

# 70-347 Enabling Office 365 Services

PowerShell Reference

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## 1 Introduction

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The PowerShell commands listed in this document have been collated from various sources based on the "Skills Measured" section of the [70-347 - Enabling Office 365 Services](#) exam information as at October 2017.

Any variables possible are represented in *Purple Italics* and parameters are highlighted in *Green Italics* for ease of reading. Where possible, cmdlets are linked to the relevant Technet pages for further reading.

[www.paulturner365.co.uk](http://www.paulturner365.co.uk)

## **2 Manage Clients and End User Devices (20-25%)**

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### **2.1 Manage user-driven client deployments**

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Objective: Restrict self-provisioning of Office 365 ProPlus, Windows Store Apps and Mobile Apps, activation/revoke activation, and Office for Mac.

There are no PowerShell commands at present for this objective.

### **2.2 Manage IT deployments of Office 365 Pro-Plus**

---

Objective: Manage deployment, manage streaming updates, manage deployments using the Office deployment tool, customize deployment, manage deployment channels, create a pilot group for testing Office 365 ProPlus updates.

There are no PowerShell commands at present for this objective.

### **2.3 Setup telemetry and reporting**

---

Objective: Enable telemetry through Group Policy, set up telemetry service, interpret issues reported by telemetry dashboard, deploy telemetry agents to legacy Office clients.

There are no PowerShell commands at present for this objective.

### **2.4 Plan for Office clients**

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Objective: Configure Outlook, Skype for Business client, Office Online, and click-to-run versus MSI; implement modern authentication for Office 365 clients.

There are no PowerShell commands at present for this objective.

## 3 Provision SharePoint Online Site Collections (20-25%)

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Connect-SPOService https://<tenant-admin>.sharepoint.com

### 3.1 Configure external user sharing

---

Objective: Enable external user sharing globally, enable per-site collection, share with external users, remove external user access using the web UI and Windows PowerShell

#### 3.1.1 List External Users

Get-SPOExternalUser

#### 3.1.2 External Sharing – Tenant Level

Set-SPOTenant -SharingCapability

*Disabled/ExternalUserSharingOnly/ExternalUserAndGuestSharing*

#### 3.1.3 External Sharing - Site Collection Level

Set-SPOSite -Identity https://<FQDN of Site> -SharingCapability

*Disabled/ExternalUserSharingOnly/ExternalUserAndGuestSharing/ExistingExternalUserSharingOnly*

### 3.2 Create SharePoint Site Collection

---

Objective: Set SharePoint Online site collection administrator, set resource quota and warning level, and automatic adjustment of site collection sizes; set storage quota for site collection, and configure name and URL of site collection using the web UI and Windows PowerShell.

#### 3.2.1 Create Site Collection

New-SPOSite -URL https://<url>/<newsite> -Owner <OwnerName> -StorageQuota <x MB>

#### 3.2.2 Set Resource Quotas

Set-SPOSite -Identity https://<url> -ResourceQuota <Integer> -ResourceQuotaWarningLevel <Integer>

#### 3.2.3 Set Storage Quotas

Set-SPOSite - Identity https://<url> -StorageQuota <x MB> -StorageQuotaWarningLevel <x MB>

### 3.3 Plan a Collaboration Solution

---

Objective: Configure Yammer.com; coauthoring, Office 365 groups; access files across multiple client devices; migrate files to OneDrive for Business; implement enterprise eDiscovery using the web UI and Windows PowerShell; implement Office 365 video; use Delve for collaboration; configure Data Loss Prevention.

### 3.3.1 Creating Office 365 Groups

New-UnifiedGroup -AccessType *Public/Private* -DisplayName "*<DisplayName>*"

### 3.3.2 Modifying Office 365 Groups

Set-UnifiedGroup -Identity "*<Group Name>*" -AccessType *Public/Private*

### 3.3.3 Create eDiscovery Case

New-ComplianceCase -Name "*<Case Name>*" -Description "*<Case Description>*"

### 3.3.4 Create a Case Hold Policy

New-CaseHoldPolicy -Name "*<Associated eDiscovery Case Name>*" -Case "*<Case Name>*" -  
ExchangeLocation "*<MailBox Name>*" -SharePointLocation "*<SharePoint URL>*" -Enabled  
*\$true/\$false*

### 3.3.5 Create a Case Hold Rule

New-CaseHoldRule -Name "*<Case Hold Rule Name>*" -Policy "*<Case Name>*" -ContentDateFrom  
"*<dd/mm/yyyy>*" -ContentDateTo "*<dd/mm/yyyy>*" -ContentMatchQuery "*<Search String>*" -  
Disabled *\$true/\$false*

## 4 Configure Exchange Online and Skype for Business Online for end users (20-25%)

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Connect-MSOLExchange

### 4.1 Configure Additional Email Addresses for Users

---

Objective: Change default/reply to email address, bulk add/remove for new domain, manage secondary email aliases and SIP addresses using the web UI and Windows PowerShell

#### 4.1.1 Additional Email Addresses

Set-Mailbox <User> -EmailAddress SMTP:<PrimaryAddress>,<AdditionalAddress>

#### 4.1.2 Add SIP Address

\$Mailbox = Get-Mailbox <User>

\$Mailbox.EmailAddresses += "eum:<user>@<Domain.com>;phone-context=<user>.<2341234-dfer234-fwsef-231df-q23e12323>"

Set-Mailbox <user> -EmailAddress \$Mailbox.EmailAddress

#### 4.1.3 Bulk Add New Domain

\$users = Get-Mailbox

foreach (\$user in \$users)

{ \$user.emailaddress.Add("(\$user.alias)@<domain.com>") }

\$users | %{ Set-Mailbox \$\_.Identity -EmailAddresses \$\_.EmailAddresses }

#### 4.1.4 Bulk Remove New Domain

\$users = Get-Mailbox

foreach (\$user in \$users)

{ \$user.emailaddress.Remove("(\$user.alias)@<domain.com>") }

\$users | %{ Set-Mailbox \$\_.Identity -EmailAddresses \$\_.EmailAddresses }

### 4.2 Create and Manage External Contacts, resources and groups

---

Objective: Create and manage resource mailboxes, create shared mailboxes, create external contacts, assign additional email address to contacts, create and manage distribution list and members, delegate permissions using the web UI and Windows PowerShell

#### 4.2.1 Create Resource Mailboxes

New-Mailbox -Name <Name> -DisplayName "<displayName>" -Room/Equipment

#### 4.2.2 Shared Mailboxes

New-Mailbox -Shared -Name <Name> -Displayname <displayname> -Alias <alias> | Set-Mailbox -GrantSendOnBehalfTo <Group> | Add-MailboxPermission -user <group> -AccessRights



*FullAccess/ExternalAccount/Deleteltem/ReadPermission/ChangePermission/ChangeOwner - InheritanceType All*

#### 4.2.3 Create External Contacts

New-MailContact -Name *<name>* -ExternalEmailAddress *<user@domain.com>*

#### 4.2.4 Assign Additional Email Addresses to Contacts

Set-MailContact -Identity *<name>* -EmailAddress  
SMTP:*<user@domain.com>*,[user2@domain.com](mailto:user2@domain.com)

#### 4.2.5 Create and Manage Distribution Lists

New-DistributionGroup -Name "*<name>*" -Alias *<alias>* -MemberJoinRestriction  
*Open/Closed/ApprovalRequired*

Set-DistributionGroup -Identity *<name>* -MemberJoinRestriction *Open/Closed/ApprovalRequired*

#### 4.2.6 Creating and Manage Distribution Groups

New-DistributionGroup -Name "*<Name>*" -RoomList  
or

Set-DistributionGroup -Name "*<Name>*" -RoomList

#### 4.2.7 Permissions

*Shared Mailboxes "Send on behalf" can only be updated by PowerShell*

Set-Mailbox *<name>* -GrantSendOnBehalfTo *<group>* | Add-MailboxPermission -user *<group>* -  
AccessRights FullAccess

Add-RecipientPermission *<group\_name>* -AccessRights Sendas -Trustee *<user>*

Set-CalendarProcessing *<room>* -AutomateProcessing None

Set-CalendarProcessing *<room>* -ResourceDelegates "*<user>*"

### 4.3 Configure Personal Archives

---

Objective: Enable personal archive for mailboxes, create custom retention policy, create retention tags, apply retention policy to mailboxes, review and modify default retention policy using the web UI and Windows PowerShell.

#### 4.3.1 Create a Personal Archive for Mailboxes

Enable-Mailbox *<user@domain.com>* -Archive

Disable-Mailbox *<user@domain.com>* -Archive

### 4.3.2 Create Custom Retention Policies

`New-RetentionPolicy "<policy name>"`

`New-RetentionPolicy "<policy name>" -RetentionPolicyTagLinks "<Test1>", "<Test2>"`

### 4.3.3 Create Custom Retention Policy Tags

*Default 2 year move to archive*

`New-RetentionPolicyTag "<TagName>" -Type All/DeletedItems/RecoverableItems/SentItems* -RetentionEnabled $true/$false -AgeLimitforRetention <x days> -RetentionAction DeleteAndAllowRecovery/PermanentlyDelete/MovetoArchive`

\*Other options are available

### 4.3.4 Apply Retention Policy to Mailboxes

`Set-Mailbox <user@domain.com> -RetentionPolicy "<policy name>"`

`Get-Mailbox -ResultSize Unlimited | Set-Mailbox -RetentionPolicy "<policy name>"`

## 4.4 Configure Skype for Business Online End-User Communication Settings

---

Objective: Turning off non-archived features for compliance, configure presence, configure available services, and configure per-user external communication using the web UI and Windows PowerShell.

## 5 Plan for Exchange Online and Skype for Business Online (20-25%)

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### 5.1 Manage Anti-Malware and Anti-Spam Policies

---

Objective: Release quarantine, configure spam settings, configure lists, and configure notifications using the web UI and Windows PowerShell; implement Advanced Threat Protection.

#### 5.1.1 Release Quarantine

```
Get-QuarantineMessage -MessageID "<MSGID>" | Release-QuarantineMessage -User <user@domain.com>
```

#### 5.1.2 Spam Confidence Levels

```
Set-HostedContentFilterPolicy "Default" -IncreaseScoreWithBizOrInfoUrls On/Off/Test -IncreaseScoreWithImageLinks On/Off/Test -IncreaseScoreWithNUmericIPs On/Off/Test -IncreaseScoreWithRedirectToOtherPort On/Off/Test
```

#### 5.1.3 Configure Lists

```
Set-HostedContentFilterPolicy "Default" -AllowedSenders "<user1@domain.com>,<user2@domain.com>"
```

#### 5.1.4 Configure Notifications

```
Set-HostedContentFilterPolicy "Default" -EnableEndUserSpamNotification $true/$false
```

##### 5.1.4.1 Allow List

```
Set-HostedConnectionFilterPolicy "Default" -IPAllowList@{Add="<192.168.0.1>","<192.168.1.1/18>";Remove="<192.168.0.2>"}
```

##### 5.1.4.2 Block List

```
Set-HostedConnectionFilterPolicy "Default" -IPBlockList@{Add="<192.168.0.1>","<192.168.1.1/18>";Remove="<192.168.0.2>"}
```

### 5.2 Recommend a Mailbox Migration Strategy

---

Objective: Select the appropriate migration method from Remote move, Staged, Cutover, or IMAP using the web UI and Windows PowerShell; use the import service for data migration.

#### 5.2.1 IMAP Migration

```
Test-MigrationServerAvailability -IMAP -RemoteServer <FQDN of IMAP Server> -Port 143/993 -Security None/SSL/TLS
```

```
New-MigrationEndpoint -IMAP -Name IMAPEndpoint -RemoteServer <imap.domain.com> -Port 993 -Security SSL
```

```
New-MigrationBatch -Name IMAP -SourceEndpoint IMAPEndpoint -CSVData ([System.IO.File]::ReadAllBytes ("<C:\<Path>\domain_com.csv>")) -AutoStart
```

### 5.3 Plan for Exchange Online

---

Objective: Plan client requirements for archive; manage Office 365 Protection Security and Compliance Center; enable Legal hold; configure OWA access; configure ActiveSync and Mobile Device Management using the web UI and Windows PowerShell; configure Data Loss Prevention; configure Advanced Threat Protection (ATP); customize malware and spam protection; enable external mail flow topologies for partners, applications and internal devices.

#### 5.3.1 Create Data Loss Prevention (DLP) Policy

```
New-DlpCompliancePolicy -Name "<Policy Name>" -ExchangeLocation All -SharePointLocation "<SharePoint URLs>" -OneDriveLocation "<OneDrive URLs>" -Mode Enable/Disable/TestWithNotifications/TestWithoutNotifications
```

#### 5.3.2 Create Compliance Rule

```
New-DlpComplianceRule -Name "<Rule Name>" -Policy "<Policy Name>" -AccessScope NotInOrganization/InOrganisation/None -BlockAccess $true/$false -ContentPropertyContainsWords "<Property>:<Value1>,<Value2>" -Disabled $true/$false
```

### 5.4 Manage Skype for Business

---

Objective: Enable external access; manage domains; manage Skype consumer connectivity; customize meeting invitations; disable push notification service using the web UI and Windows PowerShell; configure Cloud PBX, PSTN Conferencing, and Skype Meeting Broadcast.

#### 5.4.1 Connecting to a Session

```
$Credential = Get-Credential  
$Session = New-CSOnlineSession -Credential $Credential  
Import-PSSession $Session
```

#### 5.4.2 Get Tenant ID

```
Get-CsTenant | ft TenantID
```

#### 5.4.3 Enable External Access

```
Set-CsExternalAccessPolicy -Identity <PolicyName> -EnableOutSideAccess $true/$false
```

## 5.4.4 Manage Domains

### 5.4.4.1 Add Domain to AllowList

Get-CsTenant | ft TenantID

\$Var = New-CsEdgeDomainPattern -Domain "<FQDN>"

\$AllowList = New-CsEdgeAllowList -AllowedDomain \$Var

Set-CsTenantFederationConfiguration - Tenant "<TenantID>" -AllowedDomains \$AllowList

### 5.4.4.2 Remove Domains from AllowList

\$AllowList = New-CsEdgeAllowList -AllowedDomain \$null

Set-CsTenantFederationConfiguration -Tenant "<TenantID>" -AllowedDomains \$AllowList

### 5.4.4.3 View Domains

Get-CsTenantFederationConfiguration | FL BlockedDomains

## 5.4.5 Manage Skype Consumer Connectivity

Set-CsExternalAccessPolicy -Identity <PolicyName> -EnablePublicCloudAccess *\$true/\$false*

## 5.4.6 Disable Push Notifications

*On by default*

Set-CsPushNotificationConfiguration -EnabledApplePushNotificationService *\$false/\$true* -

EnabledMicrosoftPushNotificationService *\$false/\$true*