

# **Device management touchpoints**



Teams admin center



Azure Active Directory portal



Endpoint Manager admin center



# Teams admin center





### Teams admin center

One place to manage all your Teams devices

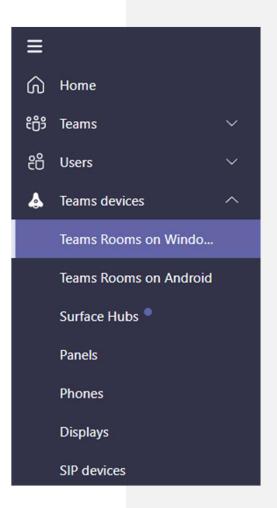
Granular device management

Inspect device health

Log Collection

Meeting history

Performance statistics (network, audio, etc.)



### Teams admin center roles

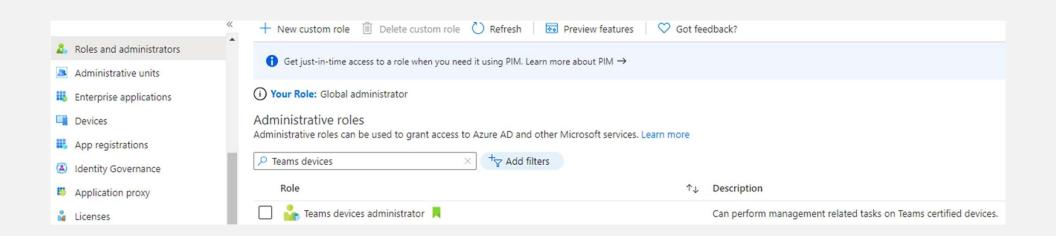
Microsoft 365 Global administrator

Teams administrator

Teams devices administrator

Assigned via
Azure AD portal

Assigned via Microsoft 365 admin center



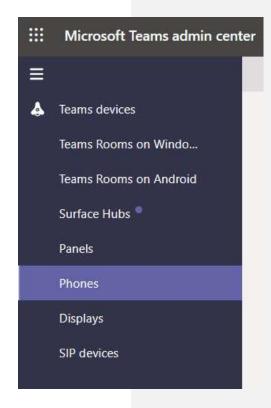
# **Introducing Teams devices administrator**

Limited to managing Teams devices

Can **not** limit to a specific device type

Can not view call quality or call history data

To view call quality data or call analytics, you need to be assigned one of the **Teams Communications** roles.









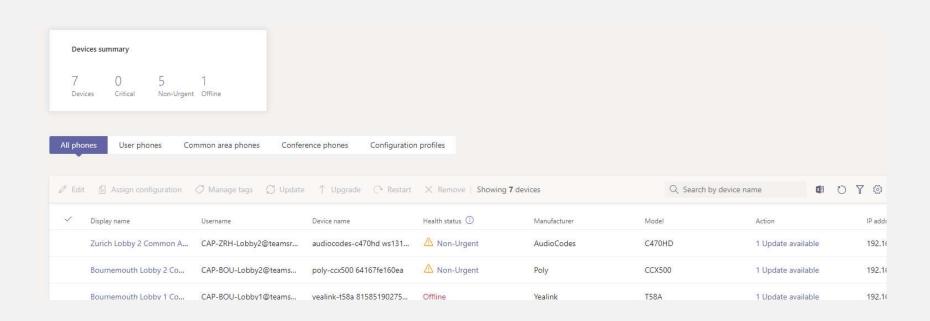


# **Managing Teams devices**

See summary of all devices

Apply configurations and tags

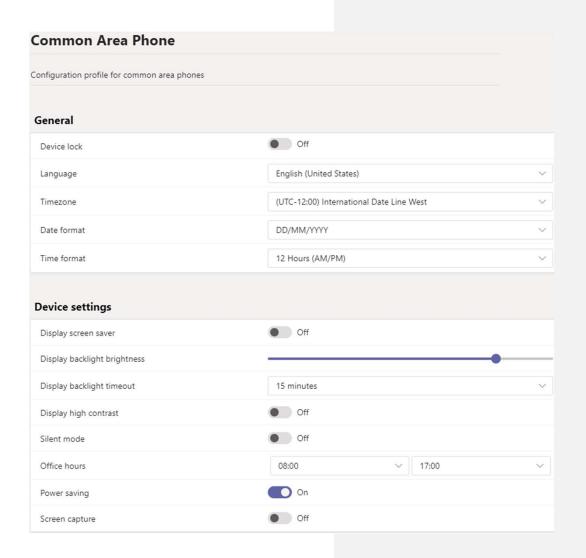
Update firmware



# **Configuration profiles**

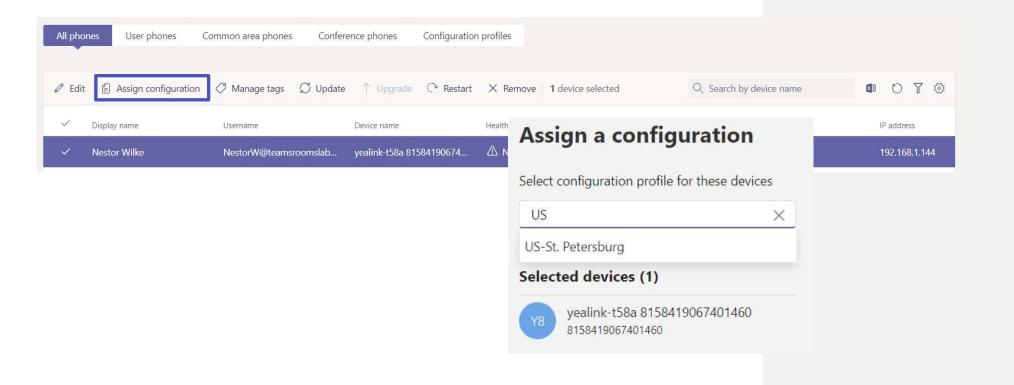
Manage settings and features for Teams devices

Assign a profile to one or many devices



# **Configuration profiles**

Assign profile to devices



# Tags

Group, organize, and more easily manage the devices you've deployed.

Device tags are assigned to the **account** that's logged into a device.

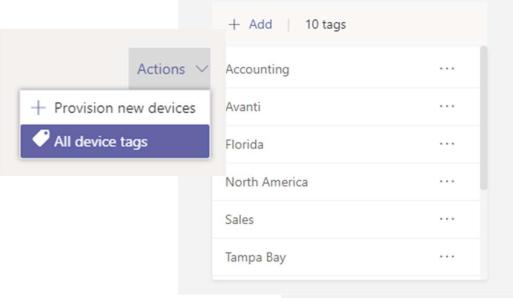
Filter based off tags.

Add, edit, delete tags via Actions menu ———

### Manage tags

10 items

Tags apply to all devices and are linked to user accounts that are used to sign in to a device. They are used to organize devices in your organization and to help with identifying a location, grouping and filtering devices, apply software updates, and with call quality monitoring.











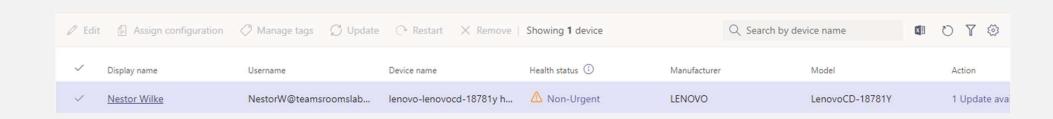


Review installed software versions

View device details

See and troubleshoot call history

Review maintenance history

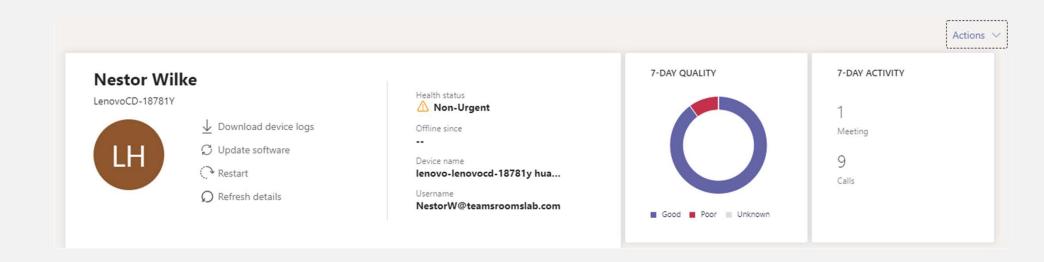


Call history overview

See device details

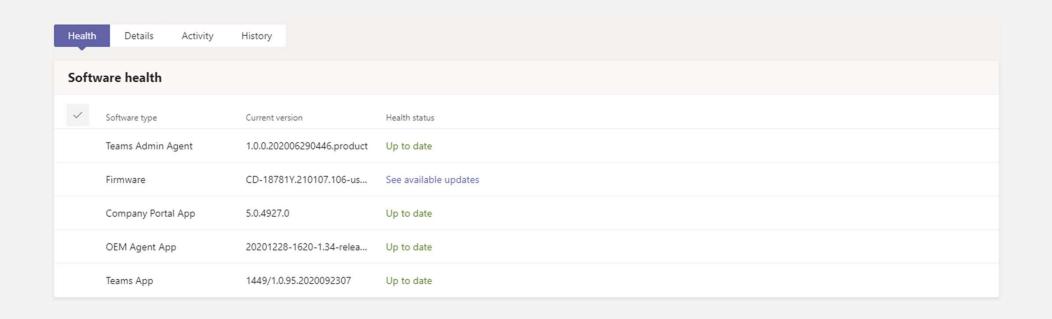
Add tags

Remove device

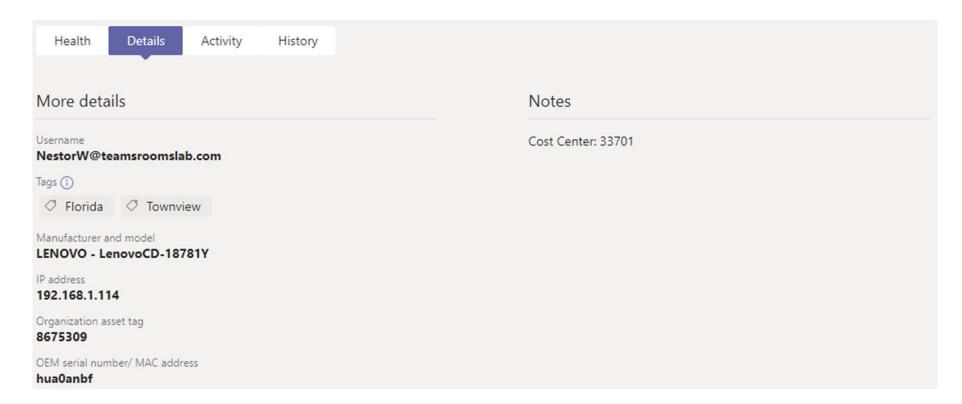


Review software versions

Install updates, if necessary

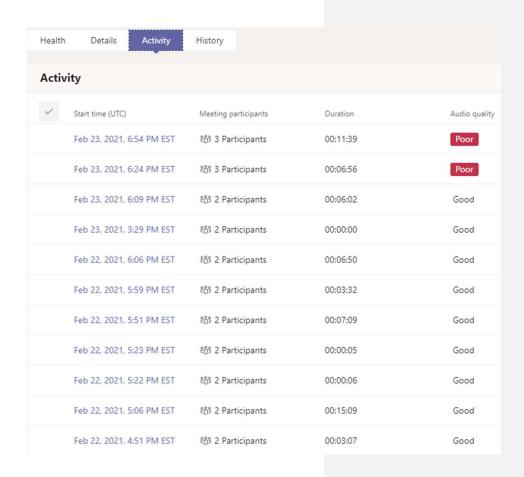


See and view details of device, such as assigned tags



See all calls on device

Click on call to see details



# Microsoft Graph



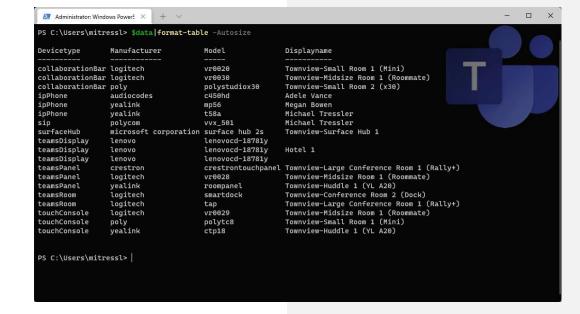


## Microsoft Graph

Microsoft Graph provides a unified programmability model that you can use to access the tremendous amount of data in Microsoft 365, Windows 10, and Enterprise Mobility + Security

Can be accessed using HTTP, C#, JavaScript, Objective-C, Java, Go, PowerShell....

Programmatic access to Teams admin center



Currently in beta.

# **Graph Methods**

Method	Description
List	Get a list of all Microsoft Teams-enabled devices provisioned for a tenant.
Get	Get the properties of a Microsoft Teams- enabled device.
Restart	Restart the specified Microsoft Teams- enabled device.
Run Diagnostics	Run and generate diagnostic logs for the specified Microsoft Teams-enabled device.
Update Software	Update the software for a Microsoft Teams-enabled device.
List Operations	Get a list of operations that are running on a Teams-enabled device.

```
"@odata.context": "https://graph.microsoft.com/beta/$metadata#teamwork/devices",
"@odata.count": 19,
"value": [
        "id": "54687218-399e-4396-a53e-e365fd7727d4",
        "deviceType": "ipPhone",
        "notes": null,
        "companyAssetTag": null,
        "healthStatus": "nonUrgent",
       "activityState": "unknown",
       "createdDateTime": "2022-03-09T02:16:40Z",
       "lastModifiedDateTime": "2022-03-09T16:31:12Z",
        "createdBy": null,
       "lastModifiedBy": null,
        "hardwareDetail": {
           "serialNumber": "sc10268774",
           "uniqueId": "sc10268774",
           "macAddresses": [],
           "manufacturer": "audiocodes",
           "model": "c450hd"
        "currentUser": {
           "id": "f2565bcf-97b4-43c3-ba99-ac88c1b50913",
           "displayName": "Adele Vance",
           "userIdentityType": "aadUser"
```

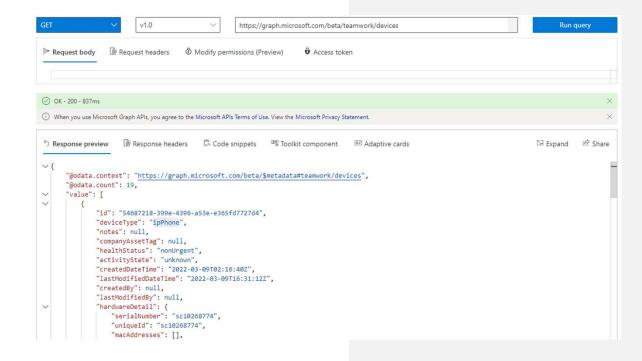
## **Graph Explorer**

Use **Graph Explorer** to test queries.

Easy way to test Graph

Need to make sure you have proper credentials:

TeamworkDevice.Read.All
TeamworkDevice.ReadWrite.All



## Connect to Graph via PowerShell

Install the Microsoft Graph PowerShell Module

```
C:\> Connect-MgGraph -Scopes 'TeamworkDevice.Read.All'
Welcome To Microsoft Graph!
C:\> Select-MgProfile -Name 'beta'
C:\> Get-MgTeamworkDevice
                                  ActivityState CompanyAssetTag CreatedDateTime
Id
                                                                                   DeviceType
                                                                                                   HealthStatus
54687218-399e-4396-a53e-e365fd7727d4 unknown
                                                              3/9/2022 2:16:40 AM
                                                                                   ipPhone
                                                                                                  nonUrgent
                                                                                   collaborationBar healthy
e57c0d43-697e-48c0-ac59-a9ca411d8a73 unknown
                                                              3/7/2022 4:37:36 PM
                                                              2/28/2022 2:04:54 PM collaborationBar nonUrgent
a566902e-f5c0-4345-96db-adfe90e46274 unknown
```

# Connect to Graph via PowerShell

```
$Devices = Get-MgTeamworkDevice | sort-object
@{Expression={$_.DeviceType,$_.hardwaredetail.Manufacturer,$_.hardwaredetail.Model};Ascending=$True}
$data =@()
foreach ($Device in $Devices)
            $row = "" | Select-Object Devicetype,Manufacturer,Model,Displayname
            $row.deviceType = $Device.devicetype
            $row.Manufacturer = $Device.hardwaredetail.manufacturer
            $row.Model = $Device.hardwaredetail.model

∠
    Administrator: Windows Power
    ✓

            $row.Displayname = $Device.currentuser.displayname
                                                                              PS C:\Users\mitressl> $data|format-table -Autosize
            $data+=$row
                                                                              Devicetype
                                                                                         Manufacturer
                                                                                                        Model
$data|format-table -Autosize
                                                                              collaborationBar logitech
                                                                                                        vr0020
                                                                              collaborationBar logitech
                                                                                                        vr0030
```

collaborationBar poly

ipPhone

ipPhone

surfaceHub

teamsDisplay

teamsDisplay

teamsDisplay

teamsPanel

teamsPanel

teamsPanel

teamsRoom

teamsRoom

touchConsole

touchConsole

touchConsole

PS C:\Users\mitressl>

sip

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yealink

yealink

polycom

lenovo

lenovo

lenovo

crestron

logitech

logitech

logitech

logitech

yealink

poly

yealink

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Displayname

Adele Vance

Megan Bowen

Michael Tressler Michael Tressler

Townview-Surface Hub 1

crestrontouchpanel Townview-Large Conference Room 1 (Rally+)

Townview-Huddle 1 (YL A20)

Townview-Small Room 1 (Mini)

Townview-Huddle 1 (YL A20)

polystudiox30

lenovocd-18781y

lenovocd-18781v

c450hd

VVX\_501

roompanel

smartdock

tap

vr0029

polytc8

mp56

t58a

microsoft corporation surface hub 2s

Townview-Small Room 1 (Mini)

Townview-Small Room 2 (x30)

Townview-Midsize Room 1 (Roommate)

Townview-Midsize Room 1 (Roommate)

Townview-Conference Room 2 (Dock)

Townview-Midsize Room 1 (Roommate)

Townview-Large Conference Room 1 (Rally+)











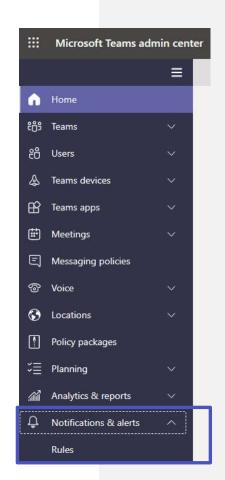


Triggers a notification when a device goes offline

Covers all supported device types in Teams admin center

Define important devices

Notified via Teams message or via webhook









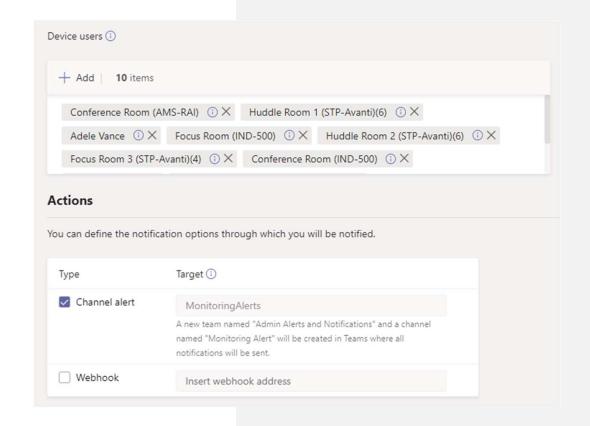


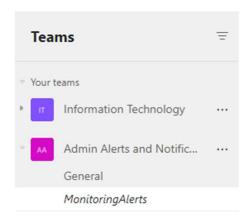
Notifications are sent for defined device users

Focus on VIP users and important spaces

New Team and channel defined for alerts

Webhook sends a JSON payload















```
"AlertTitle": "sample device name of
User Name has become offline",
"DeviceLoggedInUserId": User GUID ,
"DeviceId": Device GUID ,
"MetricValues":
       DeviceHealthStatus": "offline"
       },
"RuleName": "Device state rule",
"RuleDescription": ":"Alerts when device
health status is detected as offline",
"RuleFrequency": "Real-time",
"RuleType": "Device Management",
"TenantId": Tenant GUID ,
"RuleCondition": "DeviceHealthStatus =
Offline",
"AlertRaisedAt": "2021-04-28T12:49:06Z"
```

# **Updating Teams devices**



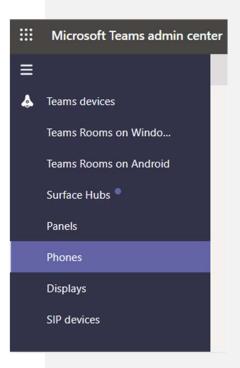


# Teams admin center or vendor utilities

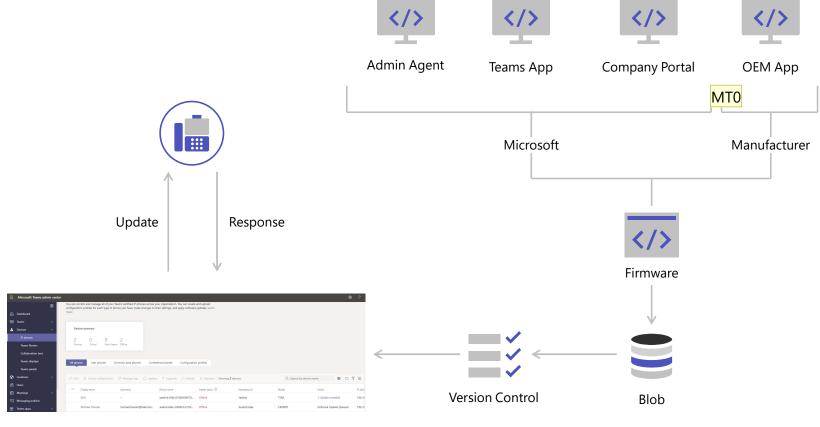
Updating via Teams admin center provides a Microsoft certified firmware image.

Teams admin center is OEM agnostic

OEM-specific tools can be used to push special firmware such as ones with a specific fix. These may not be Microsoft certified firmware



# Firmware updates



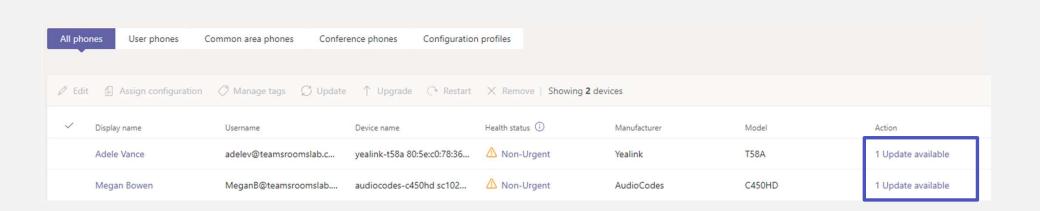
Update devices

### MT0 [@Tony Woodruff] Should we also include Android OS with OEM?

Michael Tressler, 2021-04-29T13:30:31.641

# **Updating**

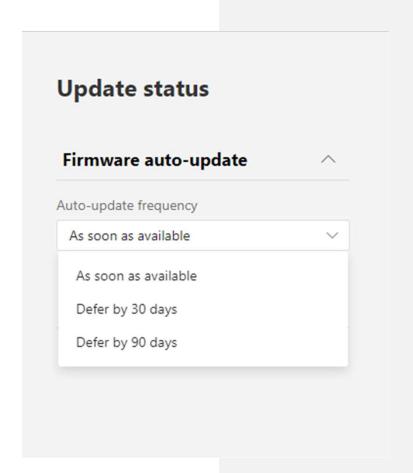
Teams admin center shows which devices need a firmware update



# **Updating**

Updates can be automatic or manual

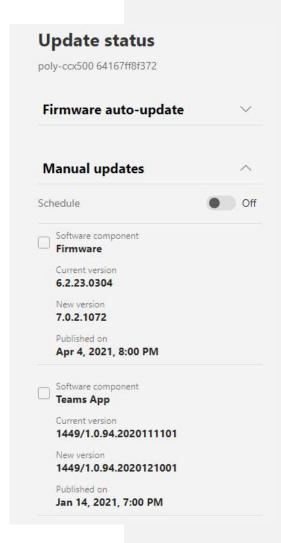
Automatic updates can be **deferred** before being applied



# **Updating**

Manual updates can be immediate or scheduled

Devices can update Teams app independently of firmware



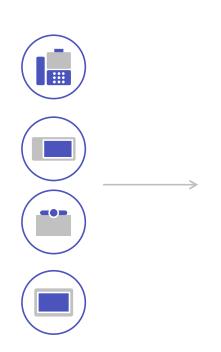
# Conditional access config examples





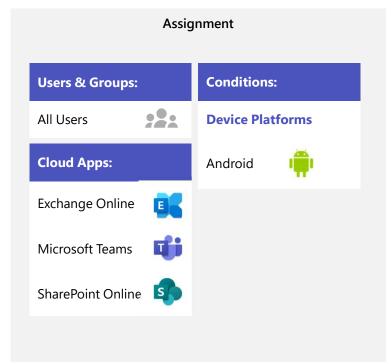
# User sign-in conditional access

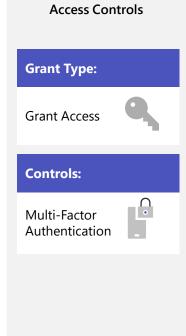
Multi-factor authentication





### **Azure Active Directory Conditional Access Rule**

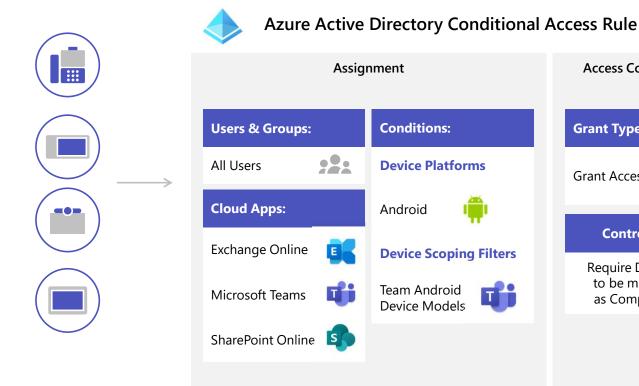


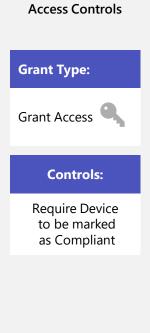


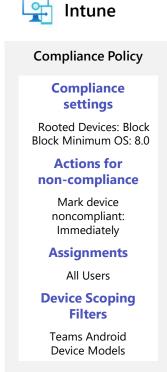


# User sign-in conditional access

### Intune compliance









# User sign-in conditional access

Intune compliance + Trusted location

