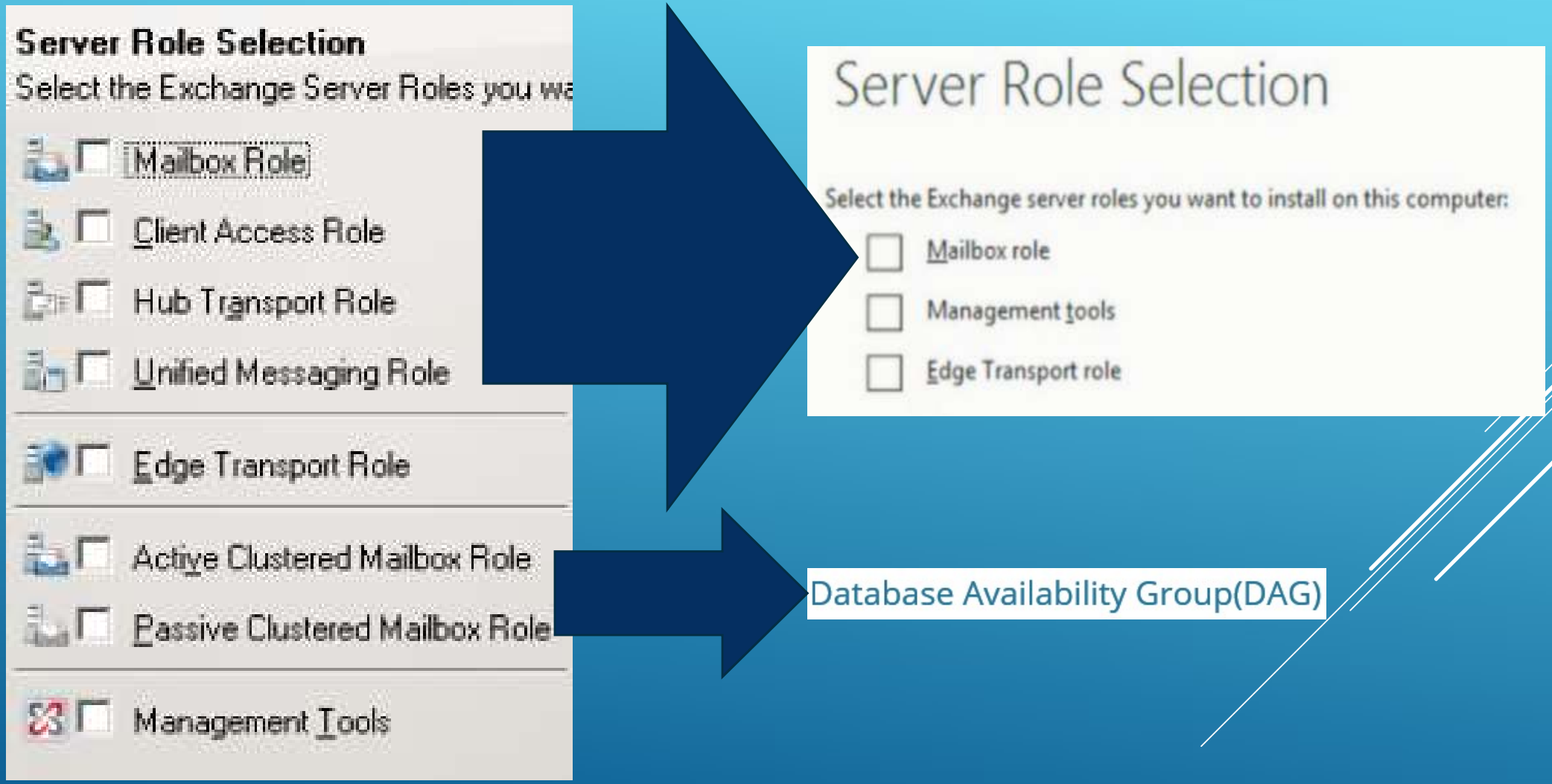
MICROSOFT EXCHANGE SERVER 2016 (ON-PREMISES)

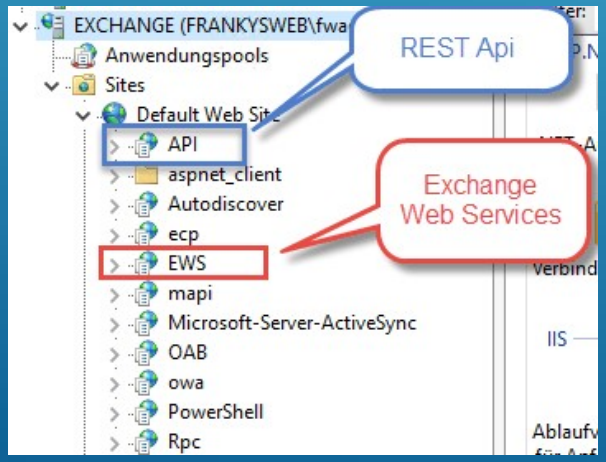
http://howto.odkud.com


Server Role Selection
Select the Exchange Server Roles you wa
Mailbox Role
Client Access Role
Hub Transport Role
Unified Messaging Role
Edge Transport Role
Active Clustered Mailbox Role
Passive Clustered Mailbox Role
Management Tools
Server Role Selection
Select the Exchange server roles you want to install on this computer:
Mailbox role
Management tools
Edge Transport role
Database Availability Group(DAG)

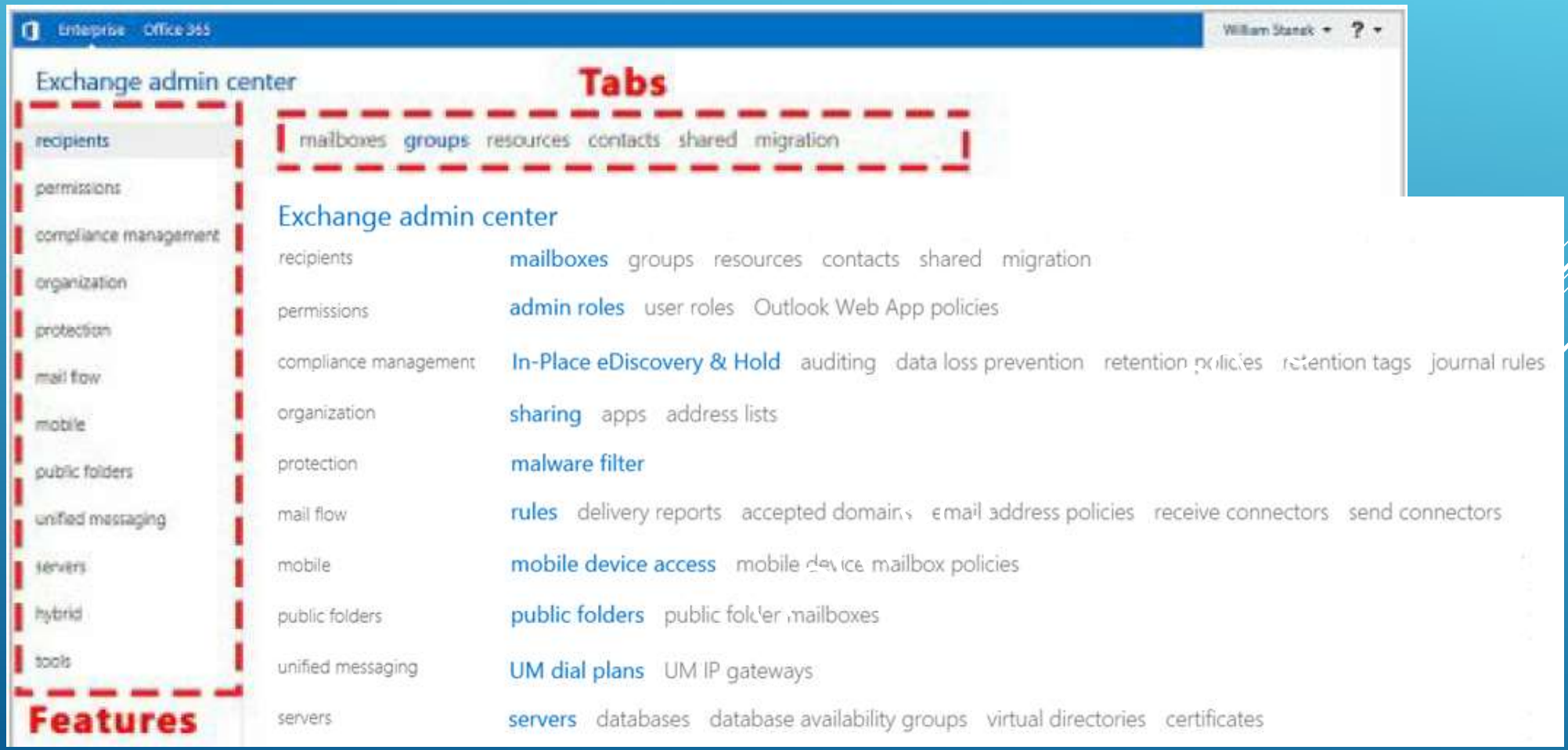
MANAGEMENT TOOLS

- **Exchange admin center (EAC)**
  - https://<ServerFQDN>/**ecp**
- **Exchange Management Shell** (based on Microsoft Windows PowerShell)

- **RDP, Rest-API**



- **Exchange admin center (EAC)**
  - https://<ServerFQDN>/**ecp**



- **Exchange Management Shell** (based on Microsoft Windows PowerShell)

GET-, SET- (Add-,Disable-,Enable-,Export-,New-,Remove-,Restore-,Resume-,Serach-,Test-,Update-)

Get-ExCommand (Get-Command | findstr *XYZ*)

Get-help *COMMAND* (Get-help *COMMAND* –examples)

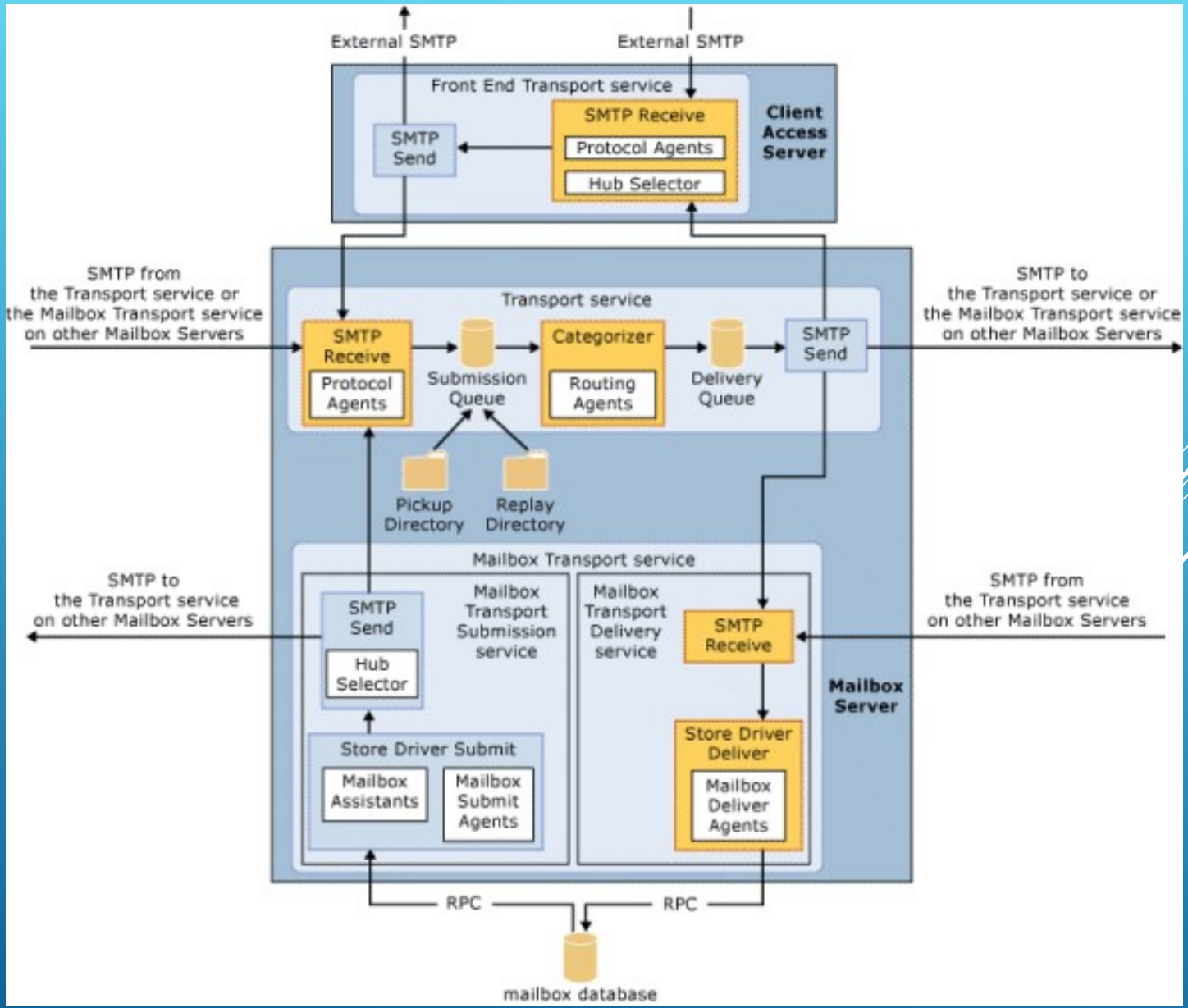
Examples:

- **Get-exchangeserver |ft name,admindisplayversion**
- **Get-mailbox adlogin (Get-mailbox adlogin | format-list)**
- **Get-MailboxStatistics -Server SERVERNAME | Sort-Object TotalItemSize -Descending | ft DisplayName,@{label="TotalItemSize(MB)";expression={$_.TotalItemSize.Value.ToMB()}},ItemCount -auto**
- **Get-MailboxStatistics -database "DATABASE NAME" | Sort-Object TotalItemSize -Descending | ft DisplayName,@{label="TotalItemSize(MB)";expression={$_.TotalItemSize.Value.ToMB()}},ItemCount –auto**
- **Get-Mailbox -ResultSize Unlimited | Get-MailboxStatistics | Sort-Object TotalItemSize -Descending | Select-Object DisplayName,TotalItemSize -First 10 | Export-CSV top100mailboxes.csv**

- *https://exchangepedia.com/reference/ExQuick.html*

MailFlow:

- **Send connector** send mail to the Internet
- **Receive Connector** for Incoming Internet Email (Relay)



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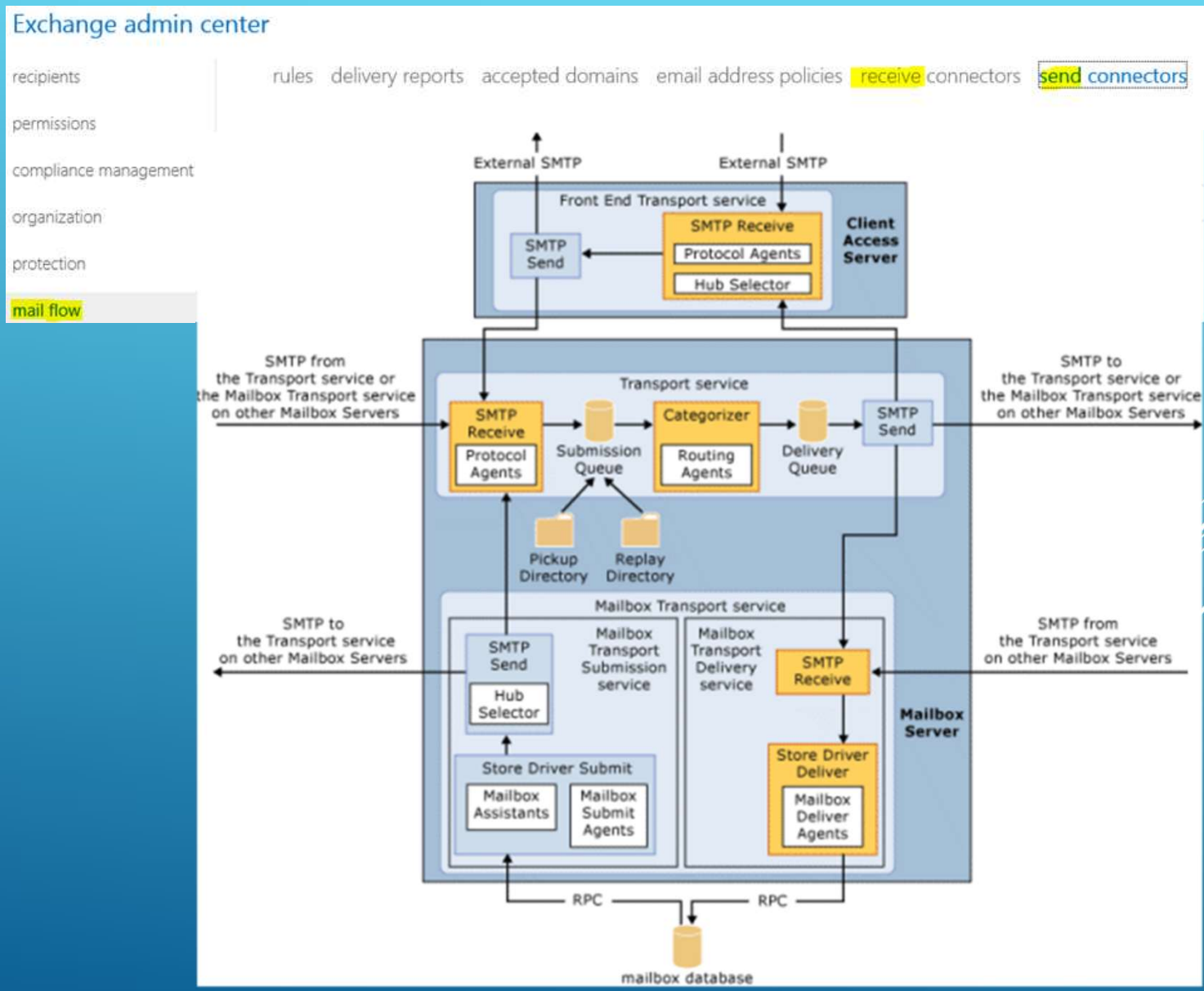


MailFlow:

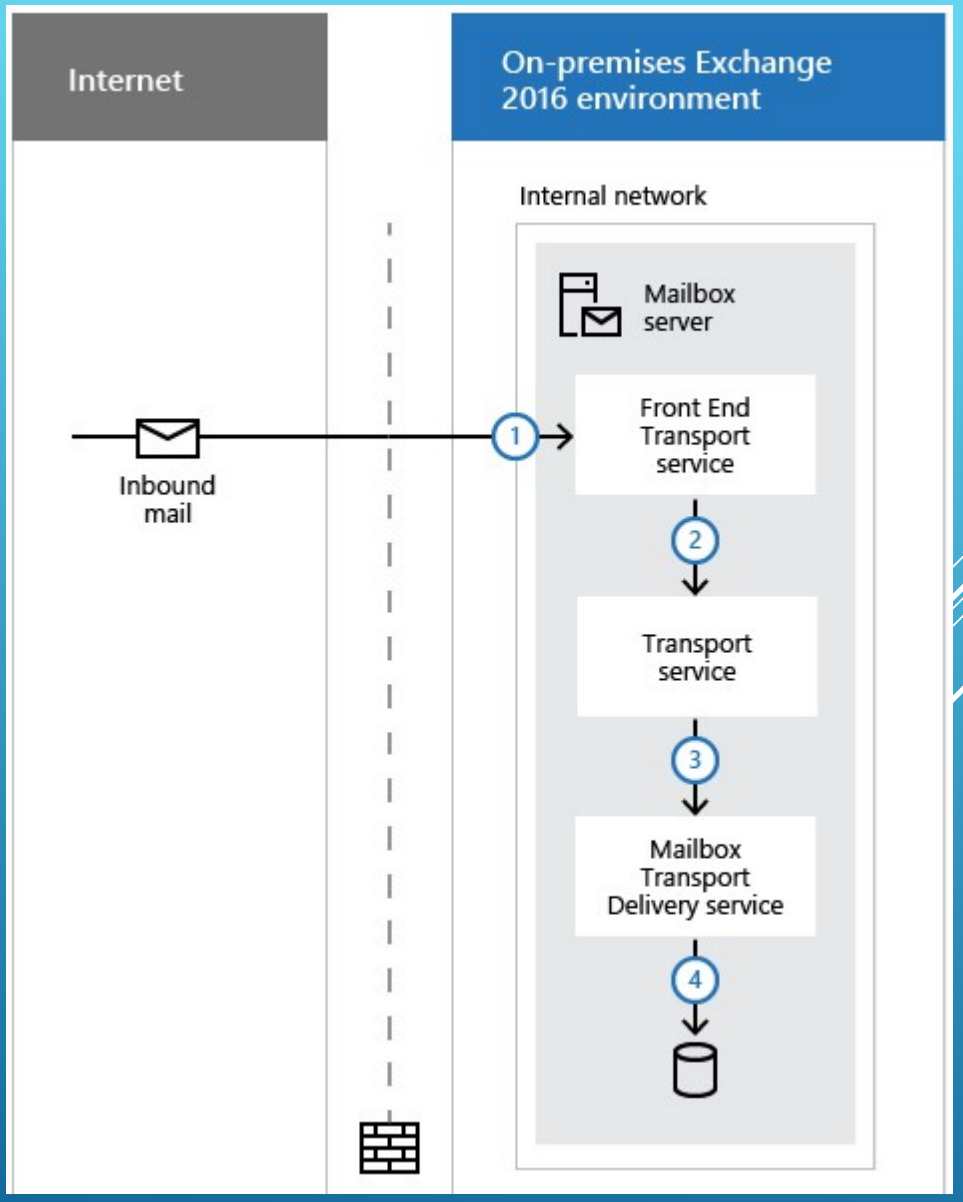
- **Receive Connector** for Incoming Internet Email (Relay)

1. A message from outside the organization enters the transport pipeline through the **default Receive connector named "Default Frontend** *<Mailbox server name>*" in the Front End Transport service.

2. The message is sent to the Transport service on the local Mailbox server or on a different Mailbox server. The Transport service listens for messages on the default Receive connector named "Default *<Mailbox server name>*".

3. The message is sent from the Transport service to the Mailbox Transport Delivery service on the local Mailbox server or on a different Mailbox server.

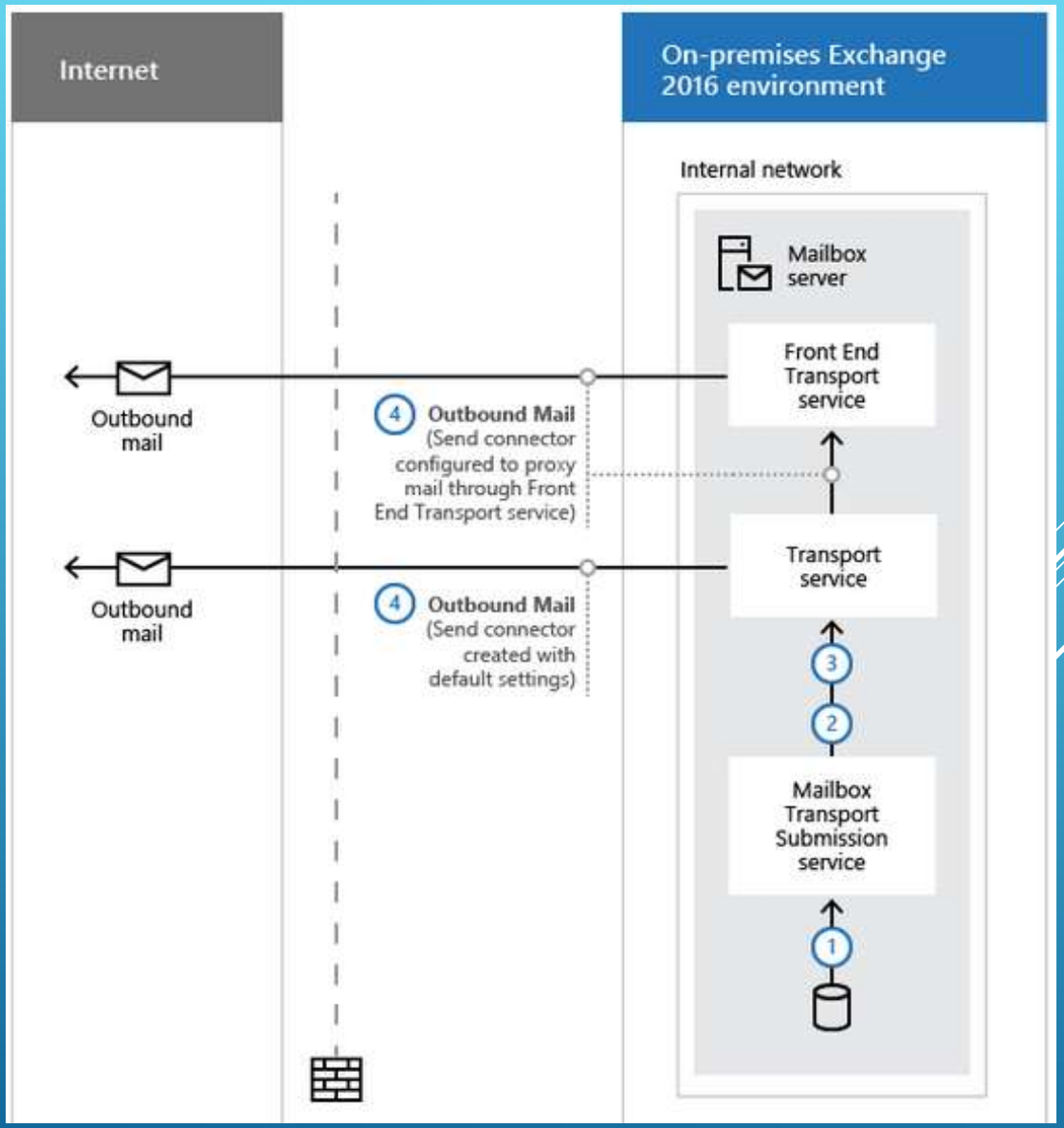
4. The Mailbox Transport Delivery service uses RPC to deliver the message **to the local mailbox database**.



MailFlow:

- **Send connector** send mail to the Internet

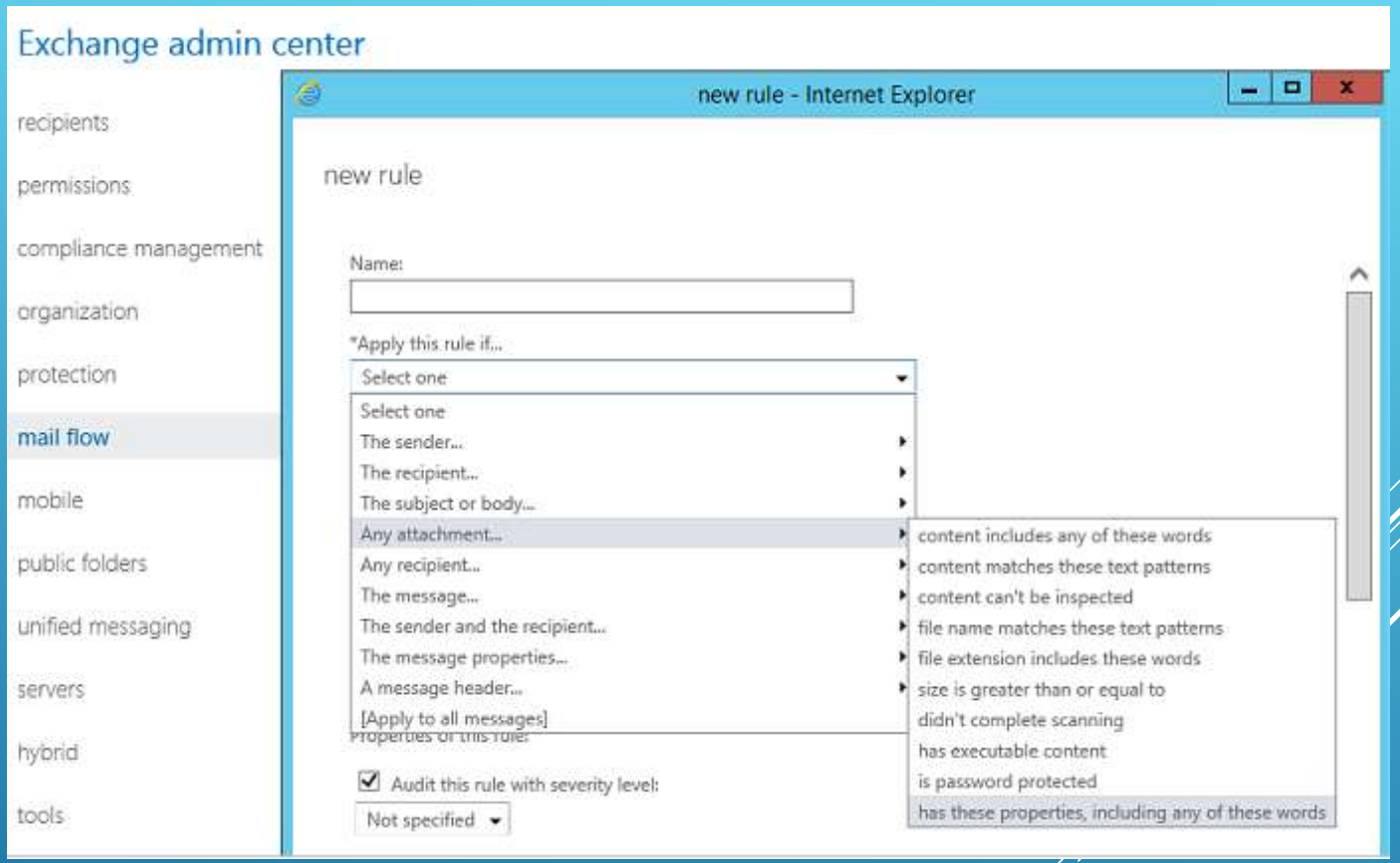
1. The Mailbox Transport Submission service uses RPC to retrieve the outbound message from the local mailbox database.
2. The Mailbox Transport Submission service uses SMTP to send the message to the Transport service on the local Mailbox server or on a different Mailbox server.
3. In the Transport service, the default Receive connector named "Default <*Mailbox server name*>" accepts the message.
4. What happens next depends on the configuration of the Send connector:
    - **Default** The Transport service uses the Send connector you created to send the message to the Internet.
    - **Outbound proxy** The Transport service uses the Send connector you created to send the message to the Front End Transport service on the local Mailbox server or on a remote Mailbox server. In the Front End Transport service, the default Receive connector named "Outbound Proxy Frontend <*Mailbox server name*>" accepts the message. The Front End Transport services sends the message to the Internet.

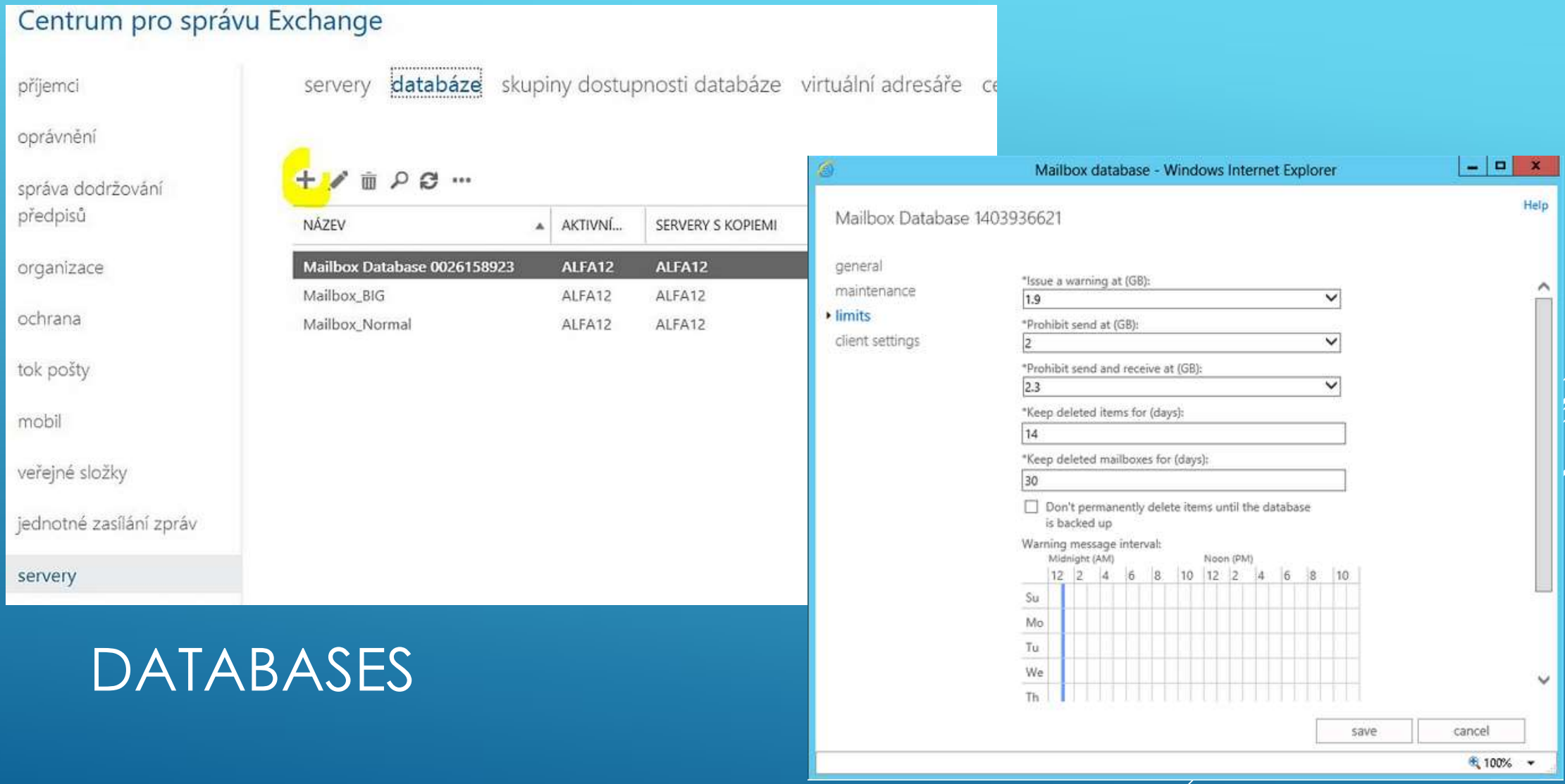


MailFlow:

- **Transport Rules**

Conditions – here you define what specific message' properties should trigger a given action. The actions can be triggered based on: the sender's address, email subject, message direction, and more.
Actions – they are applied to a message, when it meets specified conditions. The list of available actions is different in every Exchange Server version.
Exceptions – as the name suggests, here you can define what specific message attributes should stop the rule from applying an action. The list of exceptions mirrors the list of conditions.

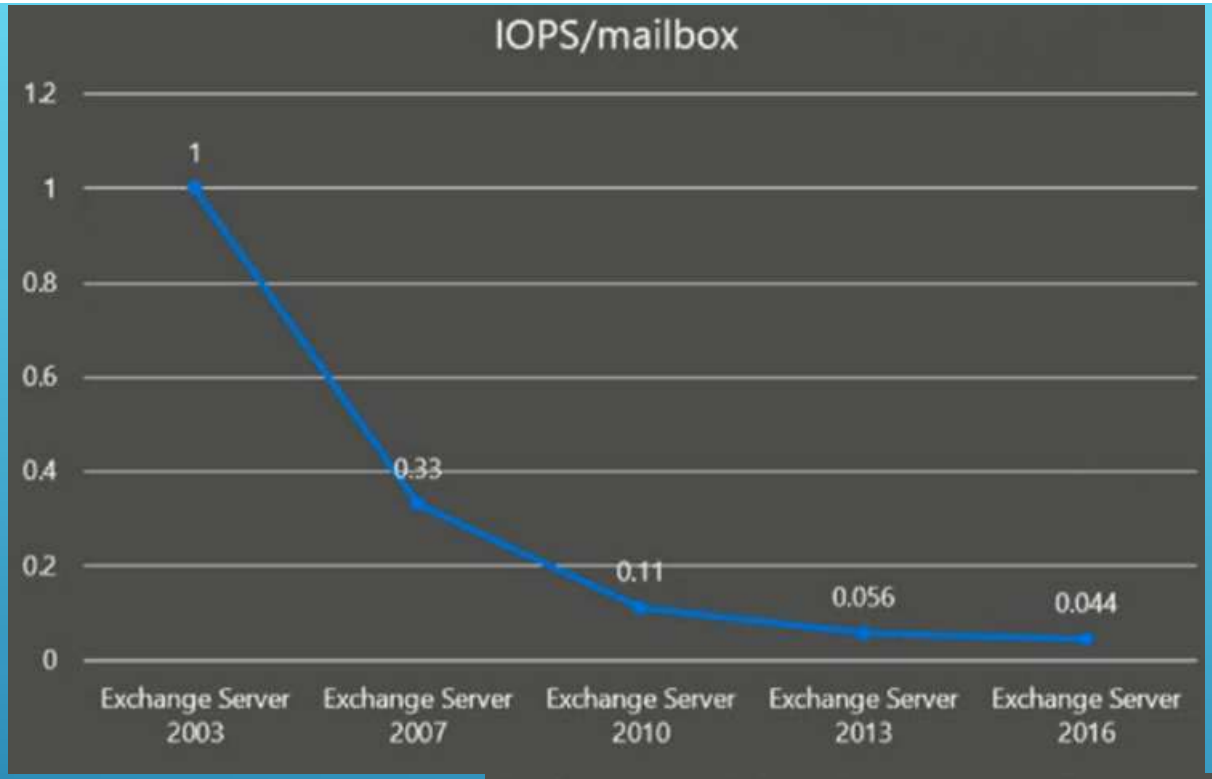


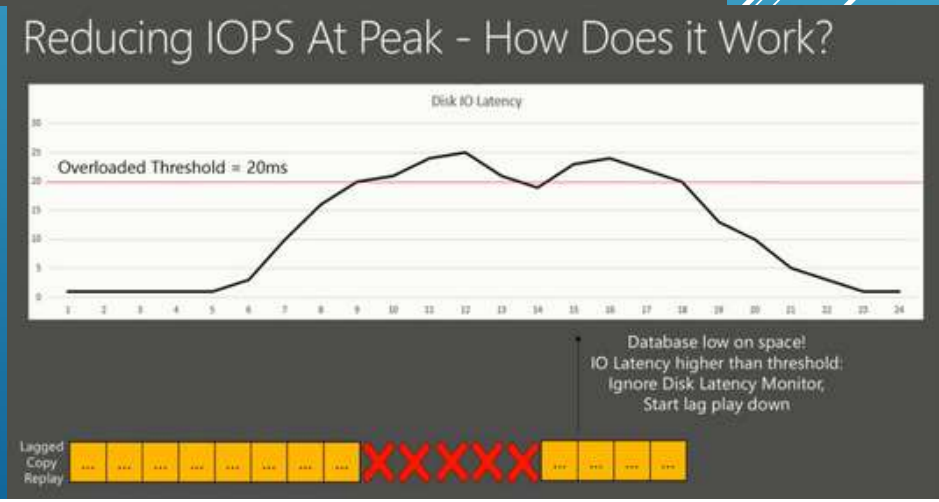


DATABASES

http://howto.odkud.com/2016/05/04/archivace-na-exchange-2016

Resilient File System (ReFS) is the new recommendation for all volumes that contain databases and logs. Use of ReFS should result in less corruption, less reseeds and less rebuilds. It is also recommended that all disks be created as GPT versus MBR.





Different types of address lists that are available:

- **Global address lists (GALs)** The built-in GAL that's automatically created by Exchange includes every mail-enabled object in the Active Directory forest. You can create additional GALs to separate users by organization or location, but a user can only see and use one GAL.
- **Address lists** Address lists are subsets of recipients that are grouped together in one list, which makes them easier to find by users. Exchange comes with several built-in address lists, and you can create more based on you organization's needs.
- **Offline address books (OABs)** OABs contain address lists and GALs. OABs are used by Outlook clients in cached Exchange mode to provide local access to address lists and GALs for recipient look-ups. For more information, see Offline address books in Exchange 2016.

Nick Name Cache (Našeptávač)

Outlook / Options / Mail / Send messages: Auto-Complete List to suggest names when typing in the To, Cc, and Bcc lines

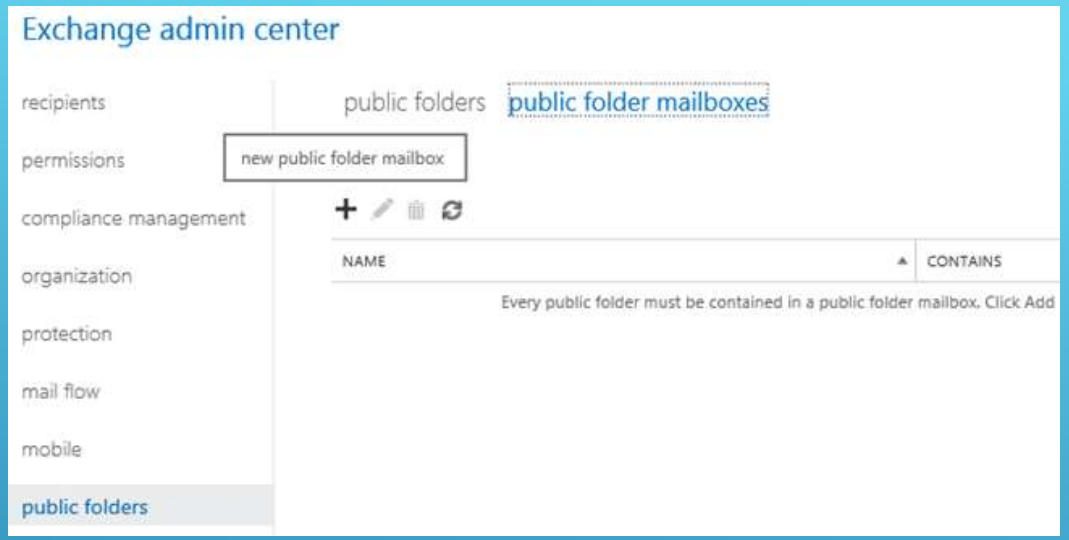
- Outlook 2003-2007 (**C**:\Users\Username\AppData\Roaming\Microsoft\Outlook**profilename.nk2**)
- Outlook from 2010 (C:\Users\Username\AppData\Local\Microsoft\Outlook\RoamCache**Stream_Autocomplete_X_AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA.dat**)
- *http://www.nirsoft.net/utils/outlook_nk2_edit.html*

- Mailbox
  - User
- Groups
  - Distribution
- Resources
  - Room
  - Equipment
- Contacts
- Shared
  - Full Access
  - Send As
  - Send on Behalf

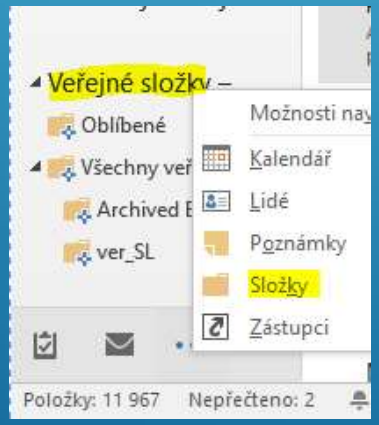
RESOURCES

PUBLIC FOLDERS

- 1. EAC



- 2.Outlook



http://msexchangeguru.com/2016/07/15/exchange2016-publicfolders/

CLIENT ACCESS

- **OWA**
  - https://exchangeserver/**owa**
  - **IE, Edge**
- **Outlook**
  - Supported Clients
    - Outlook 2010 SP2 or later with KB2956191 and KB2965295
    - Outlook 2013 SP1 or later with KB3020812
    - Outlook 2016
    - Outlook for Mac 2011 or Later
    - MAPI/CDO clients are not supported
    - Outlook 2007 is not supported
    - Outlook for MAC 2008 EWS version is not supported
- **Mobile Aplication**

- **Troubleshooting:**
  - https://testconnectivity.microsoft.com/
  - https://mxtoolbox.com/
  - http://www.kitterman.com/spf/validate.html
  - http://www.serversmtp.com/en/smtp-error
  - **LOGs**
    - ECP / Servers / Servers / Nme (Properties – Transport Logs)
      - C:\Program Files\Microsoft\Exchange Server\V14\TransportRoles\Logs\ProtocolLog\SmtpReceive
    - MessageTracking
      - **Get-MessageTrackingLog -ResultSize Unlimited -Start "Jan 3 2013" | more**
      - **Get-MessageTrackingLog -ResultSize Unlimited -Start "Nov 2 2012" | Out-GridView**
      - https://refikunver.wordpress.com/2016/0 1/18/exchange-2016-visual-message-tracking-with-powershell-parameter-out-gridview/
- **Services**
  - Services.msc
    - Test-ServiceHealth ExchangeServerName | ft Role,RequiredServicesRunning –auto
  - Iisreset

- **ANTISPAM**
  - **https://technet.microsoft.com/en-us/library/jj218660(v=exchg.160).aspx**
  - **Howto enable:**
    - https://technet.microsoft.com/cs-cz/library/bb201691(v=exchg.160).aspx
    - or http://www.techieshelp.com/exchange-2013-enable-anti-spam/
- **BACKUP**
  - Granular Backup
  - Clearing Transaction Logs
  - Export / Import pst (Outloock, cmd)
  - Archivace, Retence