



Division of Enterprise Technology

E-Mail Admin Guide to Exchange 2013 and Exchange On-Line

Table of Contents

A. Enterprise E-mail Management General Information and Definitions	4
A.1 Using This Guide.....	5
A.2 Definitions	5
A.3 Administrator Roles and Permissions	6
B. Enterprise E-Mail Naming Conventions.....	7
B.1 Resource Names	8
B.2 Distribution List Names.....	9
B.3 Shared Mailbox Names	9
C. Accessing Exchange 2013 On-Premise and Exchange On-Line Environments	10
C.1 Connect via Web Browser.....	11
C.2 Connect via Remote PowerShell:.....	11
C.3 Connect via Outlook:.....	13
D. Agency Administrator Functions	17
D.1 Navigating the Microsoft Exchange Admin Center (EAC)	18
D.2 Distribution Groups – Exchange 2013 On Premises	20
D.2.1 Distribution Groups – Exchange OnLine (O365)	23
D.3 Resource Mailboxes	24
D.4 Shared Mailboxes.....	26
D.5 Contacts	28
D.6 Managing Staff Mailbox Properties	29
Exchange PowerShell and The Agency Powerbook	30
E.1 Exchange PowerBook Information.....	31
E.2 Exchange Remote Powershell.....	31
E.3 Common PowerShell One Line Commands	32
F. Additional Exchange Client and Server Features	37
F.1 MailTips.....	38
F.2 Mailbox Quota Warning Messages	39
F.3 Open Distribution Groups	40
F.4 Mailbox Search and E-Discovery Options	44
APPENDIX: SPF Verification Failure Procedure	51



Division of Enterprise Technology

**A. Enterprise E-mail Management General Information
and Definitions**

Exchange Server 2013 and Exchange On-Line

Enterprise E-mail Management General Information, Definitions, Administrator Roles and Permissions

A.1 Using This Guide

Audience	This Enterprise E-mail Administration Guide is written for Agency E-mail Administrators and Agency Security Administrators who will use the Microsoft Exchange Admin Center (EAC), and/or Exchange Power Shell applications. Agencies will assign staff to the role of Agency E-mail Administrator and/or Agency Security Administrator.
-----------------	--

A.2 Definitions

E-mail Administrators	E-mail Administrators will be able to manage the e-mail accounts and settings for e-mail specific entities, such as Distribution Lists, Resources, Shared Mailboxes, and Contacts.
Security Administrators	Security Administrators will be able to manage some e-mail related settings on staff mailboxes. IAM will continue to provide the functions it does today for Staff mailbox creation and management. Some additional management functionality will now be available to Security Administrators through the EAC and Exchange PowerShell.
Mailbox (Staff user accounts)	In this system, a “Staff user” is an account that is associated with one physical person. These accounts must be created using the IAM tool following the IAM manual. The Agency Security Admin is now delegated to use the Exchange native tools to make some changes to “staff” accounts.
Shared Mailbox	<p>A Shared Mailbox is a mailbox that is primarily used to send or receive messages but is not associated directly to a single individual. These mailboxes are associated with disabled AD accounts and cannot be logged into directly. Commonly these are public facing addresses that may be listed on websites, brochures, or other communications to allow the general public or other agencies to communicate on a specific subject. One or more individuals may monitor shared mailboxes. Individuals or groups can be given the rights to “Send-As” or “Send on Behalf of” the mailbox.</p> <p>In some cases, shared mailboxes may require the AD account to be enabled and a password assigned so that a person or an application can ‘log in’ to the mailbox. For those situations, the delegated administrator must contact DET to enable the account and create a password.</p>
Resource Mailbox	<p>A Resource Mailbox is one that is used primarily for calendaring, and can be set to automatically accept appointments, or can have appointment requests sent to a delegate that has to manually accept or reject the requests. Resource Mailboxes that are set to automatically accept appointments will not receive e-mail messages.</p>
Distribution List	A Distribution List is a grouping of e-mail accounts with a display name that can appear in the GAL. Messages can be sent to a Distribution List.

Distribution Lists **may** be used for security access to other objects if they are created as Mail-Enabled Security groups.

Contacts

Contacts are entries in the general or agency only GAL that are used to forward messages to someone that does not have a mailbox in the enterprise e-mail system. Contacts may be included in distribution lists.

A.3 Administrator Roles and Permissions

Security Admin Role

Recipients category - Staff Mailboxes only

- Can add/edit General/custom attributes 10-15
- Can change mailbox features (e.g. ActiveSync, litigation hold etc.)
- Can add/edit MailTips
- Can add/edit mailbox delegation

Permissions category

- Can Add and Edit Outlook Web Policies for the agency

Compliance Management

- Can Add In-place eDiscovery and Hold items
- Can Run audit reports
- Can Add and Edit Retention Policies
- Can Add and Edit Retention Tags

Organization

- Can edit the name and order of the Default Sharing Policy

Mail Flow

- Can Run delivery reports
- Cannot Add or Edit the accepted domains

Mobile

- Cannot make any edits to the listed policies

Public Folders

- No access available at this time

Servers

- Cannot make any edits to the listed servers

E-mail Admin Role

Recipients category - MailProv only

- Mailboxes - Can create shared mailboxes. Archiving can be enabled.
- Add/edit rights to groups
- Add/edit rights to resources
- Add/edit rights to contacts
- Add/edit rights to shared

Permissions category

- Can Add and Edit Outlook Web Policies for the agency

Compliance Management

- Can Add In-place eDiscovery and Hold items
- Can Run audit reports
- Can Add and Edit Retention Policies
- Can Add and Edit Retention Tags

Organization

- Cannot edit the policy

Mail Flow

- Can Run delivery reports
- Cannot Add or Edit the accepted domains

Mobile

- Cannot make any edits to the listed policies

Public Folders

- No access available at this time

Servers

- Cannot make any edits to the listed servers



Division of Enterprise Technology

B. Enterprise E-Mail Naming Conventions

The Enterprise E-Mail Environment has naming conventions designed to create a consistent structure in the Global Address Book to make it easy for our customers to find staff and non-staff mail objects. Please adhere to the naming conventions. When in doubt, contact DET for guidance.

B.1 Resource Names

Each resource in the enterprise has a unique name which is used in the GAL (Global Address List) by which it is identified. The format consists of *three* parts separated by spaces:

- 1) AgencyID
- 2) ResourceID
- 3) Description (optional).

The naming convention assumes that an agency occupies a single building. If an agency occupies multiple State office buildings, the name of the building will also be included in the description part of the name. For example, conference room 041 in the GEF3 building would be named **DPI CR 041B GEF3**.

The **Agency ID** will be the existing standard abbreviation for an agency up to 7 characters in all upper case followed by a space. "WI" will be used when an 'Enterprise' resource is defined in place of the **Agency ID**.

<i>Type of Resource</i>	<i>Abbreviation</i>
Calendar	CAL
Conference Room	CR
Distribution List	DL
Laptop PC	LAP
Tablet PC	TAB
Parking Stall	PRK
Printer	PRT
Project Room	PR
Projectors, Cameras and other Audio Video	AV
Room List	RL
Fax lines	FAX
Security Group	SG
Telephones	TEL
Training Room / Resource	TR
Vehicle	VEH
External Contact – Mail Enabled	EXT
Paging Device	PGR
PC Device (Peripheral)	PCD
Lodging	LDG
Miscellaneous	MISC

The **Resource ID** will consist of the abbreviated prefix used to identify the type of resource and the specific name followed by a space.

Slashes and quotes must be avoided in resource IDs.

The **Description** (optional) is up to the owner of the resource and is used to clarify the **Resource ID**.

NOTE: A contact person **must** be identified in the resource properties for each resource. For a conference room resource, it is also helpful to list the number of people the room accommodates, the phone number if the room has a live phone jack, any AV equipment, whiteboards, etc. If the “owner” is different from the “contact”, list them both.

RESOURCE E-MAIL ADDRESSES

The e-mail address for a resource will be: **AgencyIDResourceIDDescription** (optional)@Wisconsin.gov.

(ex. DOACR10d@Wisconsin.gov)

NOTE: The use of a **Description** is optional **only** for Resources.

B.2 Distribution List Names

Distribution List names will be **AgencyID DL Description**. The description part can include a Division ID to help organize the information and make it easy for staff to locate but remember to keep the name short so it will be viewable in the Outlook Global Address List window. Some examples are:

DOA DL DAIT Waukesha Attorneys
DOC DL DAI Wardens
DOC DL All DOC Staff
WI DL Email Administrators

SECURITY GROUPS

Distribution Lists that are also Security Groups can be **AgencyID SG Description**

DISTRIBUTION LIST E-MAIL ADDRESSES

The e-mail address for a distribution list will be **AgencyIDDLDescription**@Wisconsin.gov
(ex. DOADLDAITWaukeshaAttorneys@Wisconsin.gov)

PUBLIC FOLDERS

Public Folder display names are to begin with the **AgencyID PF Description**.

B.3 Shared Mailbox Names

The name for a shared mailbox will be **AgencyIDDescription**

(ex. **DOA HELPDESK** with an e-mail address of DOAHELPDESK@Wisconsin.gov
or

DOA PRINT CENTER with an e-mail address of DOAPRINTCENTER@Wisconsin.gov)

NOTE: Agencies can, after migration, provide a friendlier, shorter e-mail address (called a secondary proxy) via Service Request or self-management, but it must still begin with the **Agency ID**.



Division of Enterprise Technology

C. Accessing Exchange 2013 On-Premise and Exchange On-Line Environments

Accessing Exchange 2013 and Exchange On-Line

There are two methods of accessing an Exchange environment to perform administrative functions; the Exchange Admin Center (EAC) and Remote PowerShell. The EAC is a web based GUI interface that is accessible over port 443 and is open to Statenet IP addresses. Remote PowerShell is also accessible over port 80 from within Statenet IP ranges.

C.1 Connect via Web Browser

To access the **EAC for Exchange 2013 on premise** management functions use the following links:

Production: <https://mail.wisconsin.gov/ecp> use (accounts\e-mail admin account)

Dev: <https://devmail.wi.gov/ecp> use (accountsdev\e-mail admin account)

Due to how many browsers cache credentials, you should not attempt to login as a different account using the same browser – for example, you should not use Internet Explorer to open the EAC as your admin user and another Internet Explorer session as your mailbox user (unless you open the 2nd one as “InPrivate” browsing in the Tools menu of your IE browser. Most other browsers have a similar feature to separate the permissions.

To access the **EAC for Exchange OnLine** management functions use the following links:

Production or Dev: <https://outlook.office365.com/ecp> This link will redirect you to a Microsoft login page where you will be prompted to pick an account to use.

To manage Exchange OnLine, you will use your *regular* user account, not your admin account!

Use the appropriate e-mail account email address (John.Smith@wisconsin.gov or John.Smith@devmail.state.wi.us). You will be redirected again to the ADFS login page where you can enter your password.

That may seem like a lot of redirection, but it is the easiest way to get directly to the EAC in Exchange Online.

C.2 Connect via Remote PowerShell:

Always open Windows PowerShell using “Run as Administrator”. To connect to one of the environments, copy all of the Login commands from one of the groups below at once and paste them into PowerShell.

On Premise Exchange 2013 Production:

```
$UserCredential = Get-Credential

$Session = New-PSSession -ConfigurationName Microsoft.Exchange -
ConnectionUri https://mail.wisconsin.gov/PowerShell/ -Authentication
Basic -Credential $UserCredential

Import-PSSession $Session -DisableNameChecking

$FormatEnumerationLimit = -1
Set-AdServerSettings -ViewEntireForest $True
```

On Premise Exchange 2013 DEV:

```
$UserCredential = Get-Credential

$Session = New-PSSession -ConfigurationName Microsoft.Exchange -
ConnectionUri https://devmail.wi.gov/PowerShell/ -Authentication
Basic -Credential $UserCredential

Import-PSSession $Session -DisableNameChecking

$FormatEnumerationLimit = -1
Set-AdServerSettings -ViewEntireForest $True
```

Exchange On-Line

```
$UserCredential = Get-Credential

$Session = New-PSSession -ConfigurationName Microsoft.Exchange -
ConnectionUri https://ps.outlook.com/PowerShell/ -Authentication
Basic -AllowRedirection -Credential $UserCredential

Import-PSSession $Session -DisableNameChecking
$FormatEnumerationLimit = -1
```

NOTE: You might find it useful to create a local transcript of everything that occurs in your PowerShell sessions. If do, you can add the following lines at the end of you commands shown above changing the path and file name to a location you want the transcript stored:

```
$date1 =(get-date).ToString('yyyy-MM-dd-hhmm')

Start-Transcript -Path
"c:\exchange\transcripts\${$date1}_0365_transcript.txt" -NoClobber
CLS
```

When you run any of the above scripts, a Windows login box will open prompting you to enter your credentials.

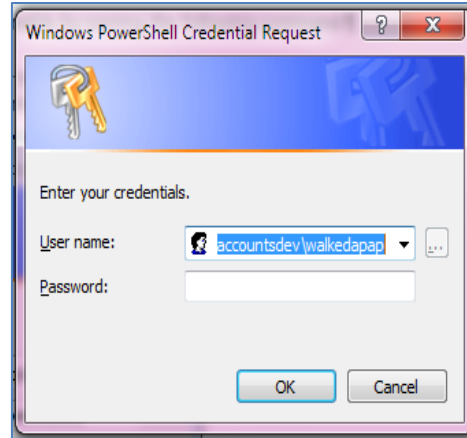
For On-Prem Exchange, use your agency E-mail Administrator account.

[Accounts*****] or [Accountsdev*****]

For Exchange On-Line, use your regular user E-mail address

[john.smith@wisconsin.gov] or

[john.smith@devmail.state.wi.us]



Microsoft advises that when you are finished using the Remote PowerShell session, disconnect from the remote Exchange Server by running this command:

Remove-PSSession \$Session

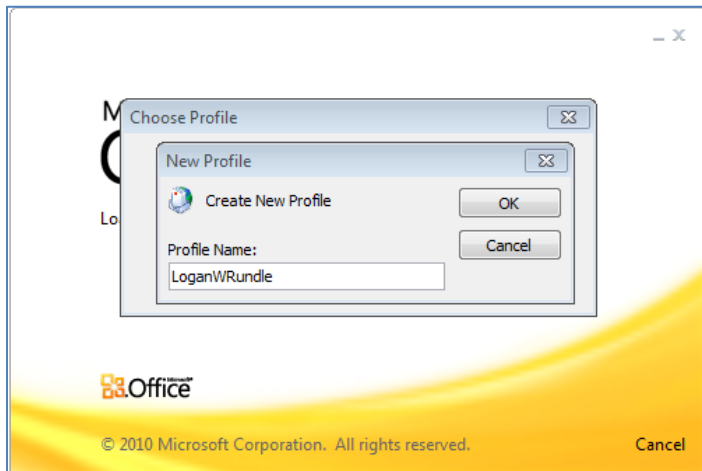
Exit

C.3 Connect via Outlook:

Create an Outlook Profile in the Exchange Server 2013 Environment

Always use the Profile wizard to create an Outlook profile. Microsoft DOES NOT recommend creating Outlook profiles manually.

When you launch Outlook for the first time, the profile wizard will automatically prompt you to create an Outlook profile. Depending on your Agency's deployment of Outlook, you may or may not be prompted to give your Outlook profile a name.

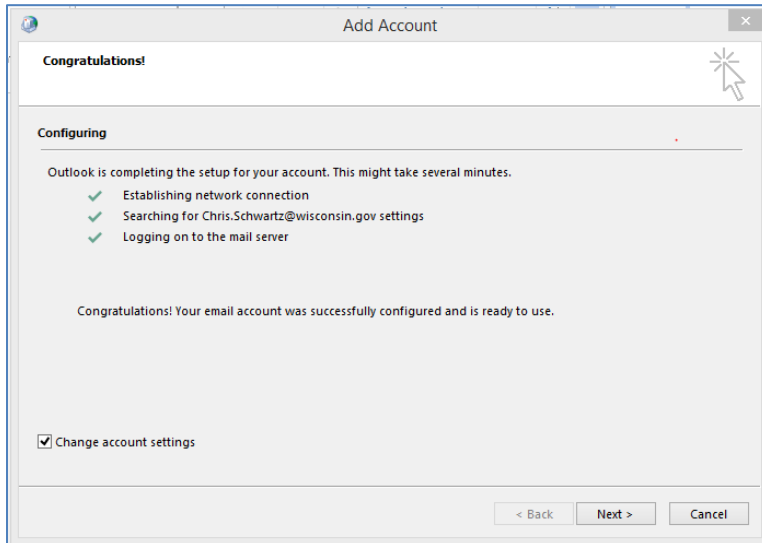


On the Auto Account Setup screen, the wizard will populate the email address field. **Unless your agency has been consolidated into the Accounts domain, you will have to change the information on this screen!** Clear all the auto-populated entries and enter your email address and password. Click Next.



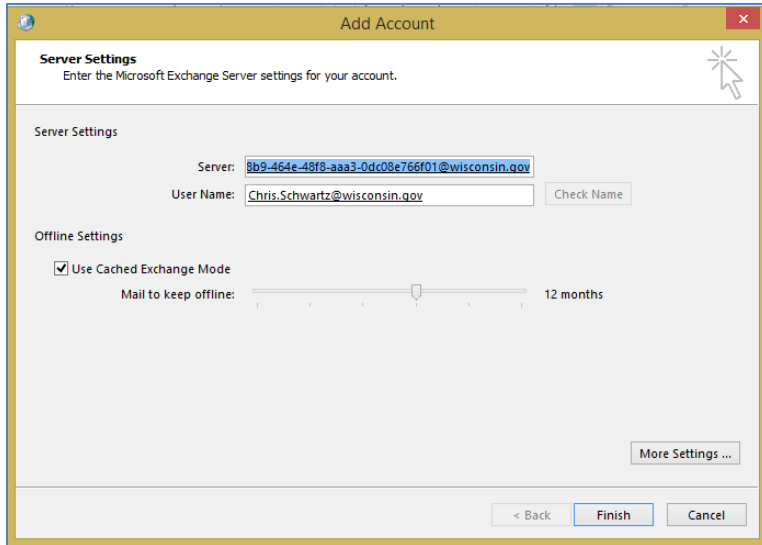
The screenshot shows the 'Add New Account' dialog box with the 'Auto Account Setup' tab selected. The dialog has a title bar with 'Add New Account' and a close button. Below the title bar, it says 'Auto Account Setup' and 'Click Next to connect to the mail server and automatically configure your account settings.' There are three radio button options: 'E-mail Account' (selected), 'Text Messaging (SMS)', and 'Manually configure server settings or additional server types'. Under 'E-mail Account', there are four input fields: 'Your Name' (with example 'Ellen Adams'), 'E-mail Address' (with example 'Logan.Rundle@wisconsin.gov'), 'Password' (masked with asterisks), and 'Retype Password' (with example 'ellen@contoso.com'). A note below the password fields says 'Type the password your Internet service provider has given you.' At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

When your Account has been successfully configured, you should check to ensure the security requirements are set correctly. Check the box next to **Change account settings**. Click Next.

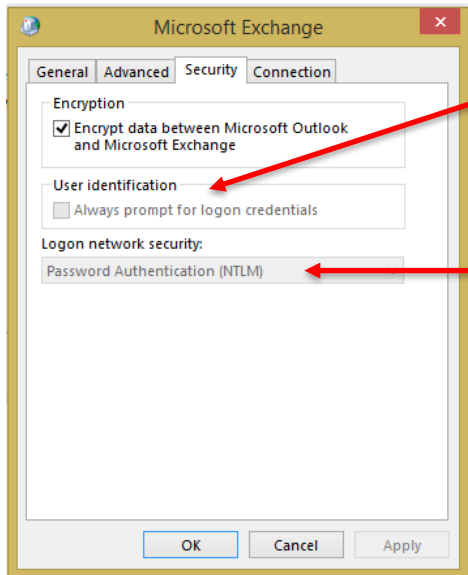


The screenshot shows the 'Add Account' dialog box with the 'Configuring' tab selected. The dialog has a title bar with 'Add Account' and a close button. Below the title bar, it says 'Congratulations!' and 'Outlook is completing the setup for your account. This might take several minutes.' There are three checkmarks with corresponding text: 'Establishing network connection', 'Searching for Chris.Schwartz@wisconsin.gov settings', and 'Logging on to the mail server'. Below this, it says 'Congratulations! Your email account was successfully configured and is ready to use.' At the bottom, there is a checkbox labeled 'Change account settings' which is checked. At the very bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Click the **More Settings** button.



Click on the Security tab to ensure the settings are correct for your environment.

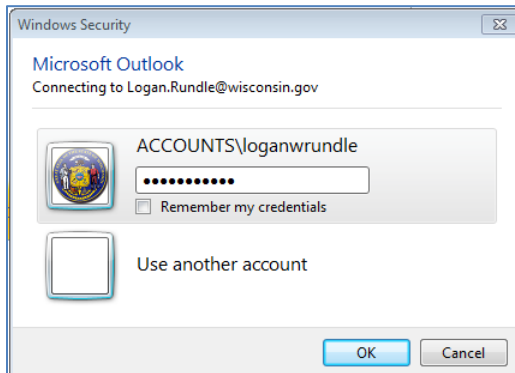


Under the User identification section, ensure that the checkbox for Always prompt for logon credentials **is checked** if your agency has not been consolidated into the Accounts domain.

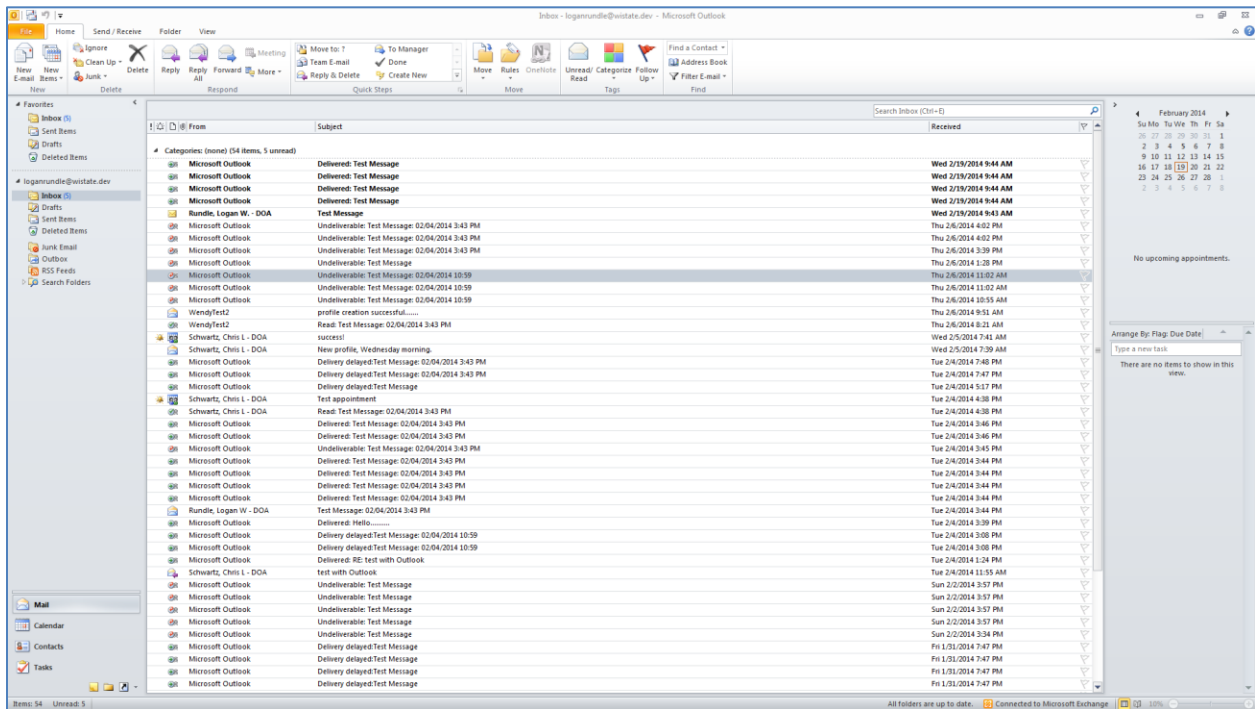
All agencies should have the Logon network security setting set to Password Authentication (NTLM).

Click OK to return to the Add Account screen. Then click Finish

If your agency is not consolidated into the Accounts domain, you will be prompted for your credentials a second time.



You have now successfully created an Outlook profile and have access to your mailbox.



NOTE: The Security tab settings “Always prompt for logon credentials” and the Logon network security: “Password Authentication (NTLM)” are required for all Outlook Clients from agencies that are not consolidated into the Accounts domain. These settings can be pushed through GPO.



Division of Enterprise Technology

D. Agency Administrator Functions

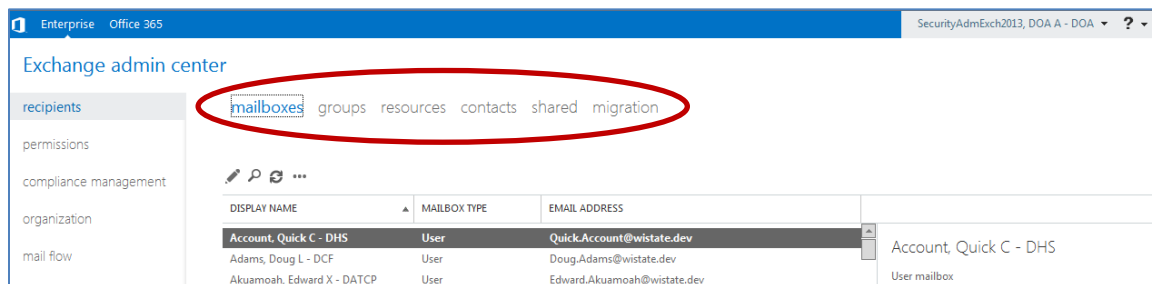
Agency Administrator Functions

Agency delegated Administrators are responsible for managing the agency Staff and non-Staff, or MailProv, Exchange objects. Delegation is set up so that the agency administrators can fully manage agency accounts through the Exchange Control Panel (EAC) or through Exchange Remote PowerShell.

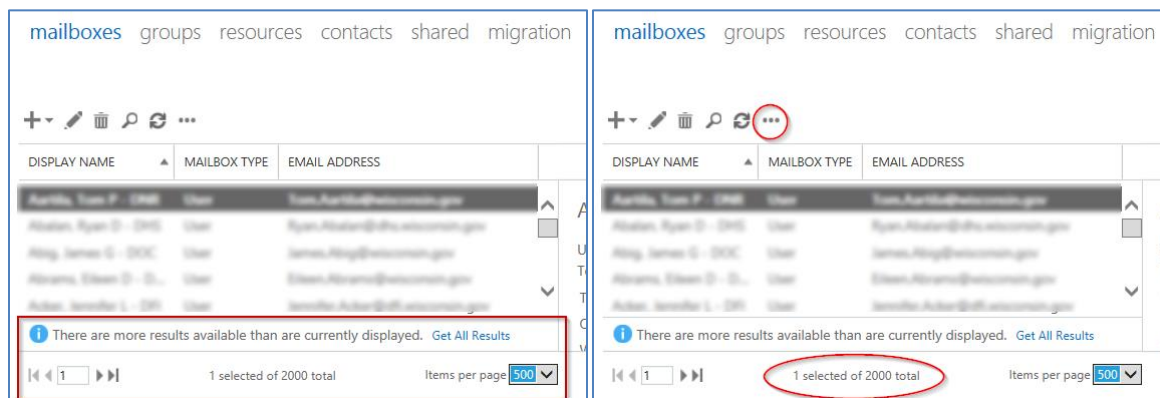
D.1 Navigating the Microsoft Exchange Admin Center (EAC)

The first screen defaults to the **recipients** category. Tabs across the top of the page allow you to see the types of recipients you can view or manage.

The **mailboxes** tab will show all enabled Staff user mailboxes and MailProv user mailboxes. The other tabs across the top will show **groups** (distribution or security), **resources**, **contacts**, and **shared** (Exchange 2013) mailboxes. The **migration** tab will show migration batches for mailboxes moving to Exchange 2013 (Agency admins cannot move mailboxes - an SR is required).



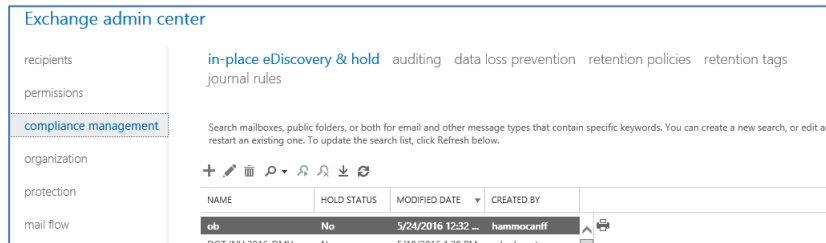
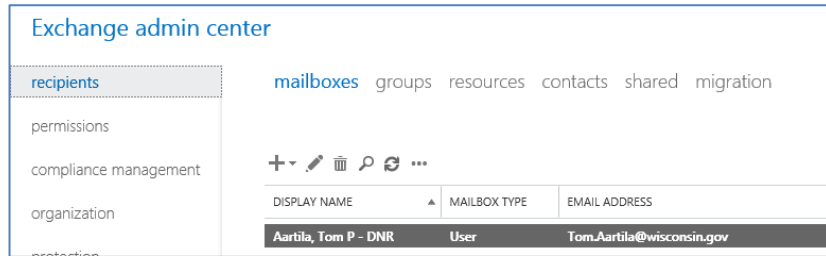
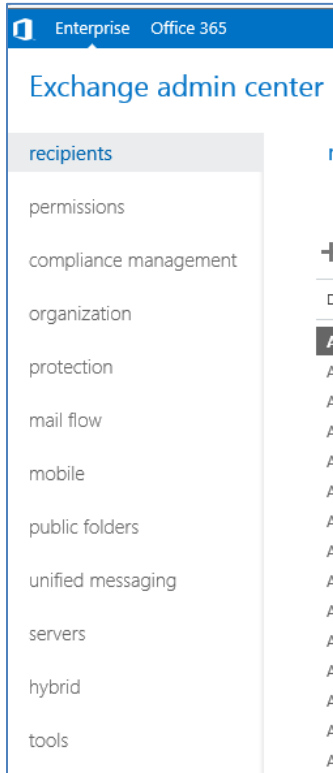
By default, the display will list only 50 items per page (use the scroll bar to see all 50 items). At the bottom of the screen, you can change that number to 500 per page. It can take a while to discover all the items in the category. The total number of items will be shown at the bottom of the screen. If there are more results than are initially returned, there will be a link to 'Get All Results'.



NOTE: The maximum number of results that can be returned in the EAC is 20,000. This is not necessarily in any specific order so you may not get all the results for your agency.

Each link on the left will take you to a different section of the EAC. Depending on the level of delegated permissions granted to your account, you may not see all the links shown here.

The most commonly used links for delegated administrators are **recipients** and **compliance management**.



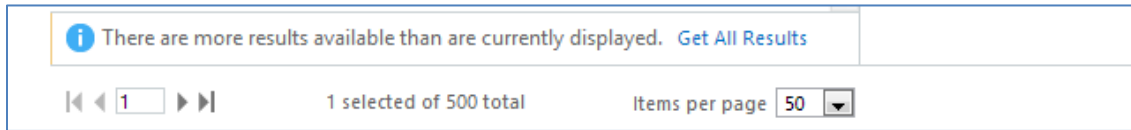
The options that are visible in the Exchange Admin Center (EAC) will be different depending on the rights assigned to the account you are using. Some options will only be visible to accounts assigned to the Agency **E-mail** Administrator role, and others will be only visible to accounts assigned to the Agency **Security** Administrator role.

Most screens have standard icons for the actions that are available.

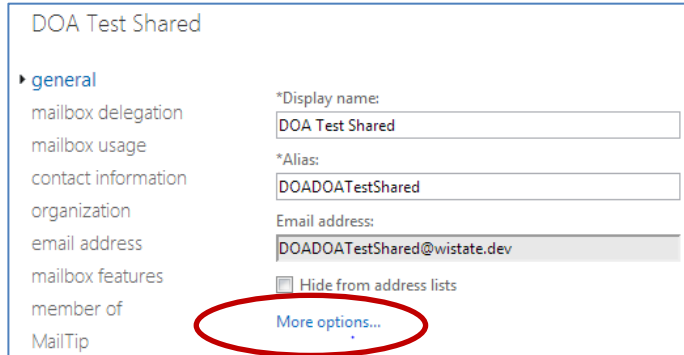


The + sign is to create a new item, the pencil is to edit an item, the trash can is to delete an item, the magnifying glass is to search, the circular arrows are to refresh the view, the ellipse (...) indicates that there are more options available.

Since accounts are not restricted to seeing only the accounts in their agency, use the search box to limit your results. Watch for notations at the bottom of the screen showing additional pages of information, a notification that more results are available than are displayed, etc.



Also check for [More options...](#), which will appear on some screens to show more information or options.

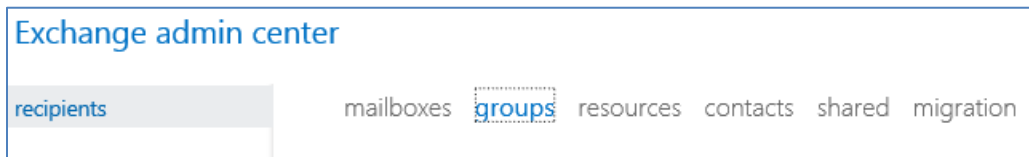


Agency delegated **E-mail** Administrators can create and manage MailProv objects only. Agency delegated **Security** Administrators have delegation to manage Staff objects only. This section focuses on the functions that E-mail Administrators routinely perform.

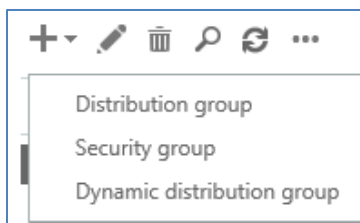
E-Mail Administrators should not create mailboxes using the **mailboxes** tab (Staff mailboxes created in CayoSoft), so we skip that in this section.

D.2 Distribution Groups – Exchange 2013 On Premises

From the Exchange Admin Center **recipient** menu, select the **groups** tab.



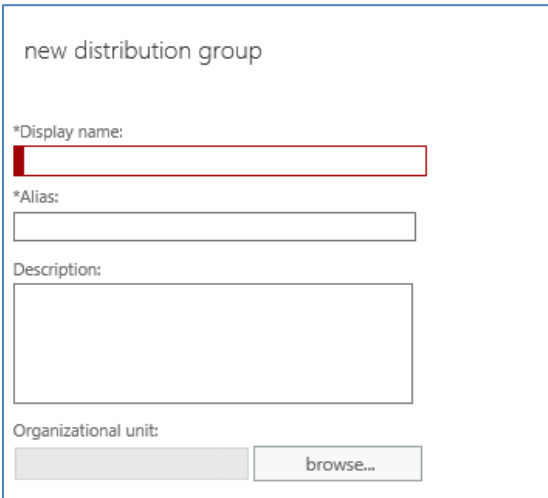
Select **+**. That will give you the option to create three types of groups. The choices are a Distribution Group (DL), Security Group (SG) or a Dynamic Distribution Group (DDG).



A regular Distribution Group is designed to simplify sending a message to a group of mailboxes.

An Exchange Security Group can be used to send mail to a group of mailboxes and can also be used to give the group members access rights to other mailboxes. (Exchange Security Groups are not recommended for granting rights in SharePoint.)

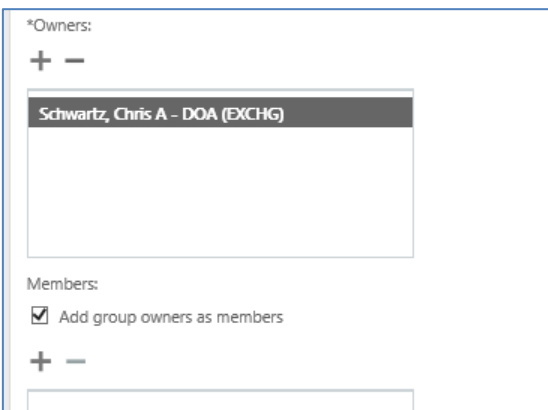
A Dynamic Distribution Group will re-create the membership every time it is used based on a specific criteria filter, such as all accounts in a certain Organizational Unit, or all accounts within that OU that have a certain Custom Attribute set.



Regardless of the type of group you want to create, you must provide the DisplayName and Alias.

Be sure to follow the Enterprise Email naming standards when naming the group

Browse to select the appropriate Organizational Unit for this Distribution Group.
(Accounts/MailProv/Agency/DLs)



An Owner is required for Exchange Distribution Groups and Mail Enabled Security Groups.

Members can be added at the time of group creation.

The options for Distribution Groups have been greatly expanded in Exchange 2013.

Choose whether owner approval is required to join the group.

Open: Anyone can join this group without being approved by the group owners.

Closed: Members can be added only by the group owners. All requests to join will be rejected automatically.

Owner approval: All requests are approved or rejected by the group owners.

Choose whether the group is open to leave.


Open: Anyone can leave this group without being approved by the group owners.

Closed: Members can be removed only by the group owners. All requests to leave will be rejected automatically.

save cancel

Regular Exchange Distribution Groups can be set up to allow people to add or remove themselves automatically rather than requiring a manager to add or remove them.

See [Section F2](#) for more information on self-subscribing Distribution Groups.

After a group is created, most fields can be changed or updated under the Edit  option.

DOA DL Jason Test DL

general

ownership

membership

membership approval

delivery management

message approval

email options

MailTip

group delegation

*Display name:
DOA DL Jason Test DL

*Alias:
DOADLJasonTestDL

Description:

Hide this group from address lists

Organizational unit:
accounts.wistate.dev/MAILPROV/DOA/DLs

IMPORTANT: You must populate Custom Attribute 2 using PowerShell because there is no way to edit Distribution Group custom attributes in the EAC. **CA2 MUST be filled in for the email address policy to populate the primary SMTP address correctly and for you to be able to manage the group with Exchange tools.**

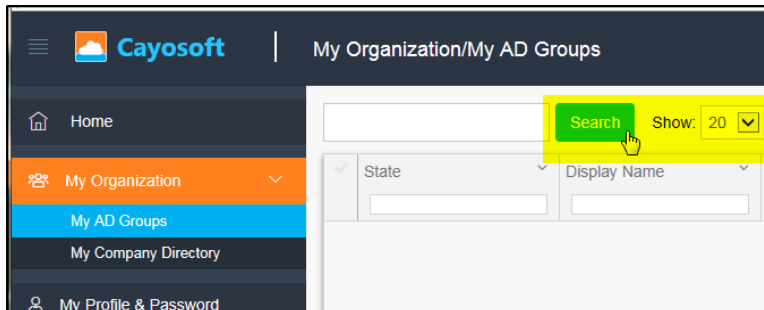
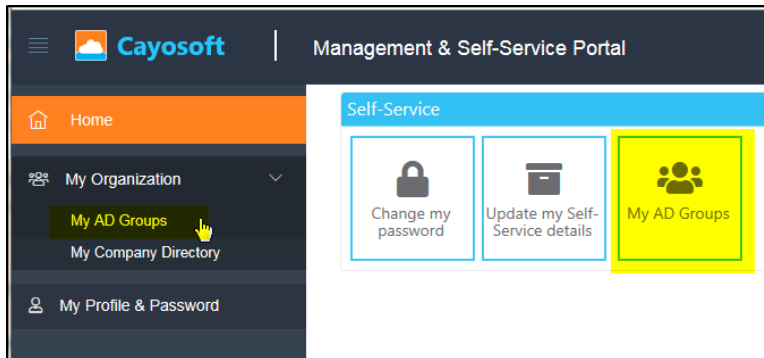
Set-DistributionGroup <group alias> -CustomAttribute2 <Agency Acronym>

D.2.1 Distribution Groups – Exchange OnLine (O365)

Since Distribution and Security Groups live On-Prem, E-Mail Administrators are not delegated the ability to create them in O365. Once your agency has been migrated to O365, you will continue to create and manage groups the way you did before migration.

Once your agency is migrated, your customers will **not** be able to add/remove members in the groups they own. That function will move to the Cayosoft product which they can access via

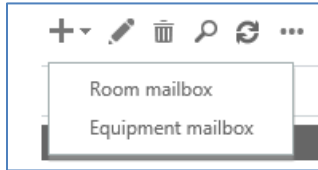
<https://eiam.wisconsin.gov/CayosoftWebAdmin/QuickSearch/Login>



D.3 Resource Mailboxes

From the Exchange Management Console **recipients** menu choose the **resources** tab.

Click **+** to create a new Resource. There will be a choice of two types of Resources: Room mailbox (CAL, CR, PR etc.) or Equipment mailbox (AV, TEL, VEH etc.).



The fields for entry have explanation helper menus.

Please follow the Enterprise Naming Standards when naming Resources.

Browse to select the correct Organizational Unit, making sure to select the “ResourceMBXs” OU for your agency

Click on **More Options** to have access to all of the fields available.

new room mailbox

*Room name:

*Email address:
 @

Organizational unit:

Location:

Phone:

Capacity:

Booking requests:
 Accept or decline booking requests automatically
 Select delegates who can accept or decline booking requests

Delegates:

Alias:

Mailbox database:

Address book policy:


You can configure Auto Accept and delegate features on the resource at initial setup.

Booking requests:
 Accept or decline booking requests automatically
 Select delegates who can accept or decline booking requests

Delegates:

The only mailbox database available for Resource creation is the **OnMailProv** mailbox store. You must browse to that database or you will receive an error.

Mailbox database:

NOTE: You must populate **Custom Attributes 1 and 2** after you create the mailbox by editing the properties, clicking on **More Options...**, then clicking on the pencil icon  to add CA1 and CA2. **CA2 MUST be filled in for the email address policy to populate the primary SMTP address correctly.**

DNR CR Room 813 Skype Help

general

booking delegates

booking options

contact information

email address

MailTip

mailbox delegation

*Room name:

Email address:

Capacity:

[More options...](#)

90%

DNR CR Room 813 Skype Help

general

booking delegates

booking options

contact information

email address

MailTip

mailbox delegation

Custom attributes:

N.	VALUE
1	R
2	DNR

90%

D.4 Shared Mailboxes

Shared mailboxes are often used for agency general information, program area, or help desks, where all mail can be sent to a single mailbox and multiple staff can manage it or respond.

Shared mailboxes can be managed by one or more staff members to view and respond to e-mail messages. Permission to 'Send As' the Shared mailbox can be granted to staff who manage the mailbox.

Shared Mailbox calendars should not be used for scheduling meetings or equipment. Create a Resource mailbox for those functions.

Shared Mailbox accounts are 'disabled' by default and there is no password required. If the mailbox needs to be logged into by a program (CCA, ActiveSync, etc.) it should be set up as a MailProv user mailbox with a password instead of a Shared mailbox. Shared mailboxes provide the use of the shared e-mail address, without the risk of sharing the passwords and needing to change it when staff change, and being able to determine who actually sent the message "from" the shared mailbox.

From the Exchange Admin Center **recipients** menu, select the **shared** tab.

The screenshot shows the 'Exchange admin center' interface with the 'recipients' menu open and the 'shared' tab selected. Below it is a 'new shared mailbox' dialog box. The dialog box has the following fields and controls:

- *Display name:** A text input field with a red border.
- *Alias:** A text input field.
- Organizational unit:** A text input field with a 'browse...' button.
- Mailbox database:** A text input field with a blue 'browse...' button.
- Archive:** A section with the text 'Use the archive to store old email.' and a checkbox labeled 'Create an on-premises archive mailbox for this user' with a 'browse...' button.
- Address book policy:** A dropdown menu currently showing '[No Policy]'.
- Buttons:** 'save' and 'cancel' buttons at the bottom.

Click on More Options to expand the dialog box and display all settings as shown here.

Follow the Enterprise Naming standards when assigning a Display name.


Use the Browse button to select the correct SharedMBXs OU.

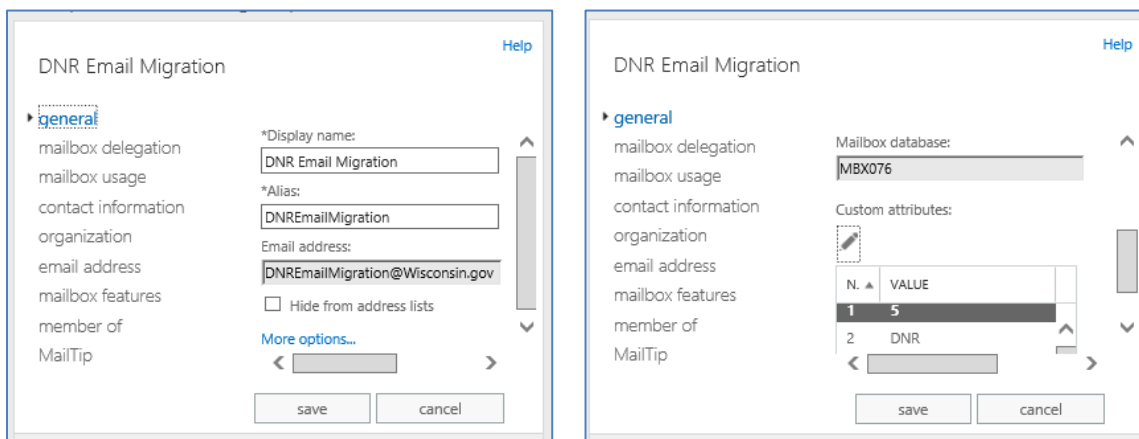
Use the Browse button to choose the OnMailProv database.

Click Save, then Edit the new mailbox configure additional settings such as Custom Attributes and mailbox delegation.

Select the staff or security groups that should have full access to read and manage the mailbox and the staff or groups that should be allowed to ‘Send-As’ the shared mailbox. Only mail enabled security groups will be available for permissions.

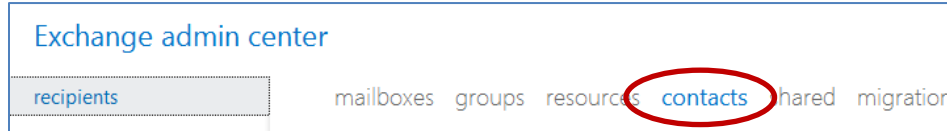
Like the other objects, you can use the pencil icon  to edit a new or migrated Shared Mailbox.

You must populate **Custom Attributes 1** and **2** after you create the mailbox by editing the properties, clicking on **More Options**, then clicking on the pencil icon  to add CA1 and CA2. **CA2 MUST be filled in for the email address policy to populate the primary SMTP address correctly.**



D.5 Contacts

From the Exchange Admin Center, recipients menu, select **contacts**.



Click on **+** to create a new contact.

 A screenshot of the 'new mail contact' form. The form has the following fields: First name, Initials, Last name, *Display name, *Name, *Alias, *External email address, and Organizational unit. The Organizational unit field has a 'browse...' button next to it. At the bottom of the form are 'save' and 'cancel' buttons. A 'Help' link is in the top right corner. The form is displayed in a window with a 90% zoom level.

Populate the contact information. Required fields are noted with an asterisk.

The Alias and the External E-mail address field cannot have the same value as another contact or internal mailbox.

Click the **browse...** button to the right of Organizational Unit (OU) and navigate to your agency Contacts OU under MailProv.

Click Save.

Contacts do not require a Custom Attribute 2 entry to denote the Agency, however, filling in the **Department** Field on the **organization** screen or the **Notes** field on the **contact information** screen of the Mail Contact object helps to identify which agency created the contact.

D.6 Managing Staff Mailbox Properties

Most of the properties of Staff mailboxes are managed through the IAM admin tool – Cayosoft and are blocked from editing in Exchange. Through the Exchange Control Panel (EAC) and using PowerShell commands you can change a subset of mailbox properties.

- Add/Modify/Remove **Custom Attributes 10 – 15** (Custom Attributes 1-9 are reserved)
- Select **Retention Policy** from available choices
- Enable/Disable **ActiveSync**
- Select **Mobile device mailbox policy** from available choices
- Add/Modify/Remove **Mobile device** pairings
- Enable/Disable **Outlook Web App**
- Enable/Disable **IMAP**
- Enable/Disable **POP3**
- Enable/Disable **MAPI****
- Enable/Disable **Litigation hold**
- Manage **Delivery Options** (mail forwarding)
- Manage **Message Delivery Restrictions**
- Add/Modify/Remove **MailTips**
- Set **Mailbox Delegation** (Full Access, SendAs, SendOnBehalfOf)

****Disabling MAPI will prevent a user from accessing their e-mail through the Outlook Client. Be careful that you do not disable this feature by accident.**



Division of Enterprise Technology

Exchange PowerShell and The Agency Powerbook

E.1 Exchange PowerBook Information

Some administrative functions cannot be performed in the Exchange Admin Center (EAC) and therefore must be completed with PowerShell. In addition, some functions are more efficient to run in PowerShell. To help get you started, we have created the Agency PowerBook. The PowerBook is an Excel workbook with some of the common PowerShell commands set up to accept input from the agency administrator and create the PowerShell command. These are basic commands and other commands or parameters for these commands may be required to meet your business needs.

The current Agency Exchange 2013 PowerBook can be found on the E-mail Governance SharePoint site <https://agency.wisconsin.gov/sites/doadet/Enterprise/emailgovernance/default.aspx> in [Shared Documents](#). The document will be updated periodically, so always check for the latest version.

The first tab has an index of the available commands, with a brief explanation for what they will be used for. Each description links to a tab that has the command with one or more parameters to input, then just copy the resulting script and run it in an Exchange 2013 (OnPrem) Remote PowerShell.

In some cases, there will be additional options available in the Exchange Admin Center (EAC) that are not in the PowerBook, such as setting the ability for staff to join and remove themselves from Distribution Lists. These settings can be included in the PowerShell command line, but don't fit the format of the PowerBook for easy input. You can also get an incredible amount of information by using any search engine such as www.yippy.com www.DuckDuckGo.com or www.google.com .

<https://docs.microsoft.com/en-us/exchange/exchange-management-shell-quick-reference-for-exchange-2013-exchange-2013-help>

E.2 Exchange Remote Powershell

Exchange 2013 management provides robust management tools via the PowerShell command line interface. The Exchange Admin Center (EAC) is a web interface that performs PowerShell commands in the background.

The Exchange Admin Center is convenient for some commands and simple daily tasks, but PowerShell is more convenient, and sometimes essential, for more advanced commands or bulk processes.

The PowerShell language is comprised of nouns and verbs at the simplest level, arranged into cmdlets. One convenient convention of PowerShell is the 'pipe'. "|" being the pipe character is normally located above the "\" on the keyboard. It can be used to send the output of one command to another command. For example (this works in any command shell, not just PowerShell), "| **more**" will pause the output after each screen to let you see it before it scrolls off.

Other convenient conventions are > which will redirect the output to a text file and >> which will append the output to the file. In PowerShell, you can use | **ft** to send selected output to a table, or | **fl** to send output to a list view. **Export-csv -NT** is also a very useful command to get an Excel file of the results.

Tab completion reduces the number of keystrokes that are required to complete a cmdlet. Just press the **TAB** key to complete the cmdlet you are typing. Tab completion kicks in whenever there is hyphen (-) in the input. For example: Get-Send

should complete to Get-SendConnector after you press the Tab key. You can even use regular expressions, such as:

Get-U*P* Pressing the TAB key when you enter this command cycles through all cmdlets that match the expression, such as the Unified Messaging Mailbox policy cmdlets. When cycling through a list of commands, **SHIFT+TAB** will go back one.

One other useful parameter is "**-resultsize unlimited**". The *ResultSize* parameter specifies the maximum number of results to return. If you want to return all mailboxes that match the query, use "unlimited" for the value of this parameter. The default value is 1000. You would want to include "**-resultsize unlimited**" if your query could result in more than 1000 answers and you need all matching answers. In addition, the first 1000 responses are not in an alphabetical or hierarchical manner, so you may only see 3 of the results you expect if you do not increase the number of results to return. For example, if you only have access to see objects in the DOA Mailprov OU, but of the first 1000 objects it displays, 997 of them are in OUs that you do not have rights to see, your result would only be 3, although you know there are many more results you expected.

Fortunately, there is much information available on the Internet concerning PowerShell. We have listed only a few basic commands you might need on a regular basis. This is not an exhaustive list, and the real power of PowerShell is the ability to script routine functions and perform bulk commands.

WARNING: PowerShell is a very powerful tool and therefore caution should be exercised when running command that are **not** 'Get-' commands.

E.3 Common PowerShell One Line Commands

Reminder:

The E-mail Admin Role can only run commands that modify MailProv objects.

The Security Admin Role can only run commands that modify Staff Objects.

General Commands

List all parameters for a cmdlet

```
Get-Command <cmdlet-name> | Format-List Definition
```

Get a list of all commands executed during the PowerShell session and send to a file

```
Get-history | fl > <path name.txt>
```

Displays information about Windows PowerShell cmdlets and concepts

```
Get-help
```


User Commands

View proxies on an account

Can also be used with SendAs and SendOnBehalfOf

```
get-mailbox <user_alias> | fl name, primarysmtpaddress, emailaddresses
```

Determine which mailboxes to which a specific user has permissions

```
Get-Mailbox -ResultSize Unlimited | Get-MailboxPermission -User <Active Directory User> | fl Identity, AccessRights, Deny > <path name.txt>
```

Mailbox Commands

View permissions on a mailbox and write out to a text file

```
get-mailboxpermission <mailboxnamealias> | fl > <path and file name>
```

Grant 'Send As' rights on a mailbox

```
Add-MailboxPermission -Identity <targetmailboxalias> -User <user_alias> -AccessRights SendAs
```

Grant 'Full Mailbox' rights on a mailbox

```
get-mailbox <mailbox alias> | add-mailboxpermission -user <user alias> -AccessRights FullAccess
```

Grant 'Send on Behalf of' rights

```
get-mailbox <mailbox alias> | set-mailbox -grantsendonbehalf <user alias>
```

View all mailboxes size class in your OU

```
get-mailbox -organizationalunit "accounts.wistate.us/staff/<xxxx>" -sortBy displayName | ft -autosize  
displayName, customattribute1 > <path name.txt>
```

View a mailbox size and status

```
get-user <user_alias> | Get-Mailboxstatistics | select DisplayName,TotalDeletedItemSize,TotalItemSize
```

Restrict who can send to a mailbox

```
Set-Mailbox -Identity <useralias> -AcceptMessagesOnlyFrom <user_alias>,<user_alias> -  
AcceptMessagesOnlyFromDLMembers <DL_alias>
```

Export mailbox data to folder in another mailbox (must grant full mailbox rights first)

```
export-Mailbox -Identity <MailboxIdParameter> -TargetFolder <String> -TargetMailbox <MailboxIdParameter>
```

View statistics for a mailbox (DisplayName, ItemCount, LastLoggedOnUserAccount, LastLogoffTime, LastLogonTime, StorageLimitStatus, TotalDeletedItemSize, TotalItemSize, database, server, etc.)

```
Get-mailboxstatistics <mailboxalias> | fl
```

Hide a mailbox from the GAL

```
Get-user <mailboxalias> | set-mailbox -hiddenfromaddresslistsenabled $true
```

Un-hide a mailbox in the GAL

```
Get-user <mailboxalias> | set-mailbox -hiddenfromaddresslistsenabled $false
```

View security permissions for all on a particular mailbox

```
get-mailbox <user_alias> | get-adpermission | fl
```

View all users who have 'Full Access' to a particular mailbox

```
Get-MailboxPermission <mailboxalias> | where {$_.AccessRights -like "*FullAccess*"} | fl
```

Determine what permissions a user account has on a specific mailbox

```
Get-Mailbox <mailboxalias> | Get-MailboxPermission -User <user_alias>
```

Retrieve information about the folders in a specified mailbox

```
Get-MailboxFolderStatistics <user_alias> | ft -wrap
```

View full details on a user's mailbox

```
Get-mailbox <user_alias> | fl
```

Find all mailboxes in your OU over their quota

```
get-mailbox -resultsizes unlimited -organizationalunit <your_OU_name> | get-MailboxStatistics | where {"IssueWarning","ProhibitSend","MailboxDisabled" -contains $_.StorageLimitStatus} | format-Table DisplayName,TotalItemSize > <path name.txt>
```

Distribution List/Group Commands

Add a member to a distribution list

```
Add-DistributionGroupMember <dl alias> -Member <member alias>
```

Restrict who can send to a DL

```
Set-DistributionGroup -Identity <DL_alias> -AcceptMessagesOnlyFrom <user_alias>,<user_alias> -
AcceptMessagesOnlyFromDLMembers <DL_alias>
```

Allow non-authenticated accounts to send to a DL

```
Set-DistributionGroup -Identity <DL_alias> -RequireSenderAuthenticationEnabled $false
```

Show the membership of a DL and export to a text file

```
Gdlet-distributiongroupmember <dl_alias> | ft > <path name.txt>
```

Show the details of a DL

```
Get-distributiongroup <dl_alias> | fl
```

Set manager permissions on a DL

```
Get-DistributionGroup <dl alias> | Set-DistributionGroup -ManagedBy <manager alias(es)>
```

Note: To make PowerShell changes to a Distribution List for which you are not a manager, add this parameter: “-BypassSecurityGroupManagerCheck” at the end of your command.

Resource Commands

Set-MailboxCalendarConfiguration

<http://technet.microsoft.com/en-us/library/dd335075%28v=exchg.150%29.aspx>

Grant ‘Full Mailbox’ rights on a resource mailbox

```
get-mailbox <mailbox alias> | add-mailboxpermission -user <user alias> -AccessRights FullAccess
```

Set basic auto-accept on a resource

```
set-CalendarProcessing -Identity <mailboxalias> -AutomateProcessing AutoAccept
```

Remove basic auto-accept on a resource

```
set-CalendarProcessing -Identity <mailboxalias> -AutomateProcessing:None
```

View auto-accept settings

```
get-CalendarProcessing <mailboxalias> | fl
```

Convert a user mailbox to a room types

```
set-Mailbox <mailboxalias> -Type Room
```

Piping your get- data to format-table or ft will create a table format showing limited data. Piping it to format-list or fl will list all the get- results. Quite often, there is more data than will stay in the window buffer. Piping that to **more** will stop the display when a screen is full. Then use the **space bar** to see the next screen or the **enter key** to see the next line.

For instance:

```
get-mailbox <user alias> | fl | more
```

Many times, it is more beneficial to export in CSV format. That can be accomplished by piping your data to export-csv command and a file location.

For instance:

```
get-mailbox <user alias> | export-csv "c:\temp\sample.csv" -nt
```

You can display the data in a browser window and filter that data using the window. You can also select all data and paste into an Excel spreadsheet by using **Out-Gridview**.

For instance:

```
get-mailbox -resultsizes unlimited -organizationalunit <your_OU_name> | Select * | Out-Gridview
```



Division of Enterprise Technology

F. Additional Exchange Client and Server Features

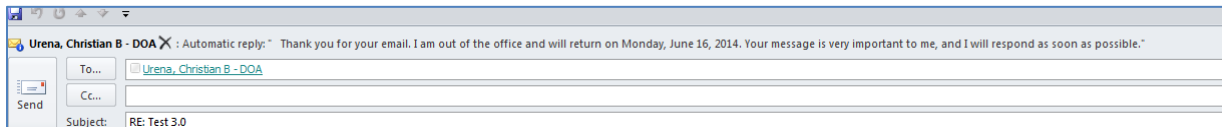
F.1 MailTips

MailTips are informative notification messages that help you avoid common mistakes. Exchange Server 2013 analyzes a message and if it detects a potential problem, it notifies the user prior to sending the message.

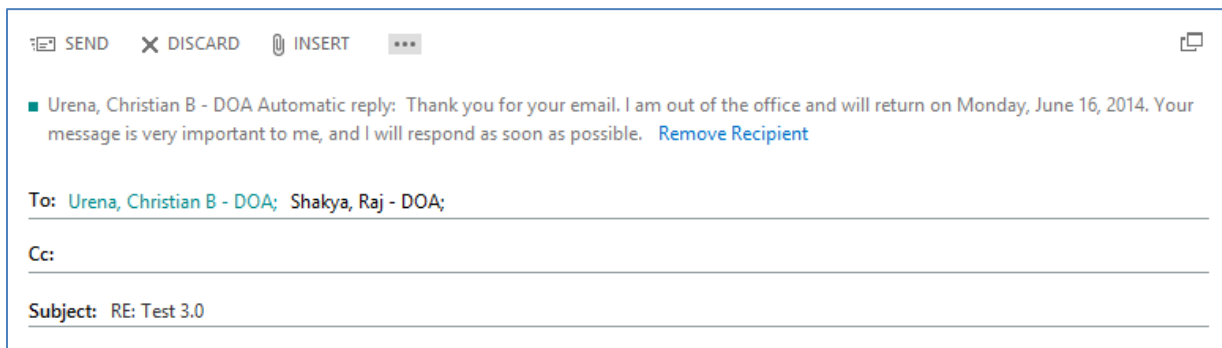
MailTips are supported and will display in the Outlook Client and in the Outlook Web Application.

In an open mail message, a set of messages will be displayed depending on the selected MailTips options. For example, alerts will be displayed if replying to a large number of recipients, sending sensitive information outside of your organization (if configured), or sending a message to someone who is out of the office.

While composing an e-mail in Outlook, the alert(s) will be displayed above the e-mail address(es).



While composing an e-mail in OWA, the alert(s) will be displayed above the e-mail address(es), similar to the Outlook Client.



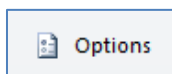
Mailbox owners can manage the options for MailTips through the Outlook client.

Configuring the MailTips Options in Outlook

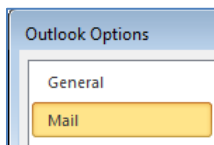
Select the **File** Tab.



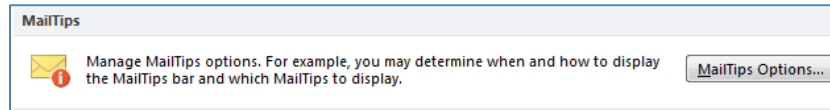
Select **Options**



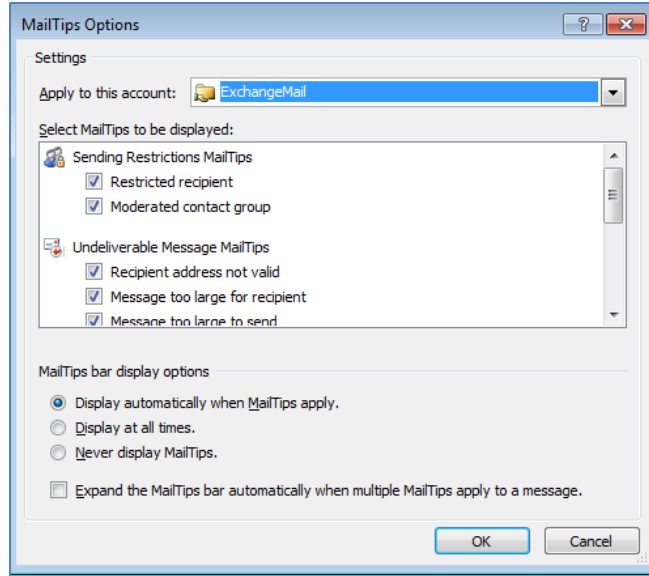
Select **Mail**



Under **MailTips**, click the **MailTips Options...** button

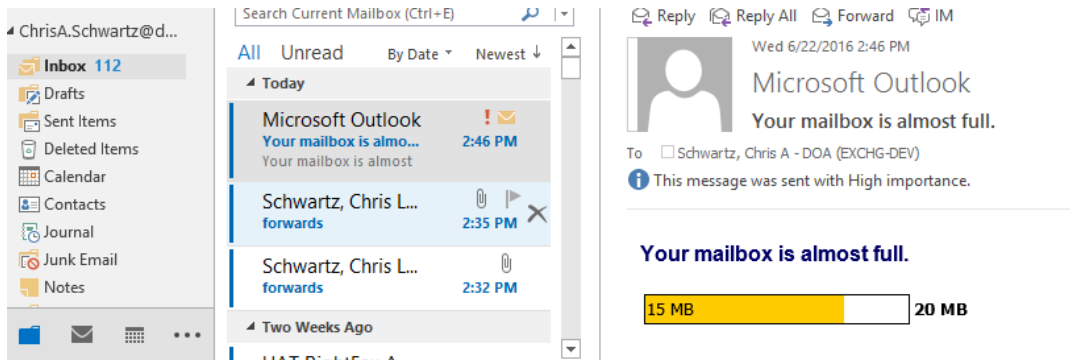


Under **MailTips Options**, select the options that you want and click **OK**.

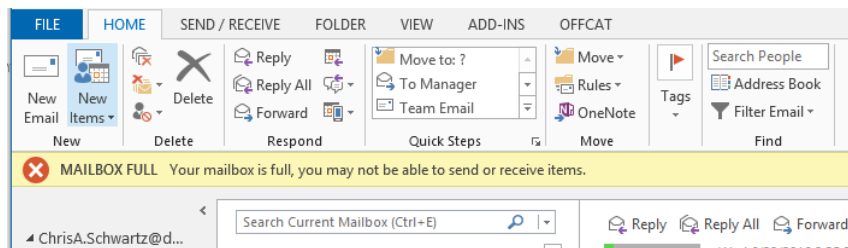


F.2 Mailbox Quota Warning Messages

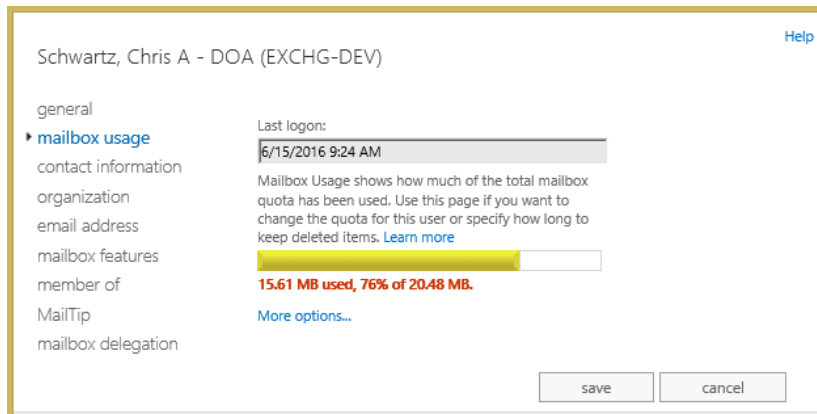
When a mailbox reaches a set limit in size, a warning message is generated for the mailbox owner when they log in to the mailbox.



If a mailbox exceeds its mailbox limit after the owner has logged in, a message will be generated at the top of the Outlook screen.

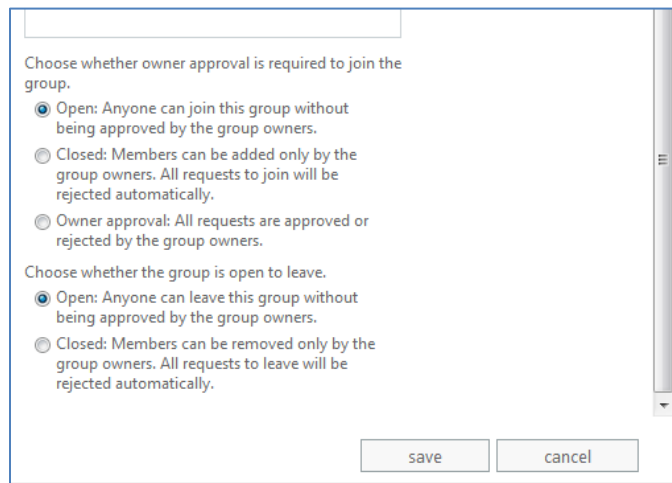


An administrator can see the current size of a mailbox by viewing the **mailbox usage** screen.



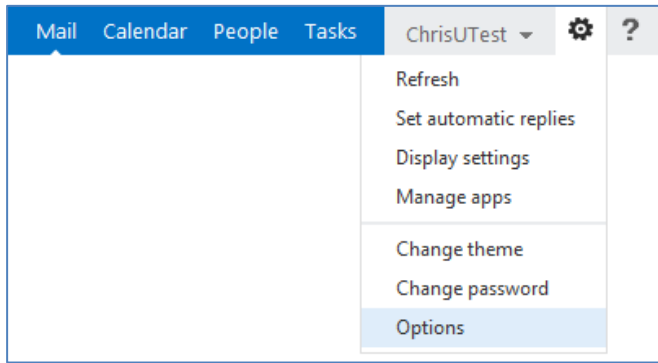
F.3 Open Distribution Groups


Distribution Groups have configuration options to allow for self-service subscribing or unsubscribing, similar to a listserv list. When creating a Distribution Group, administrators have options for how users get added to the group.

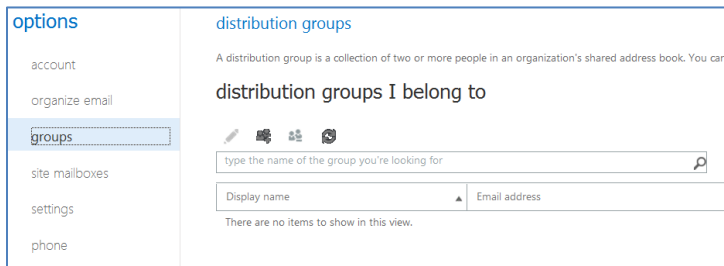


This feature is only supported in the Outlook Web Application (OWA). Users cannot subscribe to a list through the desktop Outlook client.

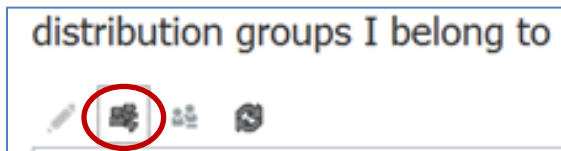
To view the distribution groups you are a member of and manage your membership options, log in to OWA (Unmigrated mailbox).



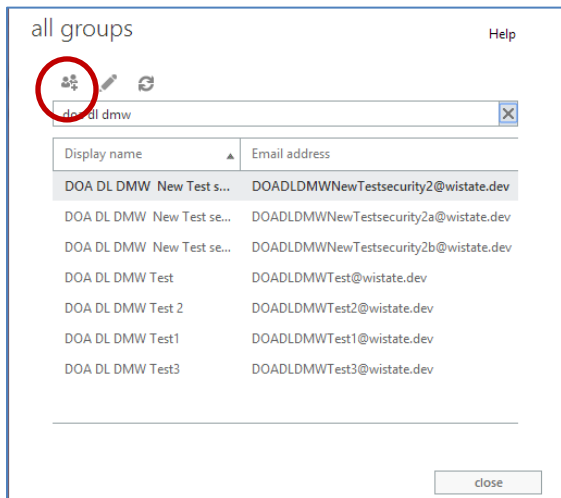
Click on the gear icon  located in the upper right corner of the OWA screen to launch Settings



Select the **groups** tab in the left column.



Click on the **Join** icon.



Search for the group you want to join, then click the **Join** icon again.

A notification will be displayed with the success or failure of your request to join that group.

<p>information</p> <p>You successfully joined the group "DOA DL DMW Test 2".</p> <p>ok</p>	<p>error</p> <p>The group "DOA DL DMW Test3" is closed to new membership requests.</p> <p>Click here for help...</p> <p>ok</p>
---	---

If a distribution group requires approval, a request will be submitted to the group owner/s.

warning

A request for "Walker, Leah - DOA" to join the group "DOA DL DMW Test" has been submitted to the group owners. Request message ID: <263d5efa2c6341319027430f8342017a@MEWMAD0D1900.accounts.wistate.dev>.


ok

You will receive a message confirming if your request has been approved or rejected.

If approved

Your request to join group DOA DL DMW Test has been approved.

DELETED REPLY REPLY ALL FORWARD ...

 Microsoft Exchange Approval Assistant
Wed 3/5/2014 3:21 PM

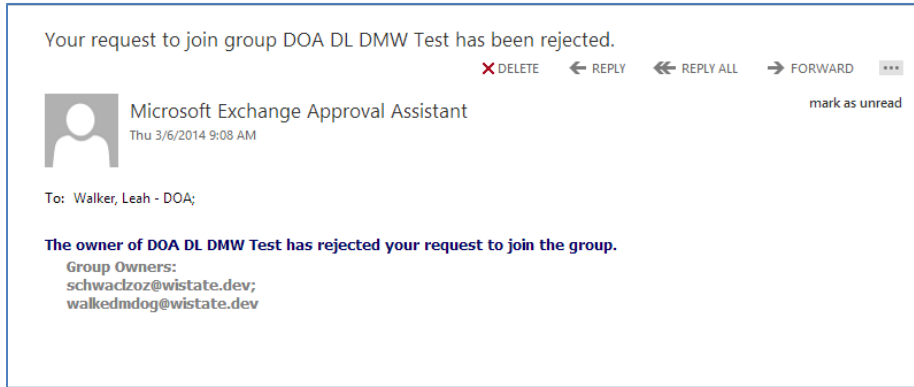
To: Walker, Leah - DOA;

walkedmdog@wistate.dev approved your request to join distribution group DOA DL DMW Test.

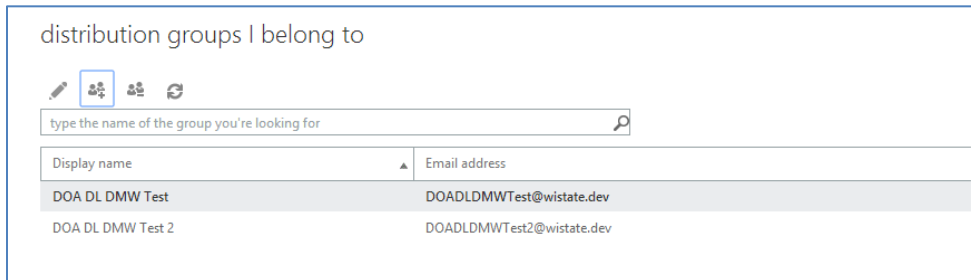
There may be a delay before you see your name included as a member of this distribution group.

mark as unread

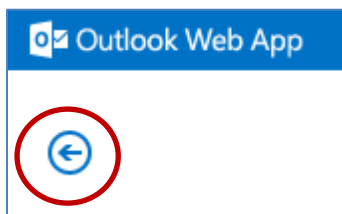
If rejected



After successfully joining or approved, the new group will be displayed in the list of distribution groups to which you belong.



To return to the OWA Mail and Calendar screens, click the return arrow icon in the upper Left corner of the Options screen.



F.4 Mailbox Search and E-Discovery Options

Agency Email Administrators and Security Officers who perform Email-related tasks have been delegated the permissions necessary to perform Mailbox searches and exports from mailboxes in their agency's MailProv and Staff Organizational Units. Upon request, the person will be added to another delegation group called XXX_E-DiscoveryAdmin. This delegation group is designed to allow Agency Legal and investigative staff to perform Mailbox searches without having all the elevated rights held by Email and Security Administrators.

Agency Email, Security, and E-Discovery Admins can:

- Perform full mailbox searches to return all content or specific items by using filters or keywords.
- Preview searches from within the EAC.
- Export search results to a .pst file.
- See the list of searches in the EAC and the search criteria, regardless of which agency initiated the search, but cannot access the search results for searches of mailboxes that are not within their scope.
- Configure Single-Item Recovery, In-Place Hold, and Litigation Hold on mailboxes within their scope.

Basic instructions for these functions are shown below. For more detailed information see the links to the Microsoft TechNet articles here.

[Search-Mailbox](#)

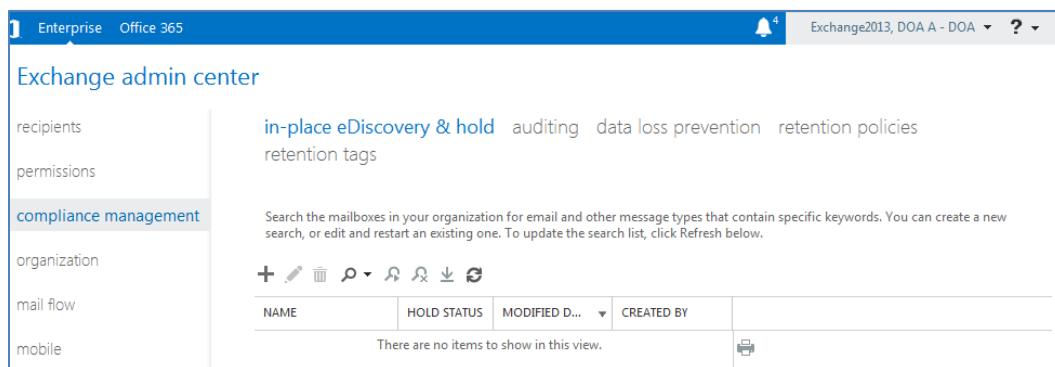
[Perform Single Item Recovery](#)

[Create an In-Place eDiscovery Search](#)

[Recoverable Items Folder](#)

How to perform a search using the EAC

Log in to the EAC with your Administrative account. Click on **compliance management**, then click on **In-place eDiscovery & hold**.



Click on the + to create a new search. Give the search a name and optionally a description. Click Next.

The screenshot shows a wizard window titled "new in-place eDiscovery & hold". Below the title is a brief instruction: "Create a search across mailboxes by specifying a filter. You can also place the results on hold. You can then view statistics, preview, copy, or export the search results." The "Name and description" section contains a text box for the name, which has "DOA Search 5-7-14" entered, and a larger text area for the description with "Descriptions are optional" entered. At the bottom left, there is an information icon and text: "In-Place Hold is a premium feature that requires an Enterprise Client Access License (CAL). [Learn more](#)". At the bottom right, there are "next" and "cancel" buttons.

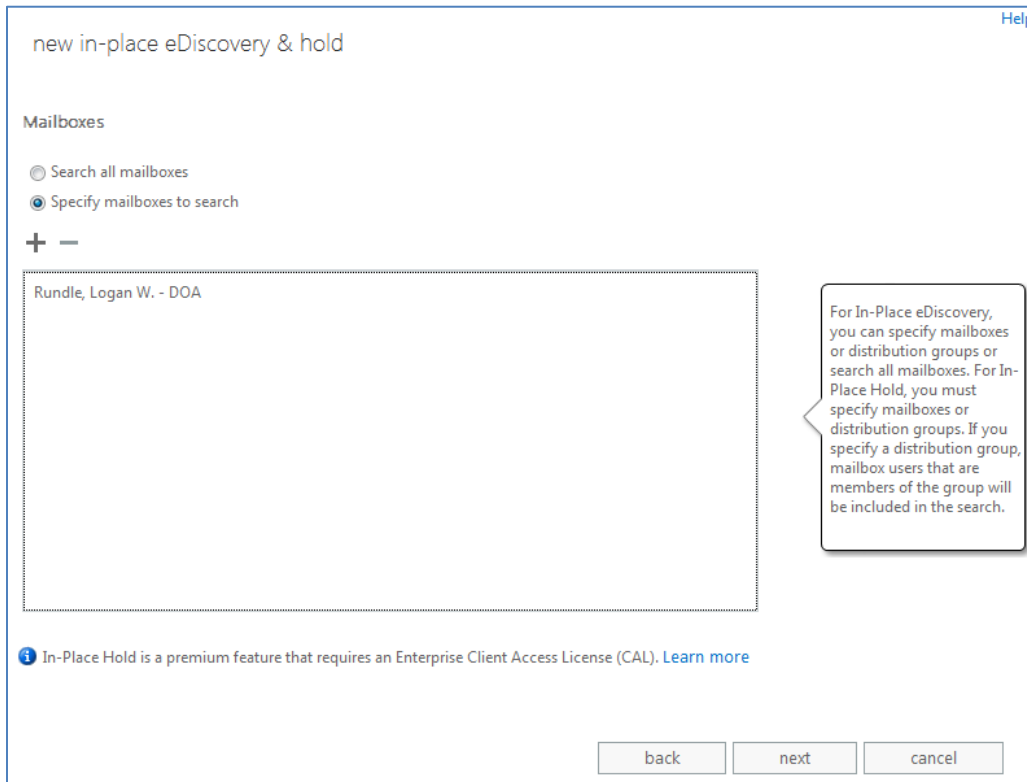
If searching in specific mailbox(es), click on the + to pick mailboxes from the GAL.

The screenshot shows the "Mailboxes" step of the wizard. It has two radio buttons: "Search all mailboxes" (unselected) and "Specify mailboxes to search" (selected). Below the radio buttons is a large empty rectangular area with a red border and a "+" sign in the top-left corner, intended for selecting mailboxes from the GAL. A callout box on the right contains the text: "For In-Place eDiscovery, you can search all mailboxes or specify mailboxes. For In-Place Hold, you must specify mailboxes to search. If you select 'Search all mailboxes', the option to set an In-Place Hold will be grayed out." At the bottom left, there is the same information icon and text as in the previous screenshot. At the bottom right, there are "back", "next", and "cancel" buttons.

Select the appropriate account, double-click or click Add, then click Ok.



Click Next



You can choose to search all user mailbox content or filter based on criteria.

new in-place eDiscovery & hold

Search query

Include all user mailbox content
 Filter based on criteria

Keywords:

Specify start date
 2014 May 7

Specify end date
 2014 May 8

From:

To/Cc:

Message types to search: All message types

Click Finish on this page without making changes if you do not have an Enterprise Client Access License or if you selected 'Search all mailboxes' on the Mailboxes page.

new in-place eDiscovery & hold Help

In-Place Hold settings

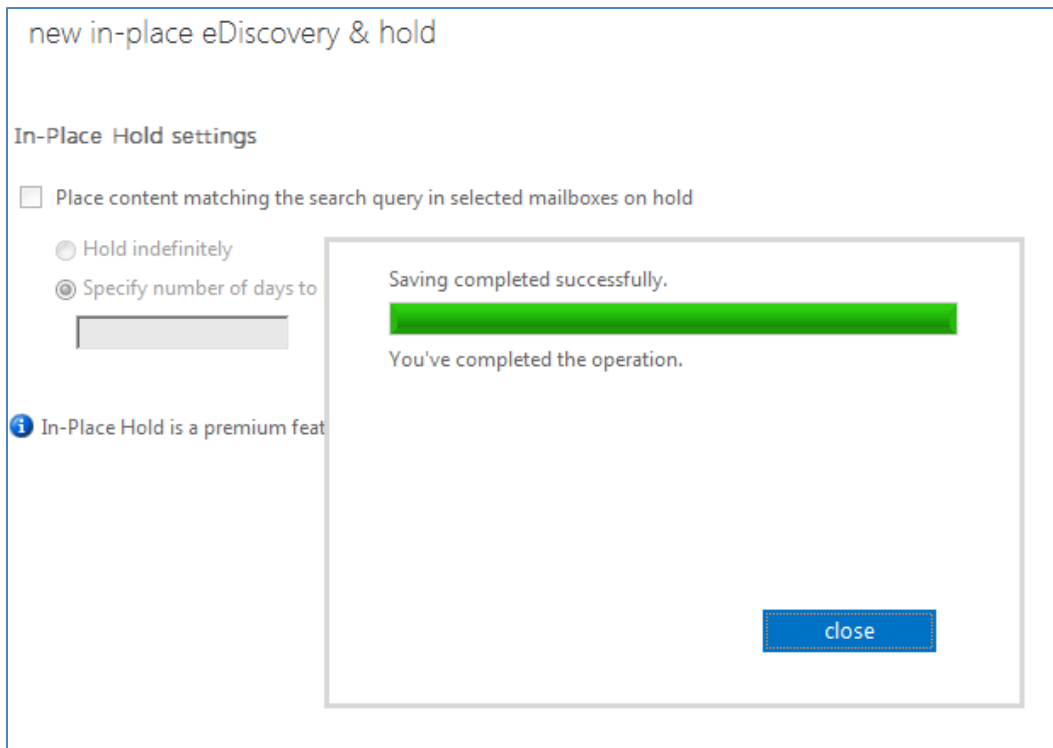
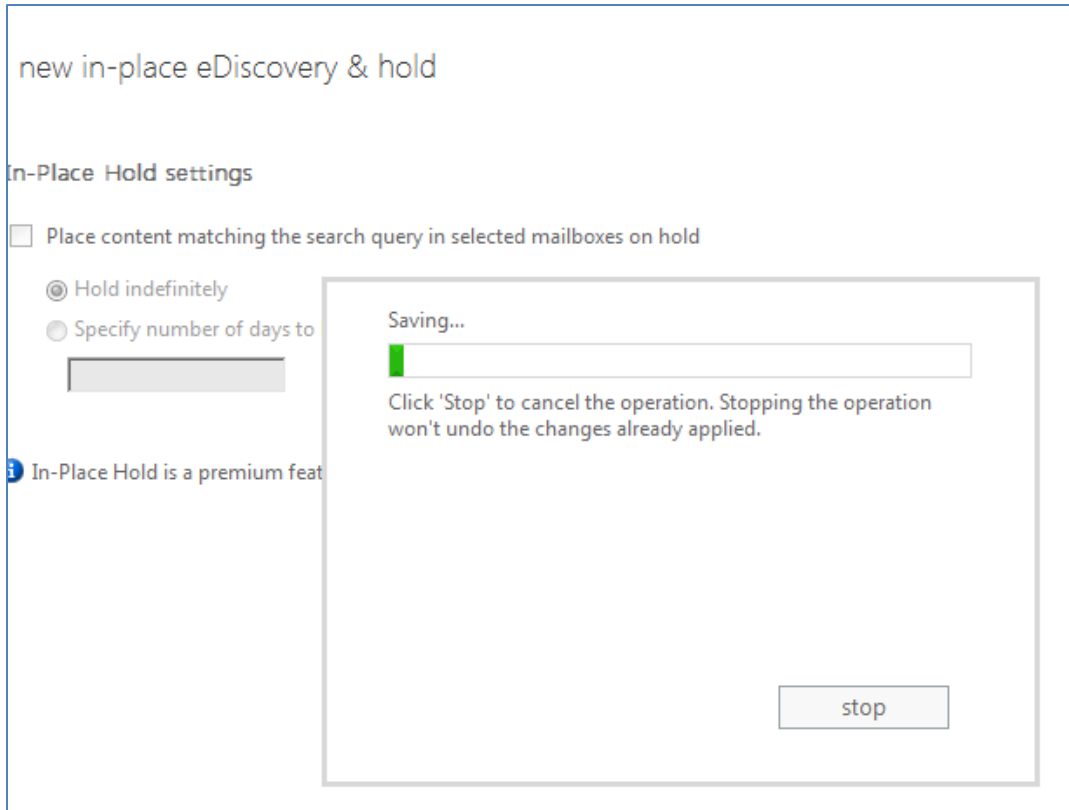
Place content matching the search query in selected mailboxes on hold

Hold indefinitely
 Specify number of days to hold items relative to their received date

i In-Place Hold is a premium feature that requires an Enterprise Client Access License (CAL). [Learn more](#)

This option isn't available if you selected 'Search all mailboxes' on the Mailboxes page.

This step is validating the requestor's delegated rights to complete a search on the mailbox(es) selected, and estimating the size of the search results.



All searches created will be displayed in this screen until they are deleted. Since all delegated administrators can see the criteria of searches listed in this screen, it is **highly** recommended that you delete your search when it is no longer needed.

Exchange admin center

recipients
permissions
compliance management
organization
mail flow
mobile
public folders
servers

in-place eDiscovery & hold auditing data loss prevention retention policies
retention tags

Search the mailboxes in your organization for email and other message types that contain specific keywords. You can create a new search, or edit and restart an existing one. To update the search list, click Refresh below.

+ ✎ 🗑️ 🔍 ⏪ ⏩ 📄 ↻

NAME	HOLD STAT...	MODIFIED D...	CREATED BY
DOA Search 5-7-14	No	5/7/2014 2:45 ...	exchadavbe

DOA Search 5-7-14
Descriptions are optional
Hold
None
Search
Status: Estimate Succeeded
Run by: Exchange2013, DOA A - DOA
Run on: 5/7/2014 2:45 PM
Size: 20.72 MB
Items: 654
Errors:
None
Statistics:
The keyword statistics table wasn't populated because the search query was empty.

The icons provide functionality to work with your search. From left to right: New search, Edit search, Delete search, Search (see next screen), Resume search, Stop search, Export to a .pst, and refresh.

in-place eDiscovery & hold auditing data loss prevention retention policies
retention tags

Search the mailboxes in your organization for email and other message types that contain specific keywords. You can create a new search, or edit and restart an existing one. To update the search list, click Refresh below.

+ ✎ 🗑️ 🔍 ⏪ ⏩ 📄 ↻

NAME	HOLD STAT...	MODIFIED D...	CREATED BY
DOA Search 5-7-14	No	5/7/2014 2:45 ...	exchadavbe

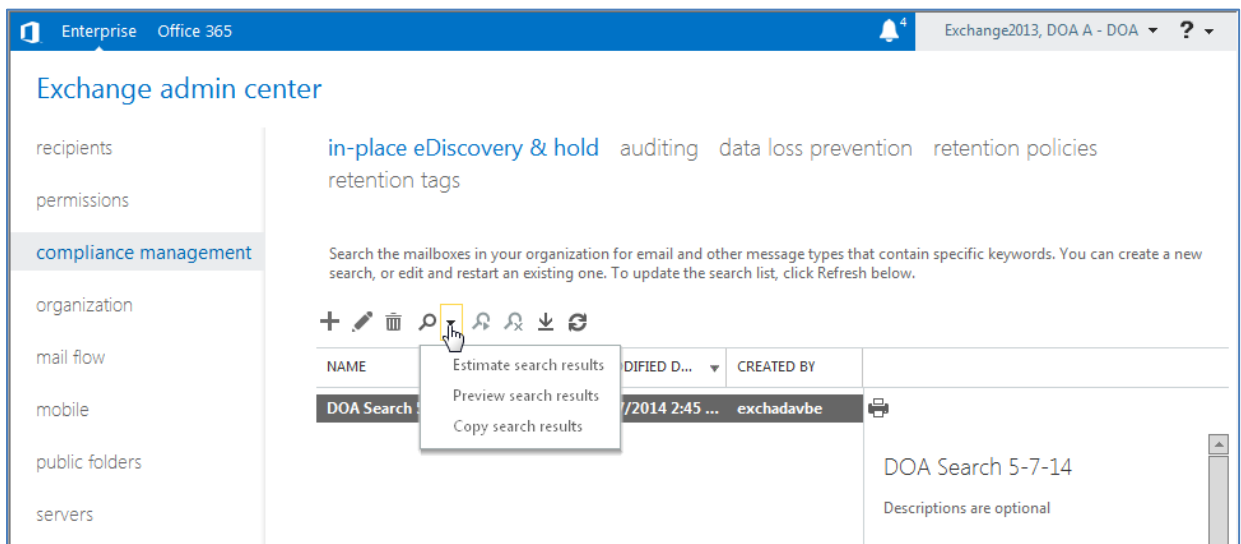
If you click on the **Search** icon dropdown immediately after the initial notice that the search estimate was successful, you will only be able to select Preview search results from this dropdown. When the search has completed you will be able to select the other options. **Preview search results** will show you a list of the items in the mailbox(es) but not the actual content. This is not particularly useful.

Selecting **Copy search results** will allow you to copy the search results to a Discovery mailbox so that you can view the actual content of items. In order to do this, your account must have access to a Discovery mailbox assigned to your agency otherwise the copy will fail.

Discovery mailboxes do not exist by default but you can request that DET create one for your agency.

Note: Once a search is deleted from the list shown above, the search results that have been copied to a Discovery mailbox are purged, too.

To keep the copy of the search results even after the search has been deleted, copy them from the Discovery Mailbox to another mailbox or use the **Export to .pst** option. Either option allows you to delete the search from the list without losing the results of the search.



APPENDIX: SPF Verification Failure Procedure

What To Do If A Message Is Quarantined Due To Failing An SPF Verification Check

An advanced query of the IronPort message tracking logs is required to identify messages that have failed an SPF check.

The management appliance allows email administrators to search for an email message or group of messages matching criteria specified, such as Subject, Date/Time range, Envelope Sender/Recipient, Event (virus positive, hard bounced, delivered, etc.) and more. Tracking gives email administrators increased visibility into the flow of email. Administrators can see message details, such as envelope and header summary, sending host, and processing details. While the message tracking logs provide detailed information about specific emails, it does not provide the ability to read a particular email.

Please Note: If you do not have an account to access the management appliance to query the message tracking logs, please contact the Enterprise Service Desk at [608-264-9383](tel:608-264-9383) or ESDhelp@wisconsin.gov.

Click the following link to access the management appliance: <https://ironport.wi.gov>

- *Query message tracking logs*
 - *Click **Email > Message Tracking > Message Tracking***
 - *Populate the **Envelope Sender, Recipient,** and Subject*
 - *Leave blank if unknown*
 - *Review **Message Received***
 - *Modify **Start** and **End Date** as necessary*
 - *Click **Advanced***
 - *Click **Content Filters**, under **Message Event***
 - *Type **SPFVerification***
 - *Do **NOT** select 'No Time Limit' under 'Query timeout:' An error will be displayed*
 - *Click **Search***

Message Filters

Forged Email Detection

Content Filters

Content Filter name:

Mail Flow Direction: Incoming Outgoing

Content Filter Action: Stopped

DMARC Failures

For example, A message from webeocsupport@wisconsin.gov fails an SPF check. Viewing the Processing Details confirms the result of an SPF check as **Fail**.

06 Mar 2018 13:34:58 (GMT -06:00) | Message 36561510 SPF: mailfrom identity webeocsupport@wisconsin.gov **Fail**

Document the **Envelope-Sender** in the **Envelope and Header Summary**, and **IP Address** listed under **Sending Host Summary**.

Message Details	
Envelope and Header Summary	
Received Time:	06 Mar 2018 13:34:58 (GMT -06:00)
MID:	36561512, 36561510
Message Size:	896 (Bytes)
Subject:	dev_New Shelter information has been added in WebEOC Development_dev
Envelope Sender:	webeocsupport@wisconsin.gov MAILER-DAEMON@eml21p.wi.gov
Envelope Recipients:	joseph.cordova@wisconsin.gov
Message ID Header:	<241070-DFW3WEB1J6pk0000040b@www.webeocasp.com>
Cisco IronPort Host:	EML21 (165.189.88.165)
SMTP Auth User ID:	N/A
Attachments:	N/A
Sending Host Summary	
Reverse DNS Hostname:	rsml.webeocasp.com (unverified)
IP Address:	174.143.220.67
SBRS Score:	5.1

Use that information to perform an SPF check: <https://www.kitterman.com/spf/validate.html>

Test an SPF record

This test is for evaluating the performance of your record based on different IP addresses that mail might come from (this has not been thoroughly tested yet). The %d macro is extracted from the supplied mail from address. If an SPF record is

IP address:

SPF Record v=spf1...//-->

Mail From address:

HELO/EHLO Address://-->

To check an incoming mail request, fill out IP address from which the mail was received and the Mail From address. If yo

The results will be provided as shown below, which you can pass along to the sender:

Input accepted, querying now...

Mail sent from this IP address: 174.143.220.67
Mail from (Sender): webeocsupport@wisconsin.gov

Results - FAIL Message may be rejected

Use the back button on your browser to return to the SPF checking tool without clearing the form.

Interpreting the Result

None

A result of "None" means that no records were published by the domain or that no checkable sender domain could be determined from the given identity. The software cannot ascertain whether or not the client host is authorized.

Neutral

The domain owner has explicitly stated that he cannot or does not want to assert whether or not the IP address is authorized.

Pass

A "Pass" result means that the client is authorized to inject mail with the given identity. The domain can now, in the sense of reputation, be considered responsible for sending the message. Further policy checks can now proceed with confidence in the legitimate use of the identity.

Fail

A "Fail" result is an explicit statement that the client is not authorized to use the domain in the given identity.

SoftFail

A "SoftFail" result should be treated as somewhere between a "Fail" and a "Neutral". The domain believes the host is not authorized but is not willing to make that strong of a statement.

TempError

A "TempError" result means that the SPF client encountered a transient error while performing the check.

PermError

A "PermError" result means that the domain's published records could not be correctly interpreted. This signals an error condition that requires manual intervention to be resolved.

Resources

<https://www.kitterman.com/spf/validate.html>

Sender Policy Framework (SPF) for Authorizing Use of Domains in Email, Version 1

<https://tools.ietf.org/html/rfc7208>

You can use the following template to inform the sender that action must be taken to ensure email delivery.

The State of Wisconsin is reviewing an implementation of Sender Policy Framework (SPF). This is a simple email-validation system designed to detect email spoofing by providing a mechanism to verify incoming mail was sent from an authorized host.

A message from **(DGraham@norcen.org)** sent by the server **(mail.co.marathon.wi.us [24.196.79.228])** was identified in our logs. Performing an SPF record test confirms the result of an SPF check as **Fail**.

Mail sent from this IP address: 174.143.220.67
Mail from (Sender): DGraham@norcen.org

Results - Permanent Error SPF Permanent Error: No valid SPF record for included domain: mail.co.marathon.wi.us: include:mail.co.marathon.wi.us

[Return to SPF checking tool \(clears form\)](#)

An SPF record is part of your mail system's DNS records, so you'll need your DNS administrator to make corrections to your SPF record. Using the website linked below, in the "Test and SPF record" email from:

<https://www.kitterman.com/spf/validate.html>

If changes are not made to how you're sending these messages, they won't be delivered when SPF is enabled. Messages that **Fail** an SPF validation check will be rejected.