

Exchange Server 2019 - PowerShell Quick Reference (v 1.01)

Install Prerequisites

In order to install Exchange 2019 on Windows 2019, a series of prerequisites need to be installed

Install-WindowsFeature Web-WebServer,Web-Common-Http,Web-Default-Doc,Web-Dir-Browsing,Web-Http-Errors,Web-Static-Content,Web-Http-Redirect,Web-Health,Web-Http-Logging,Web-Log-Libraries,Web-Request-Monitor,Web-Http-Tracing,Web-Performance,Web-Stat-Compression,Web-Dyn-Compression,Web-Security,Web-Filtering,Web-Basic-Auth,Web-Client-Auth,Web-Digest-Auth,Web-Windows-Auth,Web-App-Dev,Web-Net-Ext45,Web-Asp-Net45,Web-ISAPI-Ext,Web-ISAPI-Filter,Web-Mgmt-Tools,Web-Mgmt-Compat,Web-Metabase,Web-WMI,Web-Mgmt-Service,NET-Framework-45-ASPNET,NET-WCF-HTTP-Activation45,NET-WCF-MSMQ-Activation45,NET-WCF-Pipe-Activation45,NET-WCF-TCP-Activation45,Server-Media-Foundation,MSMQ-Services,MSMQ-Server,RSAT-Feature-Tools,RSAT-Clustering,RSAT-Clustering-PowerShell,RSAT-Clustering-CmdInterface,RPC-over-HTTP-Proxy,WAS-Process-Model,WAS-Config-APIs

```
[string]$expression = ".\UcmaRuntimeSetup.exe /quiet /norestart"
Invoke-Expression $expression
[string]$expression = ".\vcredist_x64.exe /quiet /norestart"
Invoke-Expression $expression
```

Pro Tip

Some cmdlets produce a lot of results and Exchange will cap the display at 1000. To get greater than 1000 results Use these parameters:
'-ResultSize Unlimited' OR '-ResultSize <number of objects to return>'

Prerequisite Script: <https://gallery.technet.microsoft.com/Exchange-2019-Preview-b696abcc>

Configure Exchange Service URLs

Global Names (example):

\$BaseURL = 'mail.domain.com'

\$AutoDiscoverURL = 'autodiscover.domain.com'

Outlook Web Access (OWA) – Web client version access for end-users

Set-OWAVirtualDirectory -Identity "\$Server\OWA (Default Web Site)" -InternalURL \$BaseURL/OWA -ExternalURL https://\$BaseURL/OWA

Offline Address Book – used by Outlook to download address book copy

Set-OabVirtualDirectory -Identity "\$Server\OAB (Default Web Site)" -InternalURL https://\$BaseURL/OAB -ExternalUrl https://\$BaseURL/OAB

ActiveSync – For mobile device connections

Set-ActiveSyncVirtualDirectory -Identity "\$Server\Microsoft-Server-ActiveSync (Default Web Site)" -InternalURL https://\$BaseURL/Microsoft-Server-

ActiveSync -ExternalURL https://\$BaseURL/Microsoft-Server-ActiveSync

(Exchange) Web Services (EWS)

Set-WebServicesVirtualDirectory -Identity "\$Server\EWS (Default Web Site)" -InternalURL https://\$BaseURL/EWS/Exchange.asmx -ExternalURL https://

\$BaseURL/EWS/Exchange.asmx

Exchange Control Panel (ECP)

Set-ECPVirtualDirectory -Identity "\$Server\ECP (Default Web Site)" -InternalURL https://\$BaseURL/ECP -ExternalUrl https://\$BaseURL/ECP

AutoDiscover – Used by Outlook to discover where to connect to for a mailbox as well as other configuration information

Set-ClientAccessServer \$Server -AutoDiscoverServiceInternalUri https://\$BaseURL/Autodiscover/Autodiscover.xml

MAPI – Used by Outlook to connect to mailbox

Set-MAPIVirtualDirectory -Identity "\$Server\MAPI (Default Web Site)" -InternalURL \$BaseURL/MAPI -ExternalURL https://\$BaseURL/MAPI

Additional Configuration

PageFile: Set-CIMInstance cmdlet

Event Logs: Limit-EventLog cmdlet

Server PowerManagement: Powercfg.exe

NIC PowerManagement: Registry entry
PnPCapabilities

TCP Keep Alive: Registry – 'KeepAliveTime'

TLS Capabilities (1.x): Registry

SSL 3.0 Disabled: Registry entry

Windows Core Configuration

Sconfig.Cmd:

Option 1: Domain membership

Option 2: Computer name

Option 5: Windows Updates

Option 8: Network settings

Option 9: Date and Time

Option 11: Windows Activation

Mailbox Databases

Used to store mailboxes in Exchange 2019:

List Databases:

Get-MailboxDatabase

Get-MailboxDatabase -Server EX01

Remove existing Databases:

Remove-MailboxDatabase DB01

Get-MailboxDatabase DB01 | Remove-MailboxDatabase

Move an existing Database:

Move-DatabasePath -Identity <Database> -EDBFilePath E:\Databases\DB01\Database01.edb -LogFolderPath F:\logs\DB01

Create new Databases:

New-MailboxDatabase -Name "DB01" -EdbFilePath E:\Databases\DB01\DB01.edb -Server Ex01

Change settings on existing Databases:

Set-MailboxDatabase DB01 -DeletedItemRetention 10.00:00:00

Get-Help / Commands

Find Exchange Cmdlets:

Get-ExCommands

Get Help for One Cmdlet:

Get-Help <cmdlet> <operator>

(i.e.) Get-Help Get-Mailbox -Full

Mount/Dismount Mailbox Databases

Dismount-Database DB01

Mount-Database DB01

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Distribution Groups

Distribution Groups in Exchange 2019 come in two different varieties – Dynamic and Static and can be used for groups of users or rooms.
** (Examples separated by '/') **

Distribution Groups

Disable-DistributionGroup 'Temp Workers – Satellite Office 4 – Summer 2019'

Enable-DistributionGroup 'Temp Workers – Satellite Office 1'

Get-DistributionGroup -ManagedBy Damian / Get-DistributionGroup Sales* / Get-DistributionGroup -OrganizationalUnit Users

New-DistributionGroup -Name 'Help Desk Operators' / New-DistributionGroup -Name 'Admins' -Type Security

Remove-DistributionGroup 'Help Desk Operators' / Get-DistributionGroup Test* | Remove-DistributionGroup

Set-DistributionGroup 'HR Department' -MaxReceiveSize 10MB -MailTip 'HR is limited to 10MB emails'

Dynamic Distribution Groups

Get-DynamicDistributionGroup / Get-DynamicDistributionGroup -OrganizationUnit 'Groups'

New-DynamicDistributionGroup -Name 'Chicago Office' -RecipientFilter {(RecipientType -eq 'UserMailbox') -and (Office -eq 'Chicago')}

New-DynamicDistributionGroup -Name 'Executives' -RecipientFilter {(RecipientType -eq 'UserMailbox') -and (CustomAttribute1 -eq 'Exec')}

Remove-DynamicDistributionGroup 'Chicago Office'

Set-DynamicDistributionGroup 'Executives' -ManagedBy 'Bert'

Distribution Group Membership

Add-DistributionGroupMember -Identity 'Research Group' -Member FSJurgeon

\$Members = Get-DistributionGroupMember -Identity \$Group

Remove-DistributionGroupMember 'Help Desk' -Member Damian

Get-DistributionGroup Test* | Remove-DistributionGroupMember -Member Damian

Update-DistributionGroupMember -Identity 'IT Department' -Members Sam,Donna,Frank,Dave

Full Exchange Server 2019 PowerShell Book – <https://PracticalPowershell.com>

Exchange Server Blog (EHLO): [Http://aka.ms/ehlo](http://aka.ms/ehlo)

Room Lists

Room lists are special Distribution Groups used in Exchange to organize groups of rooms for Outlook users when they search for rooms.

Create Room List based on Rooms with a particular name:

\$Members = Get-Mailbox -Filter {Name -Like "Chicago*"} | Where {\$_.RecipientTypeDetails -eq "RoomMailbox"}

New-DistributionGroup -Name "ChicagoMeetingRooms" -DisplayName "Chicago Meeting Rooms" -RoomList -Members \$Members

Create Room List based on Rooms located in one physical location:

\$Members = Get-Mailbox -Filter {Office -eq "Headquarters"} | Where {\$_.RecipientTypeDetails -eq "RoomMailbox"}

New-DistributionGroup -Name "HeadquartersMeetingRooms" -DisplayName "Headquarters Meeting Rooms" -RoomList -Members \$Members

Display all Room Lists:

Get-DistributionGroup -RecipientTypeDetails RoomList

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Helpful Tips

Use tab to autocomplete cmdlets

Tab through parameters to see all available

Check for latest module version

Read latest Microsoft Docs for Exchange

Read Exchange MVP blogs for more tips



More On PowerShell

Windows PowerShell Blog

<https://devblogs.microsoft.com/scripting/>

Script Center

technet.microsoft.com/scriptcenter

PowerShell Tips of the Week

www.practicalpowershell.com/blog

PowerShell Team – GitHub

<https://github.com/powershell>

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User Mailboxes

Mailbox Management

Connect, Disable, Enable, Get, New, Remove, Set-Mailbox

List all mailboxes in Exchange environment:

Get-Mailbox -ResultSize Unlimited

List all mailboxes in OU, Database or Server:

Get-Mailbox -Database "<database name>" / Get-Mailbox -Server <Server>

Create New Mailbox

New-Mailbox Damian -password p@ssword -UserPrincipalName damian@domain.com

Create new mailbox for existing user:

Enable-Mailbox -Identity <user>

Disable mailbox (not delete):

Disable-Mailbox -Identity Dom.Rigel -Confirm:\$False

Remove mailbox (*deletes Active Directory user object*):

Remove-Mailbox -Identity Dom.Rigel -Confirm:\$False

Other Mailbox Management Cmdlets

A variety of cmdlets and options exists to manage mailboxes. Some are listed below:

Set mailbox quotas

Set-mailbox administrator -IssueWarningQuota 8GB -ProhibitSendQuota 10GB -

ProhibitSendReceiveQuota 12GB

Set users Out of Office:

Set-MailboxAutoReplyConfiguration Administrator -AutoReplyState Enabled

Set user's Junk Mail configuration:

Set-MailboxJunkEmailConfiguration -Identity Gene.Ricks@Domain.Com -

TrustedSendersAndDomains fabrikam.com

Get-MailboxJunkEmailConfiguration -Identity Gene.Ricks@Domain.Com

Configure mailbox regional settings:

Set-MailboxRegionalConfiguration -Identity "Hans de Vries" -Language nl-nl -DateFormat

"dd-MM-yy" -LocalizeDefaultFolderName -TimeZone "W. Europe Standard Time"

Mailbox Sizes

Get-Mailbox | Get-MailboxStatistics | Ft Name,TotalItemSize

Add a retention policy to an existing mailbox

Set-Mailbox Damian -RetentionPolicy 'Corporate Retention Policy'

Manage Mailbox Folder Settings

List folder permissions (Calendar in this case):

Get-MailboxFolderPermission Damian:\Calendar

Add permissions to a folder

Add-MailboxFolderPermission 'Damian:\Contacts' -User John -AccessRights Editor

Remove an *existing* folder permission:

Add-MailboxFolderPermission 'Damian:\Calendar' -User Administrator

Modify existing Folder permissions:

Set-MailboxFolderPermission 'Damian:\Contacts' -User John -AccessRights FullAccess

Archive Mailboxes

Archive Mailbox Management

Managing Archive mailboxes uses the same cmdlets as a regular mailbox, but requires the '-Archive' switch. Sample tasks for archive mailboxes:

Find all archive mailboxes:

Get-Mailbox -Archive -ResultSize Unlimited

Find archive mailboxes in a specific database:

Get-Mailbox -Database "<database name>" -Archive

Find archive mailboxes on a specific server:

Get-Mailbox -Server <Server> -Archive

Change Settings (Location)

Set-Mailbox -Archive

Add an archive:

Enable-Mailbox Administrator -Archive / Enable-Mailbox -Identity Administrator -Archive

Remove a user's archive:

Remove-Mailbox -Archive

Get-Mailbox <user> -Archive | Remove-Mailbox

Archive Quota Settings

Set-Mailbox <user> -ArchiveQuota 10GB -ArchiveWarningQuota 9GB

Archive mailbox sizes:

Get-Mailbox -Archive | Get-MailboxStatistics | Ft Name,TotalItemSize

Move Archive Mailbox(es) to new Database

Get-Mailbox Damian -Archive | New-MoveRequest -TargetDatabase DB04

Get-Mailbox -Archive | New-MoveRequest -TargetDatabase ArchiveDB01

System Mailboxes

Exchange has a series of system mailboxes that are needed for various internal operations. Typically these are moved when a newer server version is added or if a server where the mailboxes reside will be decommissioned:

List System Mailboxes

Get-Mailbox -Arbitration

Get-Mailbox -Monitoring

Get-Mailbox -Auditlog

Get-Mailbox -AuxAuditlog

Move These mailboxes to a new server/database:

New-MoveRequest -arbitration -TargetDatabase NewDB01

Get-Mailbox -Arbitration | New-MoveRequest -TargetDatabase NewDB01

System Mailbox that contains Offline Address book :

Get-Mailbox -Arbitration | Where {\$_.PersistedCapabilities -Like '*oab*'} | Ft Name,Server

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Non-User Mailboxes

Room Mailboxes

```
Get-Mailbox -RecipientTypeDetails 'RoomMailbox'
Get-Mailbox *ConferenceRoom* -RecipientTypeDetails RoomMailbox
New-Mailbox 'Large Conference Room' -Room -ResourceCapacity 100
Remove-Mailbox 'Large conference Room'
Get-Mailbox *Chicago* -RecipientTypeDetails RoomMailbox | Remove-Mailbox
Set-Mailbox 'Medium Conference Room' -LitigationHoldEnabled $True -Capacity 55
Disable-Mailbox 'Small Conference Room'
Enable-Mailbox 'Small Conference Room'
Set-CalendarProcessing LargeConferenceRoom -AutomateProcessing AutoAccept
```

Equipment Mailboxes

```
Get-Mailbox -Filter {RecipientTypeDetails -eq "EquipmentMailbox"}
New-Mailbox Projector1 -Equipment
Set-Mailbox Projector1 -ModerationEnabled $True -ModeratedBy Damian
```

Shared Mailboxes

Shared mailboxes are special mailboxes where users have access to the mailbox, but the AD Account is disabled, preventing direct login/mailbox access.

```
Get-Mailbox -Filter {RecipientTypeDetails -eq "SharedMailbox"}).
New-Mailbox 'Suggestion Box' -Shared
Get-Mailbox 'Test*' -RecipientTypeDetails 'SharedMailbox' | Remove-Mailbox
Remove-Mailbox 'Suggestion Box'
Disable-Mailbox 'Suggestion Box'
```

Linked Mailboxes

A linked mailbox is a mailbox with a disabled user account in the Exchange environment (i.e. the resource forest).

```
$RemoteCred = Get-Credential accountforest\administrator
New-Mailbox -Name "Sjon Lont" -LinkedDomainController dc.accountforest.com -
LinkedMasterAccount accountforest\Sjon.Lont -LinkedCredential $RemoteCred
```

Full Exchange Server 2019 PowerShell Book – <https://PracticalPowershell.com>

Server Management

Exchange Certificates provide secure communications for SMTP and IIS connections.

Enable a new certificate for Exchange Services:

```
Enable-ExchangeCertificate -Thumbprint <ThumbPrint> -Services SMTP,IIS,POP
Enable-ExchangeCertificate -Server Ex01 -Thumbprint <ThumbPrint> -Services SMTP
```

Export an existing Exchange certificate for backup or copy to another server:

```
Export-ExchangeCertificate -Thumbprint
28578A7923D5696AA92FA7DF4E4FF8ED4611FAB6 -FileName "c:\cert\cert.pfx" -
BinaryEncoded -Password (ConvertTo-SecureString -String 'c3rt123' -AsPlainText -Force)
```

List certificates by server or Thumbprint:

```
Get-ExchangeCertificate -Server Ex01/Get-ExchangeCertificate -Thumbprint <ThumbPrint>
```

Import a certificate for later usage:

```
Import-ExchangeCertificate -Server $Server -FileName "\\FS01\Cert\Exchange2019.pfx" -
Password (ConvertTo-SecureString -String '3xch@ng31sb35t' -AsPlainText -Force)
```

Create a new certificate for Exchange 2019:

```
New-ExchangeCertificate
```

Remove an existing Certificate by the Thumbprint value:

```
Remove-ExchangeCertificate -Thumbprint 28578A7923D5696AA92FA7DF4E4FF8ED4611FAB6
Remove-ExchangeCertificate -Thumbprint <Thumbprint> | Remove-ExchangeCertificate
```

Database Availability Groups (DAG) are groups of Exchange 2019 servers used to provide high availability for mailbox databases.

Get Database Availability Groups:

```
$DAGServers = (Get-DatabaseAvailabilityGroup).Servers
```

```
Get-DatabaseAvailabilityGroup 'ChiDAG-01' | Fl
```

Create a new Database Availability Group:

```
New-DatabaseAvailabilityGroup -Name NYCDAG01-WitnessDirectory c:\FSW -WitnessServer FS01
```

Remove an existing Database Availability Group:

```
Remove-DatabaseAvailabilityGroup 'ChiDAG-01'
```

Restore DAG for Disaster Recovery purposes:

```
Restore-DatabaseAvailabilityGroup -Identity CorpDAG -ActiveDirectorySite NYC
```

Start a server in a DAG:

```
Start-DatabaseAvailabilityGroup CHIDAG01 -MailboxServer CHIEX01
```

Stop an exiting DAG when a server is offline:

```
Stop-DatabaseAvailabilityGroup NYCDAG01 -MailboxServer NYCEX01 -ConfigurationOnly
```

Add Exchange server to DAG

```
Add-DatabaseAvailabilityGroupServer SFCDAG01 -MailboxServer SFCEX02
```

Remove Exchange server from DAG

```
Remove-DatabaseAvailabilityGroupServer ORL -MailboxServer ORLEX01
```

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Mail Transport

Accepted Domains

Accepted Domains are domains for which Exchange will answer SMTP deliveries for. If a domain is not defined and an email delivery is attempted for that domain, it will be rejected. Defining these domains is important.

Create a new Accepted Domain:

```
New-AcceptedDomain -DomainName PracticalPowerShell.com -DomainType  
Authoritative -Name PracticalPowerShell
```

List all Accepted Domains:

```
Get-AcceptedDomain
```

Remove an existing Accepted Domain:

```
Remove-AcceptedDomain PracticalPowerShell
```

Change settings on an existing Accepted Domain:

```
Set-AcceptedDomain PracticalPowerShell -DomainType InternalRelay
```

RFC 822 Check for Postmaster Address

```
Foreach ($Domain in (Get-AcceptedDomain).DomainName) {  
$Postmaster = 'Postmaster@'+$Domain  
$Check = Get-Recipient $Postmaster -ErrorAction SilentlyContinue  
If (!$Check) {Write-Host $Postmaster" does not exist." -ForegroundColor Yellow}  
If ($Check) {Write-Host $Postmaster" does exist" -ForegroundColor Cyan} }
```

Journaling

Enable this to copy email messages to a central location.

Create a New Journaling Rule

```
New-JournalRule -Name "FinancialPlanners" -JournalEmailAddress 'FP-Journal' -Scope  
Global -Recipient 'planners@domain.com' -Enabled $True
```

Remove an existing Journal Rule:

```
Remove-JournalRule -Name "FinancialPlanners"
```

List any current Journal Rules:

```
Get-JournalRule
```

Disable an existing Journal Rule:

```
Disable-JournalRule -Name "FinancialPlanners"
```

Enable an existing Journal Rule:

```
Enable-JournalRule -Name 'FinancialPlanners'
```

Journal Rule Collections

With these cmdlets, we can export entire collections of Journal rules and import to a new Exchange Servers or for backup purposes.

Export:

```
$Output = Export-JournalRuleCollection
```

```
Set-Content -Path "C:\Temp\AllJournalRules.xml" -Value $Output.FileData -Encoding Byte
```

Import:

```
[Byte[]]$Data = Get-Content -Path "C:\Temp\AllJournalRules.xml -Encoding Byte -  
ReadCount 0
```

```
Import-JournalRuleCollection -FileData $Data
```

Connectors

Proper mail flow is important in Exchange Server 2019. There are many PowerShell cmdlets for managing these connectors and many types of connectors.

Receive Connector(s)

Receive connectors receive emails from other Exchange servers, printers, applications or remote mail servers to route emails to local mailboxes or relay to external recipients.

List Receive Connector(s) in Exchange (All or for one server):

```
Get-ReceiveConnector
```

```
Get-ReceiveConnector -Server EX01
```

Create new Receive Connector:

```
New-ReceiveConnector 'Internal Relay' -TransportRole FrontendTransport -Usage Custom  
-RemoteIPRanges 10.0.0.0/16 -Bindings 10.0.1.1:25
```

Remove existing Receive Connectors:

```
Remove-ReceiveConnector 'EX02\Internal Relay'
```

Change settings on an existing Receive Connector:

```
Set-ReceiveConnector 'EX02\Internal Relay' -ProtocolLoggingLevel Verbose
```

Send Connector(s)

By default, Exchange 2019 has no send connectors. Use these cmdlets to manage send connectors in Exchange 2019:

List Send Connectors (all or by server):

```
Get-SendConnector
```

```
Get-SendConnector 'Internet Mail'
```

Create New Send Connectors:

```
New-SendConnector 'Internet Mail' -AddressSpace '*'
```

Remove existing Send Connectors:

```
Remove-SendConnector 'Research Server'
```

Change settings on an existing Send Connector (add a domain):

```
Set-SendConnector 'Bank Partner' -AddressSpace bankdomain1.com,bankdomain2.com
```

IntraOrganization Connector(s)

IntraOrganization Connectors can connect dispersed Exchange environments across Forest boundaries (for example). Hybrid Configuration Wizard also uses this for connect Exchange 2019 to Exchange Online (do not do this manually).

List all IntraOrganization Connectors:

```
Get-IntraOrganizationConnector
```

Create new IntraOrganization Connectors

```
New-IntraOrganizationConnector -DiscoveryEndpoint https://mail.domain.com -Name  
SubsidiaryConnector -TargetAddressDomains powershellgeek.com
```

Remove an existing IntraOrganization Connector:

```
Remove-IntraOrganizationConnector -Identity SubsidiaryConnector
```

Change settings on an existing IntraOrganization Connector:

```
Set-IntraOrganizationConnector SubsidiaryConnector -Enabled $False
```

```
Set-IntraOrganizationConnector SubsidiaryConnector -TargetAddressDomains FunToys.com
```

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Mail Transport

Transport Rules

Transport Rule control mail flow and provide administrators control for certain mail types, mail flows or

List all Transport Rules:

```
Get-TransportRule
```

Create New Transport Rules [Example 1]:

```
New-TransportRule -Name "ZIP Block" -AttachmentNameMatchesPatterns zip -GenerateIncidentReport "Damian@Domain.Com" -IncidentReportOriginalMail IncludeOriginalMail -DeleteMessage $True -SetAuditSeverity Medium
```

Create New Transport Rules [Example 2]:

```
New-TransportRule -SentToScope 'NotInOrganization' -ApplyHtmlDisclaimerLocation 'Append' -ApplyHtmlDisclaimerText 'This email is for its intended recipient. If you are not the recipient, please delete this email immediately.' -ApplyHtmlDisclaimerFallbackAction 'Wrap' -Name 'Legal Required Disclaimer' -StopRuleProcessing:$false -Mode 'Enforce' -RuleErrorAction 'Ignore' -SenderAddressLocation 'Header' -ExceptIfSubjectOrBodyContainsWords 'This email is for its intended recipient'
```

Disable and existing Transport Rule:

```
Disable-TransportRule 'Test Keyword block rule'
```

Change settings on an existing Transport Rule:

```
Set-TransportRule 'Inbound HR eMail' -SetAuditSeverity Medium
```

Remove an existing Transport Rule:

```
Remove-TransportRule "ZIP Block"
```

Compliance / DLP

```
New-DlpPolicy -Name "Big Box Personal Info" -Template "Big Box PII"
```

```
New-DlpPolicy -Name "Japanese Subsidiary Finance Data" -Template "Japan Financial Data"
```

```
New-PolicyTipConfig -Name en\NotifyOnly -Value 'This message contains private information that should not be shared outside of this company.'
```

Create Document Fingerprint (for HR) and use in a Transport Rule:

```
$HRDoc1 = Get-Content "C:\Documents\HR\EmployeePII-Form.docx" -Encoding Byte
```

```
$HRDoc1_Fingerprint = New-Fingerprint -FileData $HRDoc1 -Description "Employee PII Form"
```

```
New-DataClassification -Name "HR Confidential Form 1" -Fingerprints $HRDoc1_Fingerprint -Description "Message contains confidential employee information."
```

```
Set-DataClassification -Name "HR Confidential Form 1" -Fingerprints $HRDoc1_Fingerprint
```

```
New-TransportRule -Name 'Notify: External Recipient BigBox confidential' -RejectMessageReasonText 'This file is restricted and may not be emailed outside the company.' -Mode Enforce -SentToScope NotInOrganization -MessageContainsDataClassification @{Name='HR Confidential Form 1'}
```

Full Exchange Server 2019 PowerShell Book – <https://PracticalPowershell.com>

Edge Transport Role

Edge Subscription(s)

Create the Edge Subscription XML File (run on Edge Transport Server):

```
New-EdgeSubscription -FileName "C:\Subscriptions\EdgeServerSubscription.xml"
```

Import XML on Exchange server in the AD Site:

```
New-EdgeSubscription -FileData ([byte[]]$(Get-Content -Path "C:\Subscriptions\EdgeServerSubscription.xml" -Encoding Byte -ReadCount 0)) -Site "Corp"
```

Remove Edge Subscription:

```
Remove-EdgeSubscription -Identity ChiEdge01
```

Address Rewriting

Add a new Address Rewrite Entry:

```
New-AddressRewriteEntry -Name LittleBox -InternalAddress LittleBox.Com -ExternalAddress BigCorp.Com -ExceptionList "rnd.littlebox.com,sales.littlebox.com" -OutboundOnly $True
```

```
New-AddressRewriteEntry -Name "LittleBox to BigCorp address rewrite." -InternalAddress LittleBox.com -ExternalAddress BigCorp.Com
```

Remove and existing Address Rewrite Entry:

```
Get-AddressRewriteEntry LittleBox | Remove-AddressRewriteEntry
```

Protection Configuration

Below are some sample cmdlets for inbound message hygiene:

```
Add-IPAllowListEntry -IPAddress 157.166.168.213
```

```
Add-IPAllowListProvider -Name "Spamhaus" -LookupDomain swl.spamhaus.org -AnyMatch $True
```

```
Add-ContentFilterPhrase -Phrase "Project X" -Influence GoodWord
```

```
Remove-ContentFilterPhrase -Phrase "Free credit report"
```

```
Set-ContentFilterConfig -ByPassedSenders John@TechCenter.Com
```

```
Set-ContentFilterConfig -ByPassedSenderDomains PowerShellGeek.Com  
Get-SenderIDConfig
```

```
Set-SenderFilterConfig -BlockedDomains BobsSpamService.Com -
```

```
BlankSenderBlockingEnabled $True -Action StampStatus -
```

```
RecipientBlockedSenderAction Delete
```

```
Get-RecipientFilterConfig
```

```
Set-RecipientFilterConfig -BlockedRecipients Administrator@tap.com -
```

```
BlockListEnabled $True -RecipientValidationEnabled $True
```