



HARDENING MICROSOFT 365 PLAYBOOK: BUSINESS EDITION

OVERVIEW AND USER GUIDE

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OVERVIEW & USER GUIDE

PURPOSE

The primary purpose of this document is to minimize the potential for a data breach or a compromised account by following Microsoft security best practices and step through the actual configuration.

AUDIENCE

This document was designed for the SMB market who primarily work with the Business SKUs (Basic/Standard/Premium) available from Microsoft.

LAST UPDATED

May 2020

OVERVIEW & USER GUIDE

CONTENTS

Using Microsoft Secure Score	7
Azure Active Directory.....	10
Enable MFA	10
Enable MFA For Admins.....	23
Block Legacy Authentication.....	30
Enable Self-Service Password Reset	39
Do Not Expire Passwords	43
Delete/block accounts not used in last 30 days	45
Designate More than 1 Global Admin but fewer than 5	46
Do not allow users to grant consent to unmanaged applications	49
Exchange Online.....	51
Enable Email Encryption.....	51
Enable Client Rules Forwarding Blocks.....	57
Set Outbound Spam Notifications	62
Do not allow mailbox delegation	64
Set up Connection Filtering:	66
Spam Filtering:.....	69
Malware:.....	73
Anti-Phishing Policy.....	75
Configure Enhanced Filtering.....	82
Configure ATP Safe Links and Safe Attachments Policy	83
Add SPF, DKIM, and DMARC	90
Do not Allow Calendar Details Sharing.....	96
Auditing and Reporting.....	98
Enable Audit Log Search.....	98
Enable Mailbox Auditing for All Users	103
Review Role Changes Weekly.....	105
Review Mailbox Forwarding Rules Weekly.....	106

OVERVIEW & USER GUIDE

Review the Mailbox Access by Non-Owners Report Bi-Weekly	107
Review the Malware Detections Report Weekly	109
Review your Account Provisioning Activity Report Weekly	112
Teams	113
Utilize Private Channels.....	113
Block External Access	116
Limit Guest Access	121
Turn off File Sharing and File Storage Options	129
Block Third-Party Applications	132
Restrict Users who can Create Teams Channels	135
Set Teams Expiration	139
Set up Advanced Threat Protection Policies for Teams	141
Set up app Protection Policies	149
Set up Data Loss prevention Polcies.....	155
SharePoint and OneDrive	163
Configure Expiration Time for External Sharing Links	163
Enable Versioning on all SharePoint Online Document Libraries	166
Adopt the OneDrive Sync Client	170
Conclusion	173

OVERVIEW & USER GUIDE

Checklist:

Azure Active Directory	
	Enable MFA
	Enable MFA For Admins
	Block Legacy Authentication
	Enable Self-Service Password Reset
	Do not expire passwords
	Delete/Block Accounts not used in last 30 days
	Designate more than 1 global admin but fewer than 5
	Do not allow users to grant consent to unmanaged applications

SharePoint and OneDrive	
	Configure Expiration Time for External Sharing Links
	Enable Versioning on all SharePoint Online document libraries
	Adopt the OneDrive Sync Client

OVERVIEW & USER GUIDE

Exchange Online	Auditing and Reporting
Enable Email Encryption	Review Mailbox Forwarding Rules Weekly
Enable Client Rules Forwarding Block	Review the Mailbox Access Non-Owners Report Biweekly
Set Outbound Spam Notifications	Review the Malware Detections Report Weekly
Do not allow Mailbox Delegation	Review your account provisioning activity report weekly
Set up Connection filtering	Enable Audit Log Search
Spam Filtering Policy	Enable Mailbox Auditing for all Users
Malware Policy	Review Role Changes Weekly
Anti-phishing policy	
Configure Enhanced Filtering	
Configure ATP Safe Links and Attachments	
Add SPF, DKIM, and DMARC	
Do not allow calendar sharing details	

OVERVIEW & USER GUIDE

Teams	
	Utilize Private Channels
	Block External Access
	Limit Guest Access
	Turn off File Sharing and File Storage Options
	Block 3rd Party Applications
	Restrict Users who can Create Teams Channels
	Set Teams Expiration
	Set up ATP Policies for Teams
	Set up App Protection Policies
	Set up Data Loss Prevention Policies

OVERVIEW & USER GUIDE

USING MICROSOFT SECURE SCORE

Your secure score

Total score: 32 / 507

Microsoft Secure Score analyzes the protection state of your identities, data, devices, apps, and infrastructure.

Identity 27 / 223



Protection state of your Azure AD accounts and roles

Data 5 / 219



Protection state of your Office 365 documents

Device 0 / 45



Protection state of your devices

Apps 0 / 20



Protection state of your email and cloud apps

Infrastructure No data to show



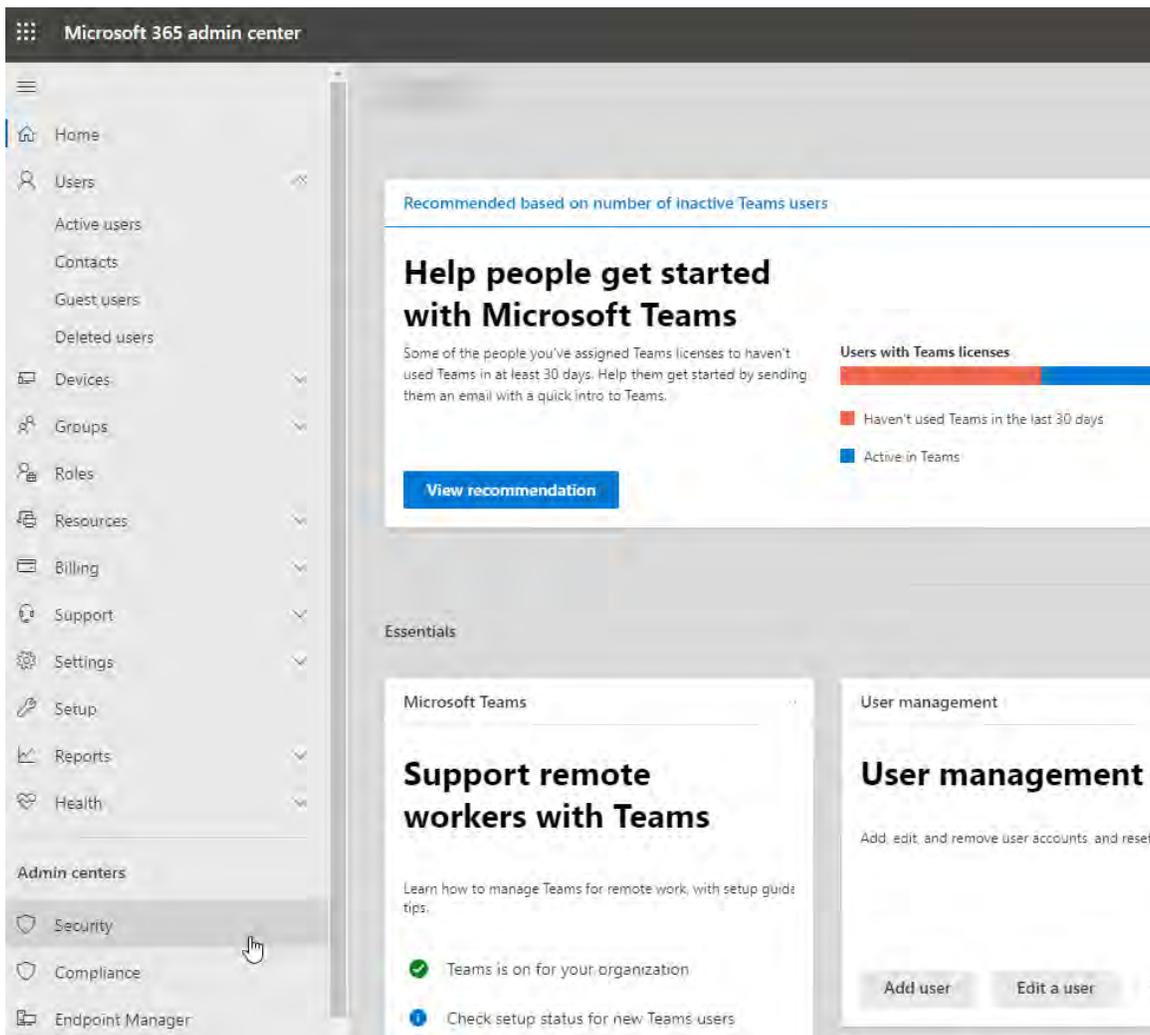
Protection state of your Azure resources

You can think of Secure Score like a credit score for Microsoft. Secure Score figures out what Microsoft services you're using (like OneDrive, SharePoint, and Exchange) then looks at your settings and activities and compares them to a baseline established by Microsoft. You'll get a score based on how aligned you are with best security practices. The numerator is your current point value and the denominator is the amount of points available based on the security features you have available to configure. You can see the list of available security options for each Microsoft plan by clicking on [this link](#).

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Microsoft compares your score to 365 accounts with a similar seat size as your organization and allows you to configure your Industry Type to compare your score to others in your industry as well.

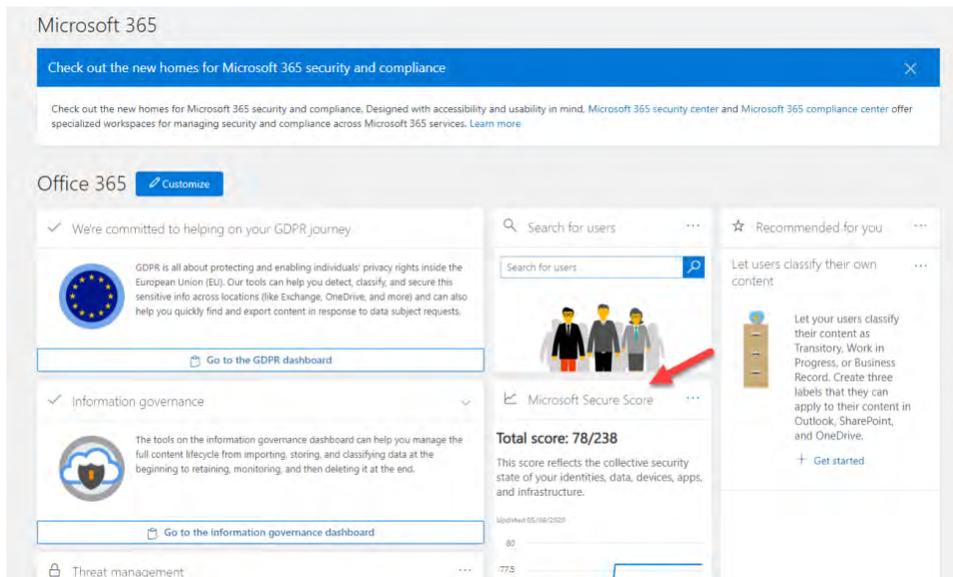
You can get to your tenant's Secure Score by logging into their 365 Admin Center with global admin creds and clicking on "Security" under Admin Centers.



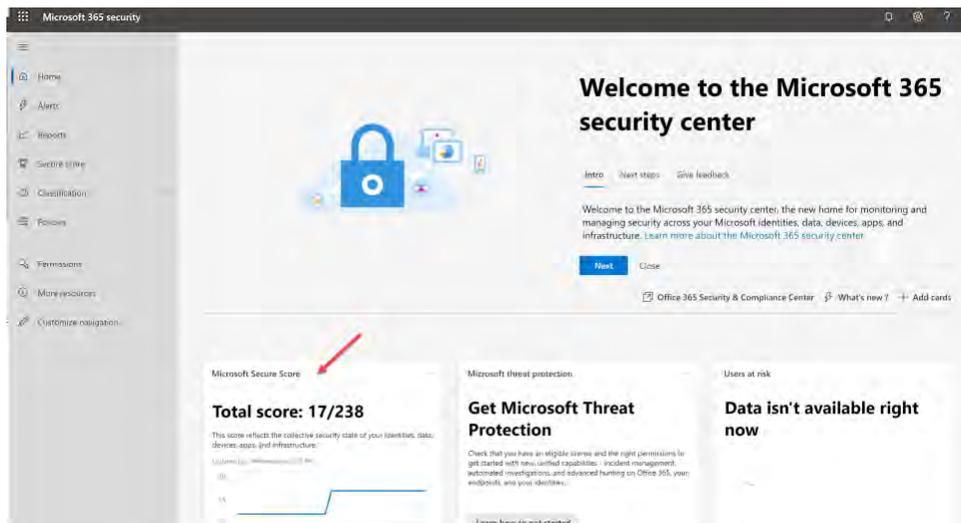
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Here you will be able to click on the Secure Score data to see the recommendations. Some of the recommendations made in this guide come from Secure Score but we wanted to show you this location as it will update over time.

Classic View:



Modern View:



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AZURE ACTIVE DIRECTORY

Enable MFA

You should enable MFA for all of your user accounts because a breach of any of those accounts can lead to a breach of any data that user has access to. MFA is encouraged to be mandatory across all users, especially in today's remote workforce. At a minimum, it should be enforced on all global admins.

Compliance Controls:

- CSA CCM301; Control DSI-02
- FedRAMP Moderate; Control IA-3
- GDPR; Control 6.6.5
- ISO 27018:2014; Control C.9.4.2, Control A.10.8
- NIST 800-171; Control 3.5.2
- NIST 800-53; Control IA-3

As of February 29, 2020, Microsoft enforced security defaults in tenants in efforts to enhance security. Security defaults is on in net new tenants that you spin up after this date and enforces the following:

- MFA on all accounts
- Blocks Legacy Authentication (IMAP/POP/SMTP)
- Enforcing MFA for users who access the Azure Portal, Azure PowerShell, Azure CLI
- [Click here](#) for the full article

OVERVIEW & USER GUIDE

Security defaults are NOT a hard requirement for non-partner tenants but are recommended. If you have a tenant licensed with conditional access, it is recommended that you enforce conditional access policies instead of security defaults. Both CANNOT be turned on at the same time. If you enable a conditional access policy, then you will have to turn off security defaults. MFA can also be enabled in the legacy portal but that will be deprecated in the future. For now, we will show you all three ways to enable MFA for users.

Licensing Considerations:

Enabling MFA and Security Defaults:

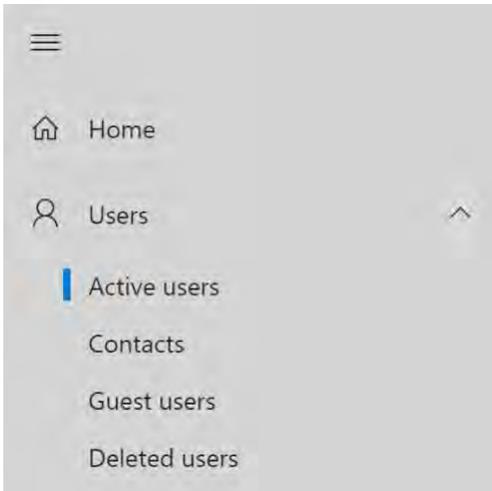
- All Microsoft licensing plans

Enabling Conditional Access Policies

- Microsoft 365 Business Premium (\$20/u/m)
- EMS + E3 (\$87.5) or EMS + E5 (\$14.80)
- Microsoft 365 E3 (\$32) or Microsoft 365 E5 (\$64)

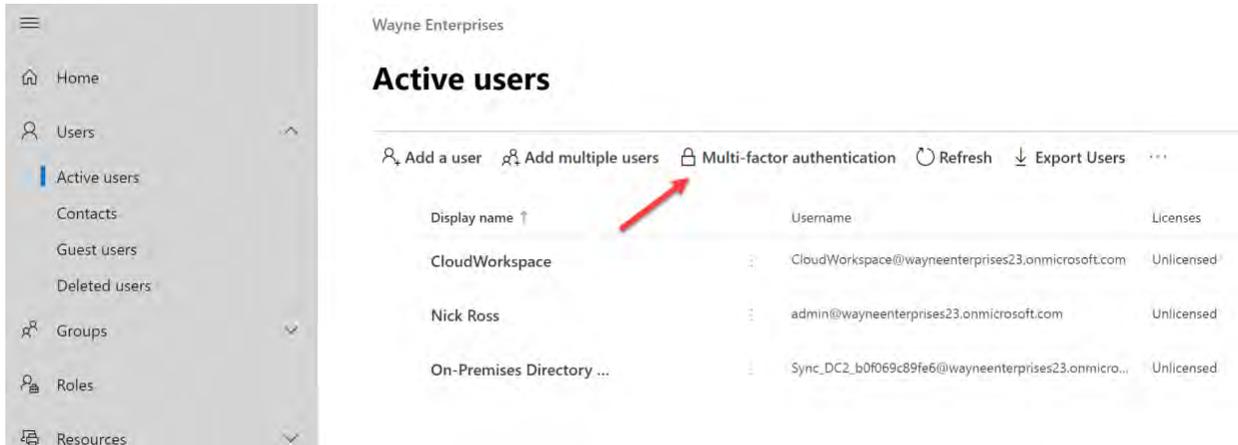
Legacy Portal:

1. Go to the 365 Admin Center>Users>Active Users

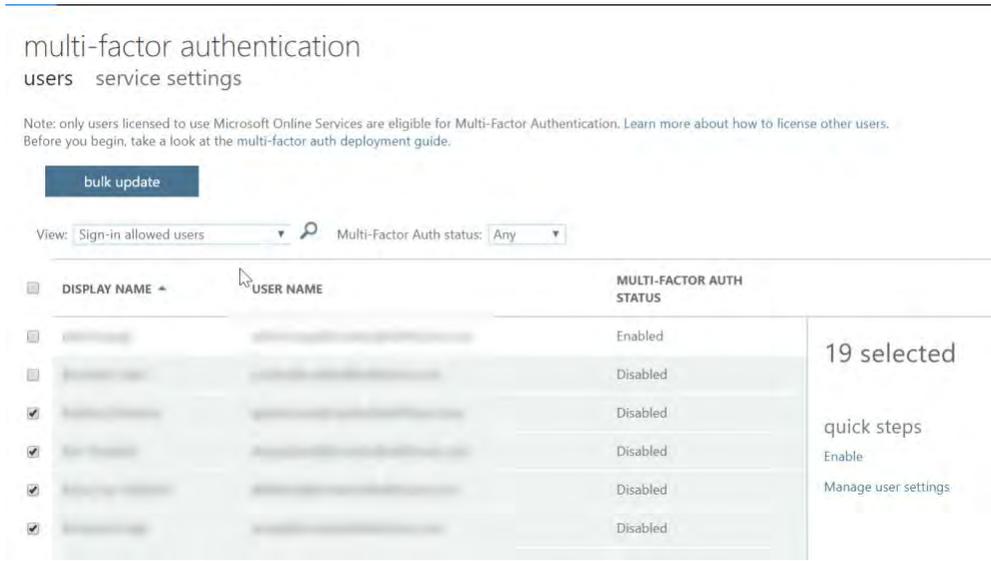


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2. Click Multi-factor Authentication

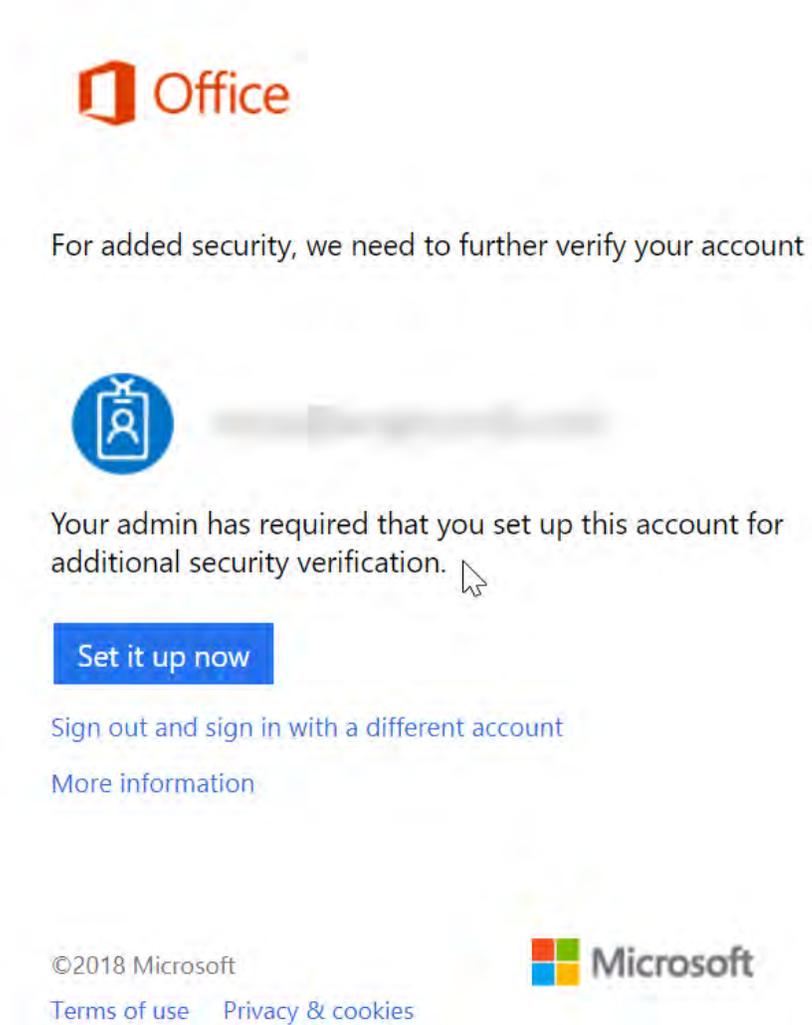


3. Select users to enable multi-factor authentication



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4. The next time the user signs in they will be prompted with the following:



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- Depending on your settings they will enter a phone used for the second form of authentication. You can adjust the settings by going to Service Settings on the top of the multi-factor page

multi-factor authentication

users service settings

app passwords



- Allow users to create app passwords to sign in to non-browser apps
- Do not allow users to create app passwords to sign in to non-browser apps

verification options

Methods available to users:

- Call to phone
- Text message to phone
- Notification through mobile app
- Verification code from mobile app

remember multi-factor authentication

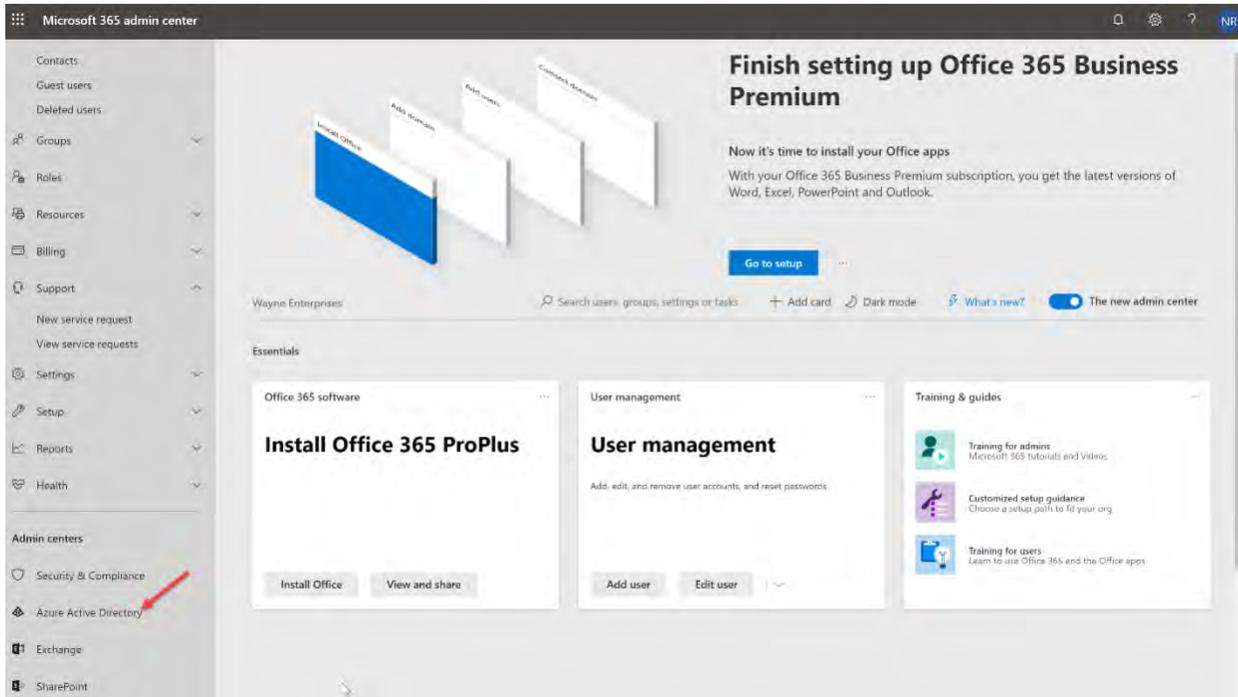
- Allow users to remember multi-factor authentication on devices they trust
Days before a device must re-authenticate (1-60):

save

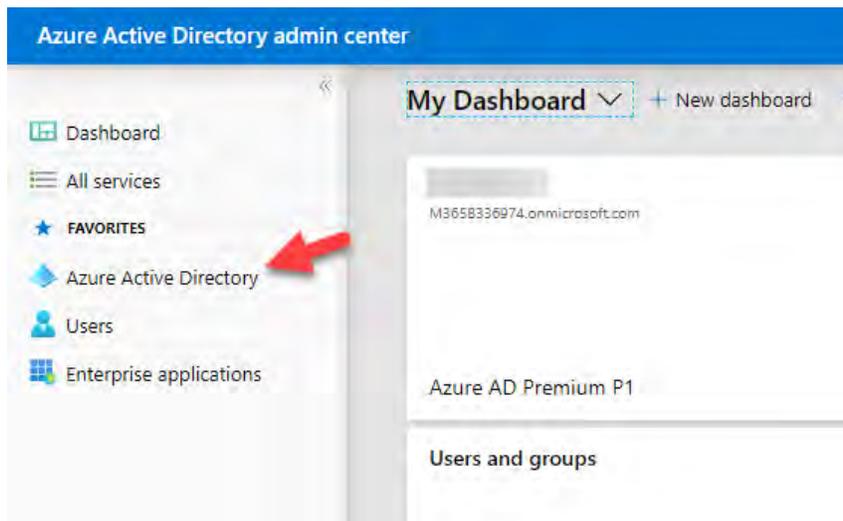
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Security Defaults:

1. In the 365 Admin Portal, click on the Azure Active Directory link under Admin Centers

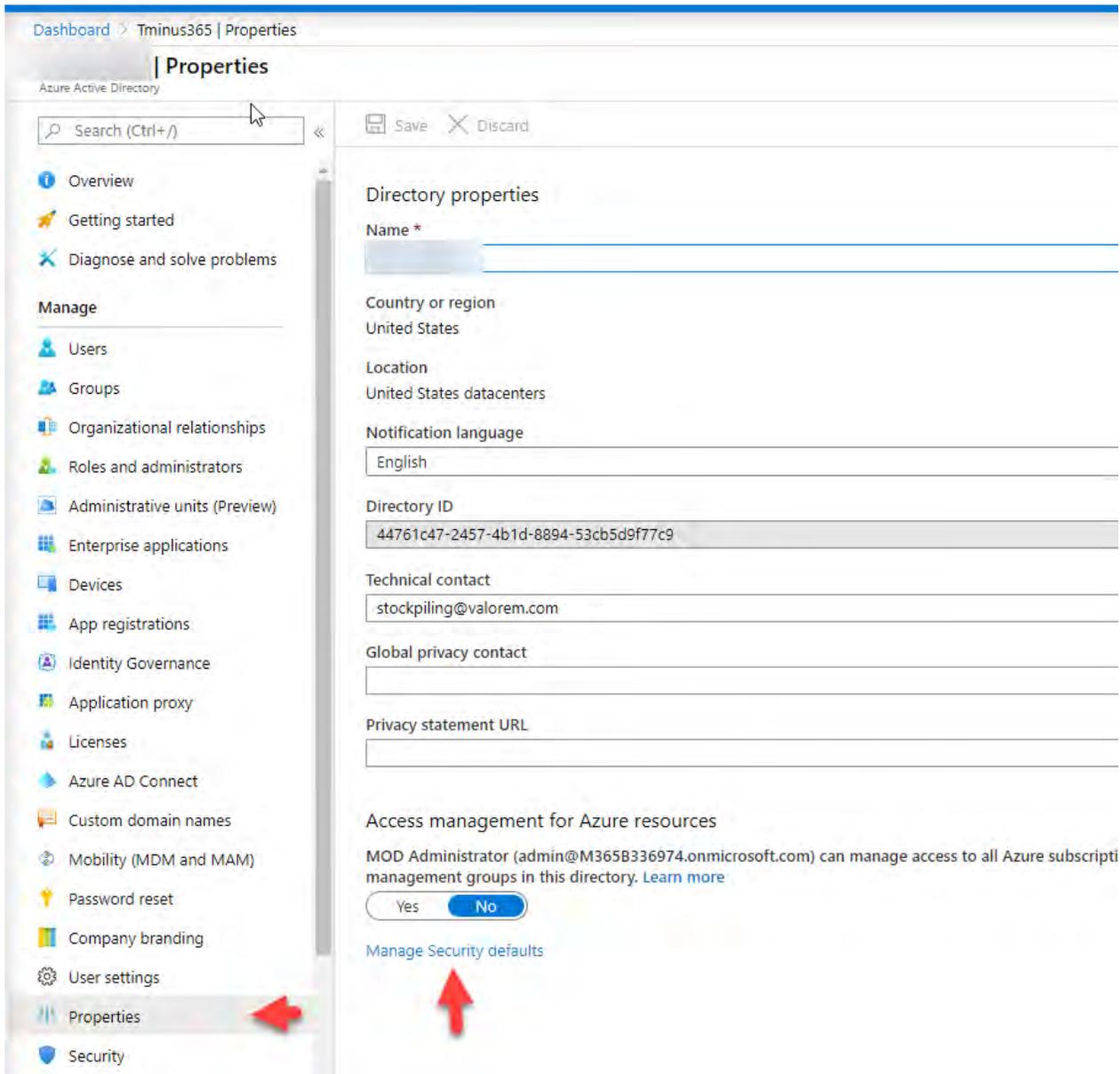


2. Click Azure Active Directory



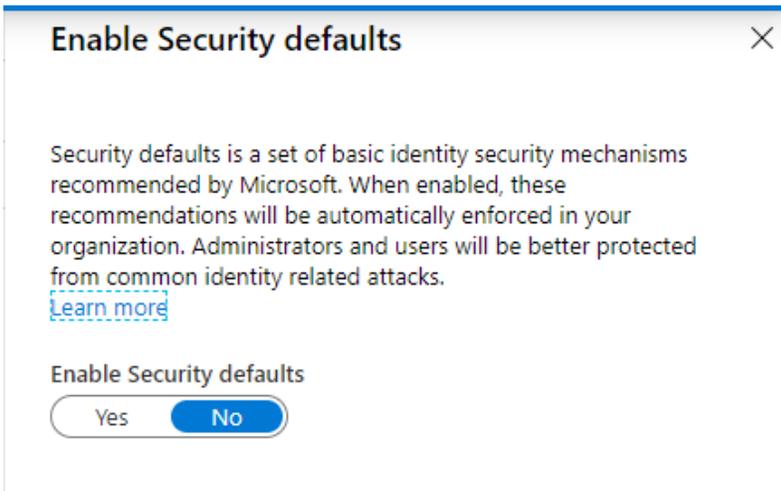
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3. Click Manage>Manage Security Defaults



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4. Toggle on Security Defaults



Enable Security defaults ×

Security defaults is a set of basic identity security mechanisms recommended by Microsoft. When enabled, these recommendations will be automatically enforced in your organization. Administrators and users will be better protected from common identity related attacks.

[Learn more](#)

Enable Security defaults

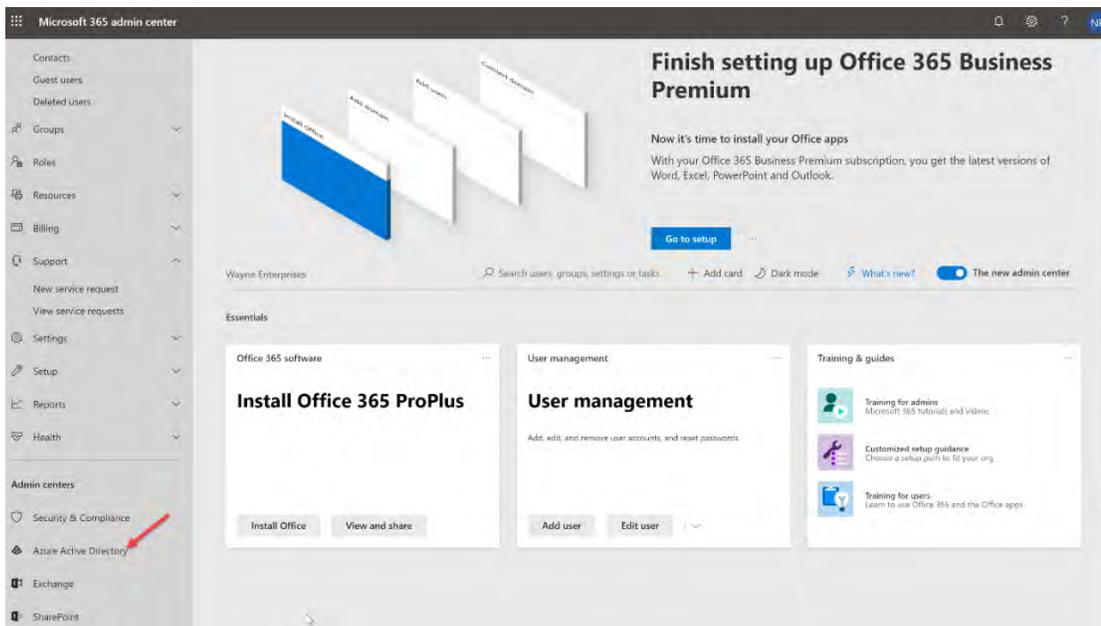
Yes No

NOTE Turning on security defaults enforces MFA for all users. They will have 14 days to register after their first sign-in after you turn this on and they will only be able to use the Microsoft Authenticator app as their second form of authentication. Be sure to plan and communicate accordingly.

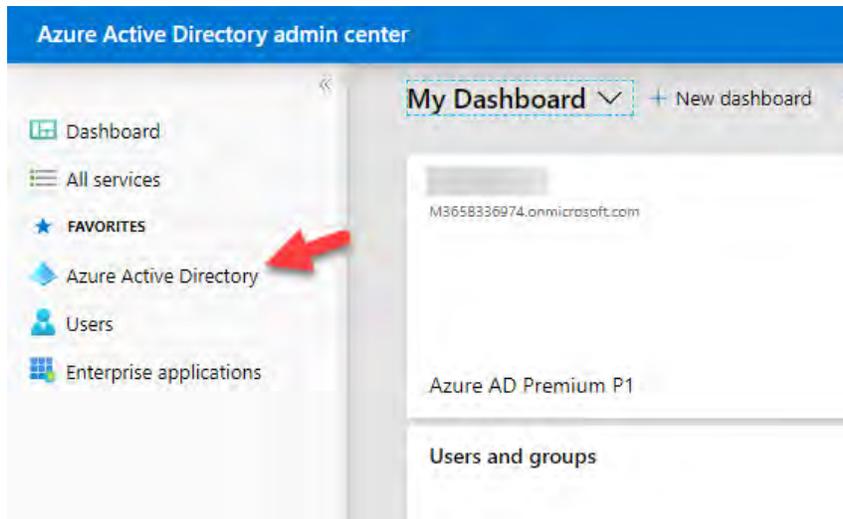
Conditional Access

1. In the 365 Admin Portal, click on the Azure Active Directory link under Admin Centers

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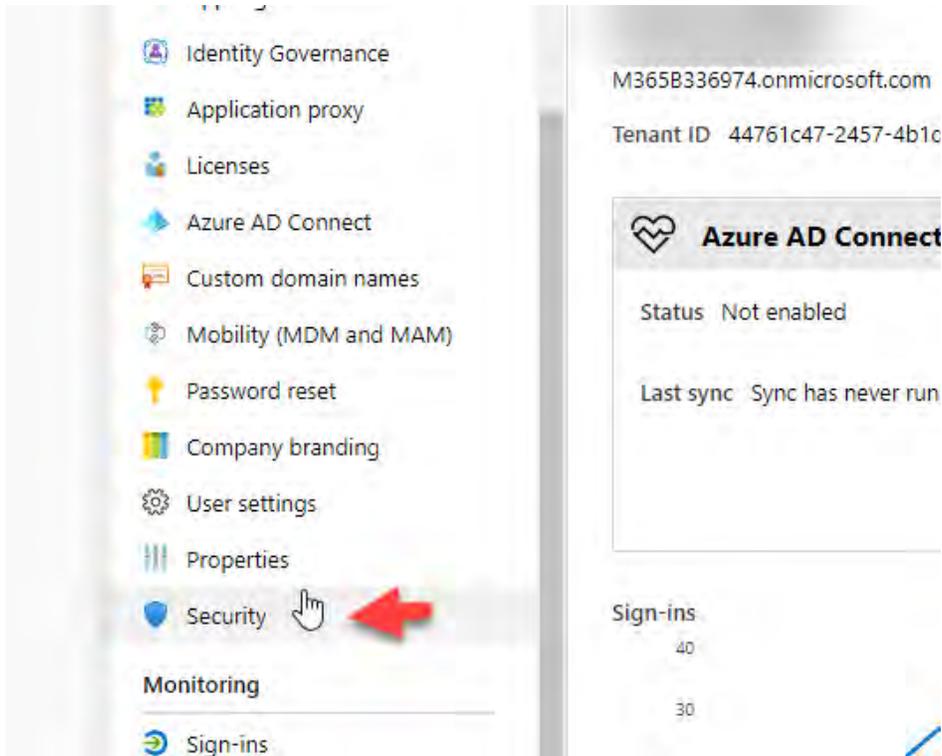


2. Click Azure Active Directory

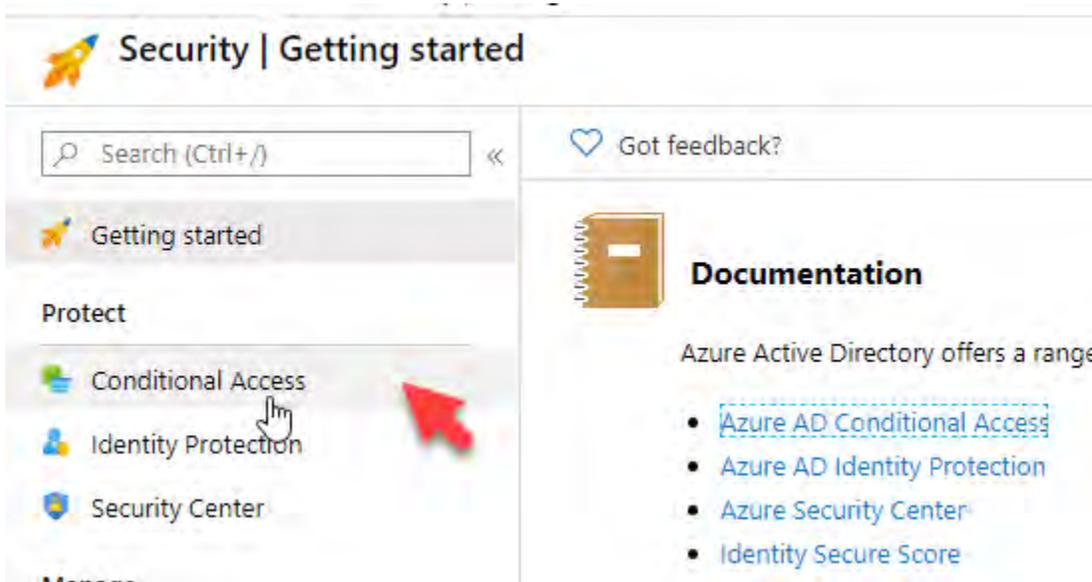


3. Scroll down and click Security

OVERVIEW & USER GUIDE

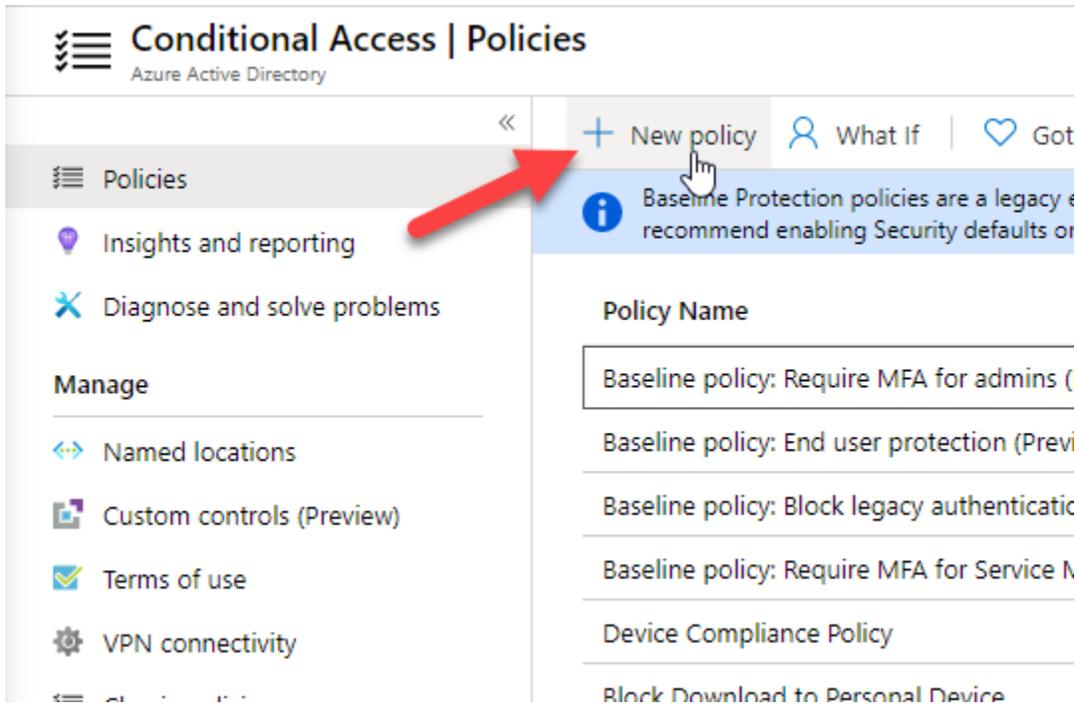


4. Click Conditional Access



5. Click New Policy

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6. Give your policy a name and select all users under the users and groups blade

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The screenshot shows a 'New' configuration window for 'Users and groups'. On the left, the 'Name' field is set to 'MFA for All Users'. Under 'Assignments', 'Users and groups' is selected with 0 users and groups, 'Cloud apps or actions' has 0 selected, and 'Conditions' has 0 selected. On the right, the 'Include' tab is active, with 'All users' selected. Other options include 'None', 'Select users and groups', 'All guest and external users', 'Directory roles', and 'Users and groups'. A warning message states: 'Don't lock yourself out! This policy will affect all of your users. We recommend applying a policy to a small set of users first to verify it behaves as expected.'

NOTE Microsoft gives you multiple warnings not to lock yourself out of the account. It is recommended that you create a break-glass global admin account so that you can get back in if you lose 2-factor on your primary account. You could use the exclude tab here to exclude that user from this list.

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7. Select All Cloud Apps

8. Skip the conditions section and in the Grant section, select Require Multi-factor Authentication

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9. Enable the policy and click Create



PowerShell:

Enable MFA for all users

[PowerShell Script](#)

Enable MFA For Admins

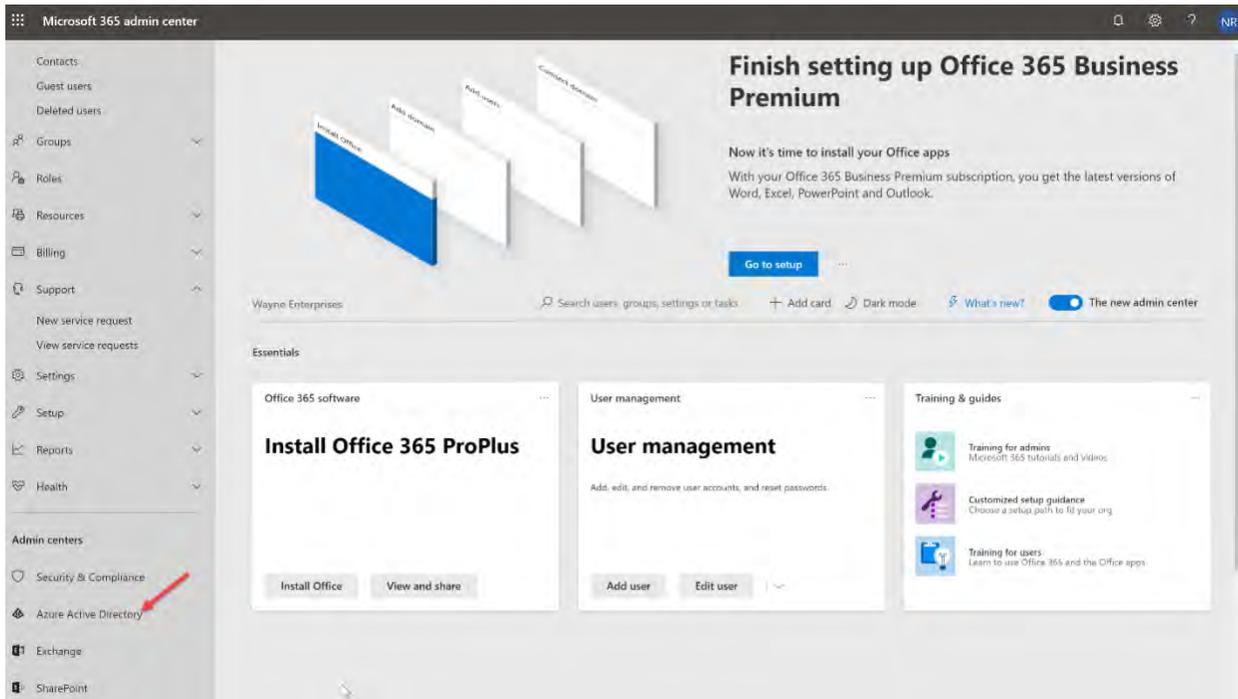
If you are not going to want to turn MFA on for all users in the organization, you should at least be turning it on for privileged roles like global admins, exchange admins, etc. Dedicated accounts like global admin roles should ONLY be used when performing admin task and generally should not be used for day-to-day end-user functions. This will help reduce your attack surface from the standpoint of a privileged account. Note that you can enable MFA on admin users via the legacy MFA portal as shown in the previous section or with a conditional access policy which will be shown here.

Compliance Controls:

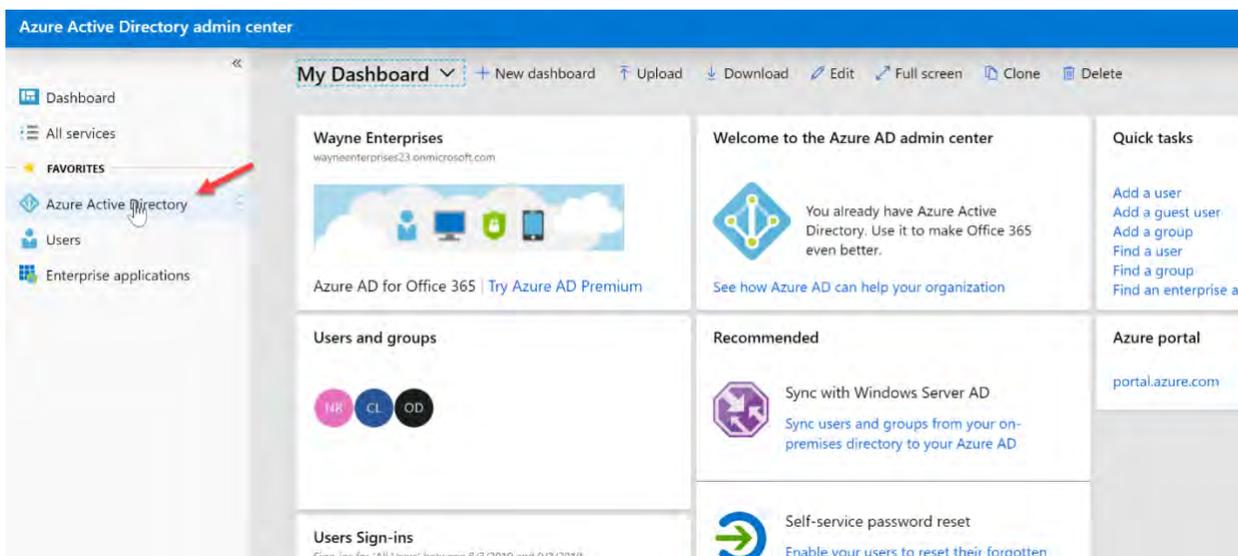
- CSA CCM301; Control DSI-02
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- GDPR; Control 6.6.5
- ISO 27018:2014; Control C.9.4.2, Control A.10.8
- NIST 800-171; Control 3.5.2
- NIST 800-53; Control IA-3

OVERVIEW & USER GUIDE

1. In the 365 Admin Portal, click on the Azure Active Directory link under Admin Centers

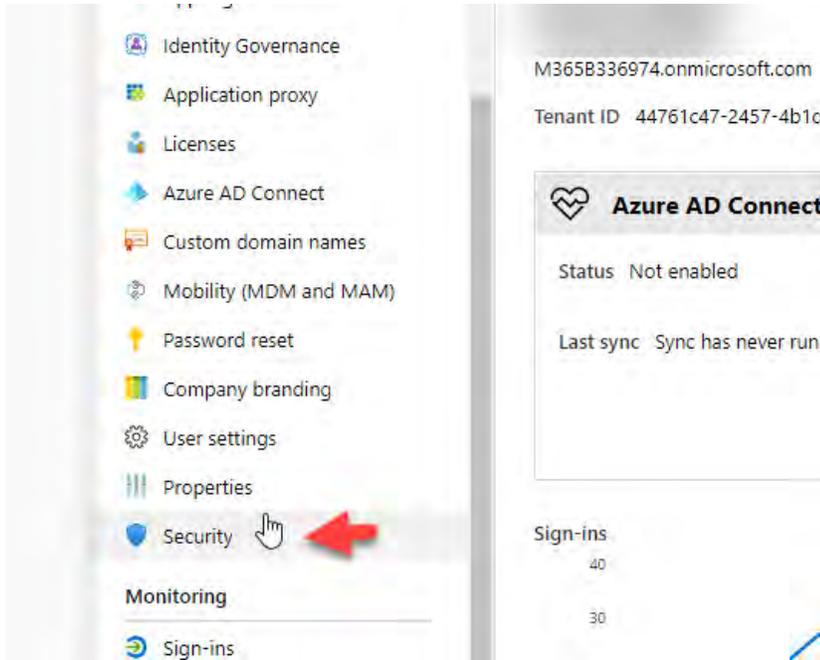


2. Click Azure Active Directory

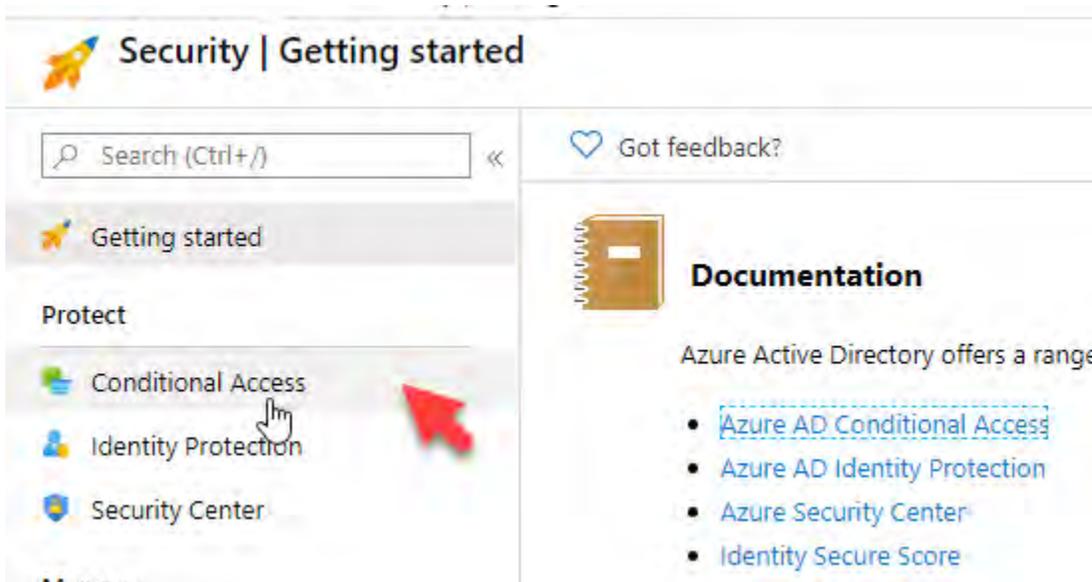


OVERVIEW & USER GUIDE

3. Scroll down and click Security

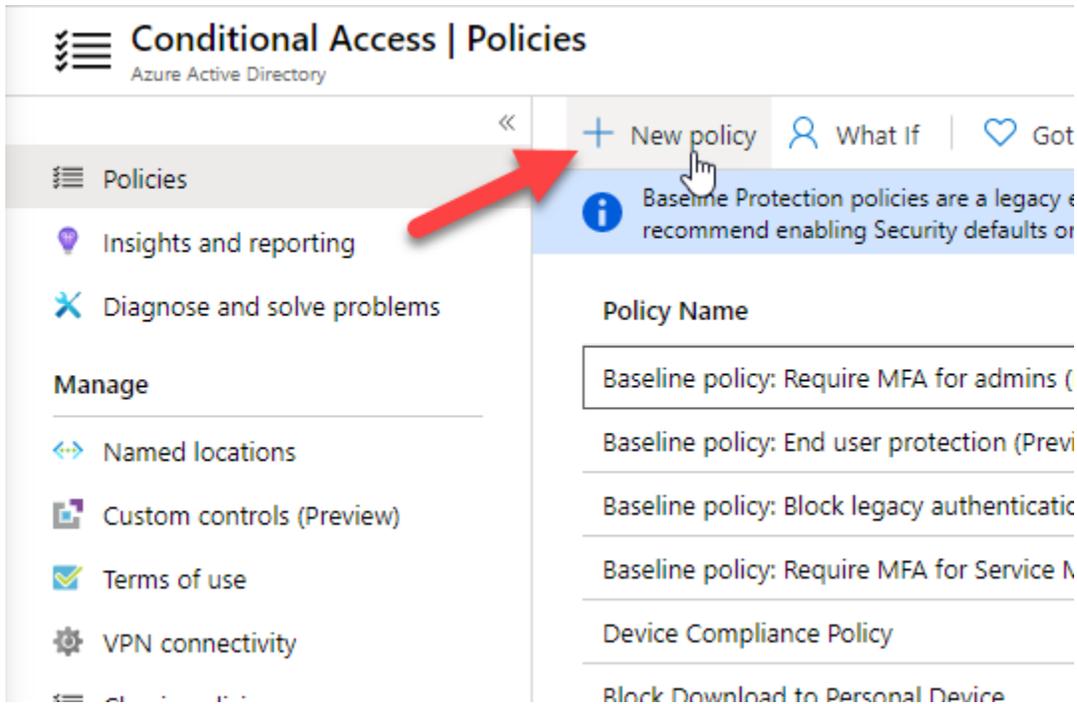


4. Click Conditional Access



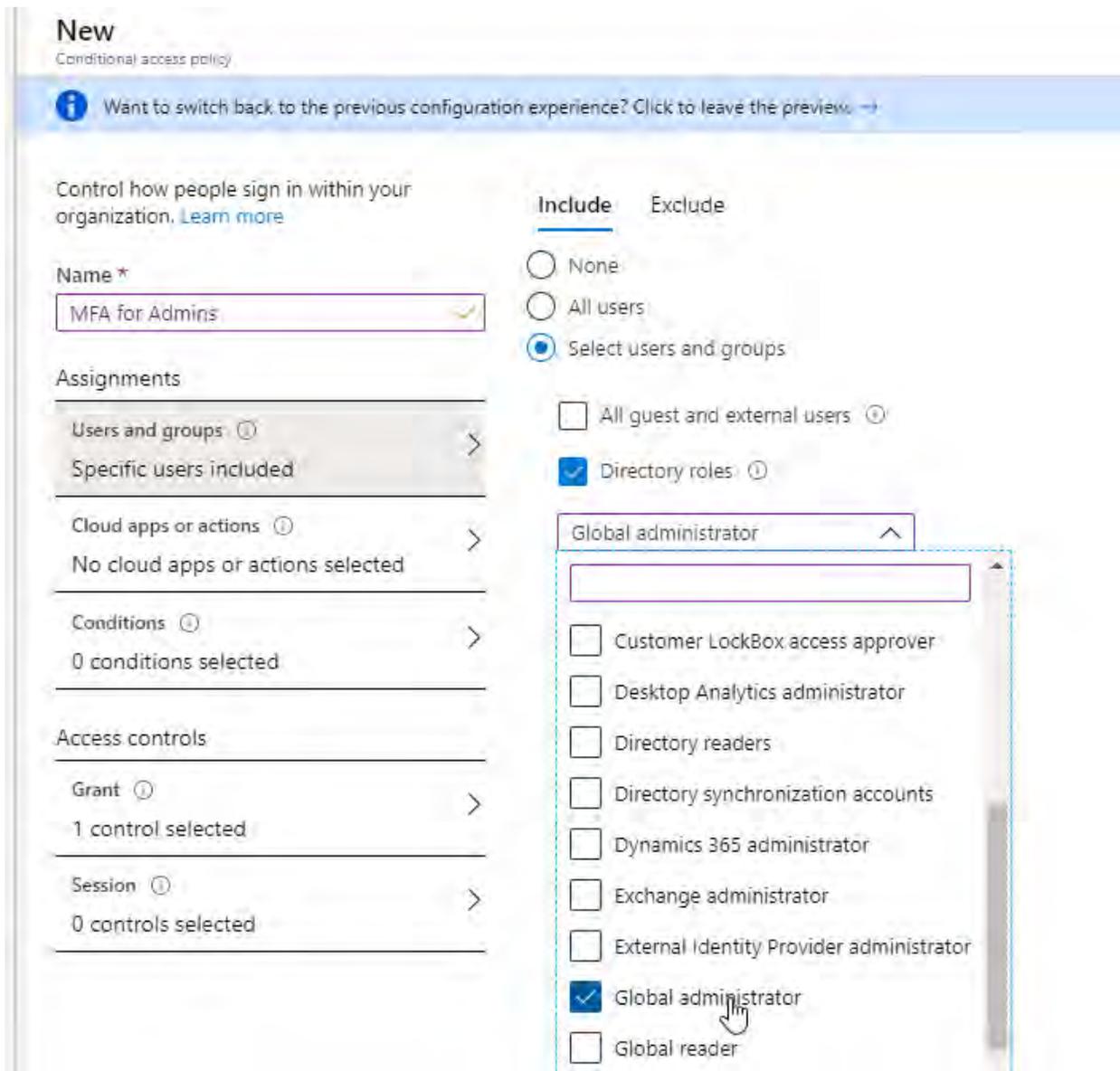
5. Click New Policy

OVERVIEW & USER GUIDE



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6. Give your policy a name and under the users and groups blade select Directory Roles. From the drop down, select Global Administrator at a minimum. If you have assigned other privileged roles like User Administrator or Security Administrator, we recommend adding them here too.



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7. Select All Cloud Apps

New
Conditional access policy

Want to switch back to the previous configuration experience? Click to leave the preview.

Control how people sign in within your organization. [Learn more](#)

Select what this policy applies to
Cloud apps User actions

Name *
MFA for all users ✓

Assignments

- Users and groups ⓘ >
All users
- Cloud apps or actions ⓘ >
All cloud apps
- Conditions ⓘ >

Include Exclude

- None
- All cloud apps
- Select apps

⚠ Don't lock yourself out! This policy impacts the Azure portal. Before continue, ensure that you or someone else will be able to get back into the portal.

8. Skip the conditions section and in the Grant section, select Require Multi-factor Authentication

Grant

Select the controls to be enforced.

- Block access
- Grant access

- Require multi-factor authentication ⓘ
- Require device to be marked as compliant ⓘ
- Require Hybrid Azure AD joined device ⓘ
- Require approved client app ⓘ
[See list of approved client apps](#)
- Require app protection policy (Preview) ⓘ
[See list of policy protected client apps](#)

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9. Enable the policy and click Create



PowerShell

We added some scripts here for multi-tenant commands via your partner center credentials. With these scripts you can identify Global admins across all customer tenants and chose to enable MFA

1. Retrieve a list of all Microsoft 365/Office 365 customers' global admins without multi-factor authentication

[PowerShell Script](#)

2. Enable multi-factor authentication on admins in customer's M365/O365 tenant. Here we will take the export data we performed in step 7 and add the users for a particular tenant into a CSV file. Once complete, these admins will be prompted to establish MFA at their next sign in.

[PowerShell Script](#)

3. Block Admin access till MFA requirements are met

[PowerShell Script](#)

OVERVIEW & USER GUIDE

Block Legacy Authentication

End of support for legacy authentication like IMAP/POP is coming in October of 2020. Legacy authentication is more susceptible to password spray attacks or brute force attacks because you cannot layer on MFA. It is advised to block all legacy authentication methods within your customer's environments. Legacy authentication can be blocked by enabling Security Defaults or creating a conditional access policy. **Note that if you have any printers/copiers/scanners or IMAP accounts used for ticketing, you should update those protocols before blocking legacy auth.**

Licensing Considerations:

Enabling MFA and Security Defaults:

- All Microsoft licensing plans

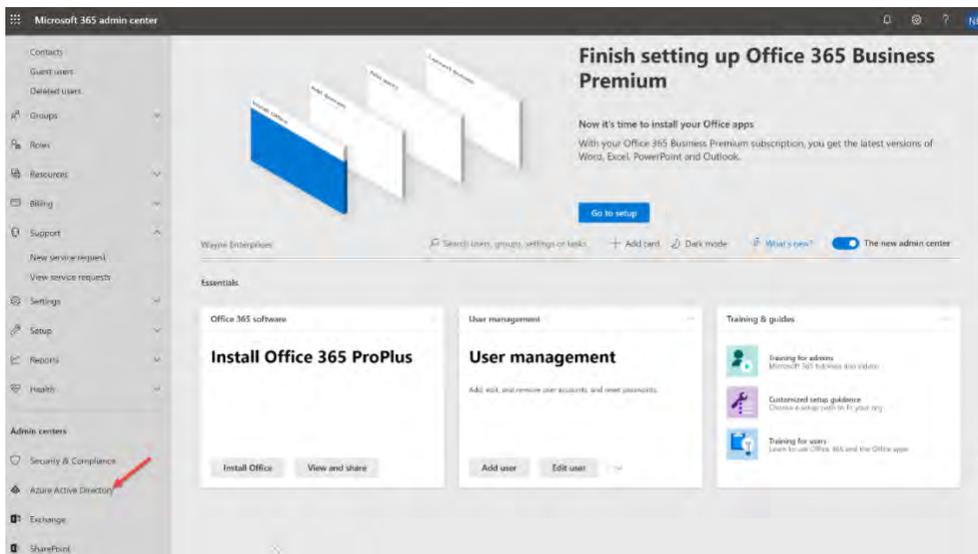
Enabling Conditional Access Policies

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- EMS + E3 (\$87.5) or EMS + E5 (\$14.80)
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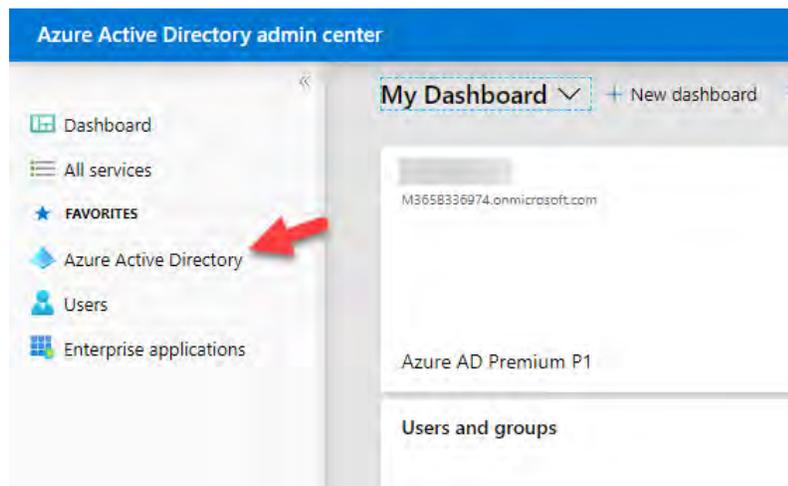
Security Defaults:

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OVERVIEW & USER GUIDE

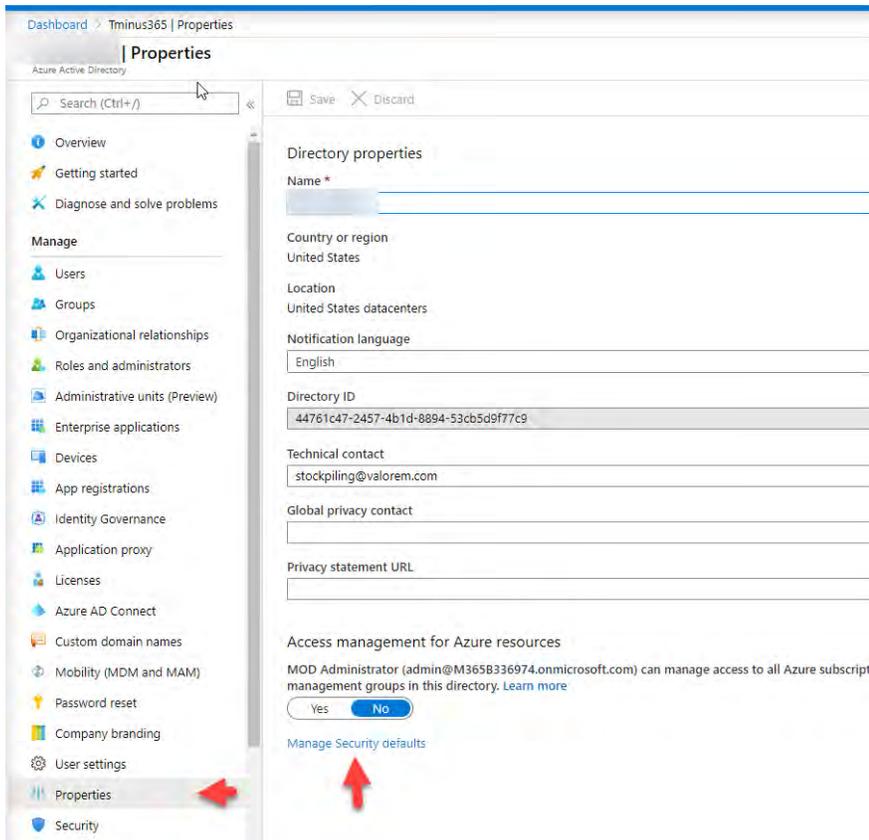


2. Click Azure Active Directory



3. Click Manage>Manage Security Defaults

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4. Toggle on Security Defaults

Enable Security defaults

Security defaults is a set of basic identity security mechanisms recommended by Microsoft. When enabled, these recommendations will be automatically enforced in your organization. Administrators and users will be better protected from common identity related attacks. [Learn more](#)

Enable Security defaults

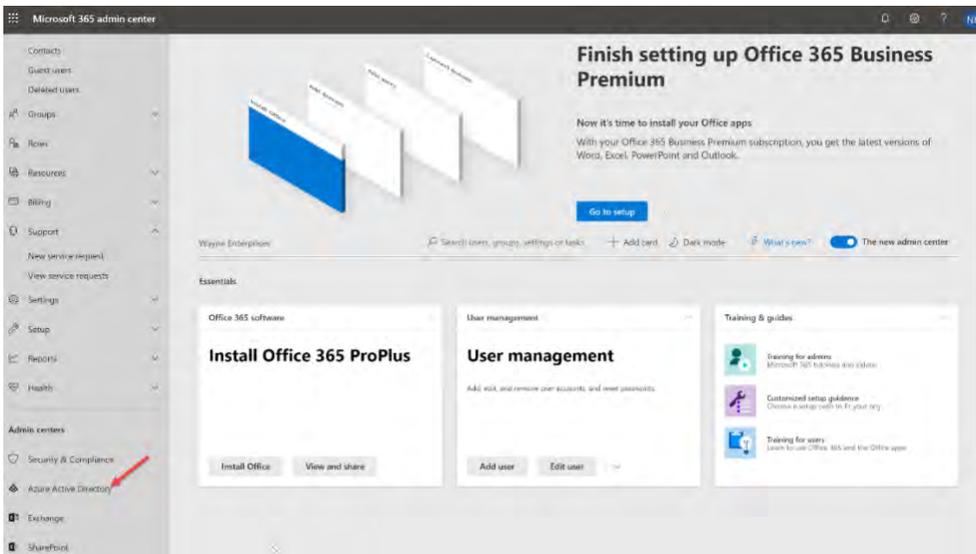
Yes No

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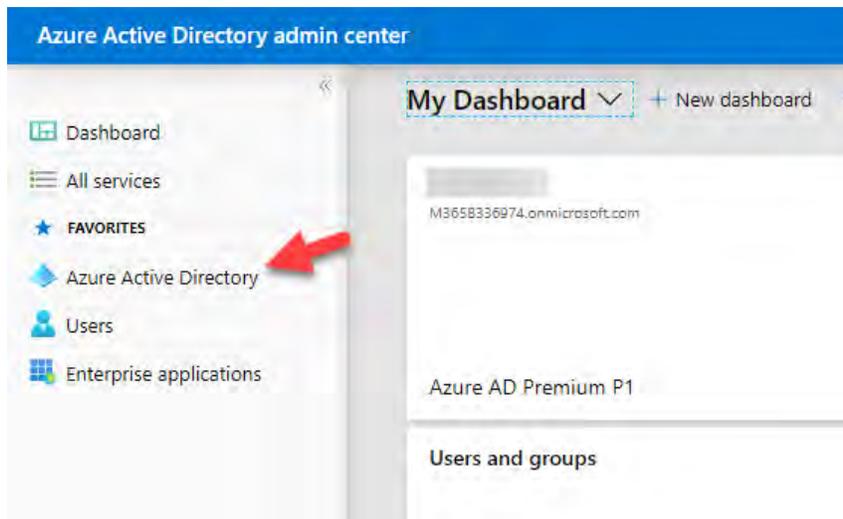
NOTE Turning on security defaults enforces MFA for all users. They will have 14 days to register after their first sign-in after you turn this on and they will only be able to use the Microsoft Authenticator app as their second form of authentication. Be sure to plan and communicate accordingly.

Conditional Access

1. In the 365 Admin Portal, click on the Azure Active Directory link under Admin Centers

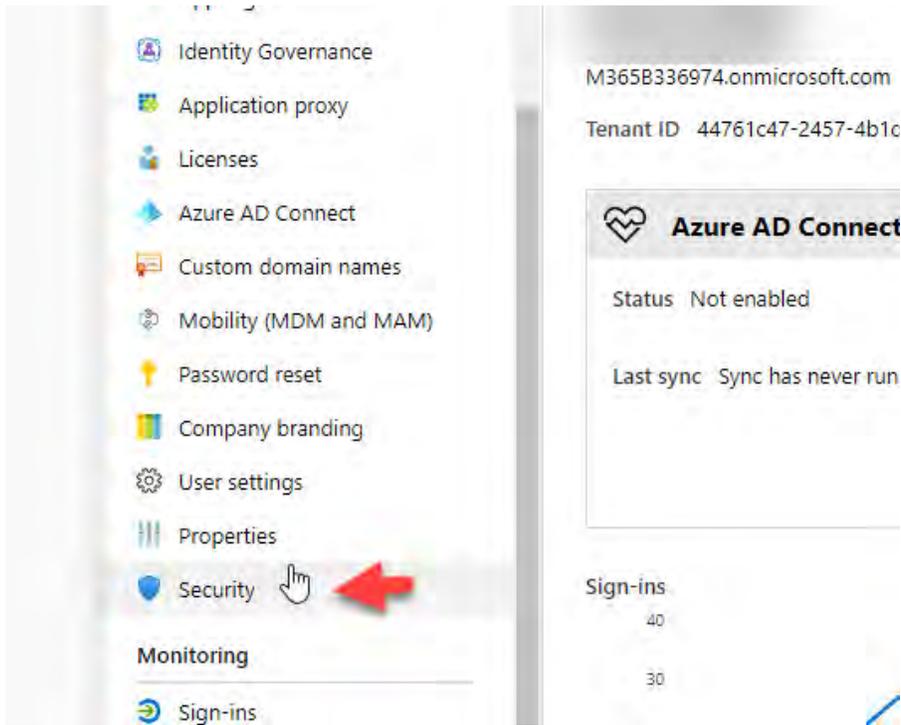


2. Click Azure Active Directory

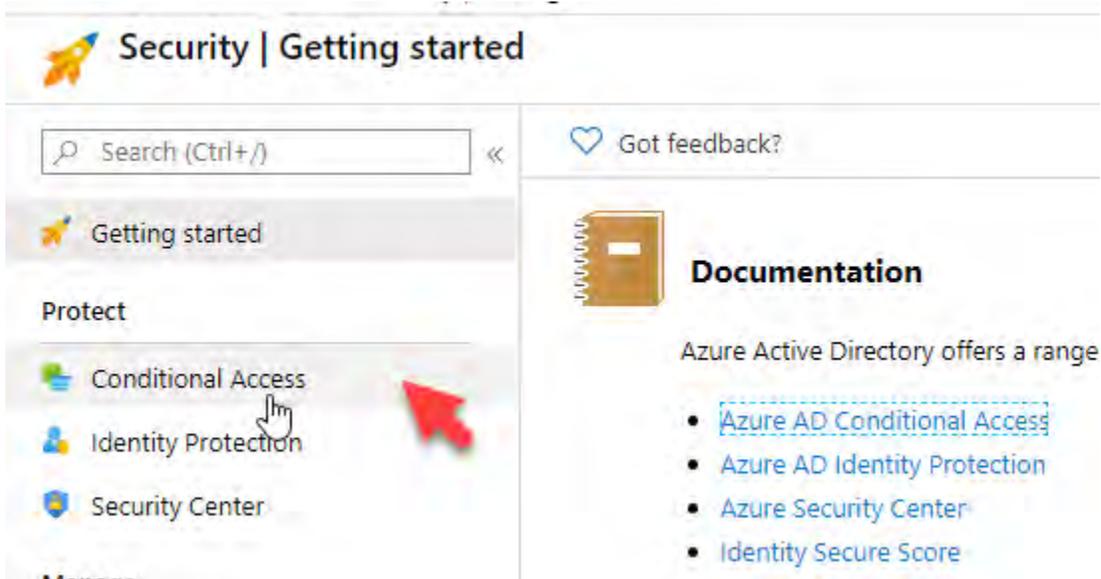


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3. Scroll down and click Security

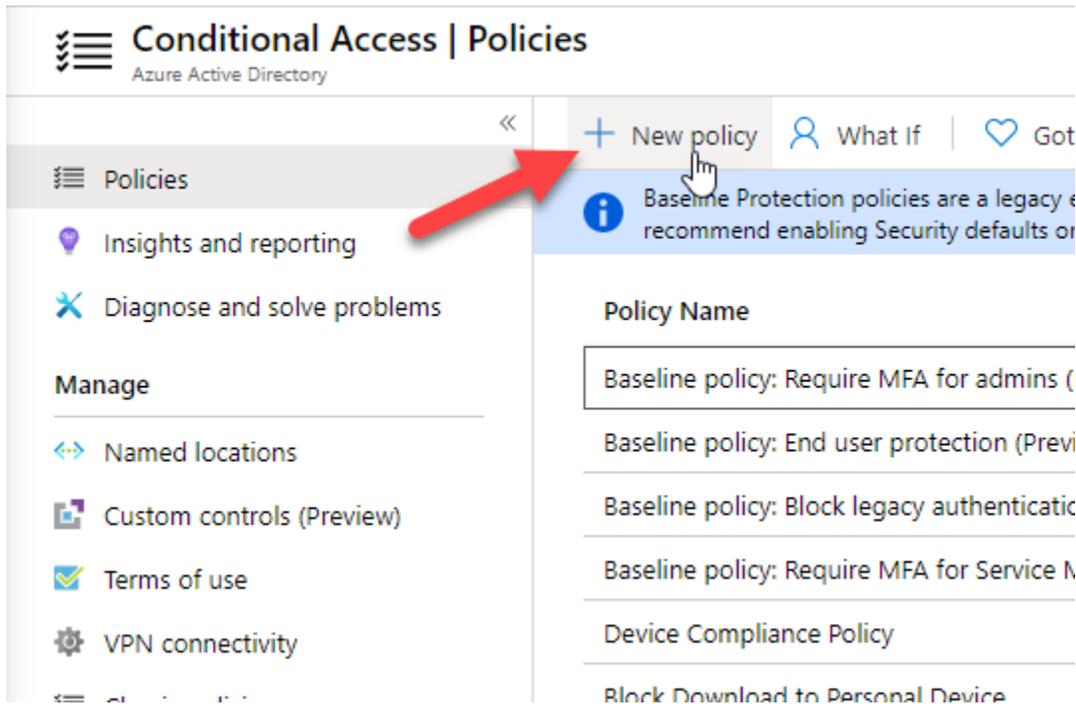


4. Click Conditional Access

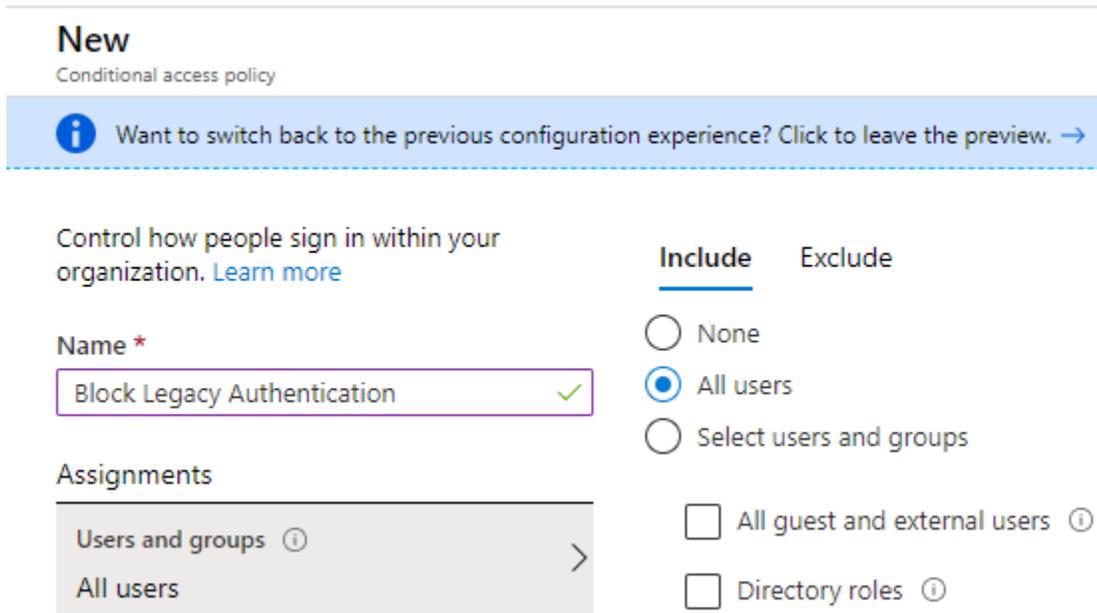


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5. Click New Policy

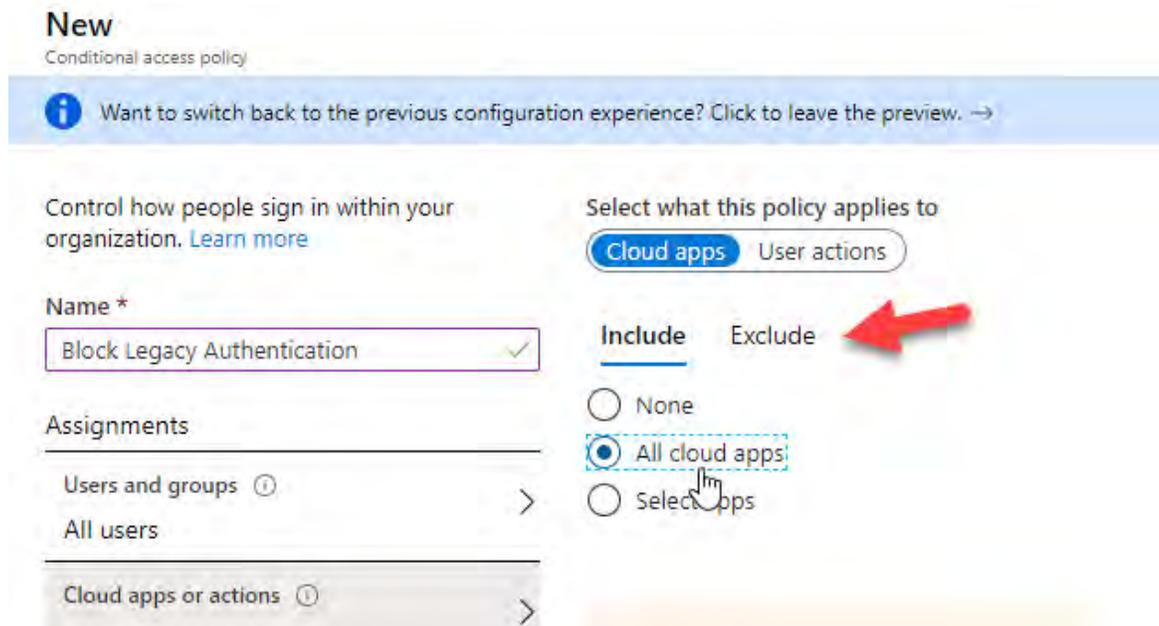


6. Name your policy and scope to all users



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7. In the Cloud apps or actions blade, click All cloud apps. *NOTE* If you do have applications that use legacy auth, you could exclude them here to give yourself more time to update the protocol.



8. In the conditions section, click Client Apps>Mobile Apps and Desktop Clients>Other Clients

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Block Legacy Auth

Conditional access policy

Delete

Want to switch back to the previous configuration experience? Click to leave the preview. →

Control how people sign in within your organization. [Learn more](#)

Refine the situations when this policy applies. [Learn more](#)

Name *

Block Legacy Auth

Assignments

- Users and groups ⓘ
All users included and specific use... >
- Cloud apps or actions ⓘ
All cloud apps >
- Conditions ⓘ
1 condition selected >

Device platforms ⓘ
Not configured >

Locations ⓘ
Not configured >

Client apps (Preview) ⓘ
2 included >

Device state (Preview) ⓘ
Not configured >

Client apps (Preview) X

Configure ⓘ

Yes No

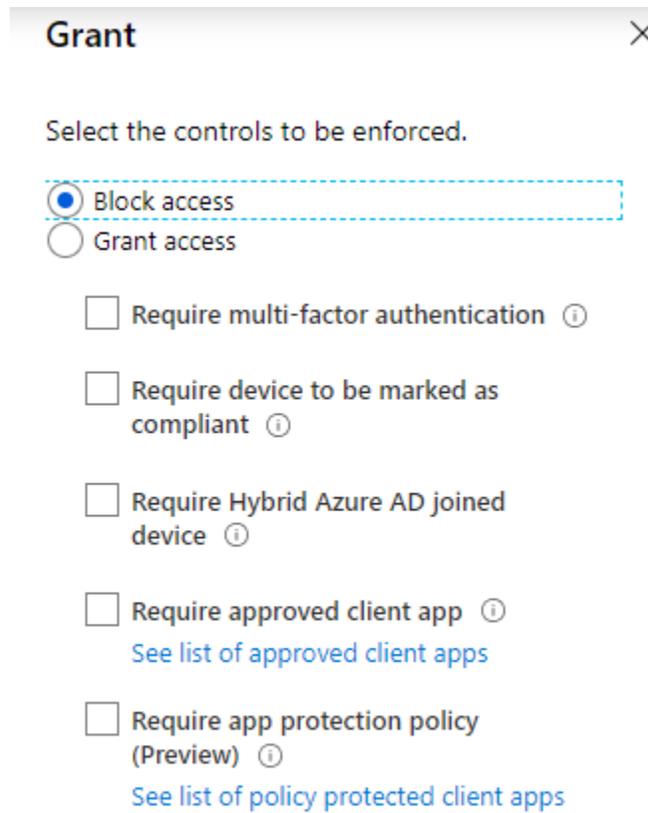
Select the client apps this policy will apply to

- Browser
- Mobile apps and desktop clients
 - Modern authentication clients
 - Exchange ActiveSync clients
 - Other clients ⓘ

9. In the Grant blade, leave the setting at Block Access



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10. Enable the policy and click Create

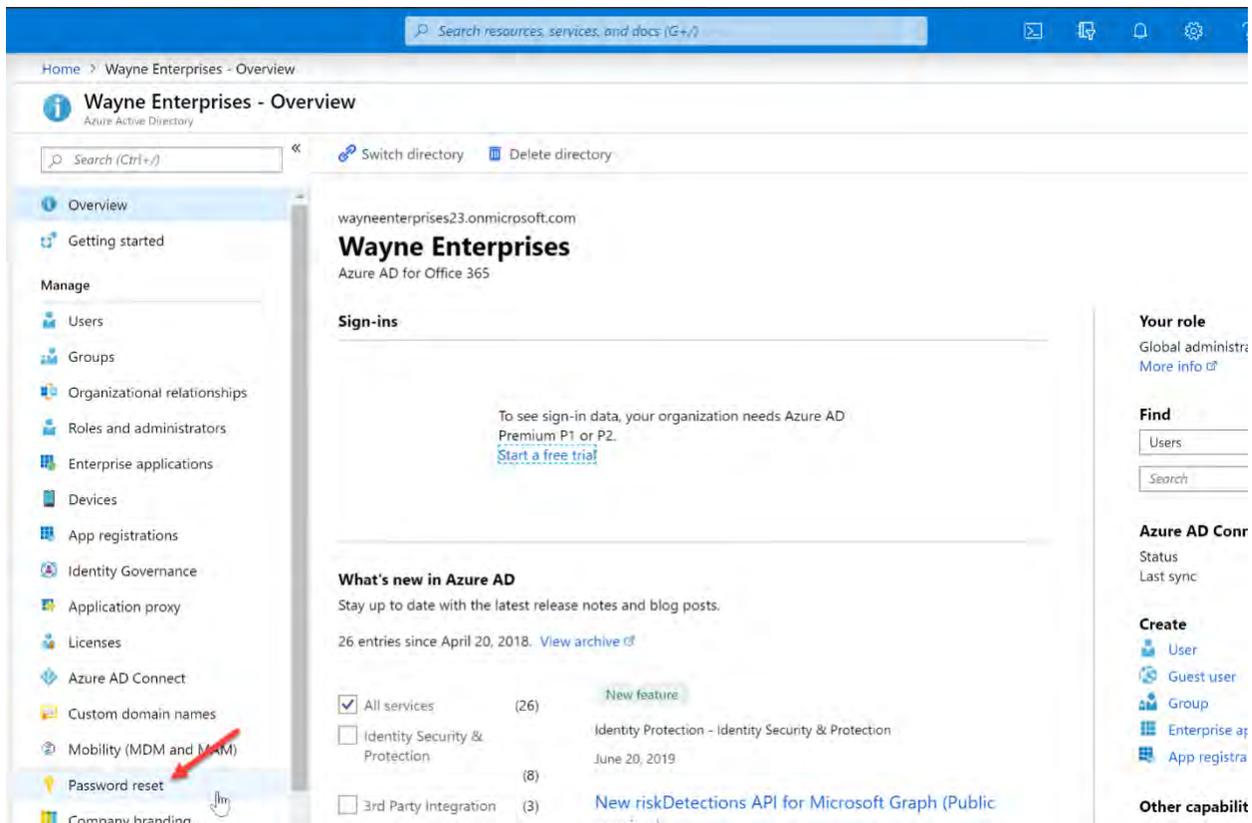


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Enable Self-Service Password Reset

With self-service password reset in Azure AD, users no longer need to engage helpdesk to reset passwords. This feature works well with Azure AD dynamically banned passwords, which prevents easily guessable passwords from being used.

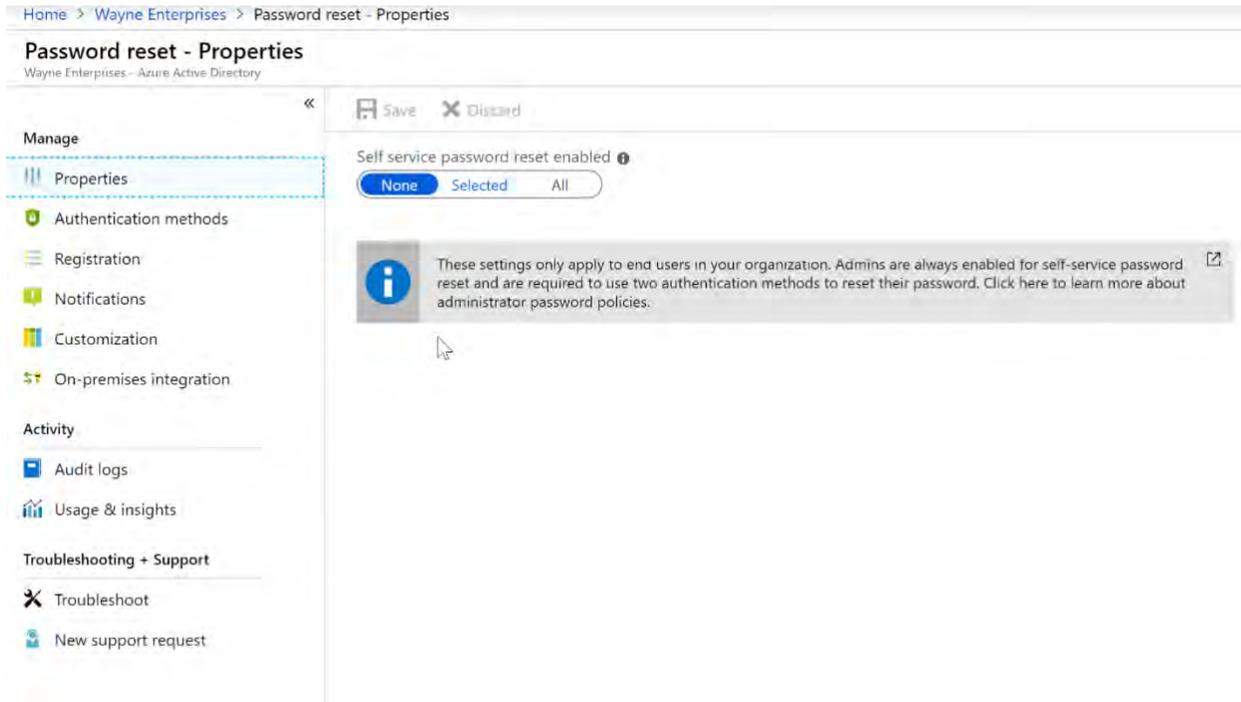
1. Go to the Azure Active Directory Admin Portal and click on the Password Reset



tab:

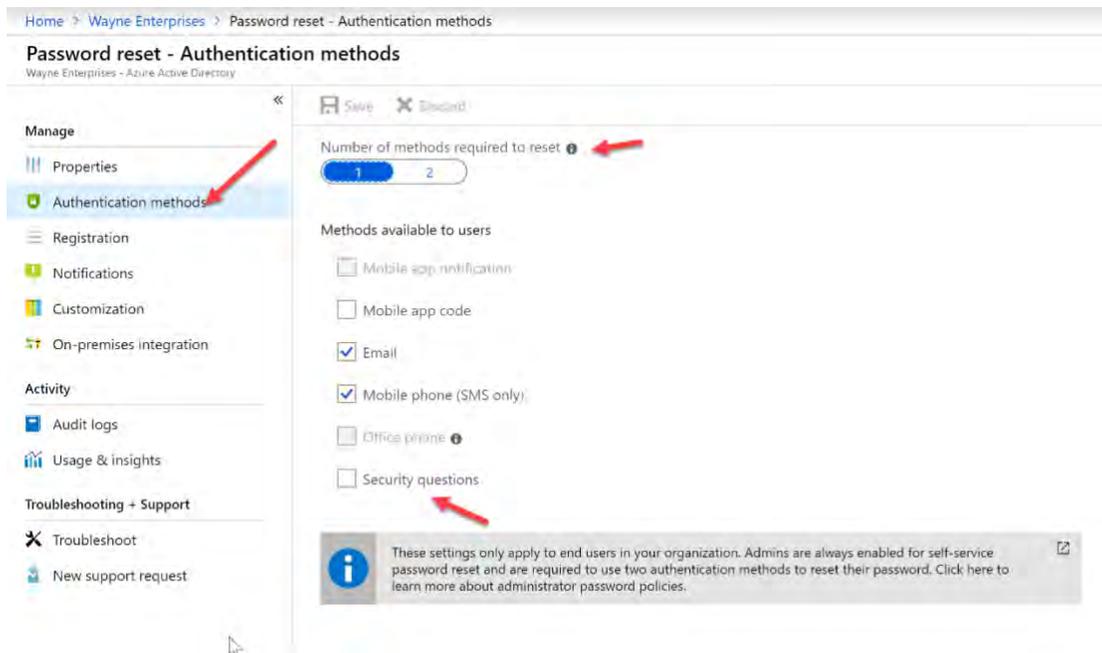
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2. The default tab allows you to enable for all users or select groups of users if you do not want to turn it on for everyone

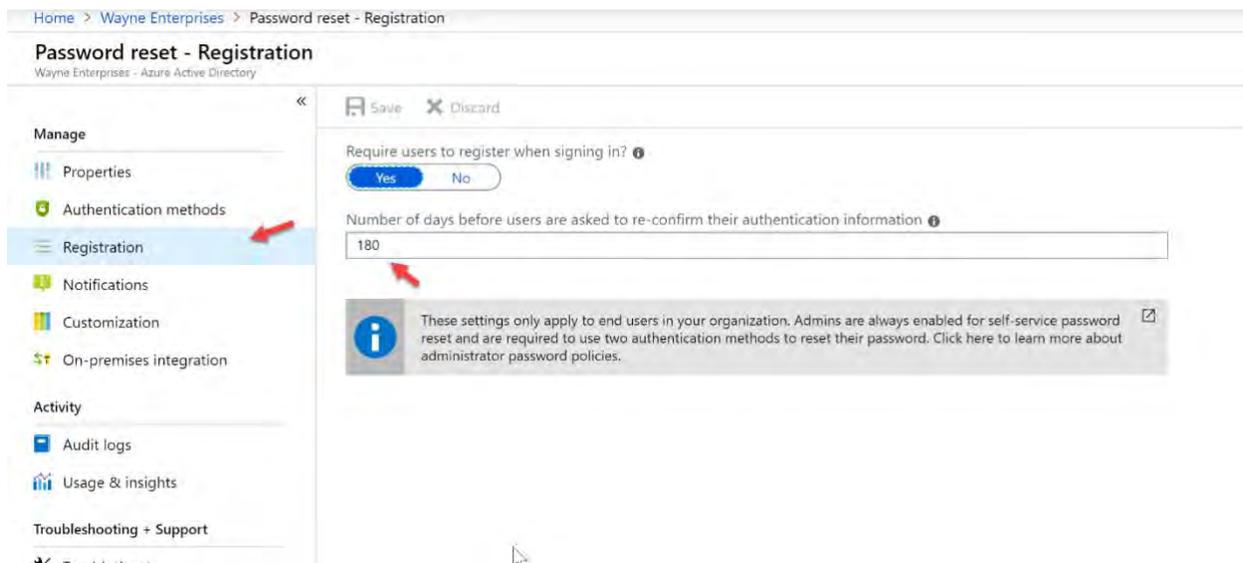


3. In the Authentication Methods tab, you can define what settings they can put in place. These may be the same you have selected for MFA. One that you could add that isn't available with MFA is security questions

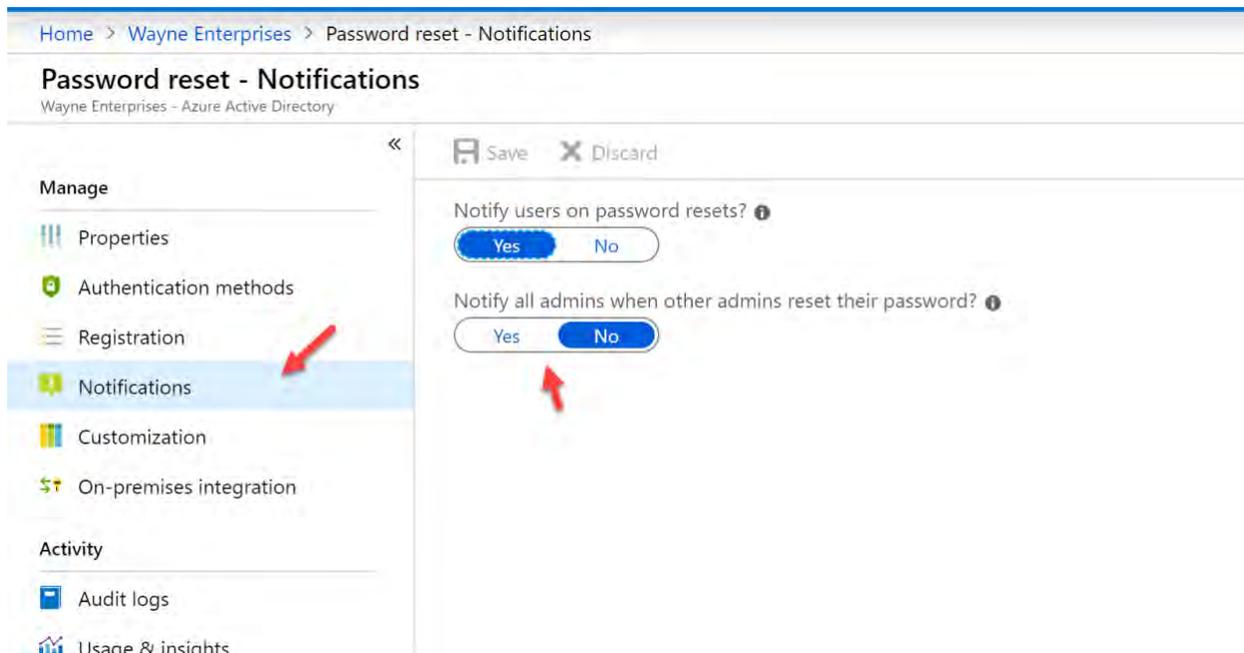
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4. You can define the number of days before users are asked to confirm their recovery options and also get alerts if you want to know when someone has reset their password



OVERVIEW & USER GUIDE



PowerShell

1. Enable SSPR for a Single Tenant
[PowerShell Script](#)
2. Enable SSPR All Tenants with Partner Center Credentials
[PowerShell Script](#)

OVERVIEW & USER GUIDE

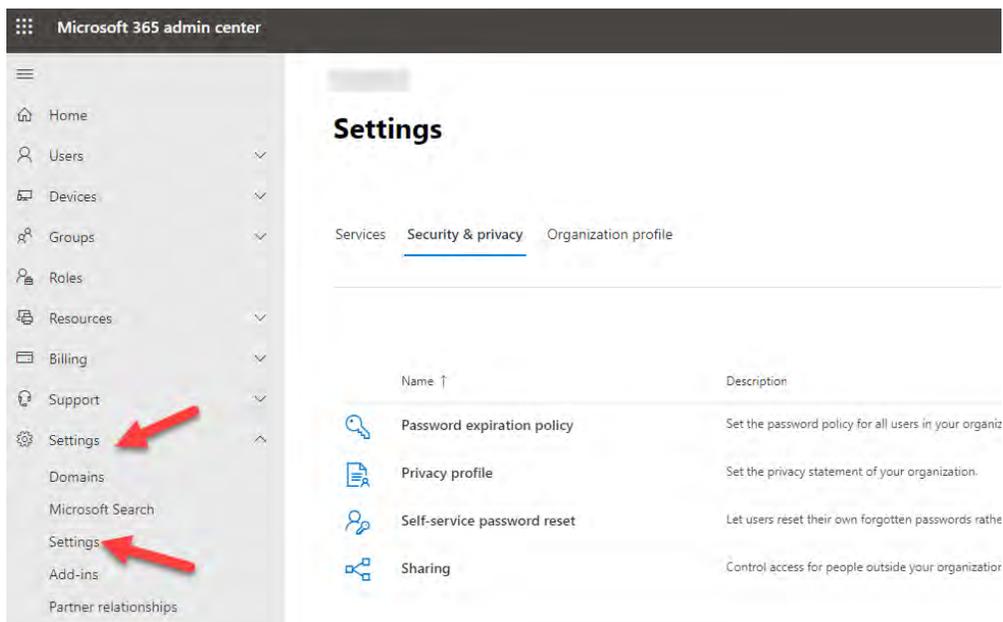
Do Not Expire Passwords

Research has found that when periodic password resets are enforced, passwords become less secure. Users tend to pick a weaker password and vary it slightly for each reset. If a user creates a strong password (long, complex and without any pragmatic words present) it should remain just as strong in 60 days as it is today. It is Microsoft's official security position to not expire passwords periodically without a specific reason. Make sure you have MFA enabled before making this setting change.

Compliance Controls

- FedRAMP Moderate; Control AC-7(a)
- NIST 800-171; Control 3.1.8
- NIST 800-53; Control AC-7(a)

1. In the 365 Admin Center, expand Settings and select Security & Privacy. From here you can click edit to make changes to the password policy



OVERVIEW & USER GUIDE

2. Ensure the checkbox is unchecked

Password expiration policy

Choose the number of days before a user's password will expire, and the number of days before they're notified about an upcoming password expiration. The policy applies to everyone in your organization.

[Learn more about password policy recommendations](#)

Set user passwords to expire after a number of days

PowerShell

Change Password Policy for single tenant or all of your customer tenants

[Click here](#)

OVERVIEW & USER GUIDE

Delete/block accounts not used in last 30 days

Deleting or blocking accounts that haven't been used in the last 30 days, after checking with owners, helps prevent unauthorized use of inactive accounts. These accounts can be targets for attackers who are looking to find ways to access your data without being noticed. In GitHub, you can download a PowerShell script called "InactiveUsersLast90Days.ps1" to look up the users who have not logged in for the last 90 days.

Compliance Controls

- FedRAMP Moderate; Control AC-2(3)
- NIST 800-53; Control AC-2(3)

1. [PowerShell Script](#)

OVERVIEW & USER GUIDE

Designate More than 1 Global Admin but fewer than 5

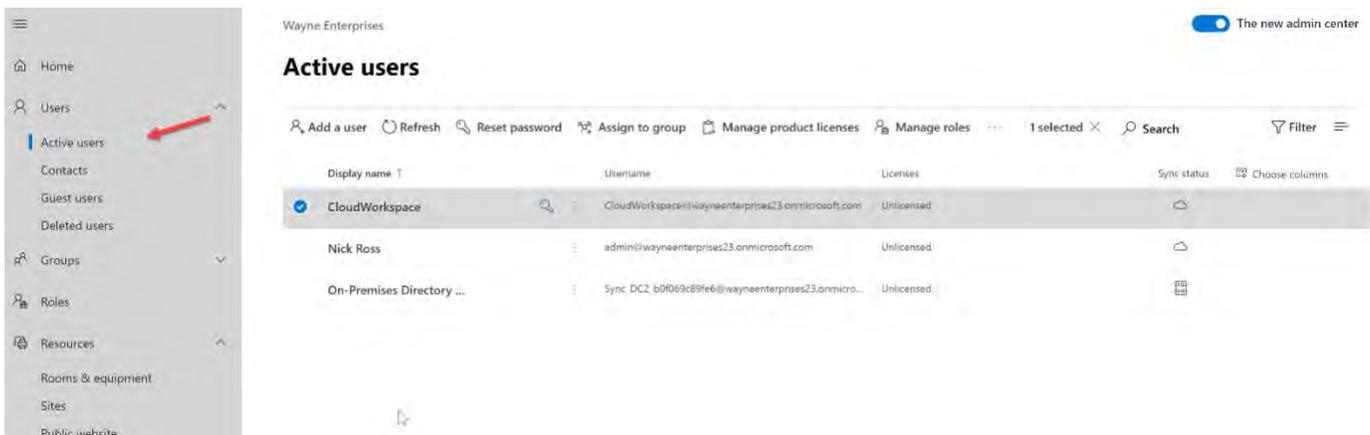
You should designate more than one global tenant administrator because that one admin can perform malicious activity without the possibility of being discovered by another admin. You could also set this second admin up with a mailbox in which all of the reports discussed in this playbook are filtered into.

Reducing the number of global admins limits the number of accounts with high privileges that need to be closely monitored. If any of those accounts are compromised, critical devices and data are open to attacks. Designating fewer than 5 global admins reduces the attack surface area.

Compliance Controls

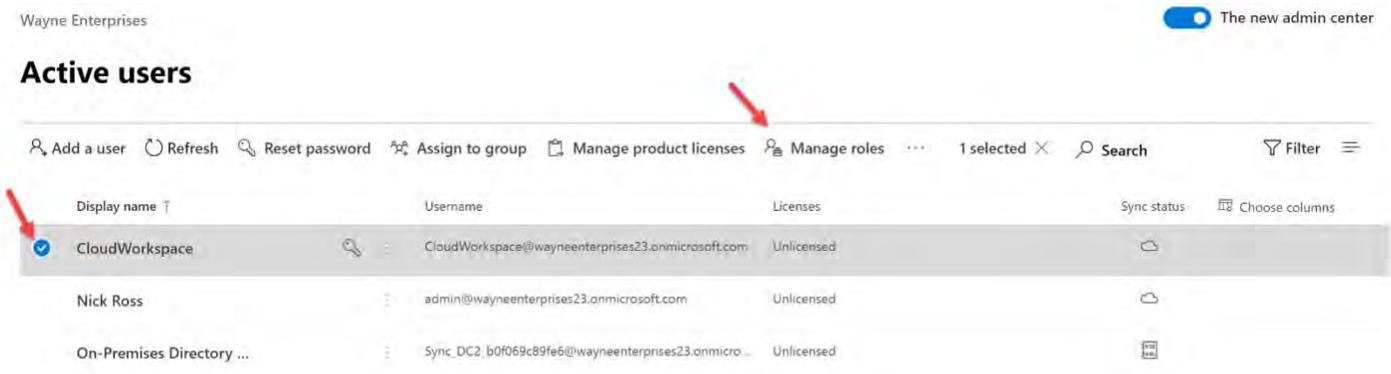
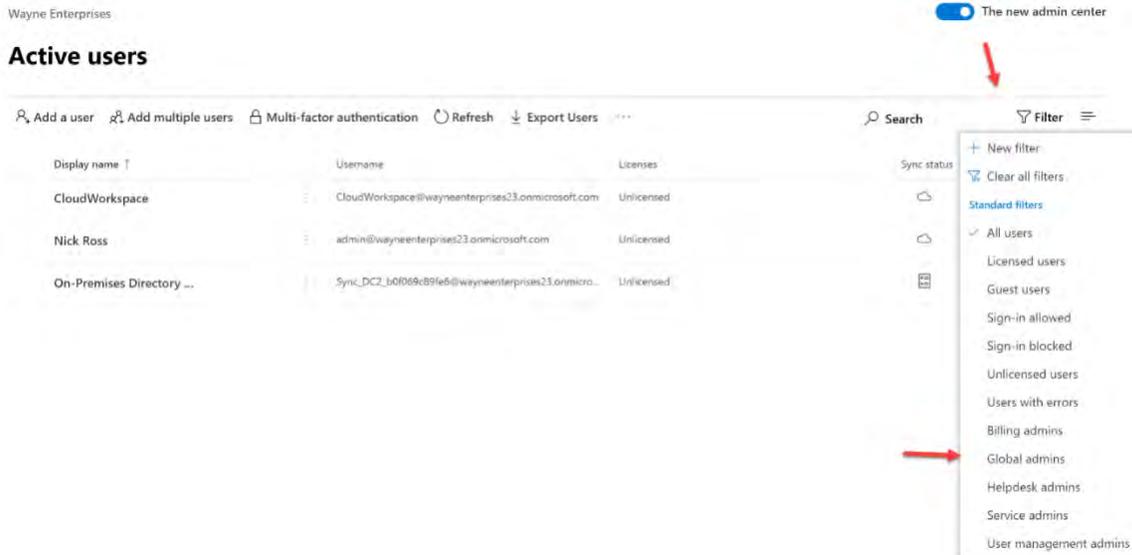
- CSA CCM301; Control DSI-02
- FedRAMP Moderate; Control IA-3
- GDPR; Control 6.6.5
- ISO 27018:2014; Control C.9.4.2, Control A.10.8
- NIST 800-171; Control 3.5.2
- NIST 800-53; Control IA-3

1. Log In to the 365 Admin Center>Go to Users>Active Users

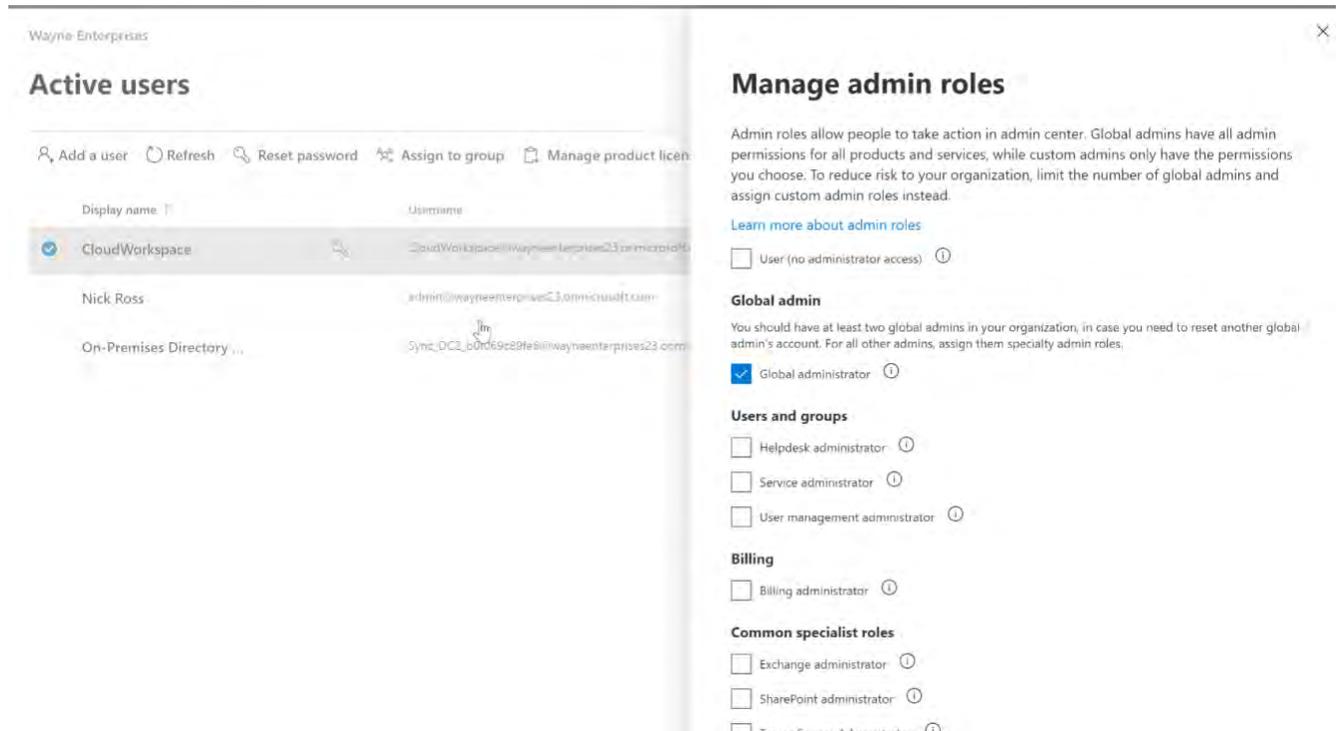


OVERVIEW & USER GUIDE

2. On this page, you can filter by Global Admin roles or you can manage user roles by selecting on a user and clicking on Manage Roles



OVERVIEW & USER GUIDE



PowerShell:

1. View all Global Admins in one customer tenant

[PowerShell Script](#)

2. View all Global Admins across all tenants with Partner Center credentials

[PowerShell Script](#)

OVERVIEW & USER GUIDE

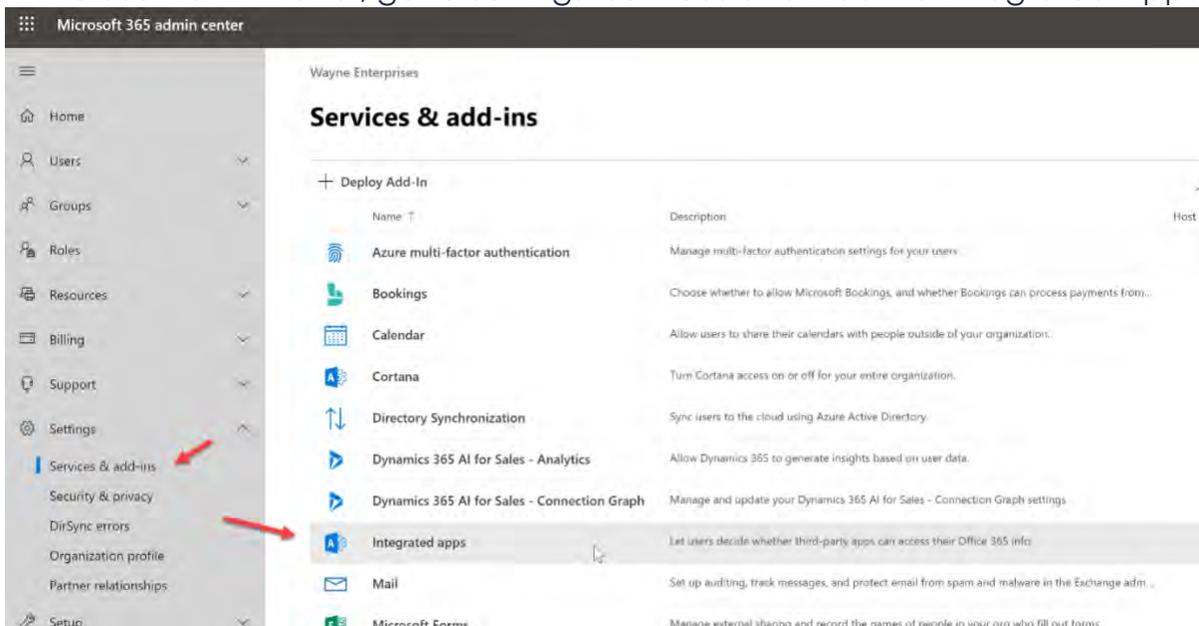
Do not allow users to grant consent to unmanaged applications

Tighten the security of your services by regulating the access of third-party integrated apps. Only allow access to necessary apps that support robust security controls. Third-party applications are not created by Microsoft, so there is a possibility they could be used for malicious purposes like exfiltrating data from your tenancy. Attackers can maintain persistent access to your services through these integrated apps, without relying on compromised accounts.

Compliance Controls

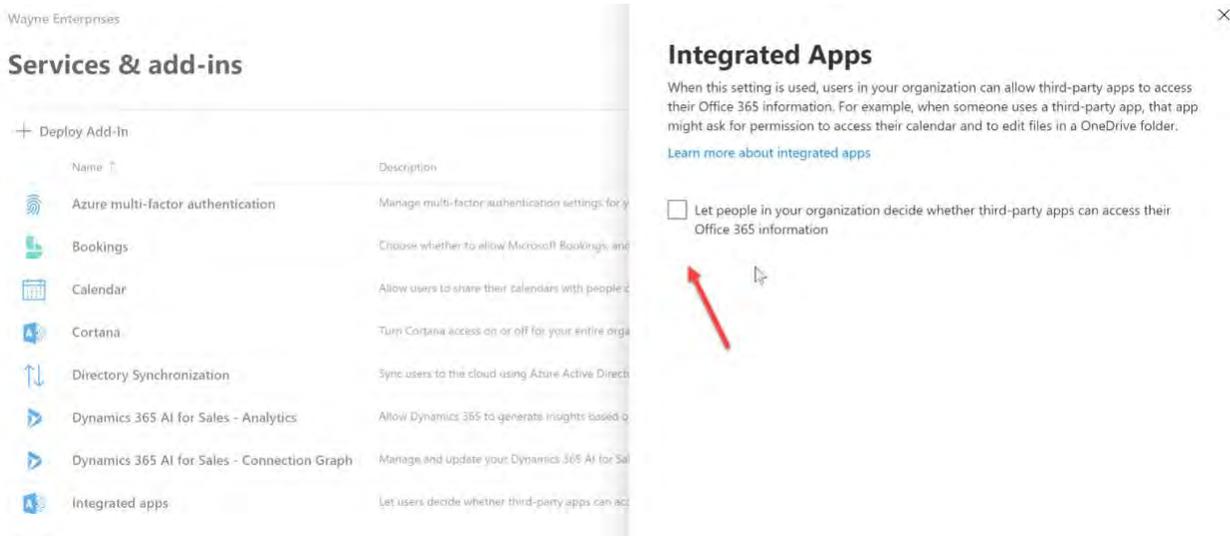
- FedRAMP Moderate; Control CM-8(3)(a)
- NIST 800-53; Control CM-8(3)(a)
- NIST CSF; Control ID.AM-1

1. In the 365 Admin Portal, go to Settings>Services and Add-Ins>Integrated Apps



OVERVIEW & USER GUIDE

2. Deselect the checkbox and save



PowerShell:

1. Disable with PowerShell for one customer
[PowerShell Script](#)
2. Disable with PowerShell across all customers with Partner Center credentials
[PowerShell Script](#)

OVERVIEW & USER GUIDE



EXCHANGE ONLINE

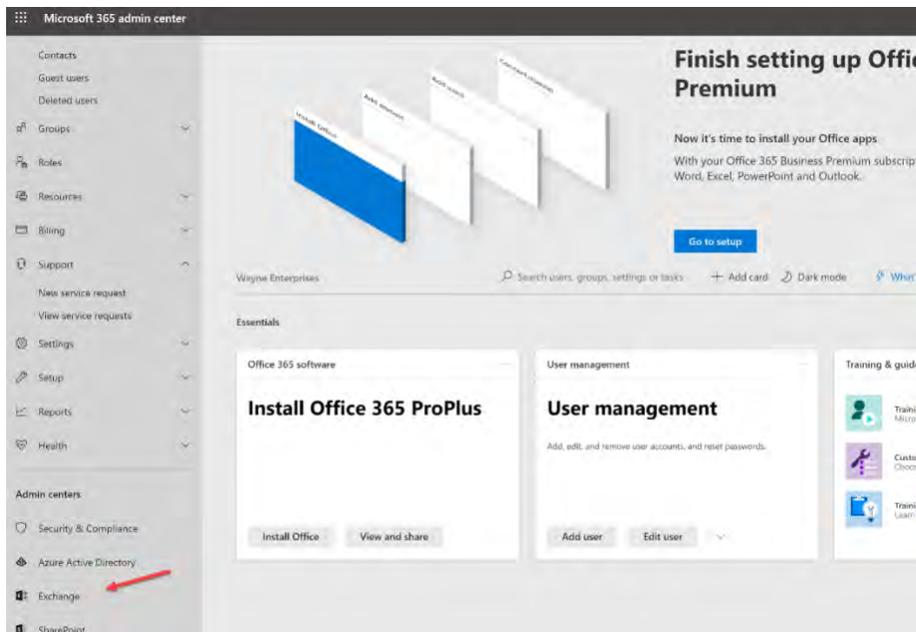
Enable Email Encryption

Email encryption rules can be added to encrypt a message with a particular keyword in the subject line or body. Most common is to add "Secure" as the key word in the subject to encrypt the message. M365/O365 Message Encryption works with Outlook.com, Yahoo!, Gmail, and other email services. Email message encryption helps ensure that only intended recipients can view message content.

Licensing Considerations:

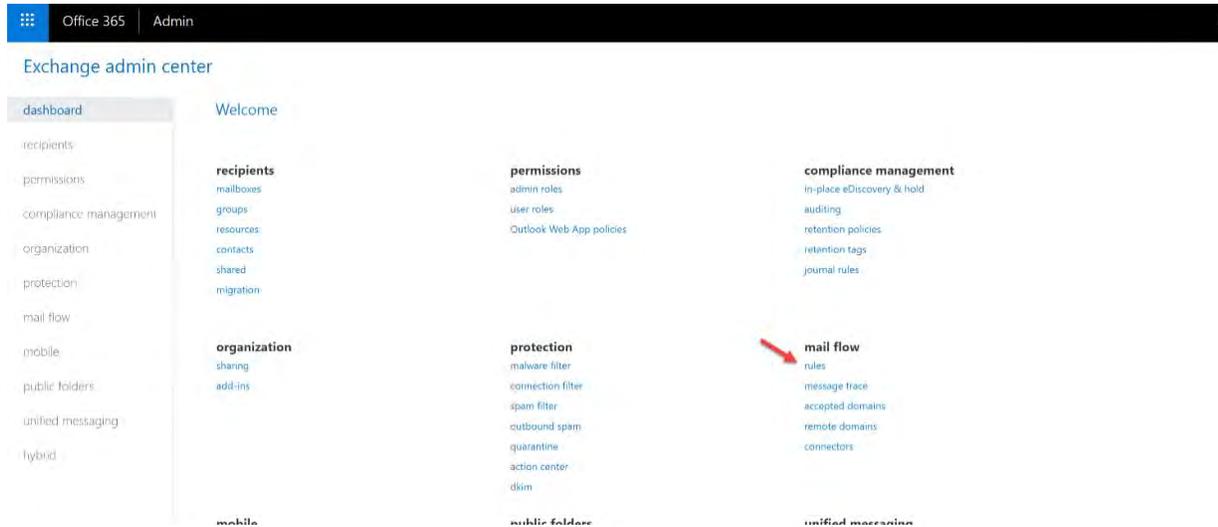
- Microsoft 365 Business Premium (\$20/u/m) -included
- Azure Information Protection Plan 1 add-on (\$2/u/m)

1. In the 365 Admin Center, click on Exchange under Admin Centers

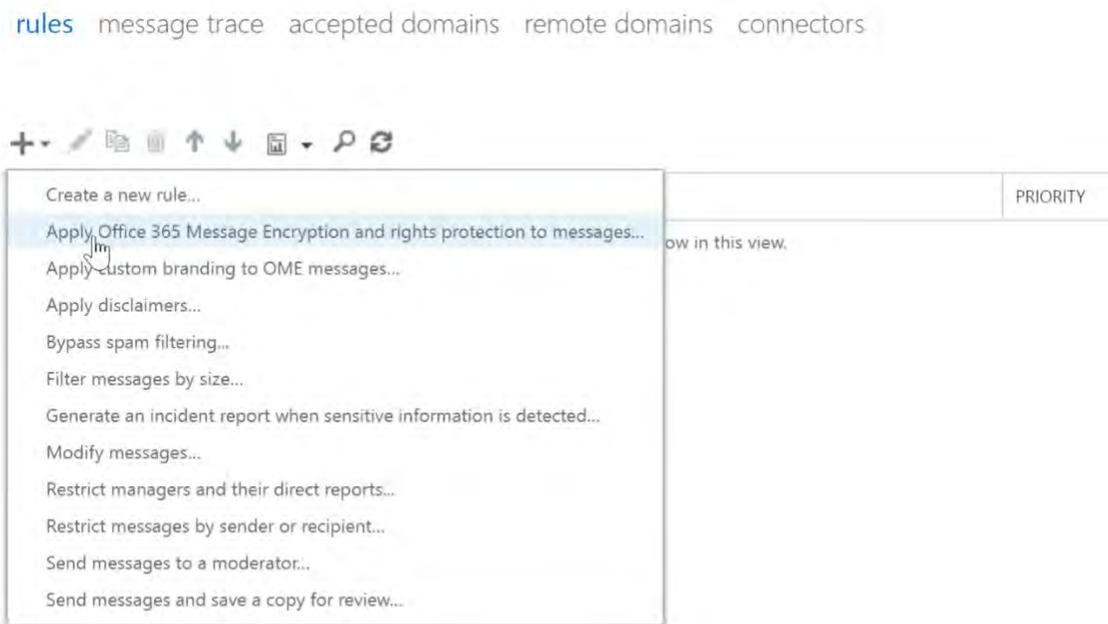


OVERVIEW & USER GUIDE

2. In the Mail Flow section, click on Rules

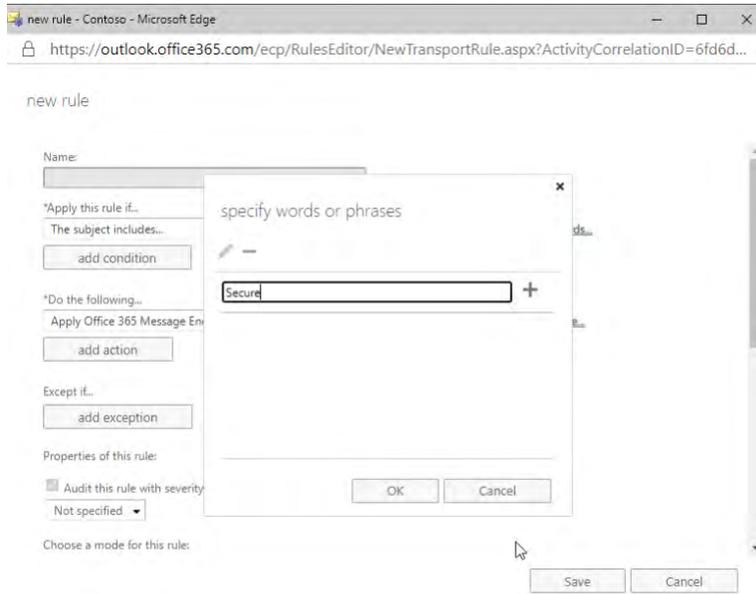


3. Click on the plus sign and click Apply Office 365 Message Encryption (allows you to define multiple conditions)

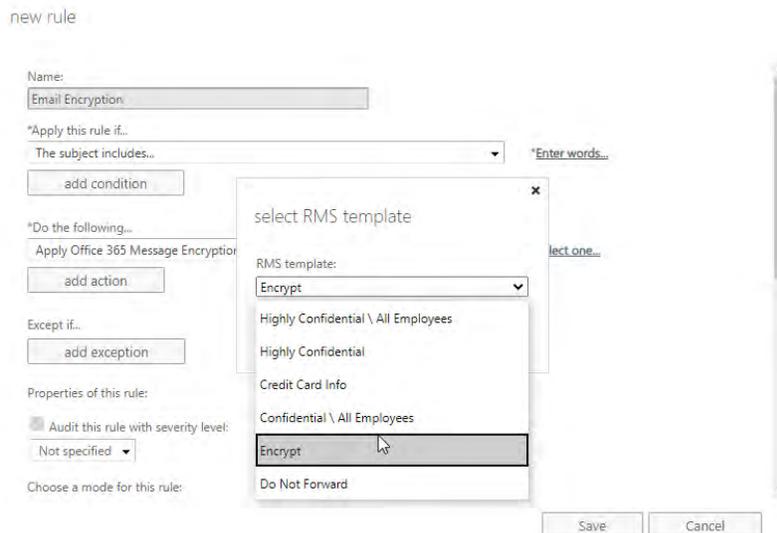


4. Name your policy and from the Apply This Rule If section, say “the subject or body includes...” and then add your keyword. Here, we are putting in “Secure”

OVERVIEW & USER GUIDE

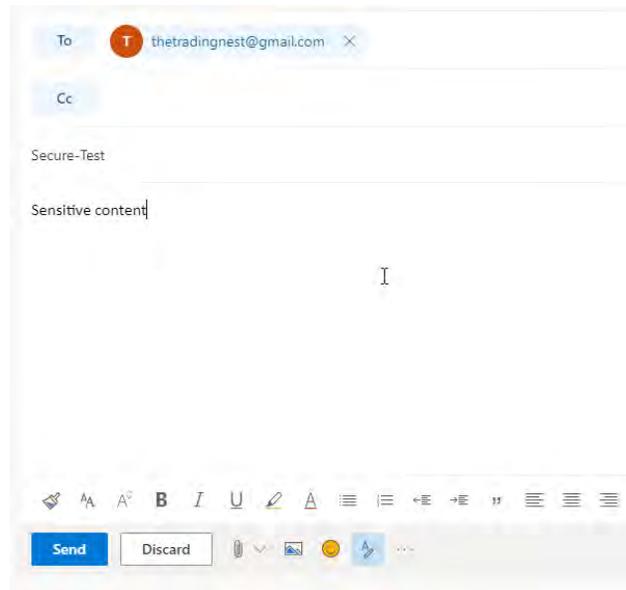


5. In the Do the Following section, click the select one for the RMS template and chose encrypt

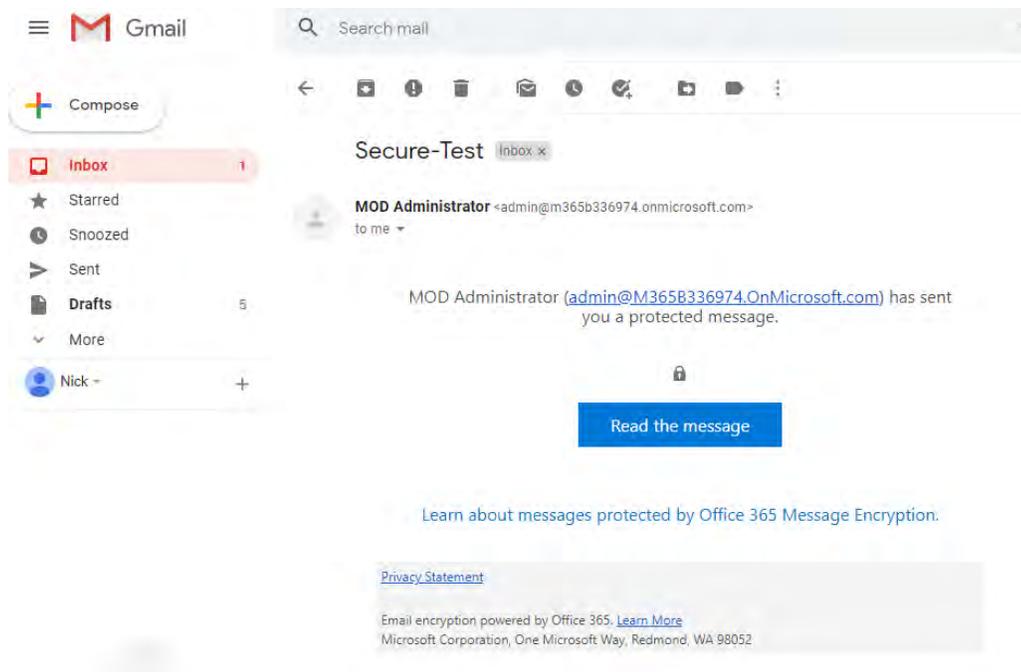


6. After you click Save you can test your policy. In this case, we are showing a message sent to a Gmail user

OVERVIEW & USER GUIDE



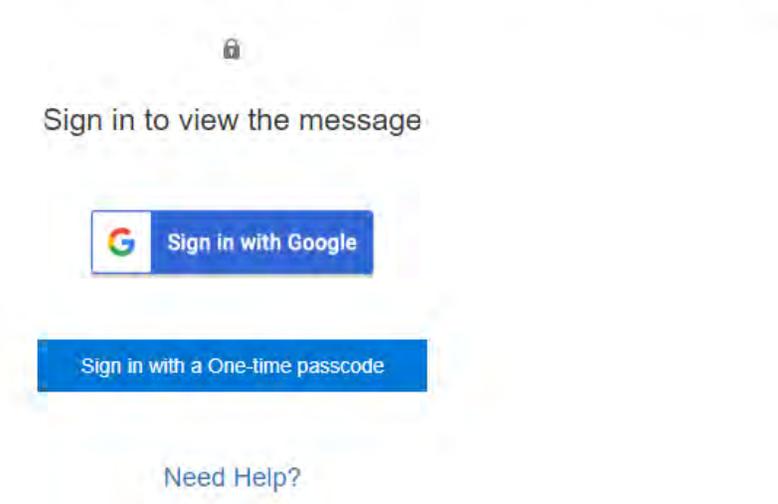
7. Gmail user inbox:



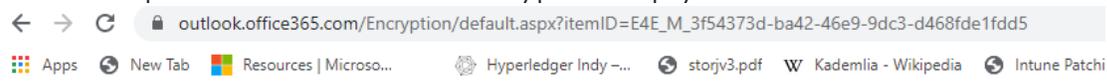
8. When the Gmail user clicks on Read the Message, they can choose to login with their Google credentials or get a one-time passcode sent to their email. In this case, we chose one-time passcode.

OVERVIEW & USER GUIDE

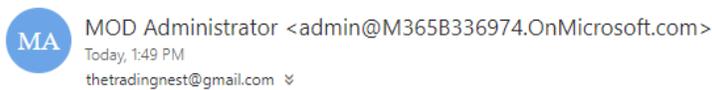
admin@M365B336974.OnMicrosoft.com has sent you a protected message



9. After we type in the correct passcode, we can view the encrypted message in the OME portal and send an encrypted reply



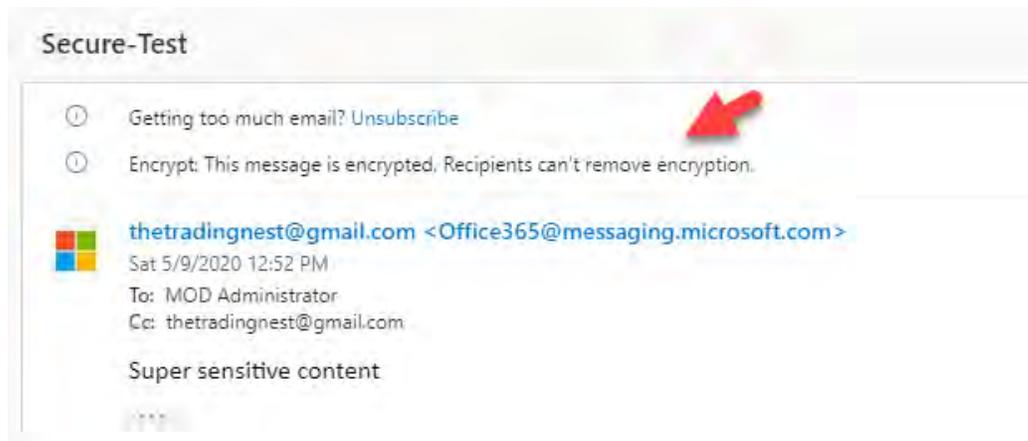
Secure-Test



Encrypt: This message is encrypted. Recipients can't remove encryption.

Sensitive content

OVERVIEW & USER GUIDE



PowerShell

[Enable Mail Flow rule for Single Tenant](#)

OVERVIEW & USER GUIDE

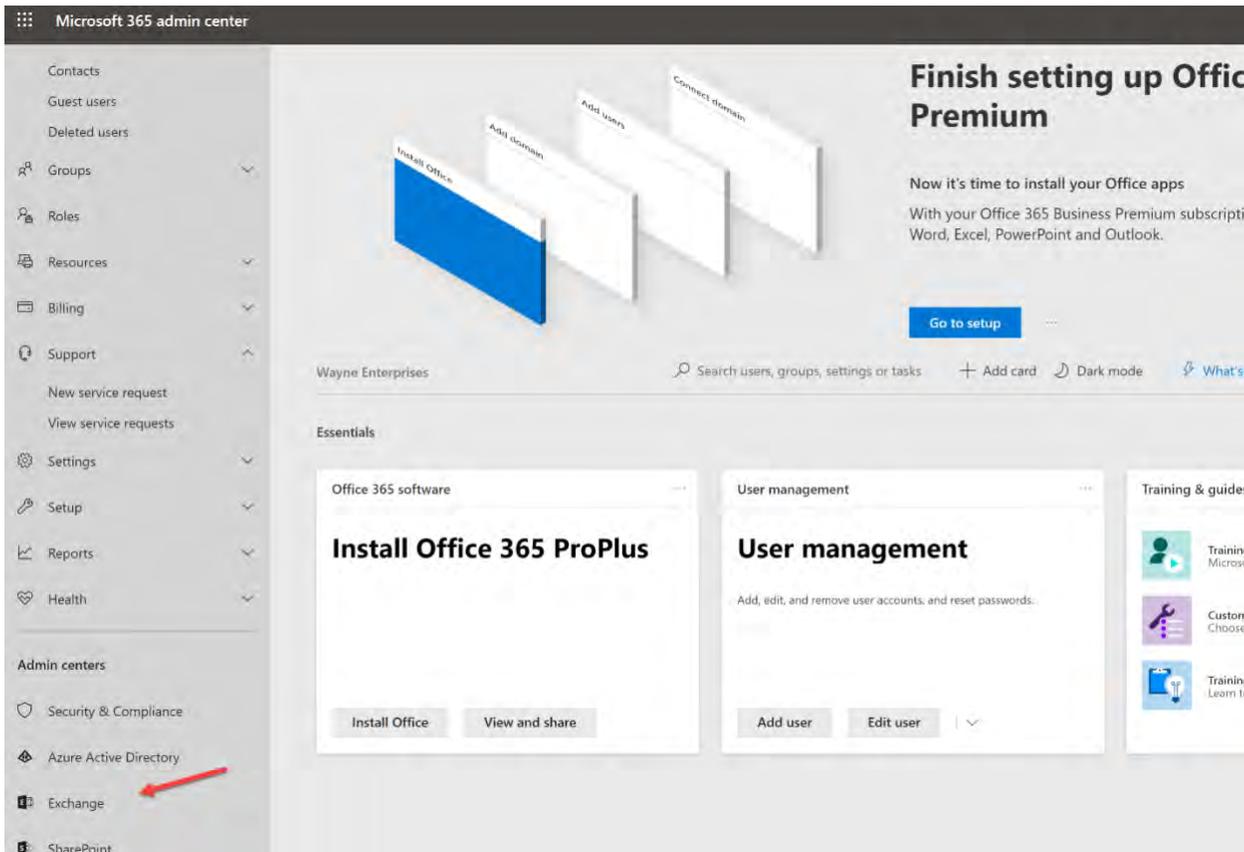
Enable Client Rules Forwarding Blocks

This is a transport rule to help stop data exfiltration with client created rules that auto-forwards email from users' mailboxes to external email addresses. This is an increasingly common data leakage method in organizations.

Compliance Controls

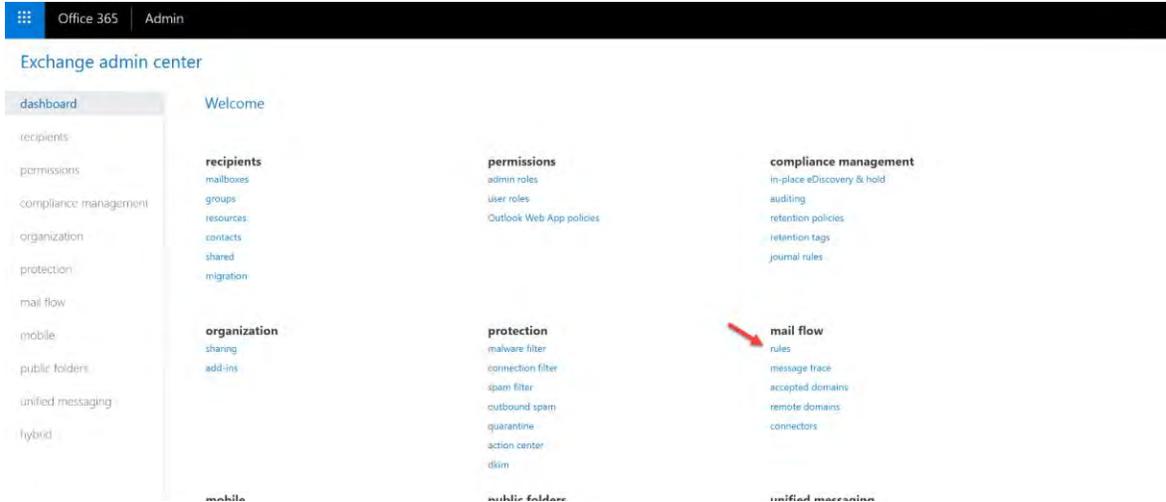
- GDPR; Control 6.8.2
- ISO 27018:2014; Control A.10.2

1. In the 365 Admin Center, click on Exchange under Admin Centers

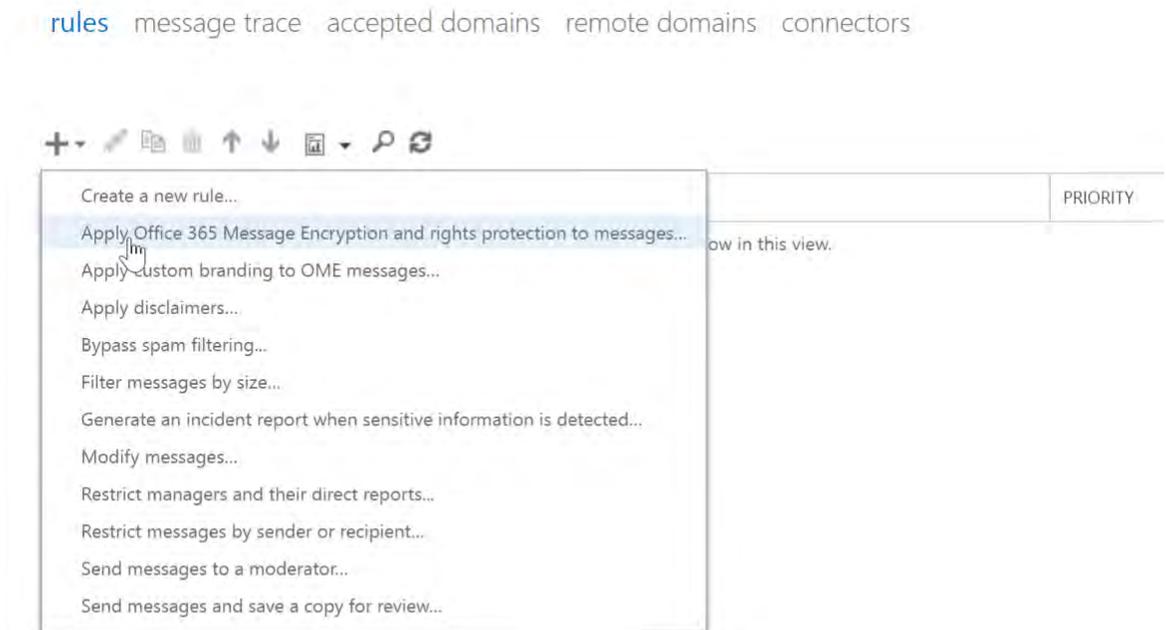


OVERVIEW & USER GUIDE

2. In the Mail flow section, click on Rules



3. Click on the plus sign and click Apply Office 365 Message Encryption (allows you to define multiple conditions)



OVERVIEW & USER GUIDE

4. Add the following Properties to the rule:

IF The Sender is located 'Inside the organization'
AND IF The Recipient is located 'Outside the organization'
AND IF The message type is 'Auto-Forward'
THEN Reject the message with the explanation 'External Email Forwarding via Client Rules is not permitted'.

The screenshot shows a browser window titled "new rule - Google Chrome" with the URL "outlook.office365.com/ecp/RulesEditor/NewTransportRule.aspx?ActivityCorrelationID=13e49f8d-3190-b495-963d-5...". The page content is titled "new rule" and contains the following configuration:

- Name:** Block FW
- *Apply this rule if...:**
 - The sender is located... [Inside the organization](#)
 - and
 - The recipient is located... [Outside the organization](#)
 - and
 - The message type is... [Auto-forward](#)
 -
- *Do the following...:**
 - [Reject the message with the explanation... 'External Email Forwarding via Client Rules is not permitted'](#)
- Except if...:**
 -
- Properties of this rule:**
 - Audit this rule with severity level:

At the bottom right, there are "Save" and "Cancel" buttons.

OVERVIEW & USER GUIDE

TIP For the 3rd condition, you need to select Message Properties >Include this message type to get the Auto-forward option to populate

new rule - Google Chrome
outlook.office365.com/ecp/RulesEditor/NewTransportRule.aspx?ActivityCorrelationID=13e49f8d-3190-b495-963d-5...

new rule

Name:
Block FW

*Apply this rule if..

- ✕ The sender is located... [Inside the organization](#)
- and
- ✕ The recipient is located... [Outside the organization](#)
- and
- ✕ The message type is... [Auto-forward](#)

Select one

- The sender... ▶
- The recipient... ▶
- The subject or body... ▶
- Any attachment... ▶
- Any recipient... ▶
- The message... ▶
- The sender and the recipient... ▶
- The message properties... ▶**
- A message header... ▶

include the message type
include this classification
don't include any classification
include an SCL greater than or equal to
include the importance level

*Select one...

Properties of this rule:

Audit this rule with severity level:
[...]

Save Cancel

OVERVIEW & USER GUIDE

5. Click Save when complete. This rule will be enforced immediately. Clients will receive a custom Non-Delivery Receipt (NDR) message that is useful for highlighting external forwarding rules they may have not known existed, or that were created by a bad actor on a compromised mailbox. You can create exceptions for certain specified users or groups in the created transport rule.

PowerShell

1. Block Auto-Forward for one customer
[PowerShell Script](#)
2. Block Auto-Forward for all of your customers via Partner Center credentials
[PowerShell Script](#)

OVERVIEW & USER GUIDE

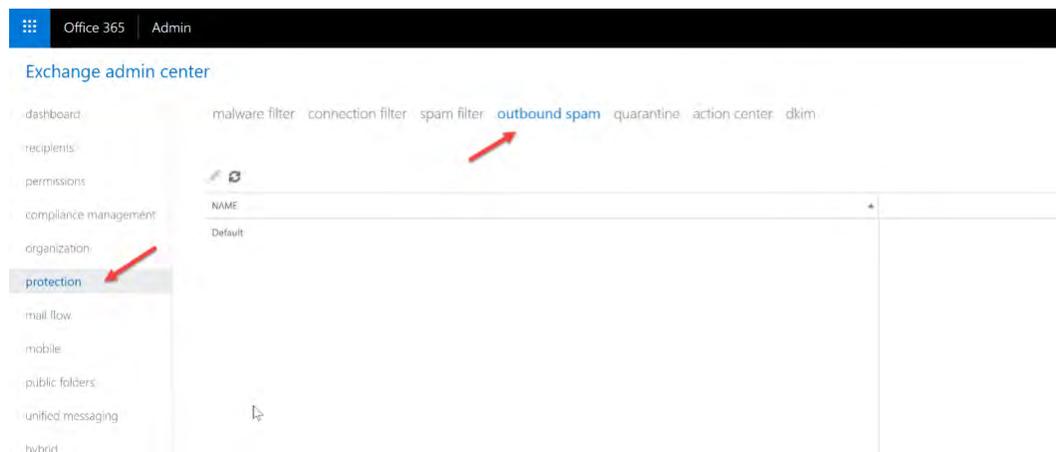
Set Outbound Spam Notifications

Setting your Exchange Online Outbound Spam notifications gives you visibility into when a user has been blocked for sending excessive or spam emails. The accounts will always be blocked, but when you configure notifications you will be notified and sent a copy of the email that caused the block to occur. A blocked account is a good indication that the account in question has been breached and that an attacker is using it to send spam emails.

Compliance Controls

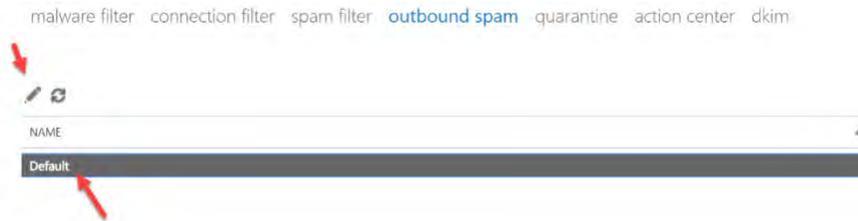
- HIPAA; Control 45 C.F.R. § 164.308(a)(5)(ii)(B)
- NIST 800-171; Control 3.14.2
- NIST 800-53; Control SI-3(a)

1. In the Exchange Admin Portal, go to Protection>Outbound Spam

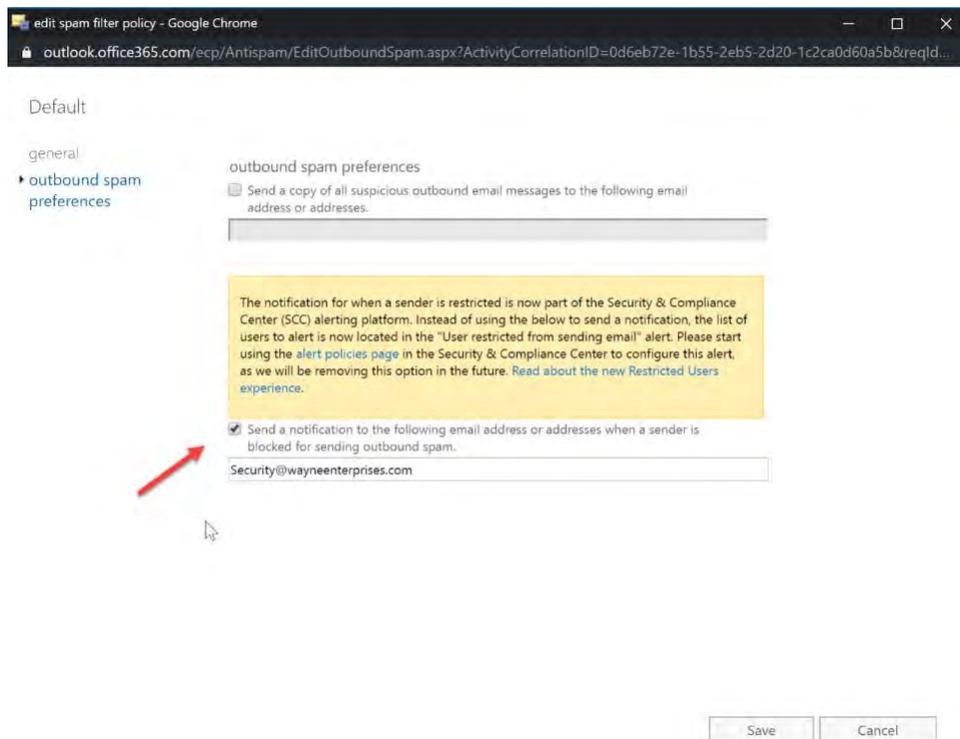


OVERVIEW & USER GUIDE

2. Click on the Default policy and then click on the pencil icon to edit



3. Click on the outbound spam preferences icon and select the checkbox under the second section to add an email address for the alert. Make sure this email is something that people would actually check. This could be the support email for your organization which opens a ticket with your corresponding PSA tool.



4. [PowerShell Script](#) to Perform

OVERVIEW & USER GUIDE

Do not allow mailbox delegation

If your users do not delegate mailboxes, it is harder for an attacker to move from one account to another and steal data. Mailbox delegation is the practice of allowing someone else to manage your mail and calendar, which can precipitate the spread of an attack.

Compliance Controls

- FedRAMP Moderate; Control AC-2, Control AC-2(3)
- GDPR; Control 6.6.1
- ISO 27018:2014; Control C.9.2
- NIST 800-53; Control AC-2
- NIST CSF; Control DE.CM-1

1. To determine if there are any existing mailbox delegation permissions, run the following PowerShell script from Github. When prompted, enter in the global admin credentials for the tenant.

[PowerShell Script](#)

OVERVIEW & USER GUIDE

- If there are any delegation permissions existing, you will see them listed. If there are none, you will just get a new command line. Identity is the mailbox who has delegated admin permissions assigned and user is the person who has those permissions.

```

Identity      User                IsInherited AccessRights
-----
alongmire     dbiers@mypax8.com   False {FullAccess}
alongmire     mguillen@wrajrecords.com False {FullAccess}
Administrator jsaunders@wrajrecords.com False {FullAccess}
Anthony Tonetti jrussell@wrajrecords.com False {FullAccess}
Christian Deacon cdeacon@wrajrecords.com False {FullAccess}
drobinson     jpelky@wrajrecords.com False {FullAccess}
drobinson     alongmire@wrajrecords.com False {FullAccess}
DiscoverySearch... Discovery Management False {FullAccess}
Jake's Shared M... jrussell@wrajrecords.com False {FullAccess}
Jake's Shared M... S-1-5-21-300025127-26525... False {FullAccess}
jruss         jrussell@wrajrecords.com False {FullAccess}
New Room      jlightner@wrajrecords.on... False {FullAccess}
Rental Car    dbiers@mypax8.com   False {FullAccess}
Shared Mailbox ... dbiers@mypax8.com   False {FullAccess}
Shared Mailbox ... testuser@wrajrecords.com False {FullAccess}
Shared Mailbox ... jpelky@wrajrecords.com False {FullAccess}
Shared Mailbox ... jheitzer@wrajrecords.com False {FullAccess}
TEST3        jrussell@wrajrecords.com False {FullAccess}
TEST3        atonetti@wrajrecords.com False {FullAccess}

PS C:\Windows\System32>

```

- You can run the following command to remove the access rights for users:

Remove-MailboxPermission -Identity Test1 -User Test2 -AccessRights FullAccess -InheritanceType All

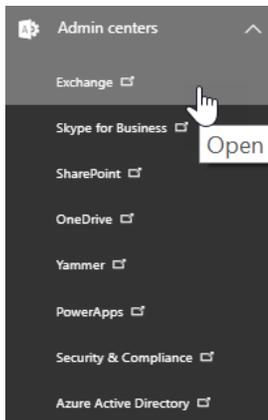
OVERVIEW & USER GUIDE

Set up Connection Filtering:

Questions to Ask:

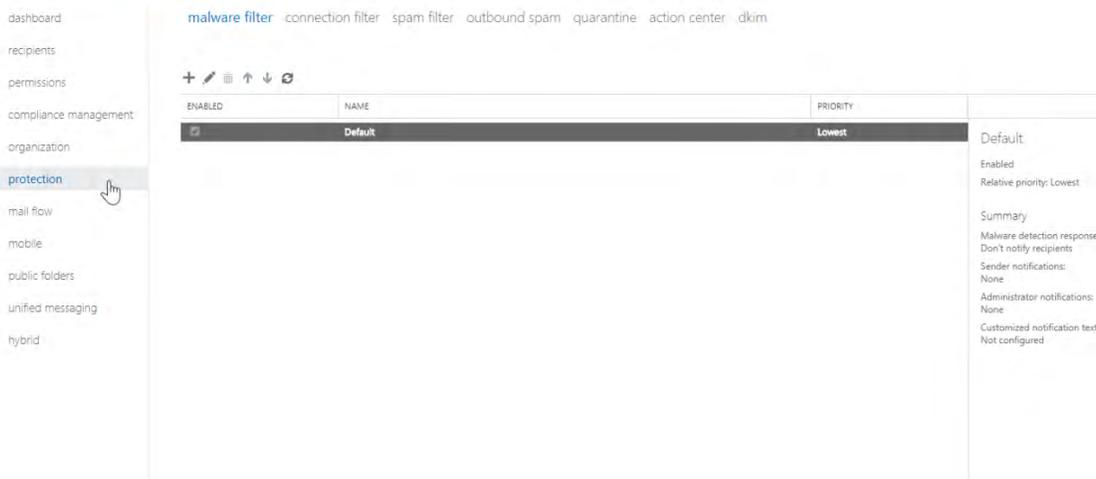
- Do I need to create an allowed list from a specific IP range?
- Do I need to create a block list?

1. Go into Admin Centers>Exchange Admin Center



2. Select the Protection tab

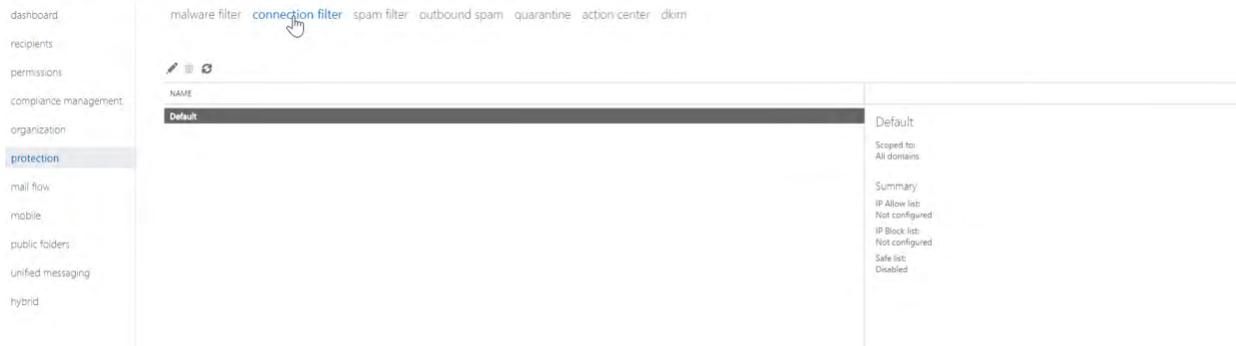
Exchange admin center



3. Click on Connection Filter

OVERVIEW & USER GUIDE

Exchange admin center

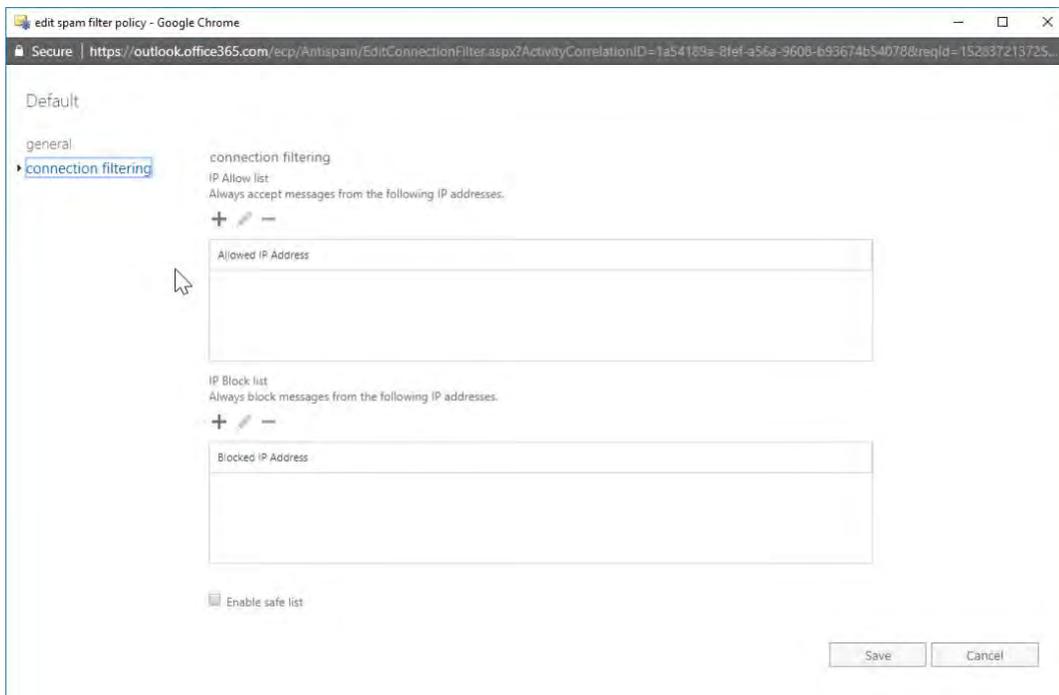


4. Click on the pencil icon to modify the default policy



5. Click Connection Filtering, add Allowed/Block List

OVERVIEW & USER GUIDE



OVERVIEW & USER GUIDE

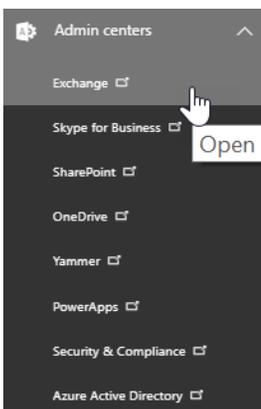
Spam Filtering:

Questions to Ask:

1. What actions do we want to take when a message is identified as spam?
 - a. Move Message to Junk Folder (Default)
 - b. Add X Header (Sends the message to the specified recipients, but adds X-header text to the message header to identify it as spam)
 - c. Prepend Subject line with text (Sends the message to the intended recipients but prepends the subject line with the text that you specify in the Prefix subject line with this text input box. Using this text as an identifier, you can optionally create rules to filter or route the messages as necessary.)
 - d. Redirect message to email address (Sends the message to a designated email address instead of to the intended recipients.)
2. Do we need to add allowed senders/domains or block senders/domains?
3. Do we need to filter messages written in specific language?
4. Do we need to filter message coming from specific countries/regions?
5. Do we want to configure any end-user spam notifications to inform users when messages intended for them were sent to quarantine instead? (From these notifications, end users can release false positives and report them to Microsoft for analysis.)

Steps:

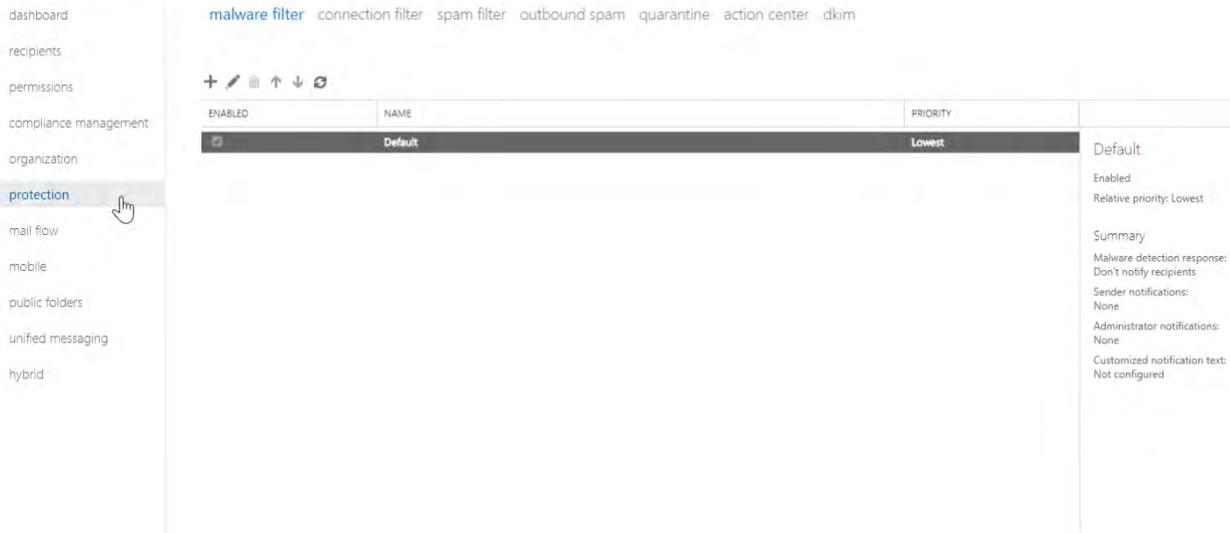
1. Go to Admin Centers>Exchange Online Admin Center



OVERVIEW & USER GUIDE

2. Click on Protection

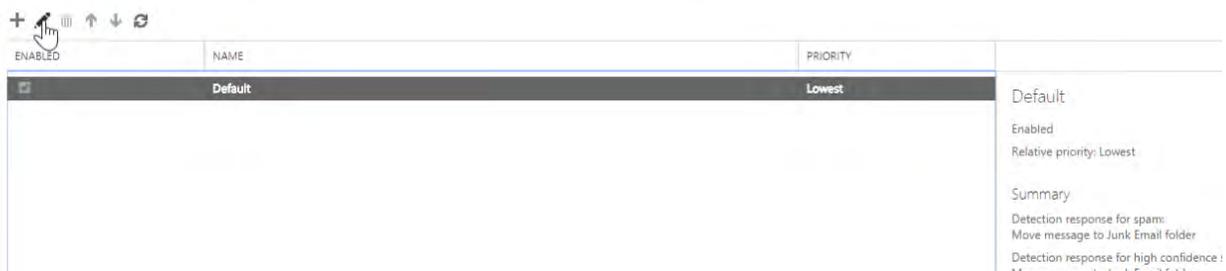
Exchange admin center



The screenshot shows the Exchange Admin Center interface. On the left is a navigation pane with options: dashboard, recipients, permissions, compliance management, organization, protection (highlighted with a mouse cursor), mail flow, mobile, public folders, unified messaging, and hybrid. The main content area is titled 'malware filter' and contains a table with columns 'ENABLED', 'NAME', and 'PRIORITY'. A single row is visible with 'Default' and 'Lowest'. To the right of the table is a details pane for the 'Default' filter, showing it is 'Enabled' with a 'Relative priority: Lowest'. A 'Summary' section lists: 'Malware detection response: Don't notify recipients', 'Sender notifications: None', 'Administrator notifications: None', and 'Customized notification text: Not configured'.

3. Click on Spam Filter and click on the pencil icon to modify the default policy

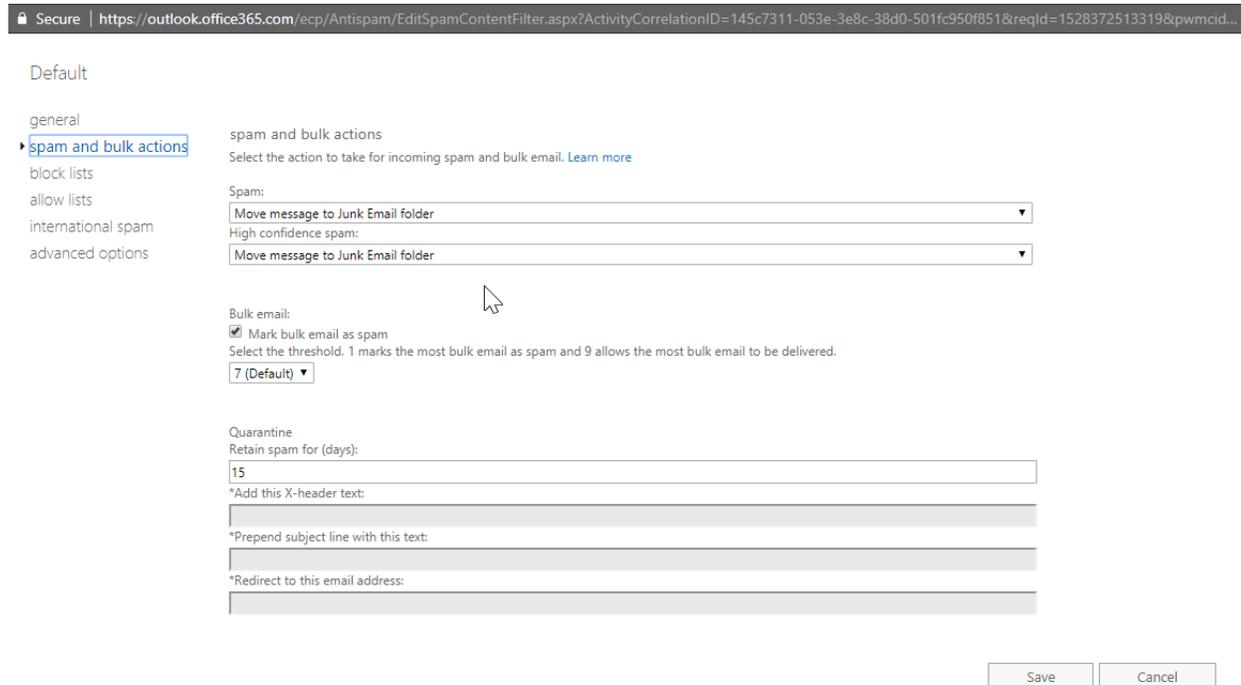
malware filter connection filter spam filter outbound spam quarantine action center dkim



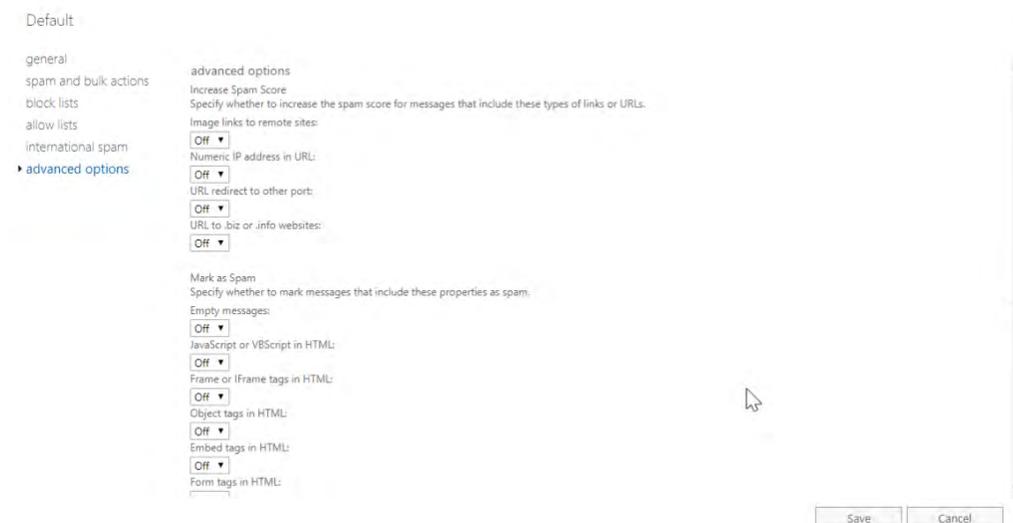
The screenshot shows the Exchange Admin Center interface with the 'spam filter' tab selected. The table in the main content area has the same structure as the previous screenshot, with one row for 'Default' and 'Lowest'. The details pane on the right shows the 'Default' filter is 'Enabled' with a 'Relative priority: Lowest'. The 'Summary' section lists: 'Detection response for spam: Move message to Junk Email folder' and 'Detection response for high confidence: Move message to Junk Email folder'.

OVERVIEW & USER GUIDE

4. Navigate through the tabs to configure any of the questions asked previously

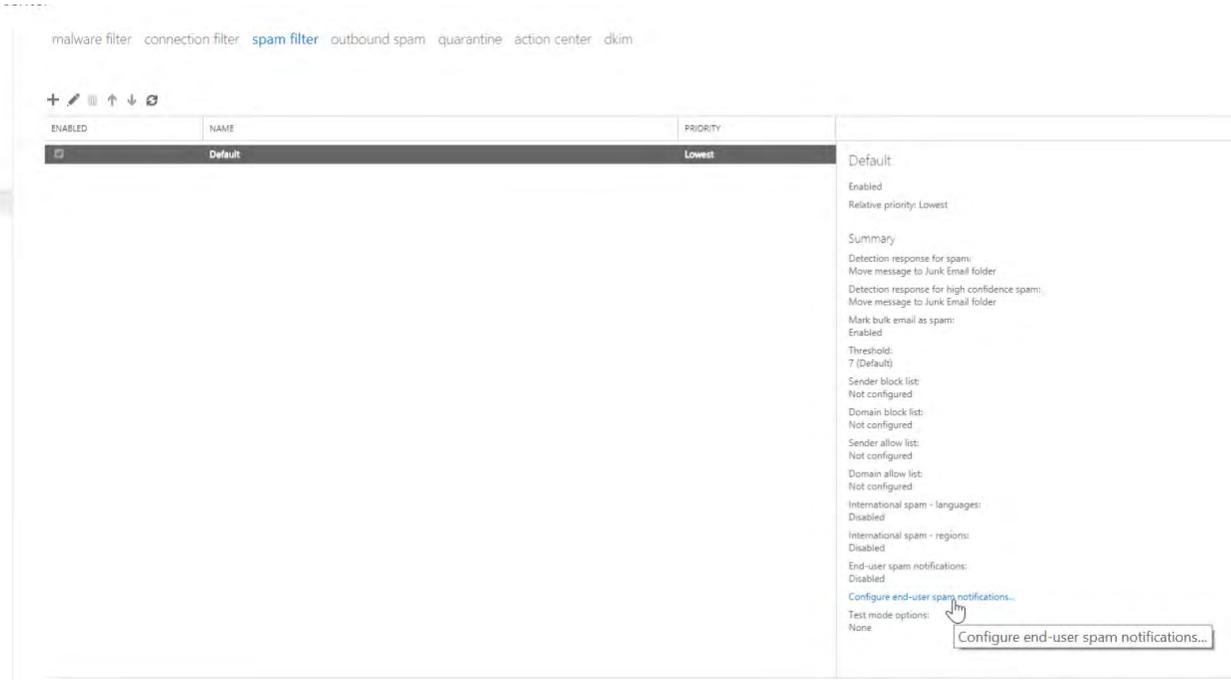


5. The Advanced Options tab allows you to get more granular with your policy and tighten the settings on the spam filter



OVERVIEW & USER GUIDE

6. You can configure end user spam notifications on the right-hand side of the page



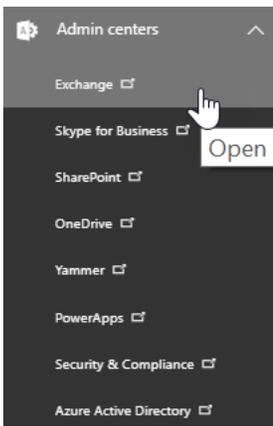
[PowerShell Commands to Configure](#)

OVERVIEW & USER GUIDE

Malware:

- This is already set up company-wide via default anti-malware policy
- Do you need to create more granular policies for a certain group of users such as additional notifications via text or heightened filtering based on file extensions?

1. Go to Admin Centers>Exchange



2. Go to Protection>Malware Filter>Click on the pencil icon to modify default policy

Exchange admin center

A screenshot of the Exchange Admin Center interface. The left sidebar shows navigation options: dashboard, recipients, permissions, compliance management, organization, protection (highlighted), mail flow, mobile, public folders, unified messaging, and hybrid. The main content area shows the 'malware filter' configuration page. At the top, there are links for 'malware filter', 'connection filter', 'spam filter', 'outbound spam', 'quarantine', 'action center', and 'dkim'. Below these links is a table with columns for 'ENABLED', 'NAME', and 'PRIORITY'. The table contains one row: 'Default' with 'Lowest' priority. To the right of the table is a configuration panel for the 'Default' policy, showing settings like 'Enabled', 'Relative priority: Lowest', and 'Summary'.

OVERVIEW & USER GUIDE

3. Modify accordingly

Default

general

▶ settings

Malware Detection Response

If malware is detected in an email attachment, the message will be quarantined and can be released only by an admin.

Do you want to notify recipients if their messages are quarantined?

- No
- Yes and use the default notification text
- Yes and use custom notification text

*Custom notification text:

If the message body is detected to contain malware, the message and all of its associated attachments are deleted regardless of which option you select.

Common Attachment Types Filter

Turn on this feature to block attachment types that may harm your computer.

- Off
- On - Emails with attachments of filtered file types will trigger the Malware Detection Response (recommended).

+ -

FILE TYPES

- .ace**
- .ani

Save Cancel

OVERVIEW & USER GUIDE

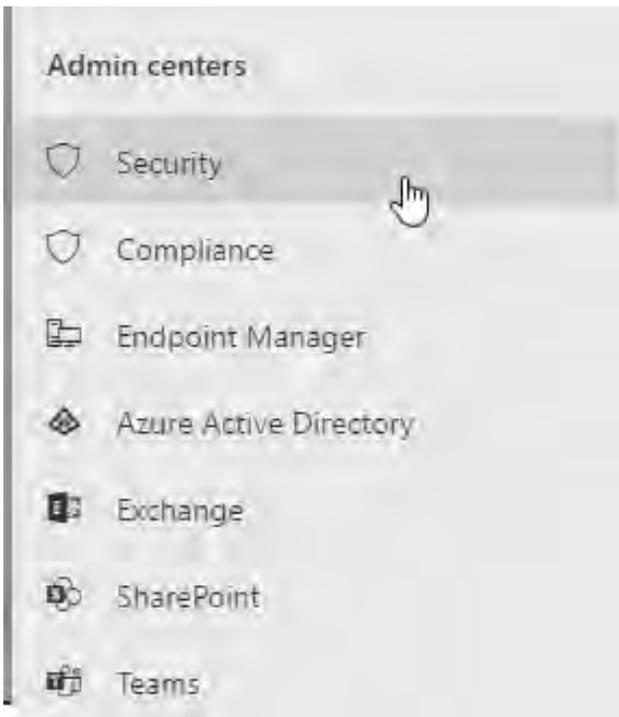
Anti-Phishing Policy

Microsoft 365 subscriptions come with a default policy for anti-phishing preconfigured but if you have the correct licensing for ATP, you can configure additional setting for impersonation attempts within the tenant. We will be configuring those additional settings here.

Licensing Considerations:

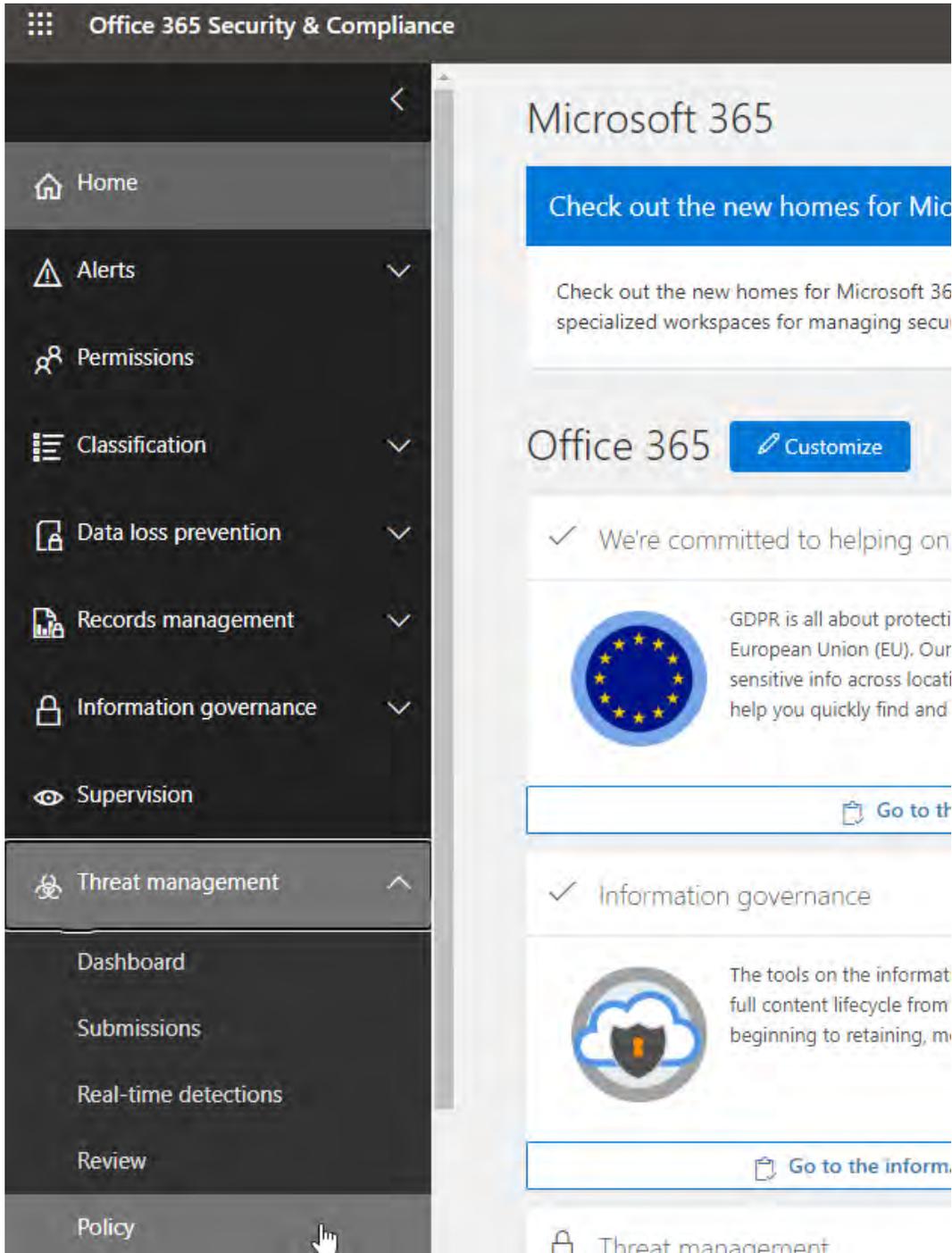
- Microsoft 365 Business Premium (\$20/u/m) -included
- Advanced Threat Protection Plan 1 (\$2/u/m)

1. In the 365 Admin Center, click Admin Centers>Security



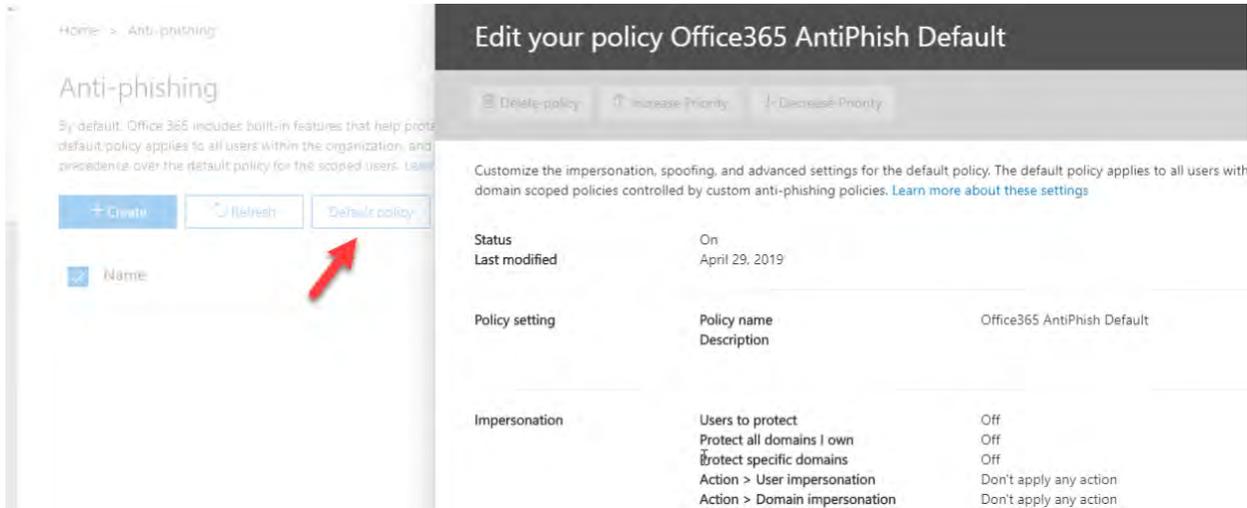
OVERVIEW & USER GUIDE

2. Under Threat Management>click Policy



OVERVIEW & USER GUIDE

3. Click Anti-Phishing> Default Policy



4. Click on Edit in the Impersonation section



OVERVIEW & USER GUIDE

5. In the first section toggle the switch to on and add top executives or users within the organization that are most likely to get spoofed

The screenshot shows the 'Office365 AntiPhish Default' settings page for 'Editing Add users to protect'. On the left is a navigation menu with options: 'Add users to protect', 'Add domains to protect', 'Actions', 'Mailbox intelligence', 'Add trusted senders and domains', and 'Review your settings'. The main content area has a header 'Office365 AntiPhish Default' and 'Editing Add users to protect'. Below this is a descriptive text: 'Add up to 60 internal and external users you want to protect from being impersonated by attackers. We recommend adding users in key roles. Internally, these might be your CEO, CFO, and other senior leaders. Externally, could include council members or your board of directors. Get tips for adding users to protect'. There is a toggle switch for 'On' which is currently turned on, and an 'Add user' button. Below that is a checkbox for 'Display name' which is checked, and a column header 'Email'. The main area below is empty with the text 'No data available'.

6. In the Add Domains to Protect section, toggle the switch to automatically include domains I own

The screenshot shows the 'Office365 AntiPhish Default' settings page for 'Editing Add domains to protect'. On the left is a navigation menu with options: 'Add users to protect', 'Add domains to protect', 'Actions', 'Mailbox intelligence', 'Add trusted senders and domains', and 'Review your settings'. The main content area has a header 'Office365 AntiPhish Default' and 'Editing Add domains to protect'. Below this is a toggle switch for 'Automatically include the domains I own' which is currently turned on. A red arrow points to this toggle. Below it is a link 'View domains I own'. There is also a toggle for 'Include custom domains' which is currently turned off. At the bottom, there is a section 'Add domains' with a text input field containing the placeholder 'Enter domain names (for example 'contoso.com') and then pre'. Below the input field are 'Save' and 'Cancel' buttons.

OVERVIEW & USER GUIDE

- 7. In the Actions section, choose what action you want to take if a user or domain is impersonated. We recommend either quarantine or moving to Junk folder

Office365 AntiPhish Default

Editing Actions

If an attacker impersonates the users or domains you specified, we'll apply the actions you select here.

If email is sent by an impersonated user:

- Quarantine the message
- Redirect message to other email addresses
- Move message to the recipients' Junk Email folders
- Quarantine the message
- Deliver the message and add other addresses to the Bcc line
- Delete the message before it's delivered
- Don't apply any action

Turn on [impersonation safety tips](#) to show a warning in the recipient's email if

[Save](#) [Cancel](#)

OVERVIEW & USER GUIDE

8. In the Mailbox Intelligence section, toggle on the protection and chose what action to take, like in the previous step

Office365 AntiPhish Default

Editing Mailbox intelligence

Mailbox intelligence analyzes your cloud-based users' mail flow patterns to determine who is most often. This helps us more easily identify when an email message might be from an impersonator or those contacts.

[Learn more about mailbox intelligence](#)

Enable mailbox intelligence?
 On

Enable mailbox intelligence based impersonation protection?
 On

If an attacker impersonates a user protected by mailbox intelligence, we'll apply the actions you choose.

If email is sent by an impersonated user:

- Don't apply any action
- Redirect message to other email addresses and apply other actions applied.
- Move message to the recipient's Junk Email folders**
- Quarantine the message
- Deliver the message and add other addresses to the Bcc line
- Delete the message before it's delivered

9. The final section allows you to whitelist senders and domains. Refrain from adding generic domains here like gmail.com.

Office365 AntiPhish Default

Editing Add trusted senders and domains

Messages from the sender email addresses and domains you add here won't ever be classified as an impersonation-based attack. As a result, the actions and settings in this policy won't be applied to messages from these senders and domains.

Trusted senders

Choose users

Trusted domains

Enter domain names (for example 'contoso.com') and then press Enter. Don't precede names with an at sign (@).

Save Cancel

OVERVIEW & USER GUIDE

10. After you review your settings, you can choose to Save

Office365 AntiPhish Default

Editing Review your settings

Add users to protect

[Edit](#)

Protected users



Bruce Banner;bbanner@tminus365.com

Add domains to protect

[Edit](#)

Include the domains I own



Protected domains



Actions

[Edit](#)

Actions for email from impersonated users

Quarantine the message

Actions for email from impersonated domains

Don't apply any action

Impersonation safety tips

User impersonation	Off
Domain impersonation	Off
Unusual characters	Off

Mailbox intelligence

[Edit](#)

Mailbox intelligence



Add trusted senders and domains

[Edit](#)

Trusted domains



Trusted senders

Save

Cancel

OVERVIEW & USER GUIDE

Configure Enhanced Filtering

Enhanced email filtering can be set up if you have a connector in 365 (3rd party email filtering service or hybrid configuration) and your MX record does not point to Microsoft 365 or Office 365. This new feature allows you to filter email based on the actual source of messages that arrive over the connector. This is also known as skip listing and this feature will allow you to overlook, or skip, any IP addresses that are considered internal to you in order to get the last known external IP address, which should be the actual source IP address. If you are using Office 365 ATP, this will enhance its machine learning capabilities and security around safe links/safe attachments/anti-spoofing from Microsoft's known malicious list based off IP. In a way, you are getting a secondary layer of protection by allowing Microsoft to view the IPs of the original email and check against their database.

For enhanced filtering configuration steps: [click here](#)

OVERVIEW & USER GUIDE

Configure ATP Safe Links and Safe Attachments Policy

Advanced Threat Protection (ATP) allows you to create policies for safe links and safe attachments across Exchange, Teams, OneDrive, and SharePoint. Real-time detonation occurs when a user clicks on any link and the content is contained in a sandbox environment. Attachments are opened inside a sandbox environment as well before they are fully delivered over email. This allows zero-day malicious attachments and links to be detected.

Licensing Considerations:

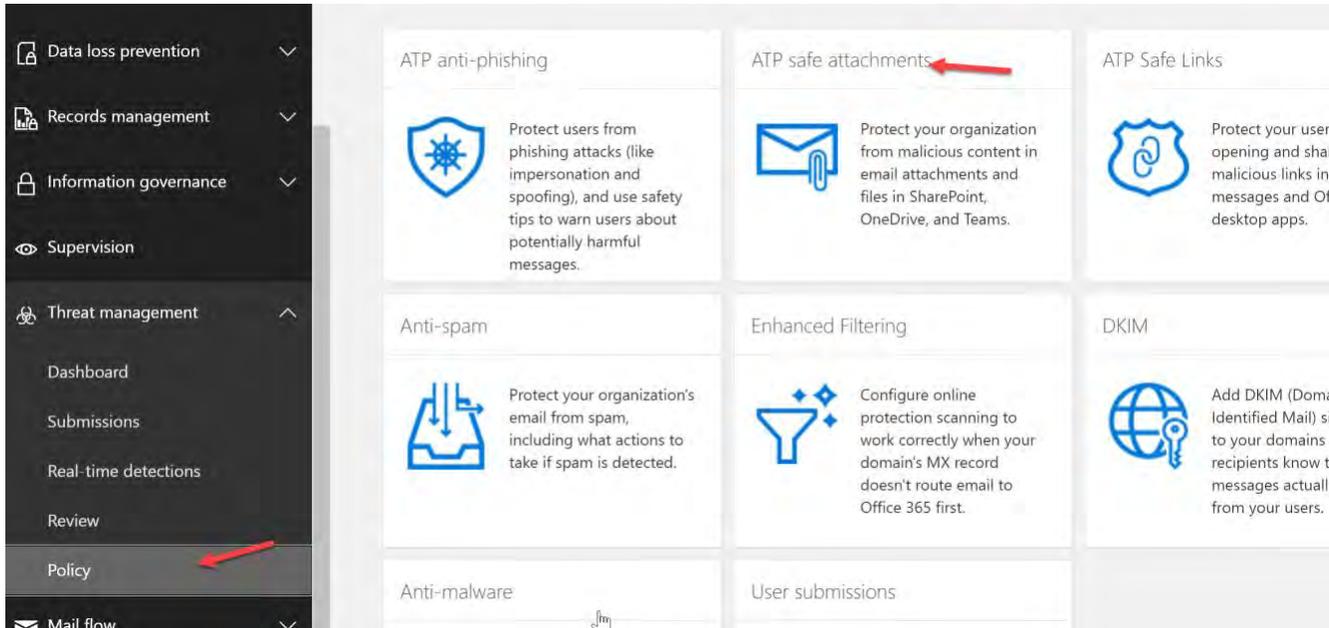
- Microsoft 365 Business Premium (\$20/u/m) -included
- Advanced Threat Protection Plan 1 (\$2/u/m)

1. In the 365 Admin Center, click Admin Centers>Security

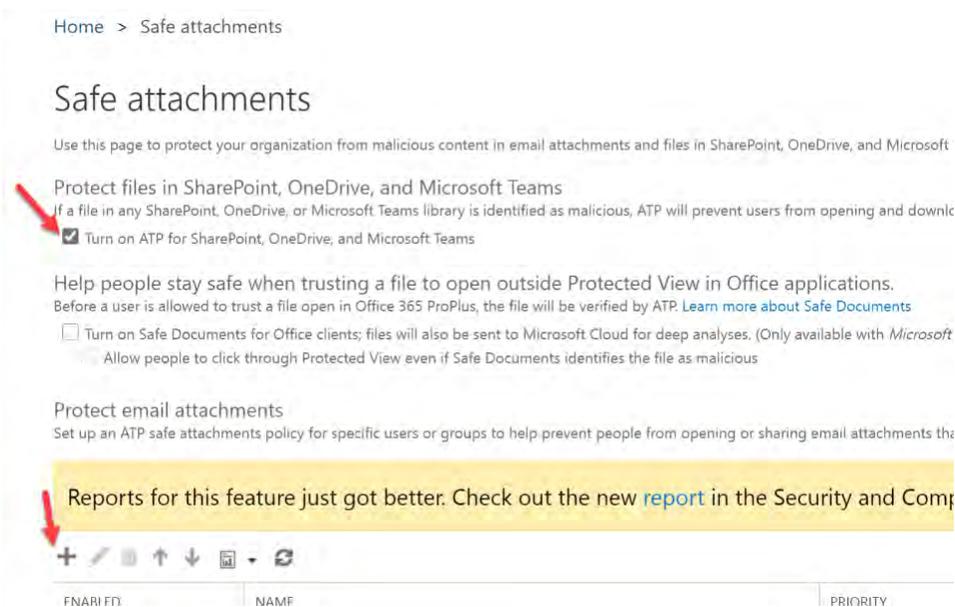


OVERVIEW & USER GUIDE

2. Click on Threat Management>Policy>ATP Safe Attachments



3. Checkmark the box to turn on ATP for Teams. Select the + icon to create a new policy



OVERVIEW & USER GUIDE

- 4. Add Name, Description, and choose Dynamic Delivery. For more on delivery methods, [click here](#)

new safe attachments policy

*Name:
Safe Attachment Policy

Description:

Safe attachments unknown malware response
Select the action for unknown malware in attachments. [Learn more](#)

Warning
Monitor, Replace and Block actions may cause significant delay to email delivery. [Learn more](#)
Dynamic Delivery is only available for recipients with hosted mailboxes. [Learn more](#)

Off - Attachment will not be scanned for malware.

Monitor - Continue delivering the message after malware is detected; track scan results.

Block - Block the current and future emails and attachments with detected malware.

Replace - Block the attachments with detected malware, continue to deliver the message.

Dynamic Delivery - Deliver the message without attachments immediately and reattach once scan is complete.

- 5. Add the Recipient Domain Is selection and choose the main domain in the tenant. Click Save when completed

Redirect attachment on detection
Send the blocked, monitored, or replaced attachment to an email address.

Enable redirect
Send the attachment to the following email address

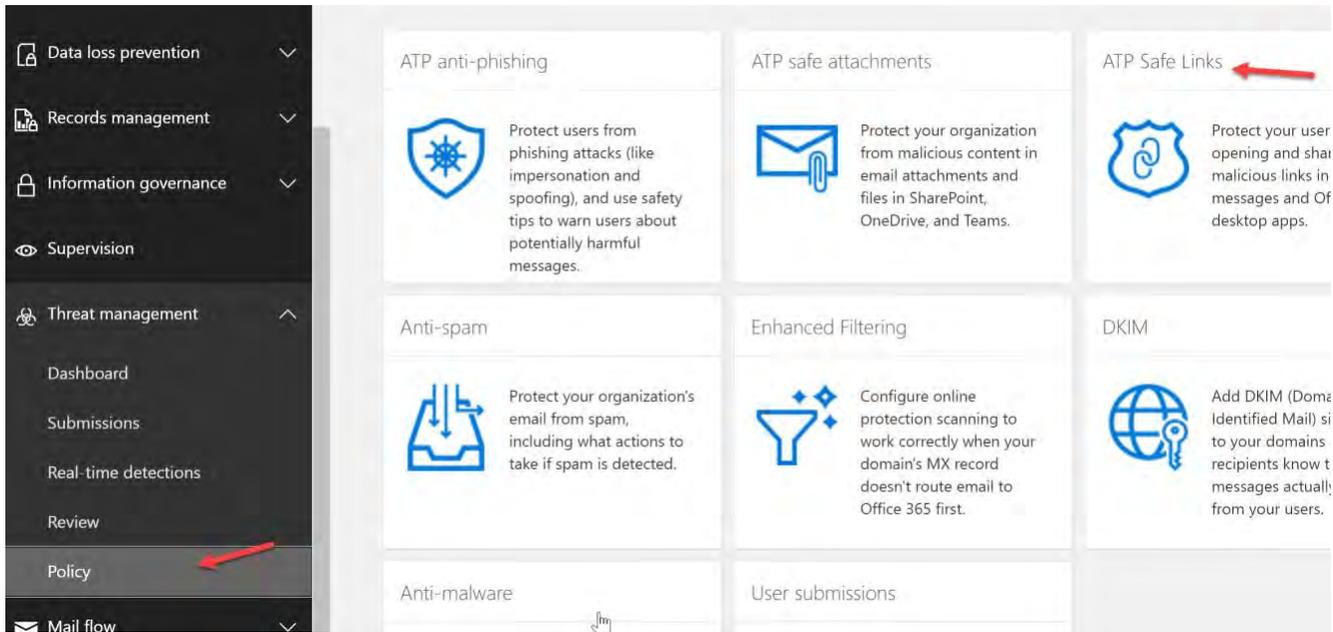
Apply the above selection if malware scanning for attachments times out or error occurs.

Applied To
Specify the users, groups, or domains for whom this policy applies by creating recipient based rules:
*If...
The recipient domain is

Except if...

- 6. For Safe Links, go back to Threat Management>Policy>Safe Links

OVERVIEW & USER GUIDE



OVERVIEW & USER GUIDE

7. Scroll down to Policies that apply to specific users and click the + icon

Safe links

Safe links help prevent your users from following links in email and documents that go to web sites recognized as unsafe. [Learn more about safe links](#)

Reports for this feature just got better. Check out the new [report](#) in the new Safe Links report.

Policies that apply to the entire organization



NAME

Default

1 selected of 1 total



Policies that apply to specific users



OVERVIEW & USER GUIDE

8. Add a Name, Description, and turn on the necessary settings displayed below:

*Name:

Description:



Select the action for unknown potentially malicious URLs in messages.

- Off
- On - URLs will be rewritten and checked against a list of known malicious links when user clicks on the link.

Select the action for unknown potentially malicious URLs within Microsoft Teams.

- Off
- On - Microsoft Teams will check against a list of known malicious links when user clicks on a link; URLs will not be rewritten. (Currently in preview for customers in the Microsoft Teams Technology Adoption Program (TAP))

- Apply real-time URL scanning for suspicious links and links that point to files.
 - Wait for URL scanning to complete before delivering the message.

- Apply safe links to email messages sent within the organization.

OVERVIEW & USER GUIDE

9. You can choose to whitelist certain URLs. Like the safe attachments policy, apply to all users in the tenant by the domain name

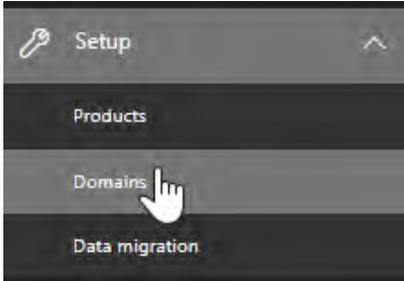
The screenshot shows the configuration interface for a Safe Links policy. At the top, there are two checked checkboxes: "Do not track when users click safe links." and "Do not let users click through safe links to original URL.". Below these is the section "Do not rewrite the following URLs:", which contains a list of URLs. The list is currently empty, with a text input field containing the placeholder "Enter a valid URL" and a plus sign icon to the right. Below the list is the "Applied To" section, which includes the instruction "Specify the users, groups, or domains for whom this policy applies by creating recipient based rules:". Underneath, there is a dropdown menu with the text "The recipient domain is" and a plus sign icon, followed by a text input field containing ".com". Below this is a button labeled "add condition".

OVERVIEW & USER GUIDE

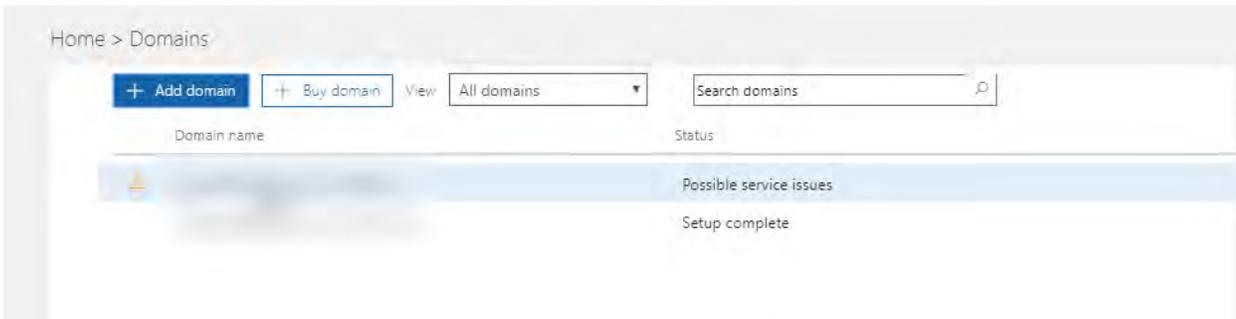
Add SPF, DKIM, and DMARC

- Do you have SPF records/DKIM records/DMARC in place?
- SPF validates the origin of email messages by verifying the IP address of the sender against the alleged owner of the sending domain which helps prevent spoofing
- DKIM lets you attach a digital signature to email messages in the message header of emails you send. Email systems that receive email from your domain use this digital signature to determine if incoming email that they receive is legitimate.
- DMARC helps receiving mail systems determine what to do with messages that fail SPF or DKIM checks and provides another level of trust for your email partners.

1. Go to Admin Center>Setup>Domains

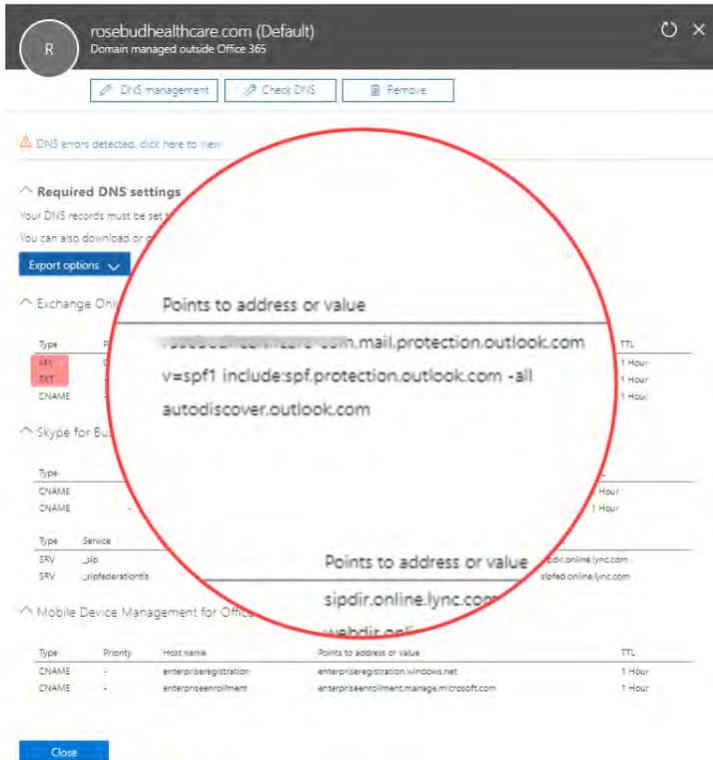


2. Click on the domain you want to add records to



OVERVIEW & USER GUIDE

3. Take note of the MX and TXT record listed under the Exchange Online



- 4. Add the TXT record of v=spf1 include:spf.protection.outlook.com -all to your DNS settings for our SPF record
- 5. For our DKIM records we need to publish two CNAME records in DNS

Use the following format for the CNAME Record:

```
Host name: selector1._domainkey.<domain>
Points to address or value: selector1-<domainGUID>._domainkey.<initialDomain>
TTL: 3600

Host name: selector2._domainkey.<domain>
Points to address or value: selector2-<domainGUID>._domainkey.<initialDomain>
TTL: 3600
```

OVERVIEW & USER GUIDE

Where:

<**domain**> = our primary domain

<**domainGUID**> = The prefix of our MX record (ex. **domain-com**.mail.protection.outlook.com)

<**initialDomain**> = domain.onmicrosoft.com

Example: DOMAIN = pax8.com

CNAME Record #1:

Host Name: selector1._domainkey.pax8.com

Points to address or value: selector1-pax8-com._domainkey.pax8.onmicrosoft.com

TTL: 3600

CNAME Record #2:

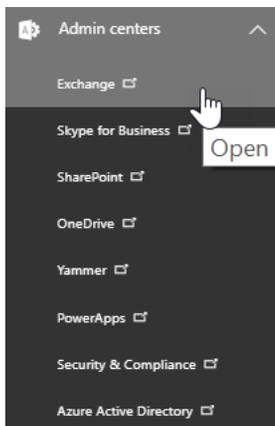
Host Name: selector2._domainkey.pax8.com

Points to address or value: selector2-pax8-com._domainkey.pax8.onmicrosoft.com

TTL: 3600

OVERVIEW & USER GUIDE

6. After publishing the records, go to Admin Centers>Exchange



7. Go to Protection>DKIM

Exchange admin center

malware filter connection filter spam filter outbound spam quarantine action center **dkim**

DKIM (DomainKeys Identified Mail) is an authentication process that can help protect both senders and recipients from forged and phishing email. Add DKIM signatures to your domains so recipients know that email messages actually came from users in your organization. [Learn more about DKIM](#)

NAME	ACCEPTED DOMAIN	DOMAIN TYPE
		Authoritative
		Authoritative
		Authoritative

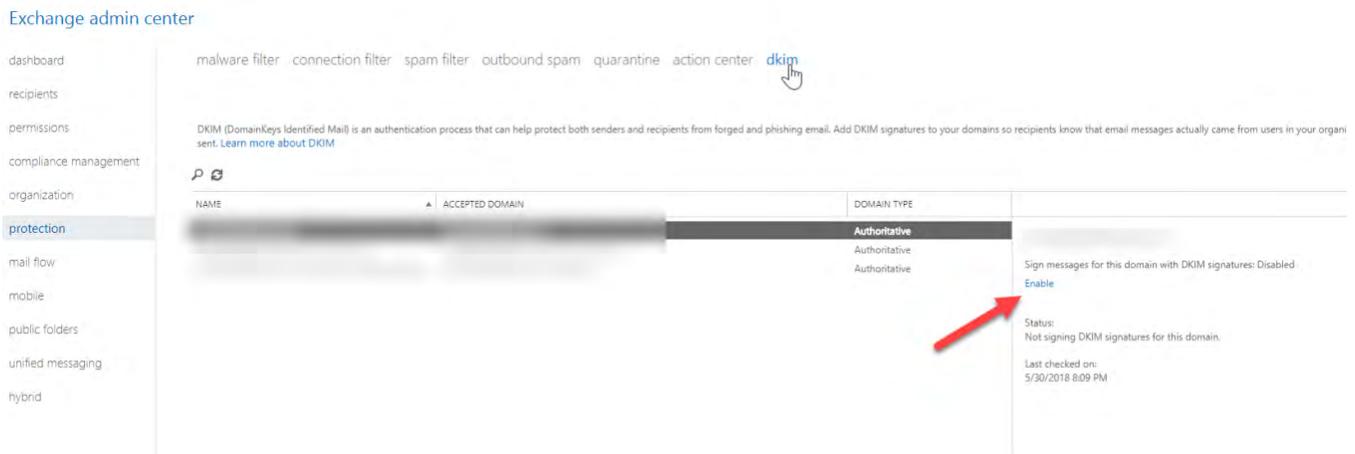
Sign messages for this domain with DKIM signatures: Disabled
[Enable](#)

Status:
Not signing DKIM signatures for this domain.

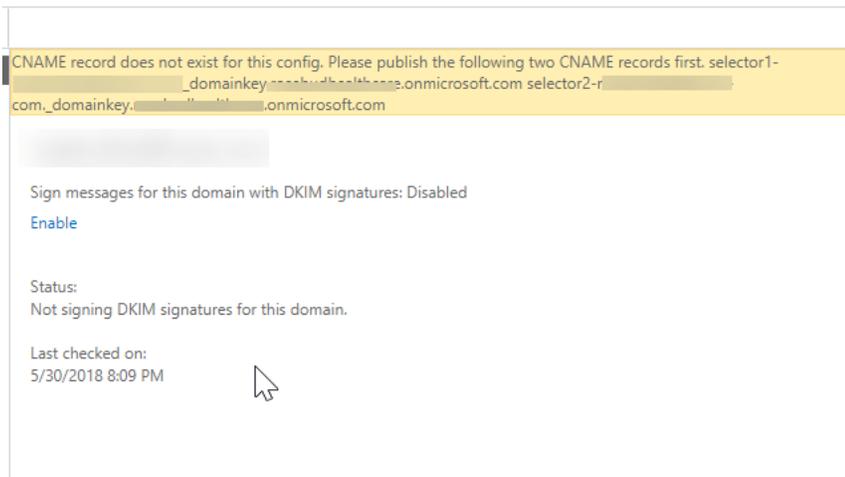
Last checked on:
5/30/2018 8:09 PM

OVERVIEW & USER GUIDE

8. Select the Domain for which you want to enable DKIM and click Enable on the right-hand side



9. If you have improperly added the CNAME records you will get an error message



OVERVIEW & USER GUIDE

10. With the SPF and DKIM records in place, we can now set up DMARC. The format for the TXT record we want to add is as follows:

```
_dmarc.domain TTL IN TXT "v=DMARC1; pct=100; p=policy"
```

Where:

<domain> = domain we want to protect

<TTL> = 3600

<pct=100> = indicates that this rule should be used for 100% of email

<policy> = specifies what policy you want the receiving server to follow if DMARC Fails.

NOTE You can set <policy> to none, quarantine, or reject

Example:

1. _dmarc.pax8.com 3600 IN TXT "v=DMARC1; p=none"
2. _dmarc.pax8.com 3600 IN TXT "v=DMARC1; p=quarantine"
3. _dmarc.pax8.com 3600 IN TXT "v=DMARC1; p=reject"

OVERVIEW & USER GUIDE

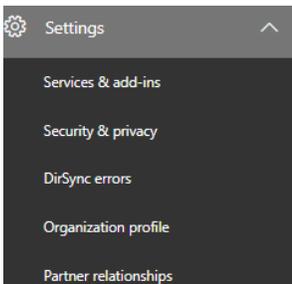
Do not Allow Calendar Details Sharing

You should not allow your users to share calendar details with external users. This feature allows your users to share the full details of their calendars with external users. Attackers will very commonly spend time learning about your organization (performing reconnaissance) before launching an attack. Publicly available calendars can help attackers understand organizational relationships, and determine when specific users may be more vulnerable to an attack, such as when they are traveling.

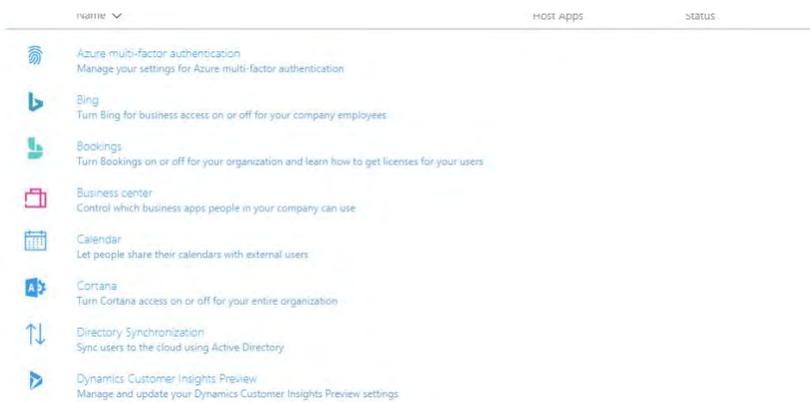
Compliance Controls

- FedRAMP Moderate; Control AC-2(9)
- NIST 800-53; Control AC-2(9)

1. Go to Settings>Services & Add-ins

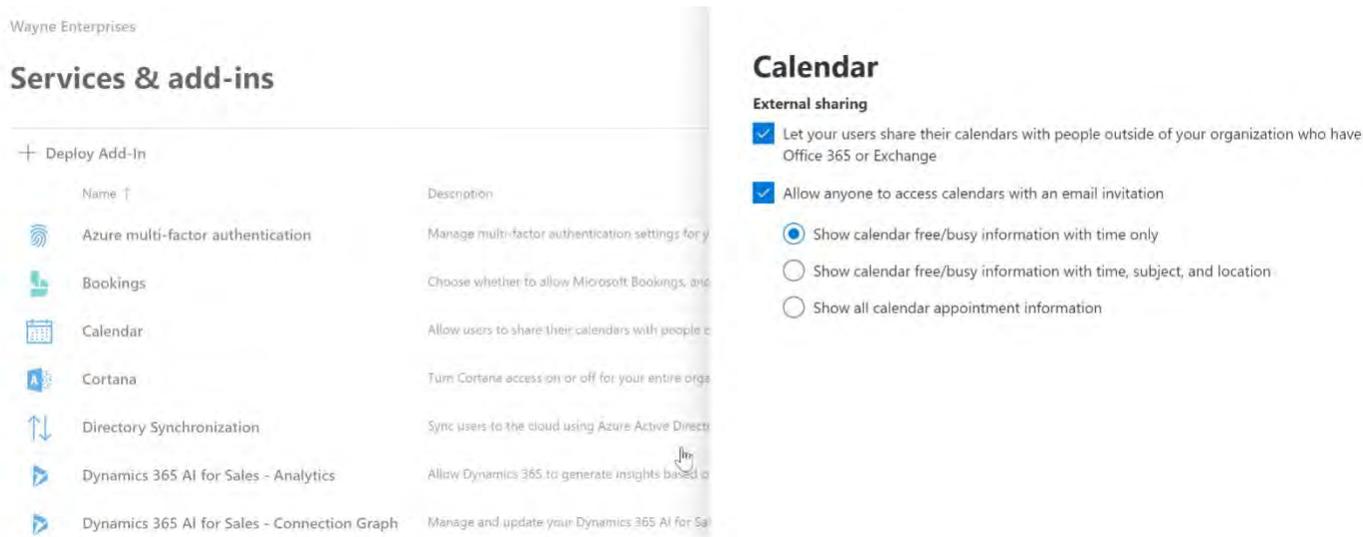


2. Click on Calendar



OVERVIEW & USER GUIDE

3. Change the settings to “Calendar free/busy information with time only”



PowerShell

1. Enable this setting on one tenant via PowerShell

[PowerShell Script](#)

2. Enable this setting in all tenants via Partner Center credentials

[PowerShell Script](#)

OVERVIEW & USER GUIDE



AUDITING AND REPORTING

Enable Audit Log Search

You should enable audit data recording for your Microsoft 365 or Office 365 service to ensure that you have a record of every user and administrator's interaction with the service, including Azure AD, Exchange Online, and SharePoint Online/OneDrive for Business. This data will make it possible to investigate and scope a security breach, should it ever occur. You (or another admin) must turn on audit logging before you can start searching the audit log.

Compliance Controls:

- CSA CCM301; Control IAM-01
- FedRAMP Moderate; Control AU-9
- GDPR; Control 6.9.4
- ISO 27001:2013; Control A.12.4.2
- ISO 27018:2014_ID; Control C.12.4.2, Part 1
- NIST 800-171; Control 3.3.8
- NIST 800-53; Control AU-9
- NIST CSF; Control RS.AN-1

Questions to Ask:

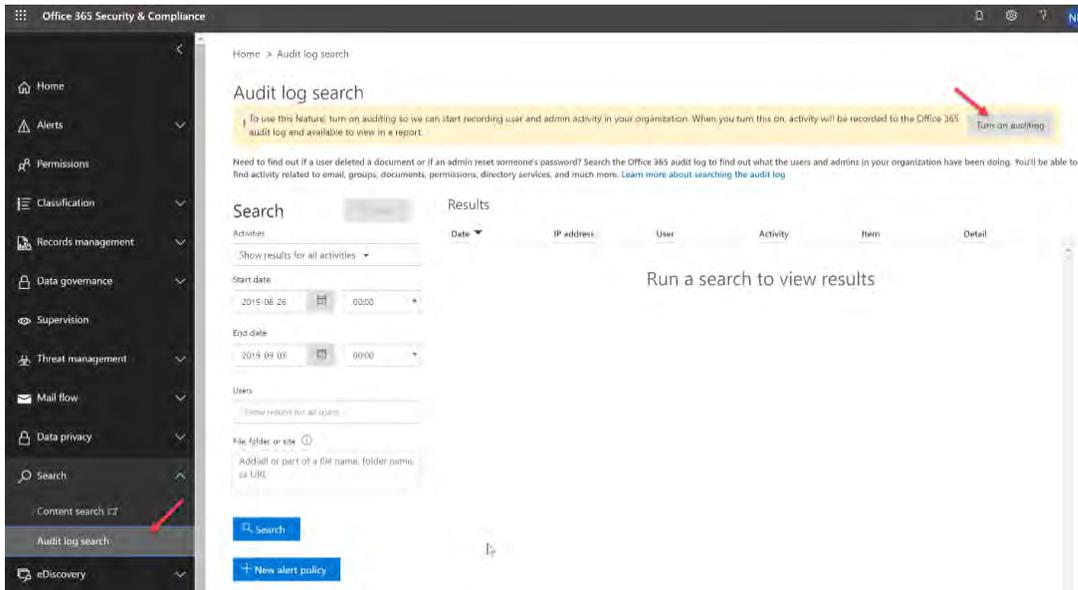
1. How often do I want to get reports on audit log data? (Recommended bi-weekly)
2. Is there a certain environment I need to more closely monitor? (Exchange, SharePoint, OneDrive, etc.)

[How to Turn the Audit Log On](#)

[How to Search the Audit Log](#)

OVERVIEW & USER GUIDE

1. Go to Admin Centers>Security and Compliance Center>Search>Audit Log search



After you turn on Auditing, you will see the following:

Audit log search

! We're preparing the Office 365 audit log. You'll be able to search for user and admin activity in a couple of hours.

OVERVIEW & USER GUIDE

2. You can create a custom search based off:
 - a. Activity
 - b. Date Range
 - c. Users
 - d. File/Folder/Site

Search ↶ Clear

Activities

Show results for all activities ▼

Start date

2018-05-30  00:00 ▼

End date

2018-06-07  00:00 ▼

Users

Show results for all users

File, folder, or site ⓘ

Add all or part of a file name, folder name, or URL.

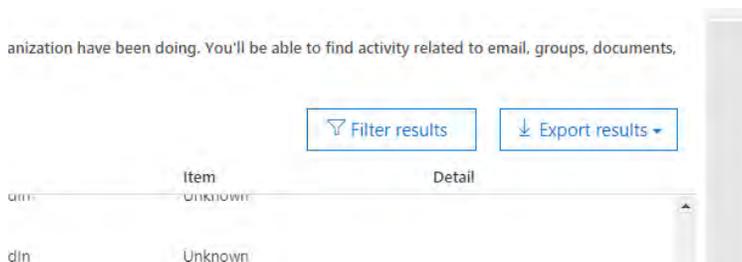
 Search

+ New alert policy

OVERVIEW & USER GUIDE

Create a New Alert Policy based off a certain event

Export Entries CSV



PowerShell

1. Turn on Audit log for one tenant

[PowerShell Script](#)

2. Turn on Audit Log for all tenants via Partner Center credentials

[PowerShell Script](#)

OVERVIEW & USER GUIDE

3. If you want to search the audit log via PowerShell you would use the commands below:

```
$auditlog = Search-UnifiedAuditLog -StartDate 06/01/2019 -EndDate 06/30/2019 -RecordType SharePointFileOperation
```

Where you can customize the start date, end date, and record type. A list of all record types you can search for can be found here:

[Click here](#)

From there you could use the following command to export certain properties to a CSV file:

```
$auditlog | Select-Object -Property CreationDate,UserIds,RecordType,AuditData | Export-Csv -Append -Path c:\AuditLogs\PowerShellAuditlog.csv -NoTypeInfo
```

OVERVIEW & USER GUIDE

Enable Mailbox Auditing for All Users

By default, all non-owner access is audited, but you must enable auditing on the mailbox for owner access to also be audited. This will allow you to discover illicit access of Exchange Online activity if a user's account has been breached. We will need to run a PowerShell script to enable auditing for all users.

Compliance Controls

- CSA CCM301; Control IAM-01
- FedRAMP Moderate; Control AU-9
- GDPR; Control 6.9.4
- ISO 27001:2013; Control A.12.4.2
- ISO 27018:2014_ID; Control C.12.4.2, Part 1
- NIST 800-171; Control 3.3.8
- NIST 800-53; Control AU-9
- NIST CSF; Control RS.AN-1

1. [PowerShell Script to Enable](#)

NOTE Use the audit log to search for mailbox activity that have been logged. You can search for activity for a specific user mailbox.

OVERVIEW & USER GUIDE

2. Go to Admin>Security and Compliance Center>Search & Investigation>Audit Log search

Home > Audit log search

Audit log search

Search

Activities

Show results for all activities ▾

× Clear all to show results for all activities

Search

Exchange mailbox activities

Created mailbox item	Copied messages to another folder
User signed in to mailbox	Sent message using Send On Behalf permissions
Purged messages from mailbox	Moved messages to Deleted Items folder
Moved messages to another folder	Sent message using Send As permissions
Updated message	Deleted messages from Deleted Items folder
Added delegate mailbox permissions	Removed delegate mailbox permissions

[List of Mailbox Auditing Actions](#)

PowerShell

1. Enable Mailbox Auditing on all customer tenants

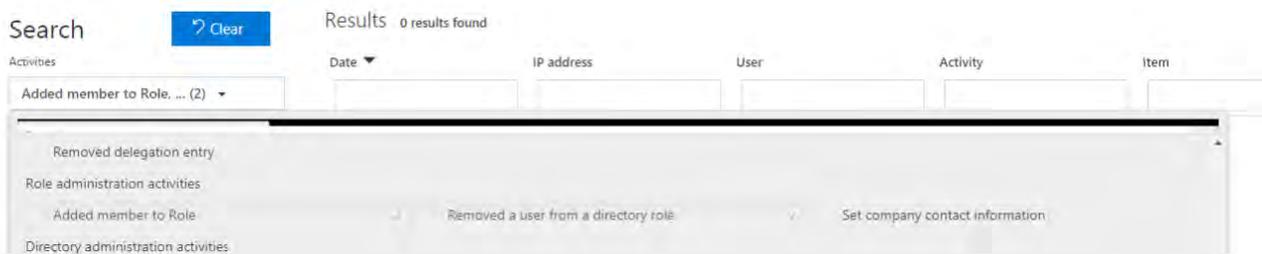
[PowerShell Script](#)

OVERVIEW & USER GUIDE

Review Role Changes Weekly

You should do this because you should watch for illicit role group changes, which could give an attacker elevated privileges to perform more dangerous and impactful things in your tenancy.

1. Go to Admin>Security and Compliance Center>Search & Investigation>Audit Log search
2. Filter the search by going to Role Administration Activities and select “Added Member to Role” and “Removed a user from a Directory Role”



3. Monitor Role Changes in all customer accounts

<https://gcits.com/knowledge-base/monitor-office-365-admin-role-changes-in-all-customer-tenants/>

OVERVIEW & USER GUIDE

Review Mailbox Forwarding Rules Weekly

You should review mailbox forwarding rules to external domains at least every week. There are several ways you can do this, including simply reviewing the list of mail forwarding rules to external domains on all of your mailboxes using a PowerShell script, or by reviewing mail forwarding rule creation activity in the last week from the Audit Log Search. While there are lots of legitimate uses of mail forwarding rules to other locations, it is also a very popular data exfiltration tactic for attackers. You should review them regularly to ensure your users' email is not being exfiltrated. Running the PowerShell script linked below will generate two csv files, "MailboxDelegatePermissions" and "MailForwardingRulesToExternalDomains", in your System32 folder.

Compliance Controls

- GDPR; Control 6.8.2
- ISO 27018:2014; Control A.10.2

PowerShell

1. Monitor on a single tenant

[PowerShell Script](#)

2. Monitor External Mailbox Forwards in all Microsoft 365/Office 365 Customer tenants

[PowerShell Script](#)

OVERVIEW & USER GUIDE

Review the Mailbox Access by Non-Owners Report Bi-Weekly

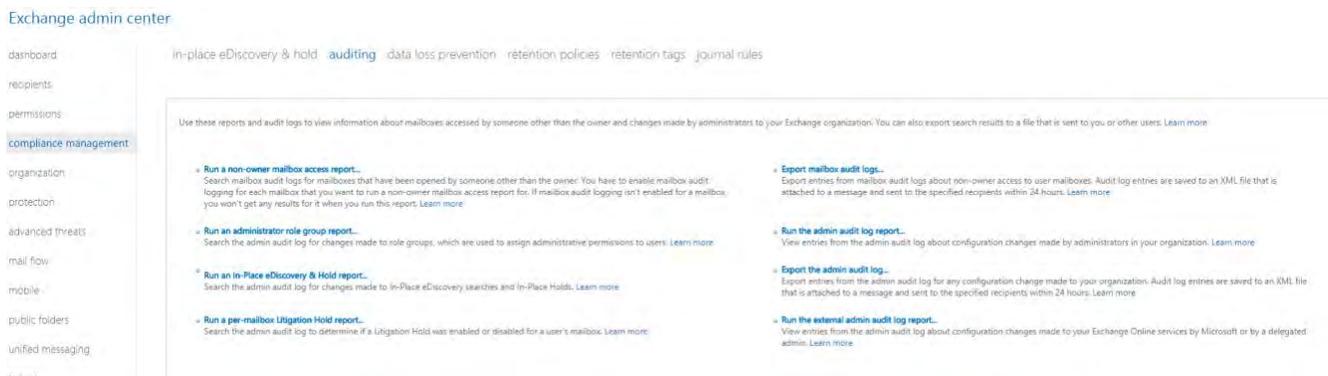
This report shows which mailboxes have been accessed by someone other than the mailbox owner. While there are many legitimate uses of delegate permissions, regularly reviewing that access can help prevent an external attacker from maintaining access for a long time and can help discover malicious insider activity sooner.

Compliance Controls

- FedRAMP Moderate; Control AC-6(9)
- NIST 800-171; Control 3.1.7
- NIST 800-53; Control AC-6(9)

1. In EAC, go to Compliance Management>Auditing

2. Click on “Run a non-owner mailbox access report...”



3. Specify a data range and run a search

OVERVIEW & USER GUIDE

search for mailboxes accessed by non-owners

Specify a date range and select the mailboxes to search for. Then select to search for non-owner access by anyone or by users inside or outside your organization. [Learn more](#)

*Start date:
2018 May 22

*End date:
2018 June 6

Search these mailboxes or leave blank to find all mailboxes accessed by non-owners:

Search for access by:

All non-owners

Search results	
Mailbox	LAST ACCESSED: ▲
There are no items to show in this view.	

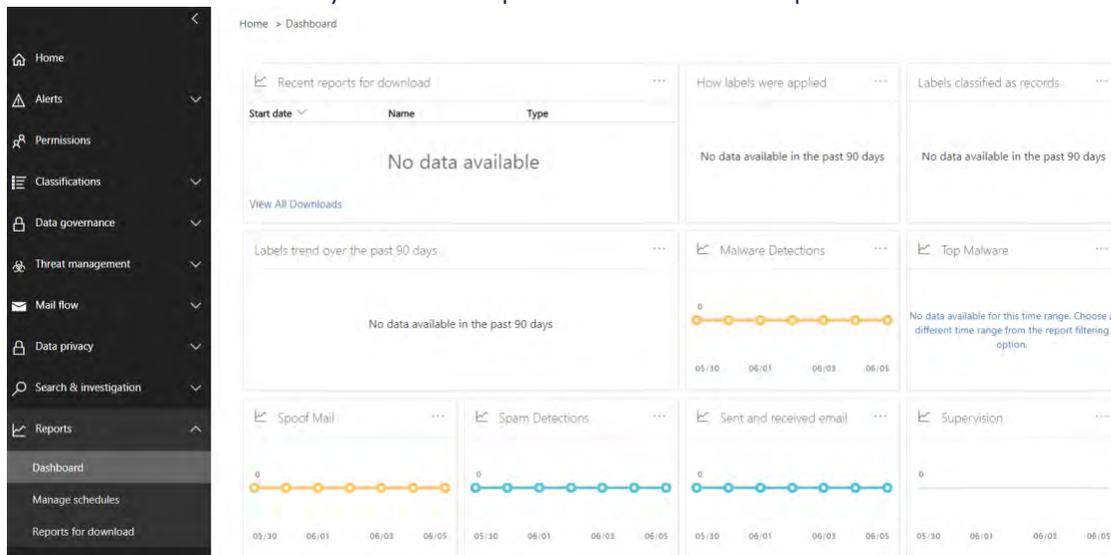


OVERVIEW & USER GUIDE

Review the Malware Detections Report Weekly

This report shows specific instances of Microsoft blocking a malware attachment from reaching your users. While this report isn't strictly actionable, reviewing it will give you a sense of the overall volume of malware being targeted at your users, which may prompt you to adopt more aggressive malware mitigations.

1. Go to Admin>Security and Compliance Center>Reports>Dashboard



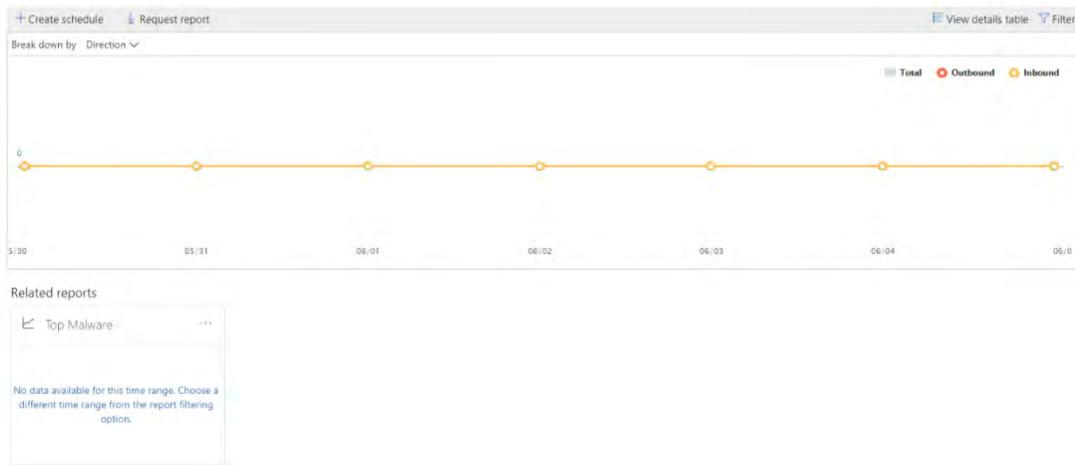
2. Click on Malware Detections

OVERVIEW & USER GUIDE

3. View the Detection Report

Home > Dashboard > Report Viewer - Security & Compliance

Malware Detections Report



4. Click "+ Create Schedule"

Malware Detections Report



OVERVIEW & USER GUIDE

5. Create a weekly report schedule and send it to the appropriate email address

Create schedule×

You are about to create a schedule for this report. You will receive a weekly email once the report is ready. You can also download the report from the Manage schedules and Manage downloads page. For more options in scheduling, visit the Customize schedules page.

Start date:

2018-06-06

Frequency
Weekly

Send email to
admin@rosebudhealthcare.onmicrosoft.com

Schedule Name
Schedule-Weekly-MalwareDetection

Create schedule

Cancel

Options

[Customize schedule](#)

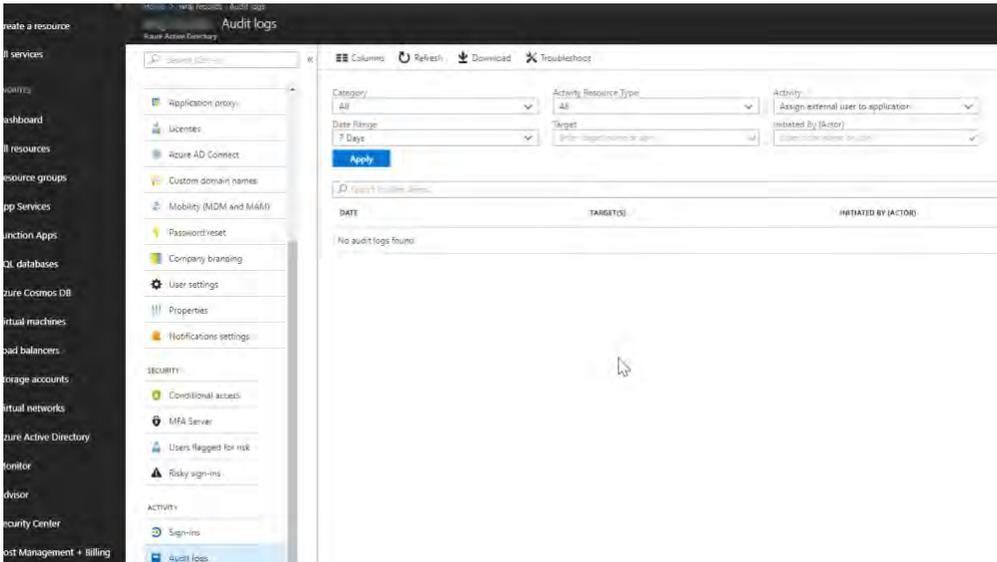


OVERVIEW & USER GUIDE

Review your Account Provisioning Activity Report Weekly

This report includes a history of attempts to provision accounts to external applications. If you don't usually use a third-party provider to manage accounts, any entry on the list is likely illicit. But, if you do, this is a great way to monitor transaction volumes, and look for new or unusual third-party applications that are managing users.

1. Go to Admin Centers>Azure Active Directory>Audit Logs



2. In the Activity section, search for “external” and select Assign External User to Application

Category	Activity Resource Type	Activity
All	All	Assign external user to application
Date Range	Target	Initiated By (Actor)
7 Days	Enter target name or upn	Enter actor name or upn
<input type="button" value="Apply"/>		

OVERVIEW & USER GUIDE



Utilize Private Channels

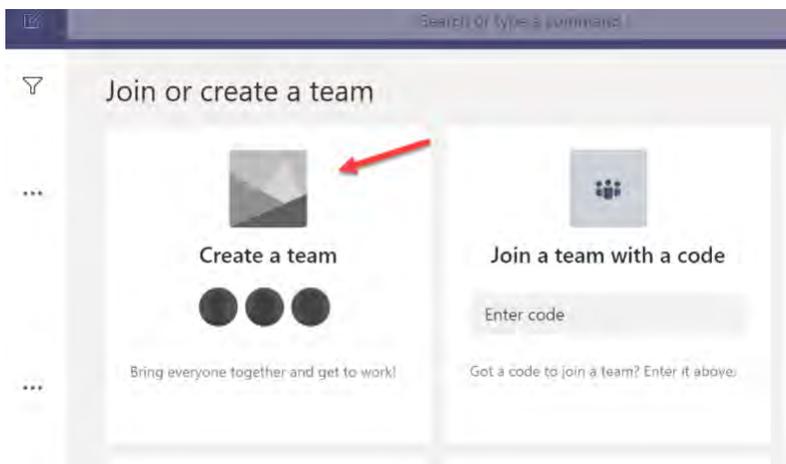
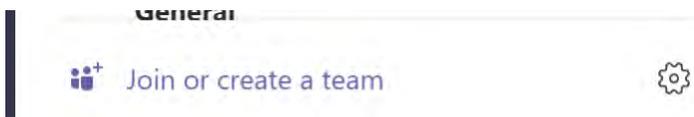
Access controls are a fundamental part of any compliance regulation. Giving access to certain Teams channels where users are collaborating on sensitive topics or sharing critical documents should follow a model of least privilege. Microsoft Teams allows you to create private channels where users can request access to the owners and all other users are prohibited from seeing the content.

Compliance Controls

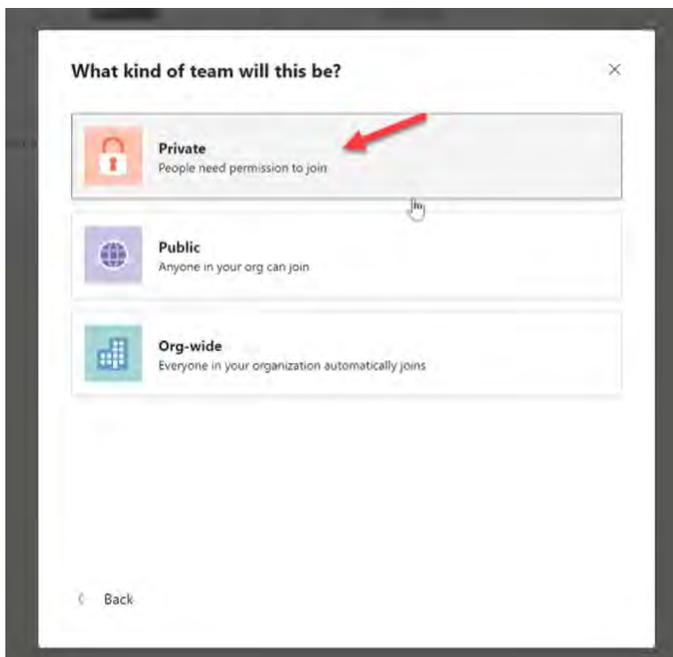
- NIST CSF PR.AC-4
- CCS CSC 12, 15
- ISA 62443-2-1:2009 4.3.3.7.3
- ISA 62443-3-3:2013 SR 2.1
- ISO/IEC 27001:2013 A.6.1.2, A.9.1.2, A.9.2.3, A.9.4.1, A.9.4.4
- NIST SP 800-53 Rev. 4 AC-2, AC-3, AC-5, AC6, AC-16
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(3), 164.308(a)(4),
 - 164.312(a)(1)
 - 164.312(a)(2)(i), 164.312(a)(2)(ii)

OVERVIEW & USER GUIDE

1. In the web or client application, click Teams>Join or create a team>Create a Team

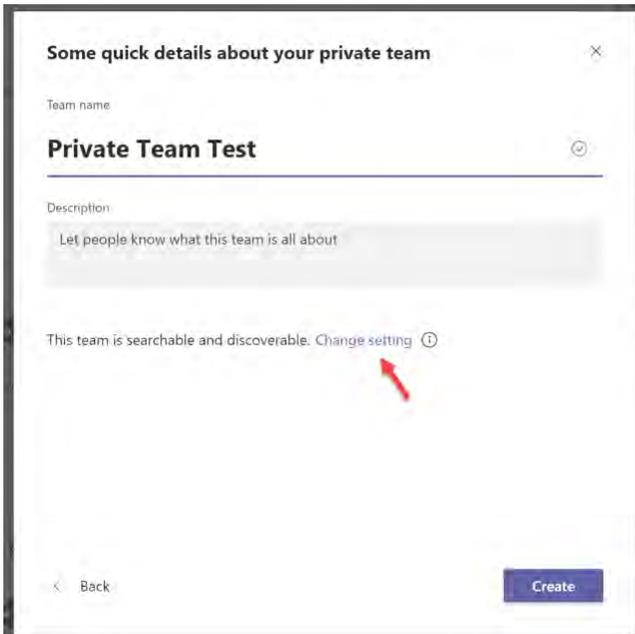


2. Click Private

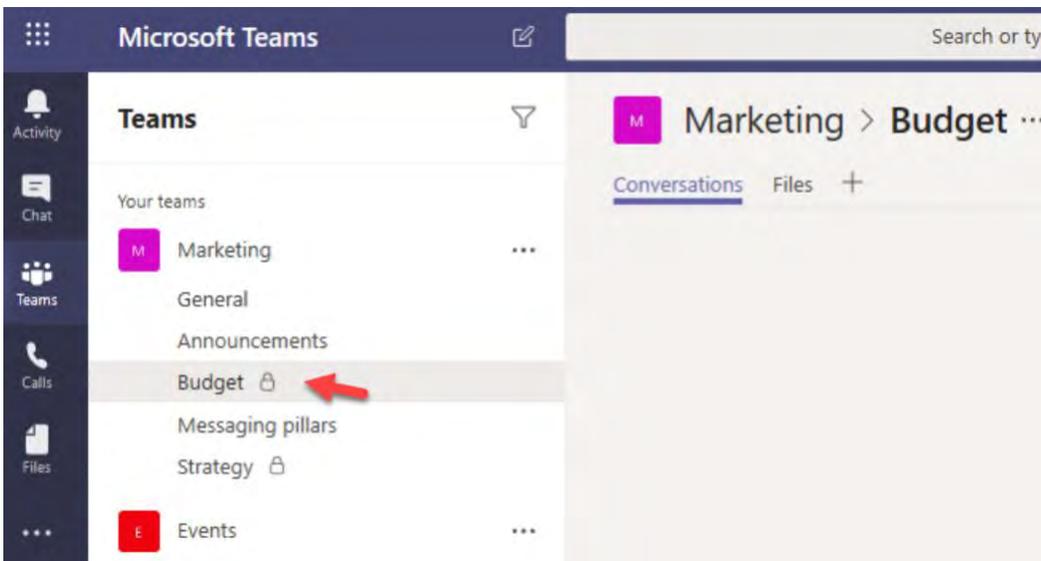


OVERVIEW & USER GUIDE

3. Here you can also choose if this team can be discoverable for additional security:



4. After the Team is created, you will see a lock icon next to the channel



OVERVIEW & USER GUIDE

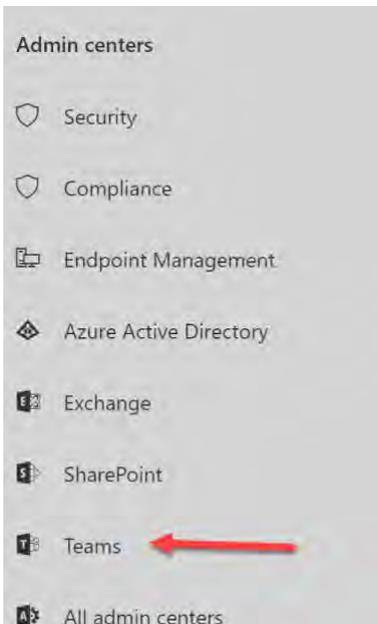
Block External Access

You should not allow your users to communicate with Skype or Teams users outside your organization. While there are legitimate, productivity-improving scenarios for this, it also represents a potential security threat because those [external users](#) will be able to interact with your users over Skype for Business or Teams. Attackers may be able to pretend to be someone your user knows and then send malicious links or attachments, resulting in an account breach or leaked information.

Compliance Controls:

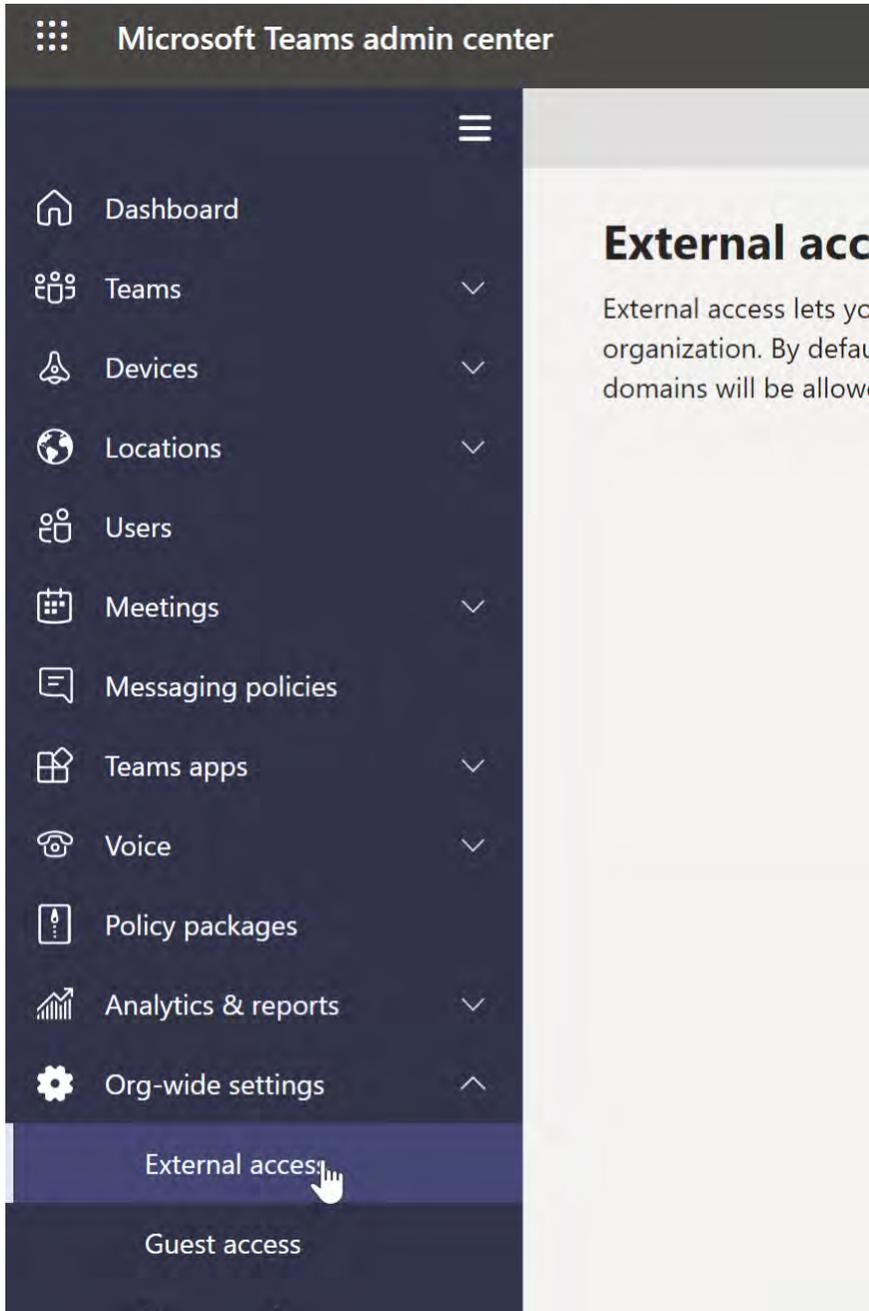
- NIST CSP DE.CM-7
- NIST SP 800-53 Rev. 4 AU-12, CA-7, CM-3,
- CM-8, PE-3, PE-6, PE-20, SI-4
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D)
 - 164.312(b)
 - 164.314(b)(2)(i)

1. In the 365 Admin Center>Click All Admin Centers Teams.



OVERVIEW & USER GUIDE

2. Click Org-Wide Settings> External Access



3. Here, turn the toggles off:

OVERVIEW & USER GUIDE

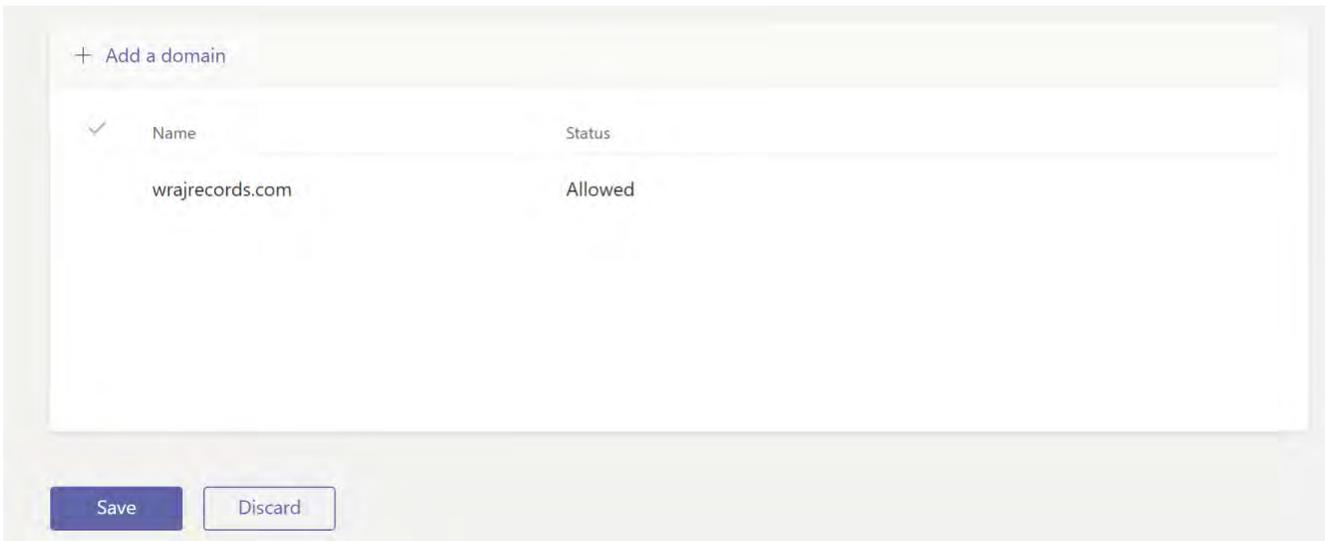
External access

External access lets your Teams and Skype for Business users communicate with other users that are outside of your organization. By default, your organization can communicate with all external domains. If you add blocked domains, all other domains will be allowed but if you add allowed domains, all other domains will be blocked. [Learn more](#)

Users can communicate with other Skype for Business and Teams users Off

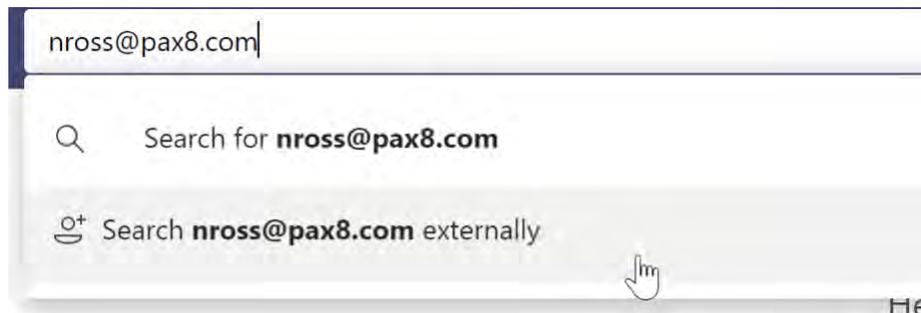
Users can communicate with Skype users Off

4. You can whitelist certain domains. This allows users to discover external users part of this domain and collaborate with them. This allows you to control the domains that users can collaborate with. Ensure that you have a proper, communicated method of how users can make request to collaborate with external organizations

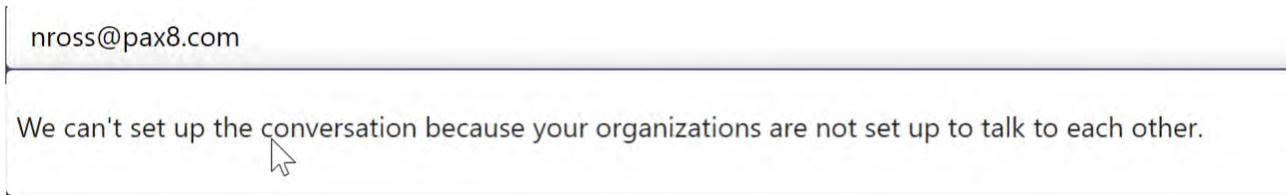


5. Users who search for external users in teams will see the following:

OVERVIEW & USER GUIDE



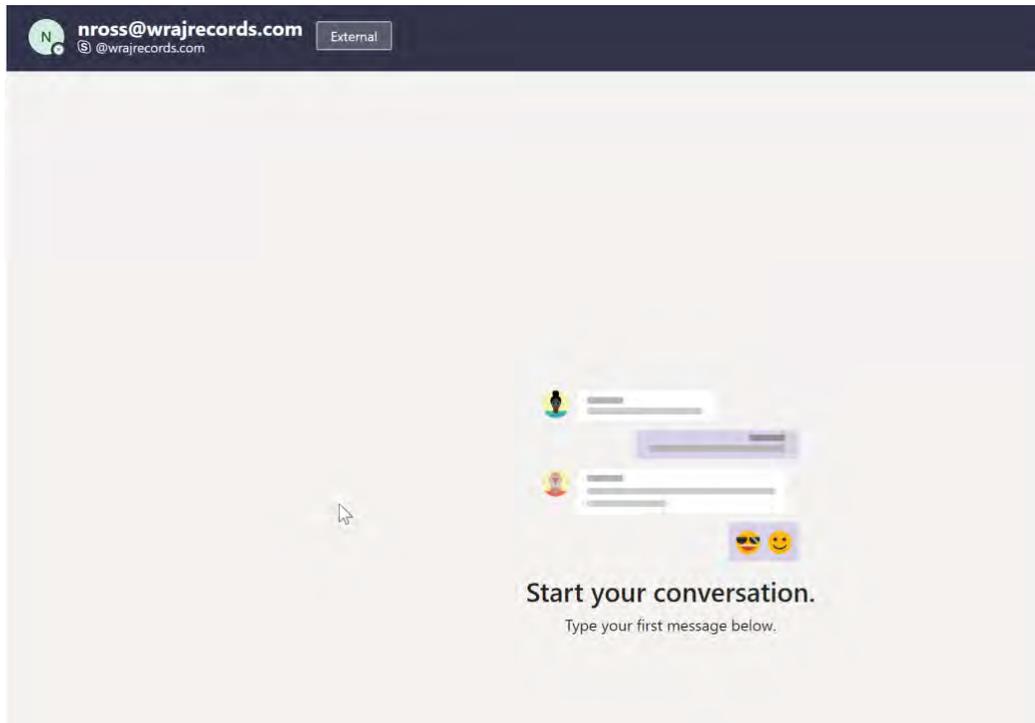
6. If they are not whitelisted, they will get the following when trying to search externally:



7. If the domain has been whitelisted, then users will have the following experience:



OVERVIEW & USER GUIDE



OVERVIEW & USER GUIDE

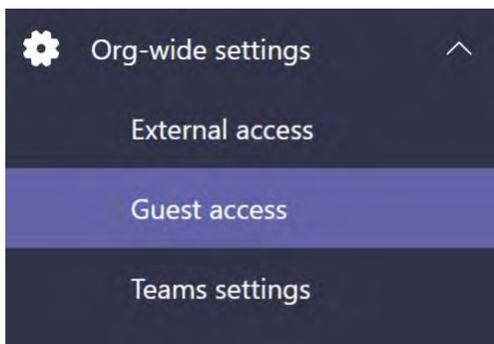
Limit Guest Access

By default, [guest access](#) in Teams is turned off. Team owners cannot add external users to any Teams channels. You can change this setting in the Teams admin center and external users can be invited to Teams Channels **by owners of that channel**. You should have a formal request process defined for adding external guest users to Teams channel where users submit business justification. Once you enable guest access, you can control the settings for the access rights that user has within the channel. Guest access should always be limited for a certain time period for security and compliance reasons.

Compliance Controls

- NIST CSP DE.CM-7
- NIST SP 800-53 Rev. 4 AU-12, CA-7, CM-3,
- CM-8, PE-3, PE-6, PE-20, SI-4
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D)
 - 164.312(b)
 - 164.314(b)(2)(i)

1. In the Teams Admin Center, click on Org-wide settings>Guest Access



OVERVIEW & USER GUIDE

2. Temporarily turn on guest access and review the settings available

Guest access

Guest access in Teams lets people outside your organization access teams and channels. When you turn on Guest Access, you can turn on or off features guest users can or can't use. Make sure to follow the steps in this [checklist](#) to set up the prerequisites and so Team owners can add guest users to their teams. [Learn more](#)

Allow guest access in Teams On

Calling

Manage calling specific controls for guest users.

Make private calls On

Meeting

Turn on or turn off settings for guests in meetings.

Allow IP video On

Screen sharing mode Entire screen

Allow Meet Now On

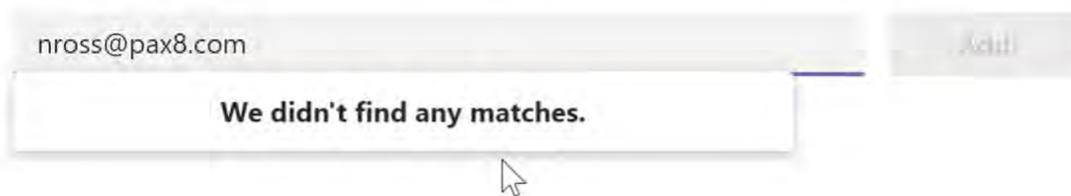
Messaging

OVERVIEW & USER GUIDE

3. If guest access is turned off, then owners of channels will not be able to invite external participants. Example:

Add members to M365

Start typing a name, distribution list, or mail enabled security group to add to your team.



4. If guest access is turned on, then owners can send invites to external participants

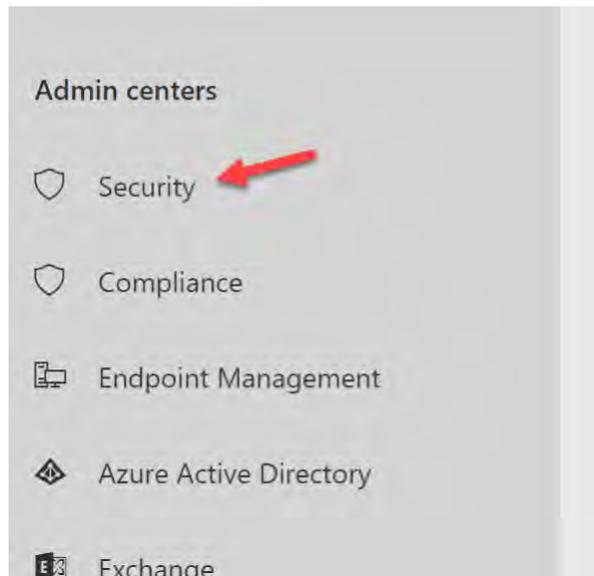
Add members to PSA Integrations

Start typing a name, distribution list, or security group to add to your team. You can also add people outside your organization as guests by typing their email addresses.

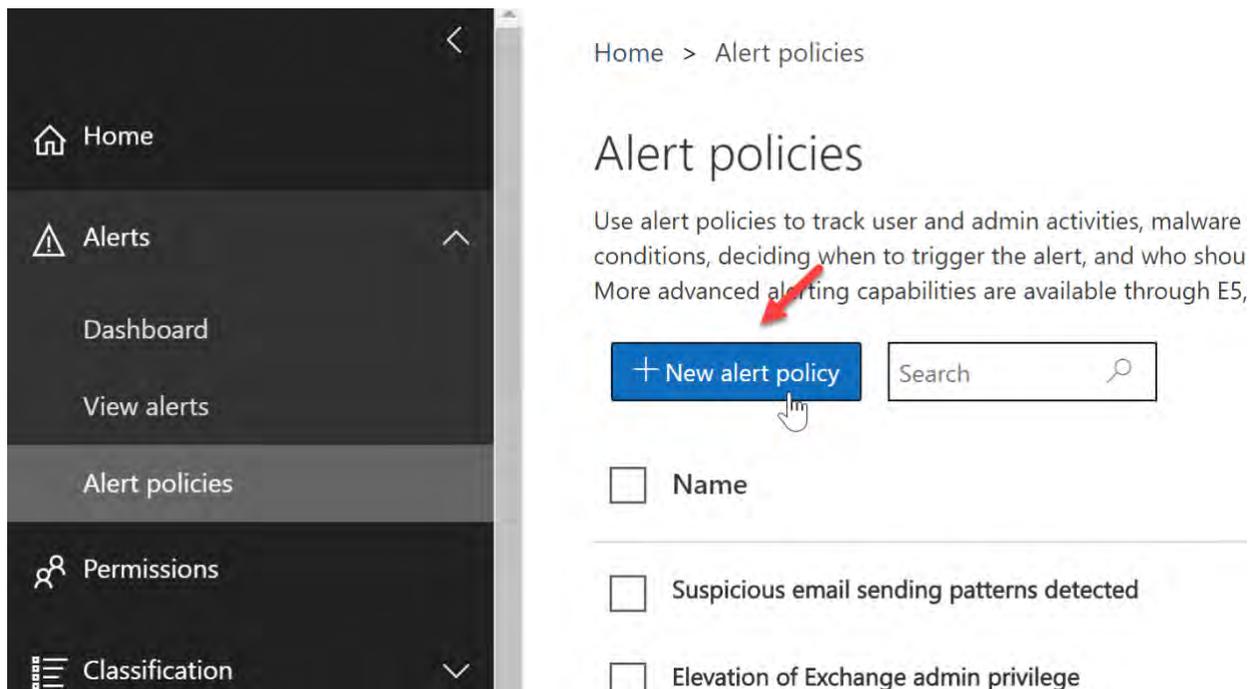


OVERVIEW & USER GUIDE

- 5. In the Security and Compliance Center, you can set up alerts to get a notification when guest users are added. In the 365 Admin Center>Click Admin Centers>Security



- 6. Click on Alerts>Alert policies>New Alert Policy



OVERVIEW & USER GUIDE

7. Add Name, Description, Severity, and Category

New alert policy

Name your alert, categorize it, and choose a severity.

Assign a category and severity level to help you manage the policy and any alerts it triggers. You'll be able to view alert settings from both the 'Alert policies' and 'View alerts' pages.

Name *

Guest User Added

Description

Enter a friendly description for your policy.

Severity * ⓘ

Medium

Category *

Data loss prevention

Next Cancel

8. Type 'Guest' and select Accepted Sharing Invitation>click Next

Choose an activity, conditions and when to trigger t

You can only choose one activity but you can add conditions to refine what we'll detect.

What do you want to alert on?

Activity is

Select an activity

Guest

Accepted sharing invitation

Created a company shareable link

OVERVIEW & USER GUIDE

9. Specify the email address you would like this to go to

New alert policy

Decide if you want to notify people when this alert is triggered

Send email notifications

Email recipients *

Nick Ross

Daily notification limit

No limit

Back Next Cancel

10. Review and turn on the alert

Daily notification limit No limit

Do you want to turn the policy on right away?

Yes, turn it on right away.

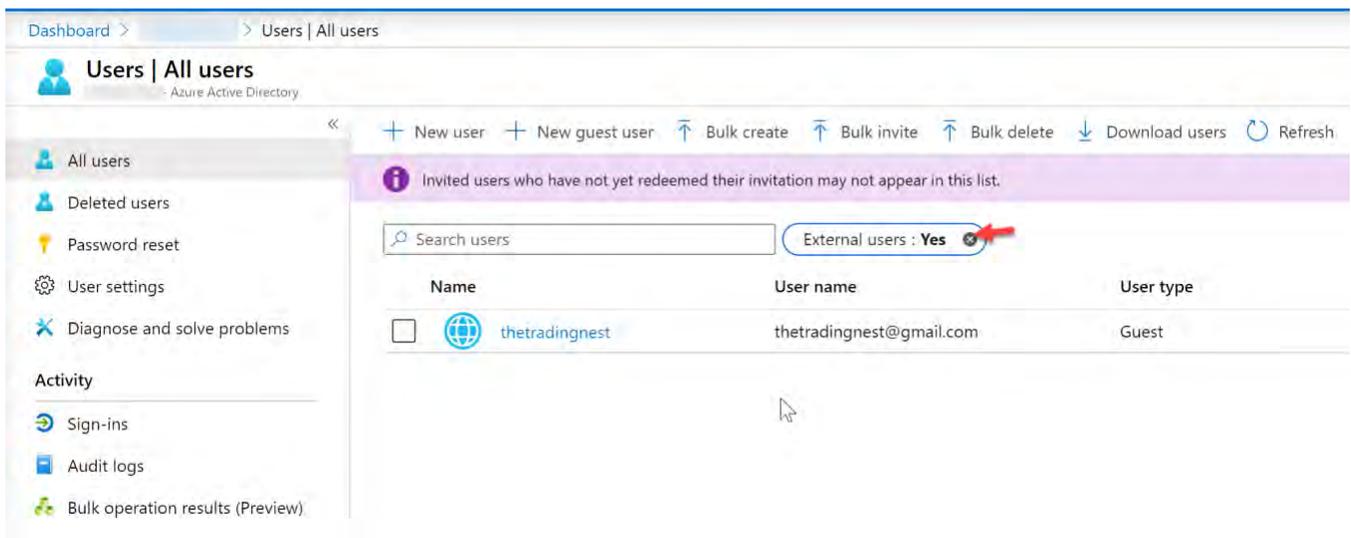
No, keep it off. I will turn it on later.

Back Finish Cancel

OVERVIEW & USER GUIDE

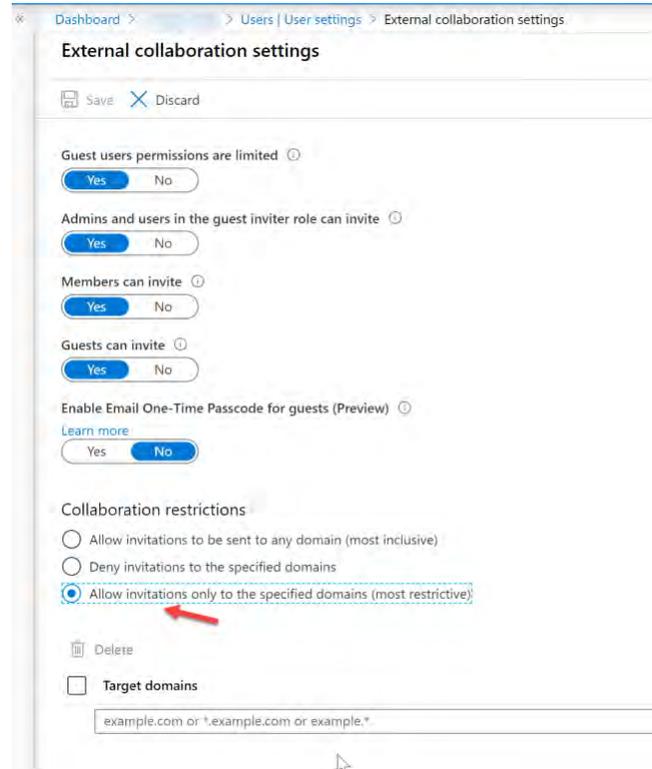
Additional Considerations:

- Periodically review guest access users in the Azure Active Directory Portal (monthly/quarterly)



OVERVIEW & USER GUIDE

- In Azure Active Directory, limit the domains for external collaboration and configure other settings. Admin Center>Azure Active Directory>Users>User Settings>Manage external collaboration settings

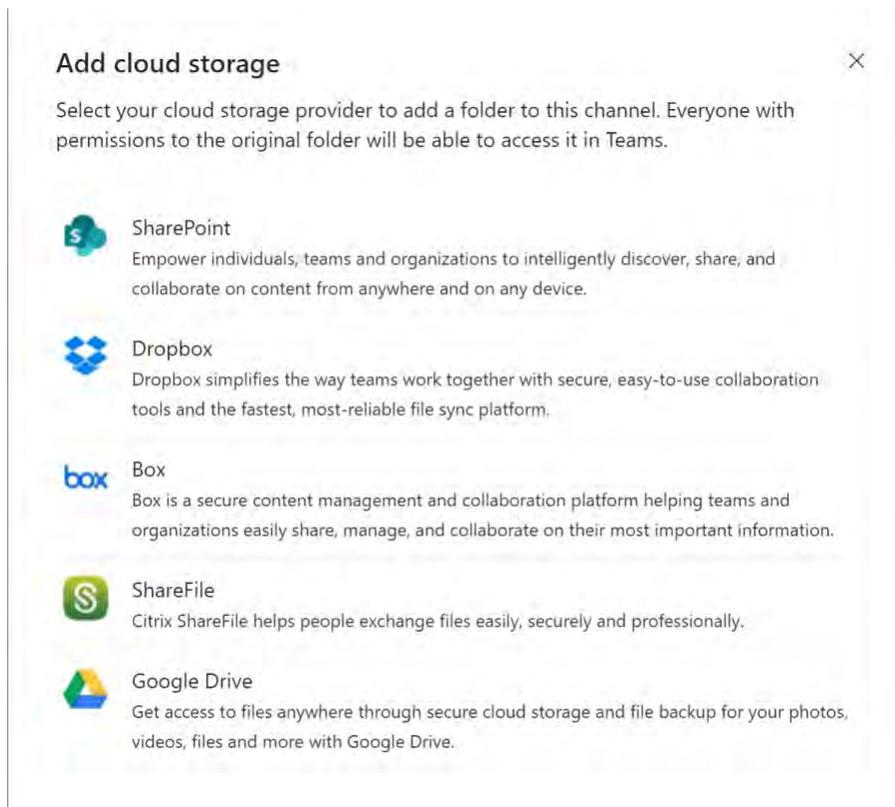
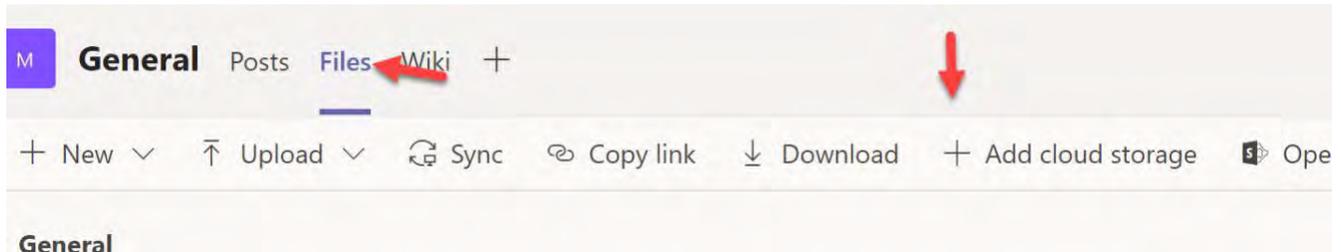


OVERVIEW & USER GUIDE

Turn off File Sharing and File Storage Options

By default, users can add external third-party storage providers like Google and DropBox to their Teams channels for file storage. Only managed, trusted providers should be allowed for data loss prevention purposes.

Ex.

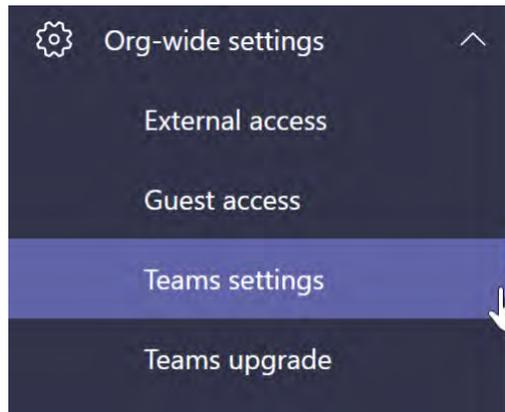


OVERVIEW & USER GUIDE

Compliance Controls:

- NIST CSF PR-DS-5
- CCS CSC 17
- COBIT 5 APO01.06
- ISA 62443-3-3:2013 SR 5.2
- ISO/IEC 27001:2013 A.6.1.2, A.7.1.1,
- A.7.1.2, A.7.3.1, A.8.2.2, A.8.2.3, A.9.1.1,
- A.9.1.2, A.9.2.3, A.9.4.1, A.9.4.4, A.9.4.5,
- A.13.1.3, A.13.2.1, A.13.2.3, A.13.2.4,
- A.14.1.2, A.14.1.3
- NIST SP 800-53 Rev. 4 AC-4, AC-5, AC-6, PE19, PS-3, PS-6, SC-7, SC-8, SC-13, SC-31, SI-4
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D), 164.308(a)(3),
 - 164.308(a)(4), 164.310(b), 164.310(c),
 - 164.312(a), 164.312(e)

1. In the Teams Admin Center, click Org-wide Settings>Teams Settings



2. Scroll down to the Files section and un-toggle each provider that is not managed by the company

OVERVIEW & USER GUIDE

Files

Turn on or turn off file sharing and cloud file storage options for the Files tab.

Citrix files	<input checked="" type="checkbox"/>	On
DropBox	<input checked="" type="checkbox"/>	On
Box	<input checked="" type="checkbox"/>	On
Google Drive	<input checked="" type="checkbox"/>	On

OVERVIEW & USER GUIDE

Block Third-Party Applications

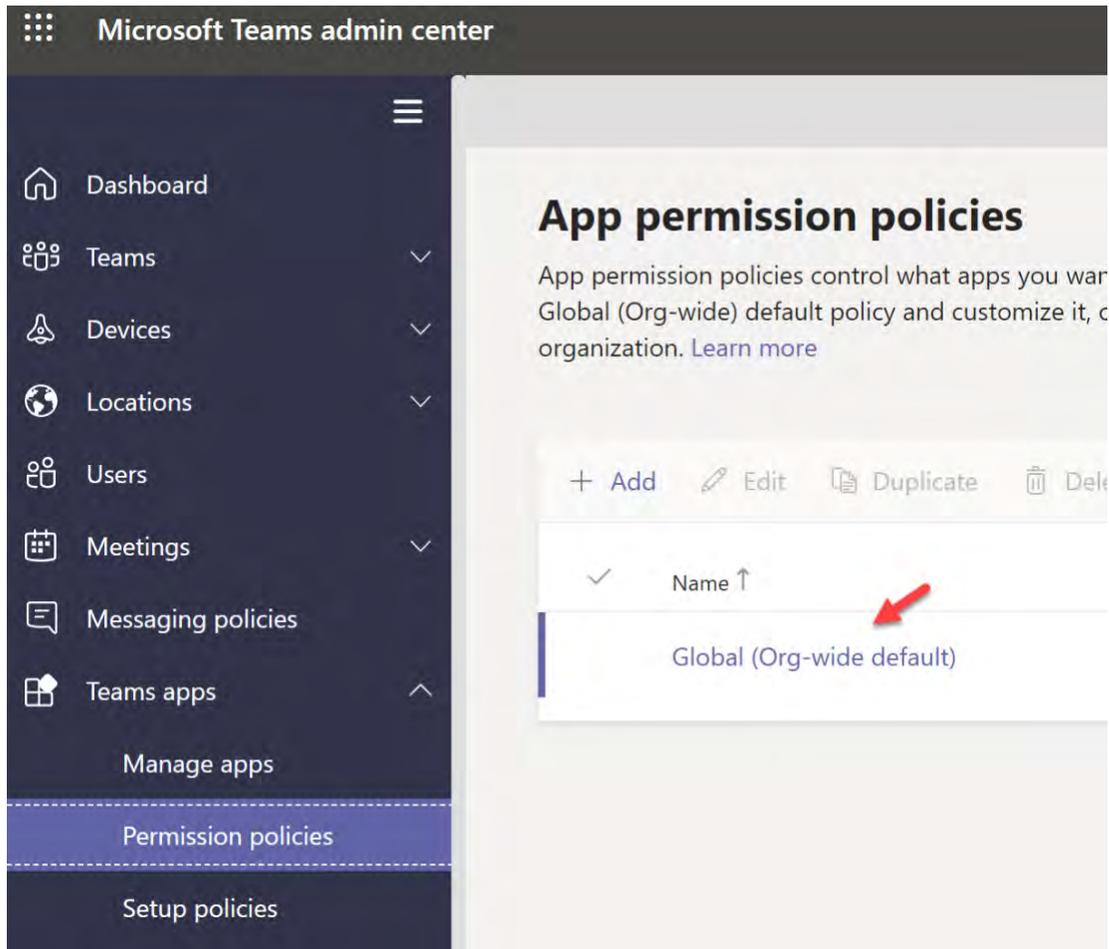
By default, all users have access to the Teams app store which contains applications published by Microsoft and other third parties. While we do not want to inhibit productivity, we do want to ensure we are preventing data loss and shadow IT at the organization. Any of these apps can be added to a Teams channel and users could begin to share corporate data back and forth with applications that are unmanaged. It is recommended that you whitelist applications that users can add and create a formal request process for additional applications.

Compliance Controls:

- NIST CSF PR-DS-5
- CCS CSC 17
- COBIT 5 APO01.06
- ISA 62443-3-3:2013 SR 5.2
- ISO/IEC 27001:2013 A.6.1.2, A.7.1.1,
 - A.7.1.2, A.7.3.1, A.8.2.2, A.8.2.3, A.9.1.1,
 - A.9.1.2, A.9.2.3, A.9.4.1, A.9.4.4, A.9.4.5,
 - A.13.1.3, A.13.2.1, A.13.2.3, A.13.2.4,
 - A.14.1.2, A.14.1.3
- NIST SP 800-53 Rev. 4 AC-4, AC-5, AC-6, PE19, PS-3, PS-6, SC-7, SC-8, SC-13, SC-31, SI-4
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D), 164.308(a)(3),
 - 164.308(a)(4)
 - 164.312(a), 164.312(e)

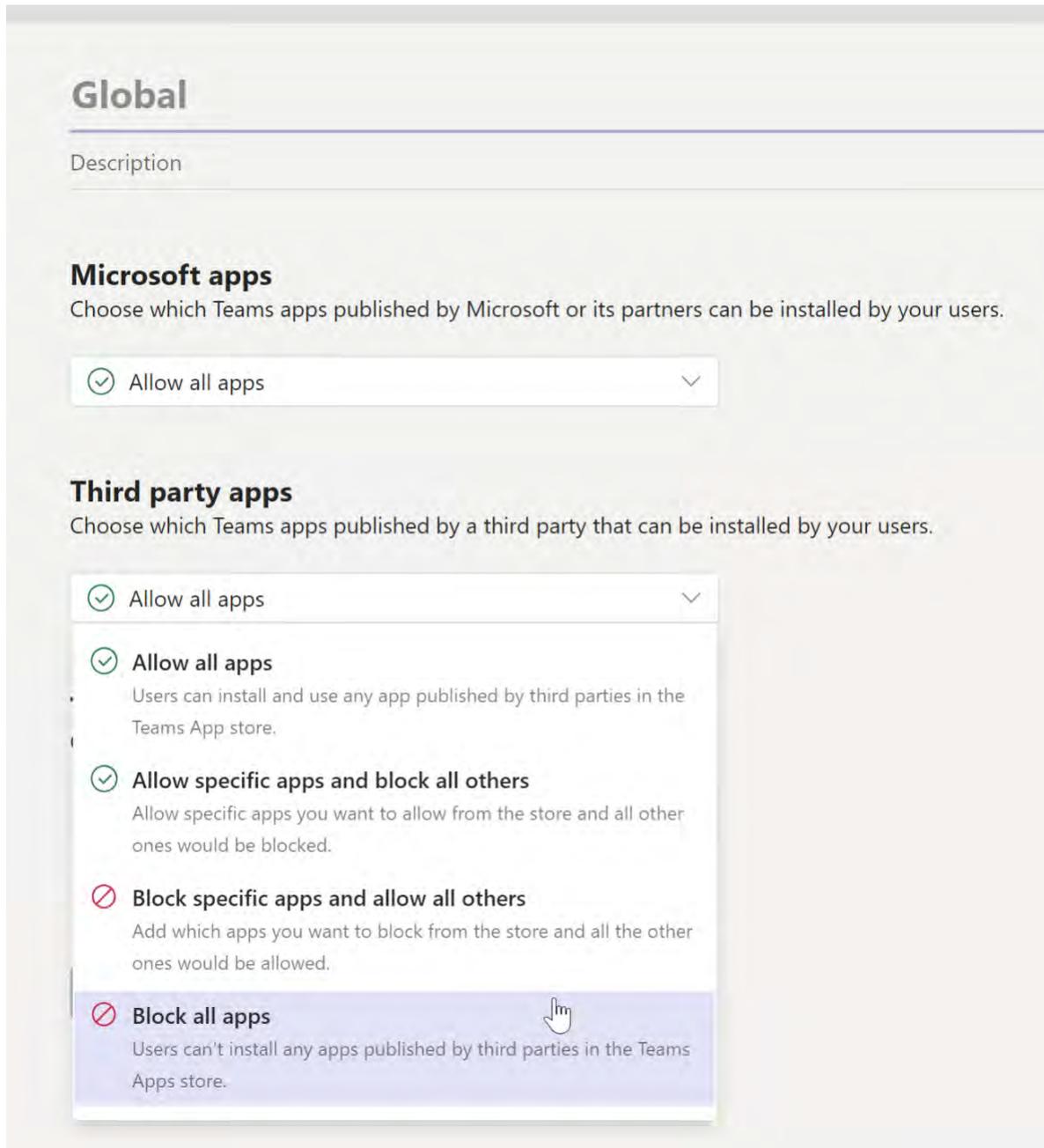
OVERVIEW & USER GUIDE

1. In the Teams Admin Center, go to Teams Apps>Permission Policies>Global



OVERVIEW & USER GUIDE

2. Choose to block all third-party applications or evaluate which apps you want to whitelist. Doing the same for Microsoft Applications is recommended



OVERVIEW & USER GUIDE

Restrict Users who can Create Teams Channels

Users within a tenant have the ability to create a public or private Teams channel by default. Behind the scenes, creating a Teams channel also creates a Microsoft 365 or Office 365 Group and a SharePoint site with a document library that stores all documents shared within the Teams channel. Over time, if this is not managed, the environment could quickly get out of hand with the number of Teams channels being created. This could lead to data loss, insecure sharing of documentation, and overall confusion across the organization. We recommend limiting the creation of Teams channels to certain members within the organization and creating a formal request process for new channels. If you do not want to restrict this to a certain group, we recommend you at least set up expiration policies around Teams channels that are processed for review based on activity in the channel. We discuss that in [the next section](#).

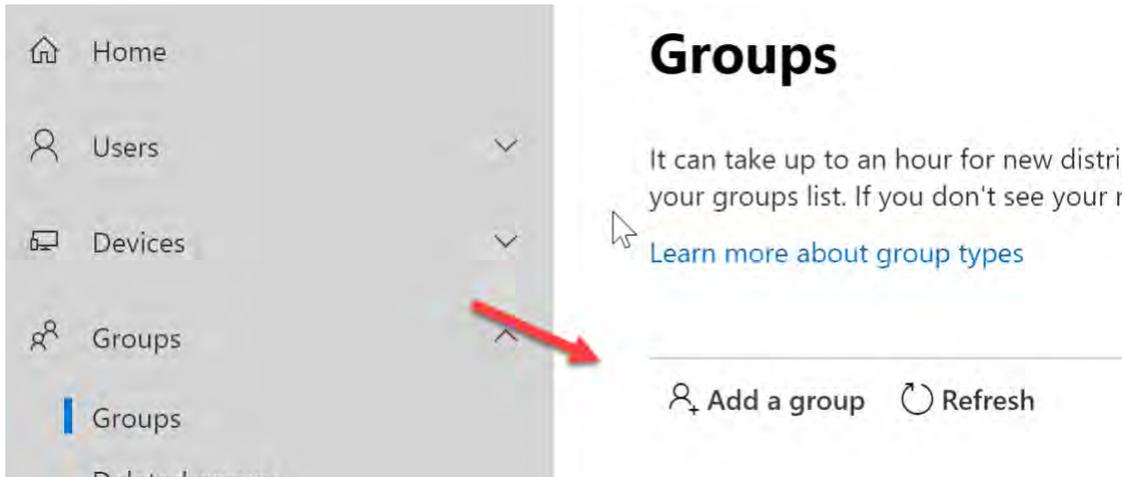
NOTE It is very important that you properly plan and communicate any changes here before rolling them out. The goal is not to inhibit productivity and force users to go to outside channels to collaborate, causing shadow IT. It is imperative that you make the request for creating a new Teams channel as seamless as possible. Restricting the creation of Teams channels also restricts who can create Groups. The setting is all or nothing in this regard.

Compliance Controls:

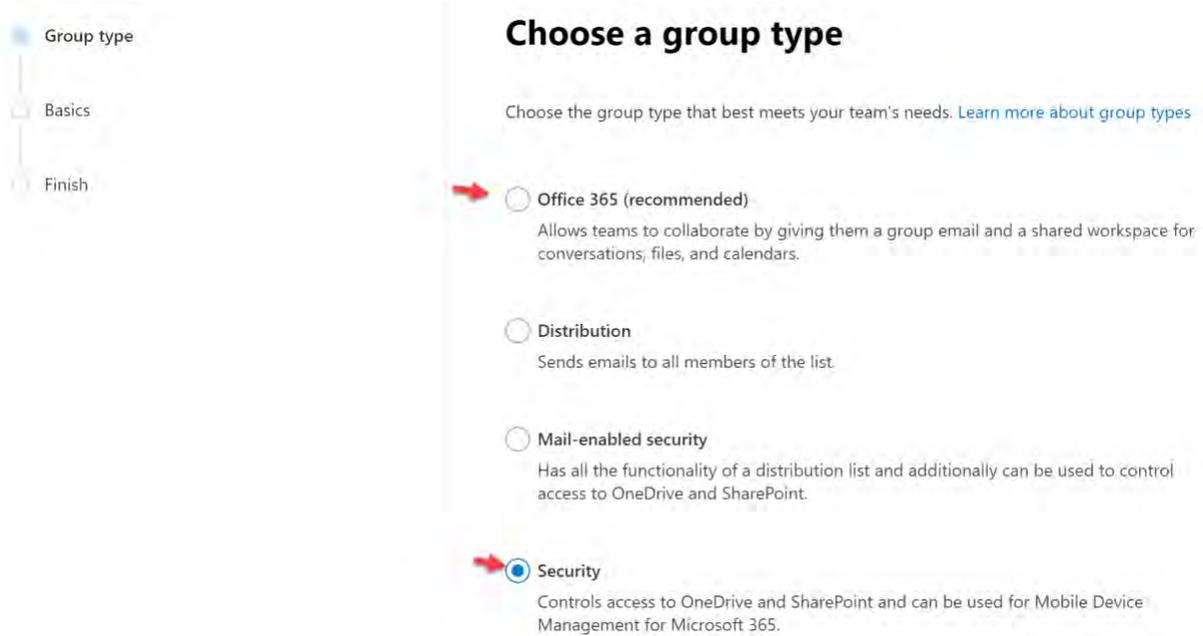
- NIST CSF PR.PT-1
- CCS CSC 14
- COBIT 5 APO11.04
- ISA 62443-2-1:2009 4.3.3.3.9, 4.3.3.5.8,, 4.3.4.4.7, 4.4.2.1, 4.4.2.2, 4.4.2.4
- ISA 62443-3-3:2013 SR 2.8, SR 2.9, SR 2.10, SR 2.11, SR 2.12
- ISO/IEC 27001:2013 A.12.4.1, A.12.4.2, A.12.4.3, A.12.4.4, A.12.7.1
- NIST SP 800-53 Rev. 4 AU Family
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D), 164.308(a)(5)(ii)(C), 164.312(b)

OVERVIEW & USER GUIDE

1. In the 365 Admin Center, go to Groups>Add Group



2. Add a 365 Group or Security Group. This will house the members who will have access to create 365 Groups and Teams Channels



OVERVIEW & USER GUIDE

3. Name the Group, Save, and add the appropriate members once the group has finished being created

Set up the basics

To get started, fill out some basic info about the group you're

Name *

Description

4. Click on the [following link](#) and scroll down to the PowerShell section

```
PowerShell Copy

$GroupName = "<SecurityGroupName>"
$AllowGroupCreation = "False"

Connect-AzureAD

$settingsObjectID = (Get-AzureADDirectorySetting | Where-object -Property Displayname -Value "Group.Unified" | Where-object !$settingsObjectID)
if(!$settingsObjectID)
{
    $template = Get-AzureADDirectorySettingTemplate | Where-object {$_.displayname -eq "group.unified"}
    $settingsCopy = $template.CreateDirectorySetting()
    New-AzureADDirectorySetting -DirectorySetting $settingsCopy
    $settingsObjectID = (Get-AzureADDirectorySetting | Where-object -Property Displayname -Value "Group.Unified")
}

$settingsCopy = Get-AzureADDirectorySetting -Id $settingsObjectID
$settingsCopy["EnableGroupCreation"] = $AllowGroupCreation

if($GroupName)
{
    $settingsCopy["GroupCreationAllowedGroupId"] = (Get-AzureADGroup -SearchString $GroupName).objectid
}
else {
    $settingsCopy["GroupCreationAllowedGroupId"] = $GroupName
}
Set-AzureADDirectorySetting -Id $settingsObjectID -DirectorySetting $settingsCopy

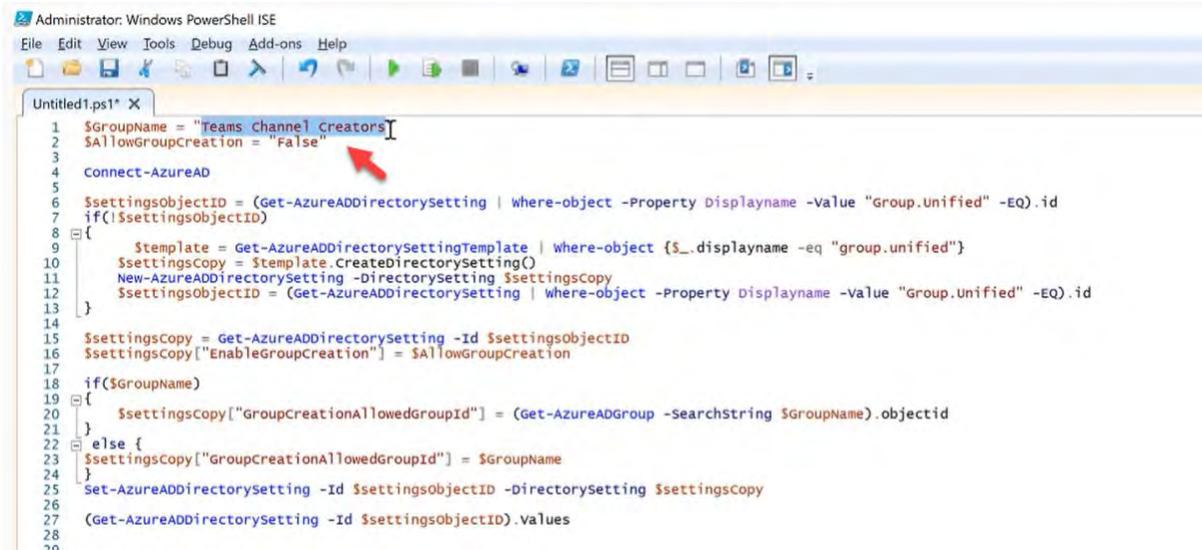
(Get-AzureADDirectorySetting -Id $settingsObjectID).Values
```

5. Run PowerShell ISE as Admin (64x version) and run the following command:

OVERVIEW & USER GUIDE

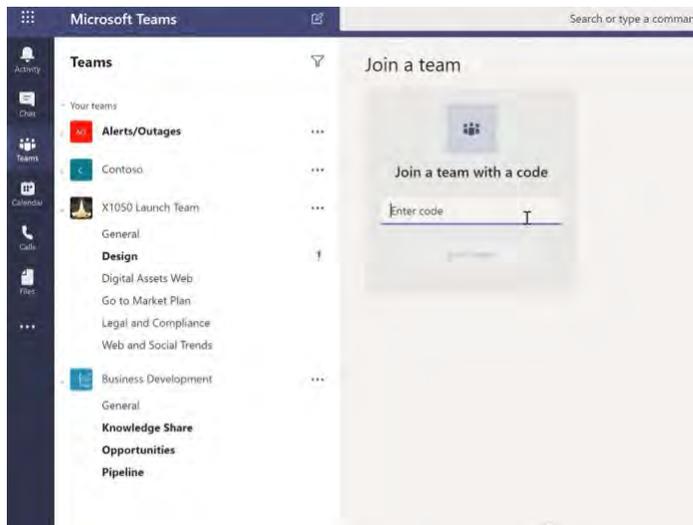
Import-Module AzureADPreview

6. Copy and paste the script for the website linked on step 4. Change the group name to the display name of the group you created in step 3



```
Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
Untitled1.ps1* X
1 $GroupName = "Teams Channel Creators"
2 $AllowGroupCreation = "False"
3
4 Connect-AzureAD
5
6 $SettingsObjectID = (Get-AzureADDirectorySetting | Where-Object -Property Displayname -Value "Group.Unified" -EQ).id
7 if(!$SettingsObjectID)
8 {
9     $Template = Get-AzureADDirectorySettingTemplate | Where-Object {$_.displayname -eq "group.unified"}
10    $SettingsCopy = $Template.CreatedDirectorySetting()
11    New-AzureADDirectorySetting -DirectorySetting $SettingsCopy
12    $SettingsObjectID = (Get-AzureADDirectorySetting | Where-Object -Property Displayname -Value "Group.Unified" -EQ).id
13 }
14
15 $SettingsCopy = Get-AzureADDirectorySetting -Id $SettingsObjectID
16 $SettingsCopy["EnableGroupCreation"] = $AllowGroupCreation
17
18 if($GroupName)
19 {
20     $SettingsCopy["GroupCreationAllowedGroupId"] = (Get-AzureADGroup -SearchString $GroupName).objectId
21 }
22 else {
23     $SettingsCopy["GroupCreationAllowedGroupId"] = $GroupName
24 }
25 Set-AzureADDirectorySetting -Id $SettingsObjectID -DirectorySetting $SettingsCopy
26
27 (Get-AzureADDirectorySetting -Id $SettingsObjectID).values
28
29
```

7. After you run the script, all users who are not part of the group will not be able to create new channels



OVERVIEW & USER GUIDE

Set Teams Expiration

Organizations with a large number of teams often have Teams channels that are never actually used. This can happen because of several reasons including product experimentation, short-term team collaboration, or team owners leaving the organization. Over time, such teams can accumulate and create a burden on tenant resources. To curb the number of unused teams, as an admin, you can use [group expiration policy](#) to automatically clean up unused teams. Because teams are backed by groups, group expiration policies automatically apply to teams as well.

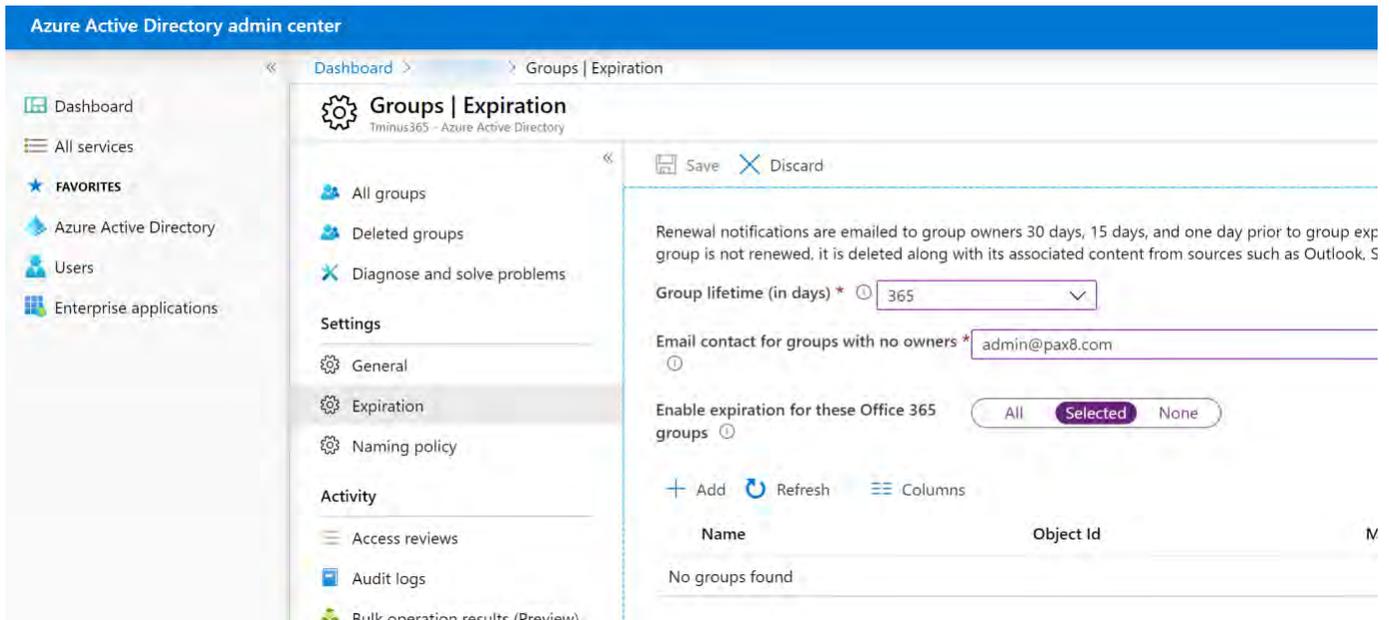
When you apply an expiration policy to a team, a team owner receives a notification for team renewal 30 days, 15 days and 1 day before the team's expiration date. When the team owner receives the notification, they can click Renew now in team settings to renew the team. To prevent accidental deletion, auto-renewal is automatically enabled for a team in the group expiration policy. When the group expiration policy is set up, any team that has at least one channel visit from any team member before its expiration date is automatically renewed without any manual intervention from the team owner.

Compliance Controls:

- NIST CSF PR.PT-1
- CCS CSC 14
- COBIT 5 APO11.04
- ISA 62443-2-1:2009 4.3.3.3.9, 4.3.3.5.8,, 4.3.4.4.7, 4.4.2.1, 4.4.2.2, 4.4.2.4
- ISA 62443-3-3:2013 SR 2.8, SR 2.9, SR 2.10, SR 2.11, SR 2.12
- ISO/IEC 27001:2013 A.12.4.1, A.12.4.2, A.12.4.3, A.12.4.4, A.12.7.1
- NIST SP 800-53 Rev. 4 AU Family
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D), 164.308(a)(5)(ii)(C), 164.312(b)

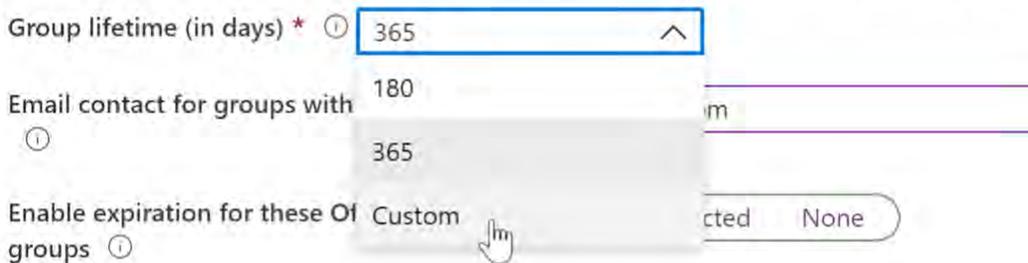
OVERVIEW & USER GUIDE

1. In the 365 Admin Center, go to Admin Centers>Azure Active Directory>Groups>Expiration



2. Here you can create custom policies to define group lifetime, an email contact for groups with no owners, and the ability to scope the policy to certain Teams channels. If you choose All, then you will not have to review this in the future. Group lifetime can be custom

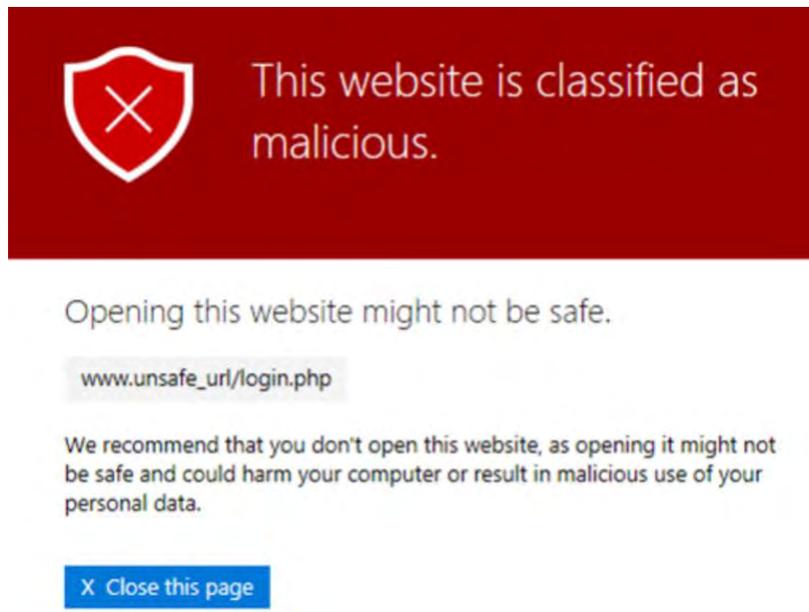
Renewal notifications are emailed to group owners 30 days, 15 days, and one day prior to group expiration. If a group is not renewed, it is deleted along with its associated content from sources such as Outlook, S



OVERVIEW & USER GUIDE

Set up Advanced Threat Protection Policies for Teams

With Office 365 Advanced Threat Protection, you can configure safe link policies and safe attachment policies within many Office environments, including Teams. A safe links policy will allow you to have real-time click protection with any links shared over Teams chats. This will detonate the URL in a sandbox environment and scan for malicious content. If malicious content is detected, the user will be prevented from continuing.

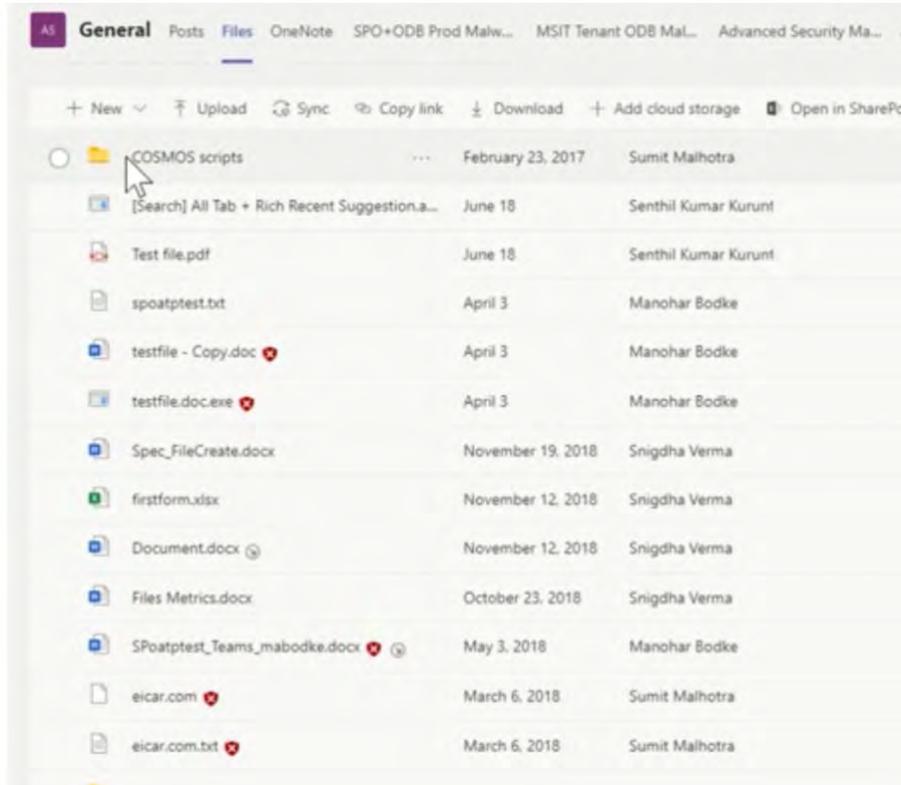


Compliance Controls:

- NIST CSF DE.CM-4
- CCS CSC 5
- COBIT 5 DSS05.01
- ISA 62443-2-1:2009 4.3.4.3.8
- ISA 62443-3-3:2013 SR 3.2
- ISO/IEC 27001:2013 A.12.2.1
- NIST SP 800-53 Rev. 4 SI-3
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(5)(ii)(B)

OVERVIEW & USER GUIDE

Safe attachments scan files shared in Teams and also the files part of the document library associated with the Teams channel.

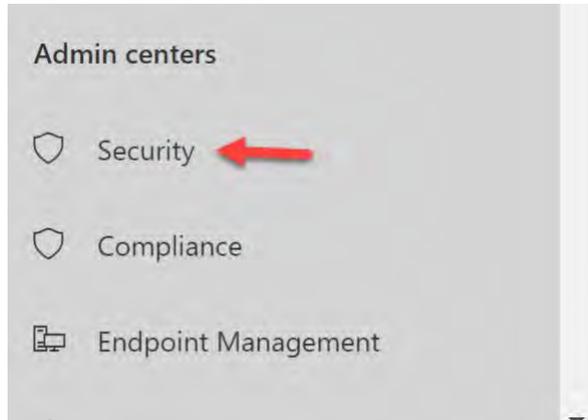


License Requirements:

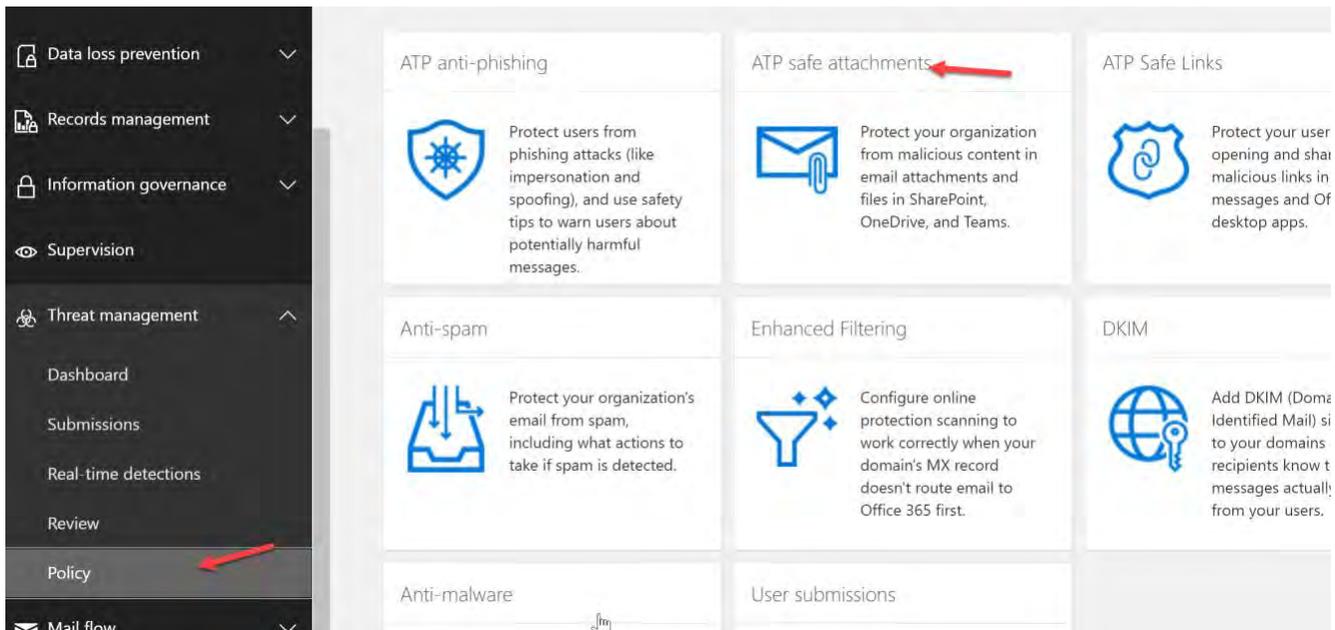
- [Microsoft Advanced Threat Protection Plan \(1\)](#) \$2/u/m
- [Microsoft 365 Business Premium](#) \$20/u/m

OVERVIEW & USER GUIDE

1. In the 365 Admin Center, click Admin Centers>Security

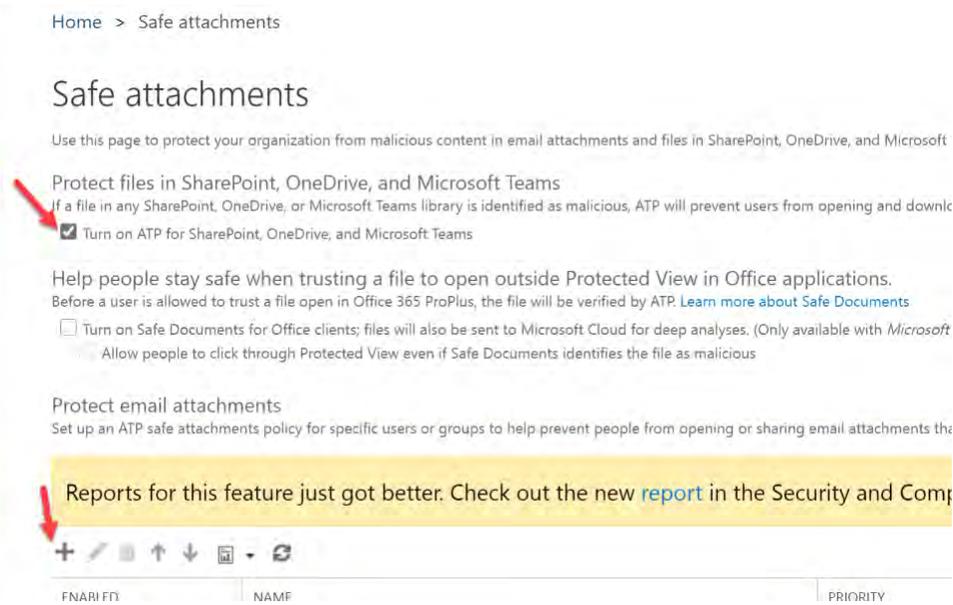


2. Click on Threat Management>Policy>ATP Safe Attachments



OVERVIEW & USER GUIDE

3. Checkmark the box to turn on ATP for Teams. Select the + icon to create a new policy



4. Add Name, Description, and choose Dynamic Delivery. For more on delivery methods, [click here](#)

new safe attachments policy

*Name:
Safe Attachment Policy

Description:

Safe attachments unknown malware response
Select the action for unknown malware in attachments. [Learn more](#)

Warning
Monitor, Replace and Block actions may cause significant delay to email delivery. [Learn more](#)
Dynamic Delivery is only available for recipients with hosted mailboxes. [Learn more](#)

Off - Attachment will not be scanned for malware.

Monitor - Continue delivering the message after malware is detected; track scan results.

Block - Block the current and future emails and attachments with detected malware.

Replace - Block the attachments with detected malware, continue to deliver the message.

Dynamic Delivery - Deliver the message without attachments immediately and reattach once scan is complete.

OVERVIEW & USER GUIDE

- 5. Add the recipient domain is selection and chose the main domain in the tenant. Click Save when completed

Redirect attachment on detection
Send the blocked, monitored, or replaced attachment to an email address.

Enable redirect
Send the attachment to the following email address

Apply the above selection if malware scanning for attachments times out or error occurs.

Applied To
Specify the users, groups, or domains for whom this policy applies by creating recipient based rules:

*If...
The recipient domain is [redacted].com'
add condition

Except if...
add exception

- 6. For Safe Links, go back to Threat management>Policy>Safe Links

OVERVIEW & USER GUIDE

7. Scroll down to Policies that apply to specific users and click the + icon

Safe links

Safe links help prevent your users from following links in email and documents that go to web sites recognized as unsafe. [Learn more about safe links](#)

Reports for this feature just got better. Check out the new [report](#) in the new Safe Links dashboard.

Policies that apply to the entire organization



NAME

Default

1 selected of 1 total



Policies that apply to specific users



OVERVIEW & USER GUIDE

8. Add a Name, Description, and turn on the necessary settings displayed below:

*Name:

Description:



Select the action for unknown potentially malicious URLs in messages.

- Off
- On - URLs will be rewritten and checked against a list of known malicious links when user clicks on the link.

Select the action for unknown potentially malicious URLs within Microsoft Teams.

- Off
- On - Microsoft Teams will check against a list of known malicious links when user clicks on a link; URLs will not be rewritten. (Currently in preview for customers in the Microsoft Teams Technology Adoption Program (TAP))

- Apply real-time URL scanning for suspicious links and links that point to files.
 - Wait for URL scanning to complete before delivering the message.

- Apply safe links to email messages sent within the organization.

OVERVIEW & USER GUIDE

9. You can choose to whitelist certain URLs. Like the safe attachments policy, apply to all users in the tenant by the domain name

Do not track when users click safe links.

Do not let users click through safe links to original URL.

Do not rewrite the following URLs:

Enter a valid URL 

Applied To

Specify the users, groups, or domains for whom this policy applies by creating recipient based rules:

If...

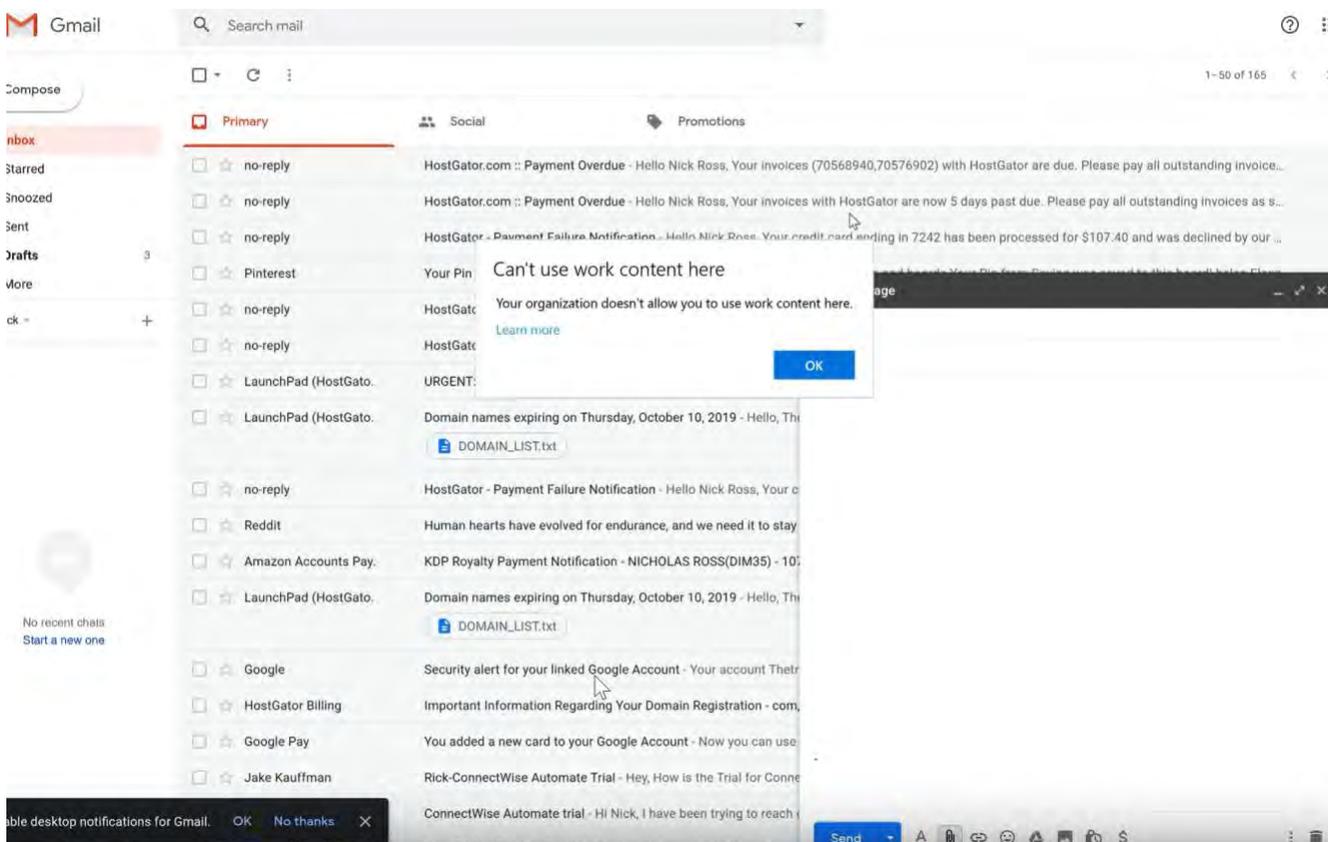
The recipient domain is   .com

OVERVIEW & USER GUIDE

Set up app Protection Policies

App Protection Policies are part of the mobile application management (MAM) solution with Microsoft Intune. App protection policies allow you to protect applications on Windows, iOS, and Android devices, no matter if they are enrolled in the Intune MDM solution or not. These policies allow you to prevent data loss to untrusted or unmanaged applications. They prevent save as and cut/copy/paste abilities to unmanaged locations.

Ex. A user trying to upload a Teams document to their personal Gmail



License Requirements:

- [Microsoft 365 Business Premium](#) \$20/u/m

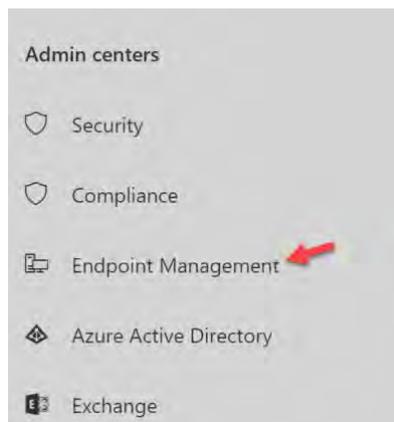
OVERVIEW & USER GUIDE

- [Microsoft Enterprise Mobility + Security E3](#) \$8.75/u/m
- [Microsoft Intune](#) \$6/u/m

Compliance Controls:

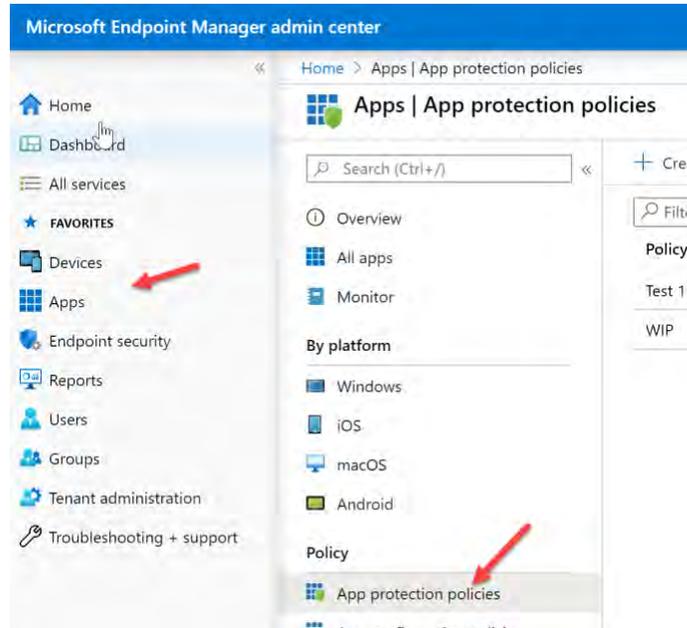
- NIST CSF PR-DS-5
- CCS CSC 17
- COBIT 5 APO01.06
- ISA 62443-3-3:2013 SR 5.2
- ISO/IEC 27001:2013 A.6.1.2, A.7.1.1,
 - A.7.1.2, A.7.3.1, A.8.2.2, A.8.2.3, A.9.1.1,
 - A.9.1.2, A.9.2.3, A.9.4.1, A.9.4.4, A.9.4.5,
 - A.13.1.3, A.13.2.1, A.13.2.3, A.13.2.4,
 - A.14.1.2, A.14.1.3
- NIST SP 800-53 Rev. 4 AC-4, AC-5, AC-6, PE19, PS-3, PS-6, SC-7, SC-8, SC-13, SC-31, SI-4
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D), 164.308(a)(3),
 - 164.308(a)(4)
 - 164.312(a), 164.312(e)

1. In the 365 Admin Center, click on Endpoint Manager



OVERVIEW & USER GUIDE

2. Click Apps>App Protection Policies

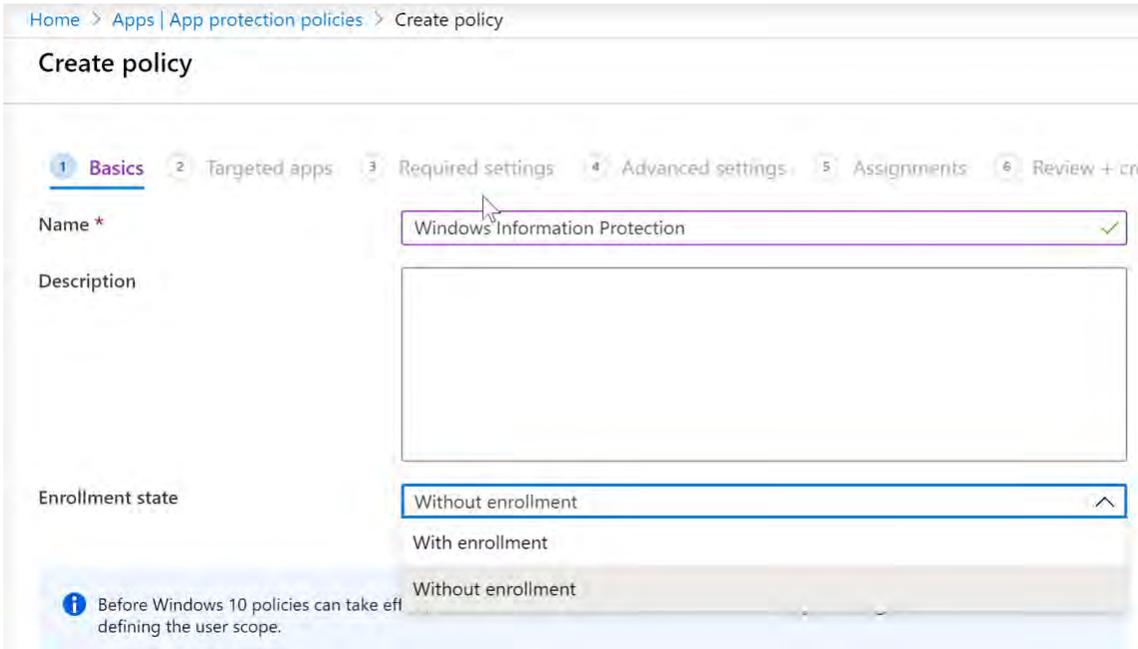


3. Click Create Policy>Windows 10 (We will only be covering Windows 10 in this guide)

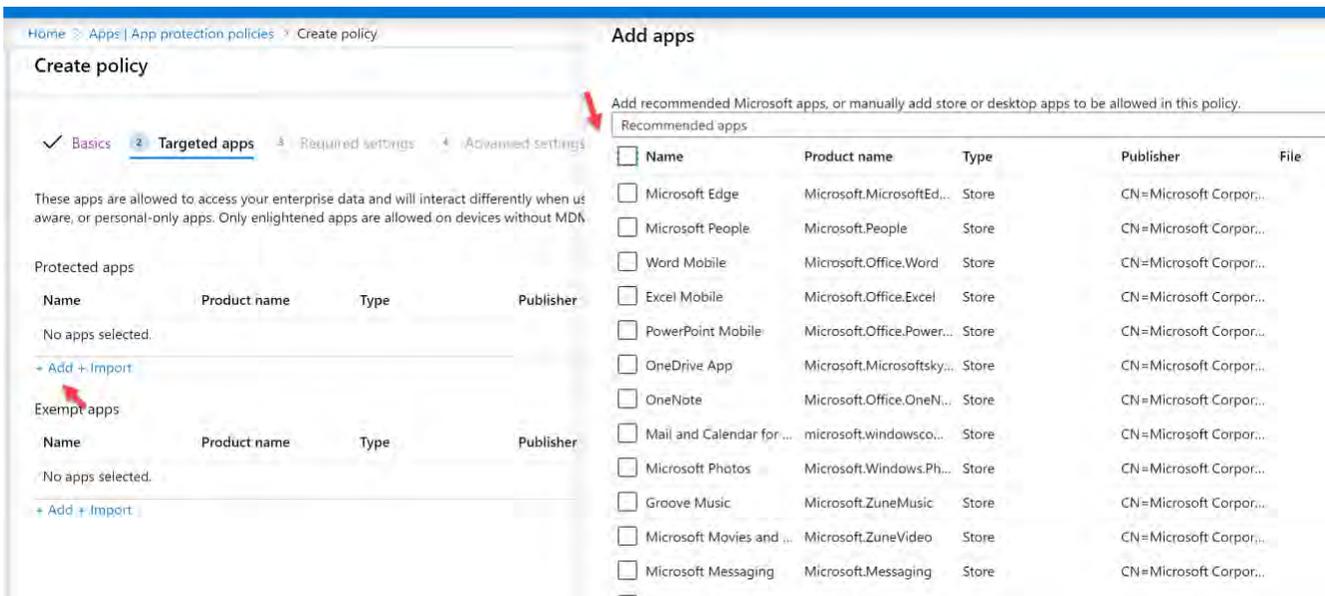


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- Here you can name the policy and chose devices enrolled in Intune or not enrolled. For this example, we will choose not enrolled:



- Click +Add and add appropriate applications. At the minimum, add the entire Office suite. You can import third-party applications



OVERVIEW & USER GUIDE

6. When you are ready, click Next

Home > Apps | App protection policies > Create policy

Create policy

Basics
 2 Targeted apps
 3 Required settings
 4 Advanced settings
 5 Assignments
 6 Review

These apps are allowed to access your enterprise data and will interact differently when used with unallowed, non-enterprise aware, or personal-only apps. Only enlightened apps are allowed on devices without MDM. [Learn more here](#)

Protected apps

Name	Product name	Type	Publisher	File
Word Mobile	Microsoft.Office.Word	Store apps	CN=Microsoft Corpor...	
Excel Mobile	Microsoft.Office.Excel	Store apps	CN=Microsoft Corpor...	
OneDrive App	Microsoft.Microsoftsky...	Store apps	CN=Microsoft Corpor...	
OneNote	Microsoft.Office.OneN...	Store apps	CN=Microsoft Corpor...	
PowerPoint Mobile	Microsoft.Office.Power...	Store apps	CN=Microsoft Corpor...	
Microsoft Teams	*	Desktop apps	O=Microsoft Corporat...	teams.exe
Microsoft OneDrive	*	Desktop apps	O=Microsoft Corporat...	onedrive.exe

[+ Add + Import](#)

7. Here we can choose what actions will be taken. Block prevents users from sharing data outside the trusted applications. Silent will collect log data without actually enforcing anything

Home > Apps | App protection policies > Create policy

Create policy

Basics
 Targeted apps
 3 Required settings
 4 Advanced settings
 5 Assignments
 6 Review + create

This policy only applies to Windows 10 Anniversary Edition and higher. This policy uses Windows Information Protection (WIP) to apply protection. [Learn more about WIP here](#)

Required settings

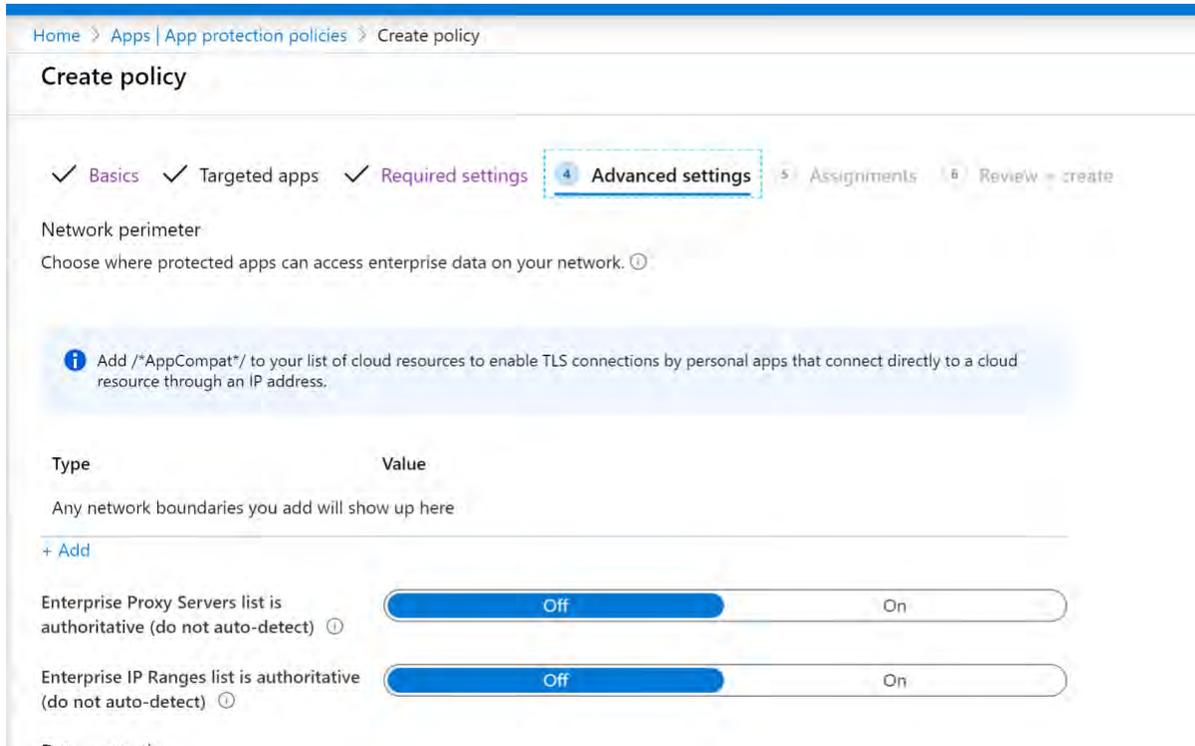
Changing the scope or removing this policy will decrypt corporate data.

Windows Information Protection mode * **Block** Allow Overrides Silent Off

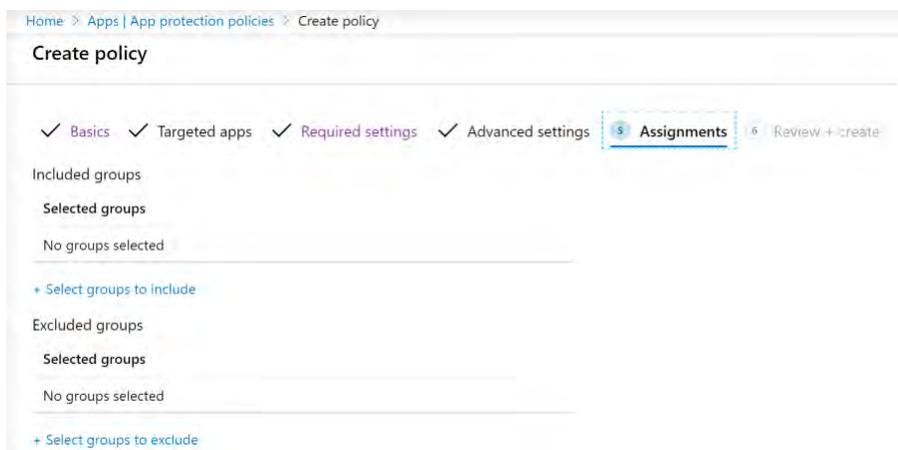
Corporate identity *

OVERVIEW & USER GUIDE

8. We will not configure anything on the Advanced Settings page



9. Last, we can scope the policy to certain users and Create



OVERVIEW & USER GUIDE

Set up Data Loss Prevention Policies

Data loss prevention policies allow us to prevent the sharing of sensitive information across Teams chats. Policies come with pre-defined templates that can detect for certain information being shared like PII, credit card numbers, social security numbers, etc. The policies are granular in the fact that we can prevent users from sharing the information or we can allow overrides with business justification.

License Requirements:

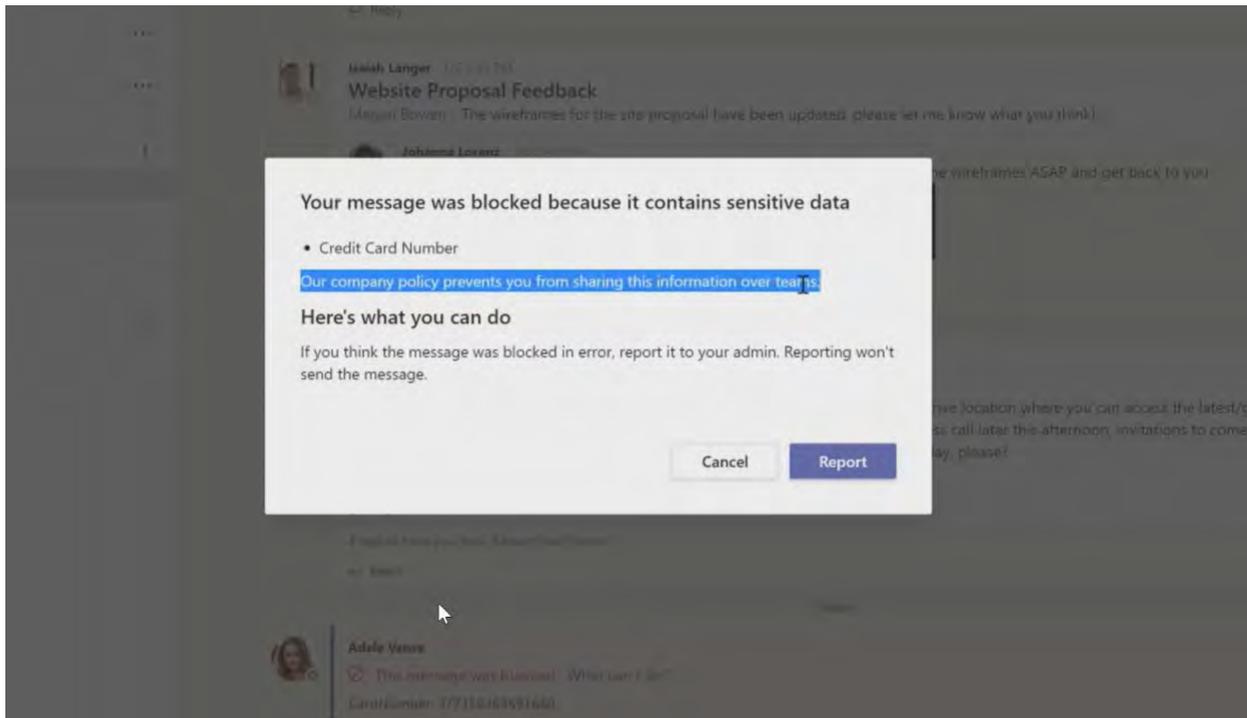
- [Microsoft 365 Business Premium](#) \$20/u/m
- [Microsoft Office 365 E3](#) \$20/u/m

Compliance Controls:

- NIST CSF PR-DS-5
- CCS CSC 17
- COBIT 5 APO01.06
- ISA 62443-3-3:2013 SR 5.2
- ISO/IEC 27001:2013 A.6.1.2, A.7.1.1,
 - A.7.1.2, A.7.3.1, A.8.2.2, A.8.2.3, A.9.1.1,
 - A.9.1.2, A.9.2.3, A.9.4.1, A.9.4.4, A.9.4.5,
 - A.13.1.3, A.13.2.1, A.13.2.3, A.13.2.4,
 - A.14.1.2, A.14.1.3
- NIST SP 800-53 Rev. 4 AC-4, AC-5, AC-6, PE19, PS-3, PS-6, SC-7, SC-8, SC-13, SC-31, SI-4
- HIPAA Security Rule 45 C.F.R. §§
 - 164.308(a)(1)(ii)(D), 164.308(a)(3),
 - 164.308(a)(4)
 - 164.312(a), 164.312(e)

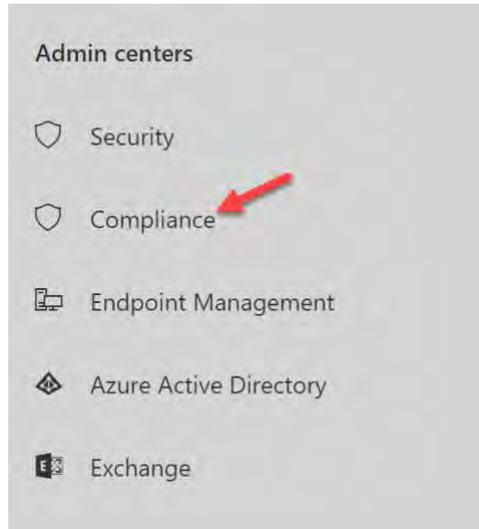
OVERVIEW & USER GUIDE

Ex. User sending credit card information

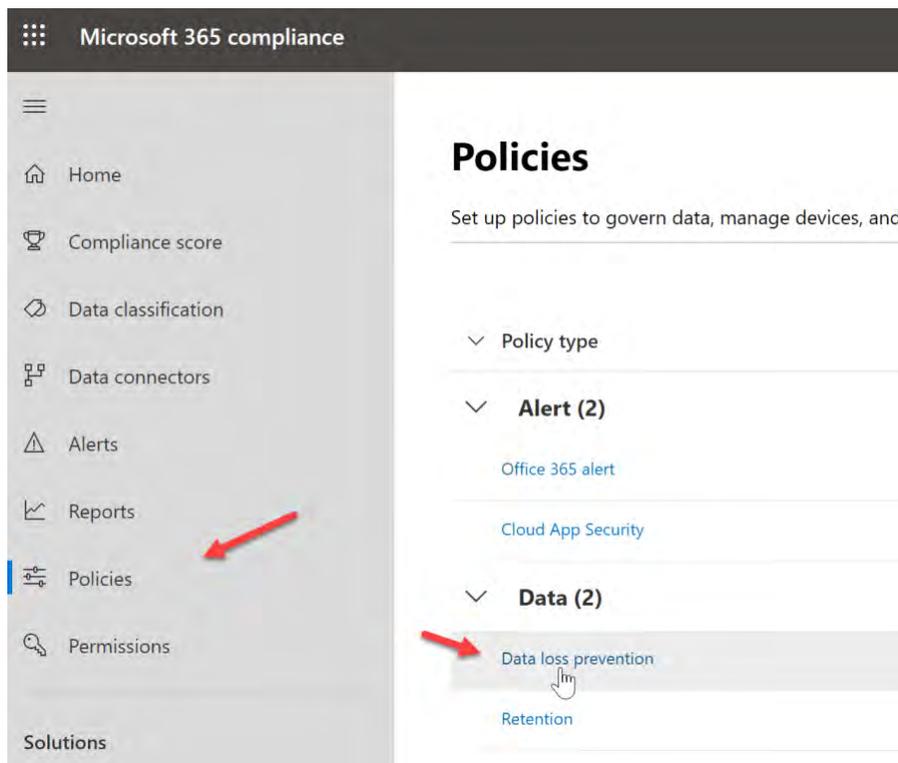


OVERVIEW & USER GUIDE

1. In the 365 Admin Center, click on Admin Centers>Compliance



2. Click Policies>Data Loss Prevention



OVERVIEW & USER GUIDE

3. Click Create Policy

Data loss prevention

Use data loss prevention (DLP) policies to help identify and protect the wrong people. [Learn more about DLP](#)

+ Create policy ↓ Export ↻ Refresh

Name
U.S. Health Insurance Act (HIPAA)
U.S. Financial Data

4. Choose a template, if applicable

Start with a template or create a custom policy

Choose an industry regulation to see the DLP policy templates you can use to protect that info or create a custom policy start from scratch. If you need to protect labeled content, you'll be able to choose labels later. [Learn more about DLP pol templates](#)

Search

Show options for All countries or regions

42 results

- Financial
- Medical and health
- Privacy
- Custom

- PCI Data Security Standard (PCI DSS)
- Saudi Arabia - Anti-Cyber Crime Law
- Saudi Arabia Financial Data
- U.K. Financial Data

U.S. Financial Data

Description

Helps detect the presence of information commonly considered to be financial information in United States, including information like credit card, account information, and debit card numbers.

Protects this information:

- Credit Card Number
- U.S. Bank Account Number
- ABA Routing Number

OVERVIEW & USER GUIDE

5. Add a name and description

The screenshot shows the 'Name your policy' step in the 'New DLP policy' configuration. On the left, a vertical navigation pane lists the steps: 'Choose the information to protect' (checked), 'Name your policy' (highlighted), 'Choose locations', 'Policy settings', and 'Review your settings'. The main content area is titled 'Name your policy' and contains a 'Name *' field with the text 'U.S. Financial Data' and a 'Description' field with the placeholder text 'Enter a friendly description for your policy'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

6. Choose Locations. *NOTE* You can scope this to certain users

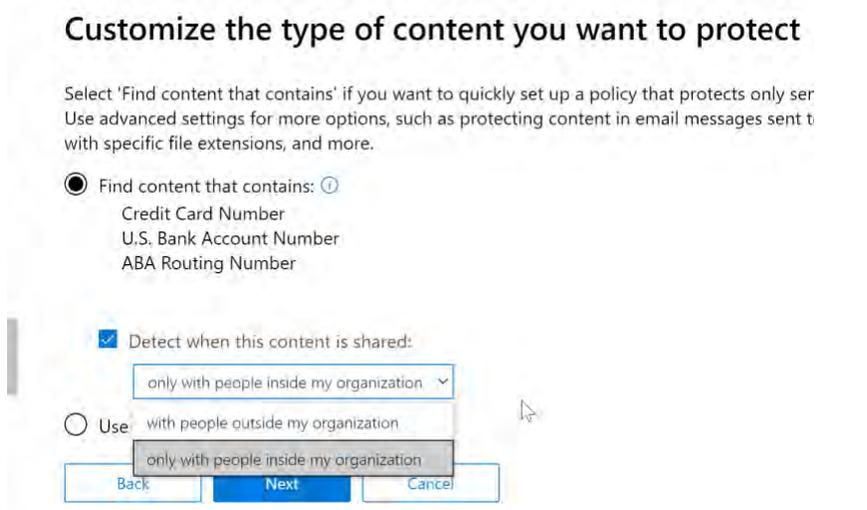
The screenshot shows the 'Choose locations' step in the 'New DLP policy' configuration. The left navigation pane shows 'Choose locations' as the active step. The main content area is titled 'Choose locations' and displays a table of locations with toggle switches and options to include or exclude them.

Status	Location	Include	Exclude
<input type="checkbox"/>	Exchange email		
<input type="checkbox"/>	SharePoint sites		
<input type="checkbox"/>	OneDrive accounts		
<input checked="" type="checkbox"/>	Teams chat and channel message:	All Choose accounts	None Exclude accounts

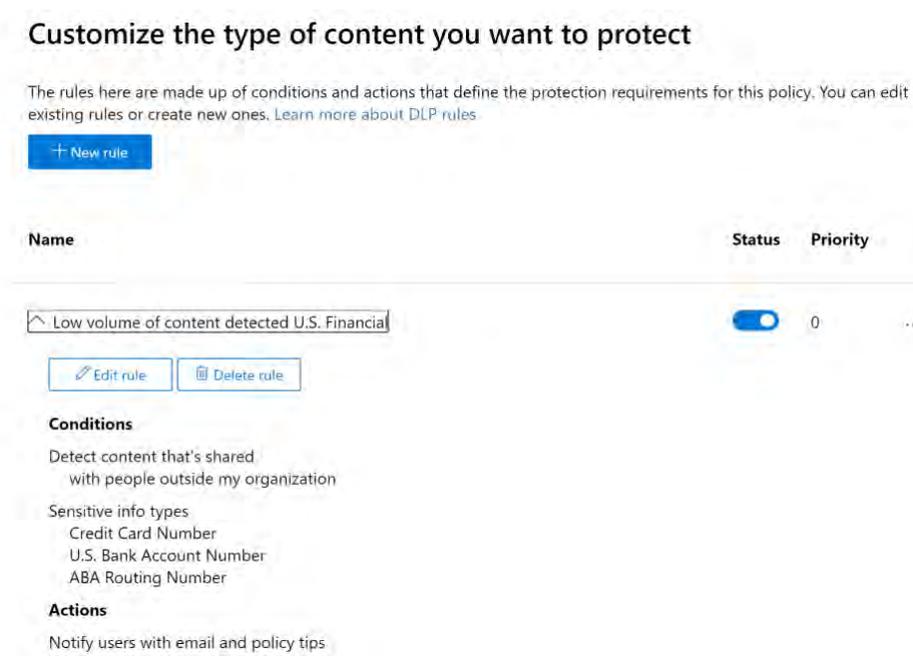
At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

OVERVIEW & USER GUIDE

7. You can choose an external or internal policy here



8. If you choose the advanced settings, you can modify the rules or create new rules



OVERVIEW & USER GUIDE

9. If you edit one of the rules you can set the actions that apply to the user such as blocking the message, allowing override, setting the policy tip, etc.

Low volume of content detected U.S. Financial

Name	Conditions	Exceptions	Actions	User notifications	User
------	------------	------------	---------	--------------------	------

^ Exceptions

We won't apply this rule to content that matches any of these exceptions.

+ Add an exception ▾

^ Actions

Use actions to protect content when the conditions are met.

Restrict access or encrypt the content

- Block people from sharing and restrict access to shared content
By default, users are blocked from sending email and Teams chats and channel messages who has access to shared SharePoint and OneDrive files. You can also decide if you want **Block these people from accessing SharePoint, OneDrive, and Teams content**
 - Everyone. Only the content owner, the last modifier, and the site admin will continue
 - Only people outside your organization. People inside your organization will continue
 - Encrypt email messages (applies only to content in Exchange)

OVERVIEW & USER GUIDE

^ User notifications

Use Notifications to inform your users and help educate them on the proper use of sensitive info. Please note: Notifications for teams will be displayed in the chat client itself.

On

Policy tips

Customize the policy tip text

^ User overrides

Let people who see the tip override the policy and share the content.

Off

10. You can choose to turn it on right away or test it out to better understand impact. After you decide, you can create the policy

New DLP policy

- ✓ Choose the information to protect
- ✓ Name your policy
- ✓ Choose locations

Policy settings

Do you want to turn on the policy or test things out first?

Do you want to turn on the policy right away or test things out first?
Keep in mind that after you turn it on, it'll take up to an hour for the policy to take effect.

Yes, turn it on right away

I'd like to test it out first

Show policy tips while in test mode

No, keep it off. I'll turn it on later.

OVERVIEW & USER GUIDE



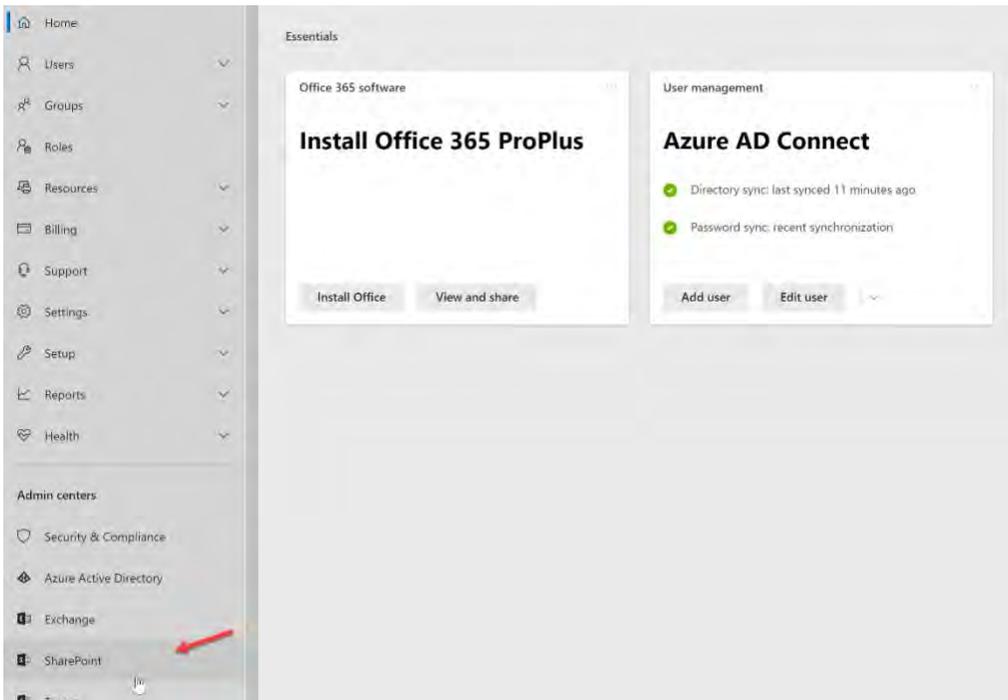
Configure Expiration Time for External Sharing Links

You should restrict the length of time that anonymous access links are valid. An attacker can compromise a user account for a short period of time, send anonymous sharing links to an external account, then take their time accessing the data. They can also compromise external accounts and steal the anonymous sharing links sent to those external entities well after the data has been shared.

Compliance Controls

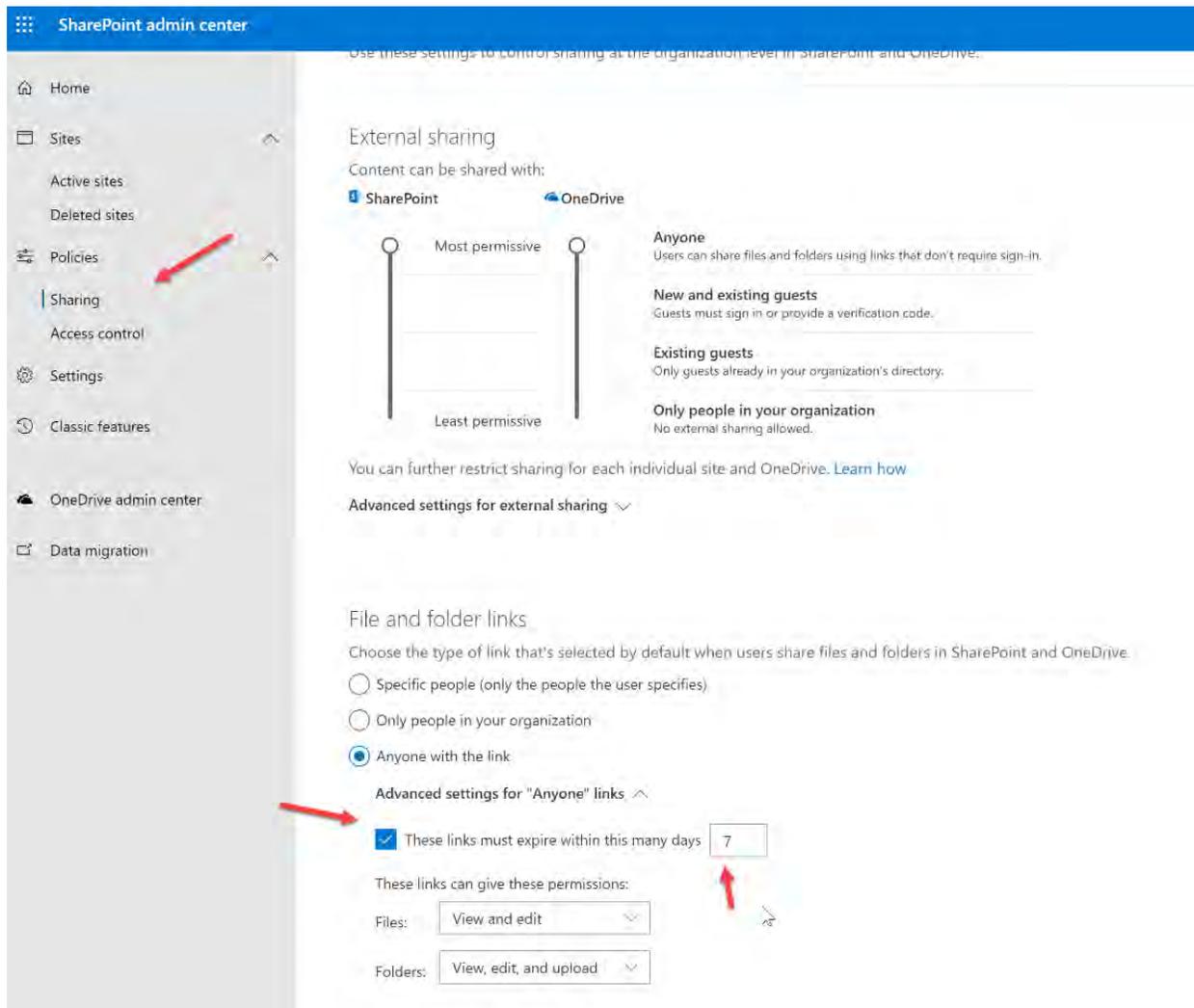
- FedRAMP Moderate; Control AC-21 (a)
- NIST 800-53; Control AC-21 (a)

1. Go to Admin Centers>SharePoint



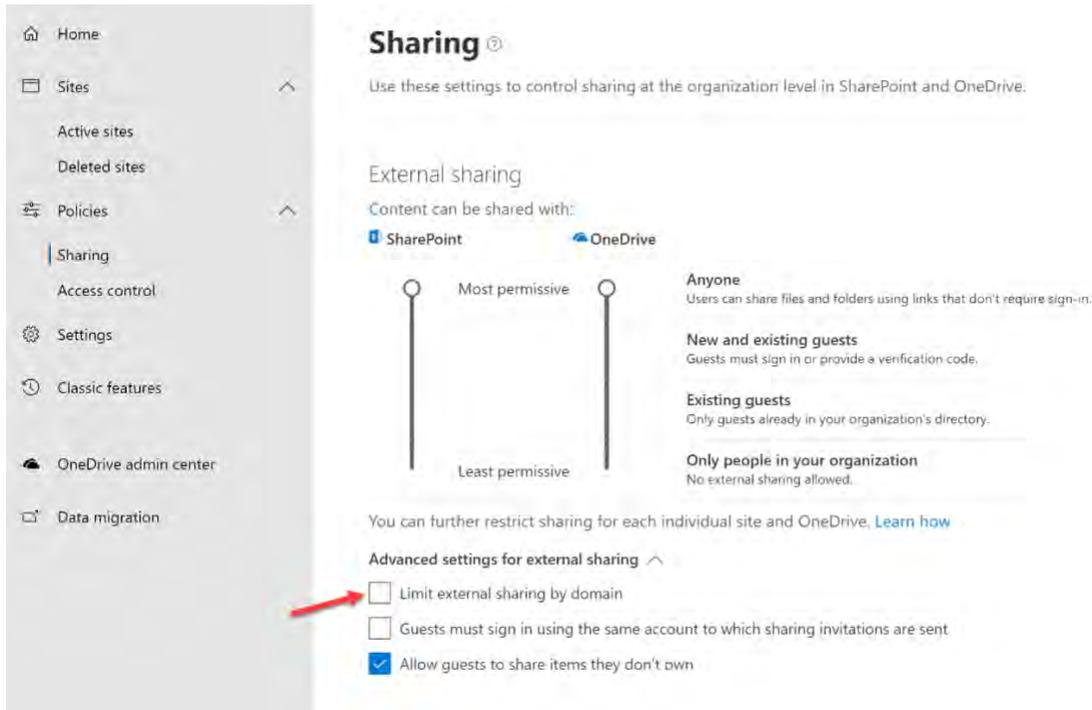
OVERVIEW & USER GUIDE

- Expand the Policies tab and click on Sharing. From here you can set the number of days in which links expire



OVERVIEW & USER GUIDE

3. If you expand the Advanced Settings for External Sharing you could get more restrictive to your sharing permissions and only limit them to certain domains



4. Set Links to Expire with PowerShell. ****NOTE**** Modify the script if you want something other than 7 days. In some cases, 30 days may be more appropriate

[PowerShell Script](#)

OVERVIEW & USER GUIDE

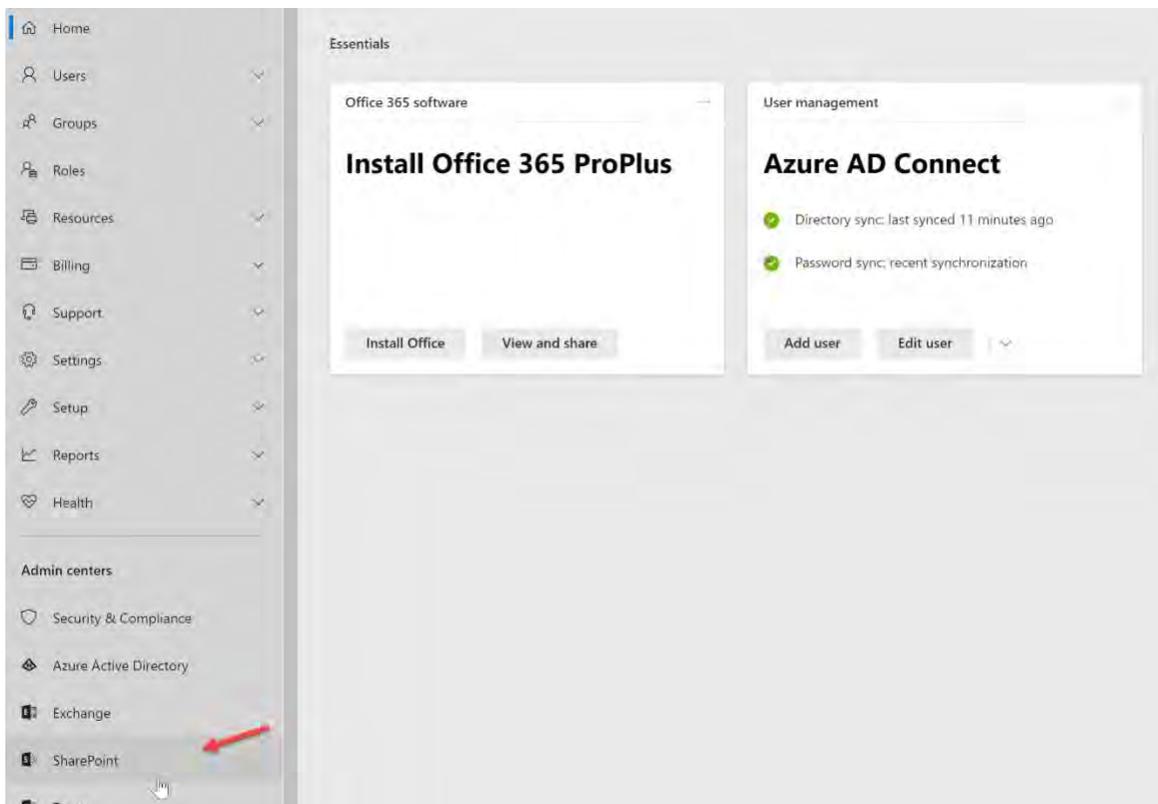
Enable Versioning on all SharePoint Online Document Libraries

You should enable versioning on all of your SharePoint online site collection document libraries. This will ensure that accidental or malicious changes to document content can be recovered. ****Note**** By default creating major versions (1.0, 2.0, etc.) is on. If you want to enable major and minor versions (1.1, 1.2, etc.) then you will need to follow the steps below.

Compliance Controls

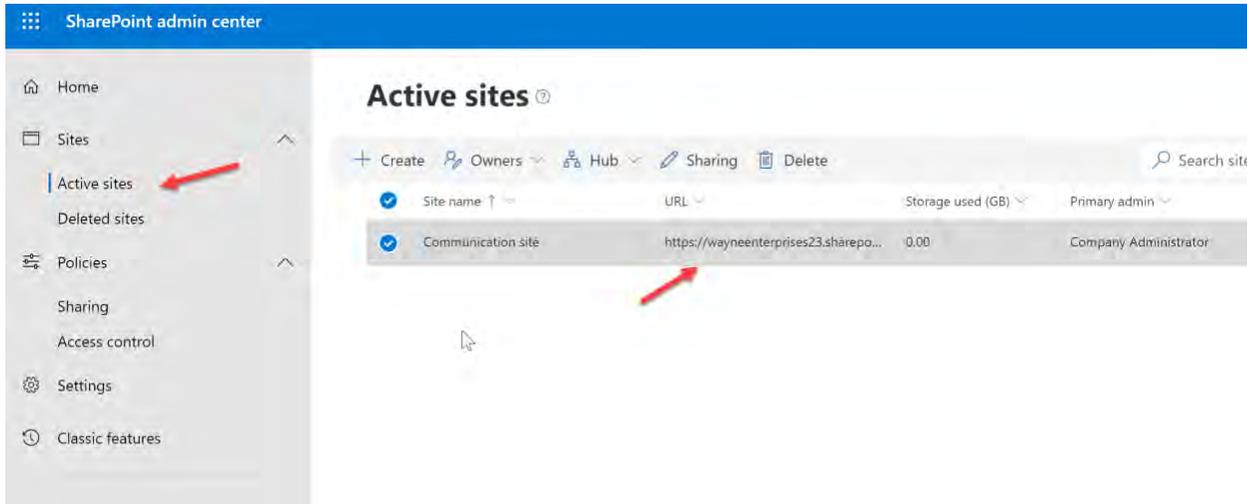
- GDPR; Control 6.9.2
- NIST CSF; Control PR.IP-4

1. Go to Admin Centers>SharePoint

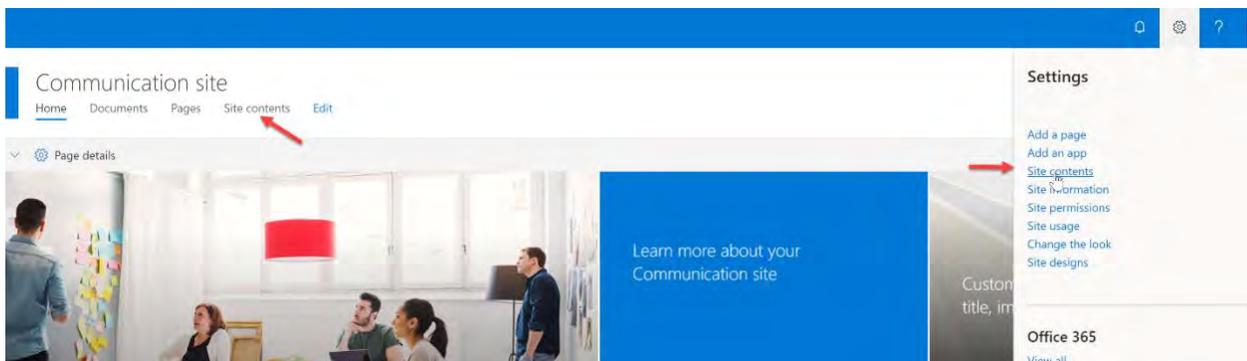


OVERVIEW & USER GUIDE

2. Go to one of the sites you want to configure versioning on

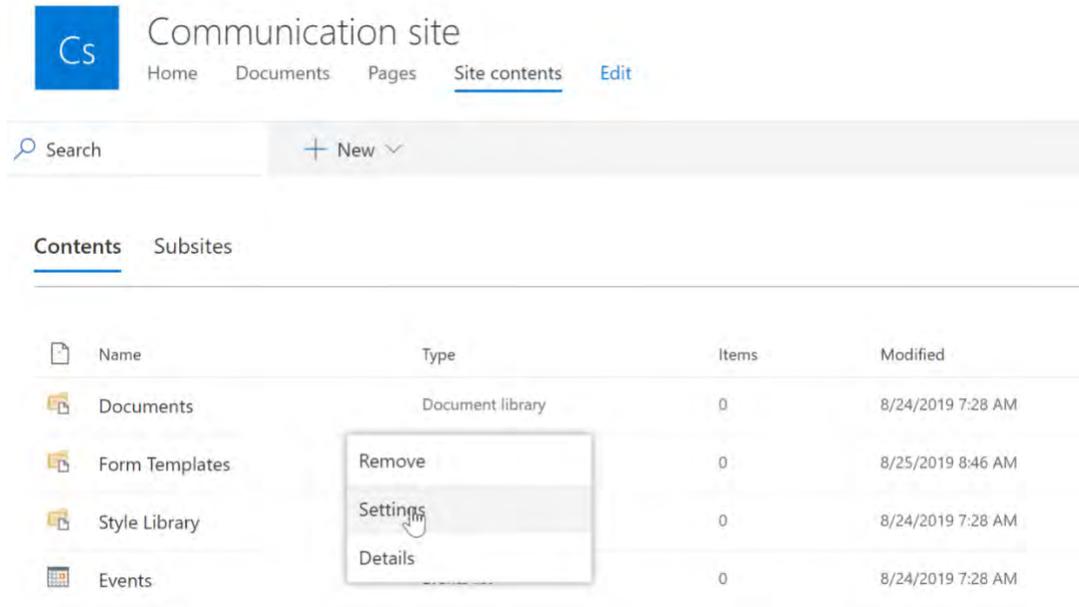


3. Go to Settings>Site Contents

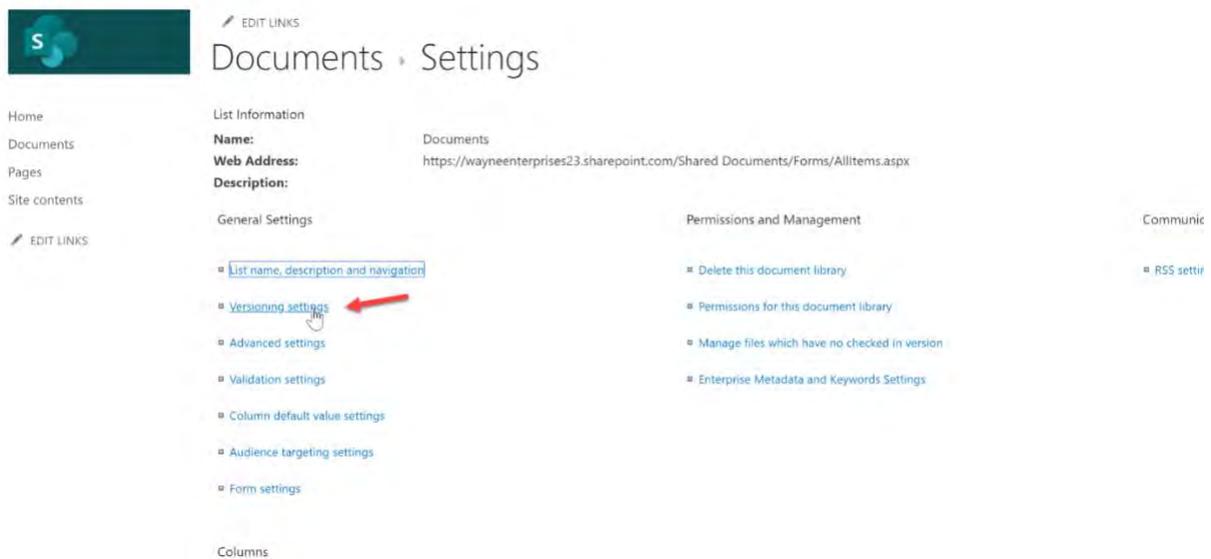


OVERVIEW & USER GUIDE

4. Next, click on the 3 dots next to a document library you want to modify and click Settings

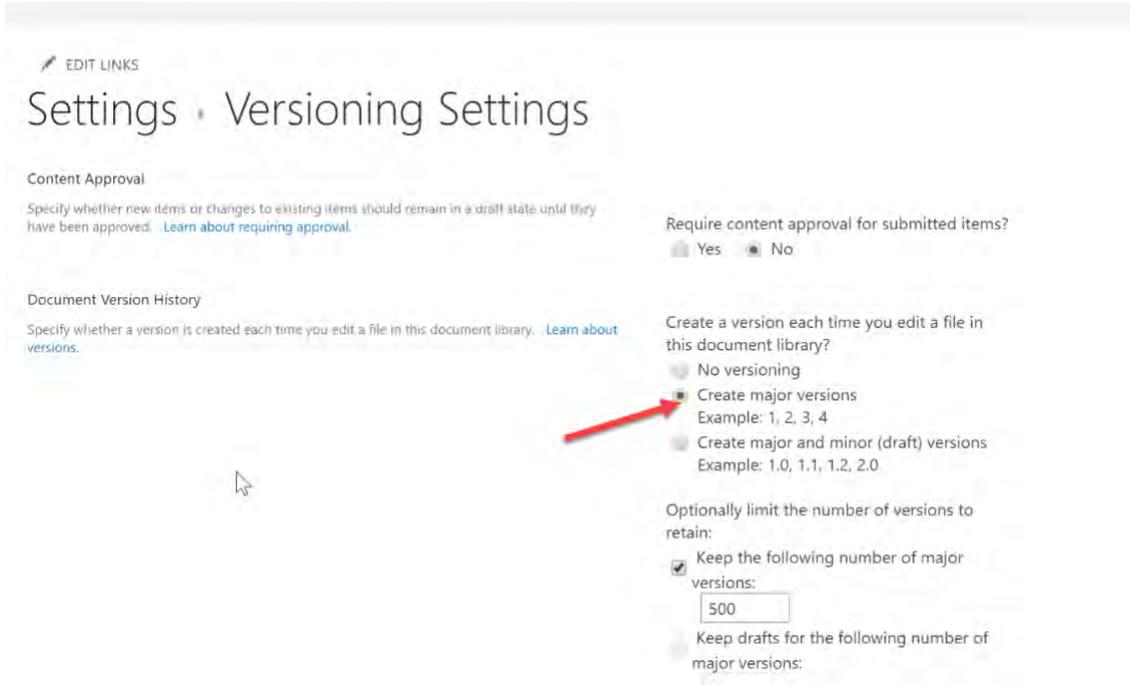


5. Select Versioning Settings



OVERVIEW & USER GUIDE

6. Ensure Versioning is enabled



PowerShell

1. Enable versioning for all lists and libraries for a site PowerShell

[PowerShell Script](#)

OVERVIEW & USER GUIDE

Adopt the OneDrive Sync Client

Storing user documents in OneDrive for Business safeguards content against data loss. Keeping documents on local client machines leaves them vulnerable to malware attacks like Ransomware that destroy or leak that data. OneDrive for Business gives you an effective backup and restore mechanism to recover from an attack on your locally stored documents. Getting your users to adopt the sync client helps you prevent data loss, takes up less storage on their devices from [files on demand](#), and allows them to easily migrate to a new workstation and have all of their files readily available.

Compliance Controls

- FedRAMP Moderate; Control SC-8
- HIPAA; Control 45 C.F.R. § 164.312(a)(2)(iv), Control 45 C.F.R. § 164.312(e)(1), Control 45 C.F.R. § 164.312(e)(2)(i)
- ISO 27001:2013; Control A.13.2.3
- NIST 800-171; Control 3.13.8
- NIST 800-53; Control SC-8

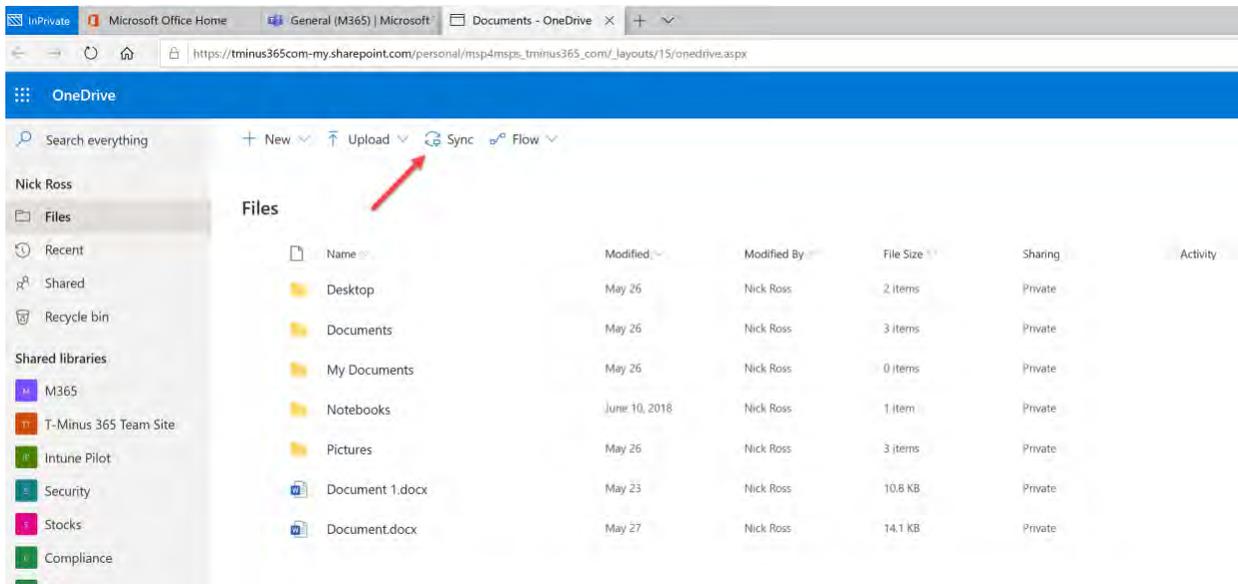
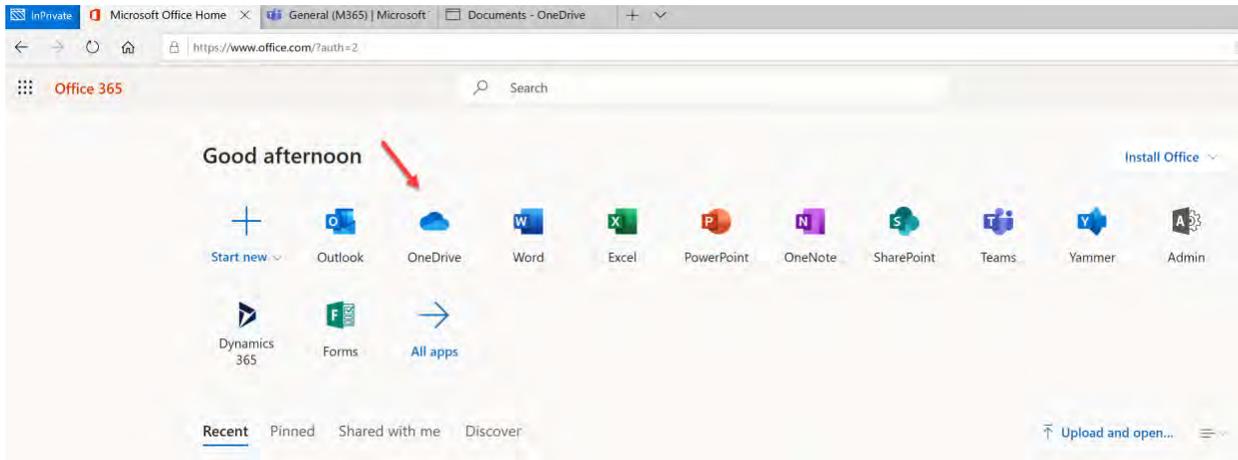
<https://support.office.com/en-us/article/sync-files-with-the-onedrive-sync-client-in-windows-615391c4-2bd3-4aae-a42a-858262e42a49>

1. If you are still in a hybrid environment with Active Directory, you can use Group Policy to silently sync users OneDrive with their Windows Credentials. The steps are defined in the following support article:

<https://docs.microsoft.com/en-us/onedrive/use-group-policy>

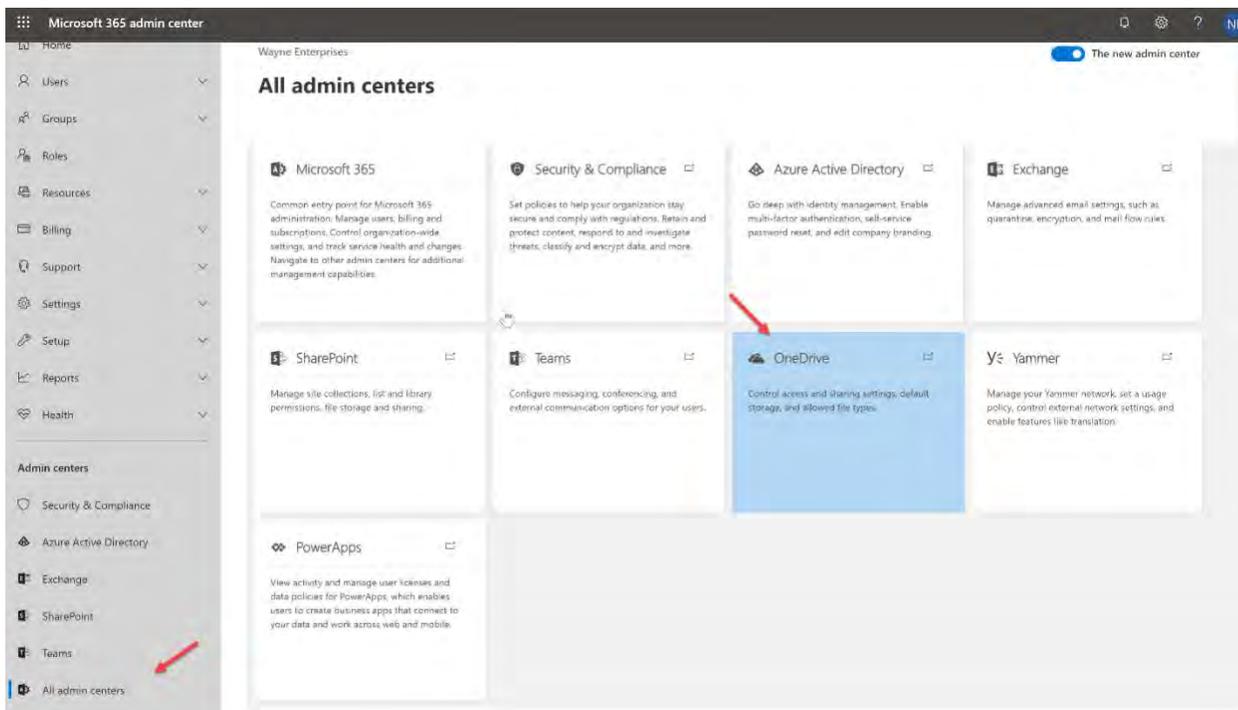
2. Users can also sync their OneDrive Libraries from within the webapp itself. If they login to office.com and go to the OneDrive application, they will have the Sync button at the top of the page

OVERVIEW & USER GUIDE



OVERVIEW & USER GUIDE

3. If you would like to get more restrictive with the ability to access OneDrive files, you could restrict access based on certain IP ranges. If you go into the 365 Admin Center>Admin Center>All Admin Centers>OneDrive, you will have the Device Access tab in which you can define IP ranges for their local network



OVERVIEW & USER GUIDE

CONCLUSION

I hope this article provided you some targeted guidance on Securing Microsoft Teams. Any feedback to improve this guide further would be greatly appreciated and can be sent to the following email:

feedback@pax8.com

For all other questions or additional assistance, please reach out to your CSA or our support team:

Support (Existing Partners Only)

- Support: 1-855-884-7298 Ext. 3
- Email: support@pax8.com
- Hours: 24/7