Configure and Deploy Intune MDM

November 19, 2018 Brad Wyatt Comments 5 comments

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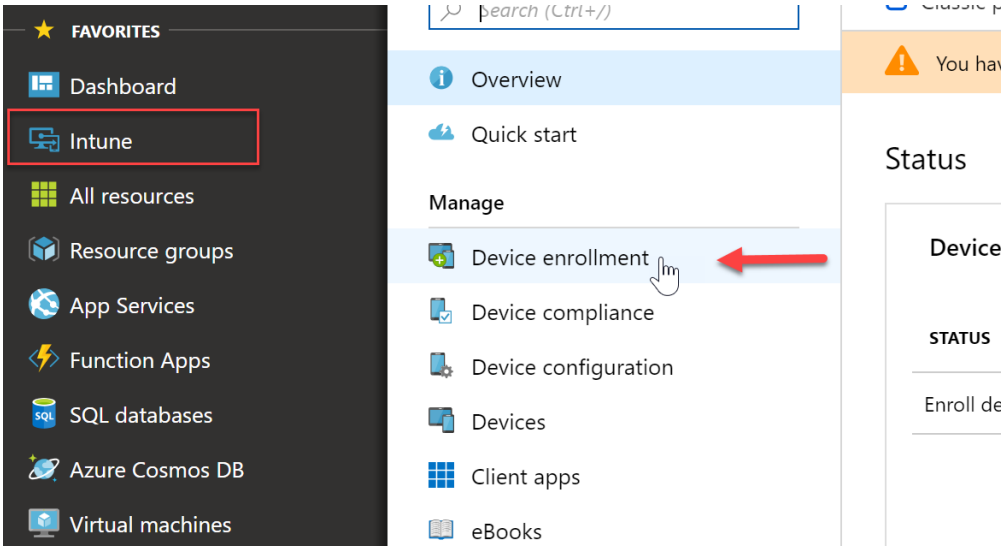
Description

In this article I will be configuring and deploying Intune as a stand-alone MDM solution. This article will walk you through deploying applications to devices, configuring your Company Portal, enrolling end user devices, creating policies and more.

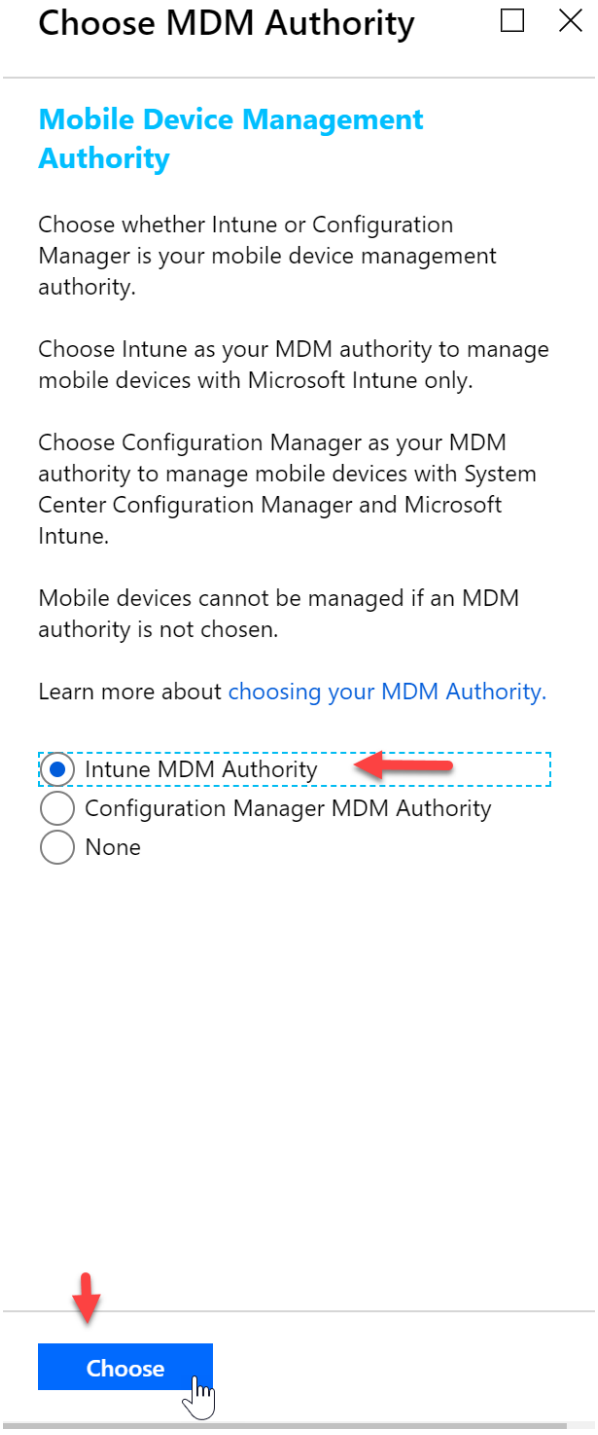
Solution

Configure MDM Authority

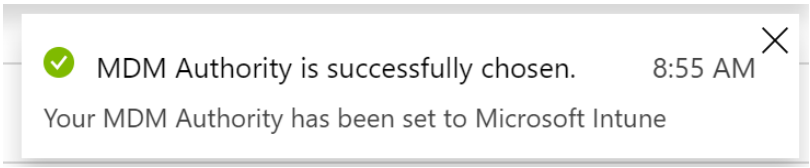
First we must configure Intune as my MDM authority. Since I am doing a stand alone I want Intune as the only authority and not Configuration Manager. By logging into portal.azure.com I can expand the Itune node and select “Device Enrollment”



Select “Intune MDM Authority” and then click “Choose”



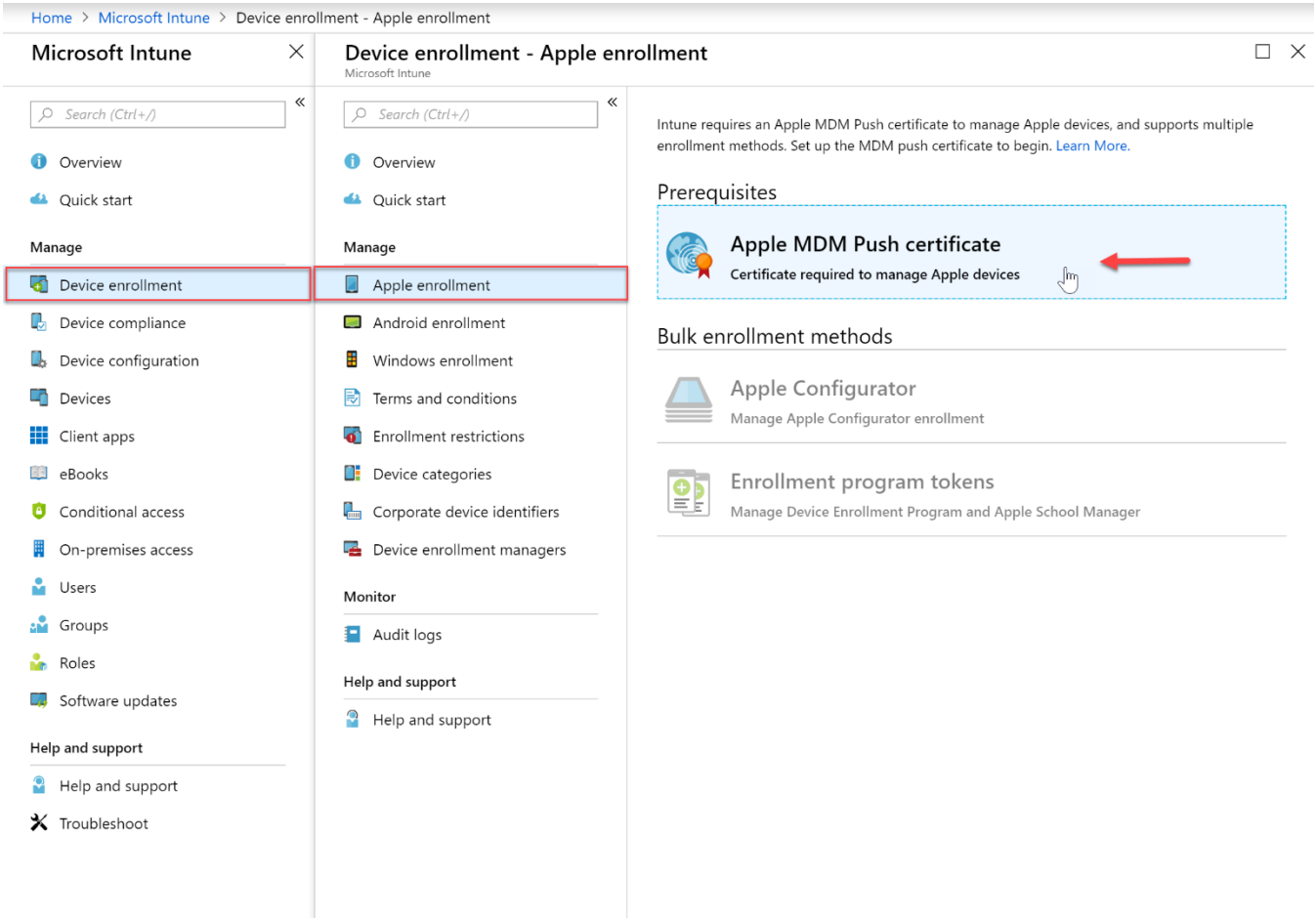
I will get a notification that my changes were saved successfully



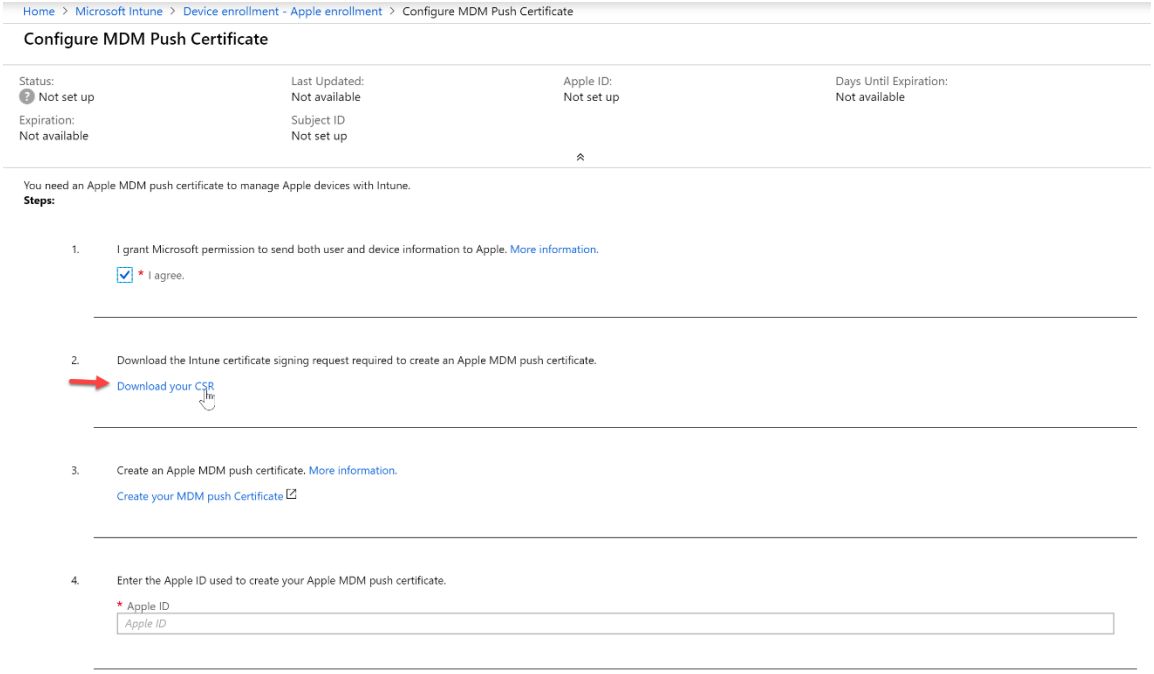
Configure APN Certificate

To manage iOS devices you must have an Apple Push certificate.

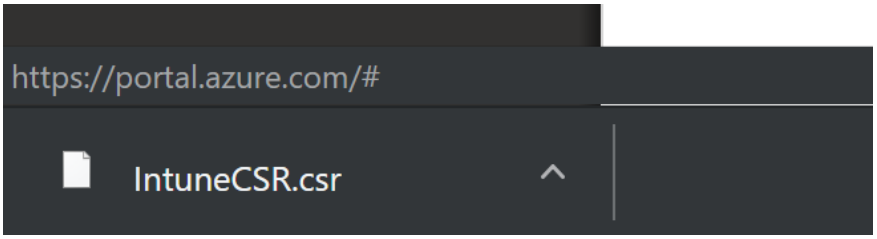
In the Intune blade we want to go to Device Enrollment and then Apple Enrollment and select “Apple MDM Push Certificate”



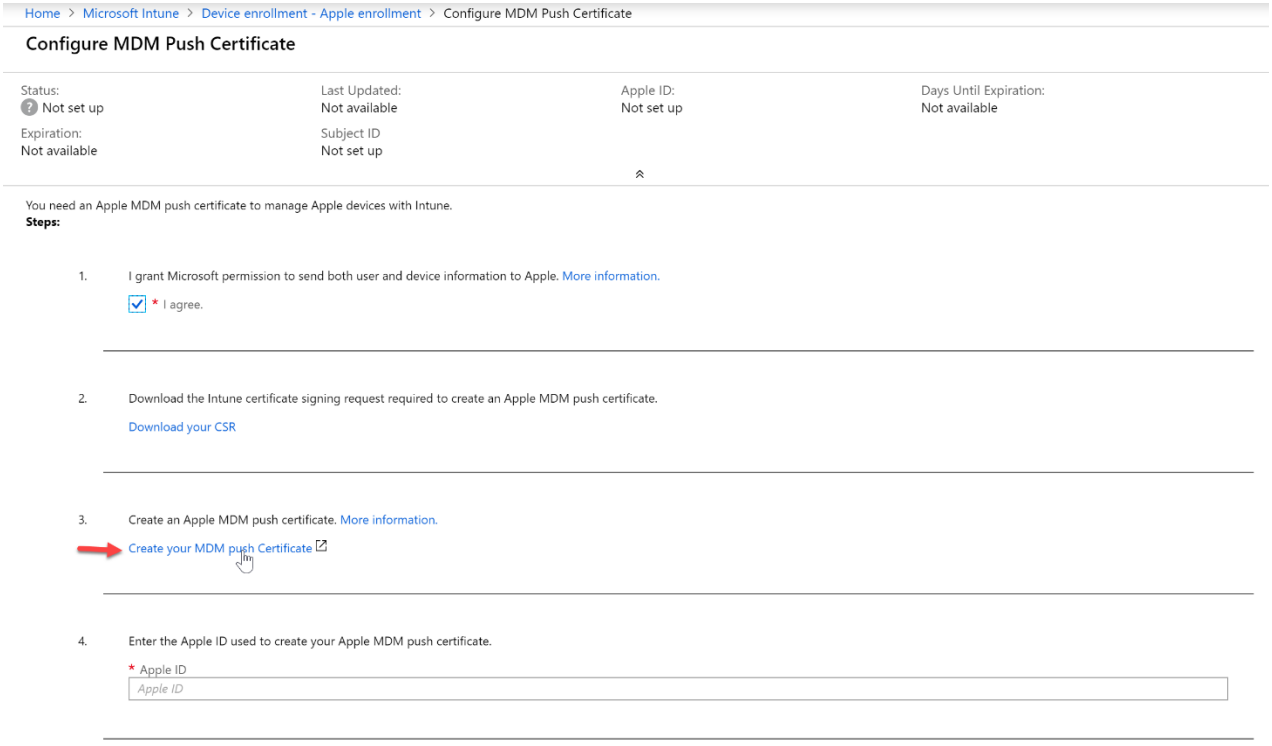
Agree to the terms in step 1 and then download the CSR



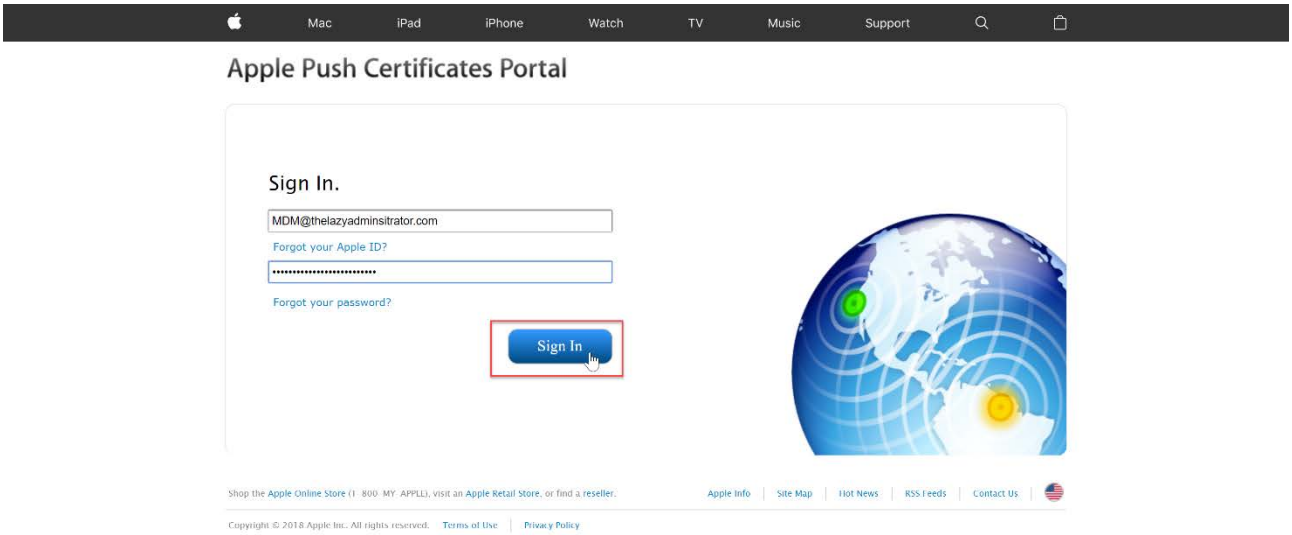
It will download the file, “IntuneCSR.csr”



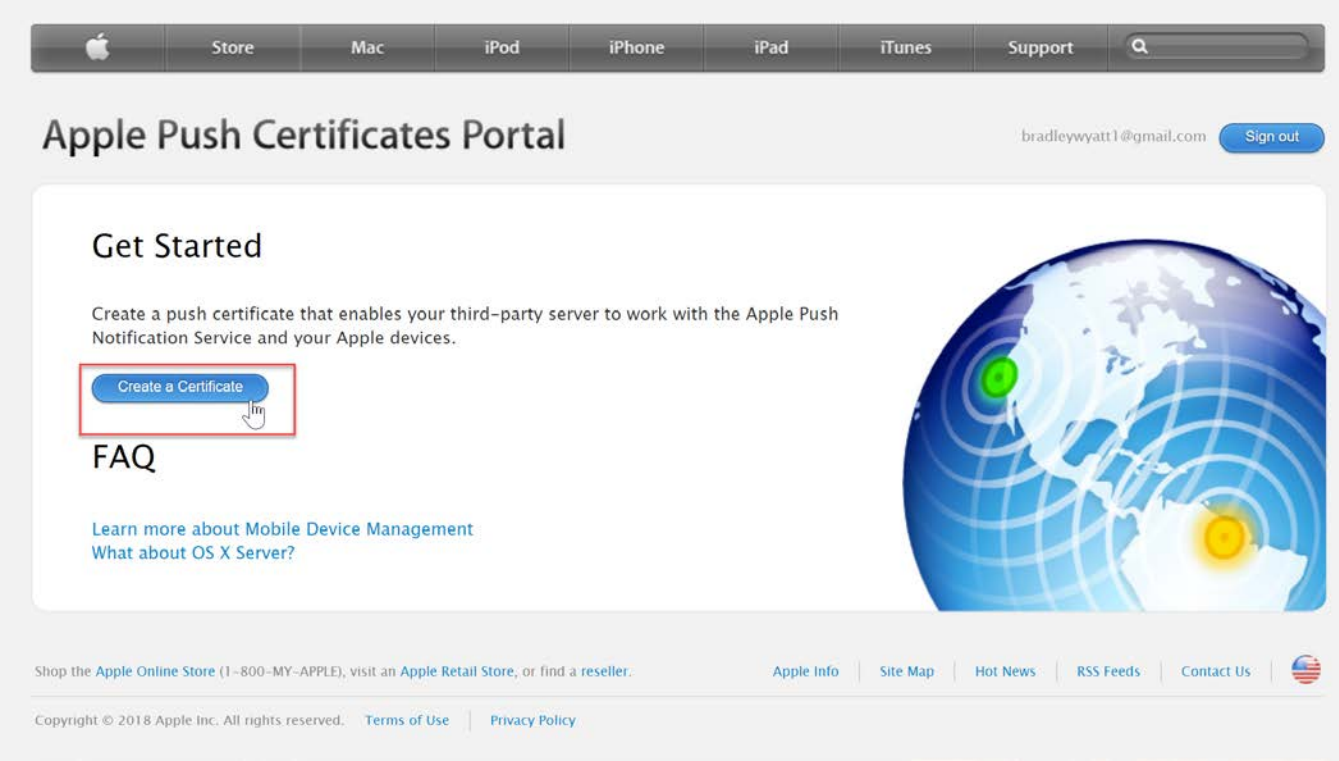
Next, click “Create your MDM push certificate.” You will need to have an Apple ID so if you do not have one you will need to create one



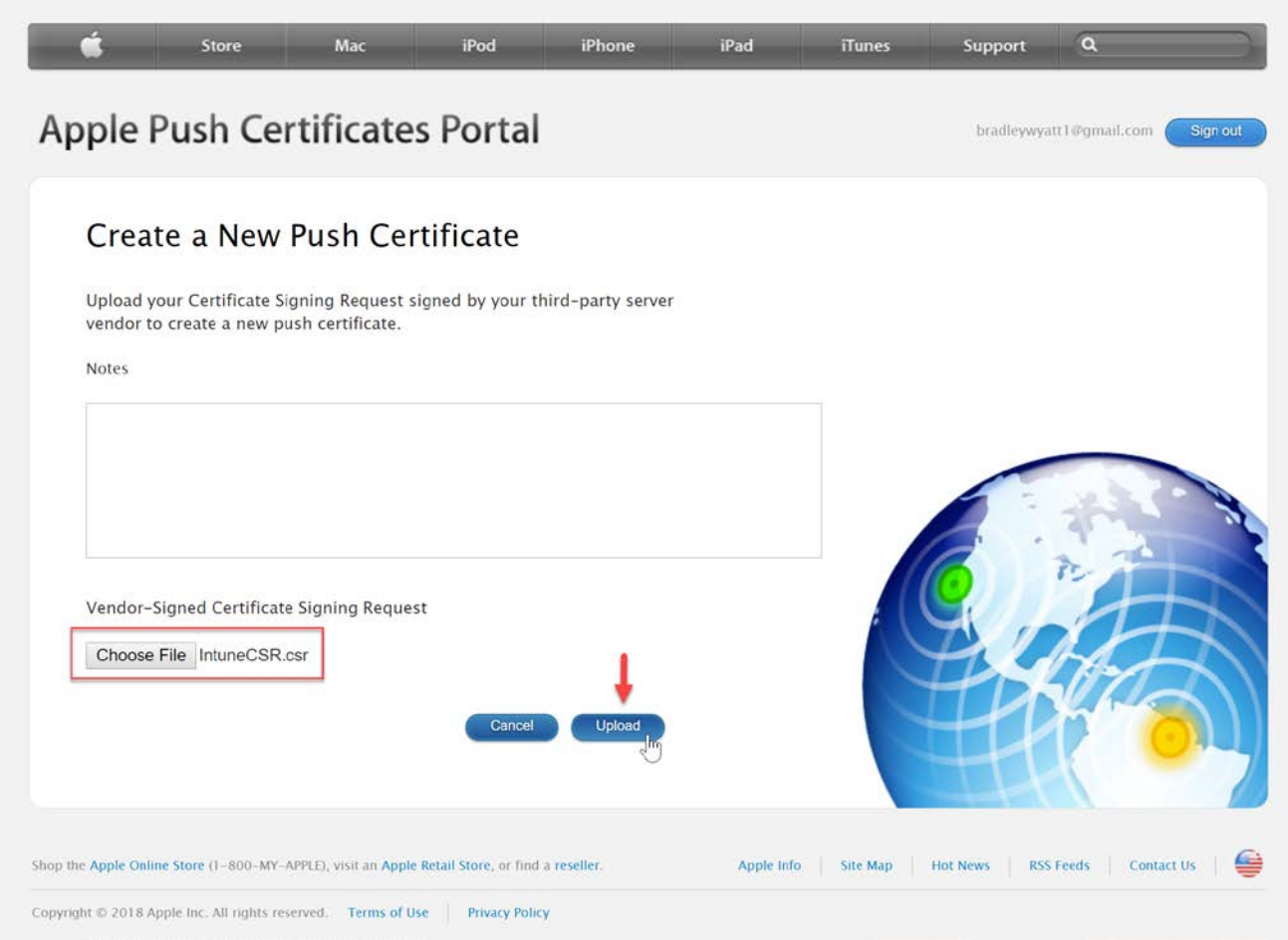
Sign in with your Apple ID into the Apple Push Certificates Portal



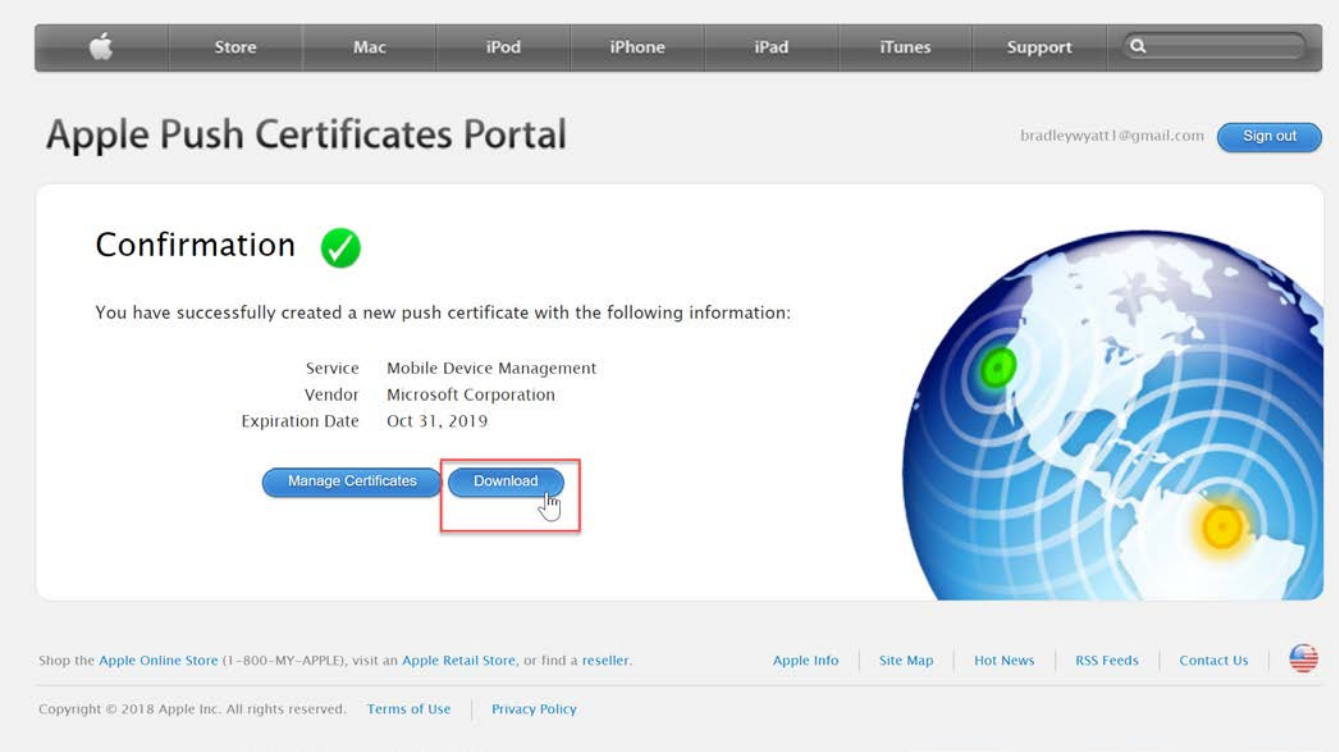
Now click “Create a Certificate” after you have successfully signed into the portal with your Apple ID.



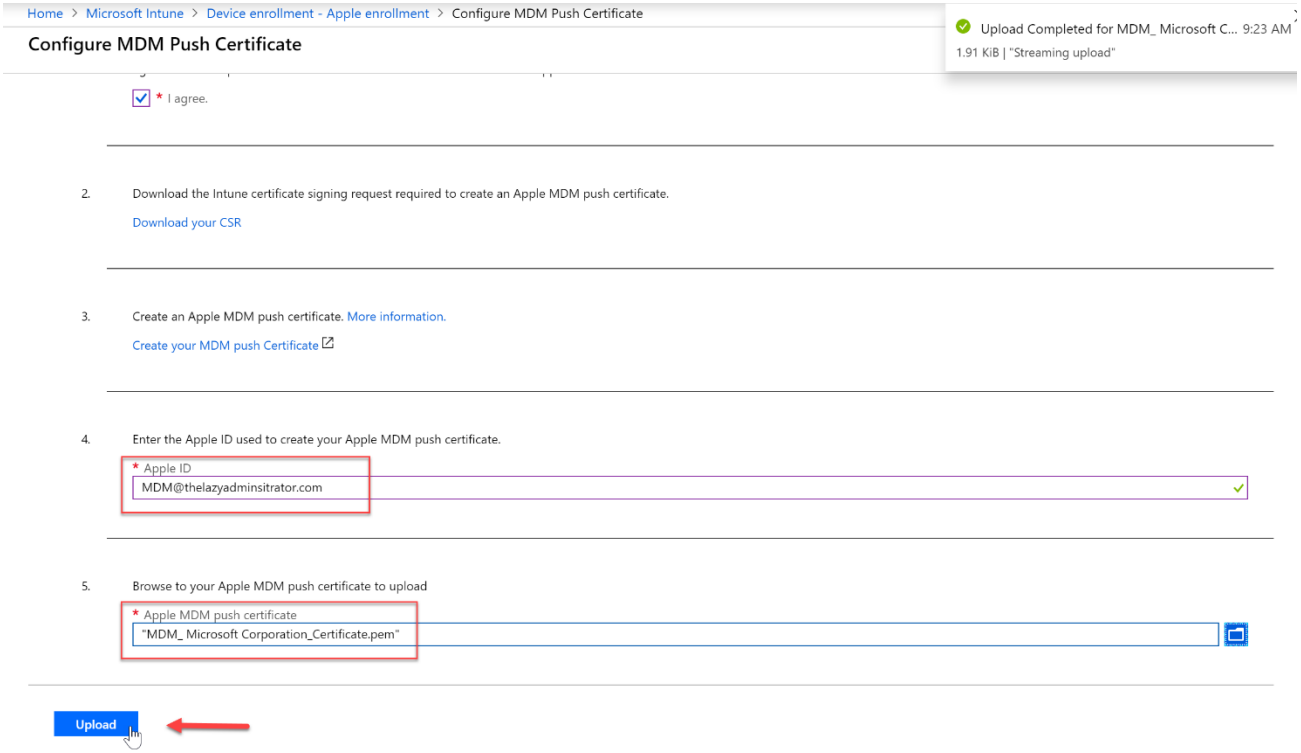
Navigate to your CSR file that you downloaded from the Intune portal above and then select “Upload”



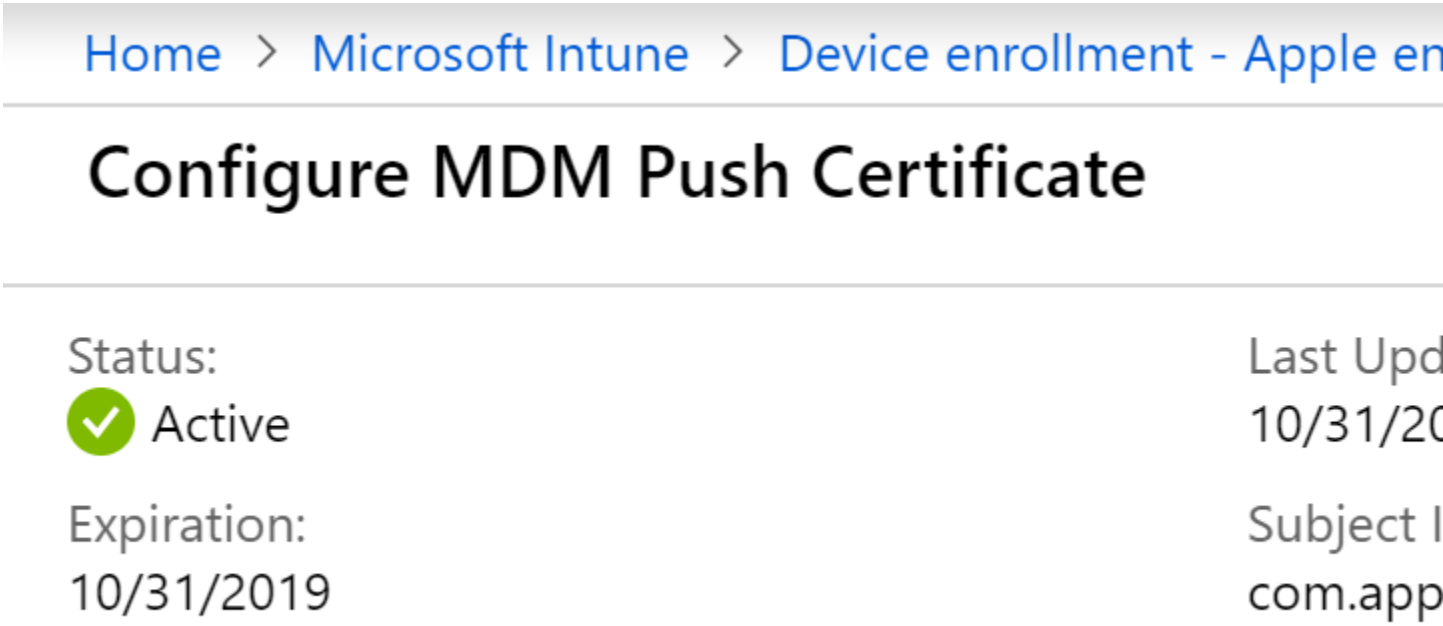
Once you have a green confirmation, download your certificate



Go back to the Intune portal and in step 4, enter your Apple ID you used to create the certificate. In step 5 browse to the downloaded certificate and then press “Upload”



Once we finish the upload, we can scroll up and see details regarding our certificate, including the expiration data



Configure MDM DNS Records

For Windows devices, there are two DNS CNAME records you need to create (pictured below):

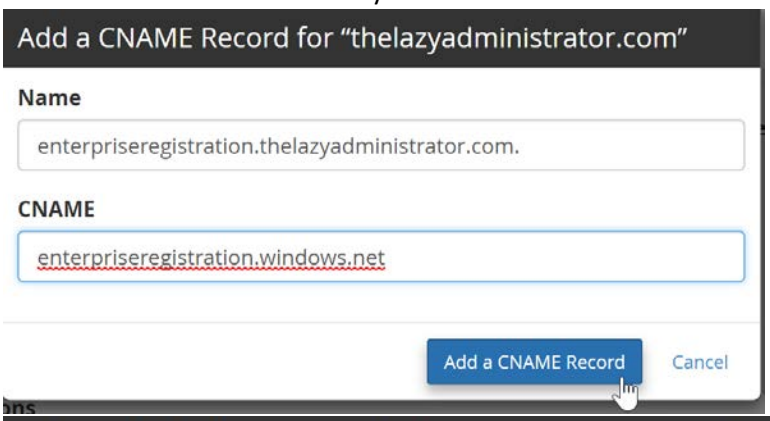
CNAME records

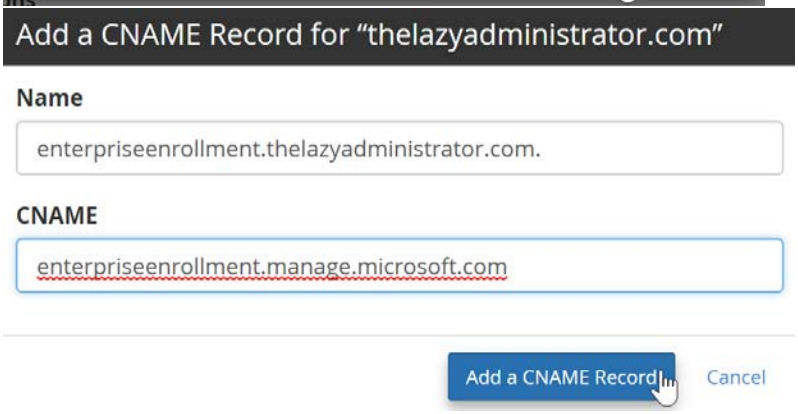
One or more of these records haven't been added correctly yet. step-by-step instructions

Copy this table

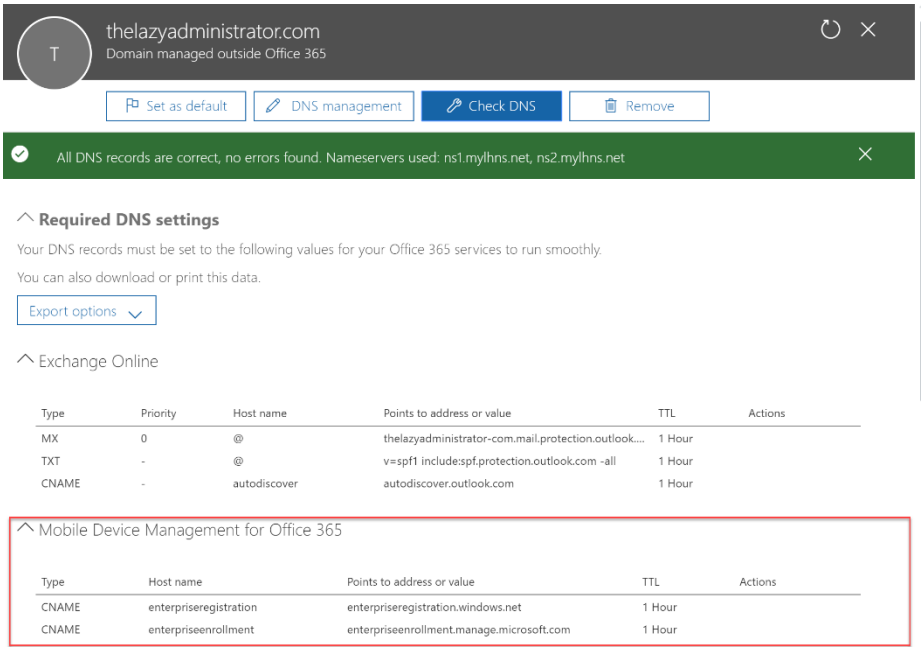
Expected vs actual record	Host name	Points to address or value	TTL	Status
Expected re...	autodiscover	autodiscover.outlook.com	3600	Correct
Expected re...	enterprisere...	enterpriseregistration.windows.net	3600	No records found
Actual record				Missing record
Expected re...	enterpriseen...	enterpriseenrollment.manage.micros...	3600	No records found
Actual record				Missing record

There are two CNAME records you will need to add. Once

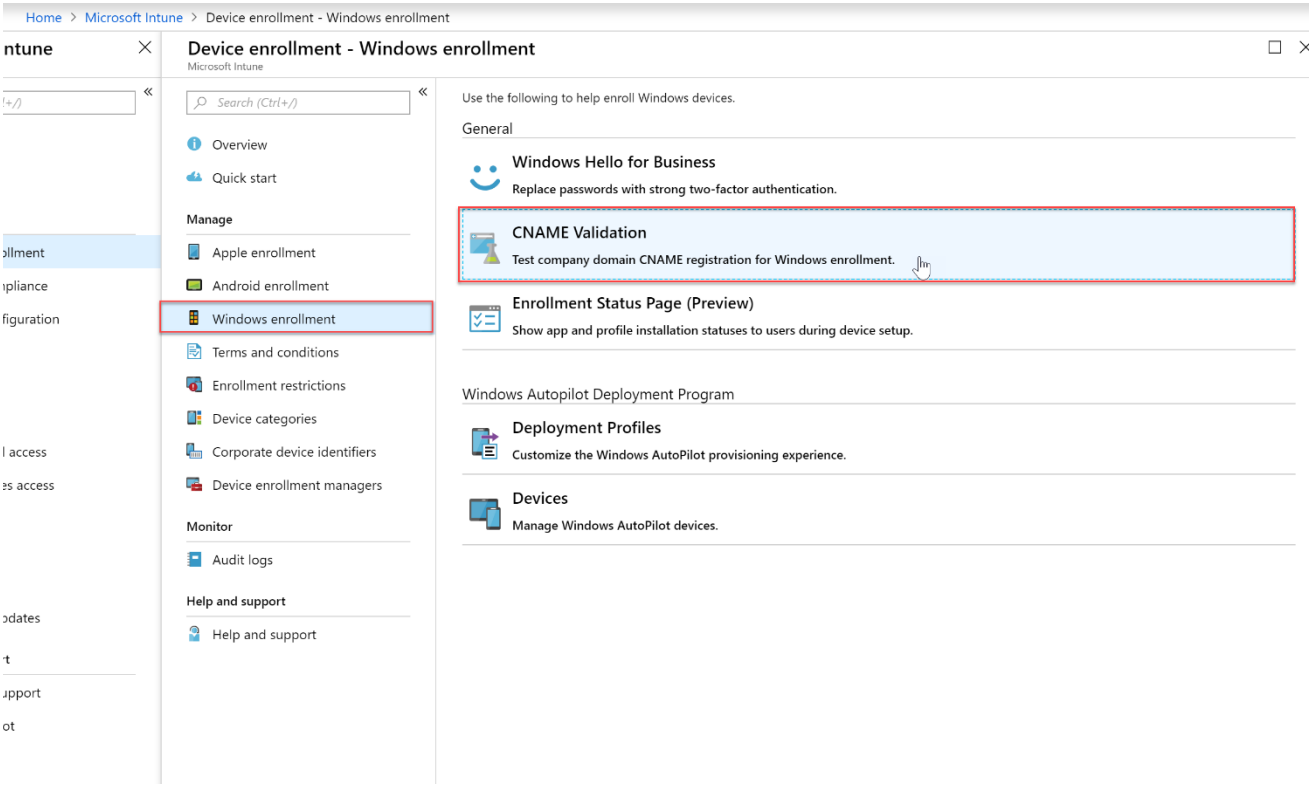




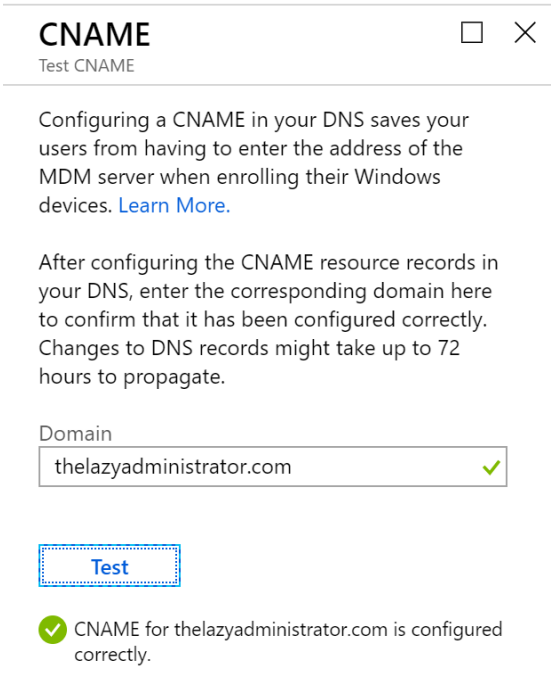
Checking my DNS for MDM again, I can see that the records are now in place and valid



Back in the Intune azure portal, under Device Enrollment, go to Windows enrollment and then CNAME Validation



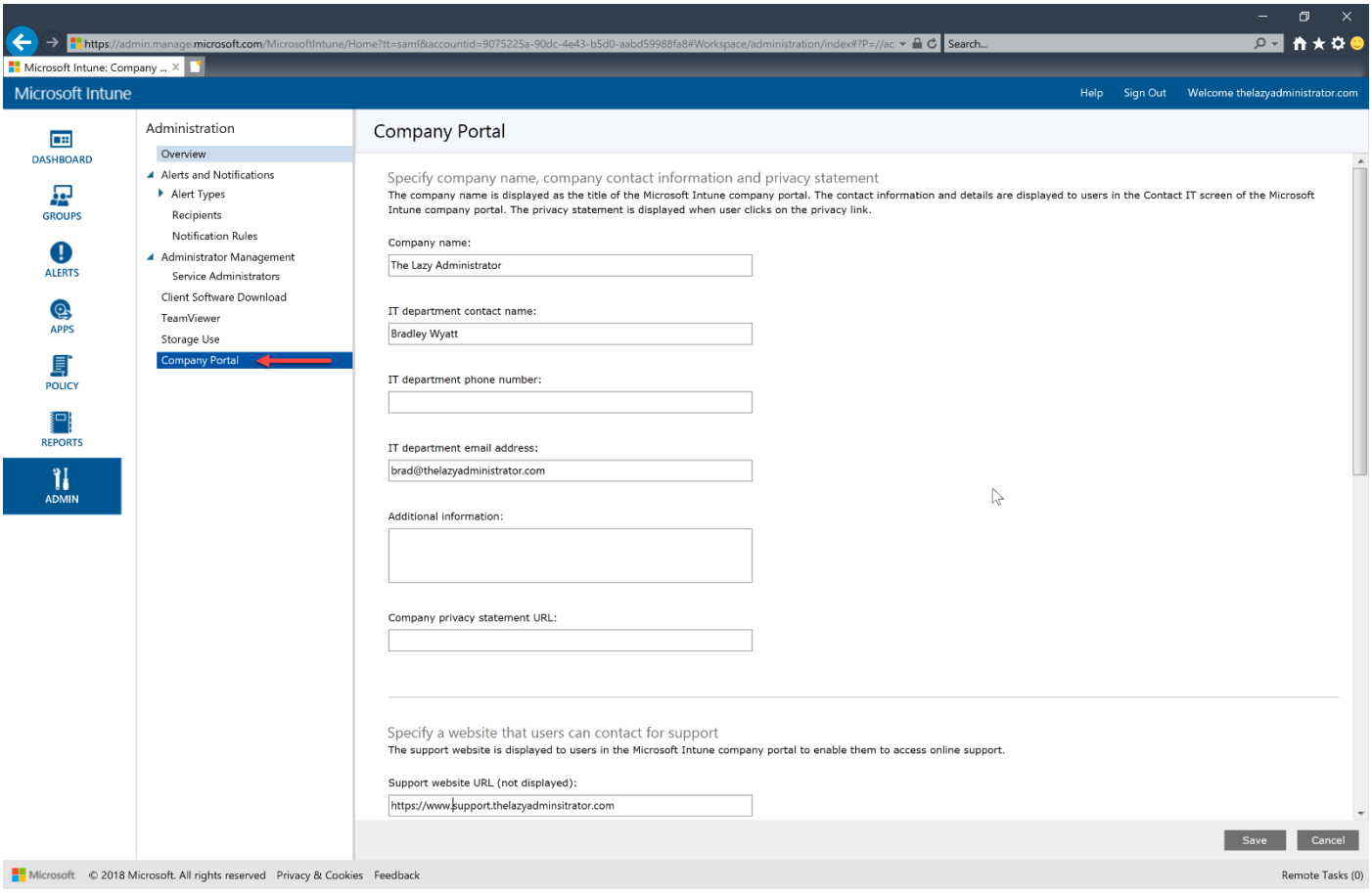
Verify that your domain comes back successful



Configure Company Portal

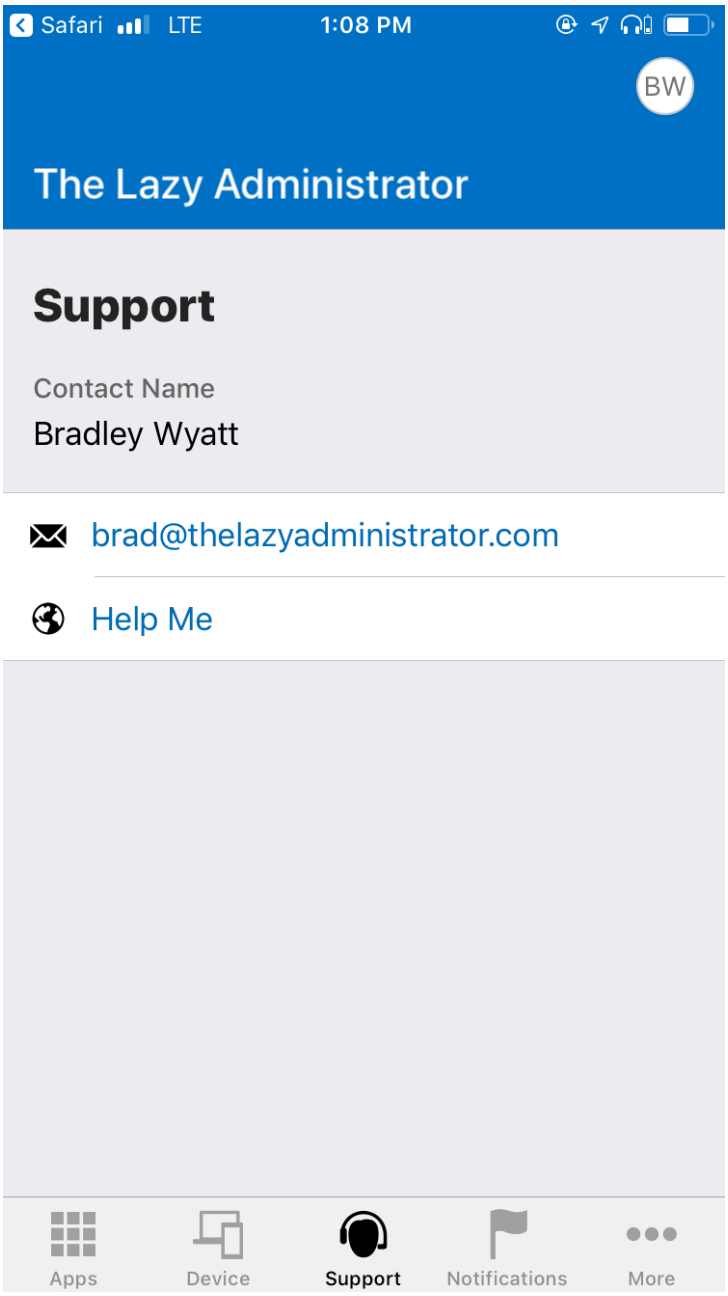
The company portal is a web page and a mobile device application that supports BYOD users. It gives them a centralized location to install published applications, self management, and retrieve information.

Currently the Company Portal can be configured on the legacy Intune Portal at admin.manage.microsoft.com

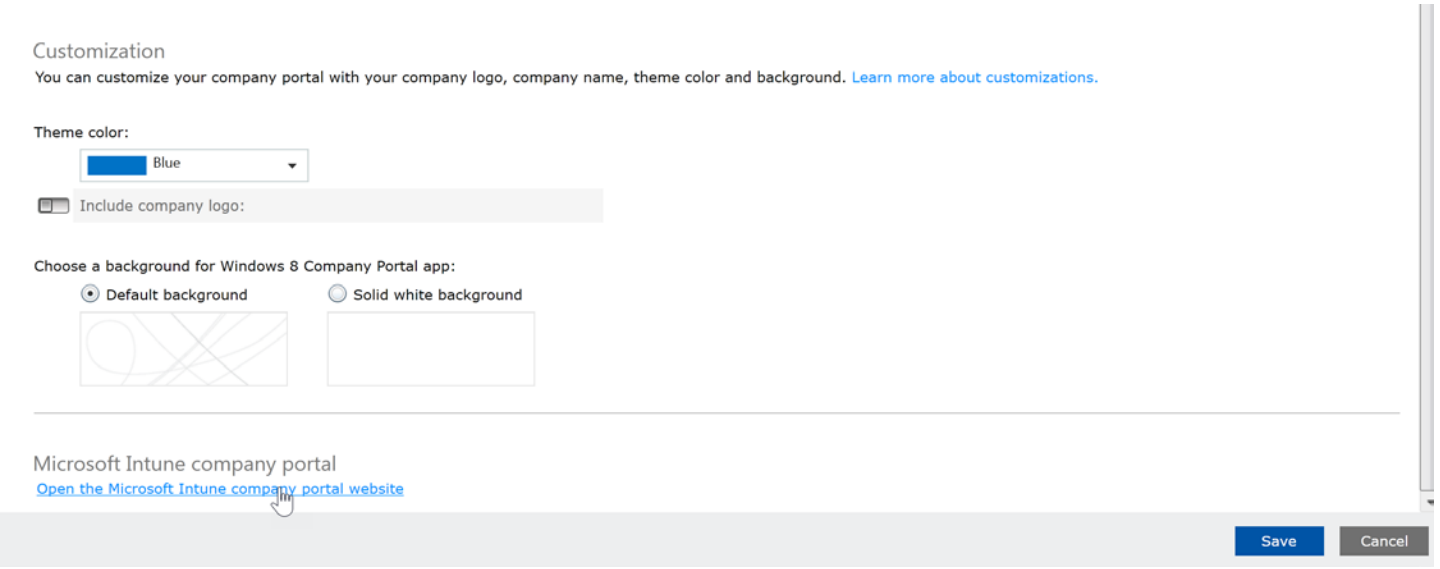


On the iOS Company Portal application under support you can see the email and website we specified for help. This is handy for end users as they have a very simple and clear way to contact you or your IT

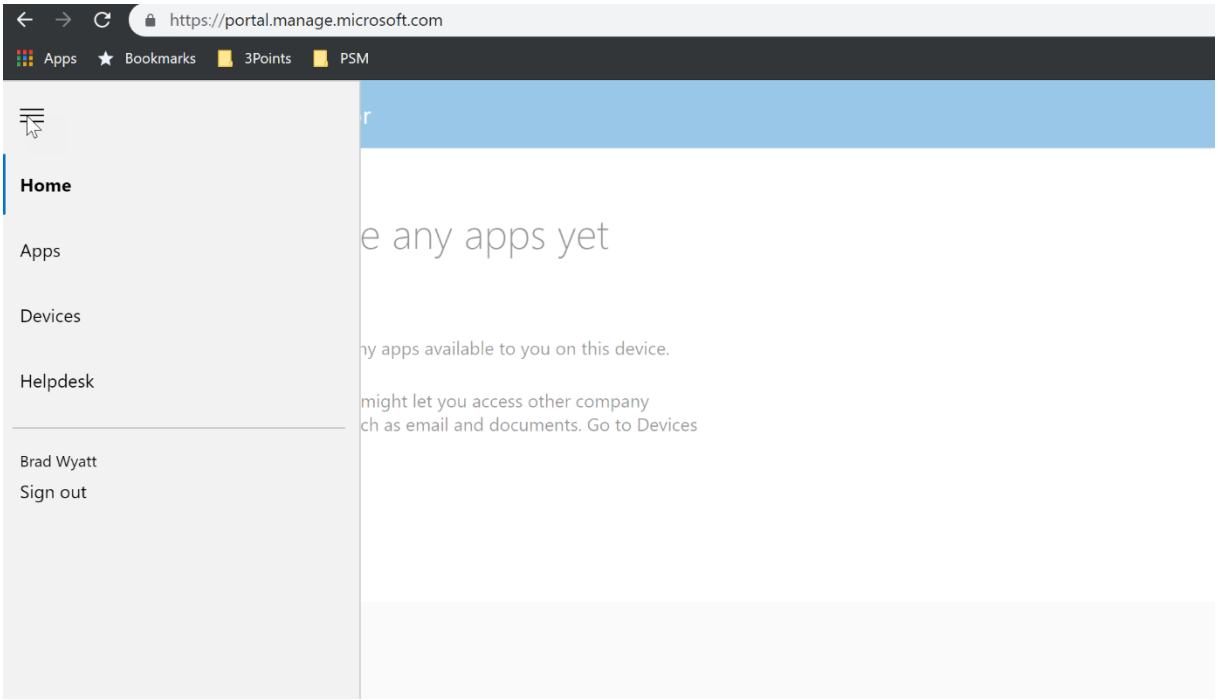
team.


Safari LTE 1:08 PM
BW
The Lazy Administrator
Support
Contact Name
Bradley Wyatt
brad@thelazyadministrator.com
Help Me
Apps
Device
Support
Notifications
More

At the bottom, once you save your Company Portal changes you can launch the portal website (https://portal.manage.microsoft.com/)



Here I can see the basic portal

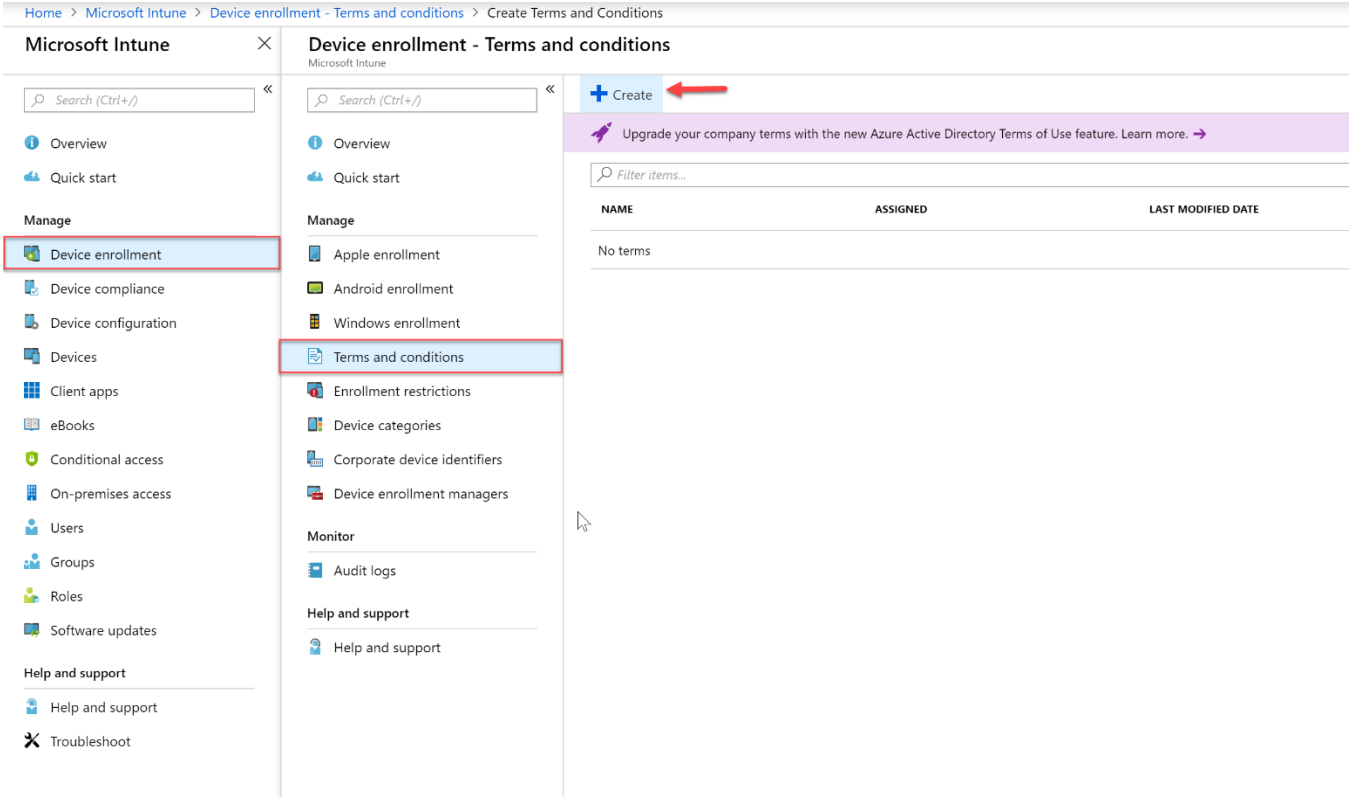


Configure Portal Terms and Conditions

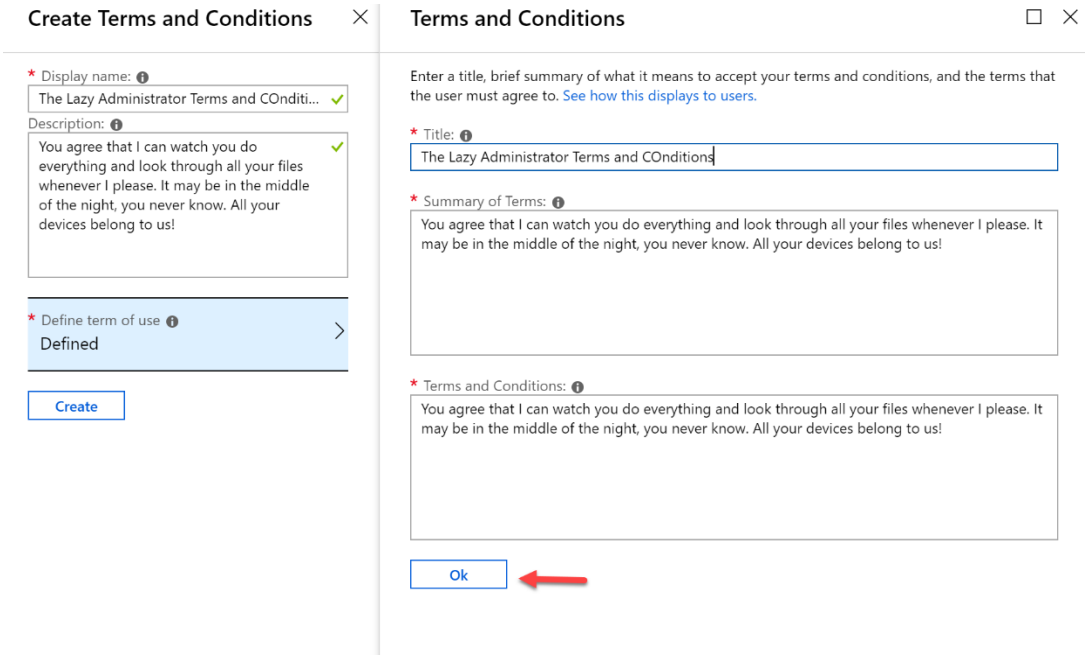
The Terms and Conditions can be prompted to users prior to them accessing the Intune Company Portal. In the Azure Intune portal you can configure your policies, apply to users or groups, and review the acceptance reporting.

Log into the Azure Intune Portal

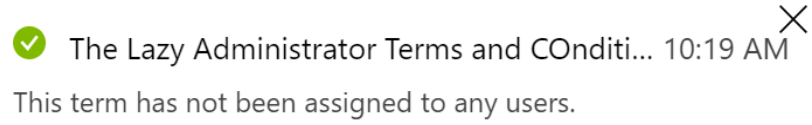
Navigate to the Intune blade, then Device Enrollment > Terms and Conditions and then click “Create”



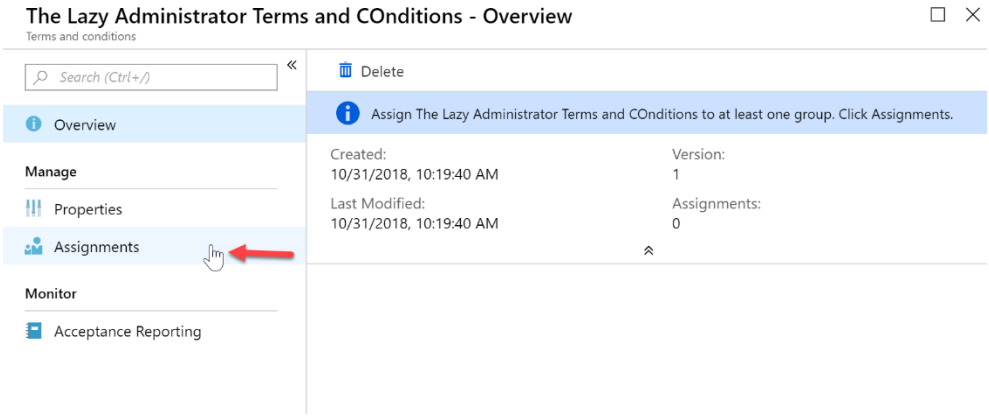
Create the required information regarding your Terms and Conditions and then press OK



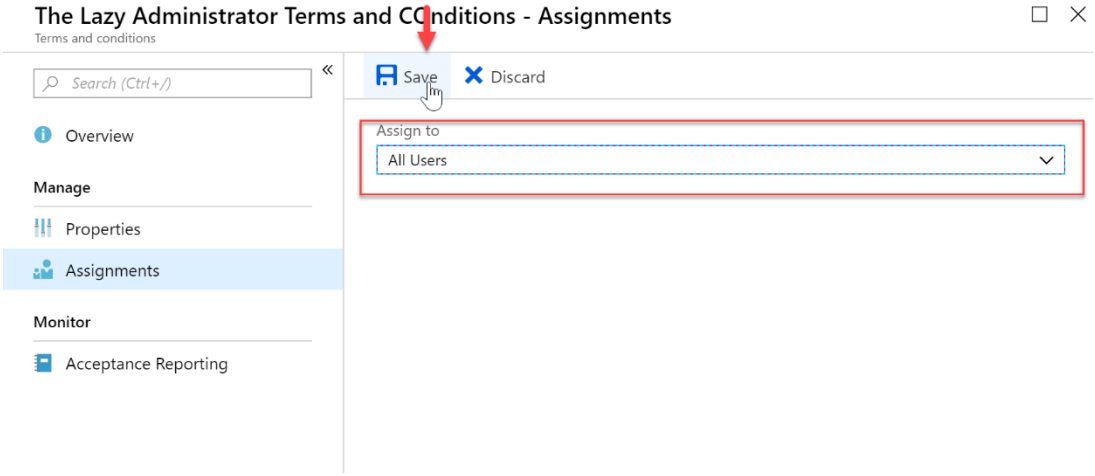
You will get a notification that your policy must be assigned to users or groups in your environment



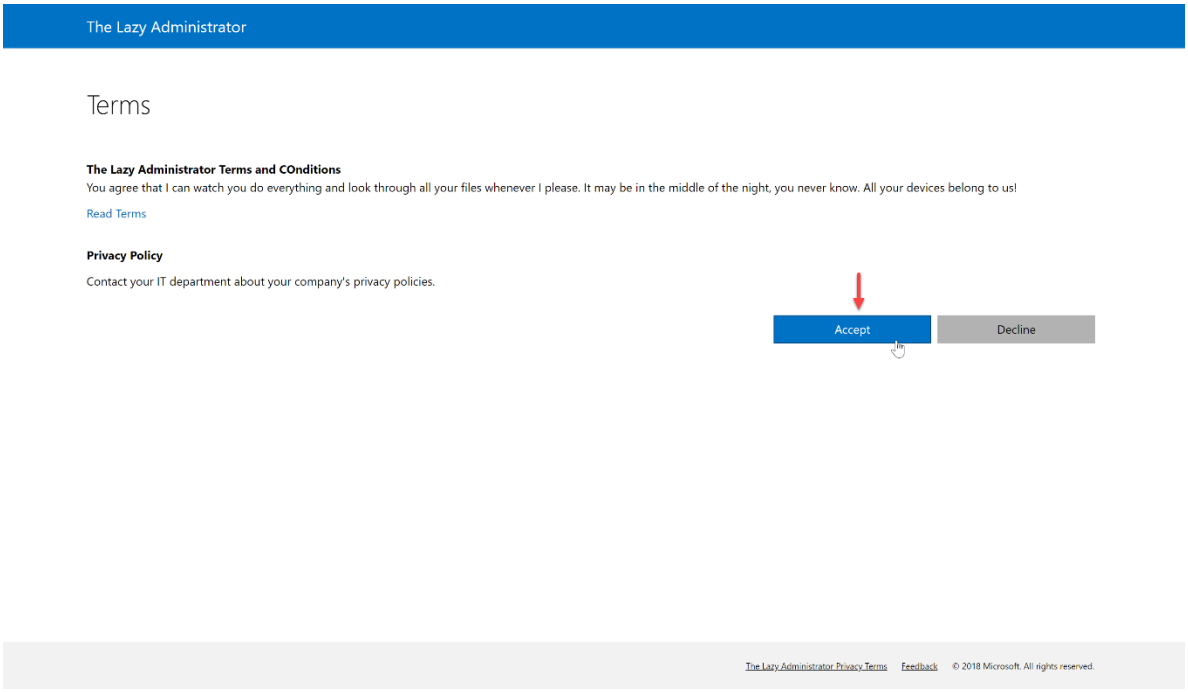
Under your Terms and Conditions overview select “Assignments”



Select the Users or Groups you want to assign the Terms and Conditions to and then press Save



Next time you or your users log into the Company Portal they will be greeted with the Terms and Conditions that were assigned to them.

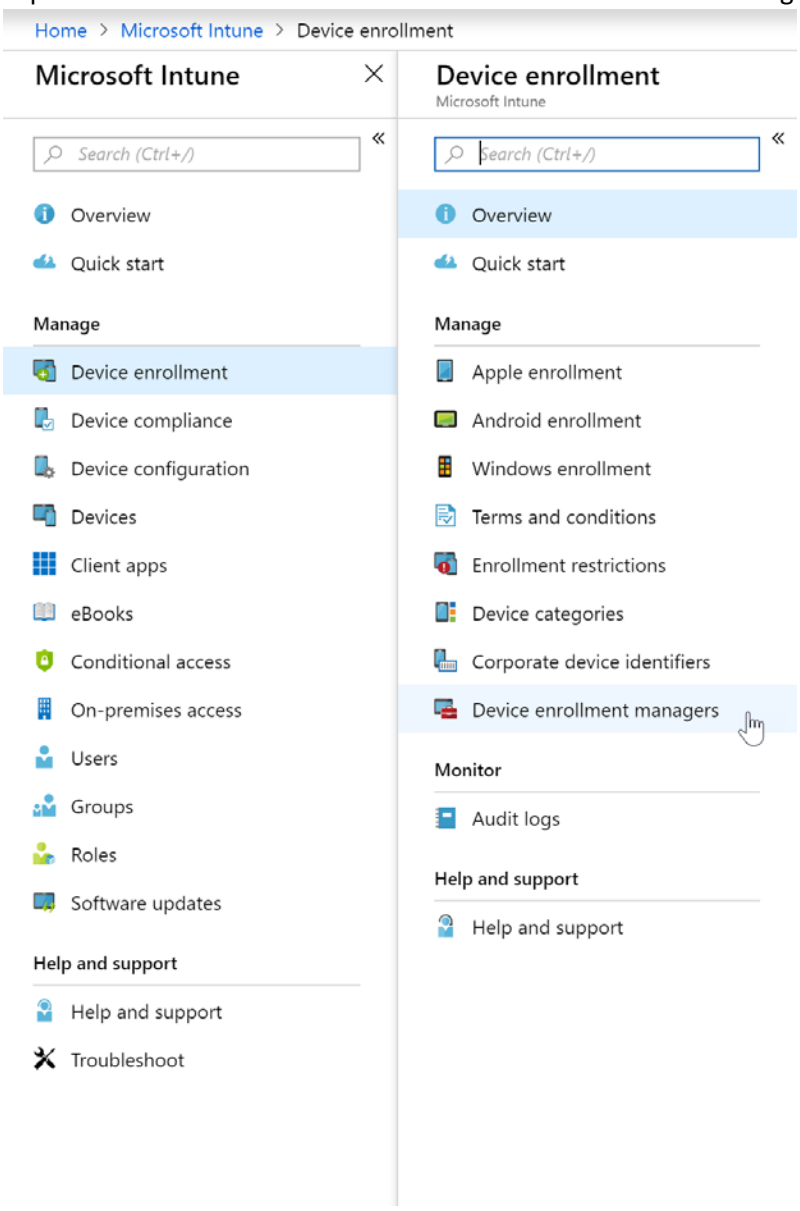


Device Enrollment Administrator

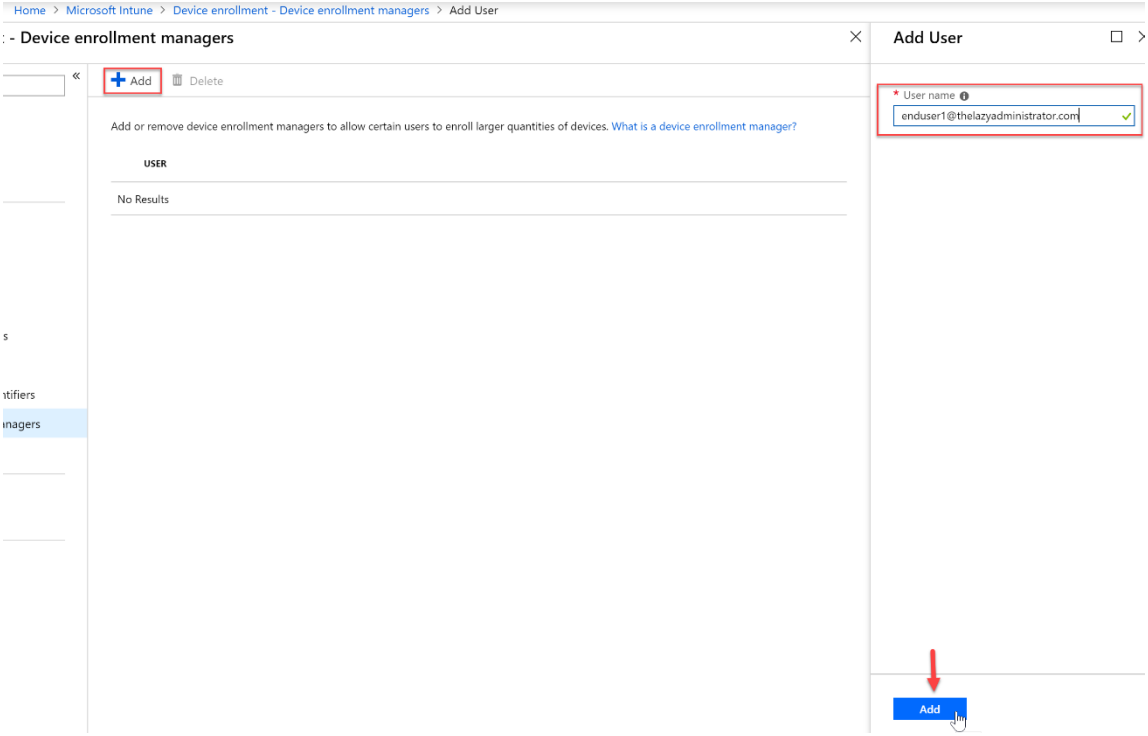
Device Enrollment Administrators are users that are able to enroll more than the default of 5 devices to Intune. This is meant for a standard user and not an Administrator account

Navigate to the Azure Portal and expand the Intune blade

Expand “Device Enrollment” and select “Device Enrollment Managers”



Click Add and then enter your users UserPrincipalName and then select the “Add” button on the bottom

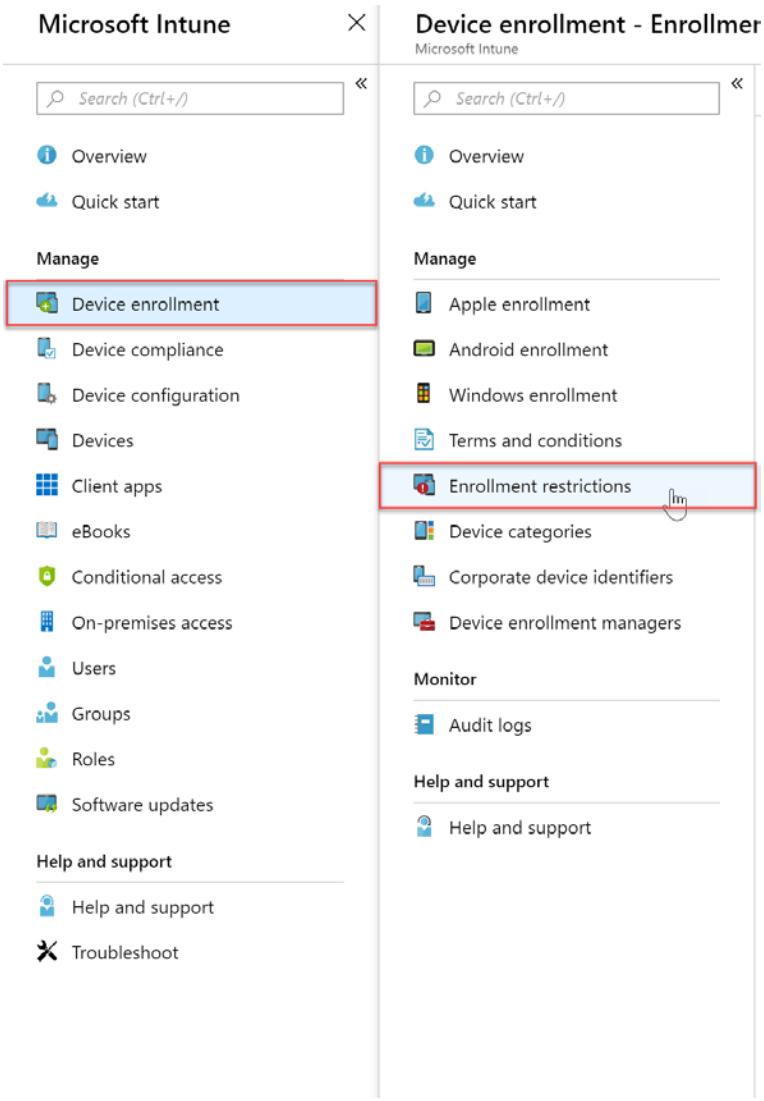


Device Enrollment and Type Restrictions

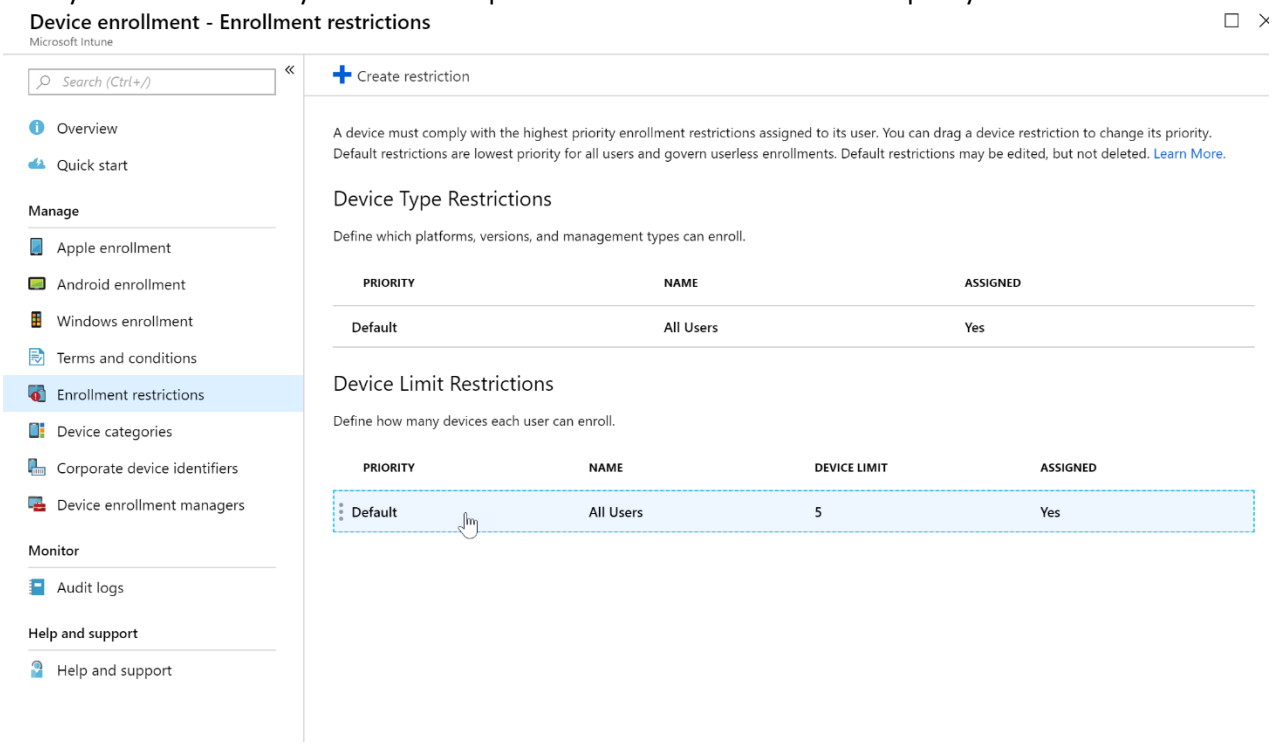
The default amount of devices a regular users can enroll into Intune is 5 unless you have granted the user to be a Device Enrollment Administrator (above). You can also change the default amount for users in the Portal.

Log into the Azure portal and select the Intune blade

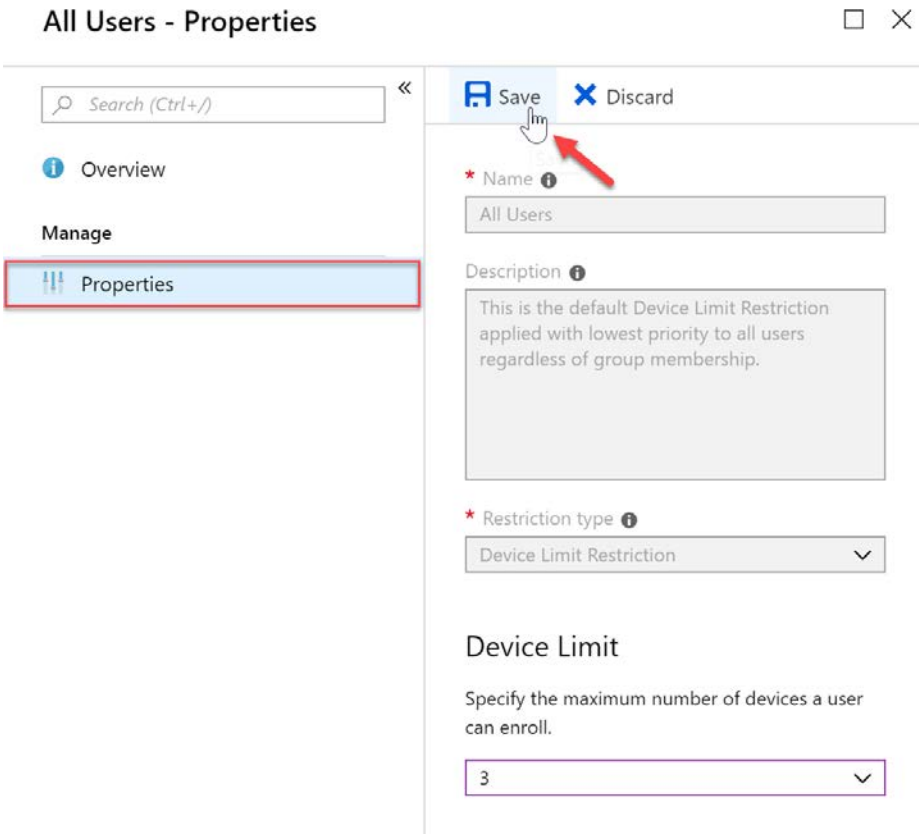
Select “Device Enrollment” and then click “Enrollment Restrictions”



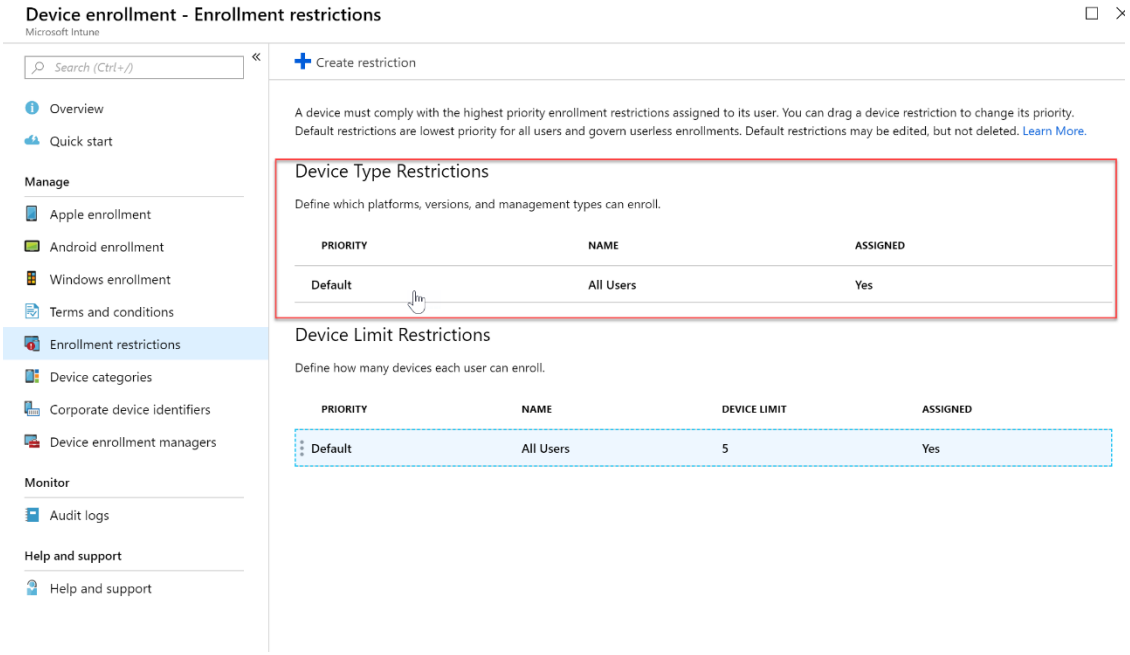
Here you can either edit your restriction policies or create a new restriction policy



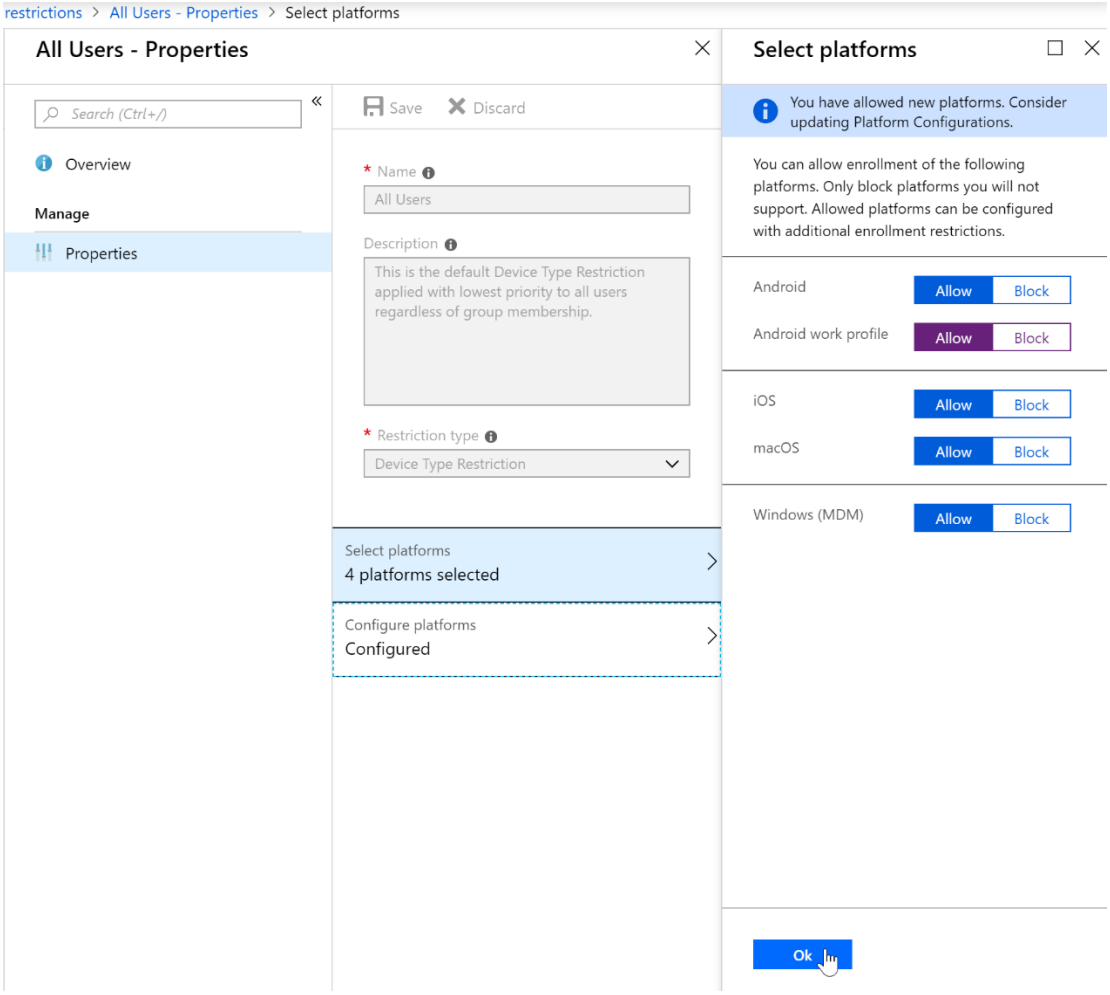
Here I am changing the device limit from the default of 5 to 3 and then saving my changes



If I want to change the Device Type Restriction Policy I can go back to the Enrollment Restrictions pane and select the Device Type Restriction policy



Here I am making a change to the Android Work Profile (seen in purple) and saving my changes



Device Group Mappings

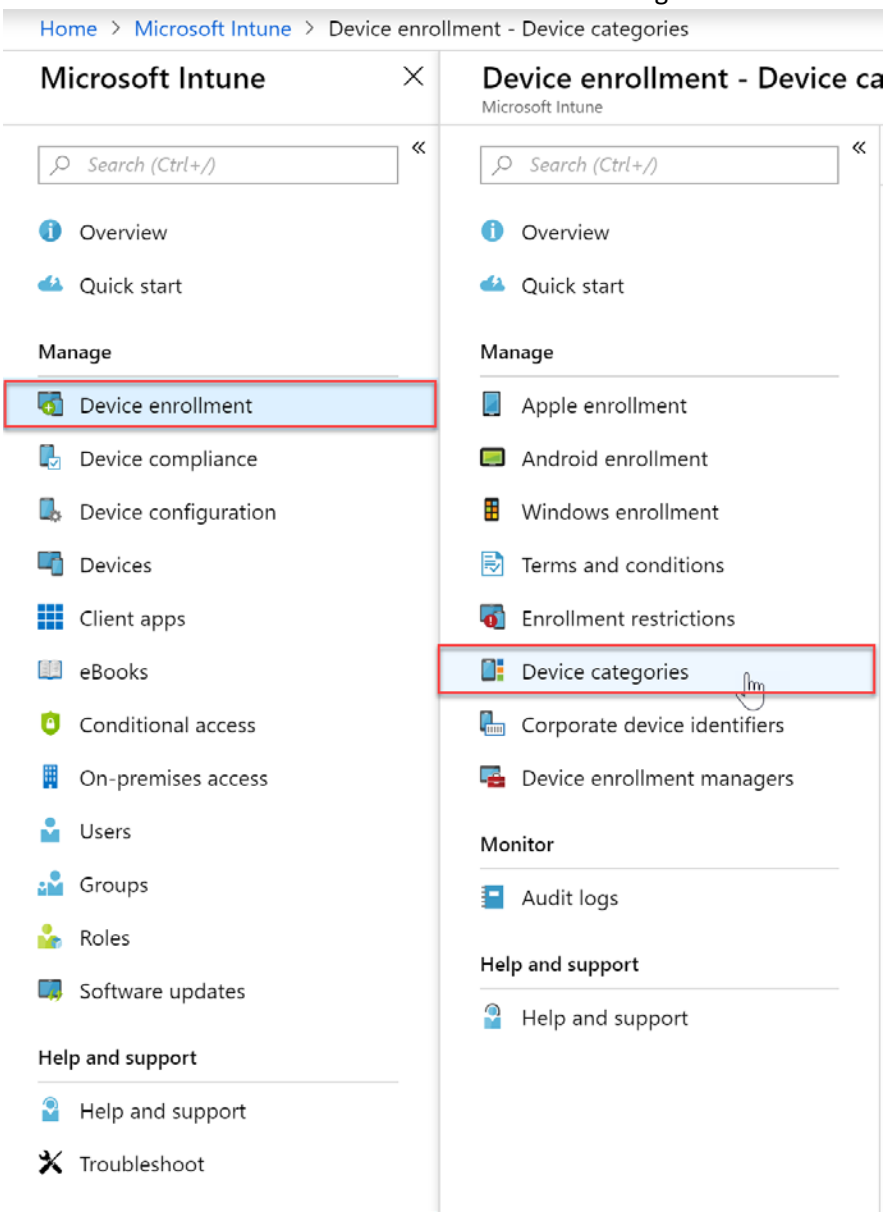
Use Microsoft Intune device categories to automatically add devices to groups based on categories that you define. This makes it easier for you to manage those devices.

Step 1: Device Categories

In my example I am going to create two (2) device categories. One category is for BYOD devices, or personal devices. These will be devices that end users own but may use them for work. The other category will be Company Owned Devices. These devices are purchased by the company, and given to the end users through the IT department.

In the Azure Portal, expand the Intune blade.

Select “Device Enrollment” and then click “Device Categories”



To add a new category, click Create Device Category and then supply a valid name and press “Create”
You can create any device categories you want. For example:

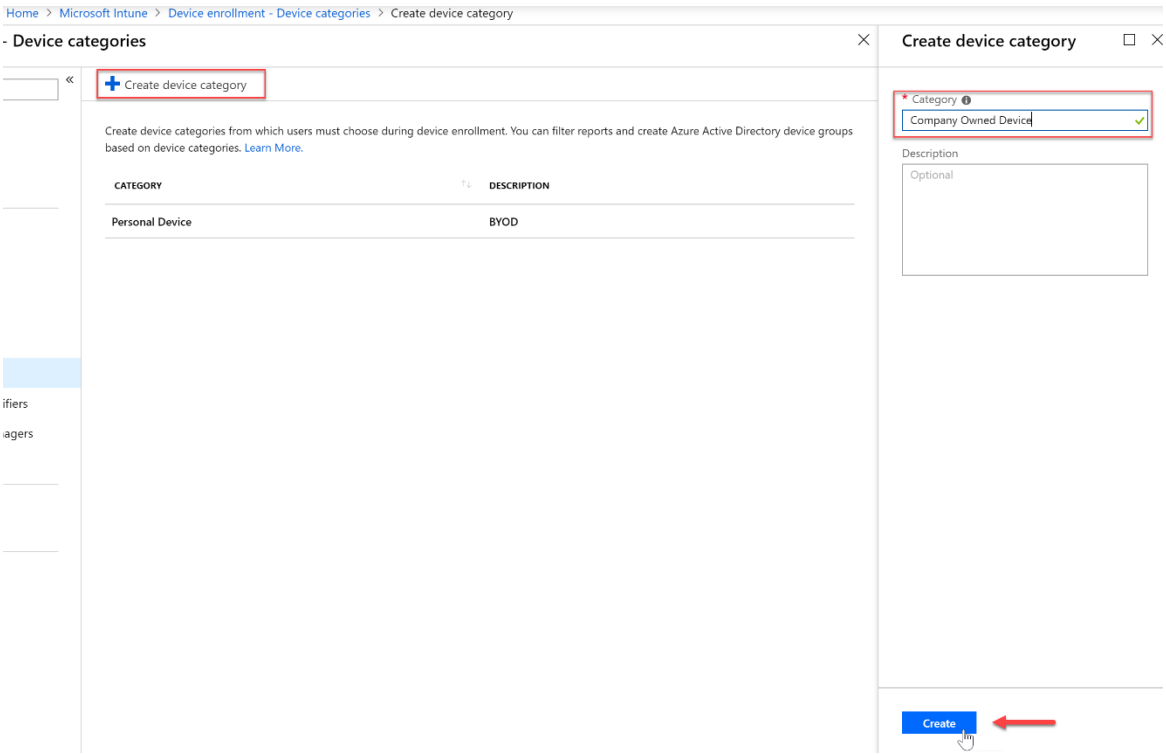
Point-of-sale device

Demonstration device

Sales

Accounting

Manager



Step 2: Create Azure Active Directory Dynamic Device Security Groups

In this step, you will create dynamic groups in the Azure portal, based on the device category and device category name.

Use the information in this section to create a device group with an advanced rule, by using the deviceCategory attribute. For example: device.deviceCategory -eq “Personal Device“.

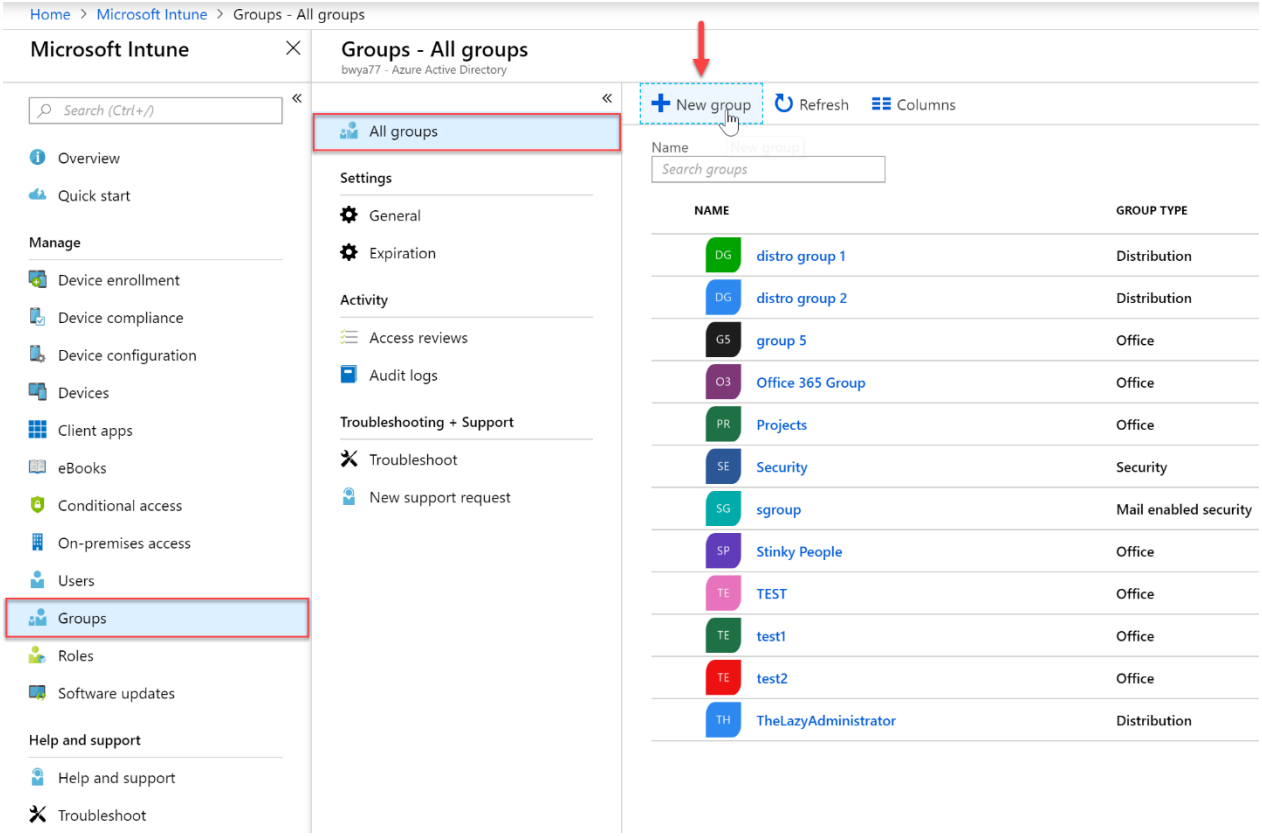
When users of iOS and Android devices enroll their device, they must choose a category from the list of categories you configured. After they choose a category and finish enrollment, their device is added to the Intune device group, or the Active Directory security group that corresponds with the category they chose.

Windows users should use the Company Portal website to select a category.

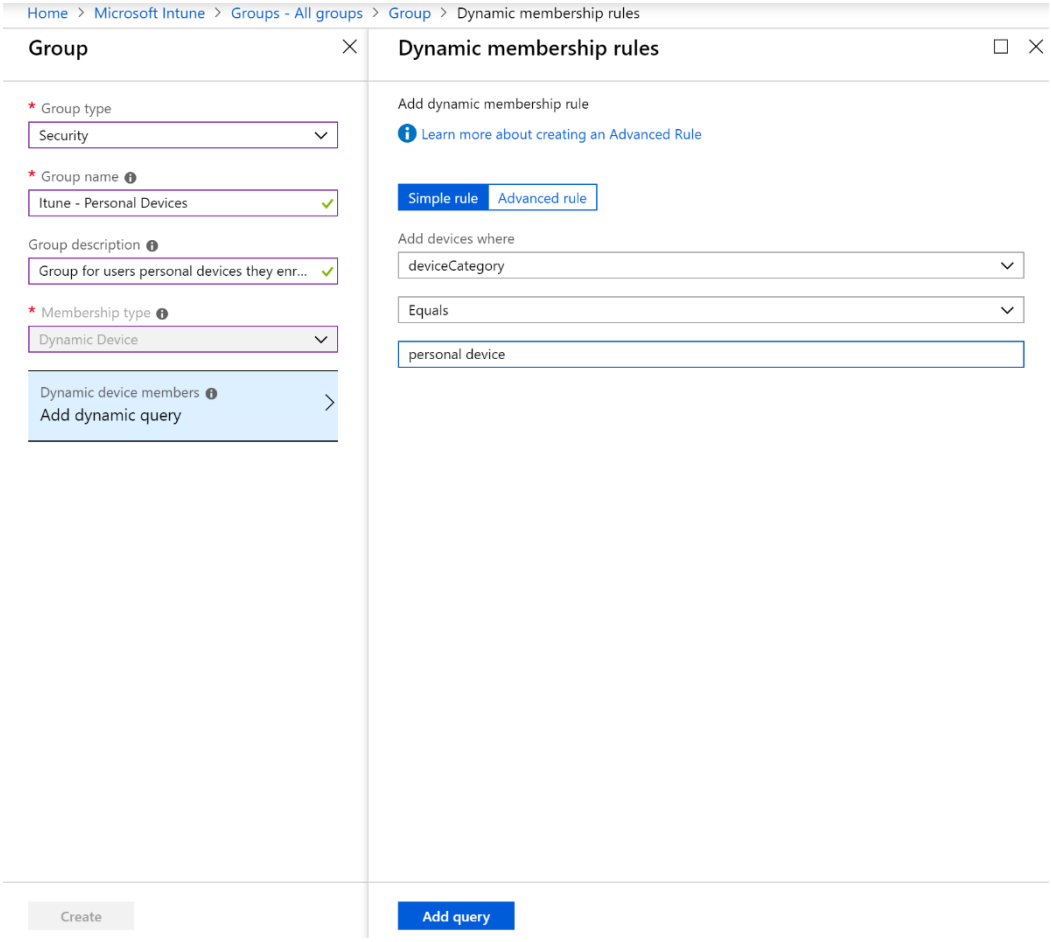
Regardless of platform, your users can always go to portal.manage.microsoft.com after enrolling the device. Have the user access the Company Portal website, and go to My Devices. The user can choose an enrolled device listed on the page, and then select a category.

After choosing a category, the device is automatically added to the corresponding group you created. If a device is already enrolled before you configure categories, the user sees a notification about the device on the Company Portal website. This lets the user know to select a category the next time they access the Company Portal app on iOS or Android.

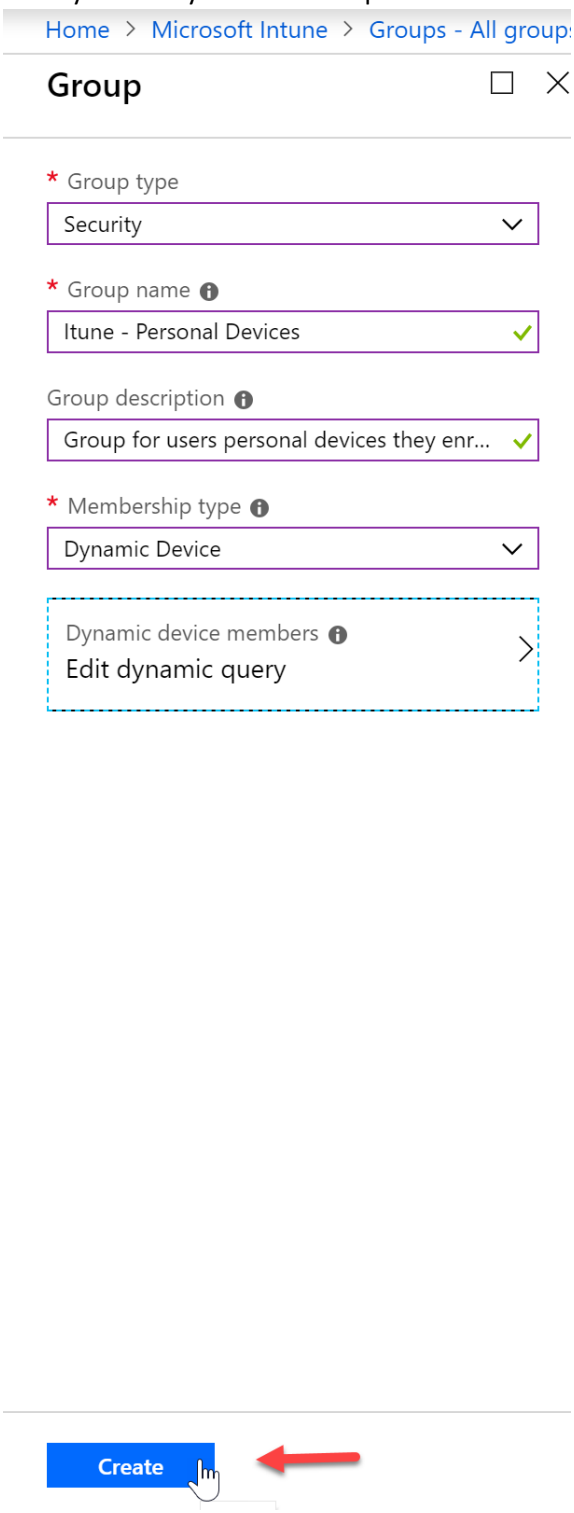
In the Intune blade, select Groups, and the select “All Groups” and click “New Group”



Give your group the required properties like type, name and description. We will want to add a dynamic membership rule. The one below will contain all devices that a user selects as their Personal Device.



Once you have your new Group with the correct properties and query, click “Create”

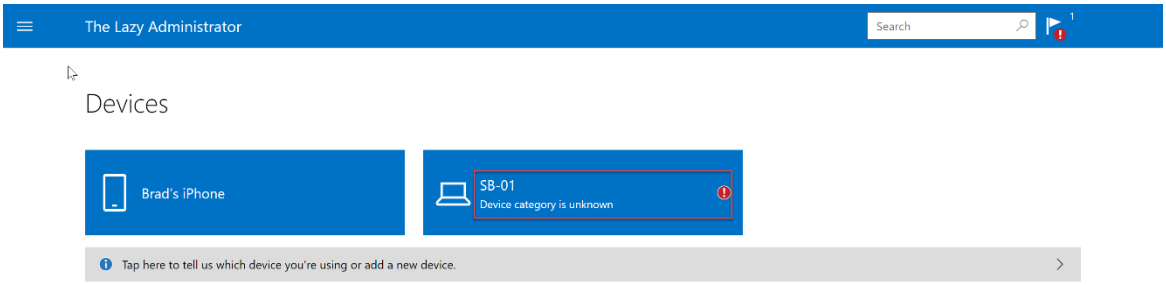


Now back in my Azure Groups pane, I can see my newly created groups

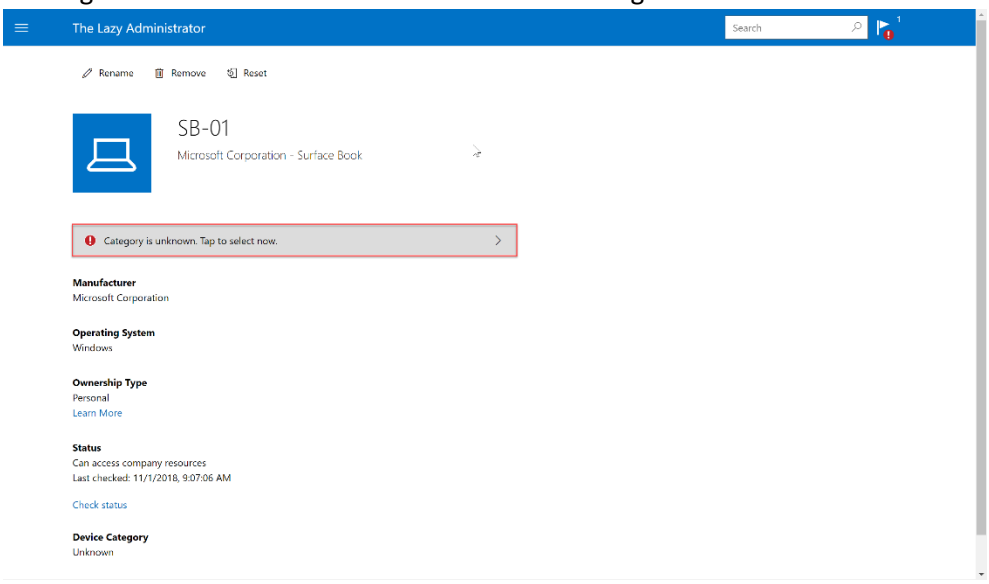
Step 3: Select Device Category

Windows

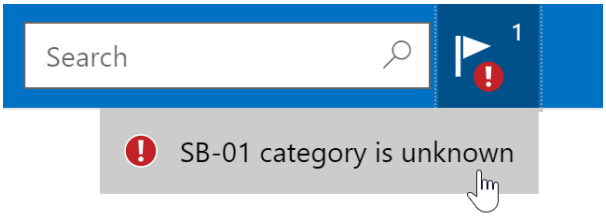
When users enroll their Windows devices they will need to assign a category in the online Intune portal



Clicking on the device will show them the outstanding notification and allow them to select a category

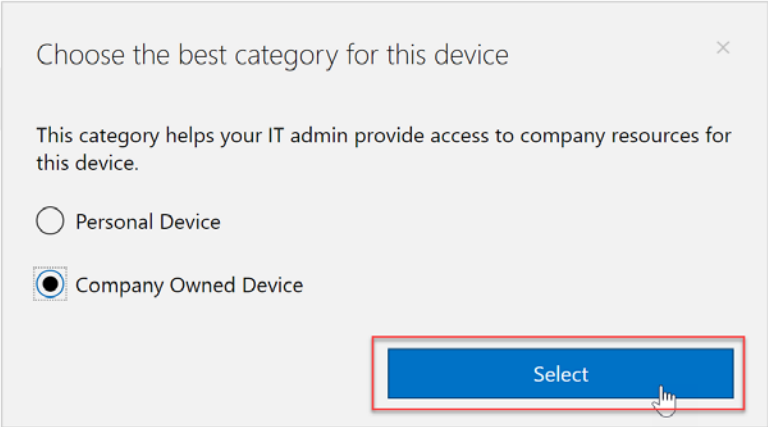


In the top right of the portal they will also see a notification



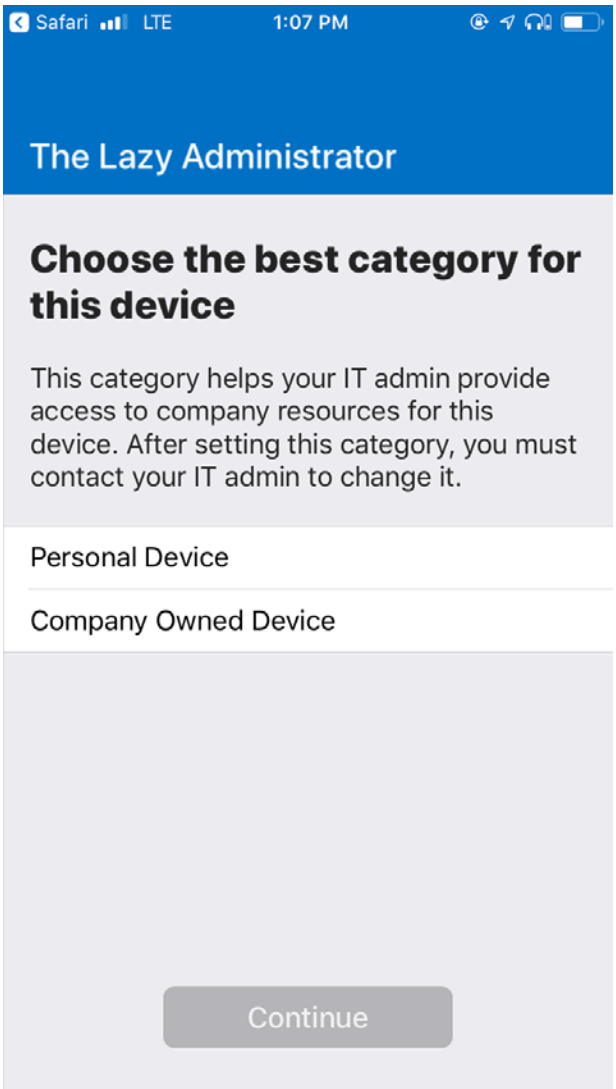
Here we see the two categories I set up for the users to select. Since this machine is a Company Owned Device I will select the category. Behind the scenes, this device is added to that dynamic group and

allows for a better management experience.



iOS

When users enroll their devices using the Company Portal application, they will select which category the device should be placed in



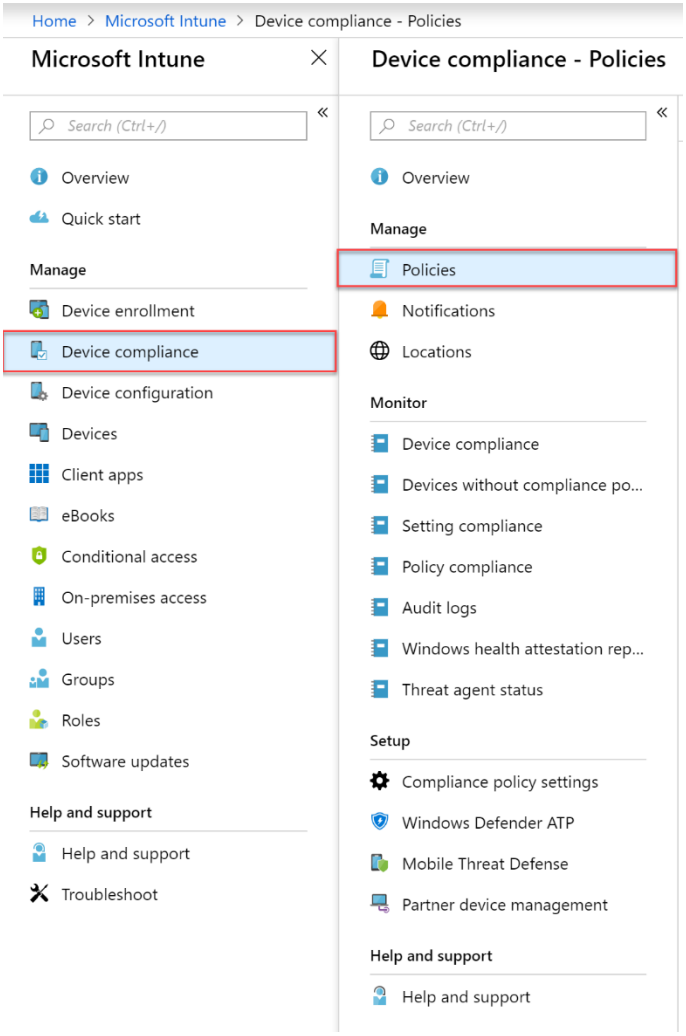
Intune Policies

Compliance Policies

Compliance policies in Intune define the rules and settings that a device must comply with in order to be considered compliant by conditional access policies.

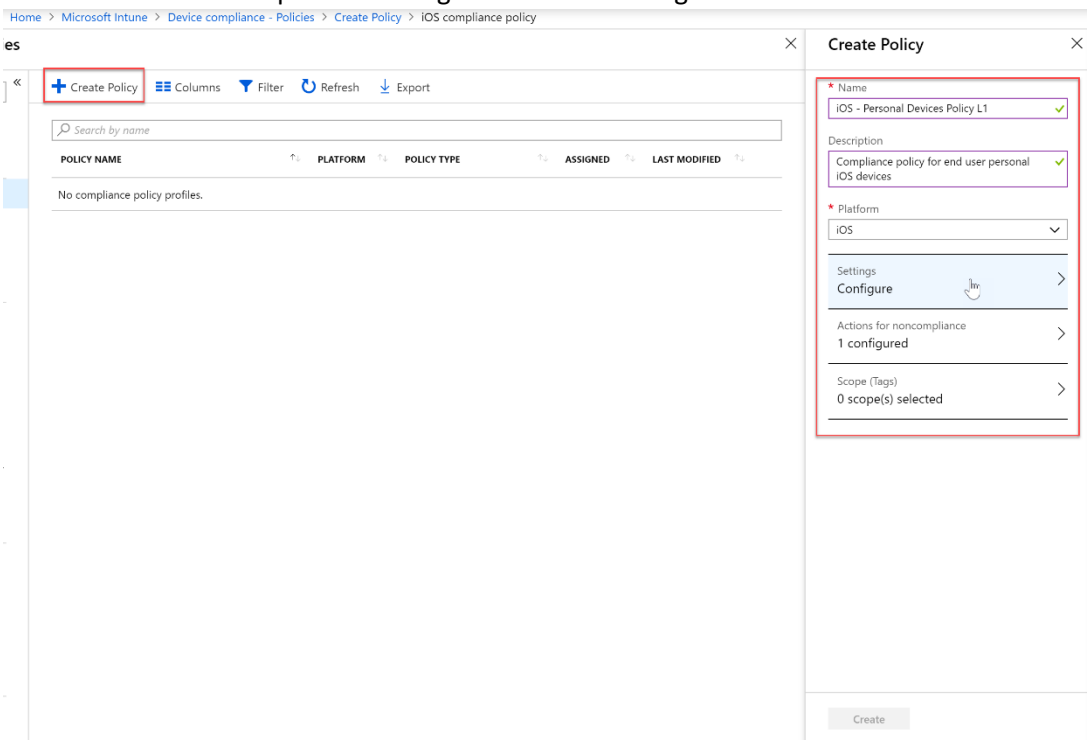
Navigate to the Azure portal and select the Intune blade

Select “Device Compliance” and then “Policies”

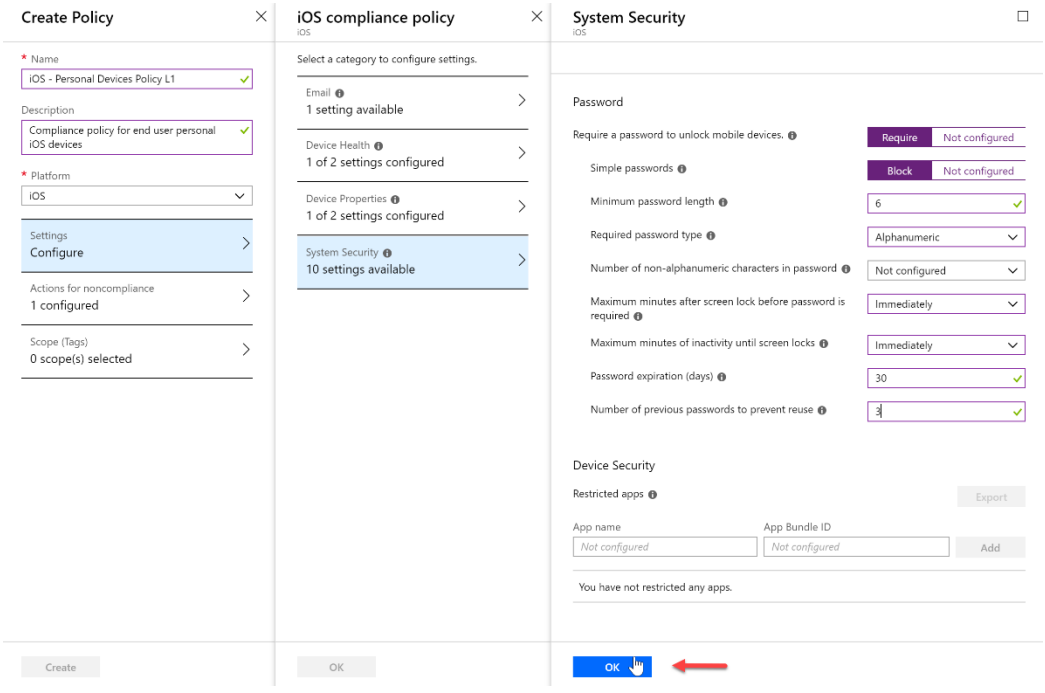


Click “Create Policy” and then I am going to create a policy that I will apply to my end users personal devices. This will be a policy for the group we created earlier. Once we specify a name and platform we

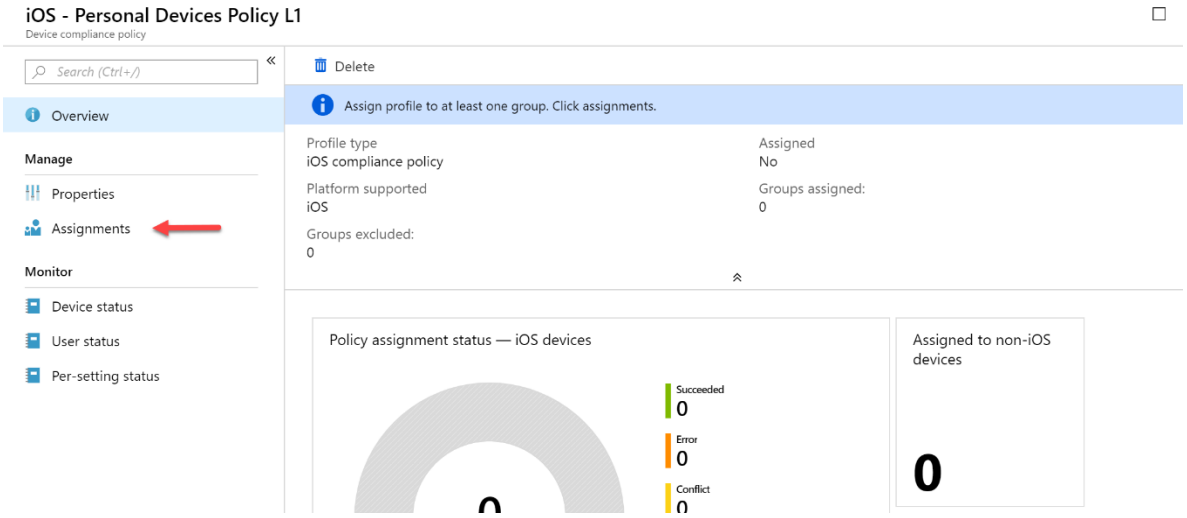
will have different compliance settings that we can configure become available.



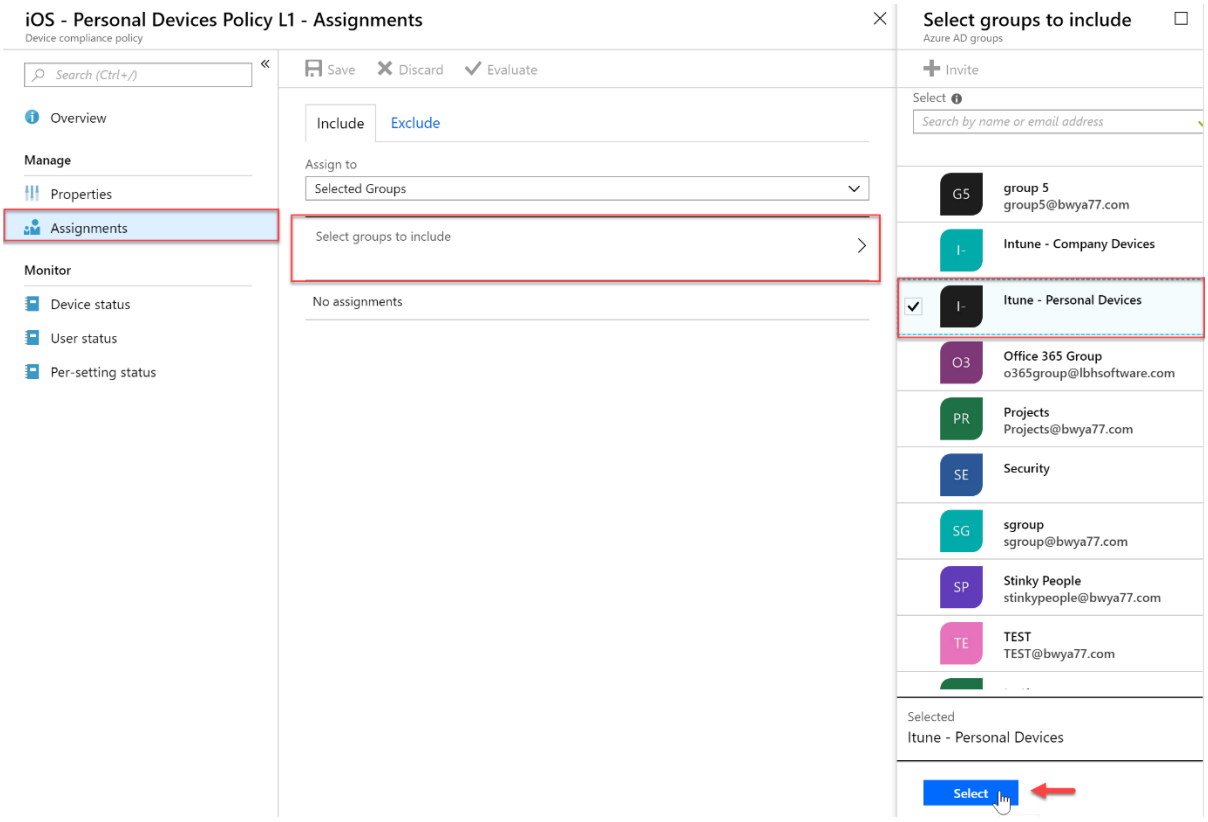
Once you have configured all of your Compliance settings, save the policy.



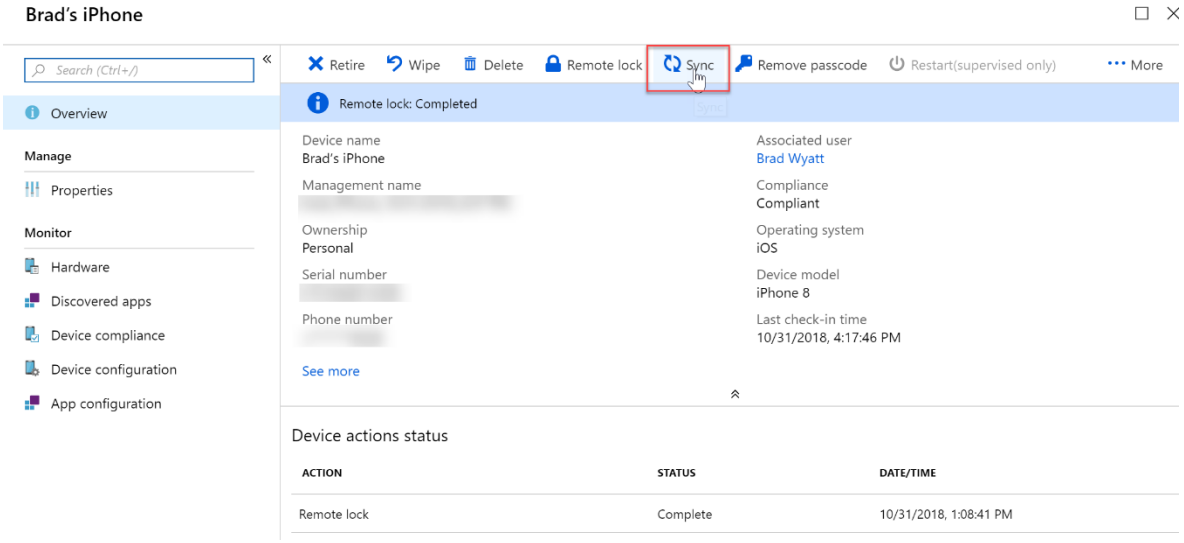
Next, we will need to assign this policy to devices or users. Click the Assignments item under Manage



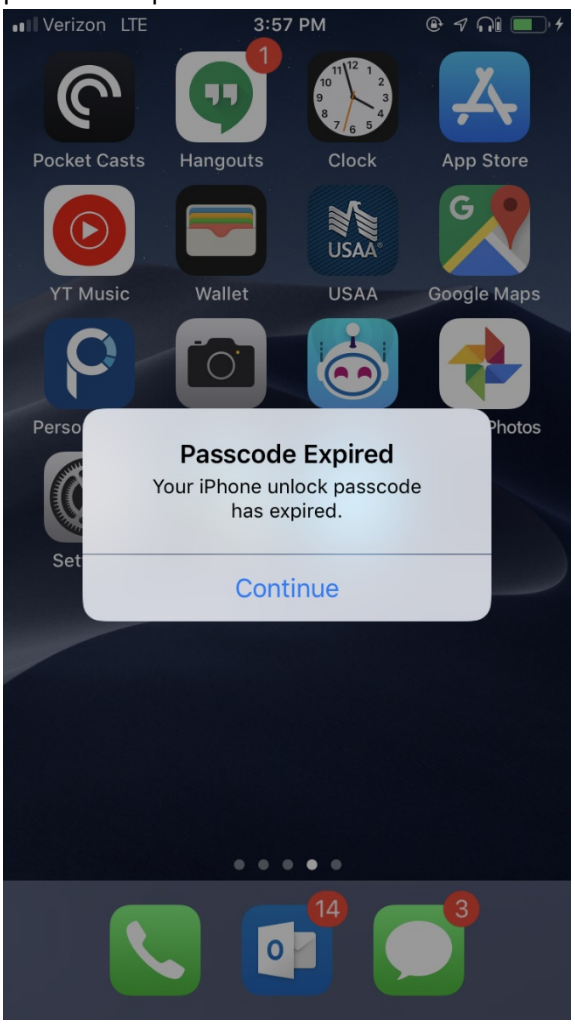
Once I click “Select groups to include” I can select my Intune – Personal Devices dynamic group and then save.



If I want to make sure the policy goes into effect immediately on a device, I can go to All Devices and find my device and force a resync.



If you set a passcode setting and the users current passcode does not match, they will be greeted with a password expiration notification. From there they can set their own passcode.

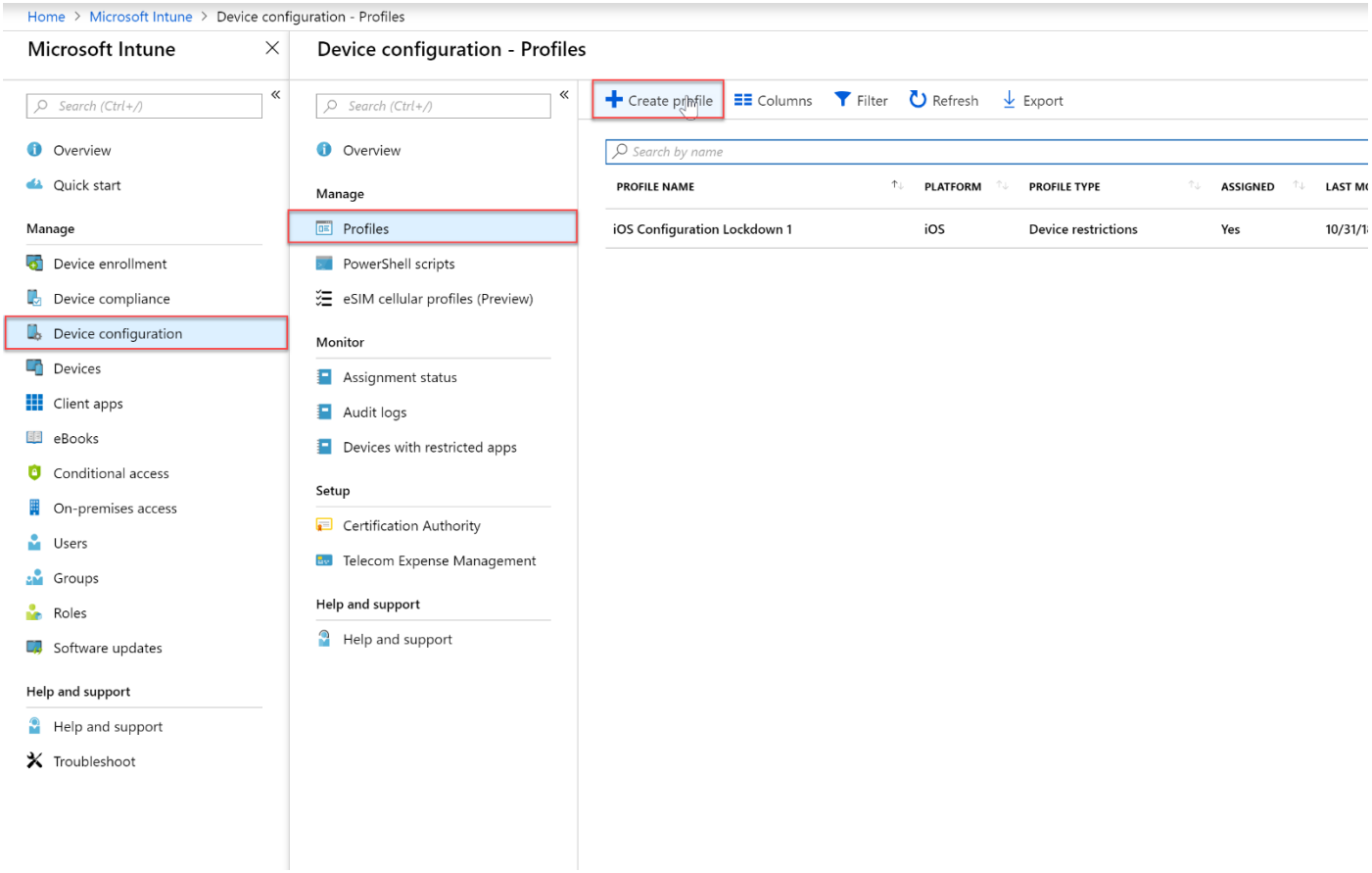


Configuration Policies

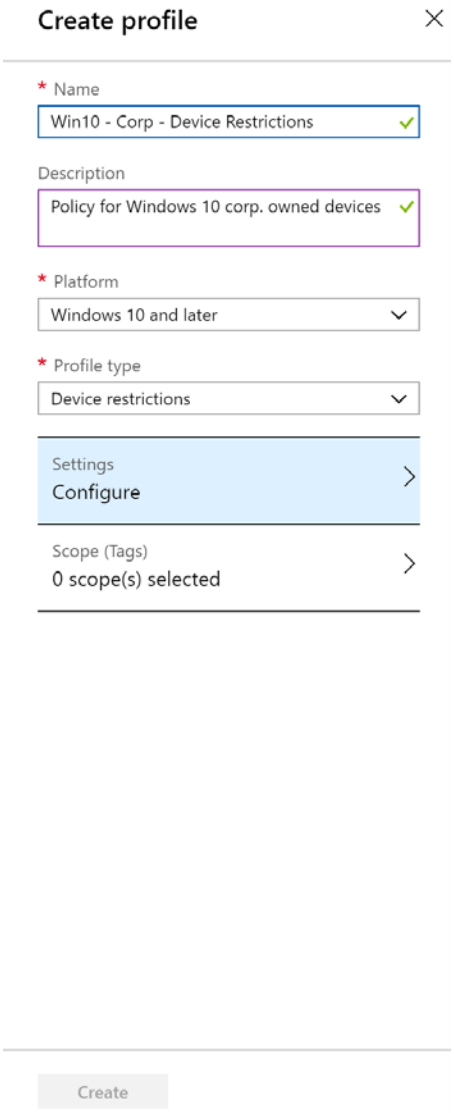
Commonly used to manage security settings and features on your devices, including access to company resources.

Basic Configuration Policy Overview

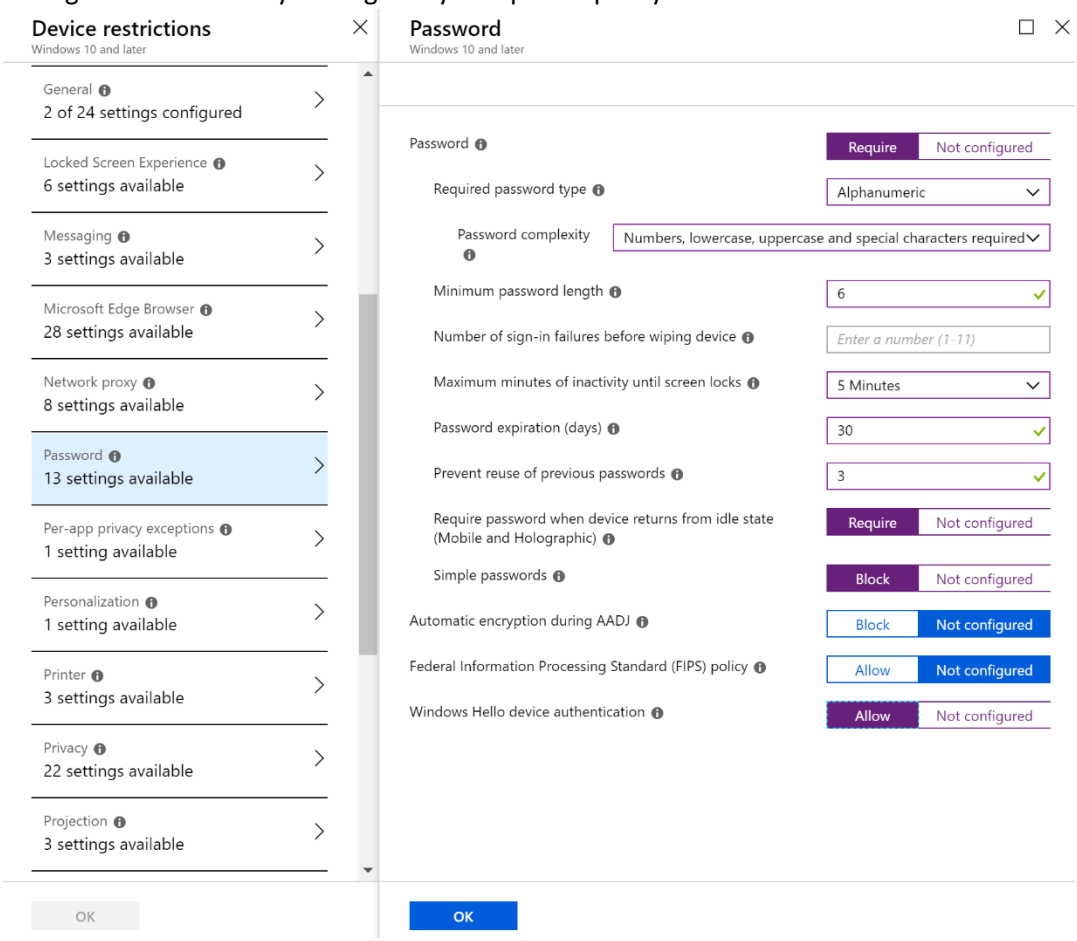
Expand the Intune blade and then select “Device Configuration”, “Profiles” and then click “Create Profile” to create a new device configuration profile.

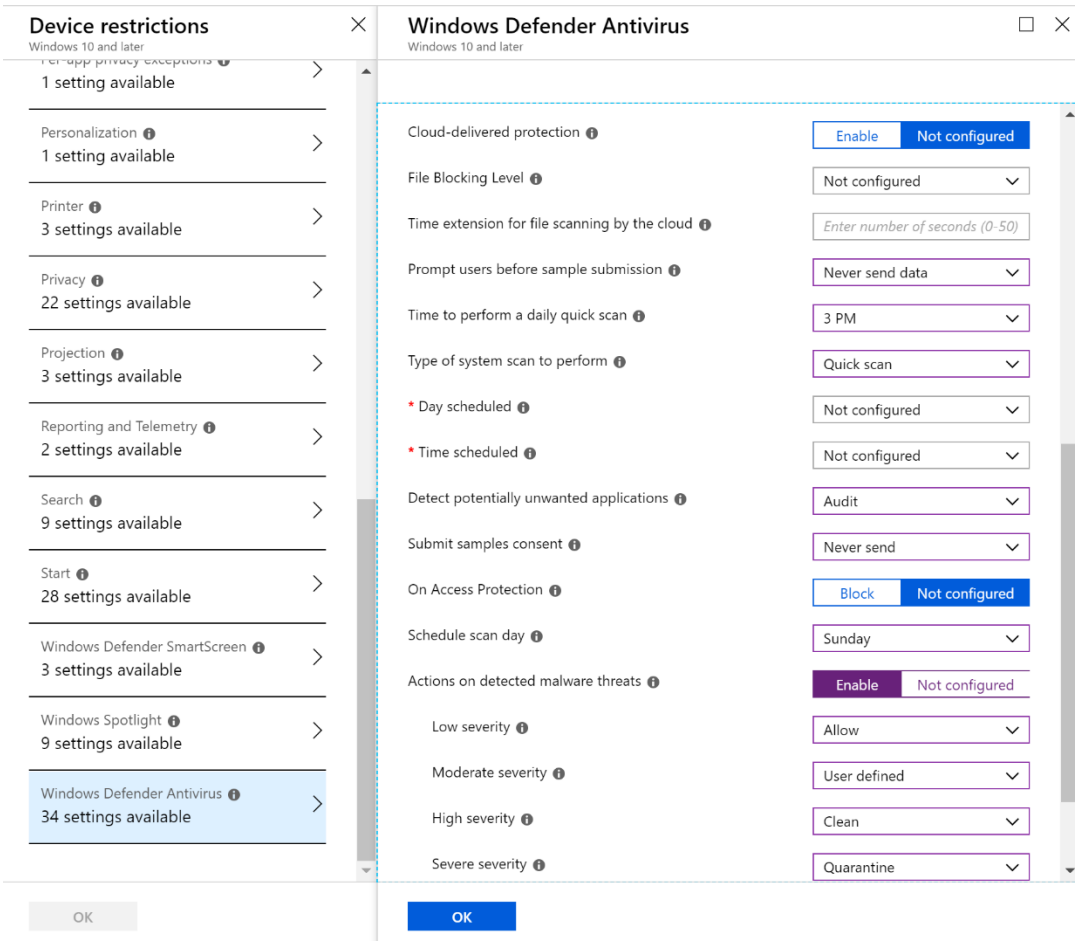


Enter the appropriate information regarding your profile / policy. In my example I will be making a policy that is applied to corporate owned Windows 10 devices.

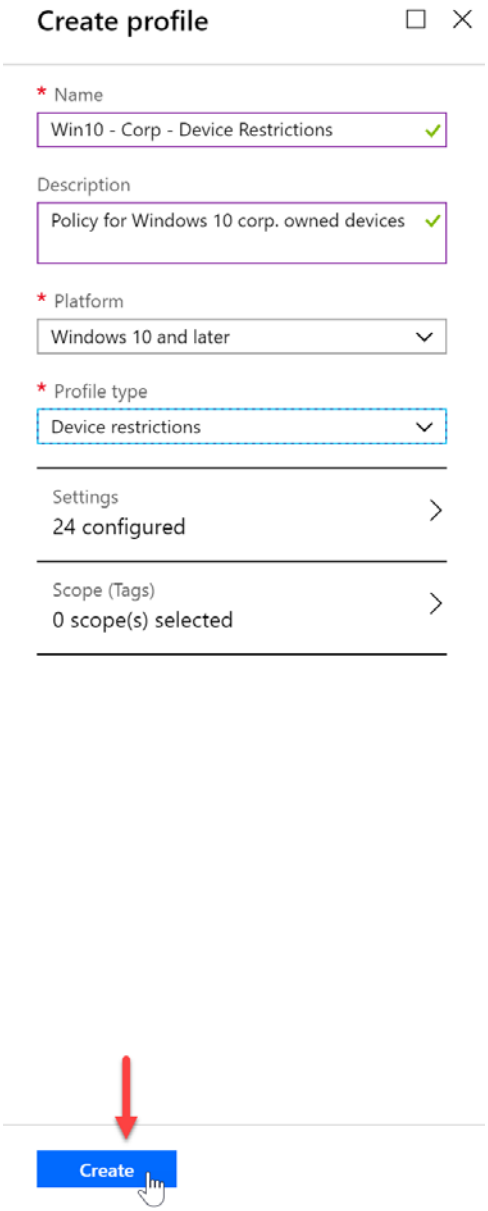


Configure the necessary settings for your specific policy

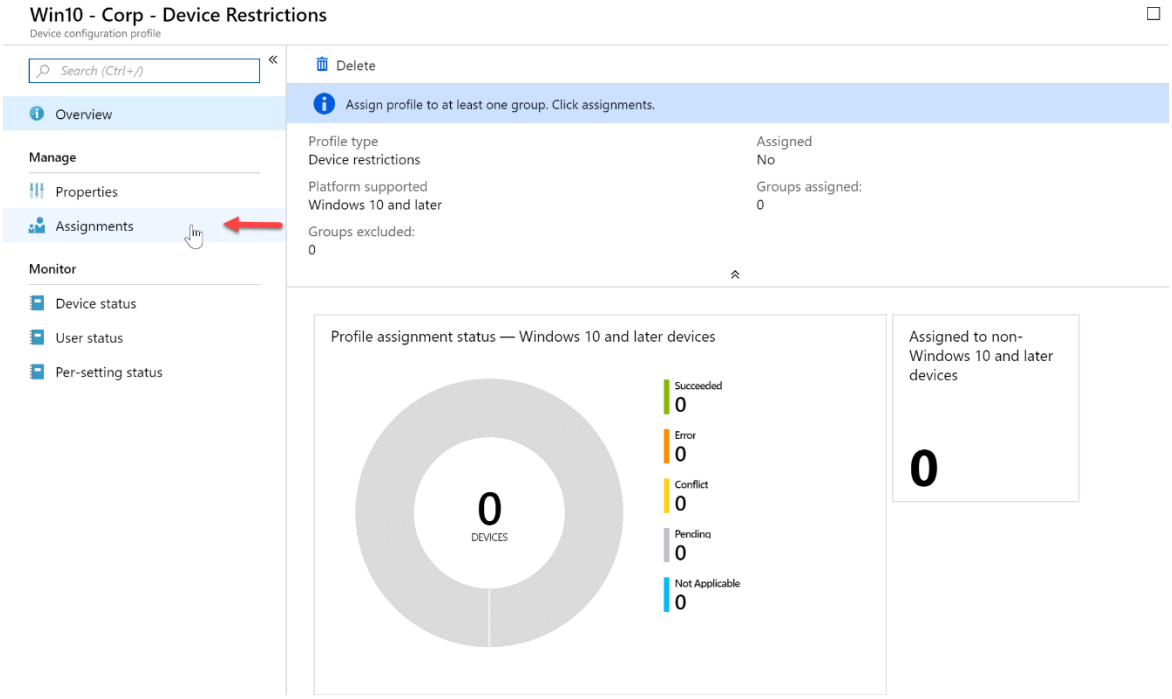



Device restrictions
Windows 10 and later
1 setting available
Personalization
1 setting available
Printer
3 settings available
Privacy
22 settings available
Projection
3 settings available
Reporting and Telemetry
2 settings available
Search
9 settings available
Start
28 settings available
Windows Defender SmartScreen
3 settings available
Windows Spotlight
9 settings available
Windows Defender Antivirus
34 settings available
OK
Windows Defender Antivirus
Windows 10 and later
Cloud-delivered protection
Enable
Not configured
File Blocking Level
Not configured
Time extension for file scanning by the cloud
Enter number of seconds (0-50)
Prompt users before sample submission
Never send data
Time to perform a daily quick scan
3 PM
Type of system scan to perform
Quick scan
* Day scheduled
Not configured
* Time scheduled
Not configured
Detect potentially unwanted applications
Audit
Submit samples consent
Never send
On Access Protection
Block
Not configured
Schedule scan day
Sunday
Actions on detected malware threats
Enable
Not configured
Low severity
Allow
Moderate severity
User defined
High severity
Clean
Severe severity
Quarantine
OK

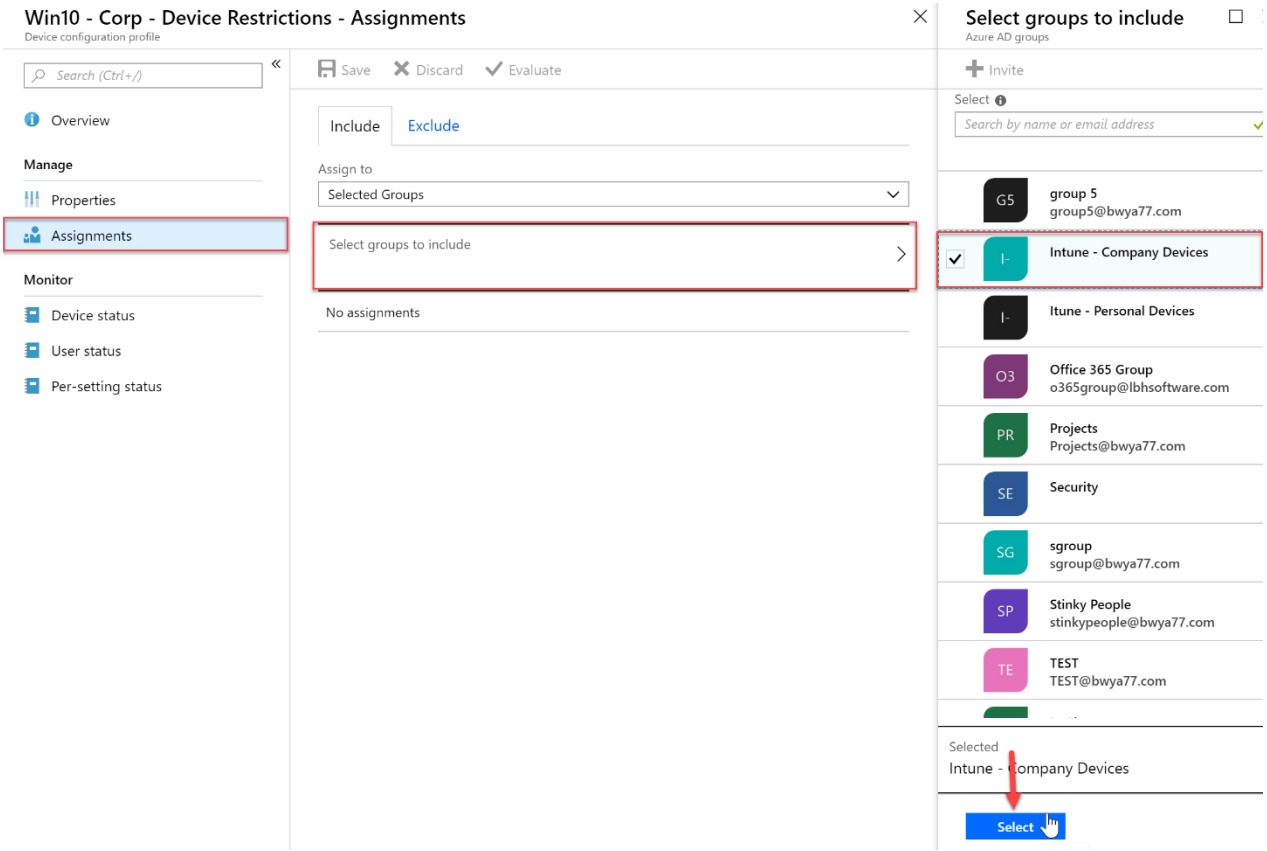
Once you have configured all of the settings you'd like, press "Create" under the create profile blade.



Next, click “Assignments” so we can assign this policy



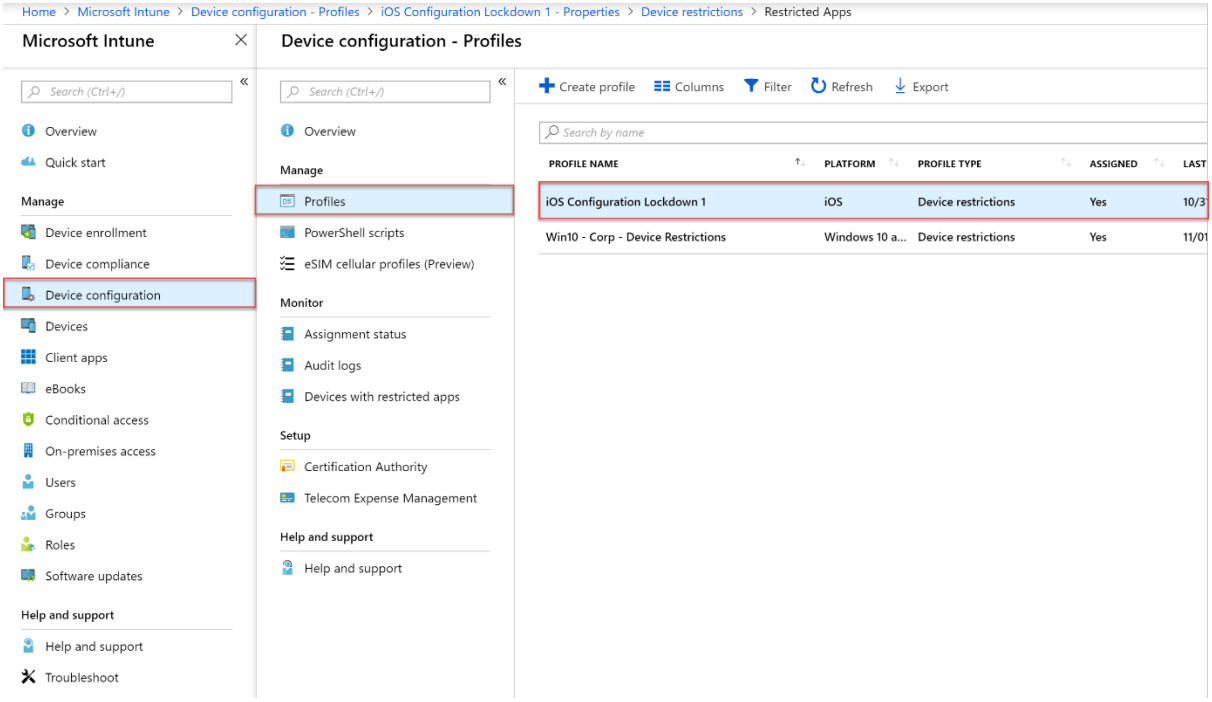
From there I will select my Intune – Company Devices group to apply this policy to.



Uninstall Restricted Applications

In this example I will be configuring a restricted application and applying it to my iOS devices. Restricted applications are applications that users are not allowed to install and run. Users are not prevented from installing a prohibited app, but if they do so, this is reported to you.

In the Intune blade select Device configuration > Profiles and then select your profile you want to edit or create a new one. In my example I will modify the profile applied to iOS devices.



In the profile select Settings > Restricted Apps, and then under type of restricted apps list select Prohibited Apps. In the next section we will configuring the application we are going to restrict

- Properties

Save Discard

* Name

iOS Configuration Lockdown 1

Description

Enter a description...

* Platform

iOS

* Profile type

Device restrictions

Settings
10 configured

Scope (Tags)
0 scope(s) selected

Dev
iOS

Selec

Ge
4 c

Pas
13

Loc
4 c

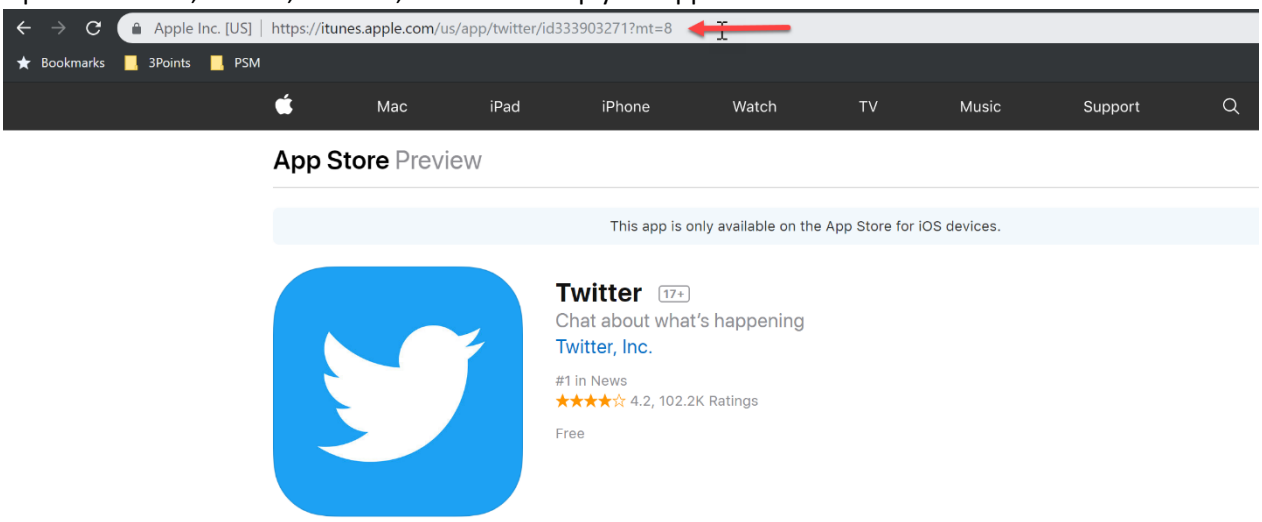
App
1 c

Bui
1 c

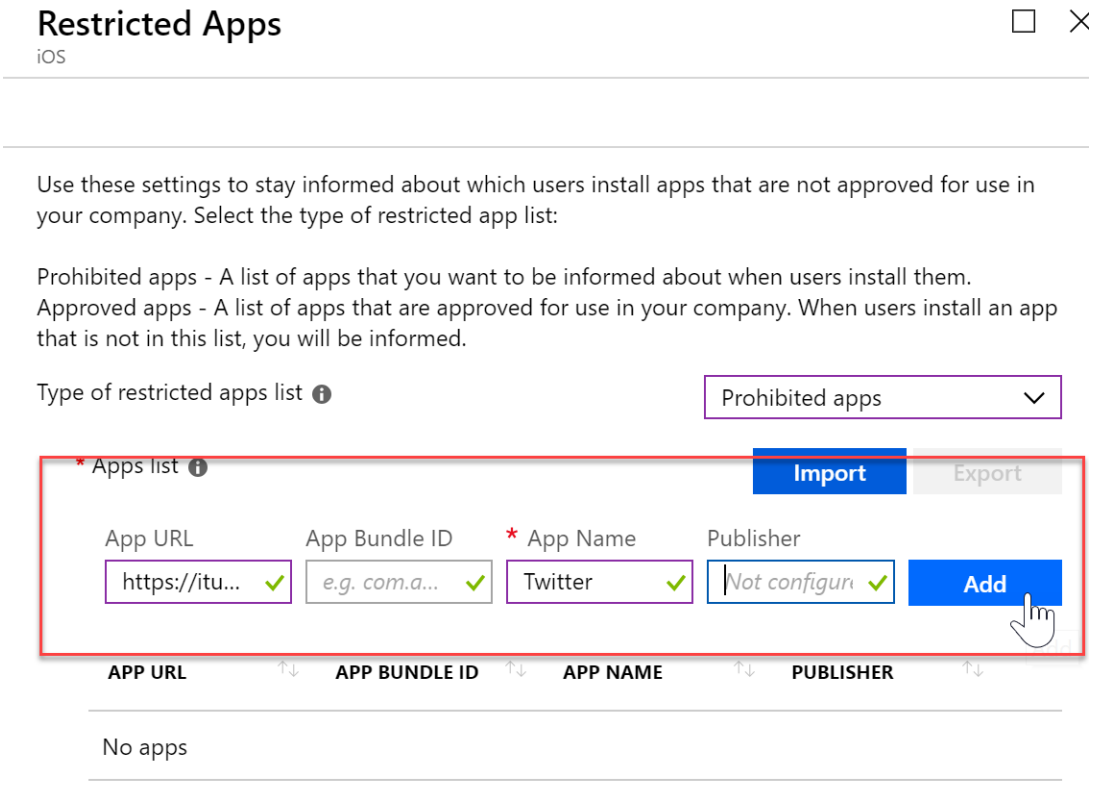
Res
2 s

Sho

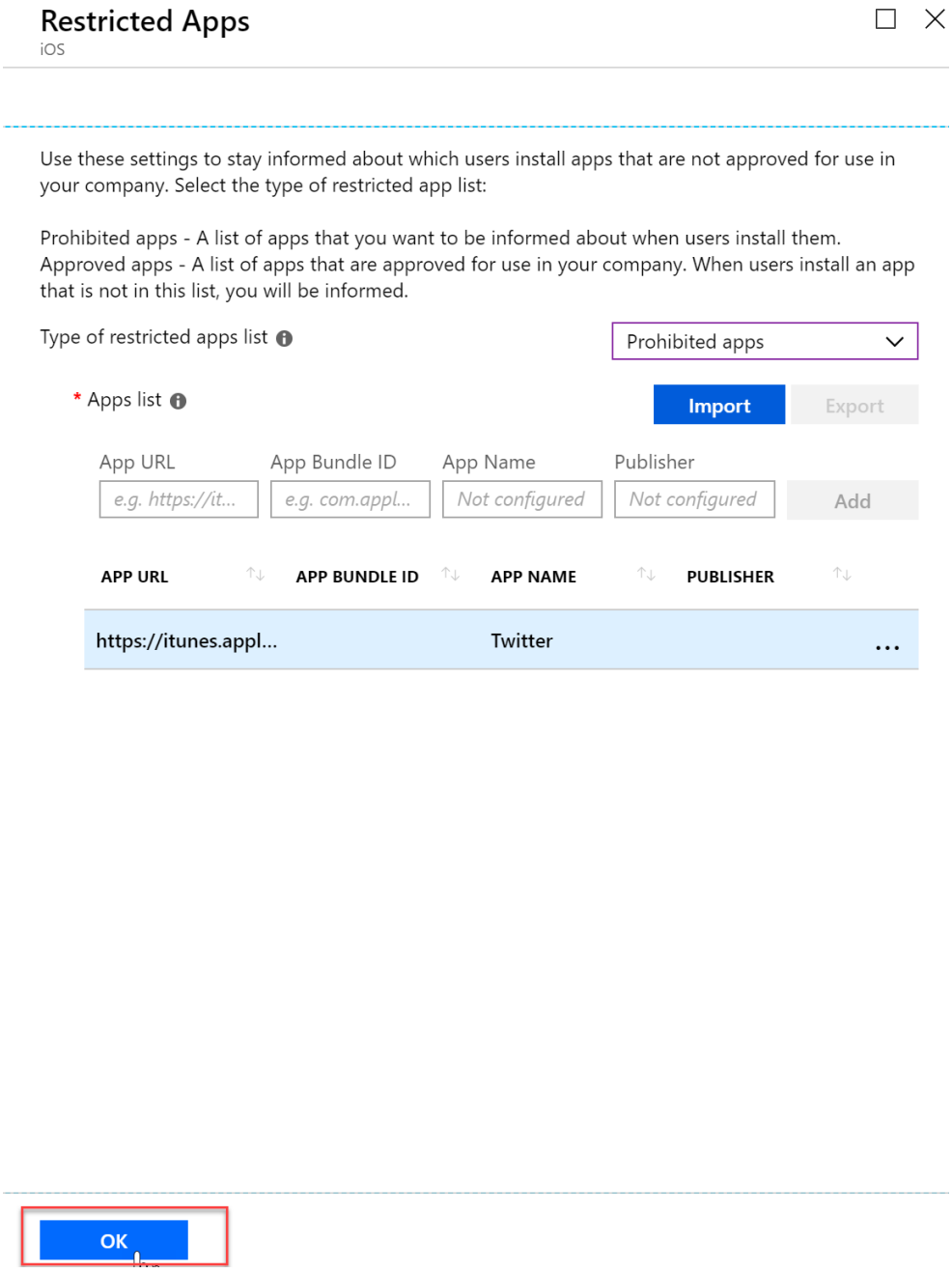
Open a tab in IE, Firefox, Chrome, etc and look up your application and note the itunes store URL



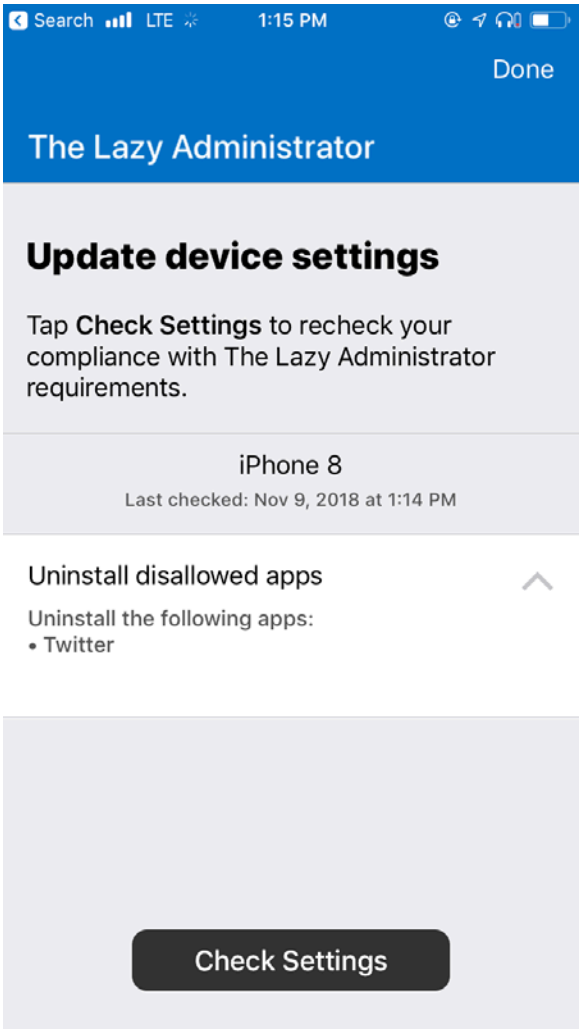
Back in the Azure Portal, past the link and then click "Add"



When you have finished your restricted apps list, click OK at the bottom and then save your profile / policy.

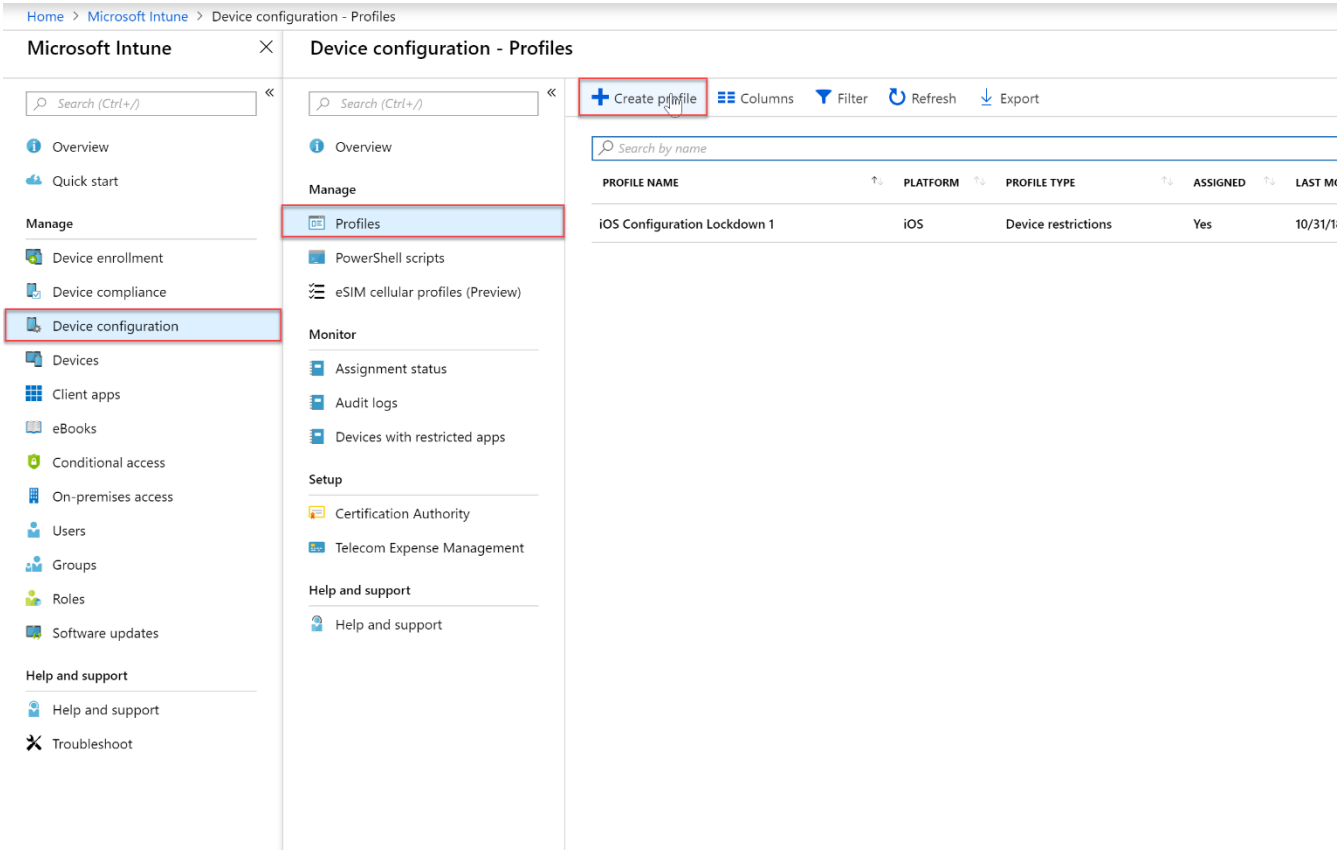


The company portal will display a message that I must uninstall the Twitter application since it is now a disallowed application.



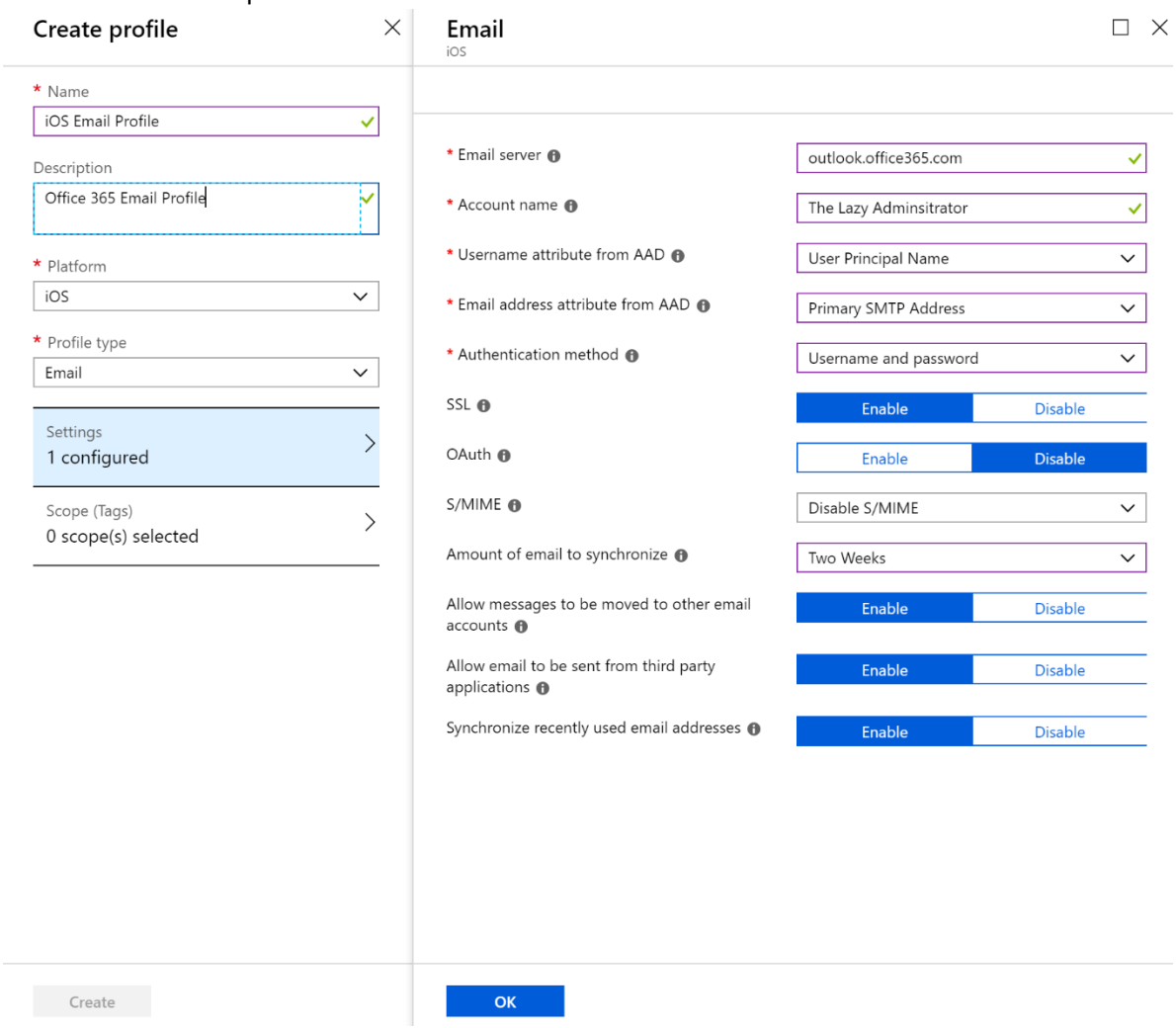
Configure Email Profiles

Expand the Intune blade and then select “Device Configuration”, “Profiles” and then click “Create Profile” to create a new device configuration profile.

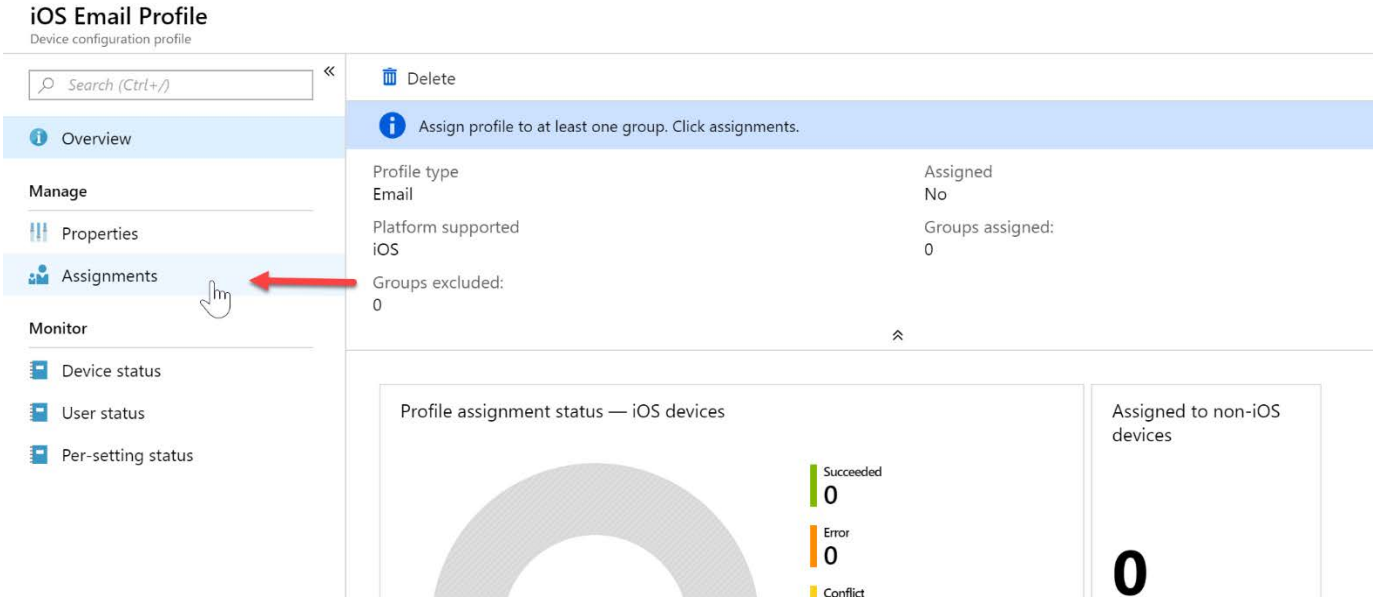


Give your new profile a name and description. Select the platform that best fits your needs. under profile type select “Email”. In the email blade configure the email profile and then press OK and then

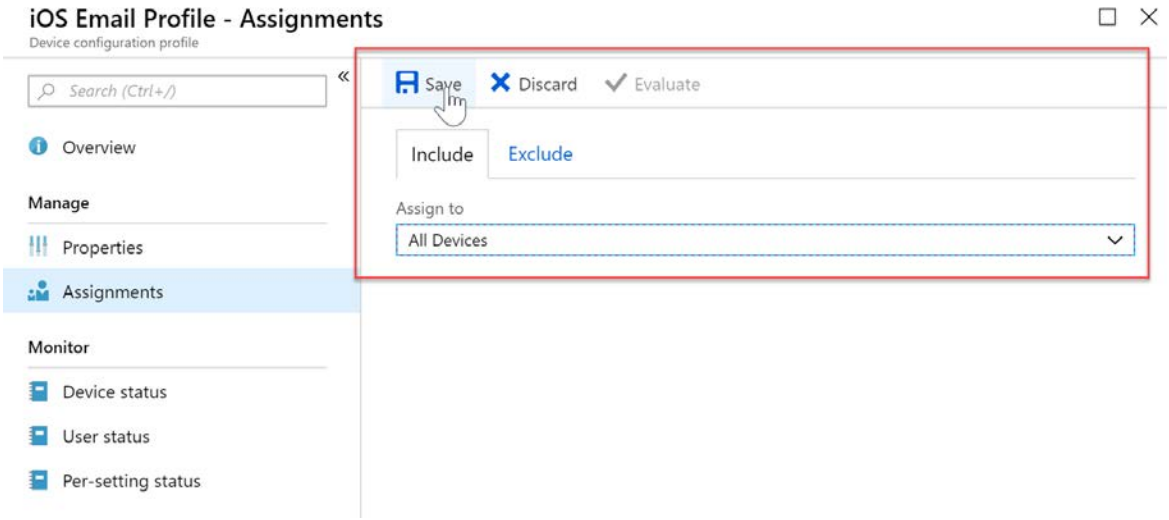
Create to create the profile.



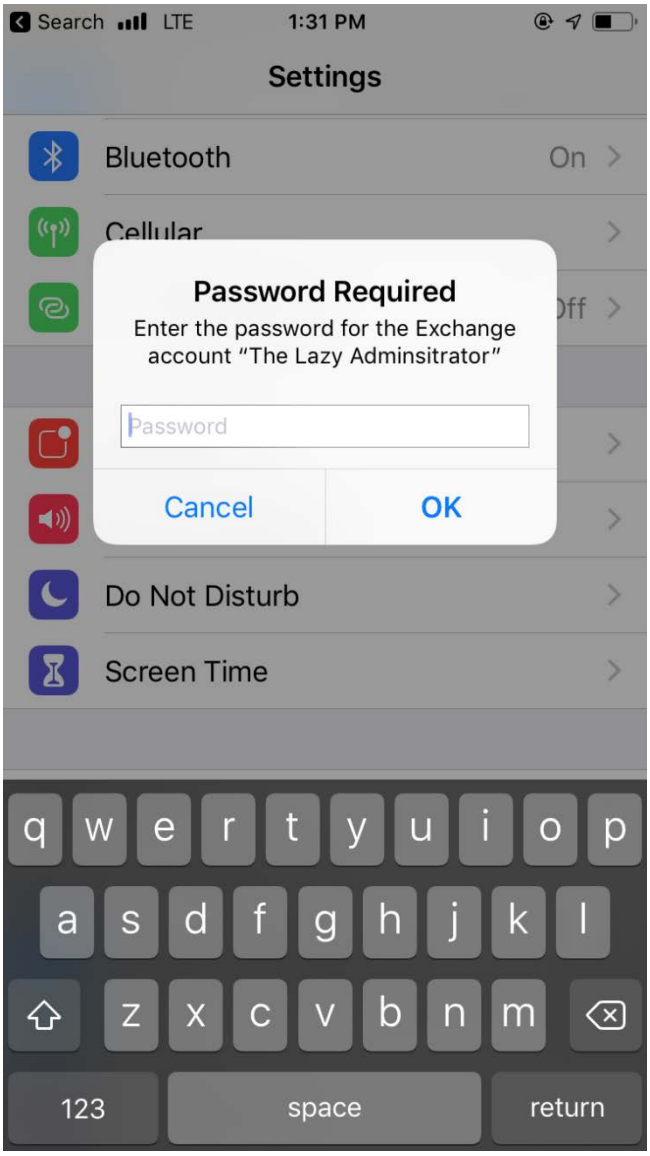
Click Assignments to assign your profile to a group or all devices.



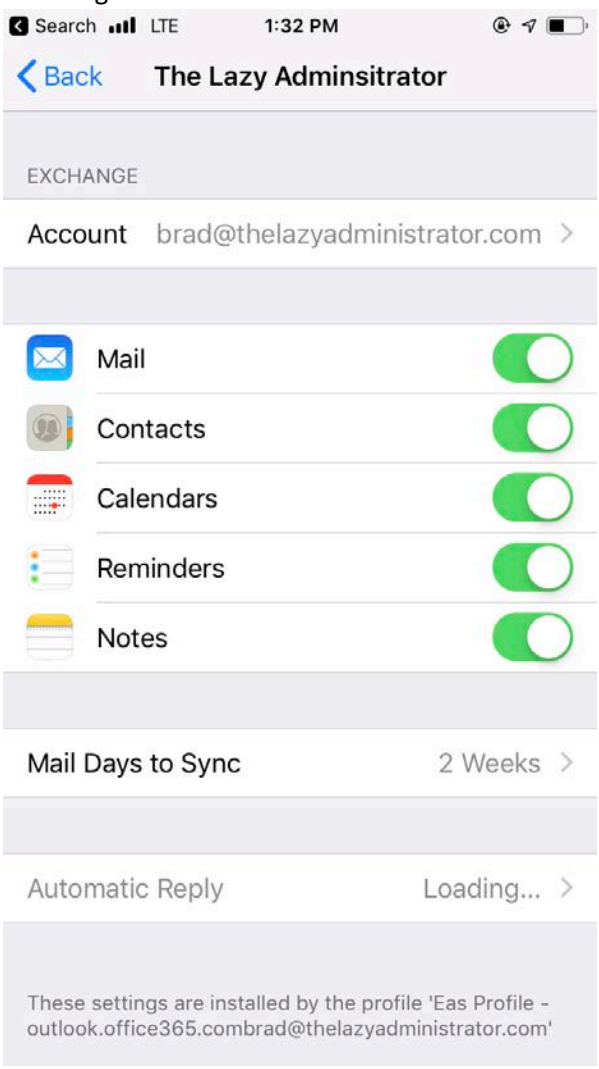
In my example, I am applying it to all devices. This will apply to all iOS devices. If there are other devices, such as Android, it will just list as not applicable.



Back on my iOS device it will automatically add the account. On an iOS device the account is in Settings > Password and Accounts. When I open the settings application it immediately asks me for my password



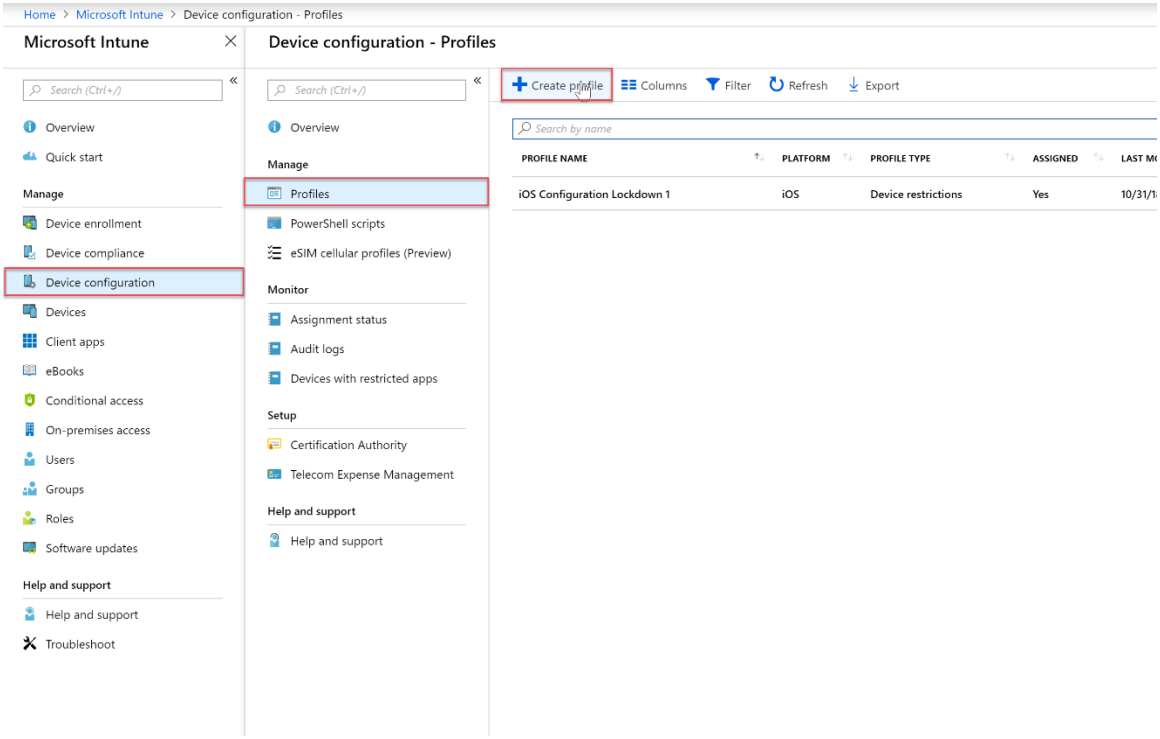
When I go to Passwords and Accounts I can see that the account was automatically added



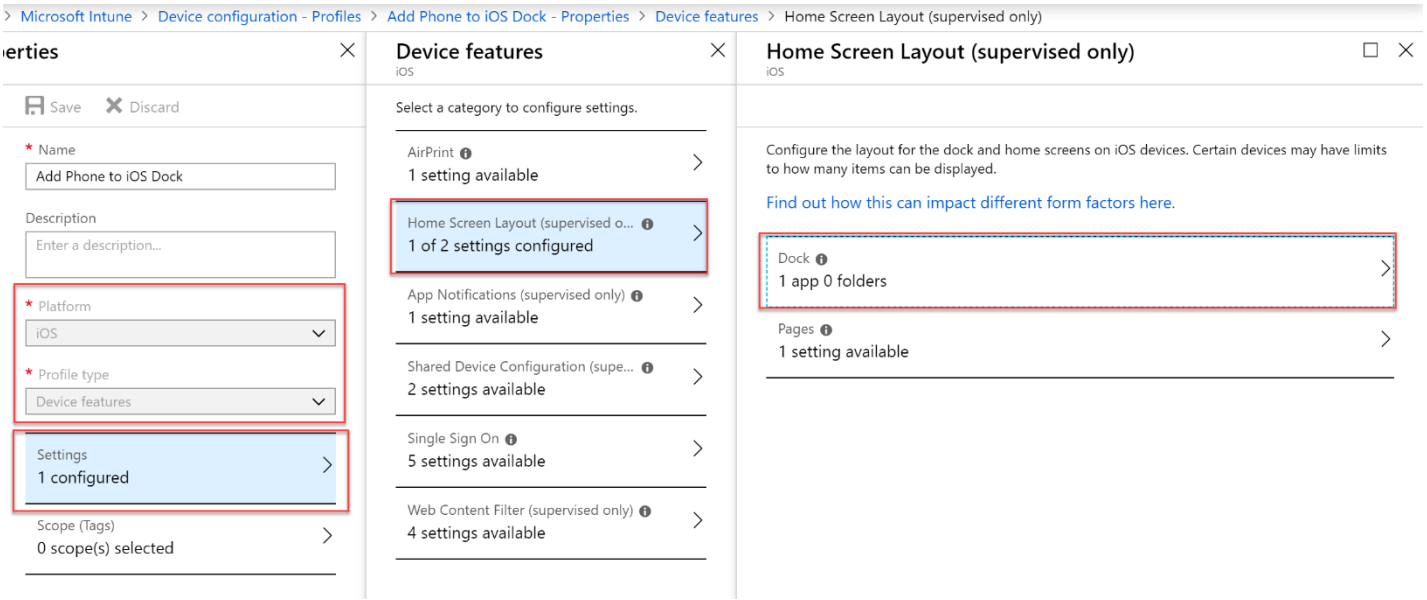
Modify iOS Dock

In this example I will be showing you how Intune can modify users home docks. I will be making a profile / policy that will ensure the default Phone application is on the dock.

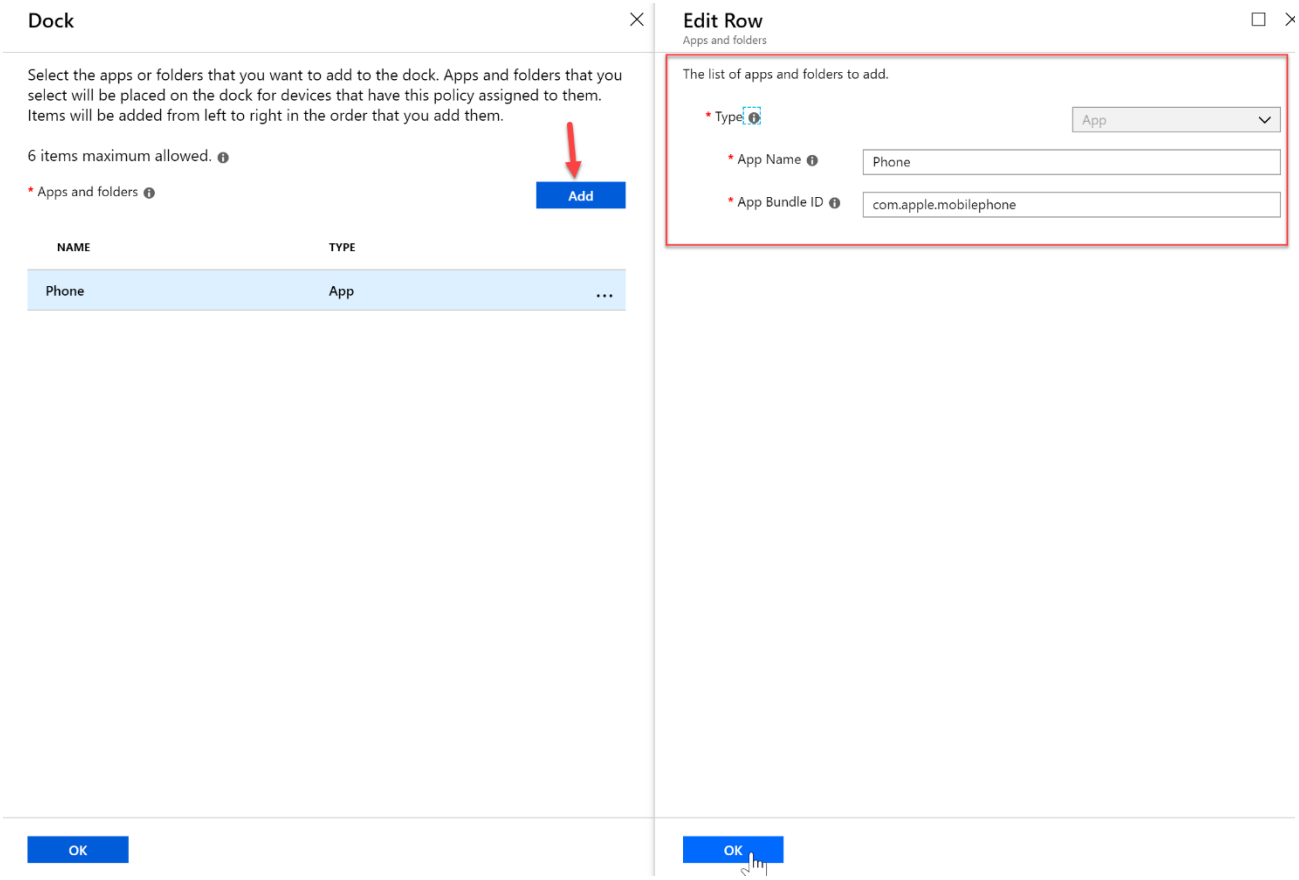
Expand the Intune blade and then select “Device Configuration”, “Profiles” and then click “Create Profile” to create a new device configuration profile.



The platform must be iOS and the Profile type is going to be “Device Features”. In the device features blade select Home Screen Layout and select Dock.



When adding a new application you will need to know the App Bundle ID. If the application is not a default iOS application you can follow these steps to obtain the bundle ID.



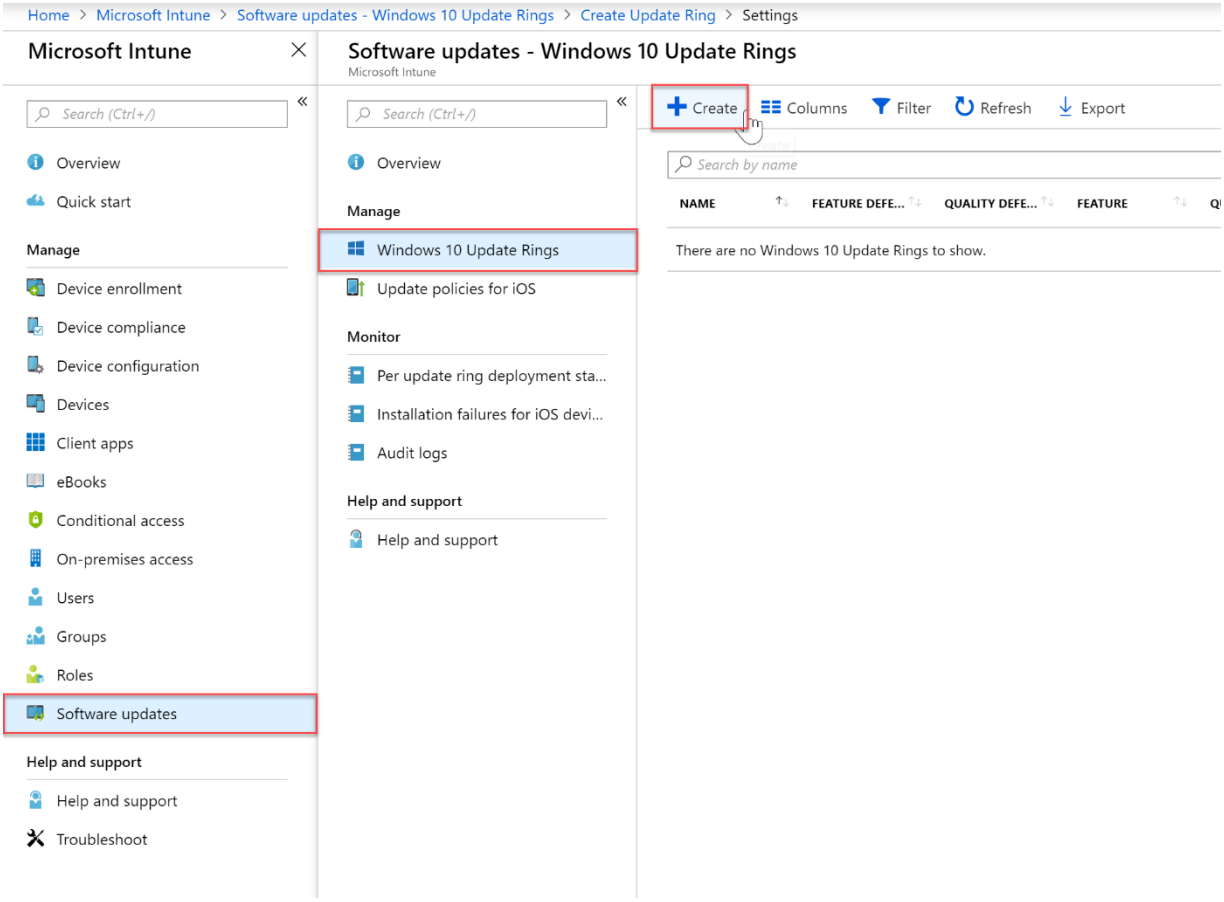
The application will automatically be placed on the dock on iOS devices once the profile gets pushed to the device.

Software Update Policies

With Software Update Policies you can control when users can update to the newest iOS, you can restrict it so they cannot download it during business hours, or how long they must wait after it has been released until they can install it. With Windows Devices you can control devices servicing channel (Insider, Semi-Annual, etc), auto updates, maintenance windows, and more.

Windows

To create a Windows Software Update policy first select the Intune blade > Software Updates > Windows 10 Update Rings, and then “Create”



Give your policy a name and description. In the Settings you can begin configuring the policy settings. Below I am putting my devices on the Windows Insider update ring. They will also get Microsoft product updates, and drivers. You can configure a deferral period which may be recommended for a production environment. In the User Experience Settings administrators can configure maintenance

hours, in my environment I am auto installing the updates anywhere from 3PM to 11PM.

Create Update Ring

* Name

Company Devices - Windows 10

Description

Company devices on Windows Insider

Settings

Configure

Scope (Tags)

0 scope(s) selected

Set

Wind

Upd

Servi

* Mi

* Wi

* Qu

* Fea

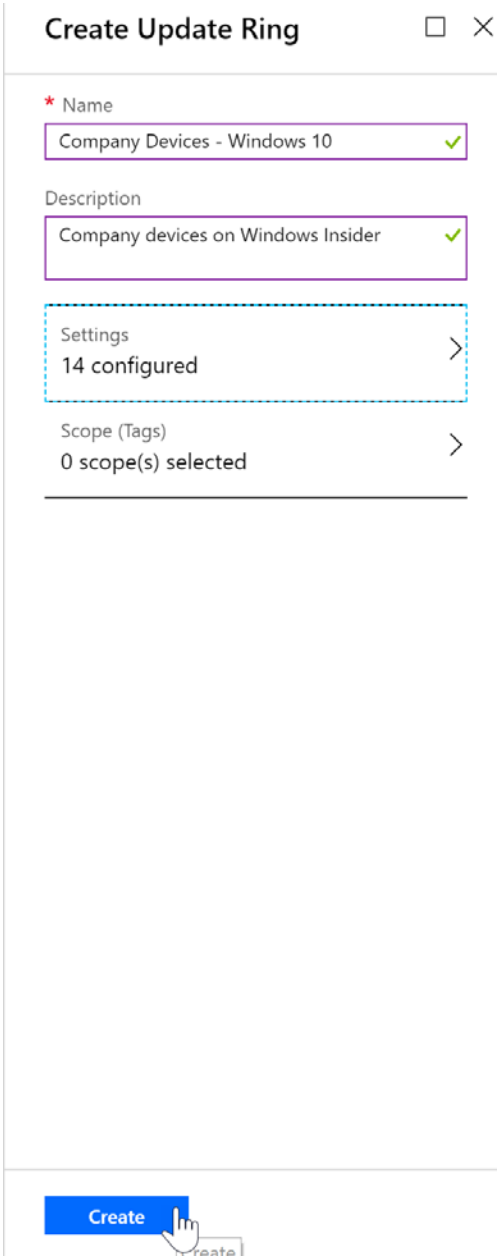
* Set

days

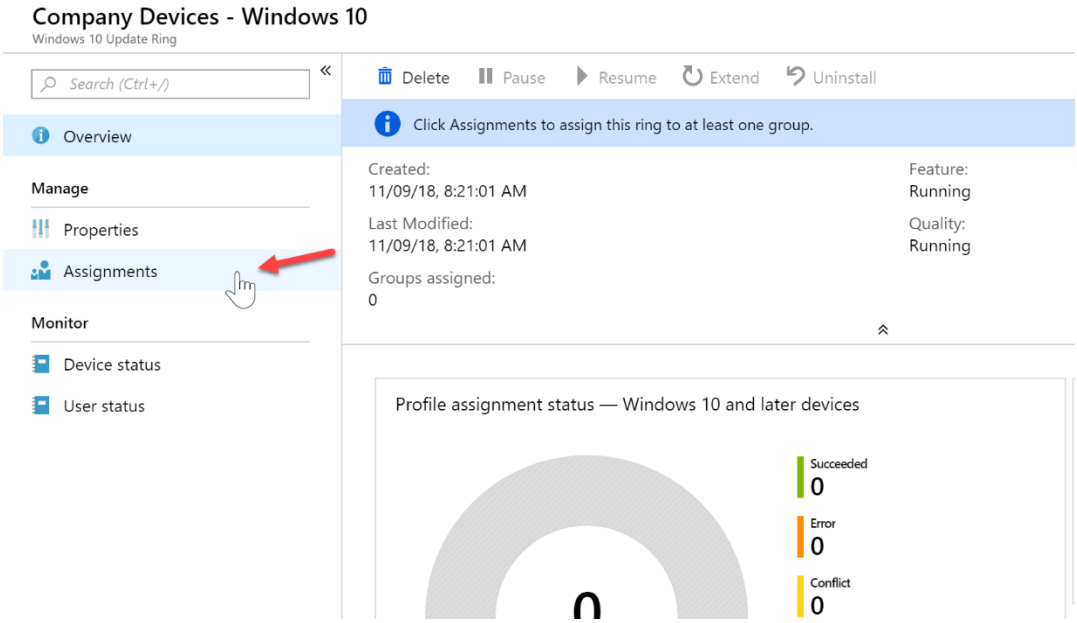
Use

Auto

Once you have the policy settings configured to your needs you can add scope tags and then press “Create” to create the policy.

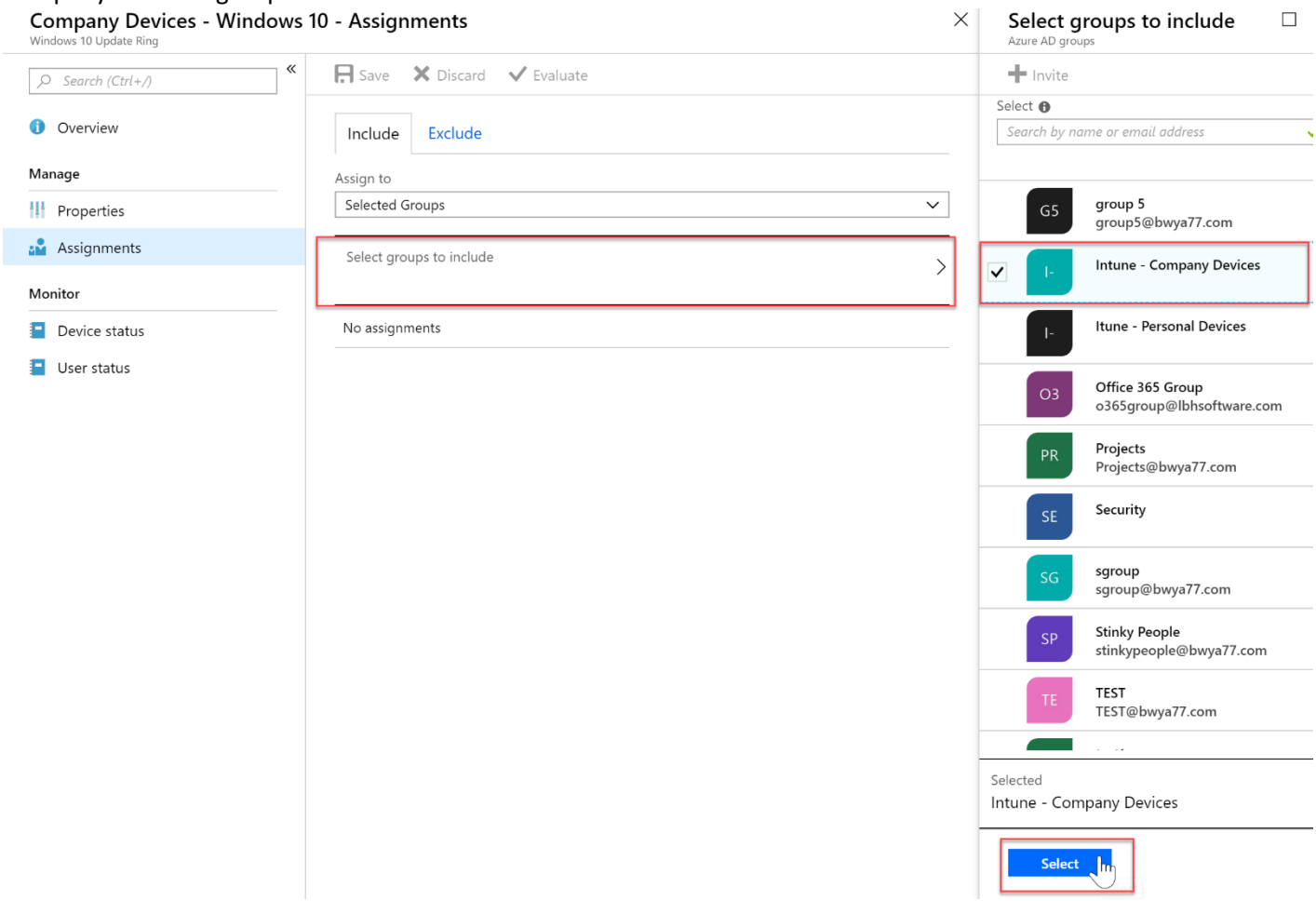


Once the policy has been created, click “Assignments” to assign the policy to devices or groups.

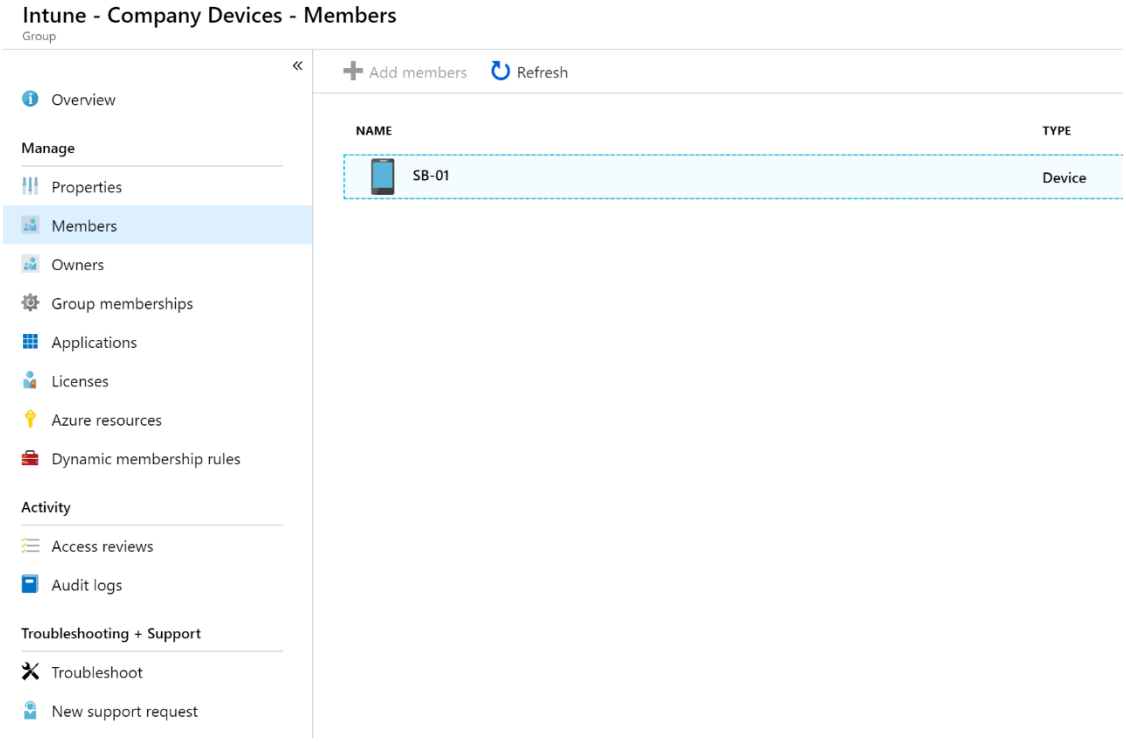


You can apply to all devices using the “Assign to” drop down, or in my case I will apply it to one of my dynamic groups I created earlier by click the “Select groups to include” and then selecting my “Intune –

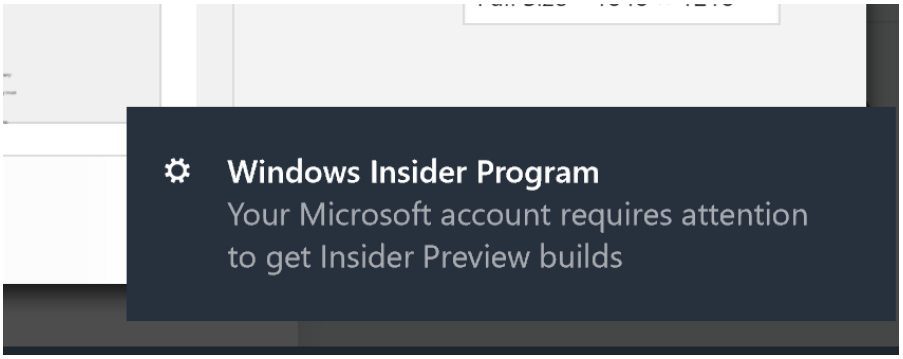
Company Devices” group.



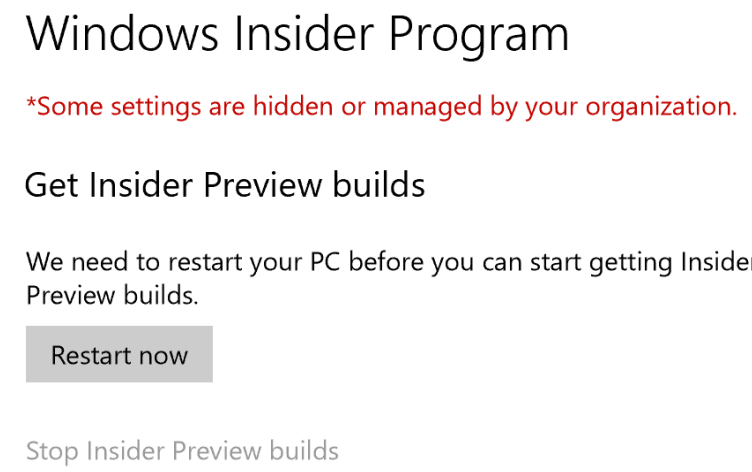
In my Group settings I can see that my windows machine SB-01 is a member of that group so I can be sure that the policy will be applied to that machine.



A few minutes later, that machine gets a toast notification regarding my build change

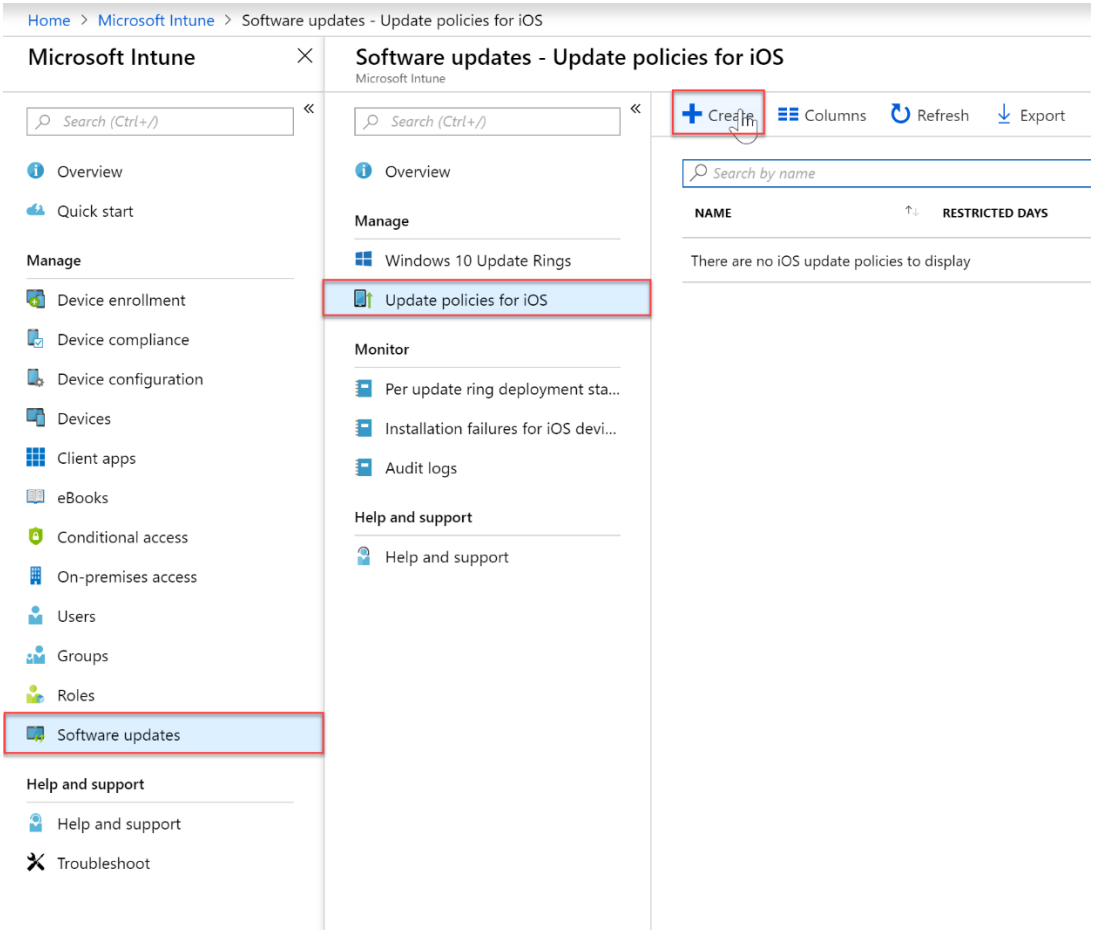


In the Settings application on the device I can see that my computer is pending a reboot. After the reboot I will be on the correct build.

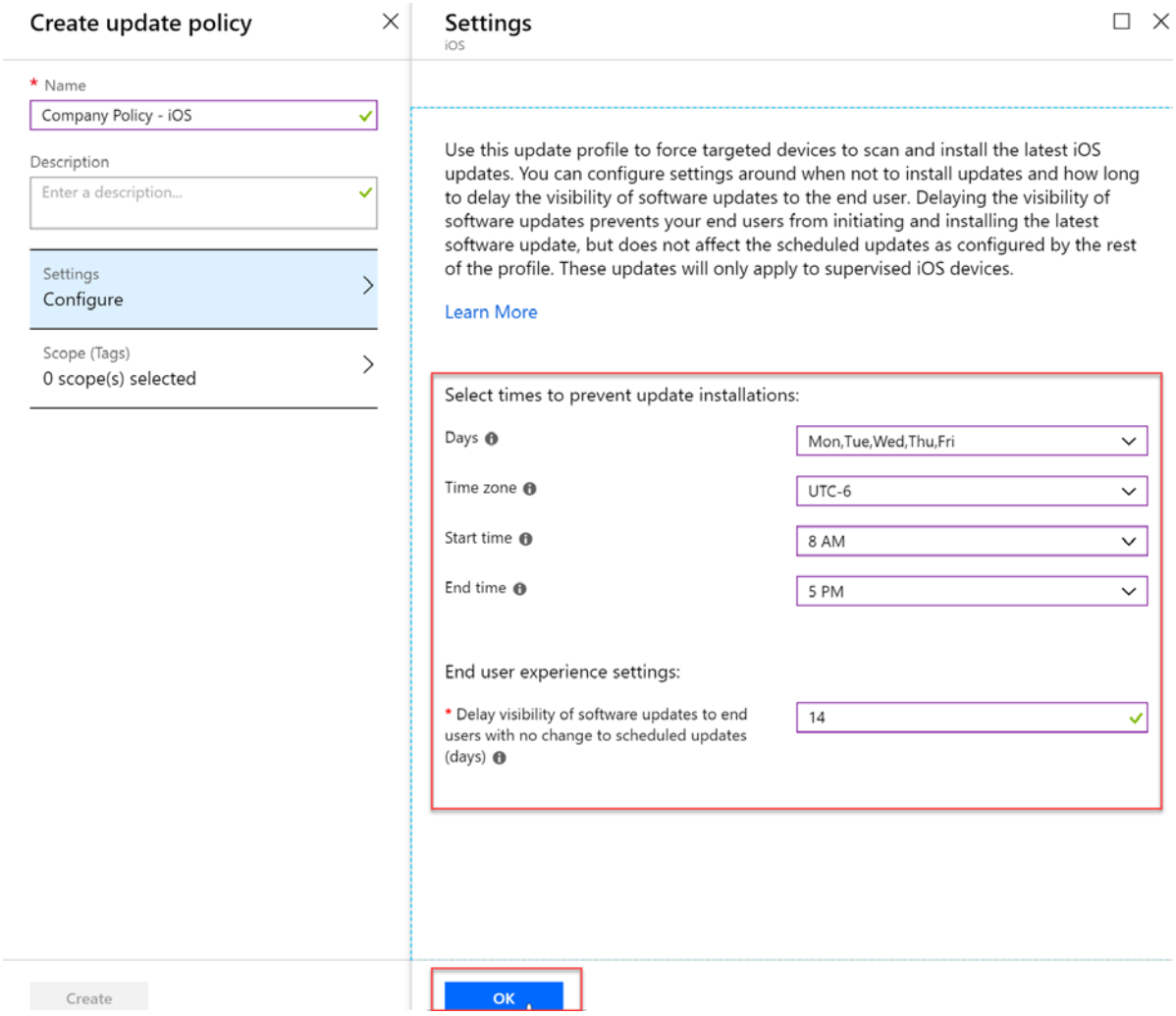


iOS

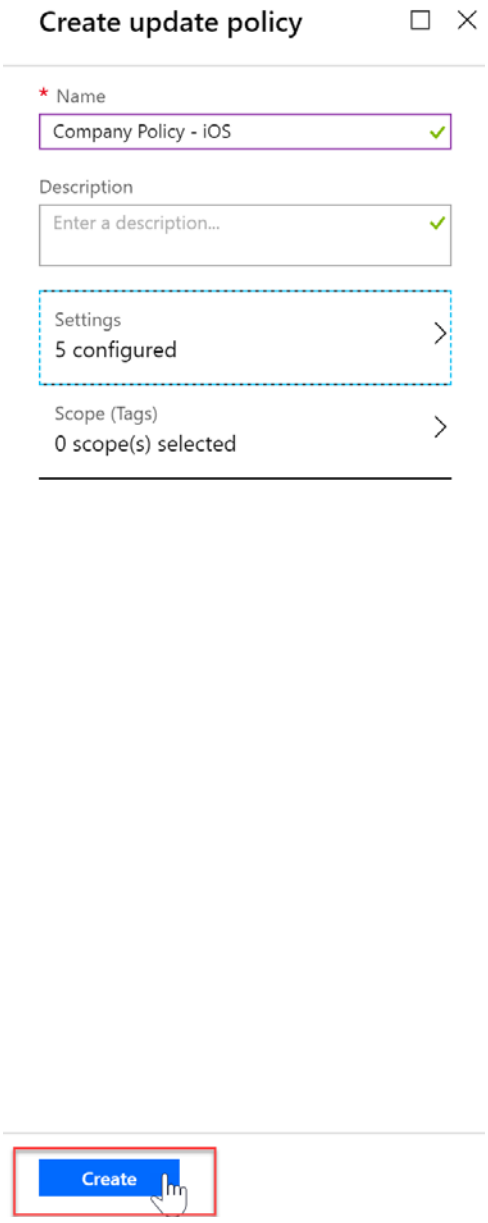
To create a Windows Software Update policy first select the Intune blade > Software Updates > Update Policies for iOS, and then “Create”



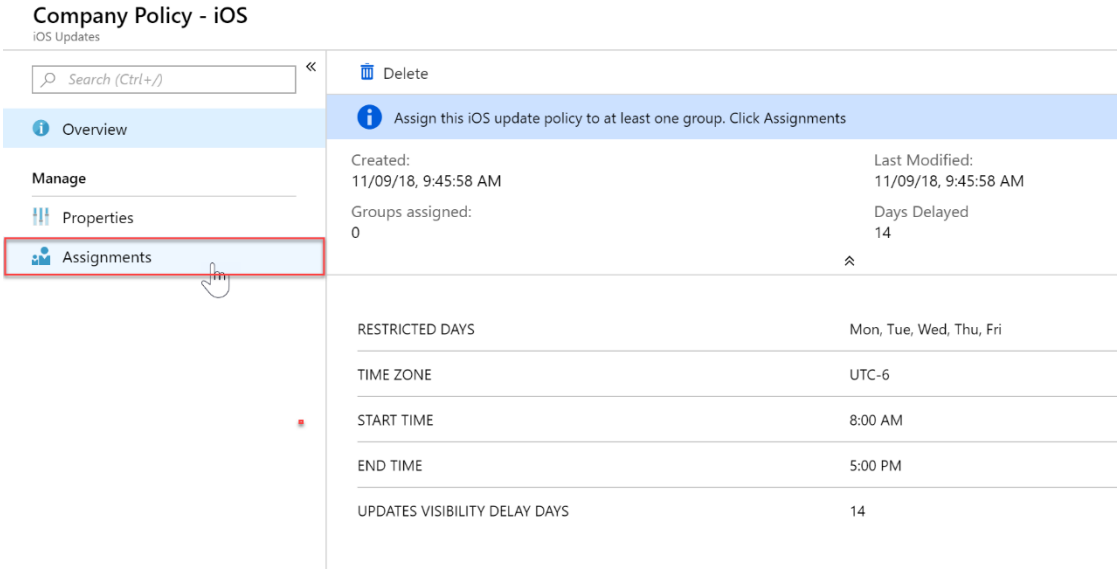
Give you policy a name and a description and then configure your settings. In my example I am disabling users from updating to the newest iOS during the work week and during work hours. iOS updates are also deferred for 2 weeks.



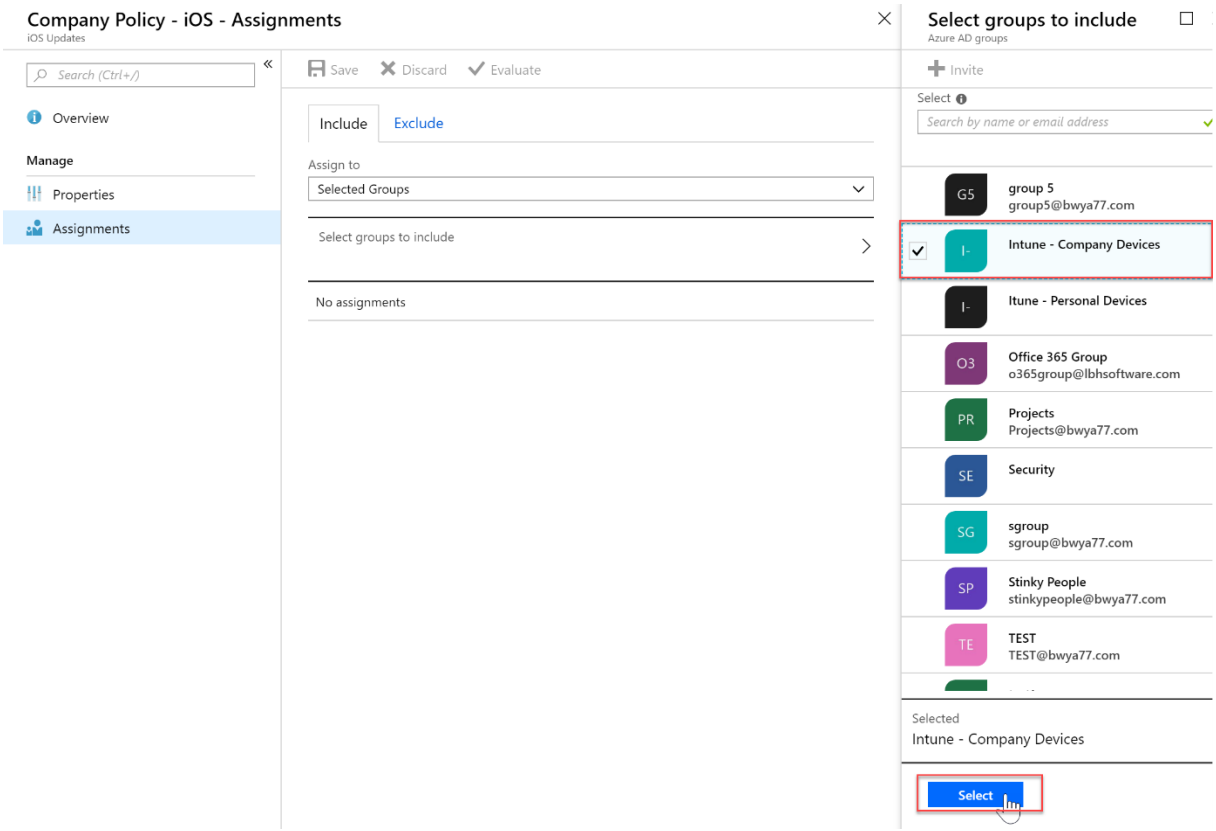
Once you have your policy set to your liking, press the Create bottom of the blade



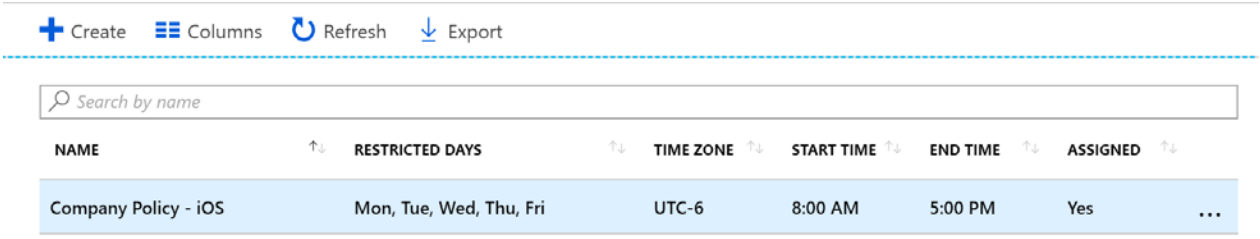
Click “Assignment” to assign your policy to groups or devices.



In my example I will apply this policy to Company Devices only.



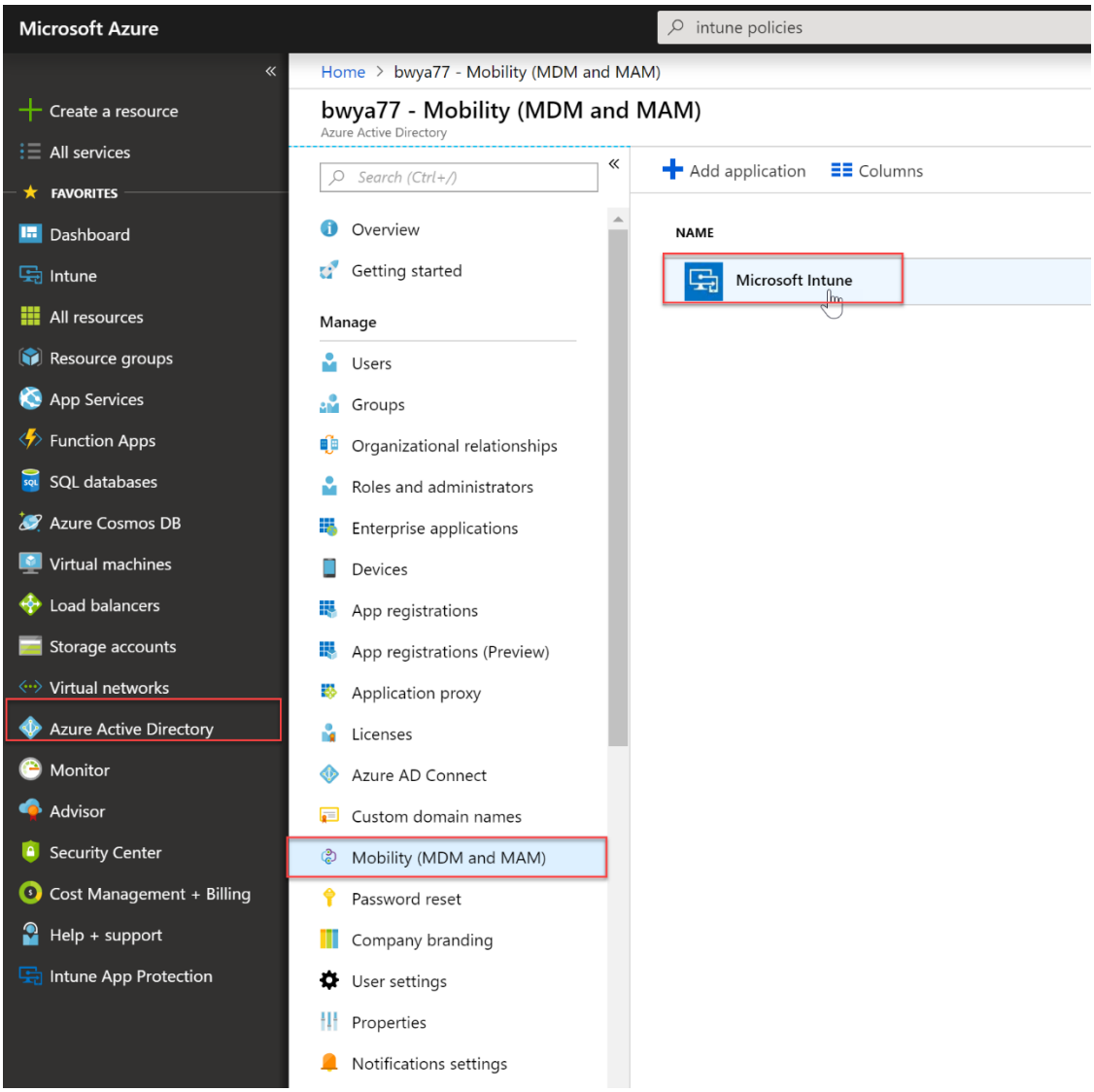
You will now see your newly created policy



Enable Windows 10 automatic enrollment

Automatic enrollment lets users enroll their Windows 10 devices in Intune. To enroll, users add their work account to their personally owned devices or join corporate-owned devices to Azure Active Directory. In the background, the device registers and joins Azure Active Directory. Once registered, the device is managed with Intune.

In the Azure Portal select Azure Active Directory and then click “Mobility (MDM and MAM) and select “Microsoft Intune”

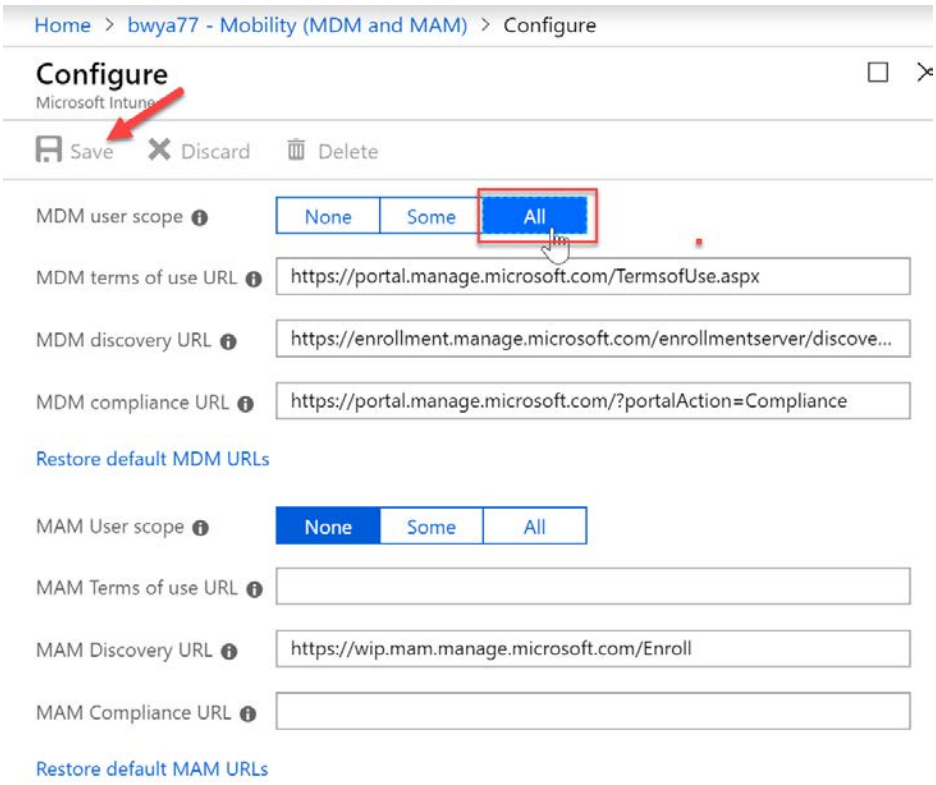


Configure MDM User scope. Specify which users’ devices should be managed by Microsoft Intune. These Windows 10 devices can automatically enroll for management with Microsoft Intune.

None – MDM automatic enrollment disabled

Some – Select the Groups that can automatically enroll their Windows 10 devices

All – All users can automatically enroll their Windows 10 devices



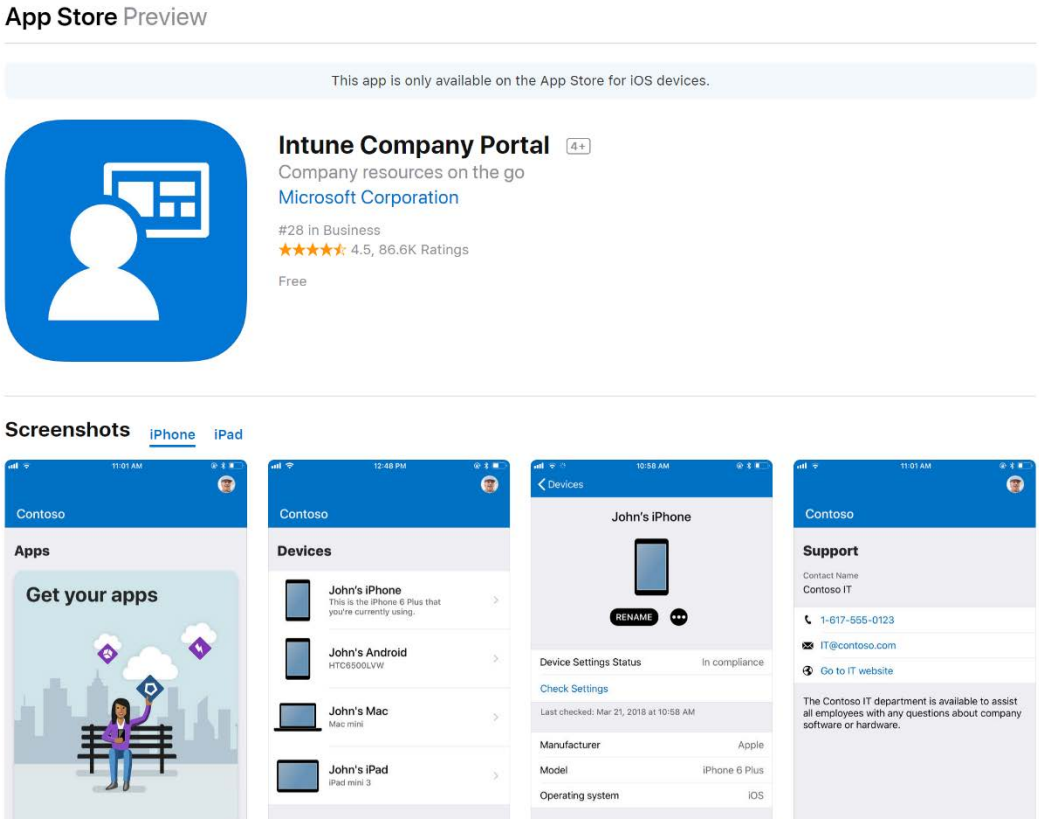
Important

If both MAM user scope and automatic MDM enrollment (MDM user scope) are enabled for a group, only MAM is enabled. Only MAM is added for users in that group when they workplace join personal device. Devices are not automatically MDM enrolled.

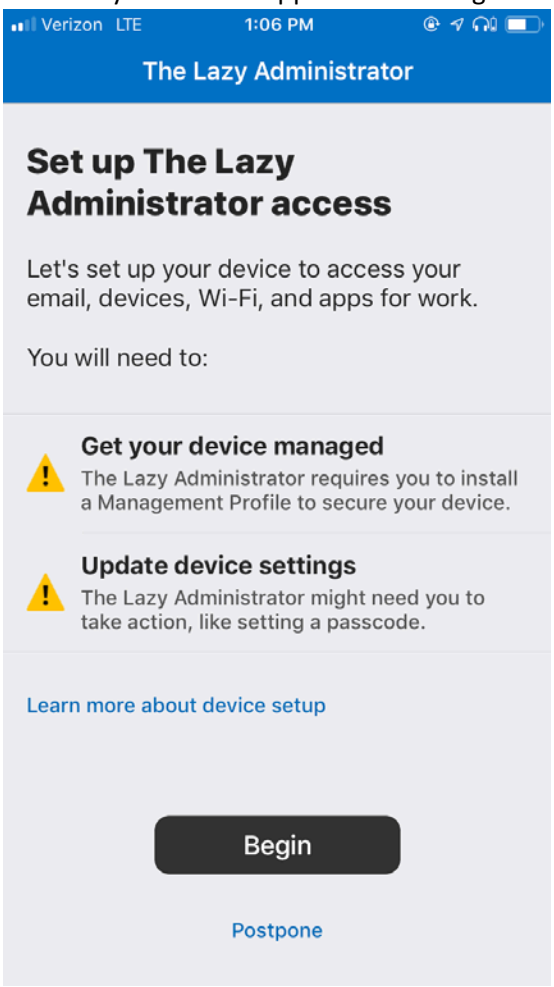
Enroll Devices into Intune

iOS

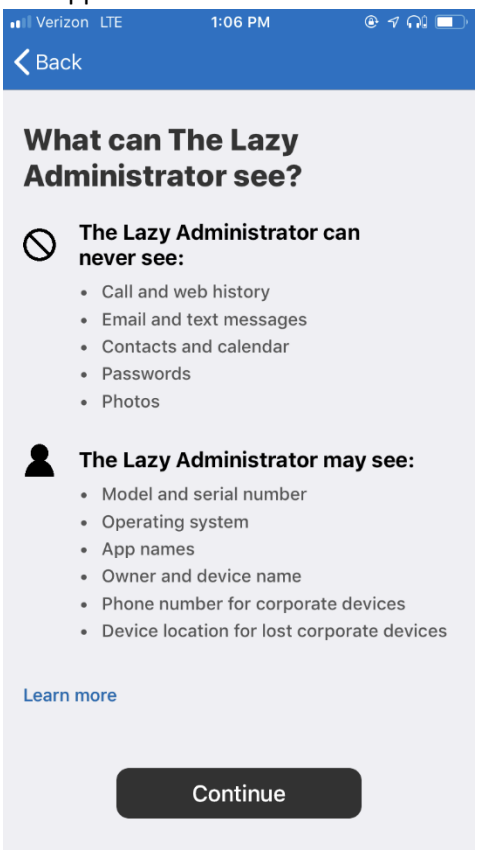
Have your users download and install the Company Portal from the iOS App Store



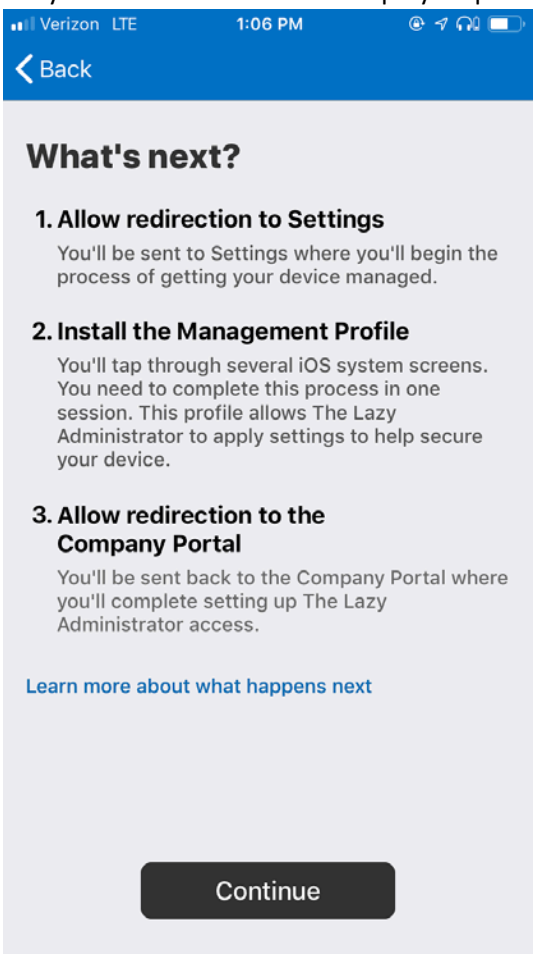
Once they launch the application and sign in they can begin to Intune enrollment process



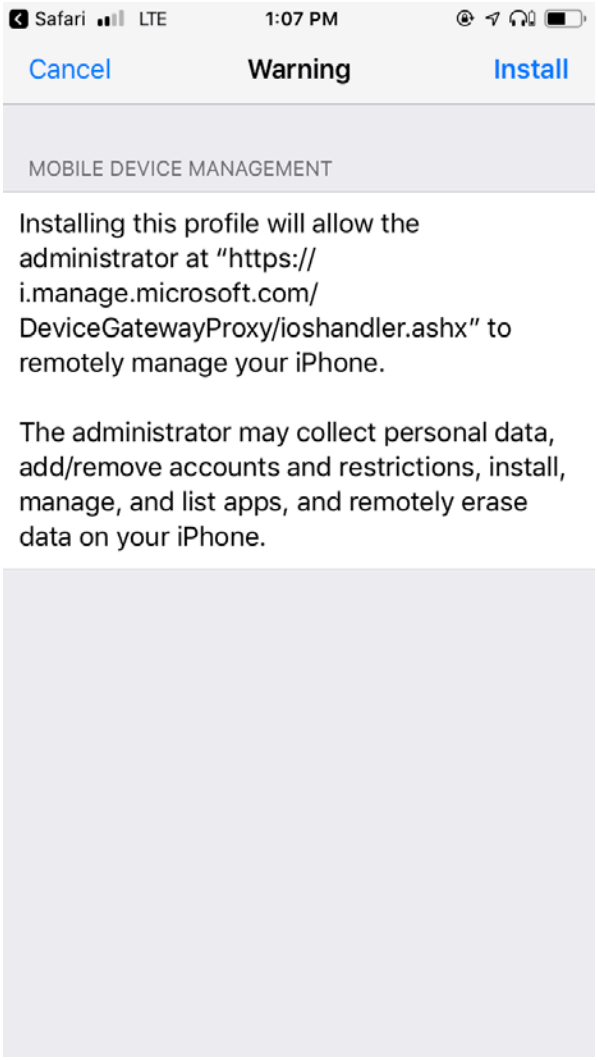
The application will show the end user the permissions the IT Administrator will have on the device.

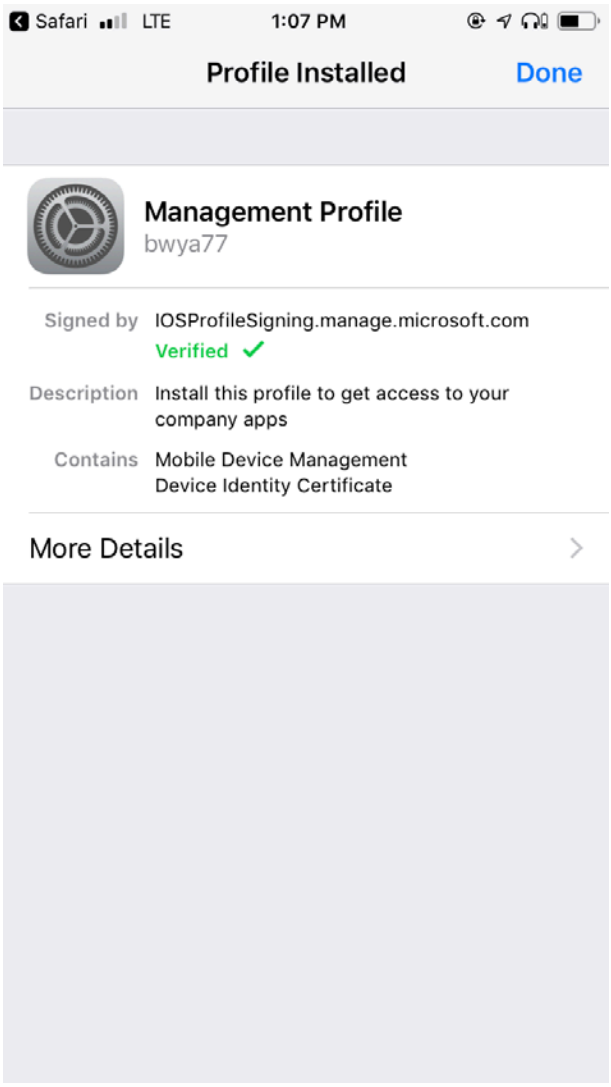


They will then be shown the step by step instructions that the application will take to enroll the device

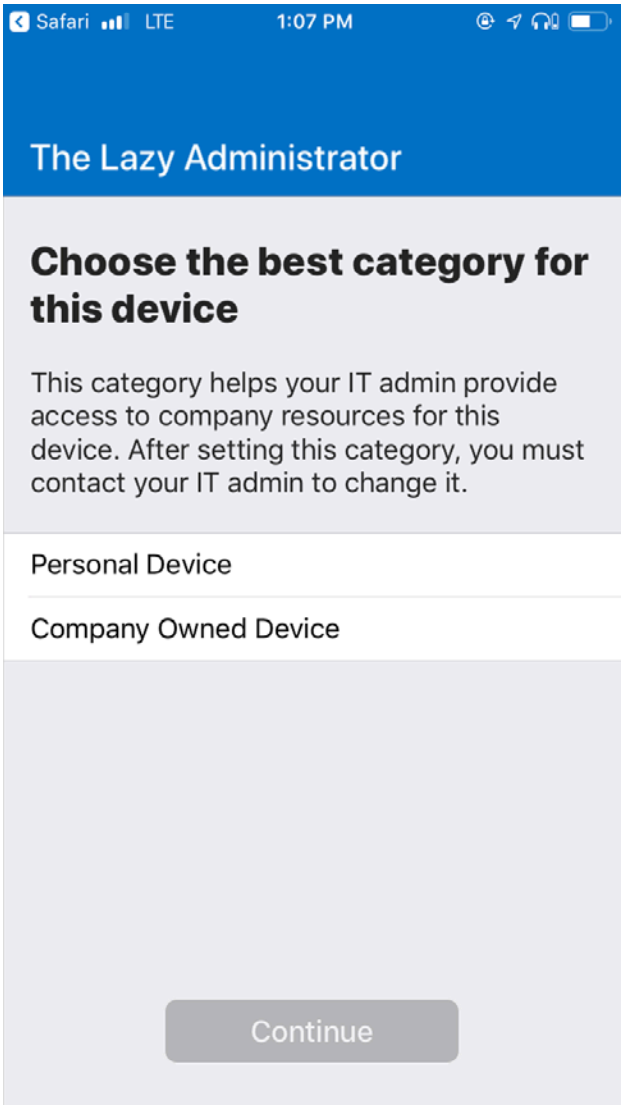


An MDM iOS Profile will be installed on the device

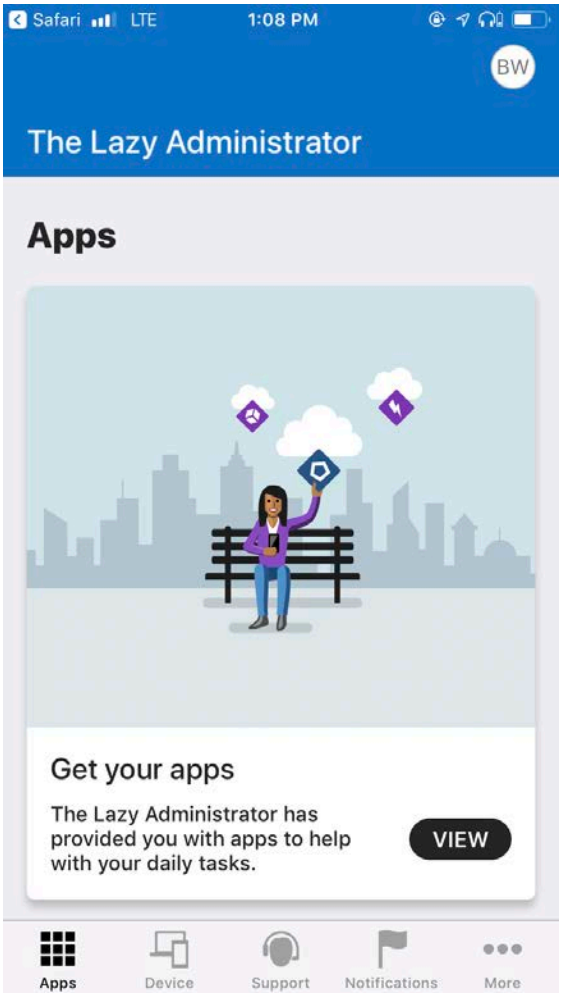



Safari LTE 1:07 PM
Profile Installed
Done
Management Profile
bwya77
Signed by
IOSProfileSigning.manage.microsoft.com
Verified
Description
Install this profile to get access to your company apps
Contains
Mobile Device Management
Device Identity Certificate
More Details

And finally, the user will select a category (set up earlier) to put their device under. This allows for a better administrator management experience



The Company Portal will show the end users any available apps you have granted them, all of their Intune devices, support options we set up previously and notifications.



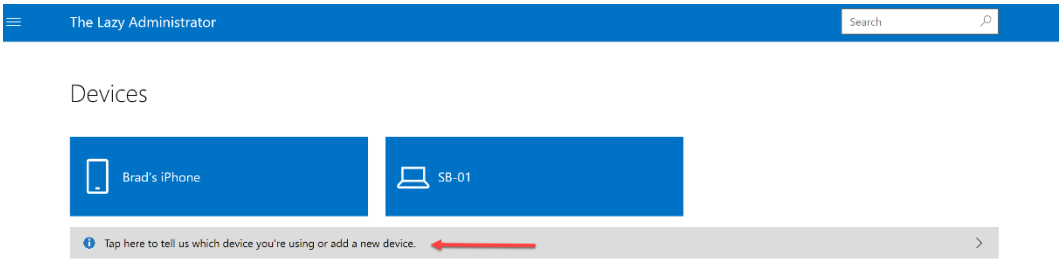
Windows

Windows users can install the Company Portal from the Windows store, use the web Company Portal, or use the Windows Settings app to enroll their Windows devices into Intune.

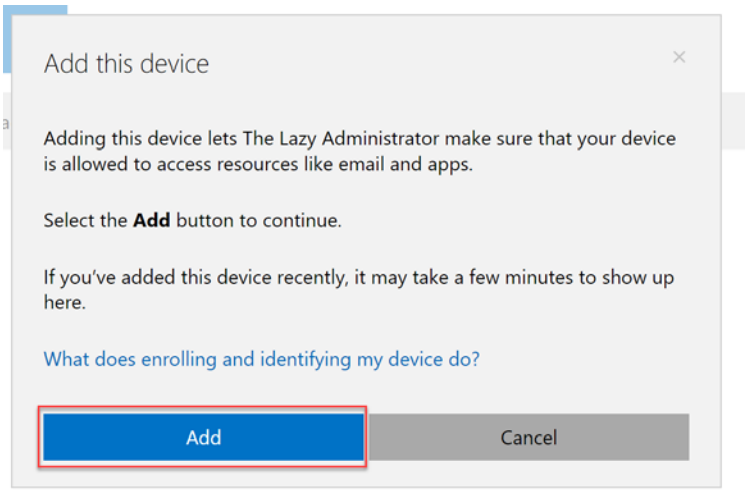
Online Portal

Navigate to the online Company Portal at https://portal.manage.microsoft.com

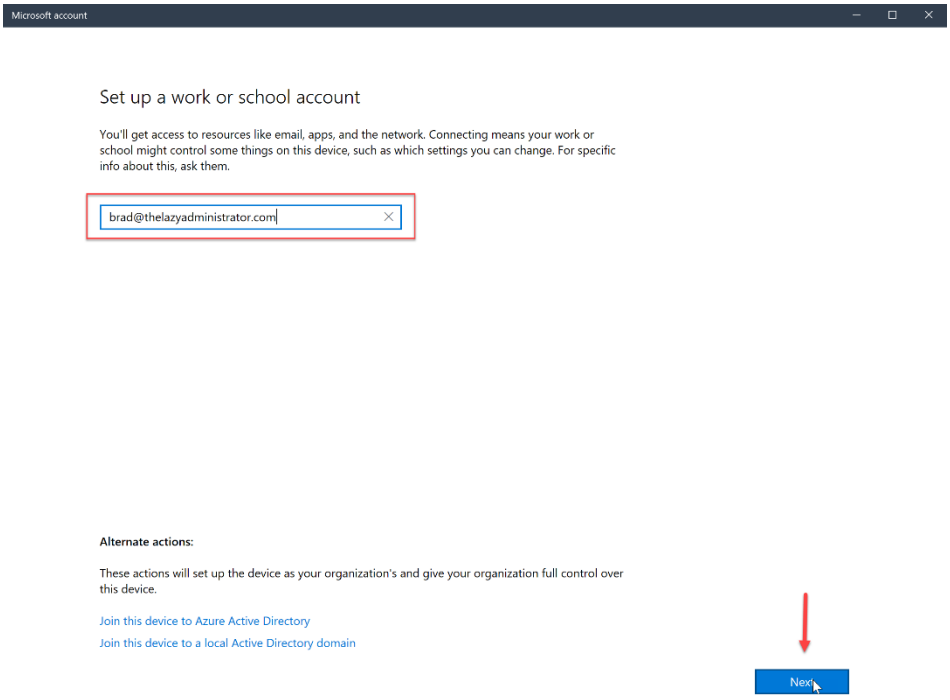
Once the user signs into the Company Portal they can add a device under Devices



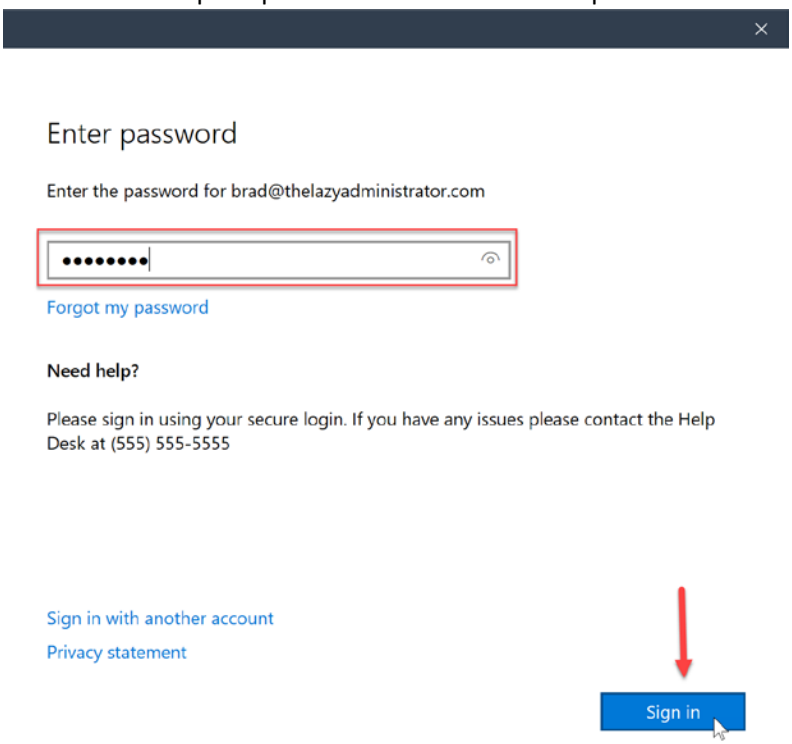
Click “Add”



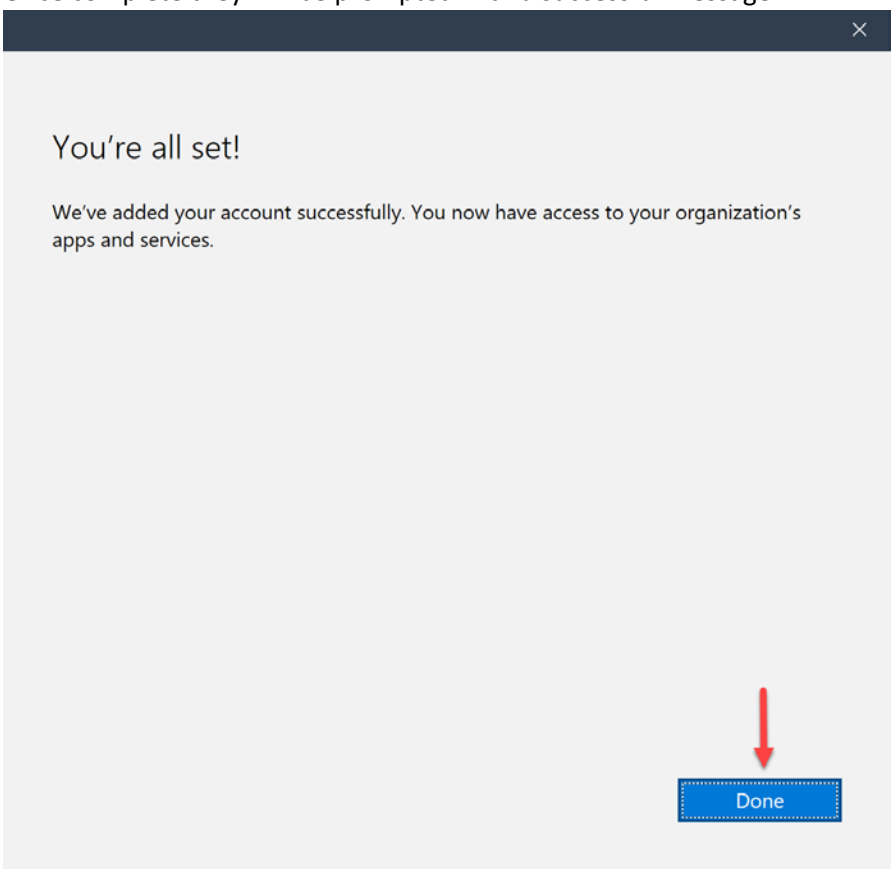
Have them sign in and then press Next



The user will be prompted to enter their account password and then press “Sign In”

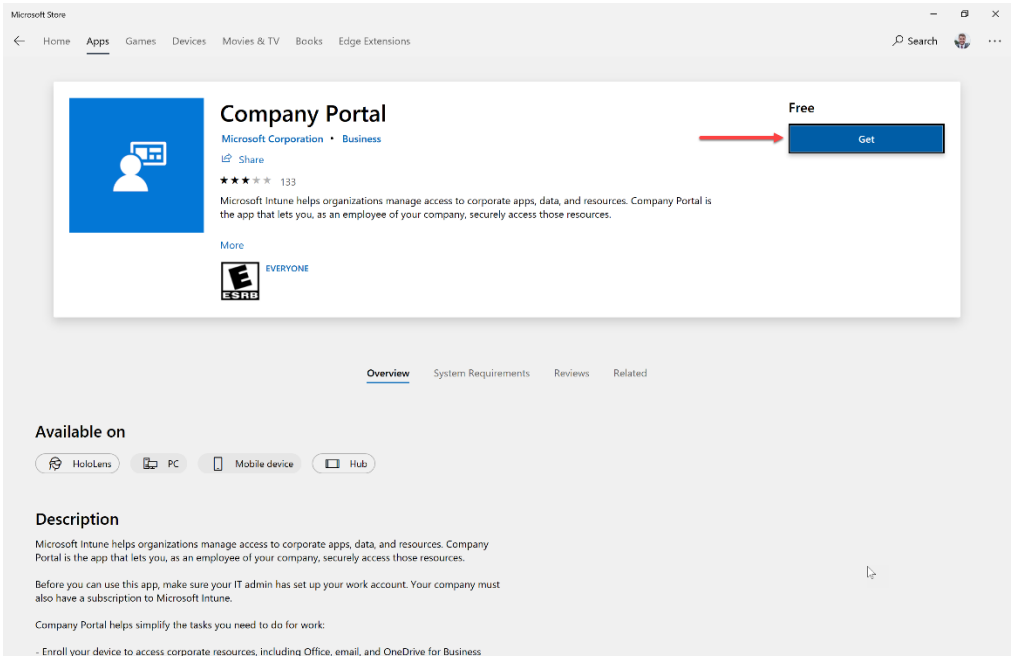


Once complete they will be prompted with a successful message.

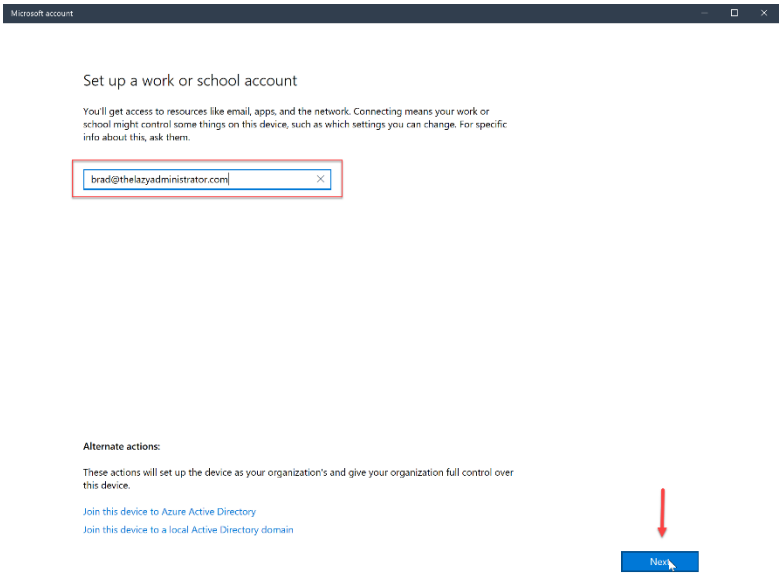


Microsoft Store App

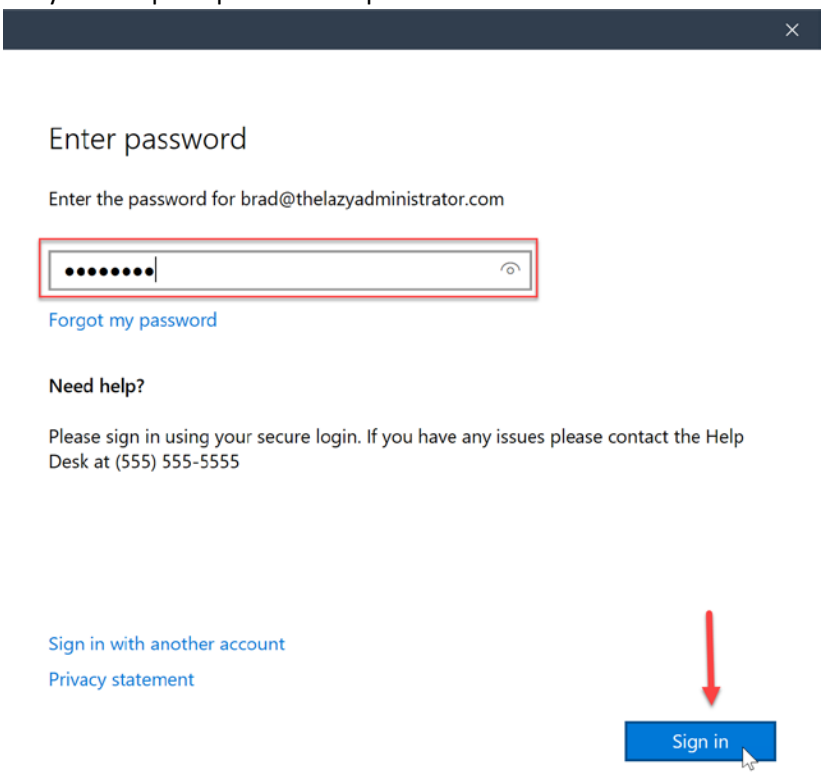
Have your users download and install the Company Portal application from the Microsoft Store



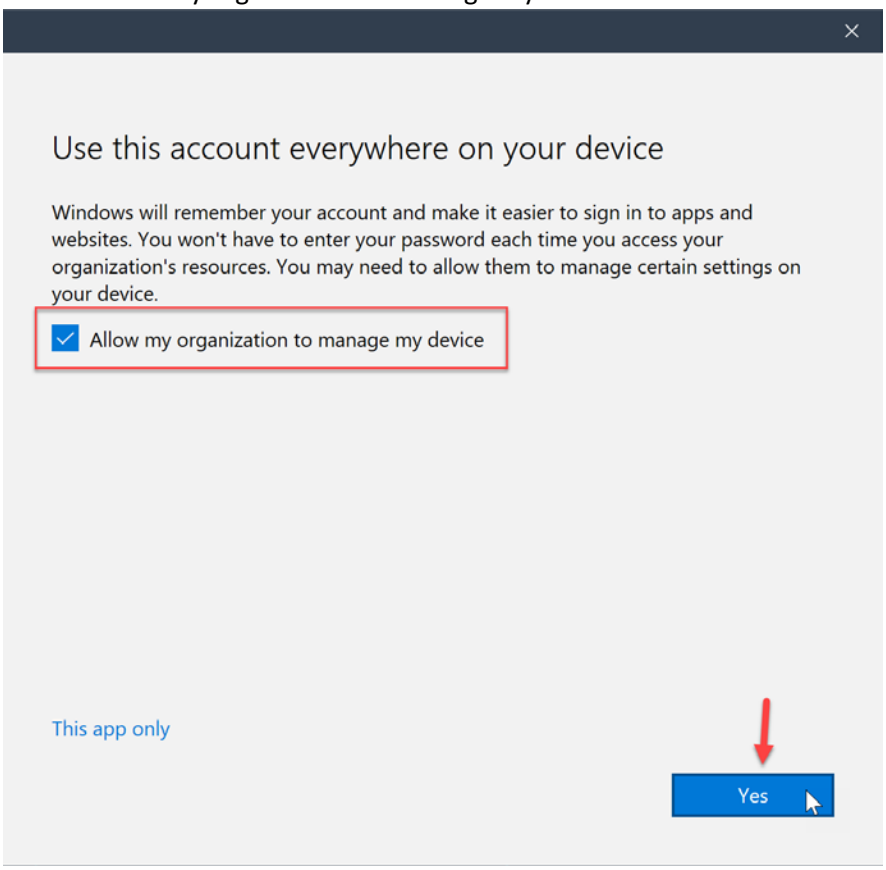
They will be prompted to sign in



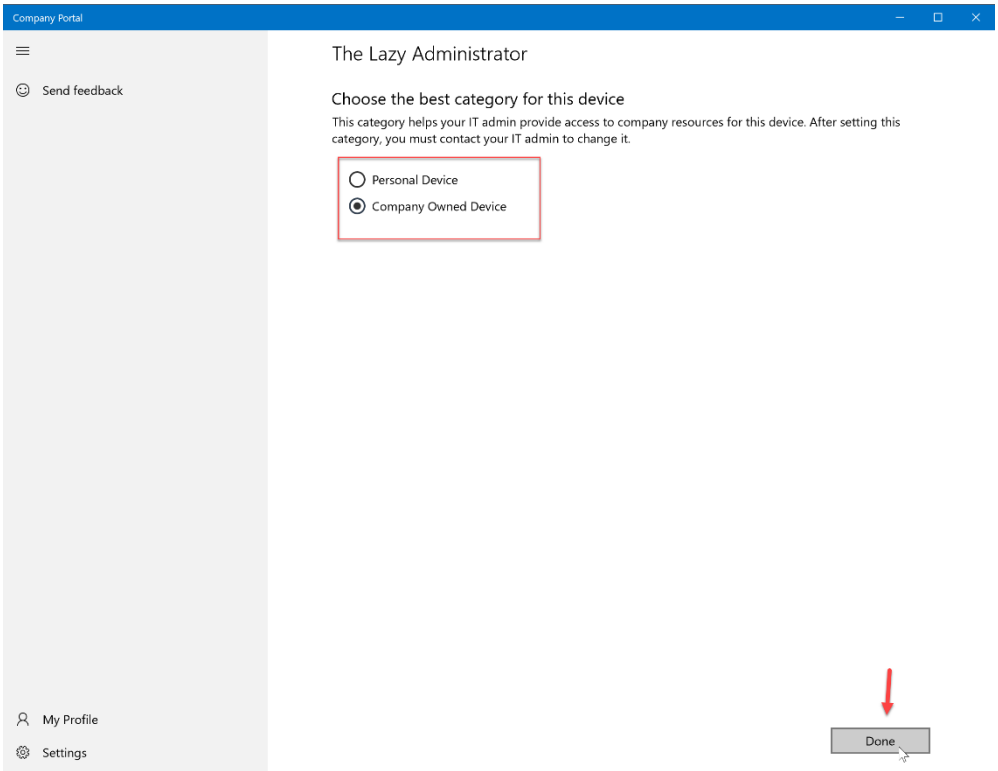
They will be prompted for the password



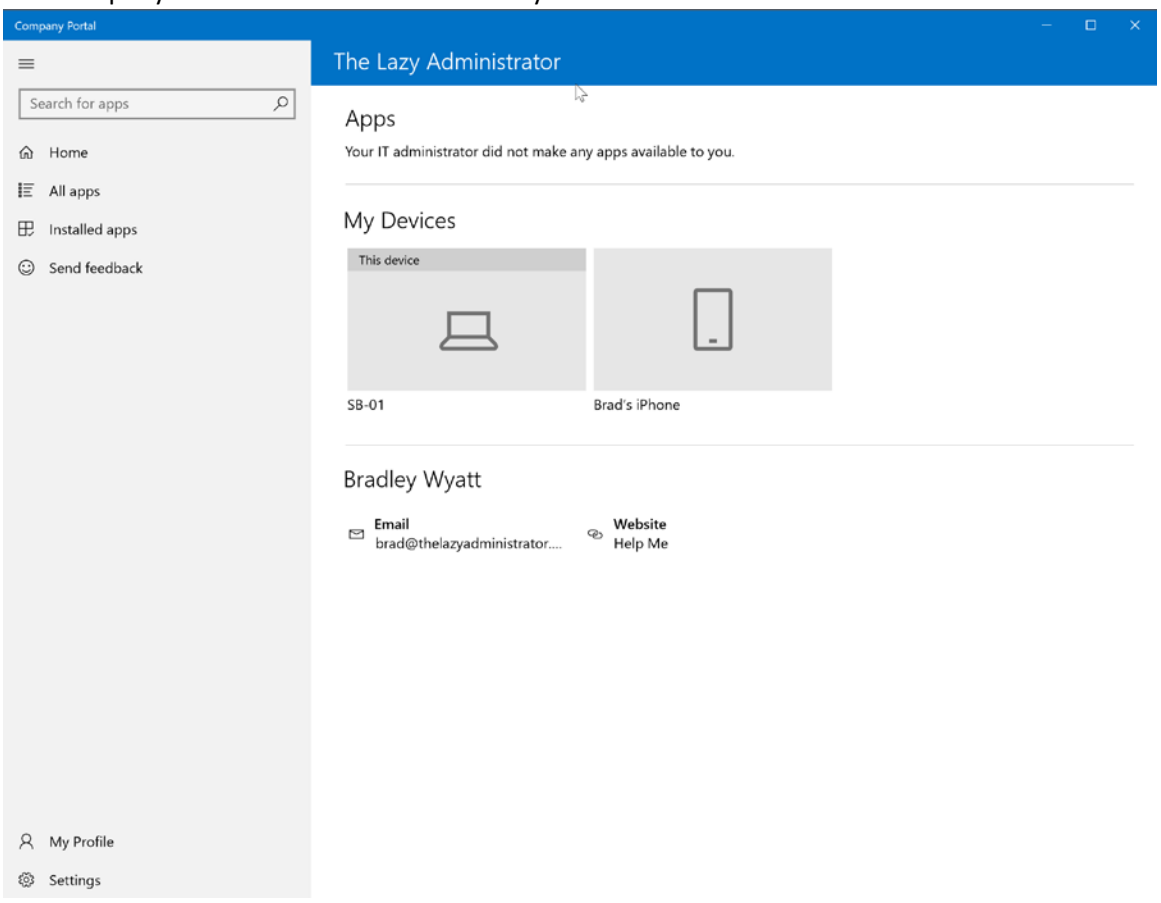
Check “Allow my organization to manage my device” and then click Yes



Finally, the Company Portal will prompt them to select a device category that we set up earlier

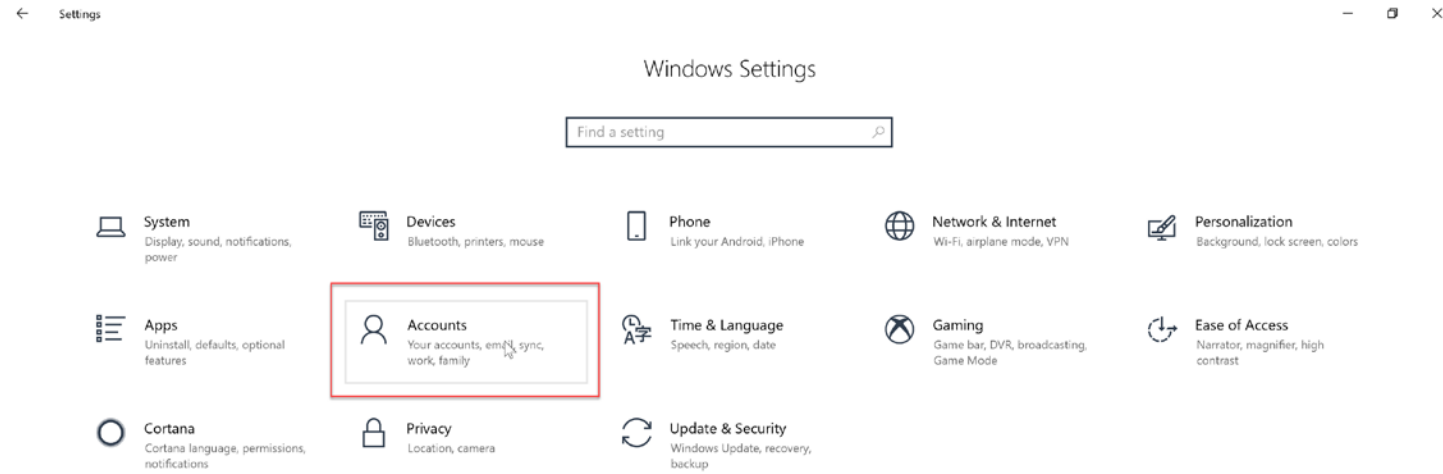


The Company Portal will now show the newly enrolled device

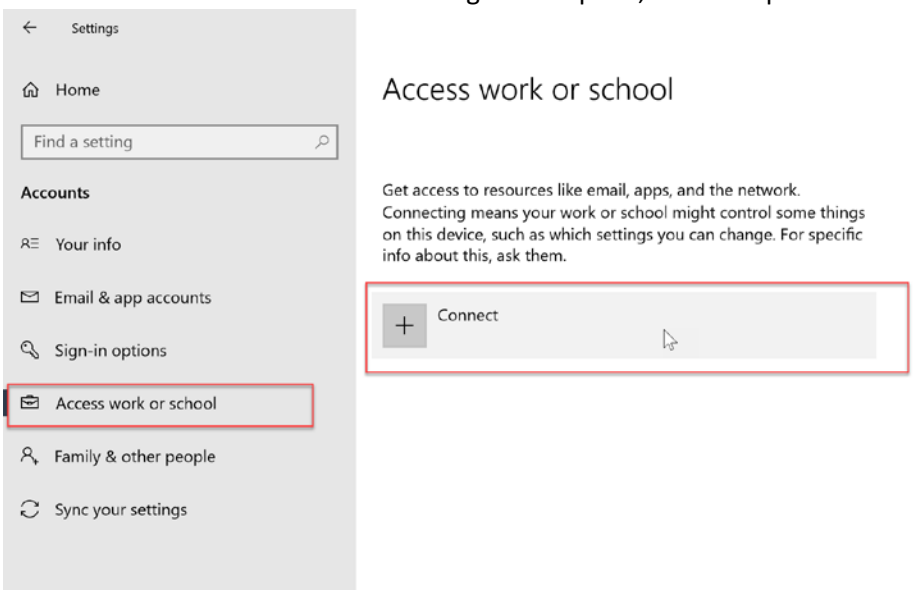


Windows Settings App

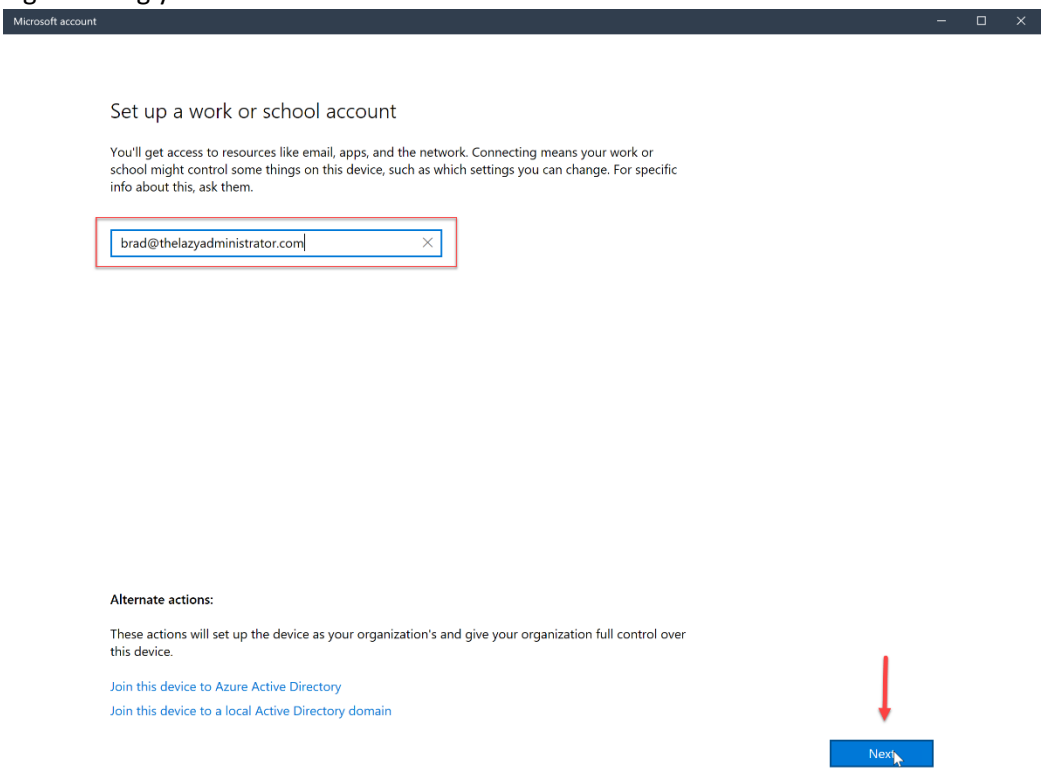
Open the Windows Settings application and select “Accounts”



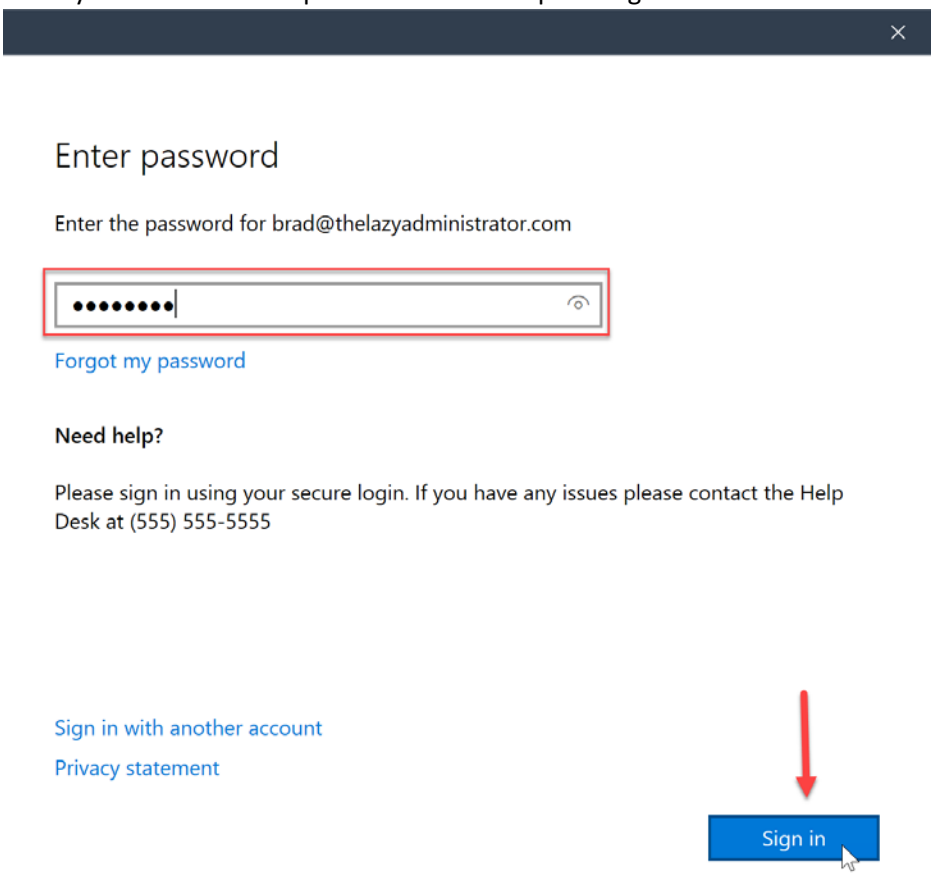
Select “Access work or school” in the right hand pane, and then press “Connect”



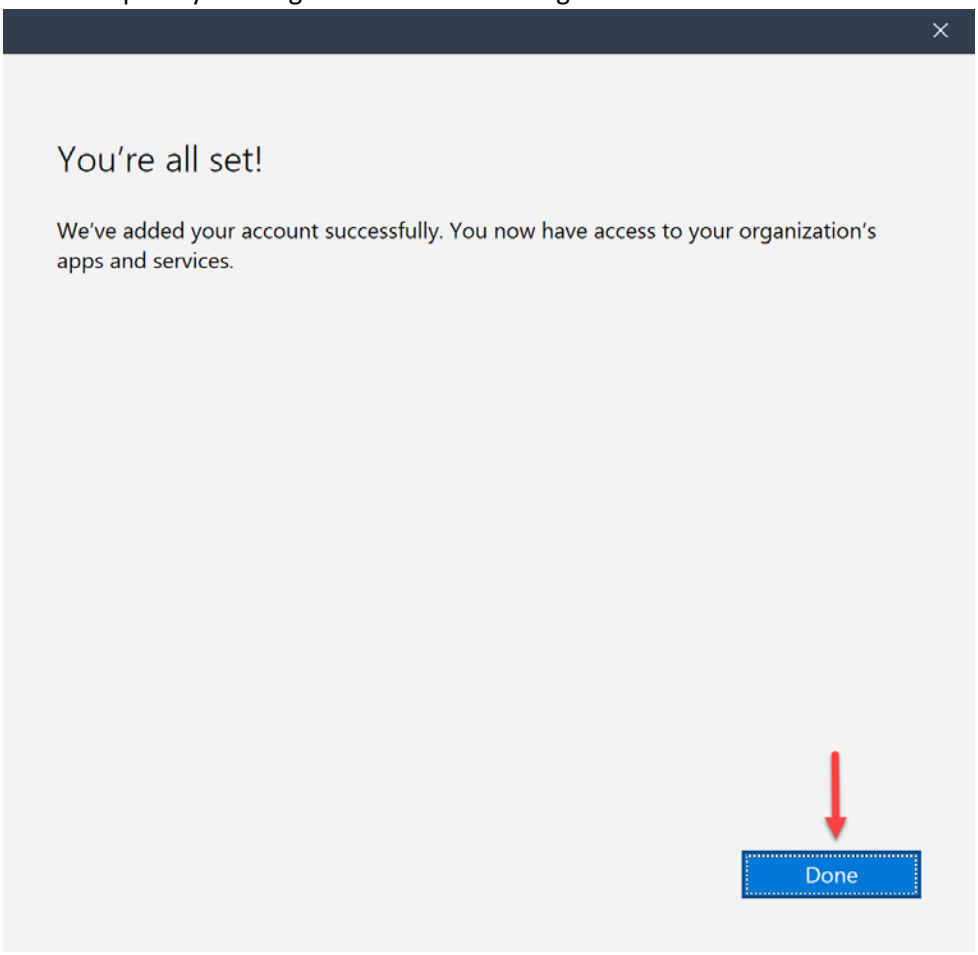
Sign in using your work account



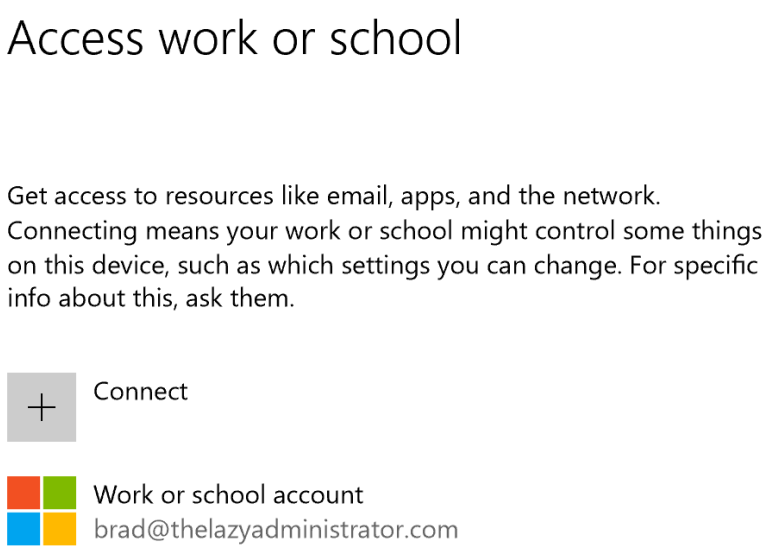
Enter your work account password and then press Sign In



Once complete you will get a successful message



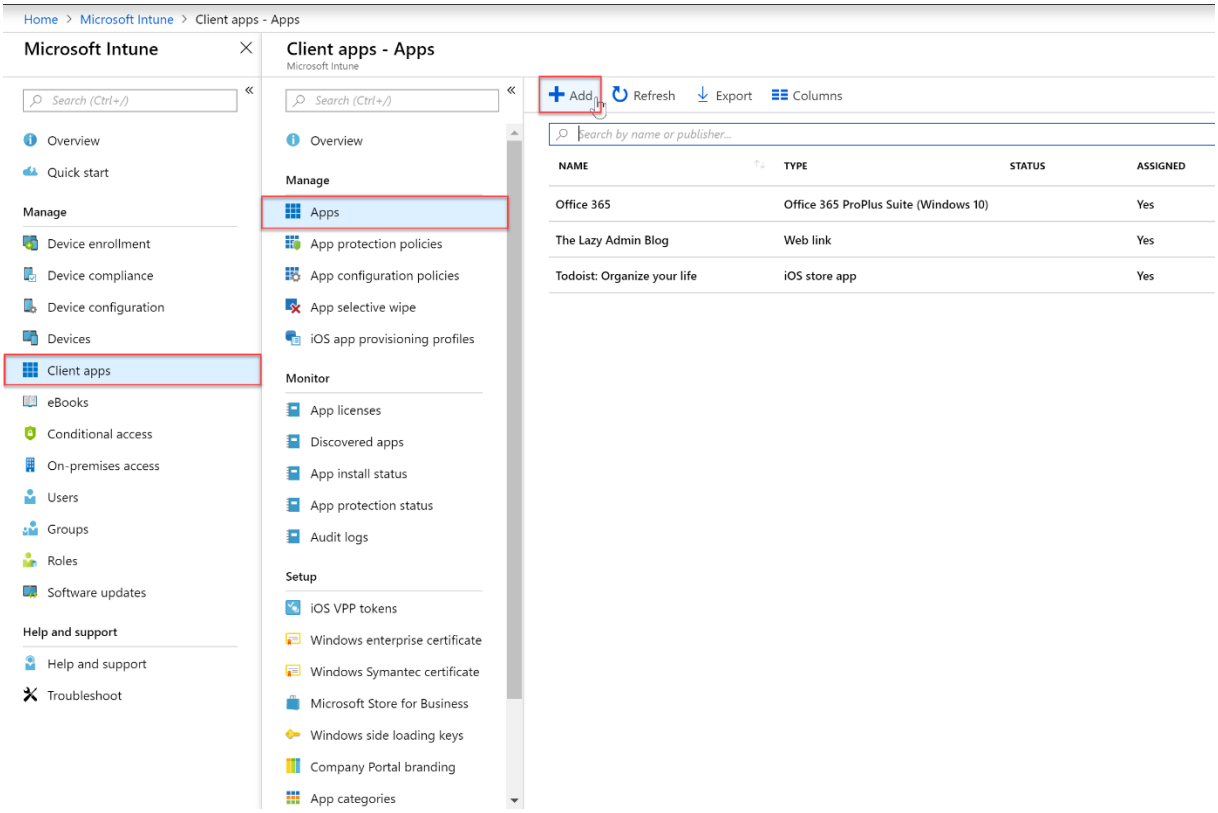
Back in the Settings app you will now see your account



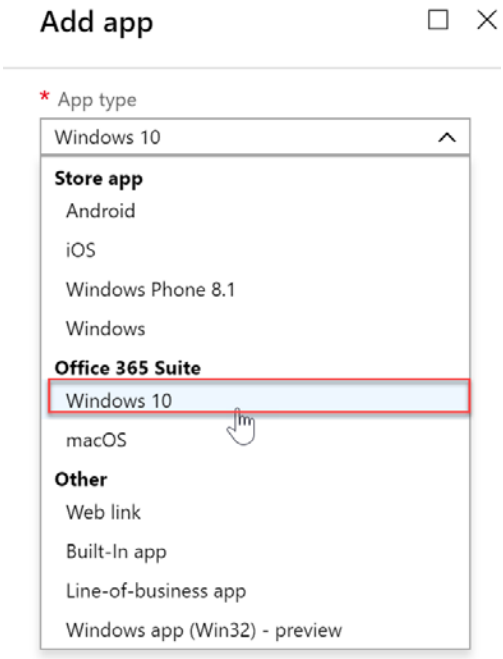
Deploy Client Apps to Managed Intune Devices

The Company Portal allows and administrator to push, install, uninstall, and make available, applications for end users. Applications can include Office 365 apps, web apps, Microsoft Store apps, iOS Apps and more. The Company Portal will only display applications that is relevant to the device they are on, if they are on an iPhone it will not display your published applications for Windows even if the device is in the same group.

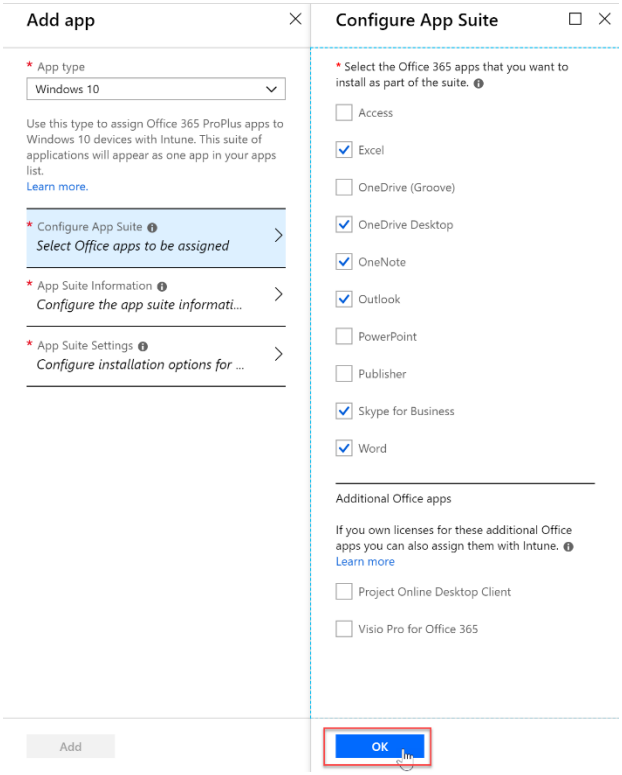
Expand the Intune blade in the Azure portal and the go to “Client Apps”, “Apps” and then select “Add”



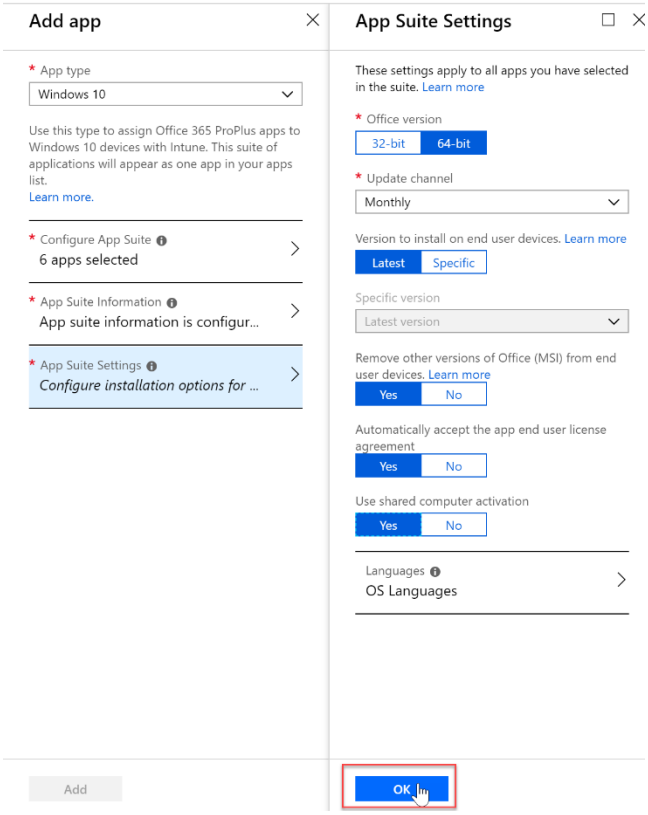
For my example, I will be deploying Office 365 ProPlus to my devices so I will select Windows 10 under Office 365 Suite



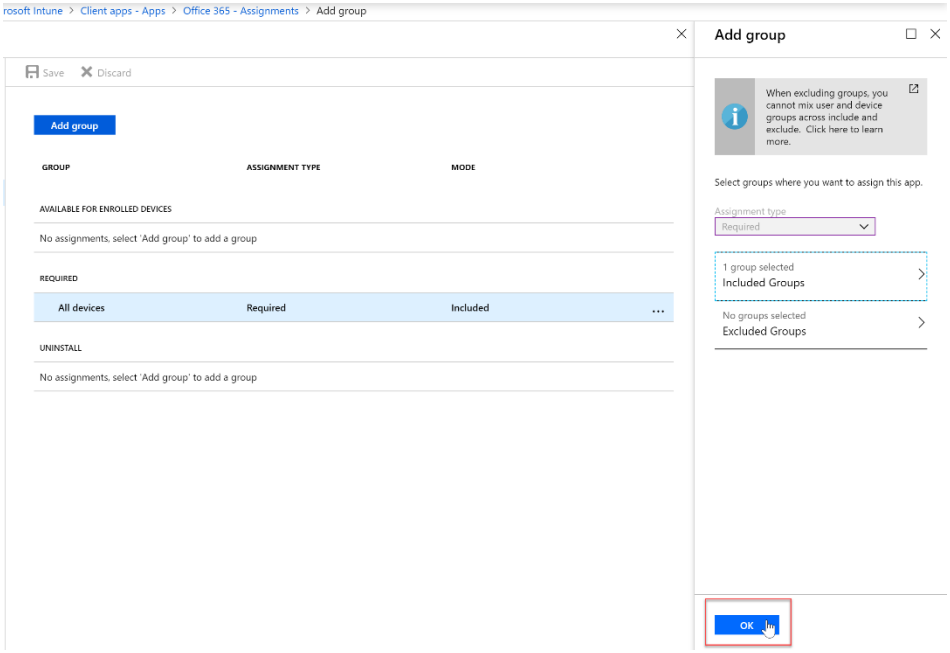
I will configure the app settings to fit my company needs



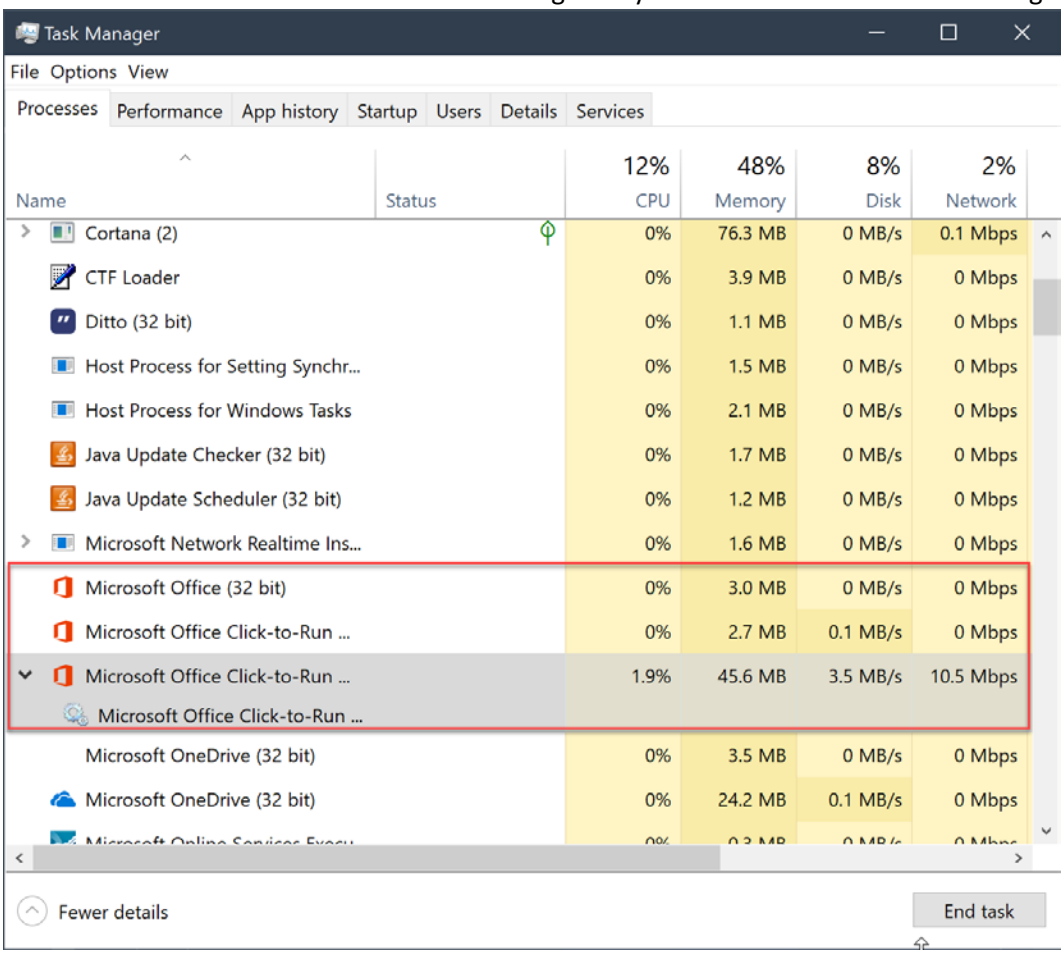
I can even configure the update channel, EULA and more



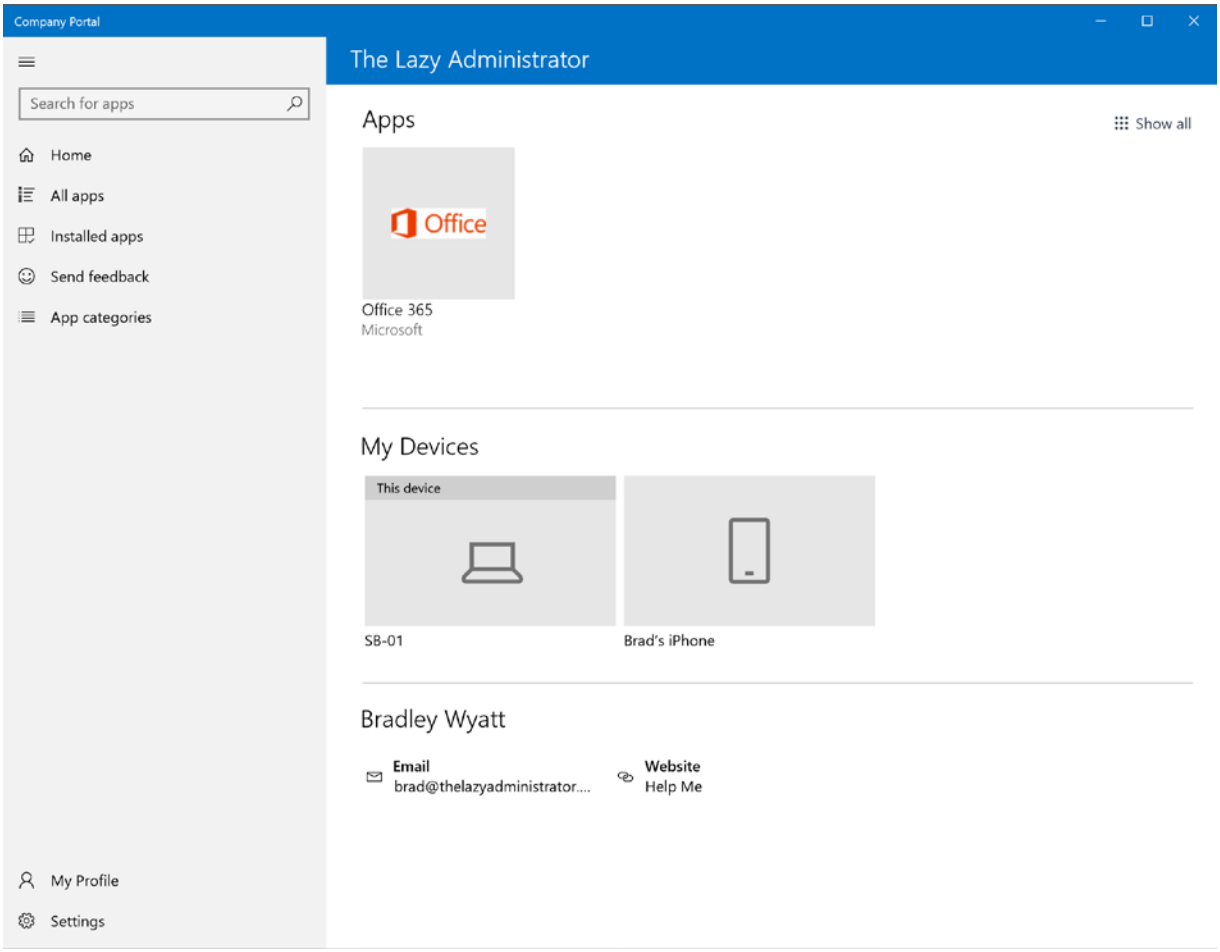
I will make this application required for all users in my assignments setting



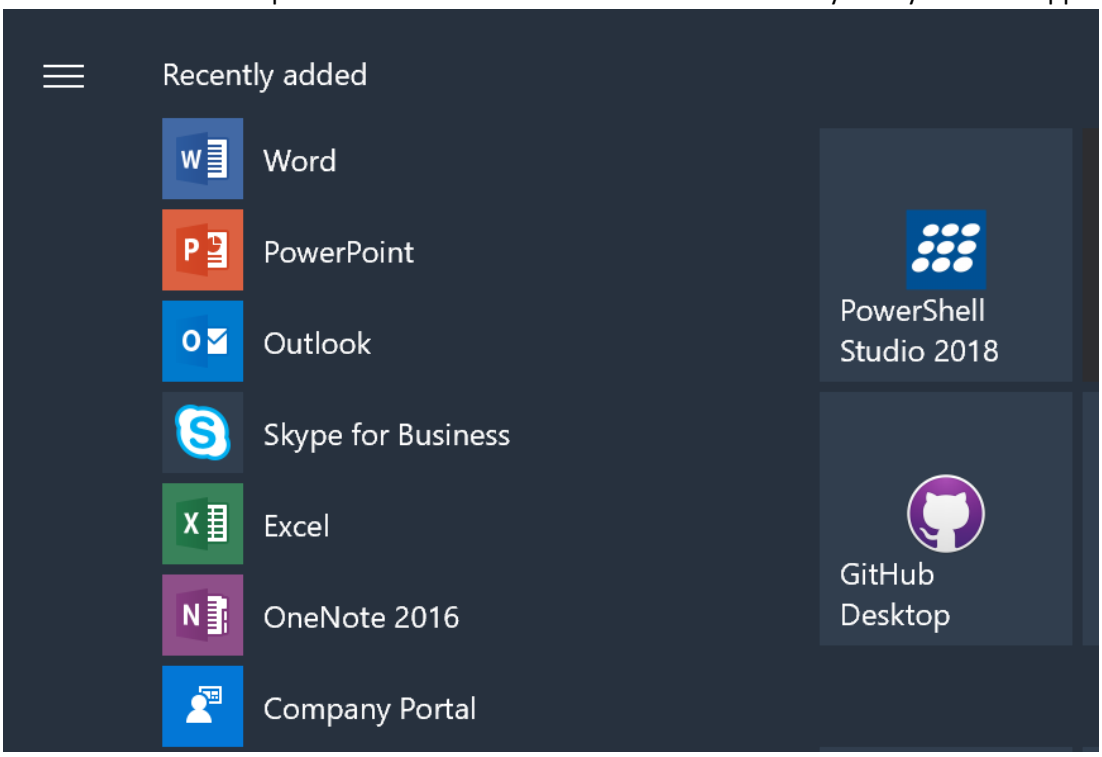
After a little bit I can see that Office is installing on my end user machine in Task Manager



If I had not made the app required and just made it available, end users could choose to install it from the Company Portal



Once the install is complete I can check the start menu to see all of my newly installed applications



In the Intune portal under my applications, I can see that I have Office 365 ProPlus successfully installed on 1 device, and not applicable on 1 device (iOS)