Movin’ On Up: Migrating Exchange to Office 365

Presented by: Ronny Loew & Stanley Louissaint
Speakers

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Agenda

• Business Case for 365
• Strategizing for the Move
• Migration Options
• Third Party Tools
• Outsourcing
• Training Resources
• Migration Tips
Business Case for 365

• Email is a commodity and Microsoft Exchange, while the best, is a beast.
• Adding Users
• Licensing
• Features
  • Tools, plugins and add-ons
  • Scalability
  • Disaster Recovery
  • OneDrive
  • Skype for Business
  • SharePoint
  • Data Loss Prevention (DLP)
  • Multi-Factor Authentication (MFA)
  • Mobile Device Management (MDM)
• Evaluating numerous options, vendors, compatibilities and pricing, takes time – Why not go Turn Key?!
Business Case for 365

• Data Centers for Exchange Online

• Boydton, VA
• Cheyenne, WY
• Chicago, IL
• Des Moines, IA
• Quincy, WA
• San Antonio, TX
# Business Case for 365

<table>
<thead>
<tr>
<th>Plan</th>
<th>Price</th>
<th>User/Month</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$12.00</strong> user/month</td>
<td><strong>Office 365 ProPlus</strong></td>
<td>(annual commitment)</td>
<td>Office applications plus cloud file-storage and sharing. Business email not included.</td>
</tr>
<tr>
<td><strong>$8.00</strong> user/month</td>
<td><strong>Office 365 Enterprise E1</strong></td>
<td>(annual commitment)</td>
<td>Business services—email, file storage and sharing, Office Online, meetings and IM, and more. Office applications not included.</td>
</tr>
<tr>
<td><strong>$20.00</strong> user/month</td>
<td><strong>Office 365 Enterprise E3</strong></td>
<td>(annual commitment)</td>
<td>All the features of Office 365 ProPlus and Office 365 Enterprise E1 plus security and compliance tools, such as legal hold, data loss prevention, and more.</td>
</tr>
<tr>
<td><strong>$35.00</strong> user/month</td>
<td><strong>Office 365 Enterprise E5</strong></td>
<td>(annual commitment)</td>
<td>All the features of Office 365 Enterprise E3 plus advanced security, analytics, and voice capabilities.</td>
</tr>
</tbody>
</table>

**Office applications included**

**Office applications (Not included)**
Strategizing for the move

Plan Ahead
VS
Emergency Recovery
Strategizing for the move

• Compatibility spans only a few versions
• Remaining life on Exchange Server
• Version of Exchange
• Server OS
• Windows OS
• Office Versions
• Office 365 works best with Office 2013 and 2016.
• Older versions (2007 & 2010) may work with limited functionality.
Strategizing for the move

• Integrations & Version issues
• Caution on integrations and older version of Practice Management, Document Management, Case Management, Time Billing & Accounting, Outlook plugins.
• May prohibit or dictate your ability to upgrade
• Know these compatibility issues in advance
• Project may need to include other necessary software upgrades
• Current versions should be compatible but better safe than sorry
Strategizing for the move

• No Time to Plan?
• All the questions will still need answers to avoid additional negative outcomes.
• Overlooking them may make a bad situation worse.
Migration Options

• Requirements

• Microsoft Tools
  • Cutover Migration
  • Staged Migration
  • Hybrid Migration
  • IMAP Migration

• Third Party Tools

• Outsourcing
**Cutover Migration**

**Pros**
- Easiest
- Active Directory Synchronization not required
- Exchange 2003 onward
- Up to 2,000 mailboxes but best for 150 mailboxes or less

**Cons**
- All users migrated in single batch
- Downtime
- All clients must be reconfigured
- Delay in mail flow
- Items not migrated
  - Hidden Mailboxes
  - Distribution Lists
  - Mail Contacts
  - Dynamic Distribution Groups
  - Public Folders
Cutover Migration

• O365 Users are created automatically
• AD Connect cannot be enabled before the migration is completed
  • Used to sync your local AD & Office 365 directories
  • Needed for Single Sign-On (SSO)
Cutover Migration

• Step 1
  • Update on-premise Exchange Server to the latest cumulative update/update rollup for the deployed version

• Step 2
  • Verify Multiple Domain (UCC/SAN) Secure Socket Layer (SSL) Certificate from a trusted Certificate Authority (CA)
  • Secure Outlook Anywhere & Autodiscover Services Addresses w/ certificate
Cutover Migration

• Step 3
  • Give Administrative Credentials Full Mailbox Access on Exchange Server
    • Start Exchange PowerShell in Administrative Mode
    • Run the following commands
      • Get-RoleGroup "Organization Management" | select members
      • Add-RoleGroupMember "Organization Management" -Member "account name"
      • Get-Mailbox -ResultSize unlimited -Filter {{RecipientTypeDetails -eq 'UserMailbox'} -and (Alias -ne 'Admin')} | Add-MailboxPermission -User admin@yourdomain.com -AccessRights fullaccess -InheritanceType all -AutoMapping:$false
Cutover Migration

• Step 4
  • Disable Unified Messaging, if applicable
    • Start Exchange PowerShell in Administrative Mode
    • Run the following commands
      • Disable-UMServer -Identity “YourUMServer” – Immediate $true

• Time to move into the O365 Admin Console
  • [http://portal.office.com](http://portal.office.com)
Cutover Migration

• Step 5
  • Verify Your Domain in O365
Cutover Migration

• Step 6
  • Create Migration Endpoint
    • Enter the Exchange Admin Center
    • Recipients -> Migration -> ... -> Migration Endpoints
Cutover Migration

New migration endpoint
Select the migration endpoint type

The type of migration endpoint to create depends on the migration type you use to migrate mailboxes. Select Exchange Remote for migrating mailboxes to and from Exchange Online in a hybrid deployment. Select Outlook Anywhere for migrating mailboxes to Exchange Online using a cutover or staged Exchange migration. Select IMAP for IMAP migrations. Learn more

- Exchange Remote
- Outlook Anywhere
- IMAP

New migration endpoint
Confirm the migration endpoint

The connection settings for this migration batch have been automatically selected based on the migration endpoints created in your organization. Learn more

⚠️ We couldn’t detect your server settings. Please enter them. The migration service failed to detect the migration endpoint using the Autodiscover service. Consider using the Exchange Remote Connectivity Analyzer (https://testexchangeconnectivity.com) to diagnose the connectivity issues.

*Exchange server:
ExchangeServer.yourdomain.com

*RPC proxy server:
ExternalURL.yourdomain.com

Authentication:
- Basic

Mailbox Permission:
- Domain Admin

Skip verification

Next  Cancel

Back  Next  Cancel
Cutover Migration

new migration endpoint
Enter general information

Enter the value for the general information for the migration endpoint that'll be applied to the associated migrations. Learn more

*Migration endpoint name:
TestMigration

Maximum concurrent migrations:
100

Maximum concurrent incremental syncs:
50

Back  new  Cancel
Cutover Migration

• Step 7
  • Post Migration Tasks
    • Convert All On-Premises Mailboxes to Mail-Enabled Users
    • Want Single Sign-On (SSO)?
      • Install AD Connect on your Local Active Directory Server
    • Redirect MX DNS Records to O365
    • Redirect Autodiscover DNS Records to O365
    • Delete Migration Batch
Staged Migration

Pro

• Migrate in batches
• 2,000+ mailboxes
• Co-existence w/ on-site Exchange

Con

• Can’t use Exchange 2010/2013
• AD Connect must be enabled
Staged Migration

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  • Update on-premise Exchange Server to the latest cumulative update/update rollup for the deployed version

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Staged Migration

- Step 5
  - Verify Your Domain in O365
Staged Migration

• Step 6
  • Create CSV File
  • Columns
    • EmailAddress
    • Password
    • ForceChangePassword

```
EmailAddress,Password,ForceChangePassword
User@testdomain.com,Testing123!,TRUE
User1@testdomain.com,Testing123!,TRUE
User2@testdomain.com,Testing123!,TRUE
```
Staged Migration

• Step 7
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    • Enter the Exchange Admin Center
    • Recipients -> Migration -> ... -> Migration Endpoints
**Staged Migration**

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Maximum concurrent migrations:

100

Maximum concurrent incremental syncs:

50

Back  new  Cancel
Staged Migration

new migration batch
Select the users
Use a CSV file to specify the mailboxes you'd like to migrate. Learn more
Specify the users with a CSV file

- Allow unknown columns in the CSV file

Choose File No file chosen

0 mailboxes to migrate
Staged Migration

• Step 8
  • Post Migration Tasks
    • Convert On-Premises Mailboxes to Mail-Enabled Users
    • Repeat Migration steps till all users have been moved
    • Redirect MX DNS Records to O365
    • Redirect Autodiscover DNS Records to O365
    • Delete Migration Batch
    • Assign O365 licenses to users
    • Decommission On-site Exchange Server
Hybrid Migration

Pros
• Single Administrative Console
• Move Mailboxes to O365 & From O365
• True Coexistence w/ on-site Exchange
• Can Migrate All Data, Resource Groups, Shared, Distribution Groups & User Mailboxes
• Unified Global Address List
• Unified Autodiscover

Cons
• Complexity
• Can’t use Exchange 2003 or 2007
• AD Connect must be enabled
Hybrid Migration

• Step 1
  • Update on-premise Exchange Server to the latest cumulative update/update rollup for the deployed version

• Step 2
  • Verify Multiple Domain (UCC/SAN) Secure Socket Layer (SSL) Certificate from a trusted Certificate Authority (CA)
  • Secure Outlook Anywhere & Autodiscover Services Addresses w/ certificate
Hybrid Migration

• Time to move into the O365 Admin Console
  • [http://portal.office.com](http://portal.office.com)
Hybrid Migration

• Step 3
  • Verify Your Domain in O365
Hybrid Migration

• Step 4
  • Choose Setup -> Data Migration
Hybrid Migration

• Step 5
  • Choose Exchange
  • Download Application
Hybrid Migration

- Step 6
  - Launch Application
  - Hit Next
Hybrid Migration

• Step 7
  • Exchange Server should be detected, if not, specify
  • Hit Next
Hybrid Migration

• Step 8
  • Use current credentials or change to another administrative account
  • Sign-in to your O365 tenant
Hybrid Migration

• Step 9
  • Validate credentials
  • Succeeded = 2 thumbs up
Hybrid Migration

• Step 10
  • Select Minimal Hybrid Configuration which is recommended
Hybrid Migration

• Step 11
  • Install Azure AD Connect

• Step 12
  • Assign O365 licenses to Users

• Step 13
  • Begin User Migration
  • Users -> Data migration -> Exchange -> Start migration
Third Party Tools

• BitTitan MigrationWiz
  • Migrate e-mails from any platform to any platform, including Microsoft Office 365.
  • Data centers are compliant with ISO/IEC 27001/27002:2013, SOC 1 Type 2 and SOC 2 Type 2, PCI DSS Level 1, FISMA, HIPAA/HITECH, CJIS, CSA CCM, FERPA and others.
  • Per user pricing model with a cost of approximately $12 per user and flat rate pricing of $114 for public folders.
Third Party Tools

• SkyKick
  • Owned by Microsoft
  • “One stop shop” solution - Exchange migration & Office 365 software workstations
  • Roughly $50 per user to license
  • Purchased through a reseller.
Third Party Tools

• CodeTwo Office 365 Migration
  • No PowerShell knowledge is needed
  • Extensive list of reporting capabilities built in.
  • Ability to group mailboxes into smaller migration jobs.
  • Minimum of 10 licenses - cost of approximately $12 per user.
Outsourcing

- Reasons you may not want to tackle this project yourself.
  - Resources and skillset.
  - Time.
  - Downtime.
  - Budget $125-$200 per mailbox.
Resources

• User training - [https://support.office.com/office-training-center](https://support.office.com/office-training-center)
• Outlook Web Access - [https://outlook.office365.com/owa/](https://outlook.office365.com/owa/)
• Default Mail Client Set Up
  • Android - [https://support.office.com/en-us/article/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c#ID0EAACAAA=Gmail_app](https://support.office.com/en-us/article/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c#ID0EAACAAA=Gmail_app)
• Native Client vs Outlook for Mobile
  • There are some mobile devices that will not pick up auto-discover through their native email clients. For those situations, Microsoft recommends downloading Outlook for Mobile. Many user forums also favor the Outlook app for functionality and consistency across devices and platforms.
Tips, warnings and other fine-tuning

• **Scan to email**
  - Update your multi-function copiers to scan to the new email server.

• **Voicemail to Email**
  - If you have an on-site voicemail system that sends voicemails to email, you may need to create a user account for the system to send messages.

• **Outlook Add-Ins**
  - If you are upgrading Outlook, ensure you have links and licensing to install any user required plugins/Add ins.

• **Current Software Sync/Integrations**
  - During the upgrade, you may want to have a certified independent consultant or software company helpdesk available to assist in reconfiguring integrations.

• **Auto Launch**
  - When software is integrated, be aware of which program should launch first (Outlook or your business software) and possibly trigger an auto launch of the other in order to ensure functionality.
**Tips, warnings and other fine-tuning**

- **3rd Party Scheduling**
  - Configure and test that your 3rd party scheduling software is talking to Exchange or Outlook and confirm time zone settings are in line. Plan ahead so no duplicates are created.

- **Migrate Spam Filter Settings**
  - Users will not want to start from scratch with their spam settings.

- **Mobile Device Management**
  - There are optional MDM services available through Office 365 to evaluate and activate. This often requires a firm to roll out a cyberpolicy with specifics on mobile device access.

- **Public Folders**
  - Microsoft has public folders set up with certain limits on size per folder. They are set up as mailboxes on the admin side and you have to make sure folders are spread out correctly @ 20 GB max per folder. If more than 20GB is required, then add more folders. This is all merged on the front end – seamless to the user. Migration of Public folders is regularly a special project that Microsoft will work on with you.
Tips, warnings and other fine-tuning

• Non-Exchange Items Manual Migration
  • Profile preferences, views & settings
  • Auto Completes
  • Categories – colors are supposed to come over but not consistent. Depends on version they are coming from.
  • Rules
  • Signatures
  • Spell check & libraries

• Version Conflicts
  • Possible version conflicts between O365 email and Outlook versions. Searching capabilities impacted – always best to upgrade to Outlook 2016
Tips, warnings and other fine-tuning

• **AD Sync Software**
  • Many things need to be hard set in AD. Blocks off a lot of admin interface in O365. Makes it a multi-step process. There are federation options.

• **Custom Search Folders & ActiveSync**
  • Custom search folders do not always sync. Users may need to manually click on properties and save for the client to update contents of the search folder.
Summary

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• Migration Options
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Reserve the dates!

TECHSHOW 2019: February 27 – March 2, 2019