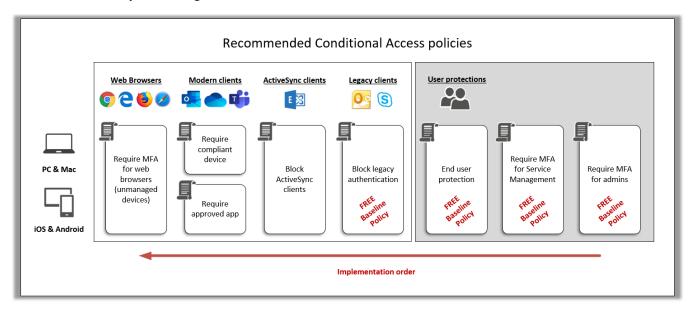
Recommended Conditional Access policies for Microsoft 365 Business

By Alex Fields, ITProMentor.com

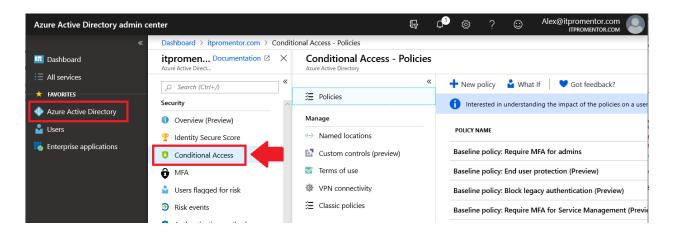
Microsoft 365 Business now includes a killer security control known as **Conditional Access**. This was previously available only with Azure AD Premium (part of Enterprise Mobility + Security). Separately, Microsoft also released "baseline" conditional access policies that are given free to all tenants, but with Microsoft 365 Business we can do a lot more.

Baseline Conditional Access policies (for everyone)

There are several recommended policies, both baseline and custom-built, which are appropriate for *most* businesses that are just starting out in Microsoft 365.



Every organization can get their feet wet by starting with the free baseline policies. Find them by navigating to the Azure AD admin center. Locate **Azure Active Directory > Conditional access**.



In the following table, we list each of the free baseline policies, describe their impact and indicate some additional considerations, e.g. what you can do to mitigate the policy's impact (if applicable).

Conditional access policy	Description	Impact	Considerations
Require MFA for Service Management	Access to Azure services require MFA	Azure Portal, Azure PowerShell, etc. will require MFA	Exclude one break glass admin account*
Require MFA for admins	Admin accounts will be required to perform MFA	Admins must register for and perform MFA	Exclude one break glass admin account*
End user protection	Require MFA for risky sign-ins; require password reset for leaked credentials	Users must register for MFA	Exclude service accounts that cannot do MFA
Block legacy authentication	Block legacy apps & protocols such as IMAP, POP and SMTP	Blocks Outlook 2010 and any other legacy app relying on basic auth	Exclude service accounts that rely on IMAP, SMTP, etc.

At the time of this writing, just know that the free baseline policies are still in "preview" which means that there could still be changes made to them before they are finalized. Also, Microsoft support may not be able to assist with preview items (though I find they usually make a best effort).

<u>Note</u>: It is recommended to exclude at least one global admin account (referred to as an <u>emergency access</u> or "break glass" account) from all conditional access policies. This account should be protected with a very long (e.g. 100 character) randomly generated password.

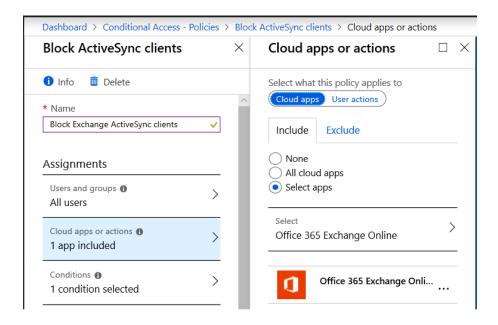
Recommended custom Conditional Access policies

The table below lists settings contained within the recommended custom policies, below. Following that we will provide screen shots to assist with the creation of each of these policies.

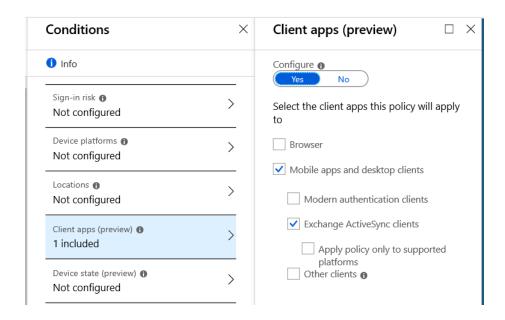
Conditional access policy	Assignments	Conditions	Access Control
Block ActiveSync clients	Users: All users Apps: Exchange Online	Client apps: Exchange ActiveSync clients	Block access
Require compliant devices (PC & Mac) Require approved app	Users: All users Apps: Exchange Online, SharePoint Online Users: All users	Device platforms: Windows and macOS Client apps: Modern authentication clients Device platforms: iOS and Android	Grant access: Require device to be marked as compliant Grant access: Require approved
(iOS & Android)	Apps: Exchange Online, SharePoint Online	Client apps : Modern authentication clients	Require approved client app
Require MFA for web browsers (unmanaged devices)	Users: All users Apps: All cloud apps	Client apps: Browser Device state: Exclude Device marked as compliant	Grant access: Require multi-factor authentication

Block ActiveSync clients

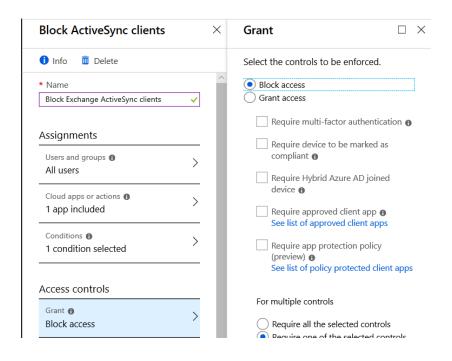
With Microsoft 365, it is recommended to use modern clients such as Outlook, which also support application protection policies (MAM), so ActiveSync clients are not necessary. Target **All users** and under **Cloud apps or actions** include only **Office 365 Exchange Online**. EAS clients only pertain to Exchange Online.



Next select **Conditions > Client apps**. Choose only **Mobile apps and desktop clients** and **Exchange ActiveSync clients**.



Last select Access controls > Block access.



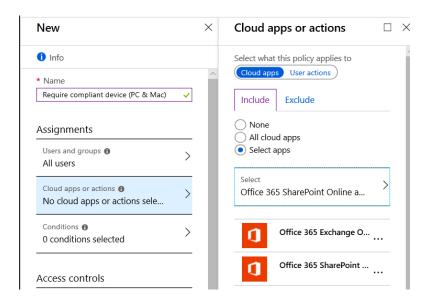
<u>Note</u>: Microsoft's documentation indicates that you should pick Grant access with the option to Require approved client app, but technically that control is only supported for mobile devices (iOS and Android). Therefore, just Block access here.

You are done creating this policy.

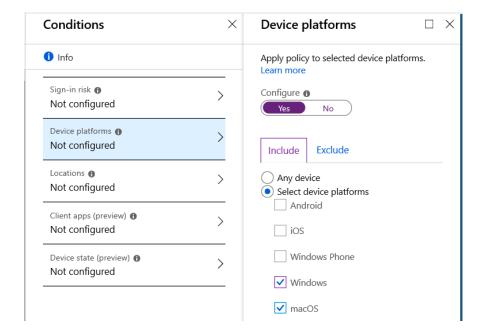
Require compliant devices (PC & Mac)

This policy assumes that you have already created a corresponding Compliance policy for each type of device within Intune/Device management. Assign your compliance policies and enroll end-user devices first.

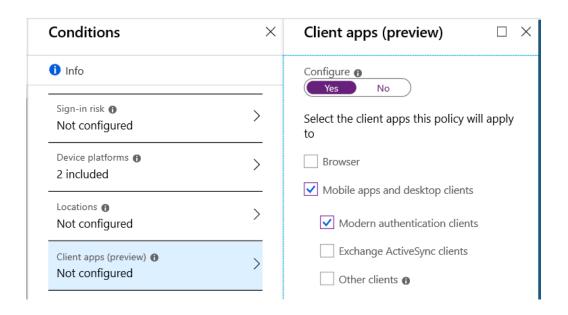
Create the policy, targeting **All users** and under **Cloud apps or actions**, select the apps you want to protect for example **Office 365 Exchange Online** and **Office 365 SharePoint Online**.



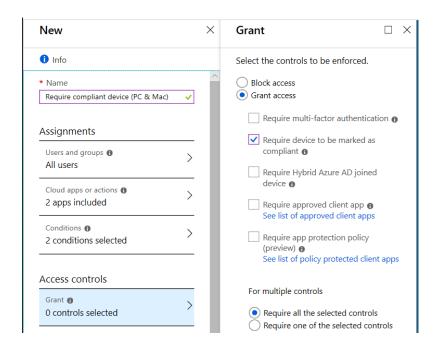
Next pick **Conditions > Device platforms** and choose only Windows and macOS.



Next under **Clients apps** pick only **Mobile and desktop clients** and **Modern authentication clients**. All other client types are being blocked by other policies.



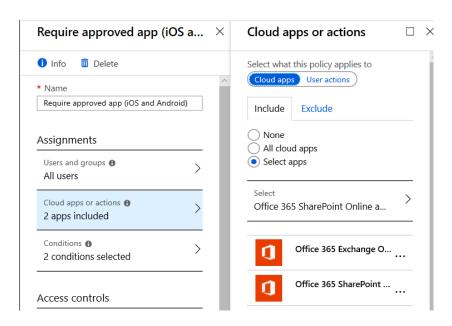
Proceed to select Access controls > Grant access, then pick only Require device to be marked as compliant. Save the policy.



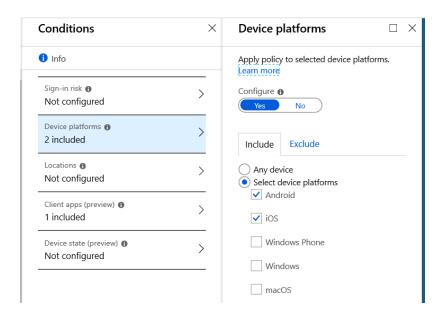
Require approved app (iOS & Android)

This policy is best when combined with App protection (MAM) policies for both iOS and Android, which allow you to control access to the client application (e.g. PIN code, fingerprint, etc.) as well as to restrict the ability to copy/paste and save data from the managed applications into other specified apps and locations.

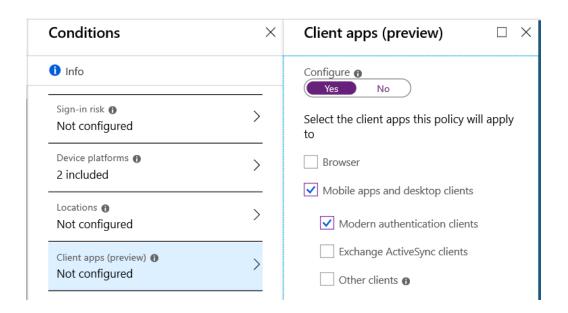
Create the policy, target **All users** and under **Cloud apps or actions** add the apps you wish to protect, for example **Office 365 Exchange Online** and **Office 365 SharePoint Online**.



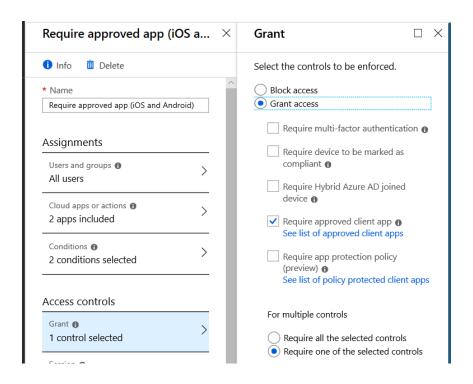
Under **Conditions > Device platforms**, choose only **Android** and **iOS**. The access control "Require approved client app" only applies to these mobile platforms.



Next under **Clients apps** pick only **Mobile and desktop clients** & **Modern authentication clients**. All other client types are being blocked by other policies.

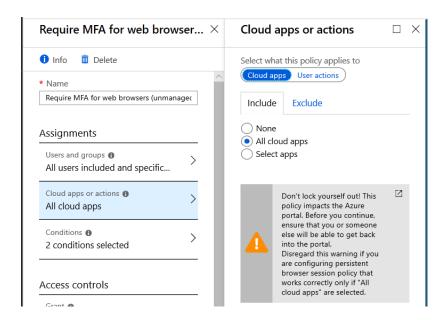


Finally, go to **Access controls** and choose **Grant access** and **Require approved client app**. This access control only applies to iOS and Android devices. **Save** the policy.

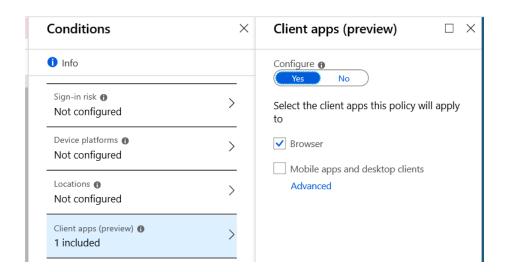


Require MFA for web browsers (unmanaged devices)

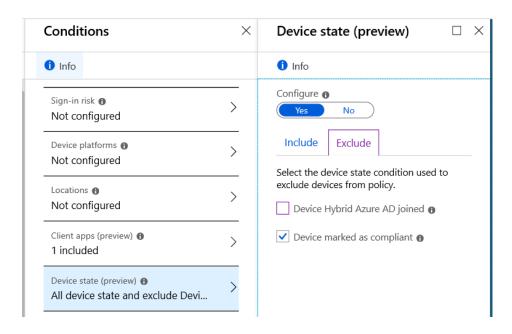
Create a new policy and assign All users (excluding your "break glass" admin account). Choose All cloud apps.



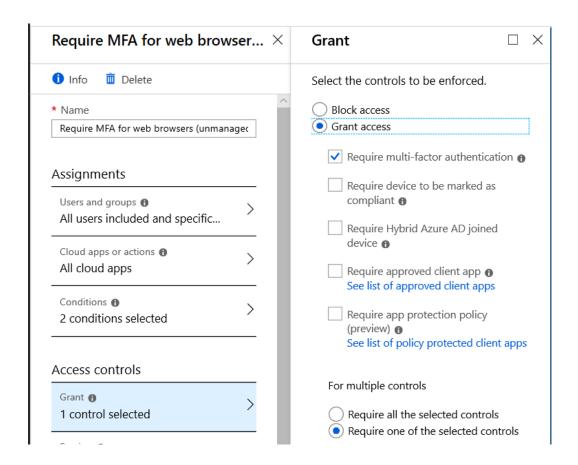
Under Conditions, pick Client apps > Browser.



Also choose another condition: **Device state**, configure the policy, on the **Exclude** tab pick **Device marked as compliant**. That means Intune managed devices are not subject to this policy.



Last, navigate to Access controls, choose Grant access and Require multi-factor authentication.

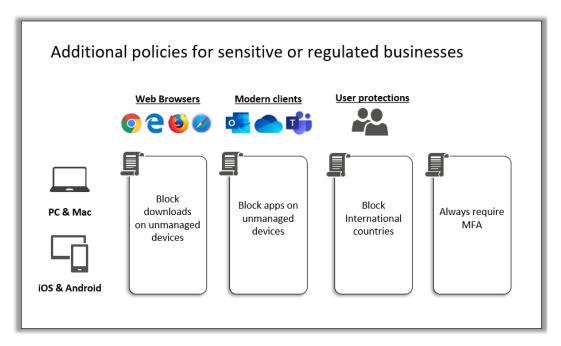


Now that we have the policies in place, and before you turn them on, we will describe their impacts and considerations, again in a table as we did before.

Conditional access policy	Description	Impact	Considerations
Block ActiveSync clients	Blocks legacy Exchange ActiveSync clients from connecting	Users should use the modern Outlook app	Alert users to this change before rolling it out
Require compliant devices (PC & Mac) Require approved app	Blocks PC's & Mac's that are not compliant with Intune policies This policy blocks apps such as the native mail	Users must enroll their PC and/or Mac devices or lose access Users must use modern apps like	Enroll using the Company Portal app before enabling Alert users to this change before
Require MFA for web browsers (unmanaged devices)	app for iOS or Android Prompts users in web browsers for MFA on unmanaged devices	Outlook and OneDrive Unmanaged devices cannot gain access over the web without MFA	rolling it out Exclude service accounts that cannot do MFA

Recommended Conditional Access Policies for highly sensitive or regulated businesses

The policy set for sensitive or highly regulated businesses will contain a few additional policies that enforce more restrictive access controls. Let's take a look:



The additional custom policy set is as follows:

- Always require MFA
- Block International countries
- Block apps on unmanaged devices
- Block downloads on unmanaged devices

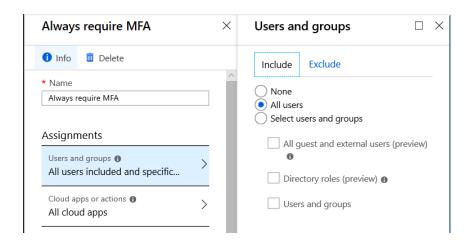
The following table describes how to build out the policies.

Conditional access policy	Assignments	Conditions	Access Control
Always require MFA	Users: All users Apps: All cloud apps	None	Grant access: Require multi-factor authentication
Block international countries	Users: All users Apps: All cloud apps	Location: Pick named location with blocked country list	Block access
Block apps on unmanaged devices	Users: All users Apps: Exchange Online, SharePoint Online	Device platforms: Any device Client apps: Modern authentication clients	Grant access: Require device to be marked as compliant
Block downloads on unmanaged devices	Users: All users Apps: Exchange Online, SharePoint Online	Client apps: Browser	Session: Use app enforced restrictions

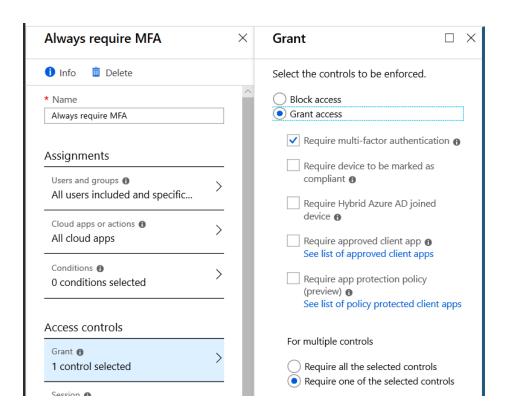
The following sections contain screenshots to assist with building these policies.

Always require MFA

Create a new policy, assign it to All users (exclude a "break glass" account) and All cloud apps.



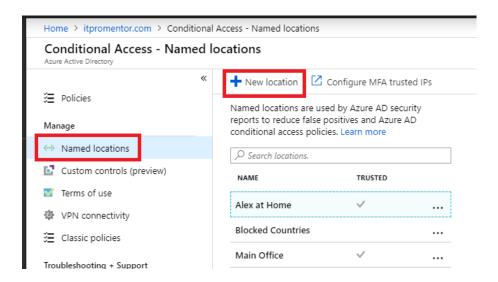
Do not select any conditions (we do not want to require MFA only under *certain* conditions but rather *all*). Therefore, move right into **Access controls**, choose **Grant access** and **Require multi-factor authentication**.



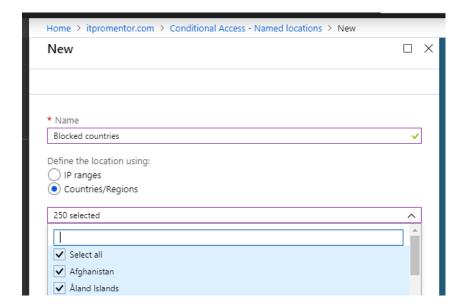
Block International countries

This policy is used to block sign-in from foreign countries; recommended for sensitive or highly regulated industries, and especially when there is no reason one of your users should be authenticating from foreign locations. Note, this does not prevent users from communicating or doing business with those other countries.

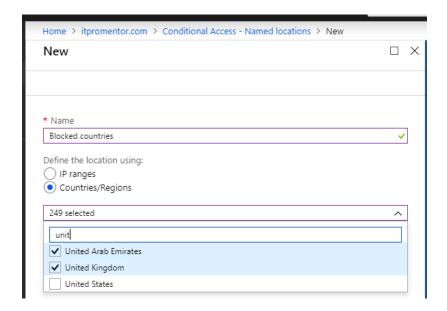
Before creating the policy, navigate from Conditional access to Named locations. Create a New location.



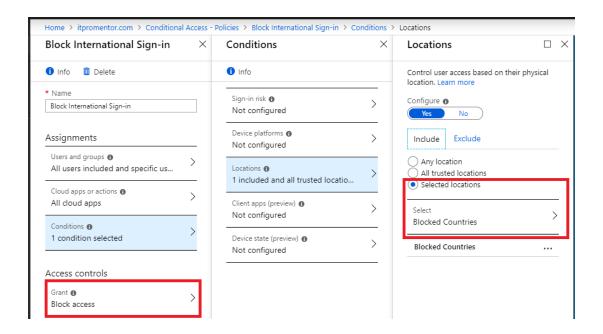
Name the location **Blocked countries**. Pick the **Countries/Regions** option, then **Select all** the countries at first.



You can then filter this list by any country or countries you wish to exclude from the policy. For example, I live in the United States, and let's say my company also has offices in Canada. I might only deselect those two countries from this list.



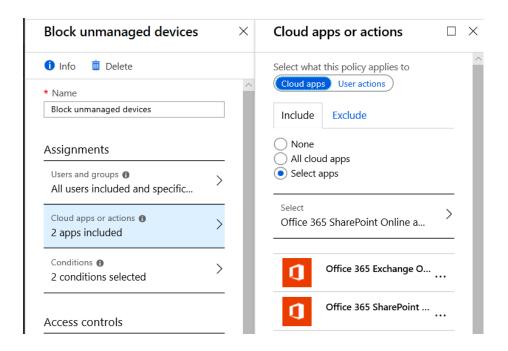
Create the named location. Now return to **Policies**. Create and assign the policy to **All users** and **All cloud apps**, excluding your "break glass" admin account. Under **Conditions**, pick **Locations** then **Selected locations** and choose **Blocked countries**. Under **Access controls**, choose **Block access**.



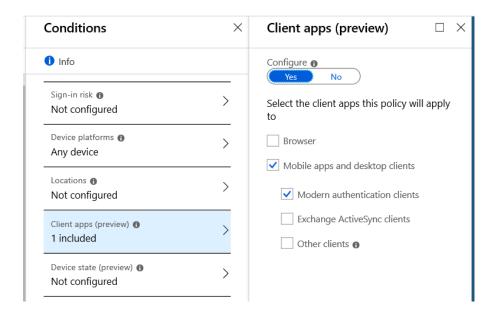
Block apps on unmanaged devices

This policy requires that devices be enrolled with Intune, and Compliance policies be assigned, before enabling the corresponding Conditional access policy.

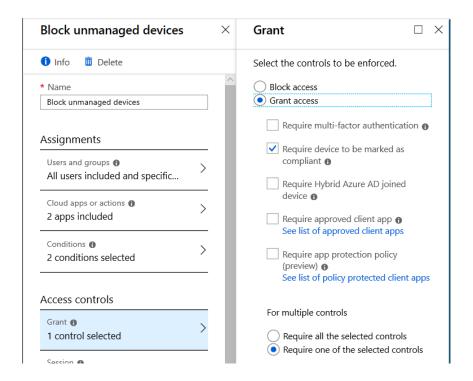
Create the new policy. Assign to **All users** and pick **Office 365 Exchange Online** and **Office 365 SharePoint Online**. Both of these cloud apps contain storage locations with sensitive company data, which could be synced to a device using a modern client application like Outlook or OneDrive.



Under Conditions, specify Device platforms > Any device as well as Client apps > Mobile apps and desktop clients and Modern authentication clients. Modern clients tend to store company data on the local device (e.g. Outlook .ost file, OneDrive sync client, etc.). All other client types are being targeted by other policies.



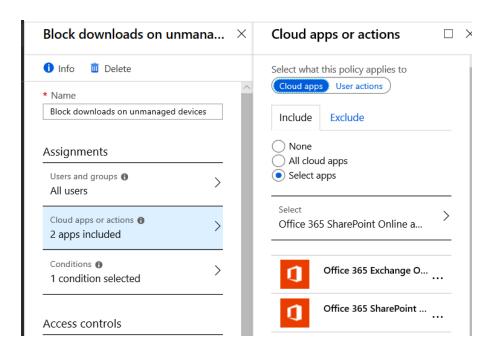
Last you must define: Access controls > Grant access > Require device to be marked as compliant.



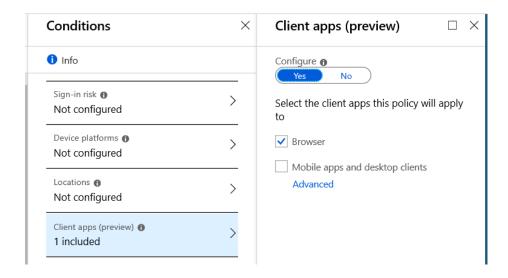
The effect of this policy is that unmanaged devices (of all types) are blocked from access; all devices must therefore be enrolled and compliant with Intune policy before connecting to resources. Do not enable this policy until all of your devices are enrolled.

Block downloads on unmanaged devices

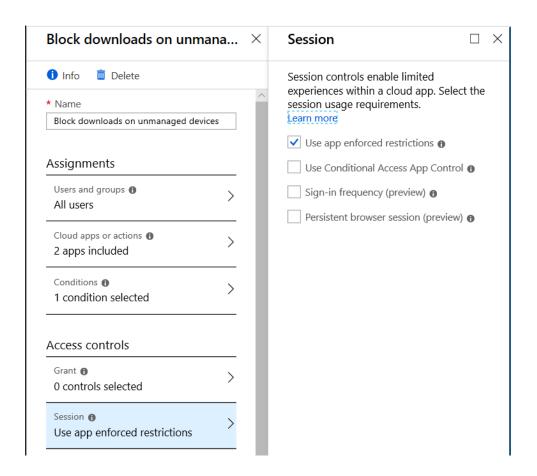
Create a new policy. Assign to **All users** and pick **Office 365 Exchange Online** and **Office 365 SharePoint Online**. Both of these cloud apps contain storage locations with sensitive company data.



Under conditions pick Client app > Browser only.



Under Access controls pick Session > Use app enforced restrictions only.



You are not done implementing this policy. You will also need to enable these settings in Exchange Online and SharePoint Online.

To enable for Exchange Online, connect to your tenant using the <u>Exchange Online PowerShell module with MFA</u>. Once connected, enable "ReadOnly" mode for Outlook on the Web:

Get-OwaMailboxPolicy | Set-OwaMailboxPolicy -ConditionalAccessPolicy ReadOnly

```
PS C:\Users\alexf> Get-OwaMailboxPolicy | fl Name,ConditionalAccessPolicy

Name : OwaMailboxPolicy-Default

ConditionalAccessPolicy : Off

PS C:\Users\alexf> Get-OwaMailboxPolicy | Set-OwaMailboxPolicy -ConditionalAccessPolicy ReadOnly

PS C:\Users\alexf> _
```

To enable for SharePoint Online, connect to **SharePoint Online Management Shell using MFA**. Run:

Set-SPOTenant -ConditionalAccessPolicy AllowLimitedAccess

```
Administrator: Windows PowerShell

PS C:\WINDOWS\system32> Set-SPOTenant -ConditionalAccessPolicy AllowLimitedAccess
PS C:\WINDOWS\system32> Get-SPOTenant | fl Name, ConditionalAccessPolicy

ConditionalAccessPolicy : AllowLimitedAccess

PS C:\WINDOWS\system32>
```

<u>Note</u>: this action will automatically create Conditional access policies labeled as [SharePoint admin center]. You can safely disable or even delete these policies, as they will be redundant to what we have already created.

Now that we have the policies in place, and before you turn them on, we will describe their impacts and considerations, again in a table as we did before.

Conditional access policy	Description	Impact	Considerations
Always require MFA	Multi-factor challenge required for access	Users required to perform MFA more frequently	Alert users to this change before rolling it out
Block access from apps on unmanaged devices	Blocks devices that are not compliant with Intune policies	Users must enroll all devices or lose access	Enroll using the Company Portal app before enabling
Block downloads on unmanaged devices	Web downloads from SharePoint, OneDrive and Outlook are not possible from unmanaged devices	Users cannot download attachments or files over the web on an unmanaged device	Alert users to this change before rolling it out