**This is a migration guide for Exchange 2007 or 2010**

**Step 1. Prepare for the migration & install Exchange**

**A. Prepare for the migration**

If you haven’t already, sign up for an Office 365 account online and verify your domain. Also: to avoid any disasters you should take the following precautions:

* Have a good backup before making any changes–Active Directory as well as Exchange
* Ensure your source server has the latest service packs / updates
* Run Best Practices Analyzer to identify potential issues with the existing configuration
* Review the steps in advance and communicate the plan to stakeholders / end users

Planning and prevention will always keep you one step ahead and you will be able to avoid many issues, and recover in case of unforeseen problems.

**B. Install Exchange 2013 or 2016**

1. On a new virtual machine, download the latest cumulative update, extract it on the server, and install Exchange 2013, or Exchange 2016, accepting defaults. Note that you may also need to download and install this prerequisite. Reboot after all installations are completed.

2. You will want to rekey your existing UCC certificate to include the name “hybrid.company.com” as well as the “autodiscover” and “mail” namespaces. Export and import this certificate so that both servers have the same certificate. If there are firewall rules mae sure they are configured for (25, 443), and a DNS (A) record for “hybrid.company.com,” pointing to the new hybrid Exchange server.

3. Update the SCP to autodiscover.company.com, from PowerShell:

$ServerName= “EXCHANGE2013”

Set-ClientAccessServer -Identity $ServerName -AutoDiscoverServiceInternalURI https://autodiscover.company.com/Autodiscover/Autodiscover.xml

4. Set the virtual directories on the new hybrid Exchange server to use “hybrid.company.com,” and enable Basic authentication on the EWS directory:

$ServerName = “EXCHANGE2013”

$HybridFQDN = “mail.company.com” or “hybrid.company.com”

Get-OWAVirtualDirectory -Server $ServerName | Set-OWAVirtualDirectory -InternalURL https://$($HybridFQDN)/owa -ExternalURL “https://$($HybridFQDN)/owa”

Get-ECPVirtualDirectory -Server $ServerName | Set-ECPVirtualDirectory -InternalURL “https://$($HybridFQDN)/ecp” -ExternalURL “https://$($HybridFQDN)/ecp”

Get-OABVirtualDirectory -Server $ServerName | Set-OABVirtualDirectory -InternalURL “https://$($HybridFQDN)/oab” -ExternalURL “https://$($HybridFQDN)/oab”

Get-ActiveSyncVirtualDirectory -Server $ServerName | Set-ActiveSyncVirtualDirectory -InternalURL https://$($HybridFQDN)/Microsoft-Server-ActiveSync -ExternalURL “https://$($HybridFQDN)/Microsoft-Server-ActiveSync”

Get-WebServicesVirtualDirectory -Server $ServerName | Set-WebServicesVirtualDirectory -InternalURL “https://$($HybridFQDN)/EWS/Exchange.asmx” -ExternalURL https://$($HybridFQDN)/EWS/Exchange.asmx -BasicAuthentication $true

5. Set OutlookAnywhere to use the “hybrid.company.com” name, also. I use Basic authentication in this example (works with most firewalls/proxy settings).

Get-OutlookAnywhere -Server $ServerName | Set-OutlookAnywhere -ExternalHostname $HybridFQDN -InternalHostname $HybridFQDN -ExternalClientsRequireSsl $true -InternalClientsRequireSsl $true -DefaultAuthenticationMethod Basic

6. Configure an Internal Relay SMTP connector by navigating to mail flow > receive connectors. Create a new connector on the hybrid server. You need to select Frontend Transport & Custom, and step through the rest of the wizard. Secure externally (by IP address). Include IP addresses that were on the old relay connector. You should also edit the connector and make sure the security is set to include Anonymous permission groups. Devices or apps that relay will also need to be updated to point at the new server.

7. Assuming that you have already purchased your Office 365 Enterprise License, get a hybrid license key from Microsoft, and activate the server.

**Step 2. Configure Directory Synchronization**

A Remote Move migration requires that you enable Directory Synchronization. This will sync all of your existing on-premise users into Azure Active Directory for your Office 365 tenant so that your users will be able to keep the same credentials in the cloud as they have on-premise.

**A. Set UPN suffix to match the email domain**

Before you proceed to install the Azure AD Connect utility, just be sure that your on-premises users have their UPN suffix set to match the email domain name (e.g. company.com instead of company.local). In Active Directory Users & Computers, check the Properties / Account tab on your users:

If you do not see an option for the email domain name, then you might have to add it from Active Directory Domains & Trusts console. Right-click Active Directory Domains and Trusts, and select Properties. Enter your email domain name and click Add. Click OK.

It’s best to that the naming convention of the user accounts should also match the Email addresses (like. Ljenkins@domain.com vs. domain\LeroyJenkins). If this type of change is required in your environment, it may affect how users log on to Windows in the existing domain.

**B. Install Azure AD Connect**

Download and install Azure AD Connect on a member server in your domain. As you complete the wizard, make sure to select the option for Hybrid Exchange, so that it will export the appropriate attributes to Azure Active Directory. Sync your users and make sure they show up in your portal. Do not assign Office 365 / Exchange Online licenses to your users yet.

**Step 3. Create the hybrid connection**

**A. Run the Hybrid Configuration Wizard**

Download this tool from Microsoft, and run it on the local hybrid Exchange server.

* if you are running a shortcut to the EAC and are configuring the Hybrid connection from there, you should update the shortcut to use the Internet domain name instead of “https://localhost.
* This wizard will ask for your local and remote administrative credentials for your on-premises domain and the Office 365 portal.
* Be sure to select the Deliver Internet-bound messages directly option, unless you have compliance reasons that require you to relay all mail through the on-premises server throughout the migration.
* Complete the wizard.

Recommended troubleshooting steps

* reboot the server
* ensure you are up to date with patches
* disable SPAM filters and other 3rd-party security software
* double-check your firewall settings
* If your network firewall is locked down you may want to open it up from the Microsoft IPs.

**Step 4: Create Remote Move migration batch**

Now that you’re ready to move, you will need to create a migration endpoint. Go to the Exchange admin center in the Office 365 Admin portal. Navigate to recipients > migration and find the 3 little dots (under Click to view the status for all current migration batches)

* Go through the wizard to define your on-premises Exchange server as the migration endpoint. Use the Exchange Remote option because this is a hybrid deployment.
* After the endpoint is set, choose the plus symbol and select Migrate to Exchange Online from the drop down.
* Select Remote Move migration and step through the rest of the wizard to select your users and begin moving data.
* Let data finish syncing, with the option to finalize/complete the migration batch manually when you’re ready

**Step 5: Migrate Public Folders**

If you have Public Folders to migrate, you need to create a Public Folder mailbox in Exchange Online. Go to Exchange admin center > public folders > public folder mailboxes.

To migrating Public Folders, You have a couple of options. The size of your organization and exchange environment will pretty much help you decide on which method to use.

* The easiest method probably a quick PST export/import process using an Outlook client and manually reset permissions after the PST is imported
* Microsoft recommends the batch method but the batch migration process is a bit more complex. There is also powershell script you can download from the powershell guys in the Microsoft repository that is based on this batch migration process.

**Step 6. Finalize the migration batch & activate mailboxes**

If you were able to use the migration batch successfully, you will need to go back to the Exchange Admin Center in Office 365, and complete it. Go to recipients > migration. Select your batches and move the status to Complete.

If you haven’t activated your users’ licenses yet, go back to the Office 365 Admin Center, select your users, and click Edit product licenses to apply the Office 365 / Exchange Online licensing to activate the cloud mailboxes.

**Step 7. Complete the Office 365 Setup & cut-over DNS**

After you have finalized the migration batch, you are ready to finish up the Office 365 setup process you started earlier by verifying your domain. Go to the Office 365 Admin center > Settings > Domains to complete your set up. You will need to enter additional DNS records with your domain registrar or service provider.

After you have added the records, just follow the link at the bottom of this page that says, Okay, I’ve added the records. Now mail will no longer be delivered to your on-premises Exchange server, and you are done.

**Step 8. Post-migration tasks**

The best part about using hybrid/remote move migration is that users will not be required to setup a new Outlook profile! They will just get a prompt reopen Outlook. When they do this, they will be prompted for credentials. They should enter use their email address as the username with password, and choose to remember the password.

Other things that may come up:

1. Reconfiguring mobile devices - users will be required to reconfigure their mobile devices. Assuming you have autodiscover configured properly, it should be as simple as removing the email account on their mobile devices and adding it back in.
2. (Optional) Adjust SPF record for SMTP relay - If you want to continue using your local Exchange server for SMTP relay (scan to email, line of business apps that send email, etc.), just make sure your SPF record includes both the local external IP, as well as Office 365, It should look something like this:

v=spf1 ip4:[ExternalIPAddress] include:spf.protection.outlook.com -all

1. (Optional) Remove Exchange - if you plan to remove your legacy Exchange server now that the migration is completed, there are additional steps to follow, which involves moving the SMTP relay service, and temporarily disabling Directory Synchronization during the Exchange uninstall process so you should have a plan for this.