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Managing Office 365™ Identities and Services

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Module 1

Preparing for Office 365

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Lesson 4

Enabling Client Connectivity

Contents:

Resources

Network Connectivity Factors



Reference Links: Exchange Client Network Bandwidth Calculator, at <http://go.microsoft.com/fwlink/?LinkId=401130>



Reference Links: Lync 2010 and 2013 Bandwidth Calculator, at <http://go.microsoft.com/fwlink/?LinkId=401131>

Module Review and Takeaways

Best Practice

Best practices for this stage of the Office 365 deployment process are as follows:

- Ensure that you understand the organization's need for Office 365.
- Identify any in-house services that are not going to transition to Office 365.
- Recruit the right people to be pilot users.
- Check that you have suitable infrastructure to support a connection to Office 365.

Review Question(s)

Question: If you had been selected to lead the Pilot at Lucerne Publishing, what personal qualities, skills, and experience do you need to demonstrate to maximize the probability of the organization moving to the Pilot phase?

Lab Review Questions and Answers

Lab B: Preparing for Office 365

Question and Answers

Lab Review

Question:

Why is it important to specify the correct country when you set up an Office 365 account?

It is important to specify the correct country as some facilities are restricted on a country-by-country basis and you cannot change the country after you have set up the account.

What ports need to be open to ensure client communications with the Office 365 environment and what are those ports and protocols used for?

Protocol /Port	Usage
TCP 443	Office 365 My Company Portal Outlook 2010 and Office Outlook 2007 Microsoft Entourage 2008 for Mac Exchange Web Services/Outlook for Mac 2011 Outlook Web App SharePoint Online
PSOM/TLS 443	Lync Online (outbound data sharing sessions)
STUN/TCP 443	Lync Online (outbound audio, video, and application sharing sessions)
TCP 10106***	Connects to xsi.outlook.com for Outlook Web App (not essential)
TCP 995	POP3(S)
TCP 587	SMTP(S) Relay with POP3
STUN/UDP 3478	Lync Online (outbound audio and video sessions)
TCP 5223	Lync mobile client push notifications
RTP/UDP 50000-50019	Outbound Lync (outbound audio sessions)
RTP/UDP 50020-50039	Outbound Lync (outbound video sessions)
TCP 50040-50059	Outbound Lync Application sharing and file transfer

The main port that must be open is 443 for encrypted web traffic.

Module 2

Managing Users, Groups, and Licenses

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Module Review and Takeaways

Question:

How scalable do you think direct user administration through EAC is for managing large numbers of users, groups, and licenses?

Answer: Generally, EAC-based administration is only appropriate for smaller organizations with fewer than 50 users. PowerShell enables scaling of user and group administration to very large numbers but requires more specialist skills and scripting knowledge. DirSync gives highest scalability levels with minimal administration.

Lab Review Questions and Answers

Lab A: Managing Users, Groups, and Licenses

Question and Answers

Lab Review

Question:

What process do you need to go through before you can use PowerShell to administer users and groups in Office 365?

Run Windows Azure Active Directory PowerShell with administrative rights, then execute the Connect-MSOL command. Provide the credentials of an account that has Global Admin or User Management Admin rights.

How would you design your group structure to minimize adding and removing people from groups?

Use nested groups and assign permissions to the group rather than to individuals.

Module 3

Administering Office 365

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Module Review and Takeaways

Question:

What additional user training requirements does implementing RMS in Office 365 generate?

Answer: Users have to know how to apply RMS policies and also the effect of those policies, otherwise the Helpdesk will be flooded with calls along the lines of: "Why can't I print or forward this email attachment?"

Lab Review Questions and Answers

Lab: Administering Office 365

Question and Answers

Lab Review

Question:

In the PowerShell sections, why did you need to run two separate connection commands in this lab?

Connect-MSOL connects to Office 365, whereas the second connection is to Exchange Online.

What is the purpose of downloading WindowsAzureADRightsManagementAdministration_x64.exe and importing the Azure Active Directory Rights Management (AADRM) module?

The AADRM module provides the cmdlets for managing Active Directory Rights Management in Office 365. WindowsAzureADRightsManagementAdministration_x64.exe contains this module.

Module 4

Planning and Managing Clients

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Module Review and Takeaways

Best Practice

- Obstacles to a successful client deployment include incomplete data, custom application incompatibilities, and not gathering enough or important information from existing implementations and running into compatibility issues later.
- The chances for a successful user-driven deployment can be jeopardized when there is lack of planning or testing, deploying the incorrect plan, or not understanding what happens when you revoke a license.
- For managed deployments, it is important to prepare a thorough support plan for users, to help guide them through the transition to Office 365 applications.

Review Question(s)

Question: What are the advantages and disadvantages of each of the different Office 365 clients?

Common Issues and Troubleshooting Tips

Common Issue	Troubleshooting Tip
Users do not all use the same first language.	Ensure that each user has access to software in their preferred language.

Lab Review Questions and Answers

Lab: Managing Clients

Question and Answers

Lab Review

Question:

Why do you need to edit the configuration xml file when preparing to use managed deployments of Office 365 Pro Plus?

This configuration file is used to specify the UNC path to the shared folder containing the Office 365 Pro Plus source files, and also to specify products and languages to install.

How can you verify that the Click-to-Run service is running?

Use Task Manager, and in the Processes list, under Background processes, look for Microsoft Office Click-to-Run. You can also click the Details tab, and look for officeclicktorun.exe in the task list.

Module 5

Planning DNS and Exchange Migration

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Lesson 2

Recommend a Mailbox Migration Strategy

Contents:

Resources

Cutover Exchange Migration



Best Practice: If you implement a single sign-on solution, you are strongly recommended to maintain at least one Exchange server so that you can access Exchange System Manager (Exchange 2003) or Exchange Management Console/Exchange Management Shell (Exchange 2007 and Exchange 2010) to manage mail-related attributes on the on-premises mail-enabled users. For Exchange 2007 and Exchange 2010, the Exchange server that you maintain should have the Hub Transport, Client Access, and Mailbox server roles installed.

PST Migration



Additional Reading: For more information about PST Capture, see the following article:
<http://go.microsoft.com/fwlink/?LinkId=321127>

Module Review and Takeaways

Best Practice

Best practices when planning Exchange Online and migration include:

- Ensure you have considered all the factors when selecting the migration path to Exchange Online.
- Analyze the risks to consider all possible “what-if” scenarios and identify mitigation plans to deal with each risk.
- Ensure you apply a structured change management methodology to the migration plan and adoption process.
- Keep your project sponsor, management team, administrators, and users informed about what is going on, particularly in the lead-up to any switchover.
- Make sure that everyone involved in the project has had sufficient training and is competent to carry out their tasks.

Review Question(s)

Question: *What DNS exploits could potentially affect Office 365 availability to clients?*

Answer: As with any cloud service, any exploit that affects DNS could potentially disrupt Office 365 availability to clients. These exploits include:

- Cache poisoning
- DNS hijacking
- Domain sniping
- Distributed Denial of Service (DDoS)

Common Issues and Troubleshooting Tips

Common Issue	Troubleshooting Tip
Timing of DNS updates	Leave plenty of time for DNS to update. It can happen in minutes or sometimes take several hours.
MX records	Incorrectly configured MX records can cause mail delivery failures for the domain. Ensure that the MX record points to the Office 365 communication endpoint or to the on-premises mail server publication IP address.

Lab Review Questions and Answers

Lab: Preparing for Exchange Migration

Question and Answers

Lab Review

Question:

Why is DNS such a critical dependency in Office 365?

DNS is a critical dependency because this service is essential for clients to locate and connect to each of the Office 365 services.

Why is it important that domains are registered before subdomains?

Office 365 links subdomains to parent domains. This linkage cannot be carried out retrospectively, so you have to register contoso.com before you can register content.contoso.com. Because you have already proved that you own contoso.com, you can then register content.contoso.com and Office 365 knows that you control that subdomain as well.

Module 6

Planning Exchange Online and Configuring DNS Records

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Module Review and Takeaways

Best Practice

Best practices when planning Exchange Online and migration include:

- Ensure you have considered all the factors when selecting the migration path to Exchange Online.
- Analyze the risks to consider all possible “what-if” scenarios and identify mitigation plans to deal with each risk.
- Ensure you apply a structured change management methodology to the migration plan and adoption process.
- Keep your project sponsor, management team, administrators, and users informed about what is going on, particularly in the lead-up to any switchover.
- Make sure that everyone involved in the project has had sufficient training and is competent to carry out their tasks.

Review Question(s)

Question:

When planning for and migrating email to Office 365, what key fact about the migration must you emphasize to the organization’s management?

Answer: You must emphasize that because Office 365 migration is dependent on DNS, there are time lags involved with DNS replication, over which you do not have control. Also, mistakes in DNS configuration can take up to 72 hours to rectify.

Common Issues and Troubleshooting Tips

Common Issue	Troubleshooting Tip
Timing of DNS updates	Leave plenty of time for DNS to update. It can happen in minutes or sometimes take several hours.
MX records	Incorrectly configured MX records can cause mail delivery failures for the domain. Ensure that the MX record points to the Office 365 communication endpoint or to the on-premises mail server publication IP address.

Lab Review Questions and Answers

Lab: Configuring DNS Records and Migrating to Exchange Online

Question and Answers

Lab Review

Question:

What is the key user action that needs to take place prior to a cutover migration?

Users must reduce the size of their mailboxes by deleting unnecessary email messages. They can back up these email messages to .PST files if necessary.

When setting up DNS on your own server to work with Office 365, what PowerShell cmdlet could you use to verify that a server on IP address 10.176.89.42 is working and authoritative for the lucernepublishing.com zone?

Test-DnsServer -IPAddress "10.176.89.42" -zonename "lucernepublishing.com"

Module 7

Administering Exchange Online

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Lesson 2

Manage Anti-malware and Anti-spam Policies

Contents:

Resources

Message Headers and Spam Confidence Levels



Best Practice: Use the Message Header Analyzer in Microsoft Remote Connectivity Analyzer to view the headers in the message.

Module Review and Takeaways

Best Practice

- Design your Exchange Online policies to reflect business need before implementing them.
- Ensure that you train users on how to apply retention tags and use archive mailboxes.
- Implement a process for managing spam quarantine and designate responsibility for attending to spam items.
- Identify who needs to be a mail user and who needs to be a mail contact.
- Decide whether mail contacts will be visible in the GAL.

Review Question(s)

Question:

How can organizations ensure greatest protection against spam and malware by using Office 365?

Answer: Organizations ensure greatest protection against spam and malware with Office 365 by adding malware filters, configuring the connection filter, adding content filters, customizing the outbound spam settings, and configuring transport rules. In addition, client computers should be running desktop anti-virus programs.

Common Issues and Troubleshooting Tips

Common Issue	Troubleshooting Tip
Junk mail is not being moved to the junk mail folder.	If you have set another action, such as to prepend spam with a message, then those messages will not be moved to the junk mail folder.
Spam is not being correctly flagged.	The message might be coming from a trusted domain.

Lab Review Questions and Answers

Lab: Administering Exchange Online

Question and Answers

Lab Review

Question:

How would you typically configure ownership and Send As permissions for a shared mailbox where you wanted to separate out who could perform each function?

By creating two security groups, one for Full Access and the other for Send As. You then add users to the groups as required.

What is a primary cause of failure to book a resource through a resource mailbox for global companies?

Failure to use the correct time zone for booking the resource, often caused by not changing the time zone on the client computer to match the location.

Module 8

Configuring SharePoint Online

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Lesson 1

Manage SharePoint Site Collections

Contents:

Resources

Plan Site Collections



Best Practice: A recommended best practice is to define more than one site collection administrator, where the additional administrators act as backups to the primary site collection administrator.

Module Review and Takeaways

Question:

If you delete a site collection, and then just over a month later decide that you still need that site collection, is there any way to still retrieve it?

Answer: Potentially Yes, because even after the site collection has been in the recycle bin for 30 days and has subsequently been permanently deleted, you still have another 14 days in which to contact Microsoft Online Services to retrieve the deleted site collection for you.

Lab Review Questions and Answers

Lab: Configuring SharePoint Online

Question and Answers

Lab Review

Question:

Is it mandatory to choose a template when creating a new site collection?

No, you could use the Custom tab to create an empty site collection and select a site template later.

What is the default versioning setting for a site collection in SharePoint Online?

The default versioning setting is to maintain no versions other than the original document.

Module 9

Configuring Skype for Business Online

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Module Review and Takeaways

Question:

What is the key differentiator between Skype domain federation and Skype coexistence?

Answer: The key differentiator is that Skype coexistence will enable you to share a common SIP domain, whereas Skype domain federation requires separate SIP domains.

Lab Review Questions and Answers

Lab: Configuring Skype for Business Online

Question and Answers

Lab Review

Question:

What is the default general setting under Audio and video for Skype for Business Online users?

The default general setting under Audio and video in Skype for Business Online is Audio and HD video.

Can you manage and configure Skype for Business Online using just Windows PowerShell?

No. You must also install the Windows PowerShell Module for Skype for Business Online which contains the Skype for Business Online Connector module and cmdlets specific to Skype for Business Online management.

Module 10

Implementing Directory Synchronization

Contents:

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Module Review and Takeaways

Best Practice

- You must have a proper project plan.
- If using filtering, it should be set up before synchronizing any objects.
- You should work with a cloud services partner.
- You should perform thorough capacity planning.
- You should remediate the Active Directory before building the DirSync infrastructure.
- You should add all SMTP domains as verified domains before synchronizing.

Review Question(s)

Question: What are some of the typical issues that can arise if UPN suffixes are not properly configured before directory synchronization is deployed?

Common Issues and Troubleshooting Tips

Common Issue	Troubleshooting Tip
DirSync filtering is no longer working.	It is important to be on the latest version of DirSync, since the link from the Office 365 portal or admin center is always to the current release. However, when upgrading to a new version of DirSync, all existing filters and other management agent customizations will not be automatically imported into the new installation. If you are upgrading to a newer version of directory synchronization, you must always manually re-apply filtering configurations after you upgrade, but before you run the first synchronization cycle.

Lab Review Questions and Answers

Lab: Implementing Directory Synchronization

Question and Answers

Lab Review

Question:

How do you configure OU-level filtering when using DirSync?

Miisclient.exe is used to configure details of the synchronization tasks to be performed during directory synchronization operations, including configuration of OU-level filtering.

How can you initiate an immediate directory synchronization, without waiting for the default synchronization interval?

You can use **Miisclient.exe**, or the **Start-OnlineCoexistenceSync** command in **Windows PowerShell** by importing the **DirSync PowerShell** module.

Module 11

Implementing Active Directory Federation Services

Contents:

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Module Review and Takeaways

Best Practice

- Always plan for using an AD FS proxy server; publishing 443 from the Internet directly to the AD FS server is not a good idea, otherwise any external computer could have direct access to your federation servers.
- Avoid having federation servers directly accessible on the Internet; direct Internet access should only be used when setting up a test lab environment, or when the organization does not have a perimeter network. You should isolate your federation servers, so that they can only be accessed by client computers that are authenticated against the corporate network through an AD FS Proxy.
- Prepare DNS to mitigate against incorrect DNS updates, especially with split brain DNS. If DNS is not functioning correctly, client computers may not be able to access AD FS.
- Pay close attention to networking, firewall, and security design, to ensure that client computers can authenticate to the corporate Active Directory.
- Ensure that all certificates are exported to include the private key; this is because both public and private keys are required for certificates to function on the Default Website.

Review Question(s)

Question: What sort of questions need to be asked when an organization is deciding whether to use AD FS for SSO or to use DirSync with password synchronization?

Common Issues and Troubleshooting Tips

Common Issue	Troubleshooting Tip
AD FS server configuration fails.	Ensure that certificates are correctly configured, and are exported to include private key.

Lab Review Questions and Answers

Lab: Implementing Active Directory Federation Services

Question and Answers

Lab Review

Question:

In the lab, why did you create two DNS host records for the AD FS server?

The scenario required an internal record for domain-joined AD FS clients on the corporate network, and an external record for non-domain-joined clients.

What are the key steps in the conversion of a managed domain to a federated domain?

You must configure Office 365 with the name of the AD FS server to use for authentication requests, by using the **Set-MsolAdfsContext -Computer <server name>** command, and then switch the Office 365 domain to federated, by using the **Convert-MsolDomainToFederated -DomainName <domain>** command.

Module 12

Monitoring Office 365

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Module Review and Takeaways

Best Practice

- There is a wide range of tools available to help troubleshoot issues in Office 365; as a starting point, the Office 365 Troubleshooter can help with initial diagnosis.

Review Question(s)

Question: What tools would typically be used to help troubleshoot problems with mail delivery?

Lab Review Questions and Answers

Lab: Monitoring Office 365 (Optional)

Question and Answers

Lab Review

Question:

How would you view all the failed messages for a group of users?

Use the Exchange Online admin center, signed in as an administrator, and then select mail flow, and message trace, and then choose Select Members.

What is the main prerequisite for using Mail Protection Reports for Office 365?

Mail Protection Reports for Office 365 requires Microsoft Excel.