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Exchange Hybrid-
The Unspoken Limitations That You Should Know

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Brief Review: Exchange Hybrid
What Is Exchange Hybrid?

**Synchronized GAL**
Users on-premises and in the cloud see different GALs with (hopefully) the same content.

**Cross-Premises Free/Busy Calendaring**
The ability to see availability cross-premises.

**SMTP Routing with “Special” Connectors**
Messages sent cross-premises appear as “internal” despite being between two Exchange orgs.

**Remote Mailbox Moves with MRS Proxy**
Ability to move mailboxes to 95% and then suspend; most seamless user conversion experience.
What Exchange Hybrid Isn’t...

A Server
The “hybrid server” is a bit of a misnomer

Isolated from Your Existing Exchange Org
When deploying Exchange 2010/2013 into your existing Exchange 2003/2007 environment, the same coexistence requirements exist

As Customizable as Your On-Premises Environment
While many features of Exchange Online are configurable, there are some limits in regards to maximum message size; see “Exchange Online Limits”
The Limitations
10 Limitations To Know Before Deployment

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Communication will be key to your success...
1: Cross-Premises Delegations

Issue
- Delegations cross-premises are not supported
- Includes tasks such as accessing a shared mailbox
- Delegations setup by users can be complex and difficult to find

Workaround
- Run scripts to pull delegate information (full access, send-as, send on behalf)
- Migrate users in batches that group the mailboxes based on their delegations
- Accept that some delegate access may be lost temporarily

Also...
- Beware of the “delegate spider web”
2: Dynamic Distribution Groups

Issue

- Dynamic Distribution Groups are not synchronized by DirSync or Azure AD Sync
- Group filters may not make sense in a hybrid configuration

Workaround

- Create a contact object in the cloud GAL to represent the on-premises dynamic distribution group as recommended by Microsoft
- Update filters to include "mail users" or "remote mailboxes"
- Possibly change filters completely if they have on-premises dependencies such as mail server or database names

More Info...

- Blog post and PowerShell script: Dynamic Distribution Groups in Exchange Hybrid
3: Self-Managed Distribution Groups

Issue

• Users in Exchange Online cannot manage Distribution Groups via Outlook when using Directory Synchronization

Workaround

• Options are somewhat limited
• Possibly discontinue this practice
• Potentially move Distribution Groups to the cloud
• Provide users with an interface other than Outlook to manage their Distribution Groups
• Delegate access to on-premises Exchange 2013 ECP (if available)

More Info...

• Blog post on granting access via ECP: Allowing Users to Edit Exchange Groups They Manage
4: Address Lists

Issue
• Address Lists do not populate properly if created after the objects are synchronized
• User objects must be “tickled” in order to update the Address List

Workaround
• “Tickle” an attribute on mail recipients so they fall into the proper scope
• Use an attribute on-premises and then sync or find one in the cloud that can be modified

More Info...
• Blog post and PowerShell script (Tickle-MailRecipient): [How to Update Address Lists in Exchange Online]
5: Organizational Relationships with Other Orgs

Issue

• Free/Busy requests from external organizations are not “proxied” in a hybrid configuration
• External organization needs to know where to send the free/busy request

Workaround

• Create Organizational Relationships to both on-premises and Exchange Online
• Use GAL synchronization to ensure the request is sent to the proper target

More Info...

• Blog post by two Office 365 MVPs: Calendar Federation with an Exchange Hybrid
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**More Info...**

- Blog post by two Office 365 MVPs: [Calendar Federation with an Exchange Hybrid](#)
6: When “Single Sign-On” is not Single Sign-On

Issue
• Deploying AD FS still results in a user prompt at initial configuration of Outlook and at each password change

Workaround
• Using the Windows “Credential Manager” is a partial workaround
• Planned changes to the Outlook authentication (ADAL) will change this
• User communication / training

More Info...
• Microsoft announcement: [Office 2013 Updated Authentication](#)
7: ActiveSync Profile Conversion

Issue
• ActiveSync profiles may not automatically convert after mailbox migration
• Users will need to reconfigure their ActiveSync profile by entering email address and password

Workaround
• Most recent update for Exchange 2010 and Exchange 2013 fixes this in some scenarios
• Some MDM solutions allow for profile configuration
• User communication / training

More Info...
• Microsoft announcement of update to Exchange: Exchange ActiveSync On-Boarding to Office 365
8: The Good and Bad of Directory Sync

Issue
• Active Directory is authoritative and thus all changes must be made in the on-premises directory

Workaround
• Keep an Exchange server on-premises for management purposes
• Extra painful for organizations that never had Exchange on-premises
• Evaluate some of the third-party tool options

More Info...
• TechNet article: [How and when to decommission your on-premises Exchange servers in a hybrid deployment](https://technet.microsoft.com/en-us/library/zz940147.aspx)
9: Third-Party SMTP Gateways

Issue
• Sending hybrid SMTP traffic through a third-party SMTP gateway is not supported

Workaround
• Route traffic directly from Exchange Online Protection (EOP) to your internal Exchange and restrict the traffic by source IP at the firewall
• Use an Exchange Edge Transport server
10: Adding “Up-Level” Versions of Exchange

Issue
- Adding Exchange 2010/2013 to your legacy environment can cause SMTP routing changes and other concerns
- Especially important in larger organizations with Exchange spread across multiple AD sites

Workaround
- Treat the addition of any Exchange servers as you would an on-premises migration to that platform
Despite These Limitations...
Hybrid is Still the Best Solution in Most Cases

Most Full-Featured Coexistence Scenario
True calendar coexistence along with SMTP messages that properly identify mail tips, OOF, etc.

Allows for Easiest Piloting of Mailbox Migration
Mailboxes can be “onboarded” or “offboarded” relatively seamlessly

Automatic Reconfiguration of Outlook Profile
User receives a simple prompt to close and re-open Outlook and is then prompted for credentials

No Re-Downloading of OST
Thus minimizing network bandwidth post-migration
Questions & Links to Slides...

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