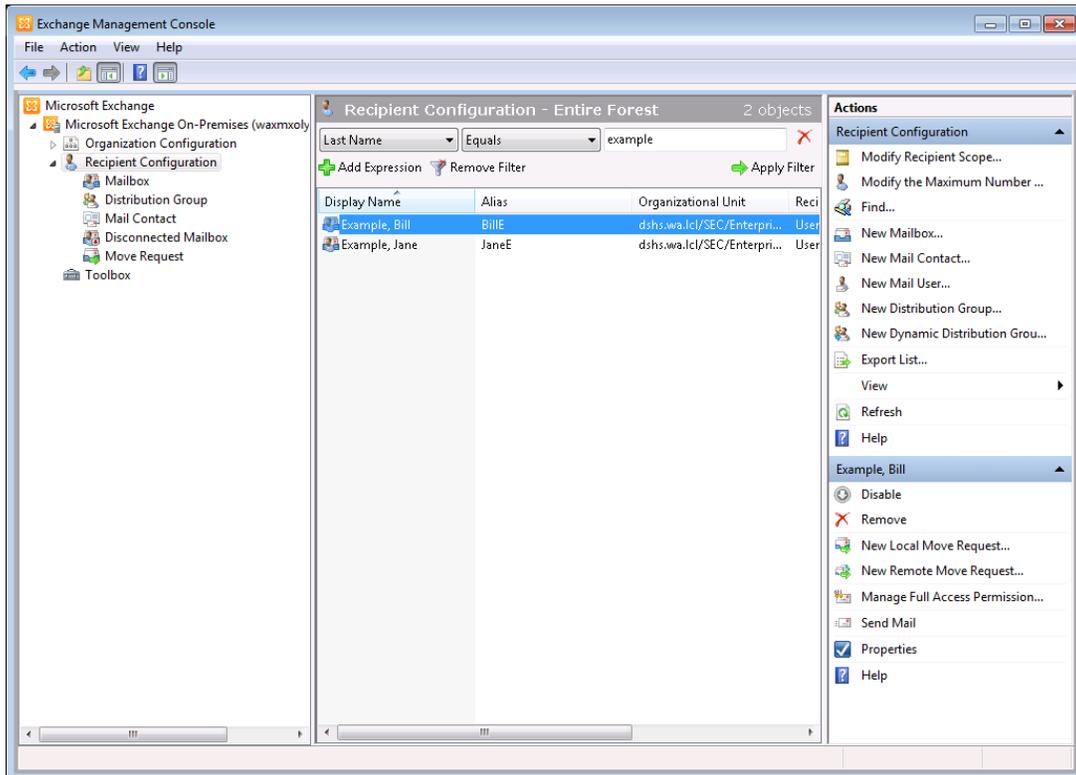
### EMC method:

1. Open EMC
2. From the console tree, click **Recipient Configuration**

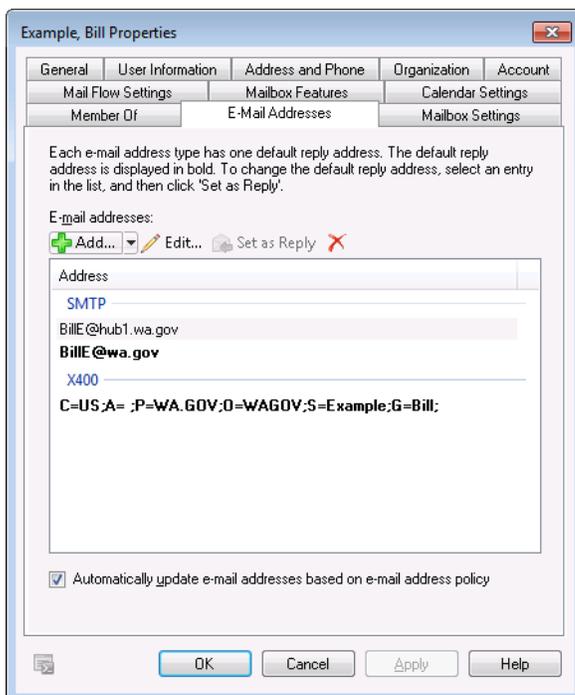
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



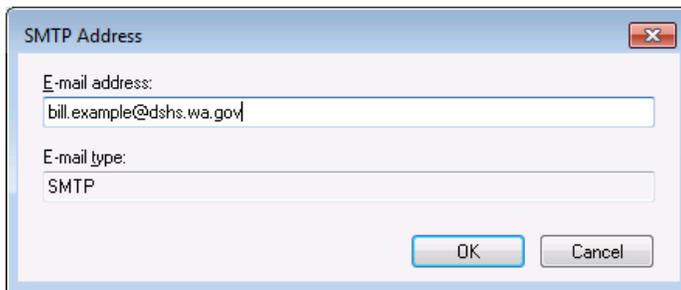
3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



4. Click the **E-mail Addresses** tab



5. Click **Edit** or **Add**. In the E-mail address field, modify or type the new SMTP address.



The image shows a dialog box titled "SMTP Address". It has two text input fields. The first is labeled "E-mail address:" and contains the text "bill.example@dshs.wa.gov". The second is labeled "E-mail type:" and contains the text "SMTP". At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

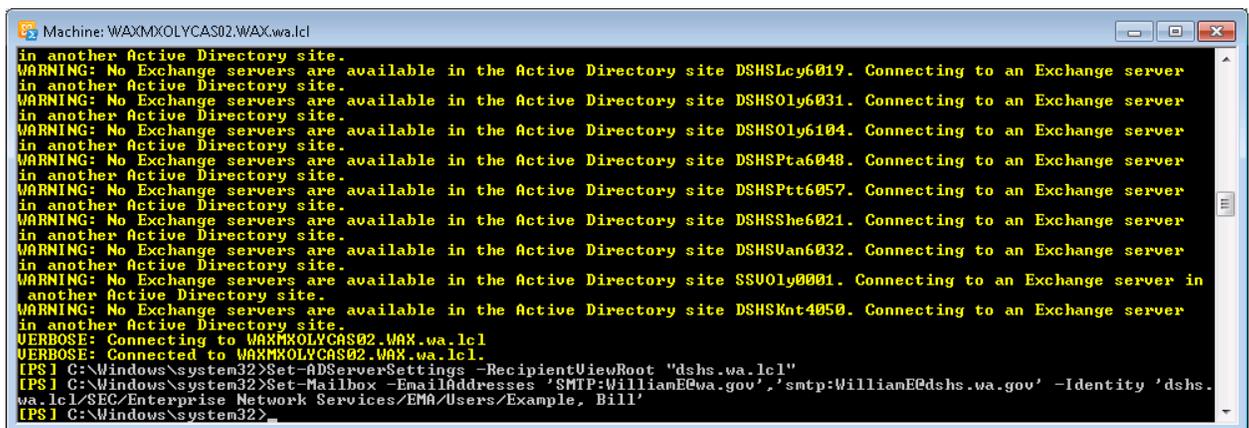
**NOTE: In Exchange 2010, Set as Primary has been replaced with Set as Reply. Any SMTP address can be set to the Set as Reply address. In some cases, the firstname.lastname@dshs.wa.gov or another e-mail address may need to be set as the reply address.**

#### EMS method:

1. Open EMS
2. Type the following command:

```
Set-Mailbox -EmailAddresses 'SMTP:WilliamE@wa.gov','smtp:WilliamE@dshs.wa.gov' -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'
```

When running the command, the current primary SMTP address must remain in the list. All other addresses will be deleted. The X400 address doesn't need to be in the list and will not be deleted.



```
Machine: WAXMXOLYCAS02.WAX.wa.lcl
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSLcy6019. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHS0ly6031. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHS0ly6104. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSPta6048. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSPtt6057. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSShe6021. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSUan6032. Connecting to an Exchange server
in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site SSU0ly0001. Connecting to an Exchange server in
another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSKnt4050. Connecting to an Exchange server
in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl
[PS] C:\Windows\system32>Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"
[PS] C:\Windows\system32>Set-Mailbox -EmailAddresses 'SMTP:WilliamE@wa.gov','smtp:WilliamE@dshs.wa.gov' -Identity 'dshs.
wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'
[PS] C:\Windows\system32>
```

---

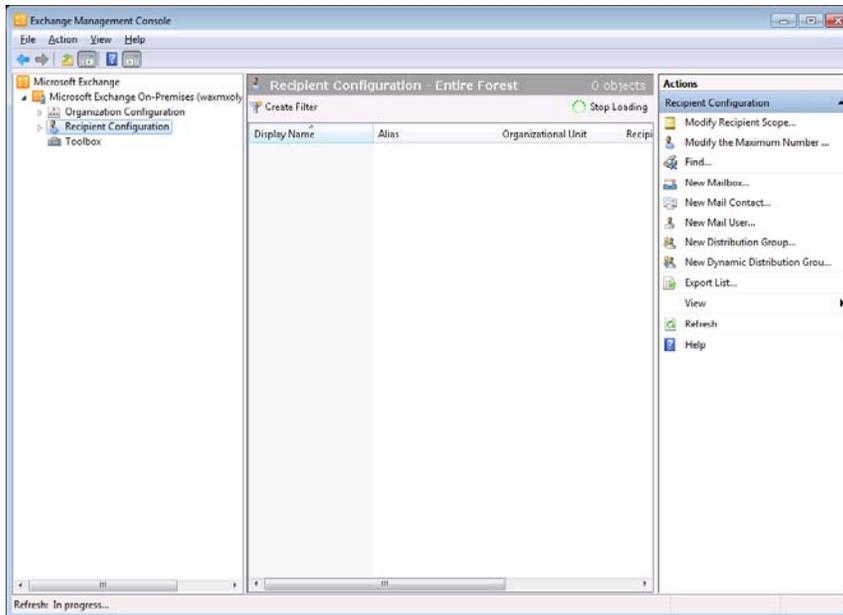
## Configure Exchange 2010 Mailbox Features

Several Exchange features can be configured from the Exchange Management Console (EMC) or with Exchange Management Shell (EMS). By default Unified Messaging and Archive are disabled by policy. Generally the only feature that needs to be configured is Outlook Web App.

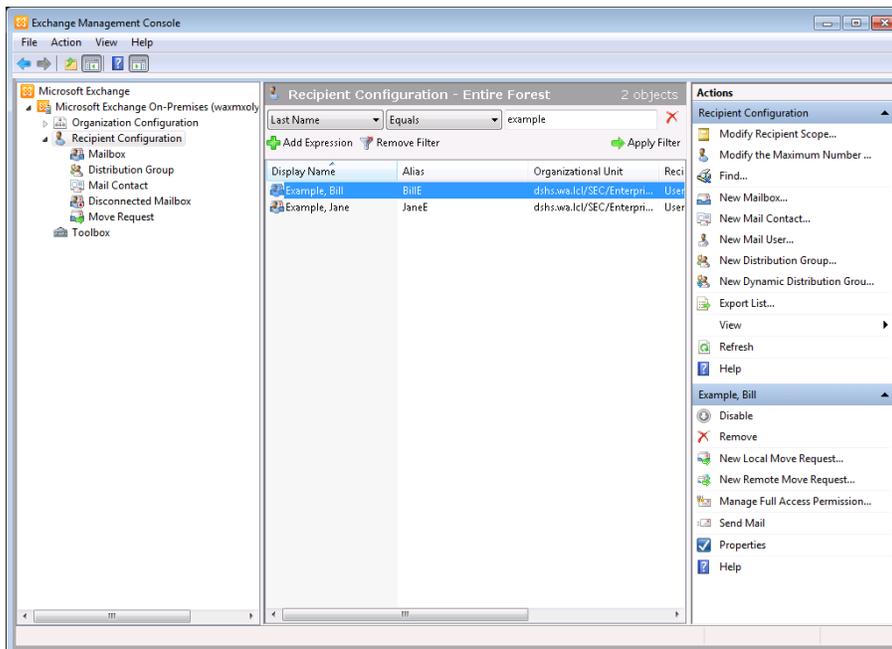
### **EMC method:**

1. Open EMC
2. From the console tree, click **Recipient Configuration**

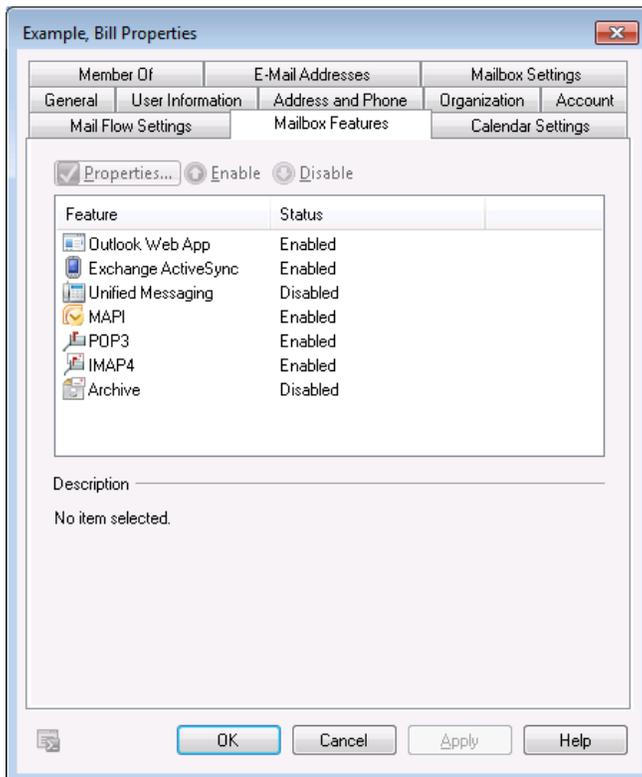
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



4. Click the **Mailbox Features** tab. Highlight the appropriate Exchange feature, then click **Enable** or **Disable**.



---

**EMS method:**

1. Open EMS
2. Type the following commands to:

**Note: To limit the focus to DSHS.WA.LCL, use the following command `Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"`**

Disable OWA: `Set-CasMailbox -OWAEnabled $false -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'`

Enable OWA: `Set-CasMailbox -OWAEnabled $true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'`

Disable POP3: `Set-CasMailbox -PopEnabled $false -PopEnabled $true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'`

Enable POP3: `Set-CasMailbox -PopEnabled $true -PopEnabled $true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'`

---

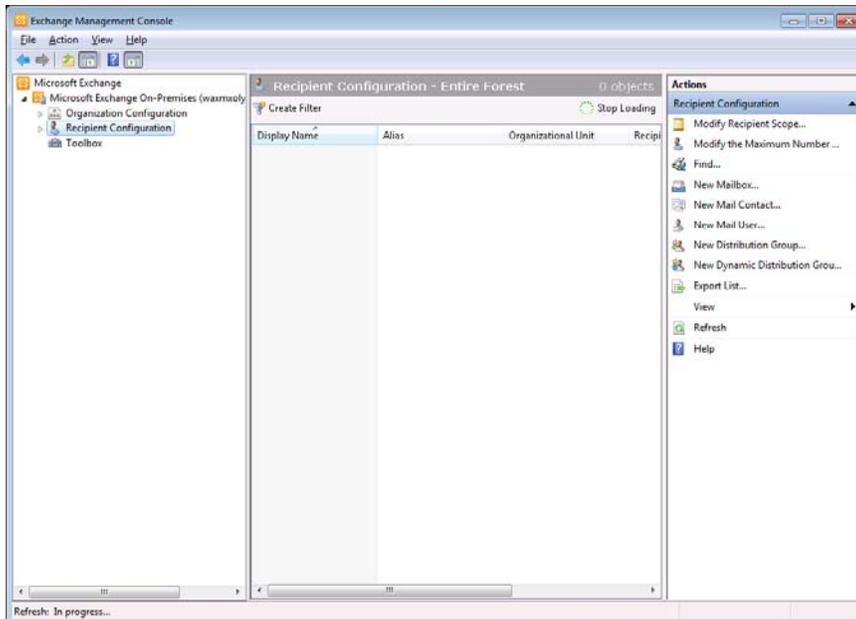
## Hide Exchange 2010 Mailbox from the Global Address List

Mailboxes can be hidden from the Global Address List by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS). In order to send a message to hidden mailboxes, the sender must know the email address.

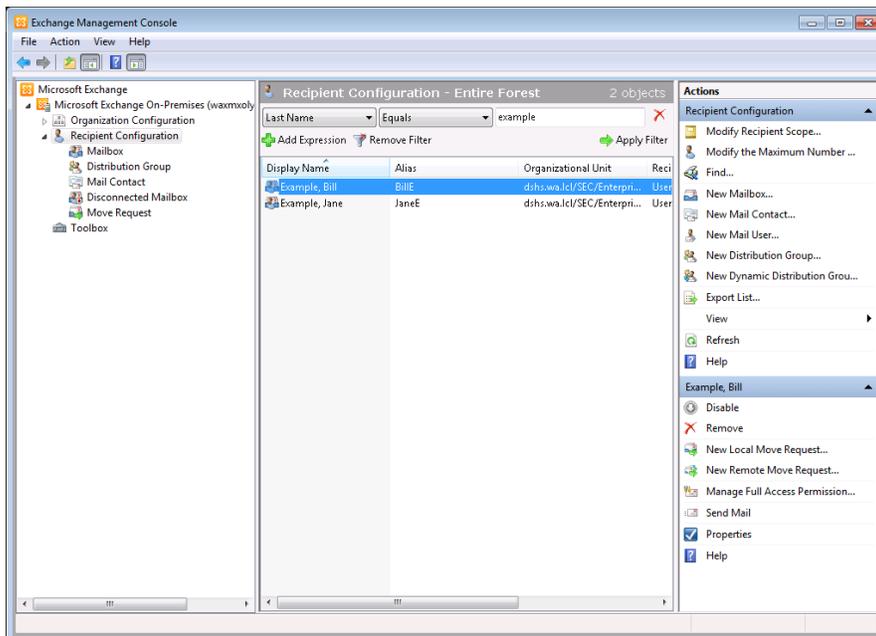
**EMC method:**

1. Open EMC
2. From the console tree, click **Recipient Configuration**

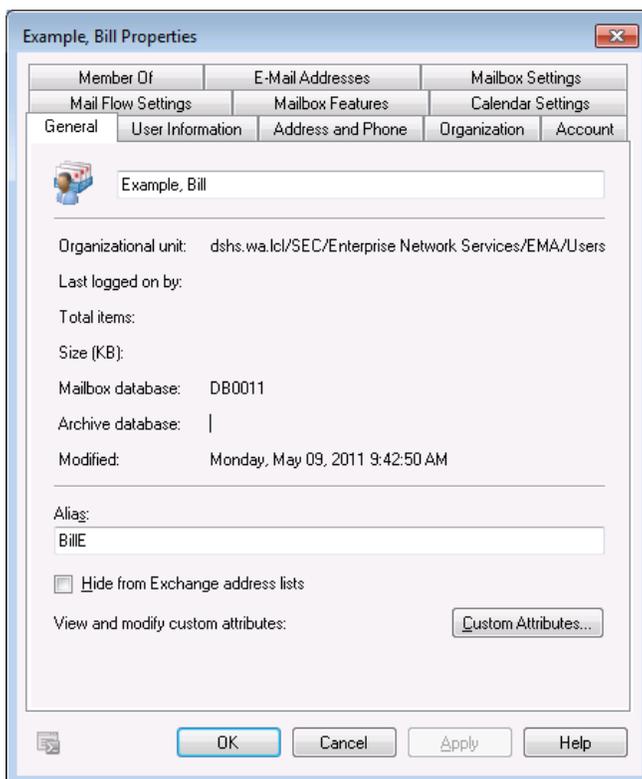
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



4. From the **General Tab**, check **Hide from Exchange address lists**



---

**EMS method:**

1. Open EMS
2. Type the following command:

**Note: To limit the focus to DSHS.WA.LCL, use the following command `Set-ADServerSettings – RecipientViewRoot “dshs.wa.lcl”`**

```
Set-Mailbox -Alias 'BillE' -HiddenFromAddressListsEnabled $true -Identity  
'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'
```

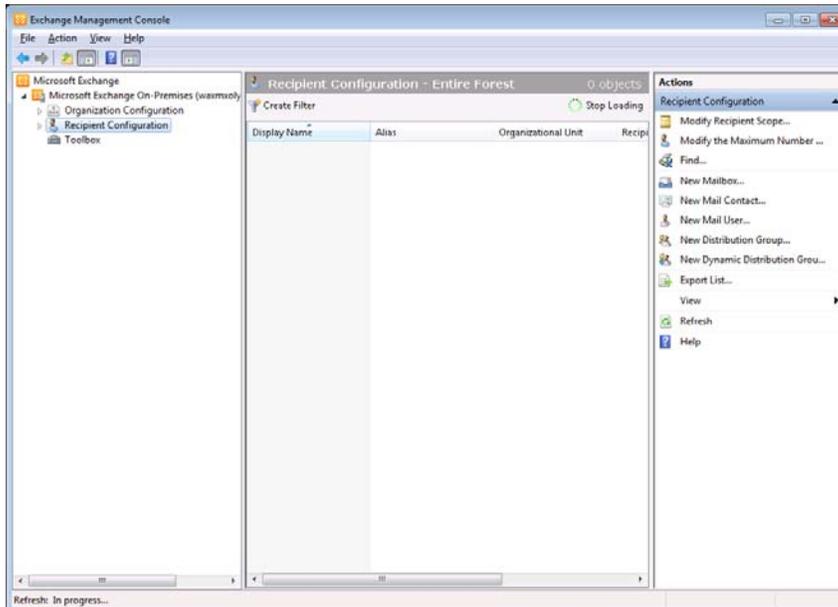
## Edit Display Name

The display name is the name that is shown in the Global Address List. This attribute can be changed in the Exchange Management Console (EMC) or with Exchange Management Shell (EMS).

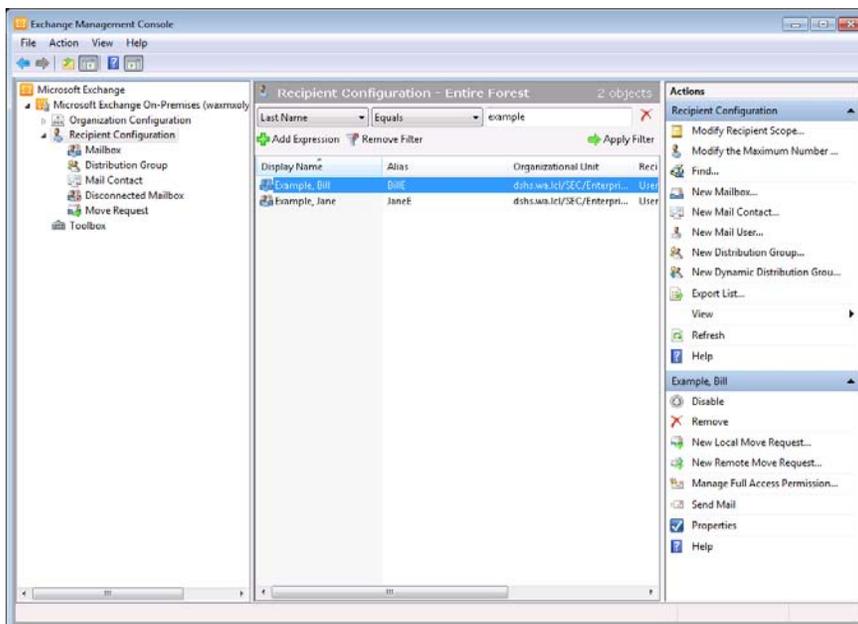
### EMC method:

1. Open EMC
2. From the console tree, click **Recipient Configuration**

**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



- From the **User Information** tab, modify the Name field

The screenshot shows a dialog box titled "Example, Bill Properties" with a close button in the top right corner. The dialog has a tabbed interface with the following tabs: Member Of, E-Mail Addresses, Mailbox Settings, Mail Flow Settings, Mailbox Features, Calendar Settings, General, User Information (selected), Address and Phone, Organization, and Account. The "User Information" tab is active and contains the following fields:

- First name:** A text box containing "Bill".
- Initials:** An empty text box.
- Last name:** A text box containing "Example".
- Name:** A text box containing "Example, Bill".
- Simple display name:** An empty text box.
- Web page:** An empty text box.
- Notes:** A large empty text area with a vertical scrollbar.

At the bottom of the dialog are four buttons: OK, Cancel, Apply, and Help.

**EMS method:**

- Open EMS
- Type the following command:

```
Set-User -Name 'Rights, Bill' -Identity 'dshs.wa.lcl/SEC/Users/Example, Bill'
```

---

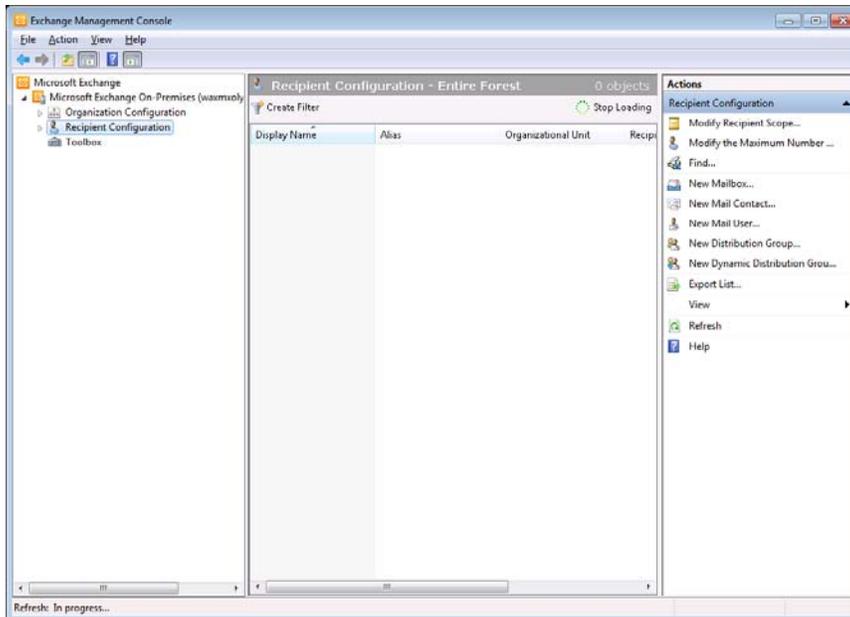
## Edit Email Alias

The Exchange email alias can be used when addressing messages in place of the recipient's name. This attribute can be changed in the Exchange Management Console (EMC) or with Exchange Management Shell (EMS).

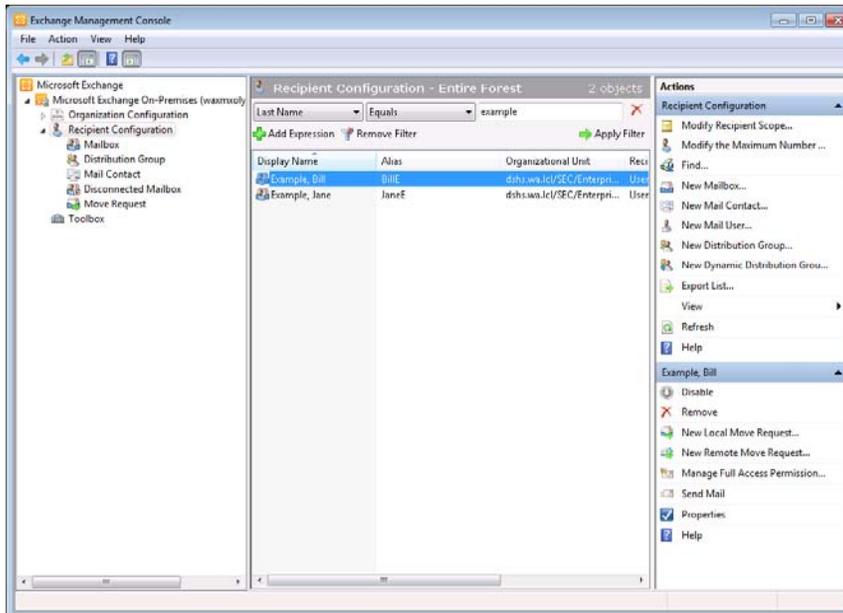
### **EMC method:**

1. Open EMC
2. From the console tree, click **Recipient Configuration**

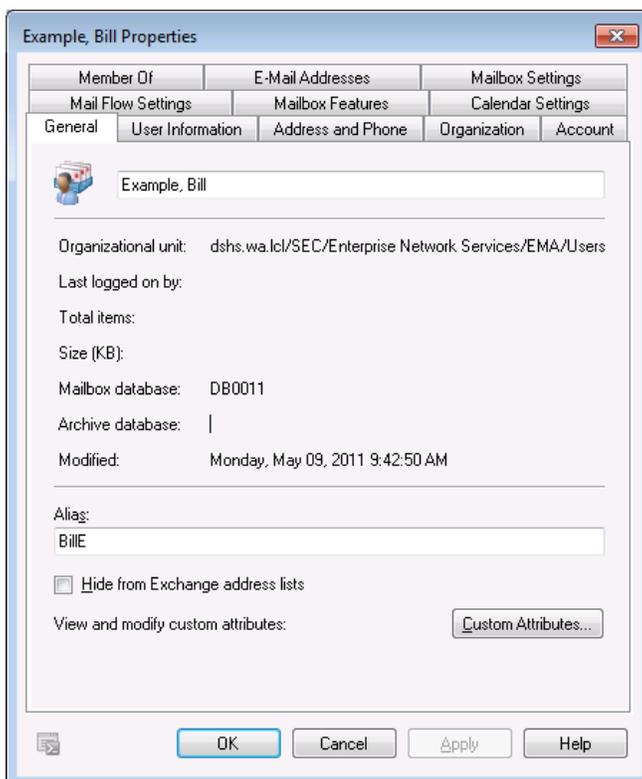
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



4. From the **General** Tab, modify the Alias field.



---

**EMS method:**

1. Open EMS
2. Type the following command:

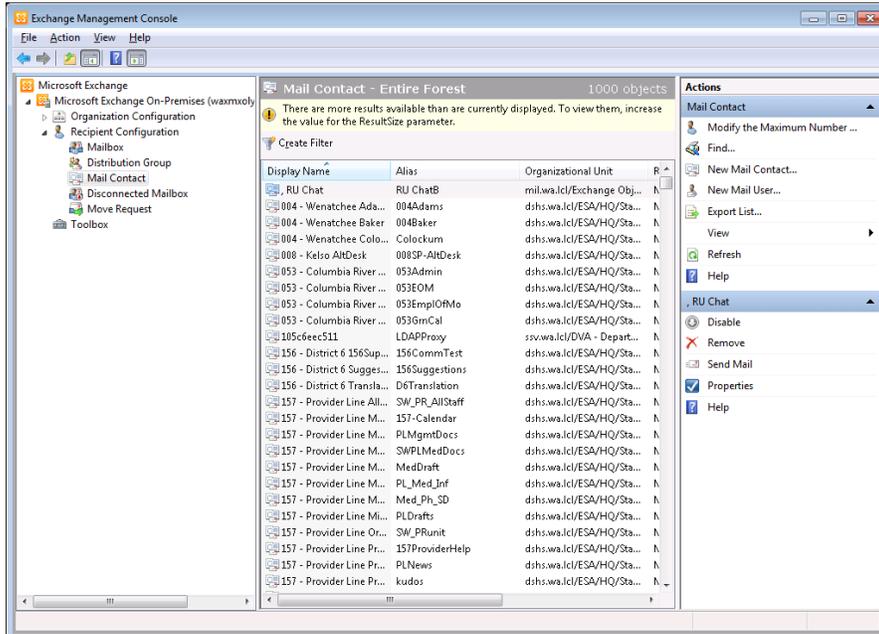
*Set-Mailbox -Alias 'BillE2' -Identity 'dshs.wa.lcl/SEC/Users/Example, Bill'*

## Create a Mail Contact

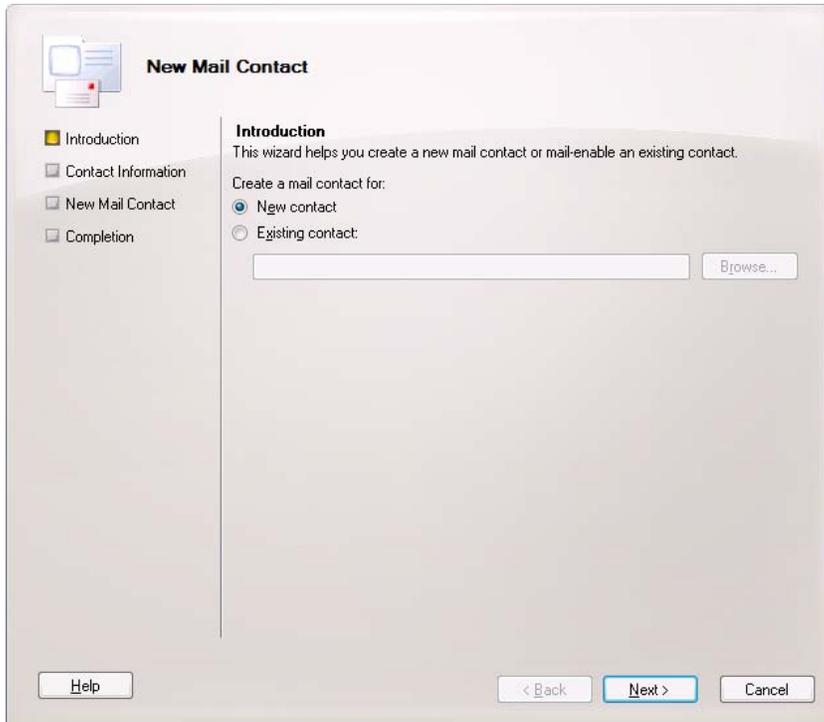
SMTP email addresses for Exchange 2010 mailboxes can be created by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS).

### EMC method:

1. Open EMC
2. From the console tree, under Recipient Configuration click **Mail Contact**. From the actions pane, click **New Mail Contact**.



3. The New Mail Contact wizard will open. Select **New contact**.



- The New Mail Contact Information page will display. Browse to the organizational unit that the user object will reside and populate all the rest of the fields on the page. To add an email address, click **Edit**.

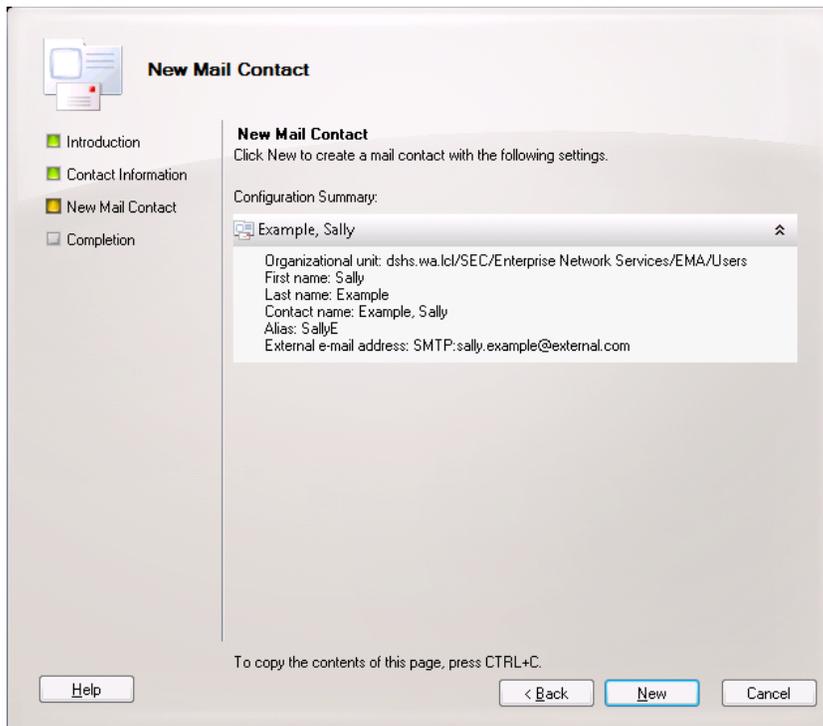
**NOTE: The name in the Name field should be populated last name, first name. This is how the name will be displayed in AD and in the Global Address Book.**

The screenshot shows the 'New Mail Contact' wizard in the 'Contact Information' step. The left sidebar contains four steps: Introduction (selected), Contact Information, New Mail Contact, and Completion. The main area is titled 'Contact Information' and contains the following fields and controls:

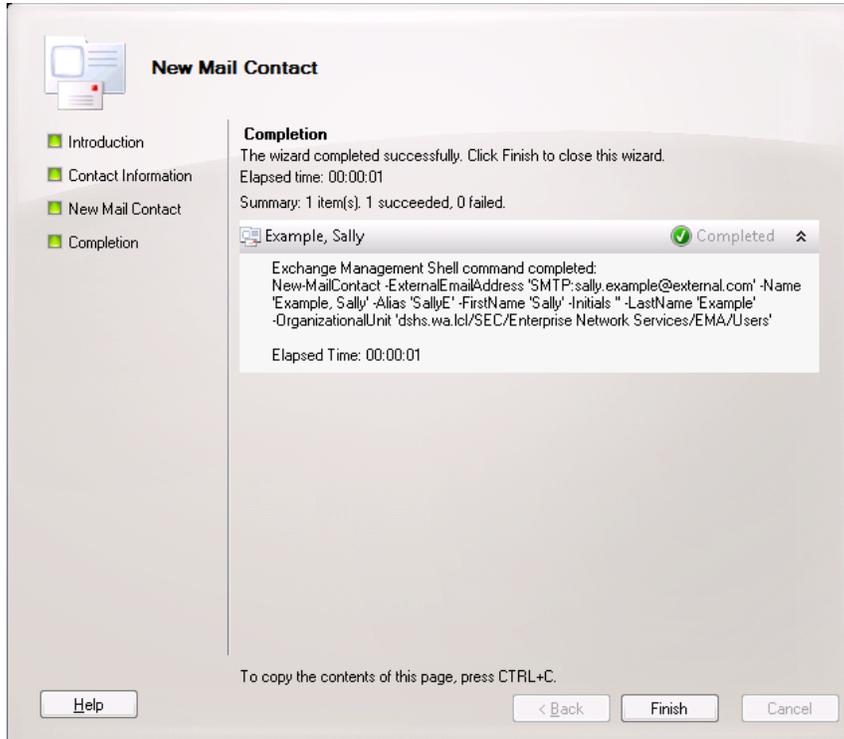
- A checkbox labeled 'Specify the organizational unit rather than using a default one:' is checked. Below it is a text box containing 'dshs.wa.lci/SEC/Enterprise Network Services/EMA/Users' and a 'Browse...' button.
- Three text boxes for 'First name:' (containing 'Sally'), 'Initials:' (empty), and 'Last name:' (containing 'Example').
- A 'Name:' text box containing 'Example, Sally'.
- An 'Alias:' text box containing 'SallyE'.
- An 'External e-mail address:' text box containing 'SMTP:sally.example@external.com' and an 'Edit...' button with a pencil icon.

At the bottom of the wizard are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button.

- The New Mail Contact page will open. Review the configurations. If changes need to be made, click the **Back** button or click **New** to create the mail contact.



- The Completion page will display. Upon completion, a status of Completed or Failed will indicate if the mailbox was successfully created. Click **Finish** to close the wizard.



---

**EMS method:**

1. Open EMS
2. Type the following command:

```
New-MailContact -ExternalEmailAddress 'SMTP:sally.example@external.com' -Name 'Example, Sally' -Alias 'SallyE' -FirstName 'Sally' -Initials " -LastName 'Example' -OrganizationalUnit 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users'
```

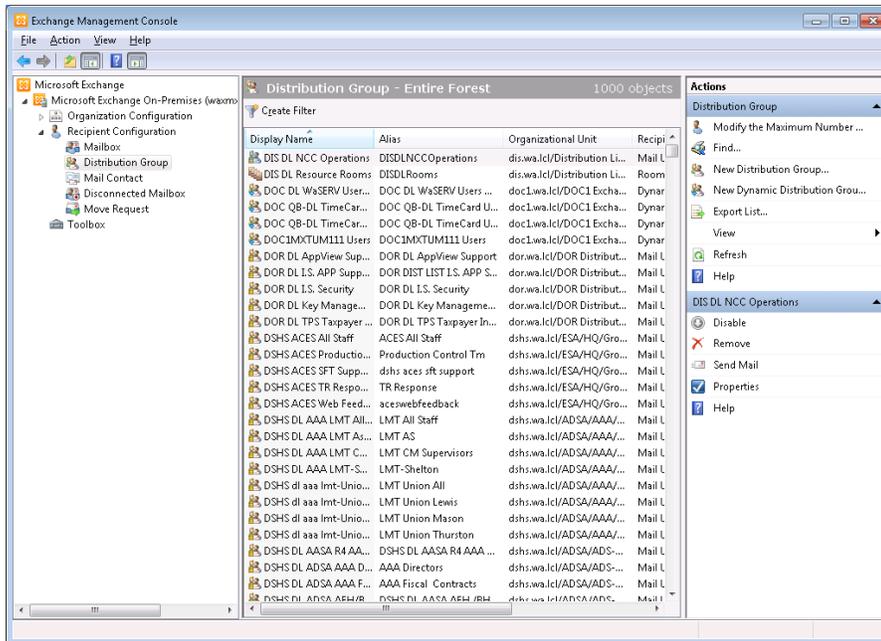
## Create Distribution List

Exchange 2010 distribution list (DL) can be created by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS).

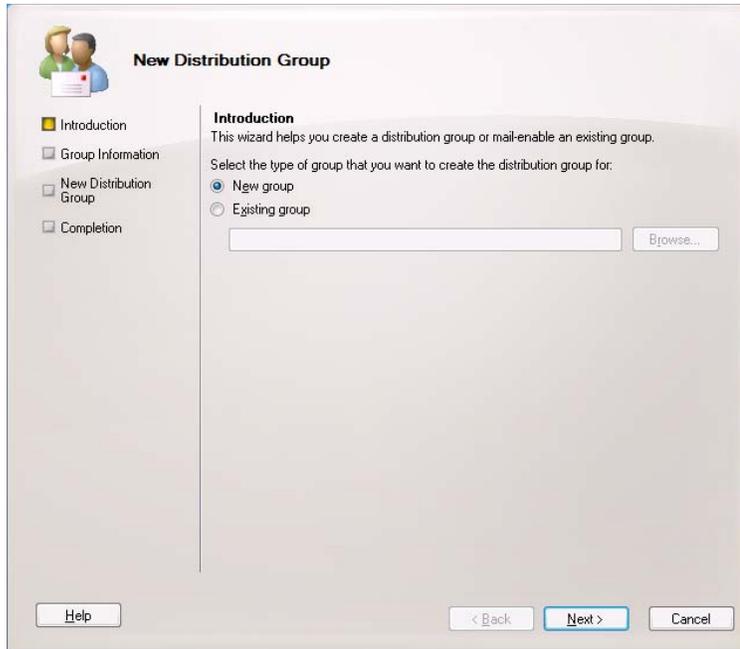
### Static Distribution List

#### EMC method:

1. Open EMC
2. From the console tree, under Recipient Configuration click Distribution Group. From the actions pane, click **New Distribution Group**.



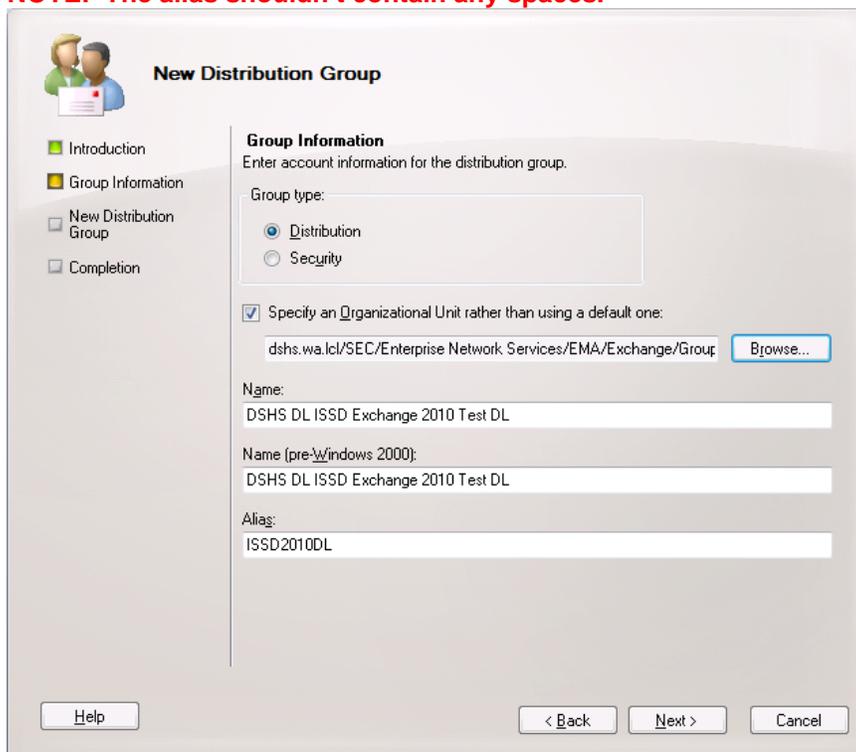
3. The New Distribution Group wizard will open. Click **next** to continue.



The screenshot shows the 'New Distribution Group' wizard at the 'Introduction' step. The left sidebar contains a list of steps: Introduction (selected), Group Information, New Distribution Group, and Completion. The main content area is titled 'Introduction' and contains the following text: 'This wizard helps you create a distribution group or mail-enable an existing group. Select the type of group that you want to create the distribution group for:'. There are two radio button options: 'New group' (selected) and 'Existing group'. Below the 'Existing group' option is an empty text box and a 'Browse...' button. At the bottom of the wizard, there are three buttons: 'Help', '< Back', and 'Next >', along with a 'Cancel' button.

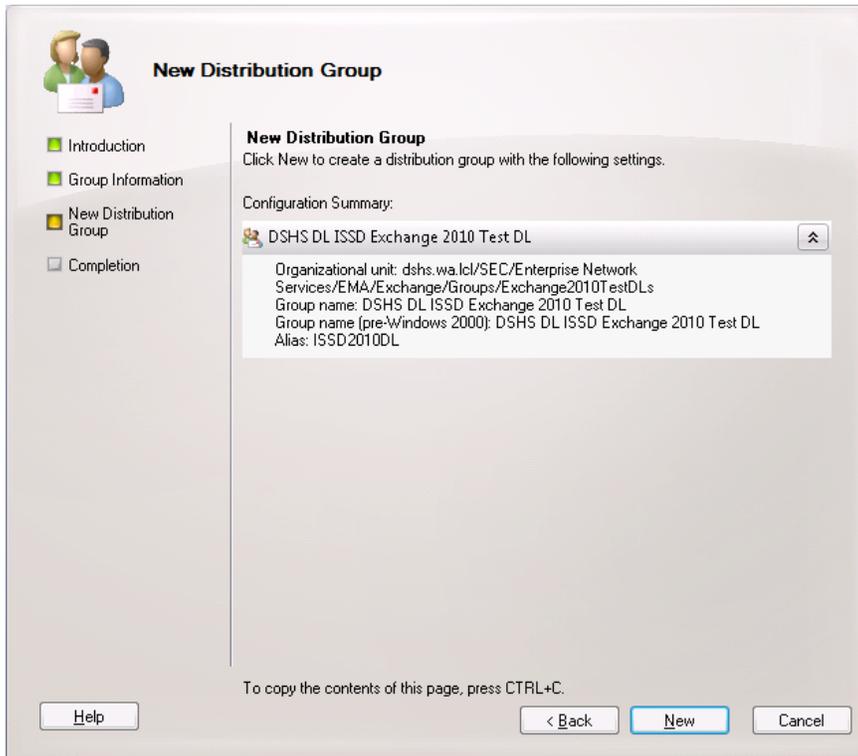
4. The Group Information page will display. DLs should be set to distribution as the group type. **Browse** to the organizational unit that the DL will reside and populate all the rest of the fields on the page. Click **Next** to continue.

**NOTE: The alias shouldn't contain any spaces.**

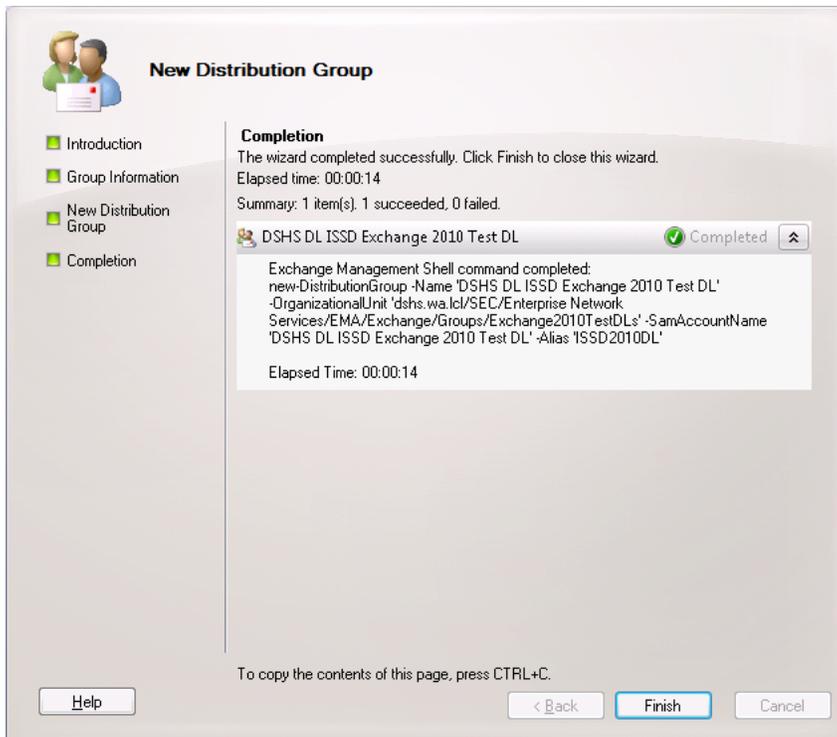


The screenshot shows the 'New Distribution Group' wizard at the 'Group Information' step. The left sidebar shows the steps: Introduction, Group Information (selected), New Distribution Group, and Completion. The main content area is titled 'Group Information' and contains the following text: 'Enter account information for the distribution group.' There are two radio button options for 'Group type': 'Distribution' (selected) and 'Security'. Below this is a checked checkbox labeled 'Specify an Organizational Unit rather than using a default one:'. Underneath is a text box containing the path 'dshs.wa.lc/SEC/Enterprise Network Services/EMA/Exchange/Group' and a 'Browse...' button. Below the checkbox are three text input fields: 'Name:' with the value 'DSHS DL ISSD Exchange 2010 Test DL', 'Name (pre-Windows 2000):' with the value 'DSHS DL ISSD Exchange 2010 Test DL', and 'Alias:' with the value 'ISSD2010DL'. At the bottom of the wizard, there are three buttons: 'Help', '< Back', and 'Next >', along with a 'Cancel' button.

5. The New Distribution Group page will open. Review the configurations. If changes need to be made, click the **Back** button or click **New** to create the DL.



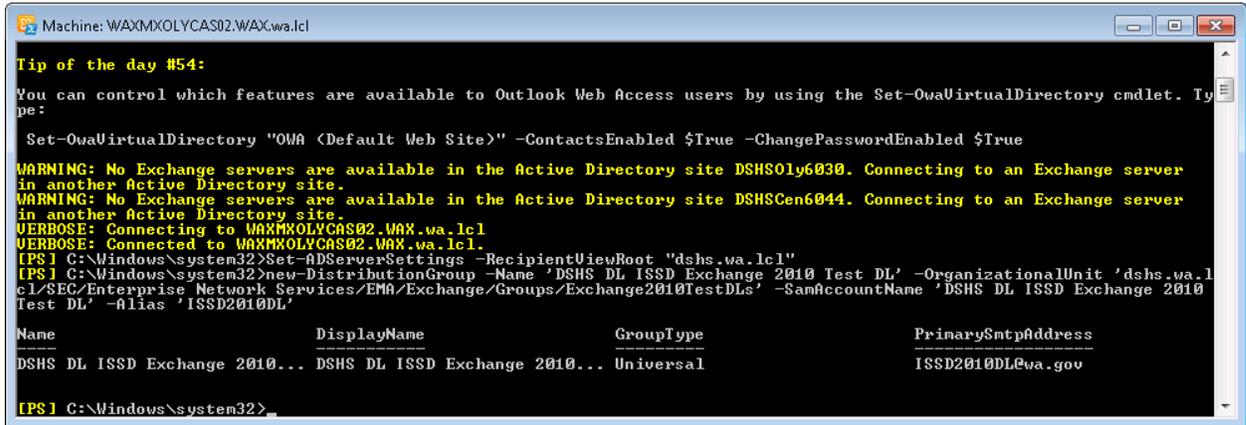
6. The Completion page will display. Upon completion, a status of Completed or Failed will indicate if the DL was successfully created. Click **Finish** to close the wizard.



**EMS method:**

1. Open EMS
2. Type the following command:

```
new-DistributionGroup -Name 'DSHS DL ISSD Exchange 2010 Test DL' -OrganizationalUnit  
'dshs.wa.lcl/SEC/Groups/Exchange2010TestDLs' -SamAccountName 'DSHS DL ISSD Exchange  
2010 Test DL' -Alias 'ISSD2010DL'
```



```
Machine: WAXMXOLYCAS02.WAX.wa.lcl

Tip of the day #54:
You can control which features are available to Outlook Web Access users by using the Set-OwaVirtualDirectory cmdlet. Type:
Set-OwaVirtualDirectory "OWA (Default Web Site)" -ContactsEnabled $True -ChangePasswordEnabled $True

WARNING: No Exchange servers are available in the Active Directory site DSHS01y6030. Connecting to an Exchange server in another Active Directory site.
WARNING: No Exchange servers are available in the Active Directory site DSHSCen6044. Connecting to an Exchange server in another Active Directory site.
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.
[PS] C:\Windows\system32>Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"
[PS] C:\Windows\system32>new-DistributionGroup -Name 'DSHS DL ISSD Exchange 2010 Test DL' -OrganizationalUnit 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Groups/Exchange2010TestDLs' -SamAccountName 'DSHS DL ISSD Exchange 2010 Test DL' -Alias 'ISSD2010DL'

Name                               DisplayName                       GroupType                         PrimarySmtpAddress
----                               -
DSHS DL ISSD Exchange 2010...     DSHS DL ISSD Exchange 2010...     Universal                         ISSD2010DL@va.gov

[PS] C:\Windows\system32>
```

---

## Edit Distribution List Membership

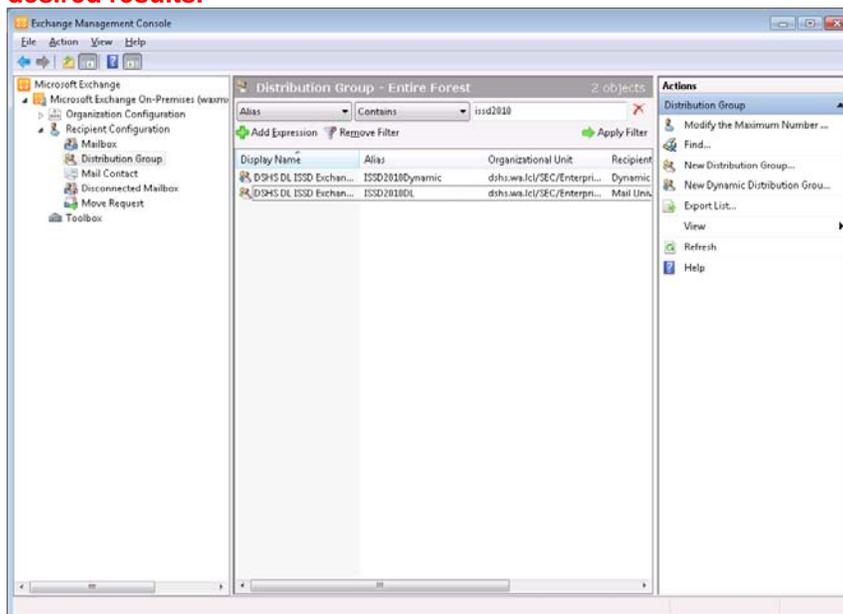
Distribution Lists (DLs) membership can be modified by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS).

### Static Distribution List

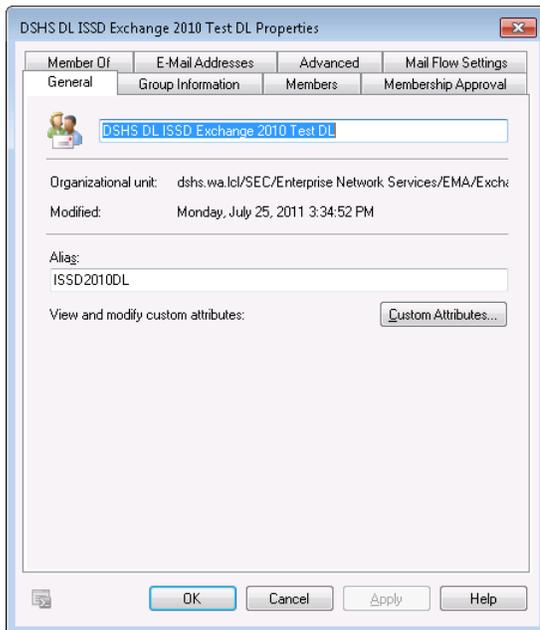
#### **EMC method:**

1. Open EMC
2. From the console tree, under Recipient Configuration click **Distribution Group**. From the actions pane, click **New Distribution Group**.

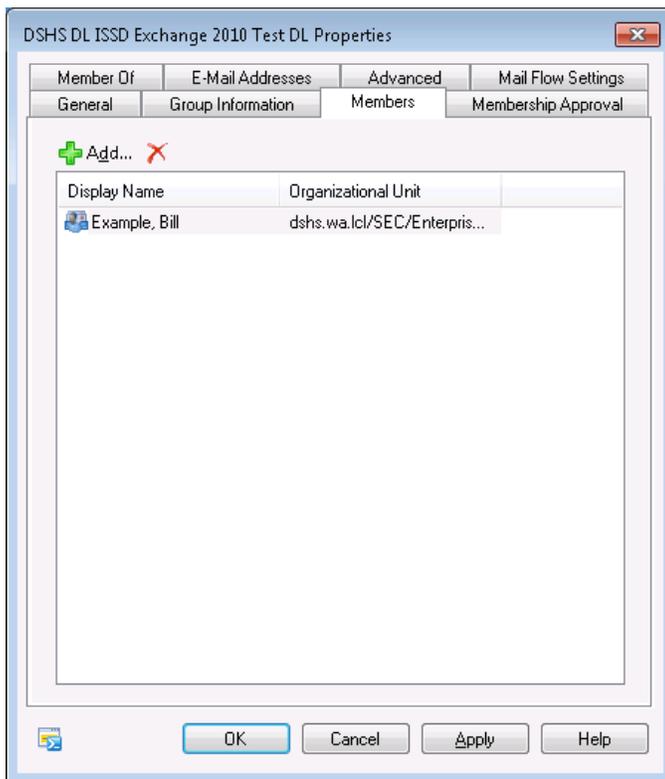
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of DLs will be displayed. Select the DL that needs to be modified. From the actions pane, click **Properties**



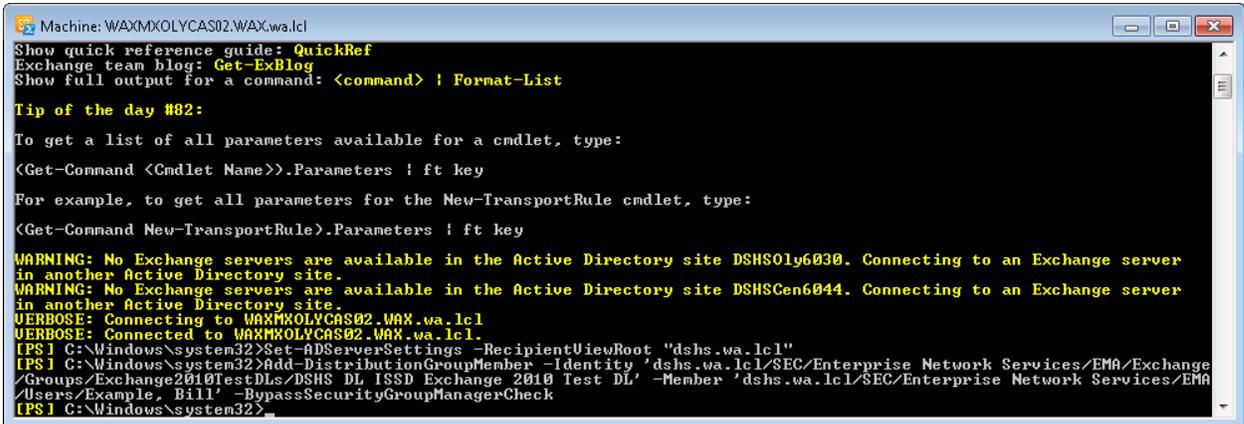
4. Select the **Members** tab. Add/remove the appropriate members to the DL. Click **OK** to apply the changes.



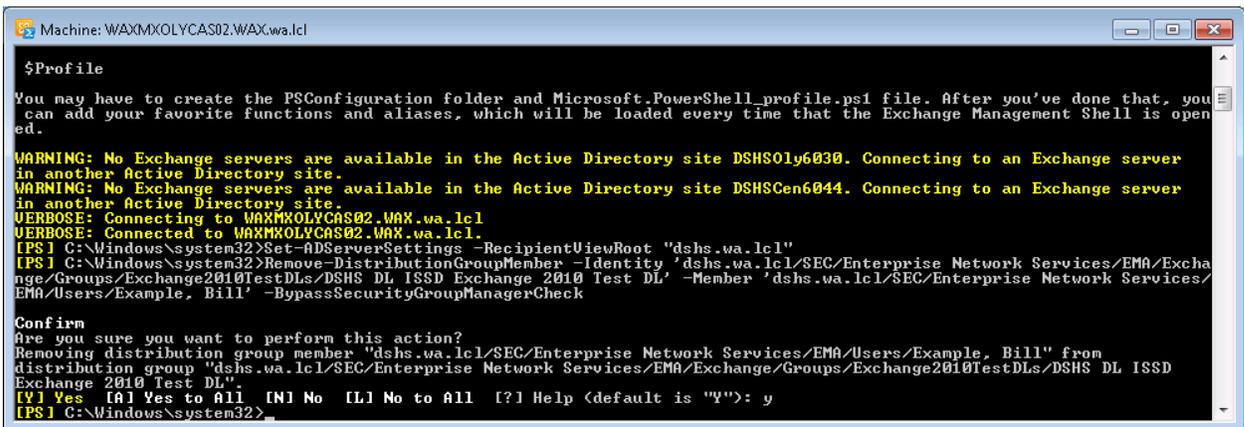
**EMS method:**

1. Open EMS
2. Type the following command:

Add member: `Add-DistributionGroupMember -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Groups/Exchange2010TestDLs/DSHS DL ISSD Exchange 2010 Test DL' -Member 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill' -BypassSecurityGroupManagerCheck`



Delete member: `Remove-DistributionGroupMember -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Groups/Exchange2010TestDLs/DSHS DL ISSD Exchange 2010 Test DL' -Member 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill' -BypassSecurityGroupManagerCheck`



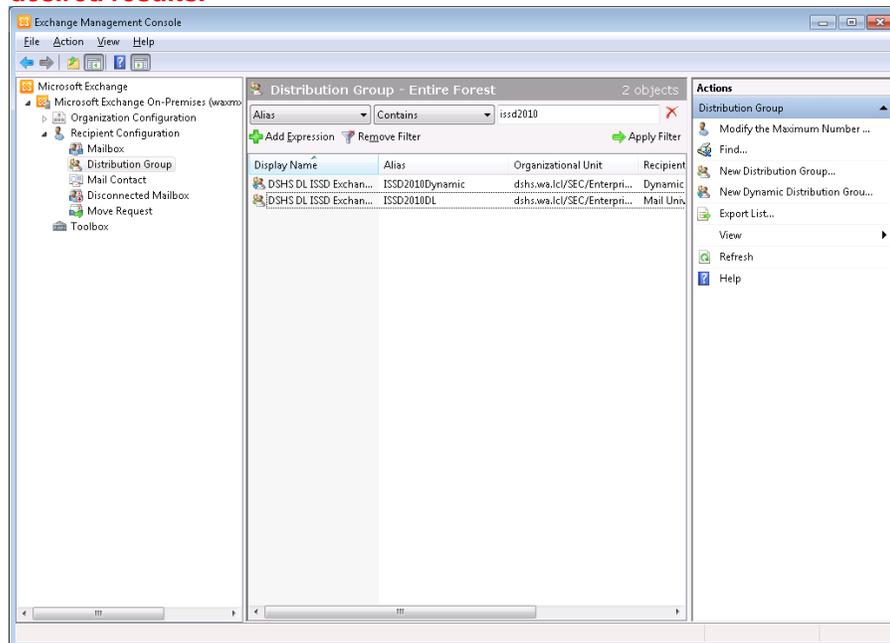
## Edit/Create Distribution List SMTP Email Address

SMTP email addresses for Exchange 2010 mailboxes can be created by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS).

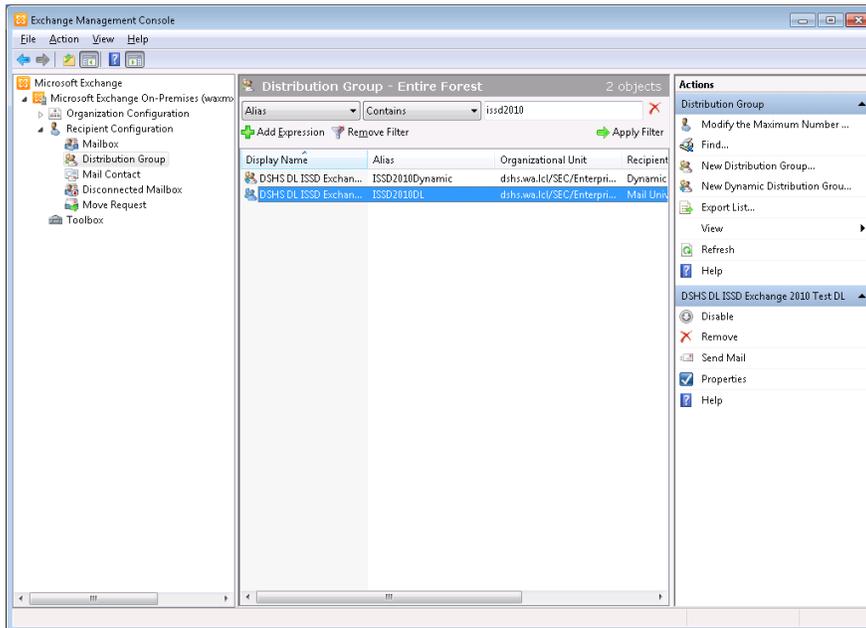
### EMC method:

1. Open EMC
2. From the console tree, under Recipient Configuration click **Distribution Group**. From the actions pane, click **New Distribution Group**.

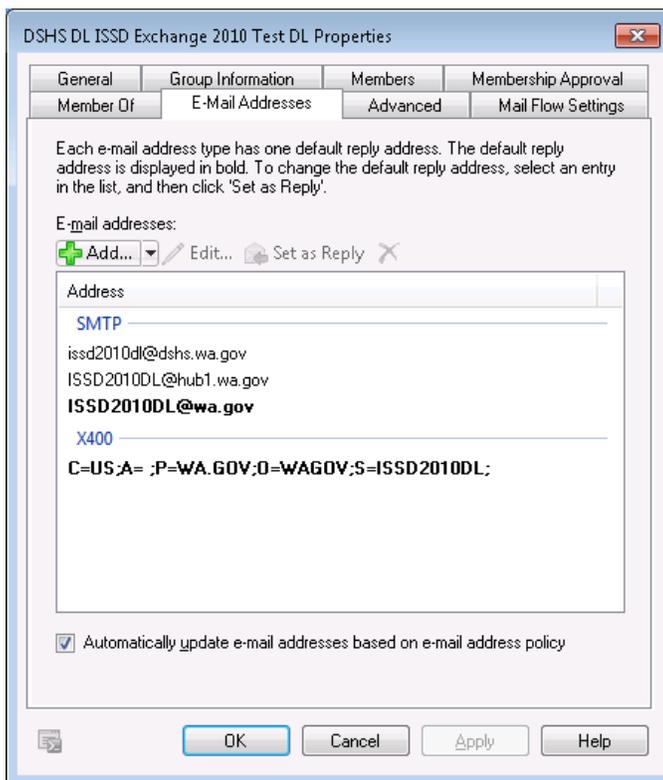
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of DLs will be displayed. Select the DL that needs to be modified. From the actions pane, click **Properties**



4. Select the **E-Mail Addresses** tab.



5. Click **Edit** or **Add**. In the E-mail address field, modify or type the new SMTP address.



SMTP Address

E-mail address:  
Exchange2010TestDL@dshs.wa.gov

E-mail type:  
SMTP

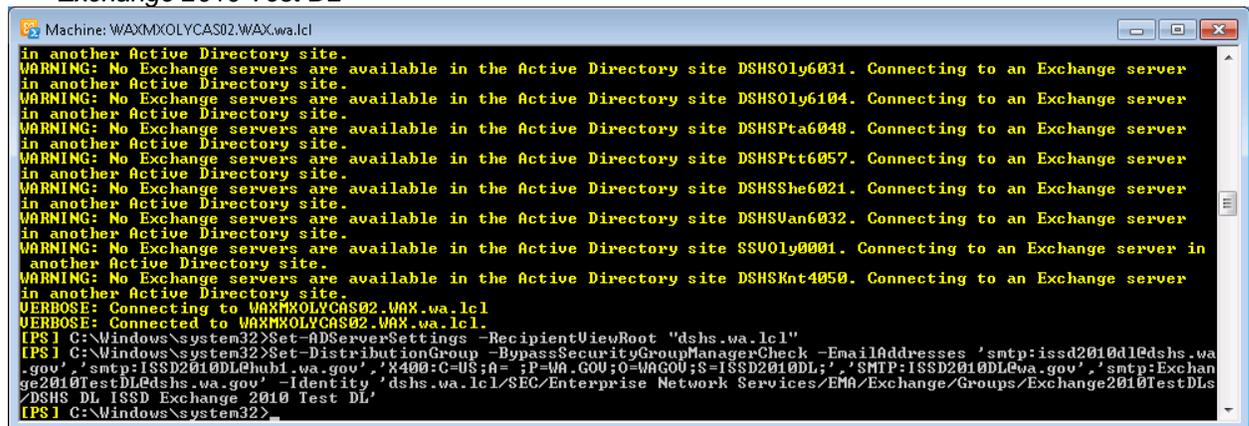
OK Cancel

**NOTE: In Exchange 2010, Set as Primary has been replaced with Set as Reply. Any SMTP address can be set to the Set as Reply address.**

**EMS method:**

1. Open EMS
2. Type the following command:

```
Set-DistributionGroup -BypassSecurityGroupManagerCheck -EmailAddresses  
'smtp:issd2010dl@dshs.wa.gov','smtp:ISSD2010DL@hub1.wa.gov','X400:C=US;A=  
;P=WA.GOV;O=WAGOV;S=ISSD2010DL;','SMTP:ISSD2010DL@wa.gov','smtp:Exchan  
ge2010TestDL@dshs.wa.gov' -Identity 'dshs.wa.lcl/SEC/Exchange2010TestDLs/DSHS DL ISSD  
Exchange 2010 Test DL'
```



```
Machine: WAXMXOLYCAS02.WAX.wa.lcl  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHS01y6031. Connecting to an Exchange server  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHS01y6104. Connecting to an Exchange server  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHSPta6048. Connecting to an Exchange server  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHSPtt6057. Connecting to an Exchange server  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHSShe6021. Connecting to an Exchange server  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHSvan6032. Connecting to an Exchange server  
in another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site S$U01y0001. Connecting to an Exchange server in  
another Active Directory site.  
WARNING: No Exchange servers are available in the Active Directory site DSHSKnt4050. Connecting to an Exchange server  
in another Active Directory site.  
VERBOSE: Connecting to WAXMXOLYCAS02.WAX.wa.lcl  
VERBOSE: Connected to WAXMXOLYCAS02.WAX.wa.lcl.  
[PS] C:\Windows\system32>Set-ADServerSettings -RecipientViewRoot "dshs.wa.lcl"  
[PS] C:\Windows\system32>Set-DistributionGroup -BypassSecurityGroupManagerCheck -EmailAddresses 'smtp:issd2010dl@dshs.wa  
.gov','smtp:ISSD2010DL@hub1.wa.gov','X400:C=US;A=;P=WA.GOV;O=WAGOV;S=ISSD2010DL;','SMTP:ISSD2010DL@wa.gov','smtp:Exchan  
ge2010TestDL@dshs.wa.gov' -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Groups/Exchange2010TestDLs  
/DSHS DL ISSD Exchange 2010 Test DL'  
[PS] C:\Windows\system32>
```

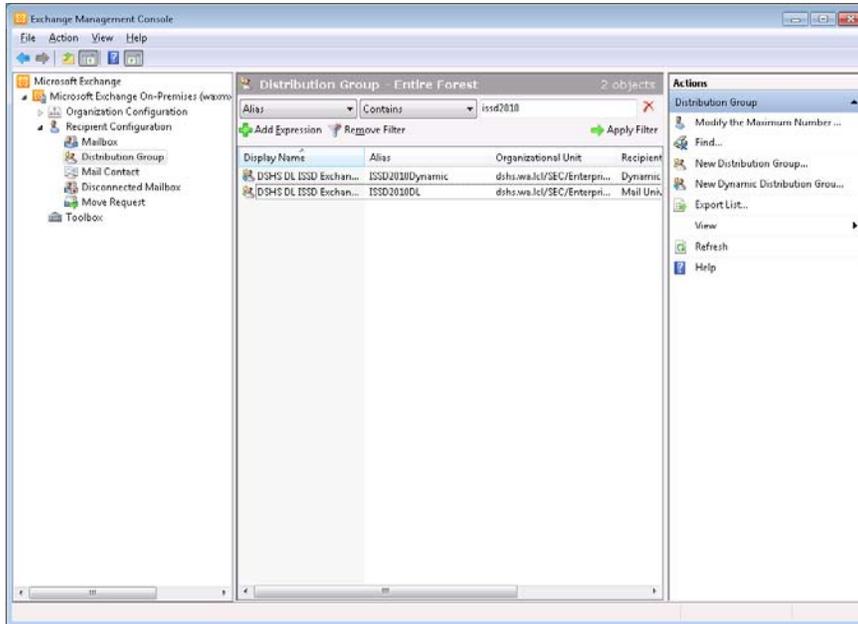
## Hide Distribution List from the Global Address List

Mailboxes can be hidden from the Global Address List by using the Exchange 2010 Management Console (EMC) or with Exchange Management Shell (EMS). In order to send a message to hidden mailboxes, the sender must know the email address.

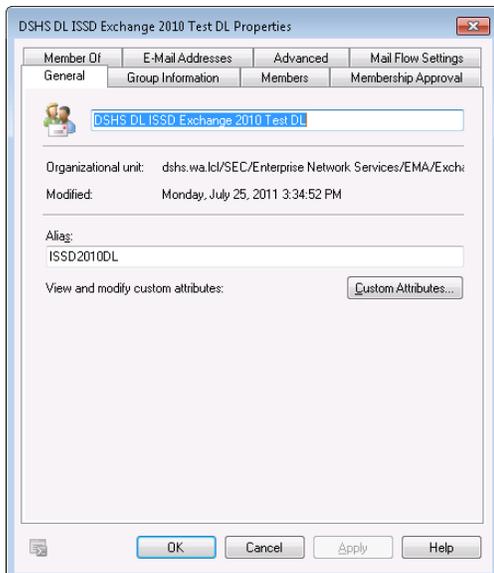
### EMC method:

1. Open EMC
2. From the console tree, under Recipient Configuration click **Distribution Group**. From the actions pane, click **New Distribution Group**.

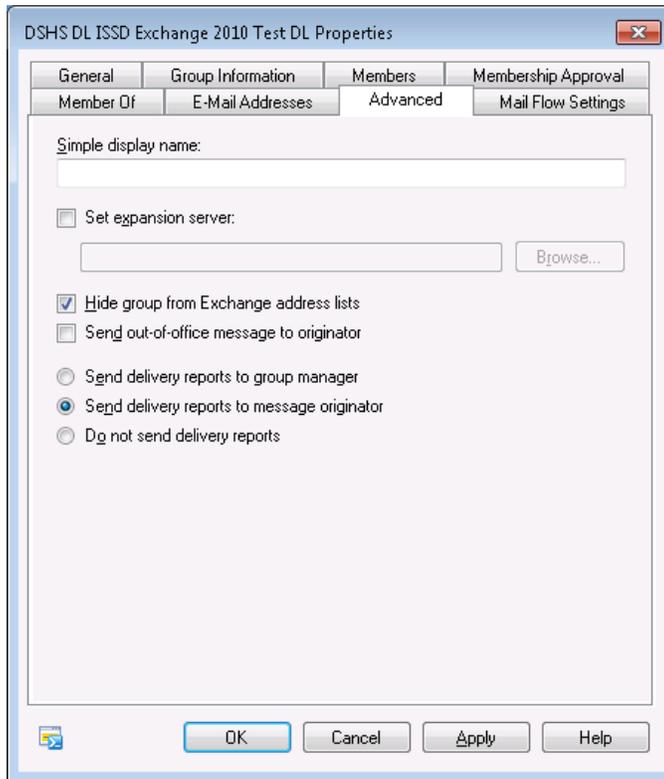
**NOTE: EMC can only display 1000 items so a filter may need to be applied to retrieve the desired results.**



3. A list of mailboxes will be displayed. Select the mailbox that needs to be modified. From the actions pane, click **Properties**



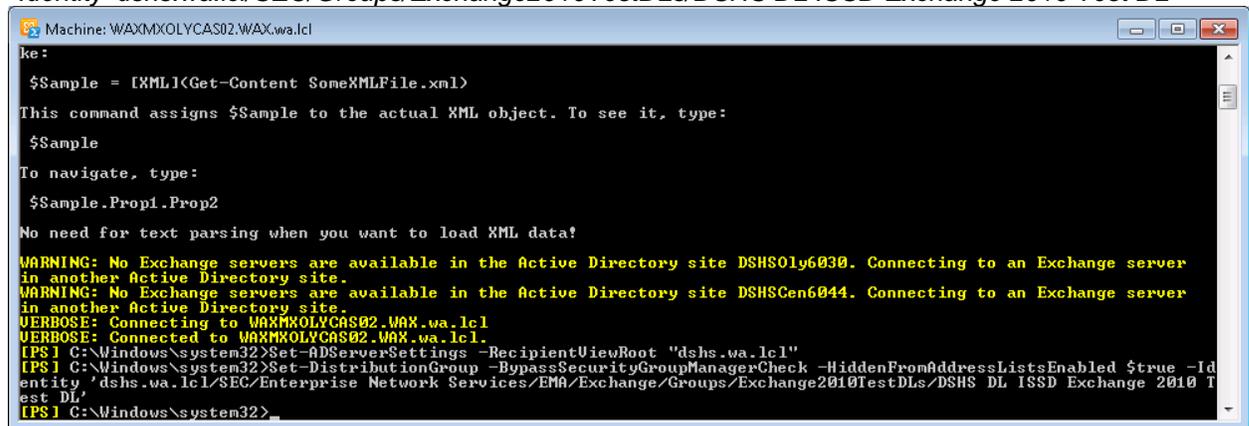
4. Select the **Advanced** tab. Click the box to **Hide group from Exchange address lists**.



**EMS method:**

1. Open EMS
2. Type the following command:

*Set-DistributionGroup -BypassSecurityGroupManagerCheck -HiddenFromAddressListsEnabled \$true -Identity 'dshs.wa.lcl/SEC/Groups/Exchange2010TestDLs/DSHS DL ISSD Exchange 2010 Test DL'*

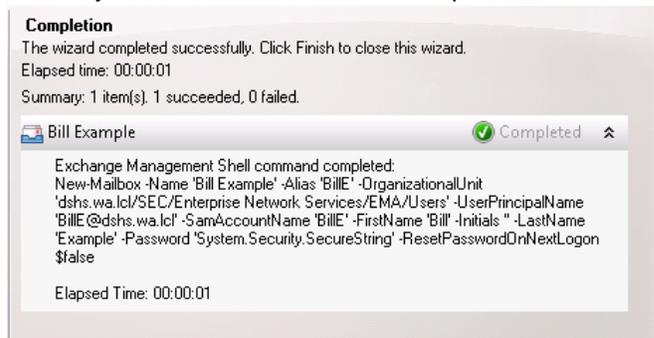


---

## Index of PowerShell scripts to run in EMS

Before you look at the scripts below, here are a few quick tips to make your PowerShell experience a little easier.

- As a best practice, when you first open EMS, run the following command, which changes the focus of the PowerShell session to the agency domain instead of the wa.gov domain
  - o `Set-ADServerSettings -RecipientViewRoot ""agy.wa.lcl"`
- When you begin to type a command, for example, if you're creating a new mailbox, type "New-M", press the tab key to cycle thru the various options. In this case, stop when you get to "New-Mailbox". Using this method can increase the speed of creating a script as well as minimizing spelling mistakes.
- The `-whatif` command will give an output of expected results without actually executing the script
- Every time you run PowerShell a process in the EMC interface, the "completion" page will display the corresponding PowerShell script. You can copy that script to Notepad and make modifications if you have several tasks to complete.



**Note: the examples below are for reference only. To use effectively, copy them into another editing program, such as Notepad or Wordpad, and modify them accordingly.**

### Create/Delete Active Directory objects and mailboxes

Create AD user and Exchange 2010 mailbox

- `New-Mailbox -Name "Example, Bill" -Alias BILLE -OrganizationalUnit "dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users" -UserPrincipalName "Bille@dshs.wa.lcl" -SamAccountName "BILLE" -FirstName "Bill" -LastName "Example" -Password (ConvertTo-SecureString "#password1" -AsPlainText -Force) -ResetPasswordOnNextLogon $true`

### Create an Exchange 2010 mailbox for an existing Active Directory user object

- `Enable-Mailbox -Identity "dshs.wa.lcl/SEC/Enterprise Network Services/EMA/users/Example, Bill" -Alias "BILLE"`

### Delete an Exchange 2010 mailbox

- The AD user object will NOT be removed
- The mailbox will exist in the Exchange database for 21 days based on the mailbox retention policy.
  - o `Disable-Mailbox -Identity DSHS\BILLE`
    - Choose (Y) Yes if you're sure you want to perform this action

---

## Delete Exchange 2010 mailbox and Active Directory user object

- The mailbox will exist in the Exchange database for 21 days based on the mailbox retention policy.
  - o *Remove-Mailbox -Identity DSHS\BillE*
    - Choose (Y) if you're sure you want to perform this action

## Create a mail contact

- *New-MailContact -ExternalEmailAddress 'SMTP:sally.example@external.com' -Name 'Example, Sally' -Alias 'SallyE' -FirstName 'Sally' -Initials " -LastName 'Example' -OrganizationalUnit 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users'*

## Distribution List Management

### Create distribution list

- Static DL (specify users in the group)
  - o *New-DistributionGroup -Name 'DSHS DL ISSD Exchange 2010 Test DL' -OrganizationalUnit 'dshs.wa.lcl/SEC/Groups' -SamAccountName 'DSHS DL ISSD Exchange 2010 Test DL' -Alias 'ISSD2010DL'*
- Dynamic DL (users in group based on criteria/query)
  - o *new-DynamicDistributionGroup -Name 'DSHS DL ISSD Exchange 2010 Dynamic' -RecipientContainer 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Users/Exchange2010TestUsers' -IncludedRecipients 'AllRecipients' -OrganizationalUnit 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Groups/Exchange2010TestDLs' -Alias 'ISSD2010Dynamic'*

### Edit static distribution list membership

- Add member
  - o *Add-DistributionGroupMember -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Exchange/Groups/Exchange2010TestDLs/DSHS DL ISSD Exchange 2010 Test DL' -Member 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill' -BypassSecurityGroupManagerCheck*
- Delete member
  - o *Remove-DistributionGroupMember -Identity 'dshs.wa.lcl/SEC/Groups/Exchange2010TestDLs/DSHS DL ISSD Exchange 2010 Test DL' -Member 'dshs.wa.lcl/SEC/Users/Example, Bill' -BypassSecurityGroupManagerCheck*

### Create/Edit distribution list SMTP email address

- The primary smtp address must be included or the script will fail
  - o *Set-DistributionGroup -BypassSecurityGroupManagerCheck -EmailAddresses 'smtp:issd2010dl@dshs.wa.gov','smtp:Exchange2010TestDL@dshs.wa.gov' -Identity 'dshs.wa.lcl/SEC /DSHS DL ISSD Exchange 2010 Test DL'*

### Hide distribution list from the Global Address List

- *Set-DistributionGroup -BypassSecurityGroupManagerCheck -HiddenFromAddressListsEnabled \$true -Identity 'dshs.wa.lcl/SEC/Groups/DSHS DL ISSD Exchange 2010 Test DL'*

---

## Modifying Exchange 2010 mailbox permissions/settings

### Delivery restrictions

- Restrict who can send to a mailbox
  - o *Set-Mailbox -Identity 'dshs.wa.lcl/SEC/Example, Jane' -AcceptMessagesOnlyFrom 'dshs.wa.lcl/SEC/Example, Bill' -AcceptMessagesOnlyFromDLMembers 'dshs.wa.lcl/SEC/DSHS DL ISSD Exchange E-mail Administrators'*
- Restrict who can send to a distribution list
  - o *Set-DistributionGroup -AcceptMessagesOnlyFromSendersOrMembers 'dshs.wa.lcl/SEC/Example, Bill','dshs.wa.lcl/SEC/Groups/DSHS DL ISSD Exchange Team' -Identity 'dshs.wa.lcl/SEC/dshs dl issd 2010 test'*

### Send on Behalf

- *Set-Mailbox -Identity "Example, Jane" -GrantSendOnBehalfTo "Example, Bill"*

### Set Forwarding Address

- *Set-Mailbox -Identity "Example, Jane" -ForwardingAddress Bille@wa.gov*

### Create/Edit SMTP email addresses

- The primary smtp address must be included in the script or it will fail. Also, any existing secondary addresses MUST be included **or they will be removed...**
  - o *Set-Mailbox -EmailAddresses 'smtp:WilliamE@dshs.wa.gov','smtp:WilliamE@hub1.wa.gov','SMTP:WilliamE@wa.gov','smtp.example.bill@dshs.wa.gov' -Identity 'dshs.wa.lcl/SEC/Example, Bill'*

### Configure Exchange 2010 mailbox features

- Disable OWA
  - *Set-CasMailbox -OWAEnabled \$false -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*
- Enable OWA
  - *Set-CasMailbox -OWAEnabled \$true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*
- Disable POP3
  - *Set-CasMailbox -PopEnabled \$false -PopEnabled \$true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*
- Enable POP3
  - *Set-CasMailbox -PopEnabled \$true -PopEnabled \$true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*

### Hide Exchange 2010 Mailbox from the Global Address List

- *Set-Mailbox -Alias 'Bille' -HiddenFromAddressListsEnabled \$true -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*

### Edit display name

- *Set-User -Name 'Rights, Bill' -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*

### Edit email alias

- *Set-Mailbox -Alias 'Bille2' -Identity 'dshs.wa.lcl/SEC/Enterprise Network Services/EMA/Users/Example, Bill'*



# Chapter 3: Delegated Discovery Administrators Role

Prepared by:  
The CTS Shared Services Email Project Team

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## Introduction

This document assumes you have followed and met the requirements and installation procedures found in the Recipient Administration Guide for the configuration of the Exchange Administration workstation and the installation of the Exchange Administration tools.

Use caution when running commands in EMS because some commands might run against an entire OU unless a mailbox is specified. The **-whatif** command can be placed at the end of commands to see results without actually running the command.

**Example:** *Disable-Mailbox -Identity CTS\WilliamE -whatif*

Each new session of the Exchange Management Shell must be scoped to the agency domain.  
*Set-ADServerSettings -RecipientViewRoot cts.wa.lcl*

---

## Delegated Discovery Administrator

### Get-ADServerSettings

Synopsis: View the Active Directory Domain Services (AD DS) environment settings in the current Windows Powershell session.

**Example:**

This example displays the session settings for the current session.

***Get-AdServerSettings | Format-List***

### Get-DomainController

Synopsis: View a list of domain controllers that exist in your organization.

**Example:**

This example lists domain controllers in the specified domain.

***Get-DomainController -DomainName cts.wa.lcl***

### Get-Mailbox

Synopsis: View mailbox objects and attributes, populate property pages, or supply mailbox information to other tasks.

**Examples:**

This example returns a list of all mailboxes in your organization

***Get-Mailbox***

This example returns a list of all mailboxes that resolve from the ambiguous name resolution search on the string "chr"

***Get-Mailbox -Anr "Chr" -DomainController CTSGCOLY2010***

This example returns a list of all available attributes for the mailbox JohnD

***Get-Mailbox JohnD |fl***

### Get-MailboxExportRequest

Synopsis: View the detailed status of an ongoing export request that was initiated by using the *New-MailboxExportRequest* cmdlet.

**Examples:**

This example returns a list of export requests that have completed.

***Get-MailboxExportRequest -Status Completed***

This example returns a list of export requests that have been suspended.

***Get-MailboxExportRequest -Suspend \$true***

This example returns a list of export requests that have failed.

***Get-MailboxExportRequest -Status Failed***

### Get-MailboxExportRequestStatistics

Synopsis: View detailed information about export requests.

**Examples:**

This example returns details of the export requests for the specified mailbox.

***Get-MailboxExportRequestStatistics [JohnAppleseed@cts.wa.gov](mailto:JohnAppleseed@cts.wa.gov)/mailboxexport |fl***

### Get-MailboxSearch

Synopsis: View mailbox searches that are in progress, complete, or stopped.

**Examples:**

This example returns a list of mailbox searches.

---

### **Get-MailboxSearch**

This example pairs down the results from the list of mailbox searches.

**Get-MailboxSearch** */fl Name, CreatedBy, SearchQuery, Status*

This example returns results from the specified mailbox search.

**Get-MailboxSearch** *"Discovery Search for John #2"*

### **Get-Recipient**

Synopsis: Returns a list of recipient objects from Active Directory.

#### **Examples:**

This example returns a list of recipient objects from Active Directory.

**Get-Recipient** *-ResultSize unlimited*

This example returns a list of all mail contacts in your organization and sorts them by name.

**Get-Recipient** *-RecipientType MailContact -SortBy Name*

### **New-MailboxExportRequest**

Synopsis: Use the New-MailboxExportRequest cmdlet to begin the process of exporting contents of a primary mailbox or archive to a .pst file.

**NOTE:** The mailbox server will need access to the agency file share; firewalls will need to be opened. Please contact CTS for assistance with this activity.

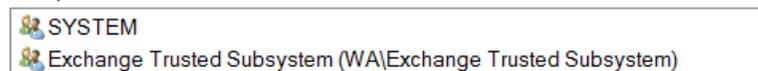
#### **Example:**

This example exports the specified mailbox to a PST file on the specified server and share.

**New-MailboxExportRequest** *-Mailbox dislantest -MRSServer waxmxolyhtcas08.wax.wa.lcl -FilePath \\ctsdcgcoly2010\myshare\lantest.pst*

(The WA\Exchange Trusted Subsystem will need access on the file share)

Group or user names:



### **New-MailboxSearch**

Synopsis: Use the New-MailboxSearch cmdlet to start a new mailbox search. Mailbox searches are performed across all servers running Microsoft Exchange Server 2010 in an Exchange organization, unless the search is constrained to fewer mailboxes by using the SourceMailboxes parameter.

#### **Examples:**

This example creates the mailbox search Legal-ProjectX. The search uses several parameters to restrict the query:

**SourceMailboxes** This parameter restricts the search to members of the CTS Search List distribution groups.

**Recipients** This parameter specifies that the search includes all mail sent to the domain cts.wa.gov.

**SearchQuery** This parameter specifies an AQS query for messages with either the words parking or concerns and for messages with attachments.

**StartDate** and **EndDate** These parameters specify the start date of July 1, 2011, and end date of December 31, 2011, for the search.

**TargetMailbox** This parameter specifies that search results should be copied to the discovery mailbox LegalDiscovery.

**StatusMailRecipients** This parameter specifies that the distribution group CTS DL Discovery Team is to receive a notification when the search is complete.

**New-MailboxSearch** *-name "CTS Discovery Project" -SourceMailboxes "CTS News" -TargetMailbox ctsdiscovery@cts.wa.gov -StartDate "12/1/2010" -EndDate "7/1/2011" -Recipients "@cts.wa.gov" -SearchQuery "Parking Concerns" -StatusMailRecipients "discoverymanager@cts.wa.gov"*

### **Remove-MailboxExportRequest**

Synopsis: Remove fully or partially completed export requests.

---

**Examples:**

This example removes the specified export request

***Remove-MailboxExportRequest -identity "cts.wa.lcl/Exchange Accounts/CTS LAN Support\MailboxExport"***

**Remove-MailboxSearch**

Synopsis: Removes a mailbox search.

**Examples:**

This example removes the mailbox search

***Remove-MailboxSearch "CTS Discovery Project"***

**Search-Mailbox**

Synopsis: Search a mailbox and copy the results to a specified target mailbox, delete messages from the source mailbox, or both.

**Examples:**

This example

***Search-Mailbox -Identity "DES Communications" -SearchQuery "Subject:Potluck" -TargetMailbox "jimmy.harding@des.wa.gov" -targetfolder "Communications" -LogLevel Full***

This example searches Jim Conger's mailbox for messages that contain the phrase "Secret Formula" in the subject and deletes the message from the source mailbox.

***Search-Mailbox -Identity [jim.conger@cts.wa.gov](mailto:jim.conger@cts.wa.gov) -SearchQuery "Subject:'Secret Formula'" -DeleteContent***

**Set-ADServerSettings**

Synopsis: Manage the Active Directory Domain Services (AD DS) environment in the current Exchange Management Shell session.

**Examples:**

This example sets the RecipientViewRoot to the local domain

***Set-ADServerSettings -RecipientViewRoot cts.wa.lcl***

This example sets the scope to the entire forest

***Set-ADServerSettings -ViewEntireForest \$true***

This example sets the scope to the entire forest and designates a preferred global catalog server

***Set-ADServerSettings -ViewEntireForest \$true -PreferredGlobalCatalog CTSGCOLY2010***

**Set-MailboxExportRequest**

Synopsis: Change export request options after the request has been created.

**Examples:**

This example changes the specified export request to accept up to 10 corrupt mailbox items.

***Set-MailboxExportRequest -identity "cts.wa.lcl/Exchange Accounts/CTS LAN Support\MailboxExport" -BadItemLimit 10***

**Set-MailboxSearch**

Synopsis: Modify an existing mailbox search.

**Examples:**

This example modifies the start date of a mailbox search.

***Set-MailboxSearch -Name "Legal-ProjectX" -StartDate "01/01/2010"***

**Start-MailboxSearch**

Synopsis: Restart or resume a mailbox search that's been stopped.

**Examples:**

This example starts the specified mailbox search.

---

***Start-MailboxSearch -Identity "ProjectCTS"***

**Stop-MailboxSearch**

Synopsis:

***Examples:***

This example stops the specified mailbox search.

***Stop-MailboxSearch -Identity "ProjectCTS"***

**Suspend-MailboxExportRequest**

Synopsis: Suspend an export request any time after the request was created, but before the request reaches the status of Completed.

***Examples:***

This example suspends the second export request for the DES mailbox with the identity DES\MailboxExport1

***Suspend-MailboxExportRequest -Identity "DES\MailboxExport1"***

**Write-AdminAuditLog**

Synopsis: Write a comment to the administrator audit log.

***Example:***

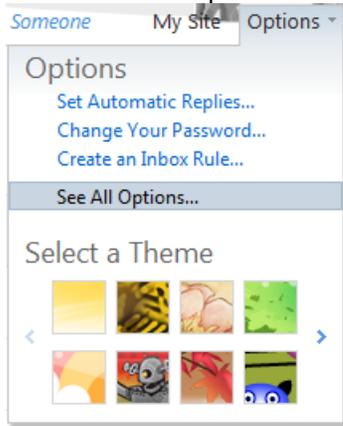
This example writes a comment to the administrator audit log.

***Write-AdminAuditLog -Comment "Ran custom script."***

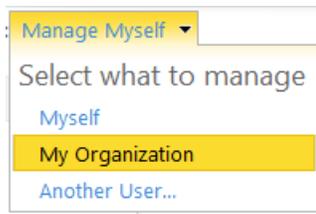
## Multi-Mailbox Search Using the OWA Interface

Multi-mailbox searches require an Agency “Discovery” mailbox to be established. Search results will be returned to the Discovery mailbox. CTS must setup the Discovery mailbox for your agency. To create the mailbox, submit a CTS Service Desk ticket requesting the Discovery mailbox creation, including the names of the users and/or accounts that will need access to the Discovery mailbox.

1. Open Webmail or go to Mobile.wa.gov
2. Select “See All Options” from the “options” menu in the upper right of the OWA screen

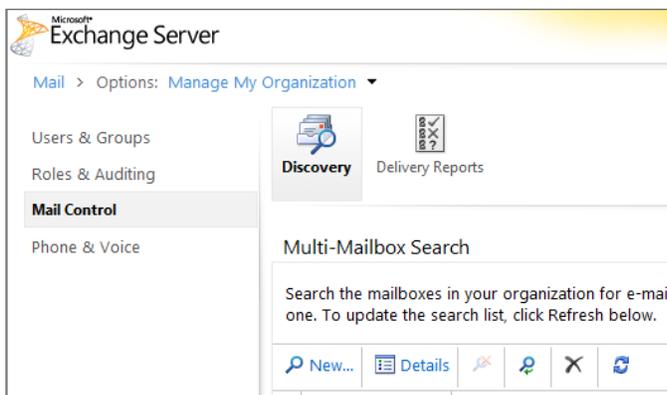


3. Select “My Organization” from the “Manage Myself” menu

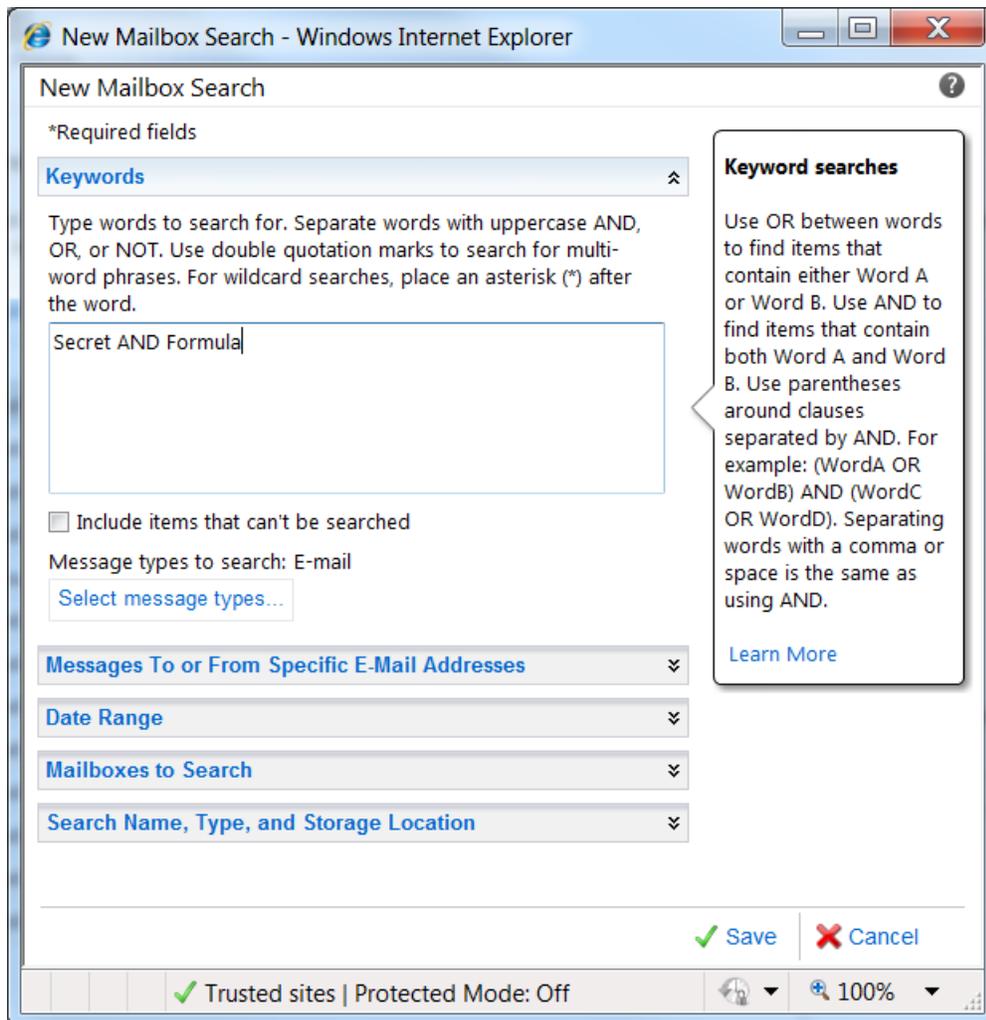


The search tool will be found in the middle of the screen.

**Note:** Searches from other agencies will be visible on this screen. It is possible to delete searches from other agencies. Use caution when deleting your searches and verify they belong to you.



4. Select "New..." to create a new search.
5. Enter the keywords you are looking for.
6. Select "Message types to search" if needed
7. Select the "Keywords" you want to search and any Boolean expressions.



8. Select the From or To addresses you want to search under “Messages To or From Specific E-mail Addresses” if you want to narrow your search.
9. Specify a date range to search or select “Don’t limit the search by date range:”

New Mailbox Search - Windows Internet Explorer

New Mailbox Search

\*Required fields

Keywords

Messages To or From Specific E-Mail Addresses

Narrow the search to messages sent to or from specific e-mail addresses or domains. Use display names, e-mail addresses, or domain names.

From:

Add users...

OR

To (including Cc and Bcc):

jay.deboer@cts.wa.gov, william.clark@cts.wa.g Add users...

Date Range

You can specify the date range for the search as follows:

Don't limit the search by date range

Limit the search by the following date range:

Start date:

2010 January 1

End date:

2011 November 4

Save Cancel

Trusted sites | Protected Mode: Off

100%

**To (including Cc and Bcc):**

You can also narrow the search to items sent to a specific person or anyone in a specific domain. Specify a domain name like this: @example.com. Separate multiple recipients with a comma.

[Learn More](#)

10. Select the mailboxes to search.

New Mailbox Search - Windows Internet Explorer

New Mailbox Search

\*Required fields

Keywords

Messages To or From Specific E-Mail Addresses

Date Range

Mailboxes to Search

\* Select mailboxes to search:

Search all mailboxes

Search specific mailboxes or the mailboxes of members of distribution groups:

+ Add... - Remove

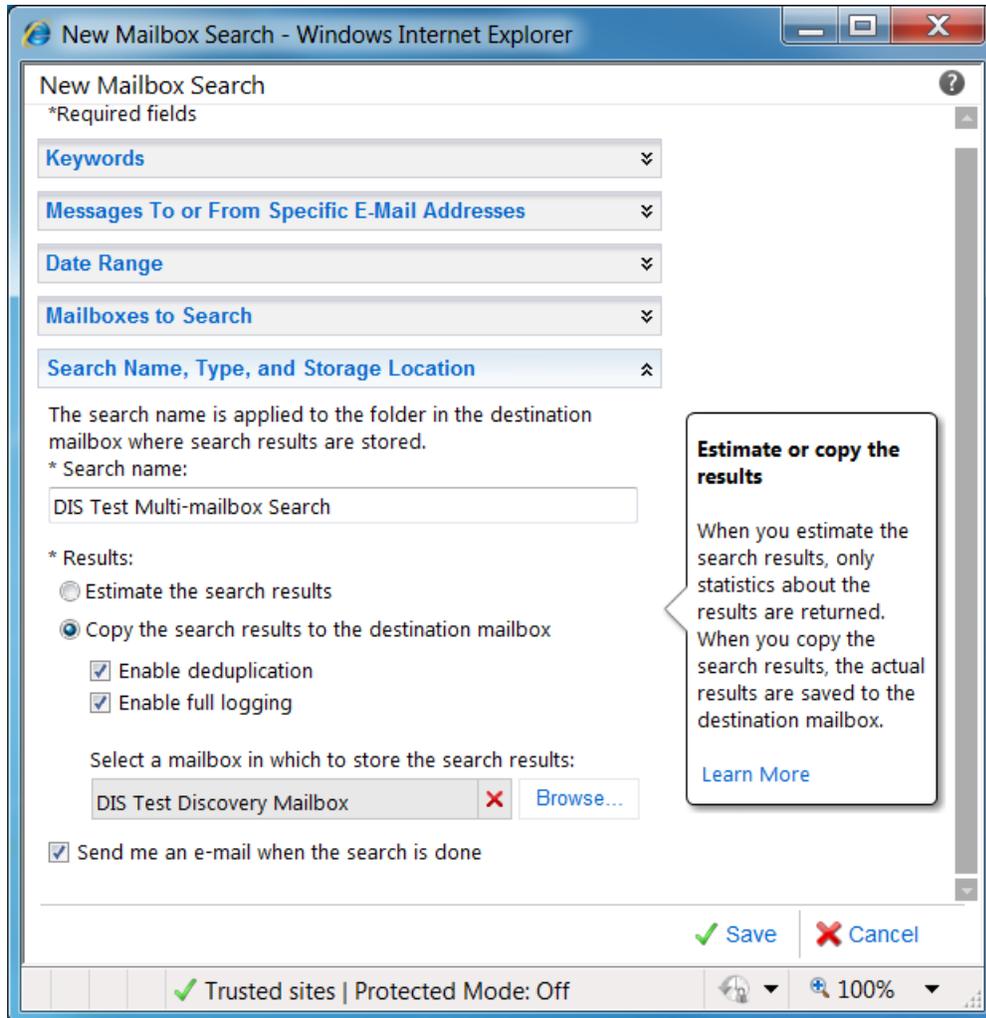
DIS DL Mailbox Searches

Search Name, Type, and Storage Location

Save Cancel

Trusted sites | Protected Mode: Off 100%

11. Under "Search Name" name your search starting with your Agency designator.
12. If you choose to "Copy the search results to the destination mailbox" then select a discovery mailbox to copy the results to and select how you want the "Results" handled along with enabling deduplication and enabling full logging.
13. If you want an email sent to you when the search is done check the box.



14. Clicking on **Save** will save your search and start the search process
15. Your search will show up as "in progress" in the Multi-Mailbox Search window

#### Multi-Mailbox Search

Search the mailboxes in your organization for e-mail and other message types that contain specific keywords. To update the search list, click Refresh below.

Status	Search Name	Date	Size
New...	Details		
Search In progress	DIS Test Multi-mailbox Search	11/3/2011 3:40 PM	0 B

16. Details of the search will be displayed in the right hand column.

**DIS Test Multi-mailbox Search**

Status:  Search In progress - 0% complete

User: DeBoer, Jay (CTS)

Date: 11/3/2011 3:40 PM

Size: 0 B

Items: 0

Errors: None

Keyword statistics: (Duplicates not excluded)

Keyword	Hits	Mailboxes
---------	------	-----------

17. When the search is complete you will receive an email with the results of the search. You will see the results in the right hand pane (you may have to refresh the window) of the Multi-Mailbox Search. (Email received in Outlook)

Microsoft Exchange    The search 'DIS Test Multi-mailbox Search' has 'Search Succeeded'. Thu 11... 5 C

**DIS Test Multi-mailbox Search**

Status:  Search Succeeded

User: DeBoer, Jay (CTS)

Date: 11/3/2011 3:40 PM

Size: 87.85 KB

Items: 3

Results: distestdiscovery@DIS.WA.GOV  
[\[open\]](#)

Errors: None

Keyword statistics: (Duplicates not excluded)

Keyword	Hits	Mailboxes
Secret AND Formula	4	2

18. You will notice an [\[open\]](#) link under the “Results” field. Clicking this will take you to the Discovery mailbox that you had the results copied to and here you will find a folder with the same name “Search Name” along with the search results.

The screenshot shows the Outlook Web App interface. On the left is a navigation pane with folders like 'Favorites', 'DIS Test Discovery Mailbox', and 'DIS Test Multi-mailbox Search'. The main area shows a search bar with 'Search Entire Mailbox' and a list of results. One result is highlighted: 'DIS Test Multi-mailbox Search-11/3/2011 3:40:0...' with a timestamp of 3:41 PM.

19. When you are finished with the search you can delete the search from the Multi-Mailbox Search by selecting it and clicking the “X” to delete it. Use caution here and make sure you are only deleting searches that you created.

### Multi-Mailbox Search

Search the mailboxes in your organization for e-mail and other message types that contain specific keywords. To update the search list, click Refresh below.

Status	Search Name	Date	Size
Search Succeeded	DIS Test Multi-mailbox Search	11/3/2011 3:40 PM	87.85 KB