

Neat Implementation Guide

For Microsoft Teams



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Microsoft Teams Room licensing

In preparation for the set up of a Neat device as a Microsoft Teams Room (MTR), make sure that an appropriate license is on hand to apply to the resource account assigned to the device. Depending on the in-house process for acquiring Microsoft licenses, purchase and availability of licenses can take a significant amount of time. Please confirm that licenses are available before the intended date of setup and testing of the Neat device.

Neat MTR devices implemented in a shared space will need to be provided with a Microsoft Teams Room license. Microsoft Teams Room license can be purchased in two levels. Pro and Basic.

- Microsoft Teams Room Pro: provides a full rich conferencing experience including intelligent audio and video, dual screen support, advanced device management, Intune licensing, phone system licensing, and more. For best conferencing experience, MTR Pro licenses are recommended to use with Neat MTR devices.
- Microsoft Teams Room Basic: provides a core meeting experience for MTR devices. This is a free license but provides a limited feature set. This license can be assigned up to 25 MTR devices. Any additional licenses would need to be a Teams Room Pro license.

For additional information on Microsoft Teams Licenses and a comparison matrix of features between the Basic and Pro licenses, visit: <https://learn.microsoft.com/en-us/microsoftteams/rooms/rooms-licensing>.

If you have Teams Rooms Standard or Teams Room Premium legacy licenses, these can continue to be used until their expiration date.

Using a Neat MTR device with a personal account using a user license (for example an E3 license) will currently work but is not supported by Microsoft. Microsoft has announced that this use of personal licenses on MTR devices will be disabled July 1st, 2023 (a 90-day grace period granted by Microsoft ends on September 30, 2023).

If you plan to use your MTR device to make/receive PSTN calls, additional licensing may be needed for PSTN connectivity. PSTN connectivity options - <https://learn.microsoft.com/en-us/microsoftteams/pstn-connectivity>.

Neat Frame is in a category of Teams Devices known as a Microsoft Teams Display. Being a different category of device, Frame runs a Microsoft Teams Display specific software from Microsoft. For more information on Microsoft Teams Display and the device license requirements see: <https://learn.microsoft.com/en-us/microsoftteams/devices/teams-displays>.

For additional detail, Neat has provided an additional data sheet regarding Microsoft licensing with Neat devices - <https://neat.no/resources/microsoft-teams-licensing/>.

Creating a resource account for Neat Microsoft Teams Rooms

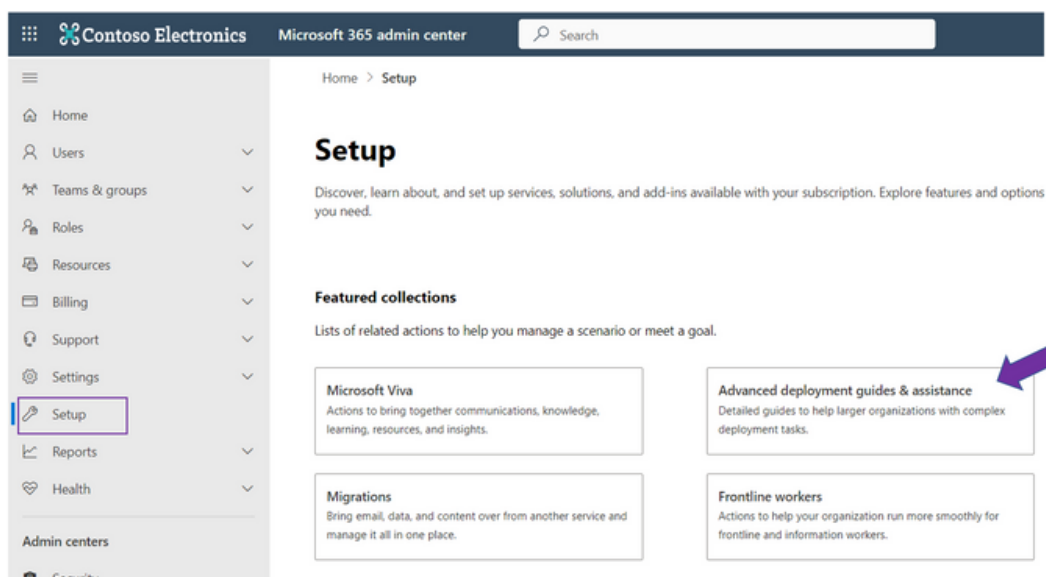
Every Neat MTR device requires a resource account that will be used to login to Microsoft Teams. A resource account also includes an Exchange Online mailbox to enable calendaring with the MTR.

Microsoft recommends using a standard naming convention for resource accounts associated to Microsoft Teams Room devices. A good naming convention will allow for administrators to filter for resource accounts and create dynamic groups that can be used to manage policies for these devices. For example, you could prefix “mtr-neat” to the beginning of all resource accounts associated with Neat MTR devices.

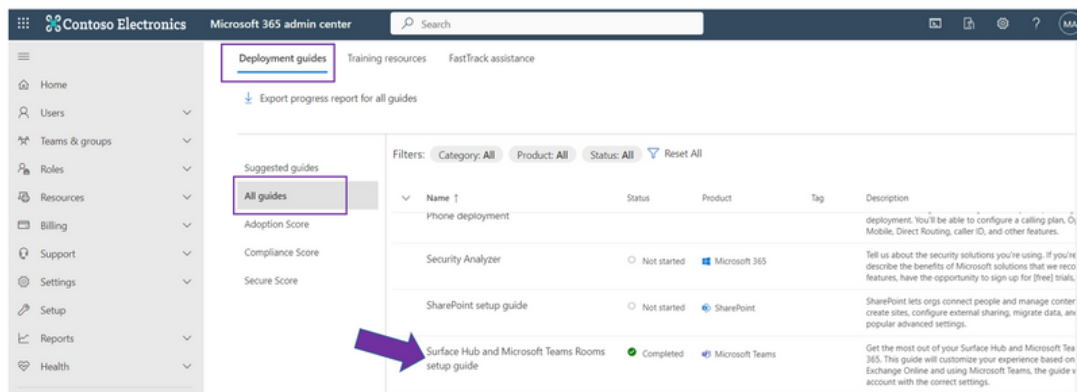
Quick set up wizard for Microsoft Teams Rooms devices / resource accounts

Use this Microsoft wizard to provide an easy standard setup for Microsoft Teams Room Resource Accounts.

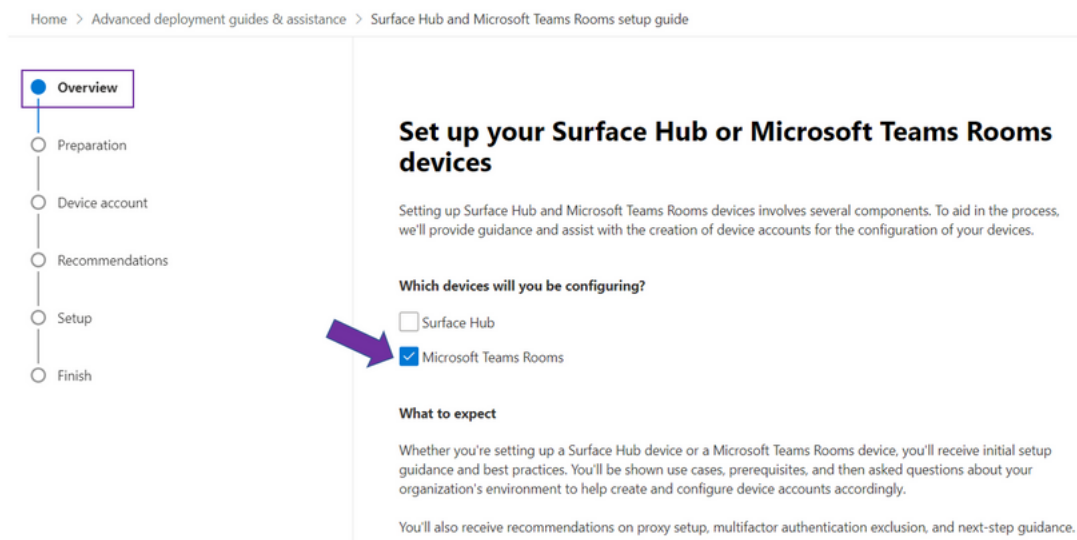
With an Administrator account sign into the Microsoft 365 admin center <https://admin.microsoft.com>. From the Microsoft 365 admin center main menu, select the “Setup” option and then select “Advanced deployment guides & assistance” option. With the “Deployment guides” tab selected at the top of the page, click on All guides and scroll down to select Surface Hub and Microsoft Teams Rooms setup guide.



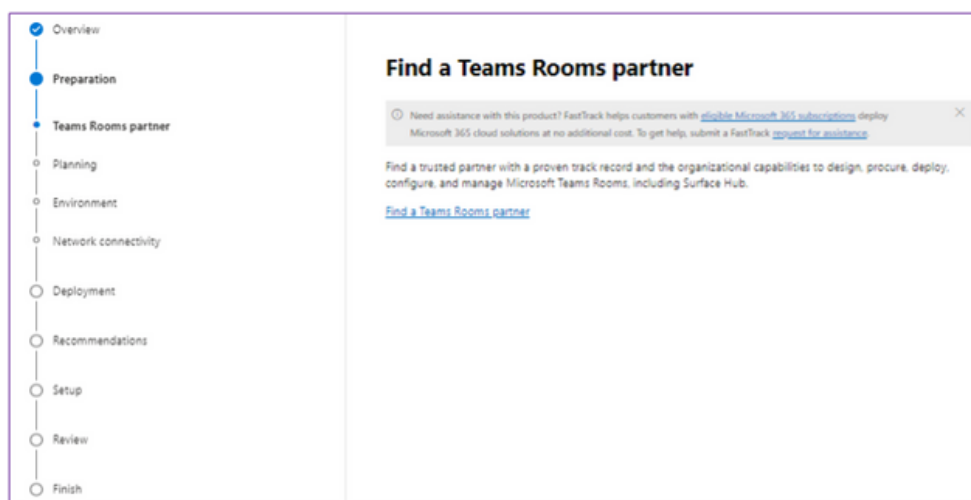
Creating a resource account



From the Overview screen, select the Microsoft Teams Rooms option. Click Next.



Review the Find a Teams Room partner page. If you are already working with a partner to purchase & install your MTR devices or if you self-install you can select Next.



Creating a resource account

Review Initial Prep Documentation and click Next.

Home > Advanced deployment guides & assistance > Surface Hub and Microsoft Teams Rooms setup guide

- Overview
- Preparation**
- Planning
- Environment
- Network connectivity
- Device account
- Recommendations
- Setup
- Finish

Review use cases and initial preparation documentation

Is this deployment guide not adequate for your needs? If you qualify for the FastTrack for Microsoft 365 benefit, then deployment assistance from a FastTrack specialist is available. View the [FastTrack assistance](#) page for more information.

The following information will show you common use cases and provide initial preparation guidance for your device.

Microsoft Teams Rooms device

- Presentation-focused meetings
- Co-creation-focused meetings

Requirements

To make sure that you meet the requirements for Microsoft Teams Rooms, see [Microsoft Teams Rooms requirements](#).

Prepare your environment

To prepare your environment for Microsoft Teams Rooms, see [Prepare your environment](#).

Select your environment settings. Use the recommended settings unless you are certain there is need to select another option. Click Next.

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- Device account
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Select your environment settings

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To determine the next steps in the process, answer these questions about your org's environment.

Where will your device account be hosted?

☒ Teams (recommended)

☐ Skype for Business Server

Where will the room mailbox for your device account be hosted?

☒ Exchange Online (recommended)

☐ Exchange Server (On-premises)

How will you manage your devices?

☒ Azure Active Directory (recommended)

☐ On-premises Active Directory

☐ Standalone

Is your network behind a proxy?

☐ Yes

☒ No

Creating a resource account

If you are not certain you have a good connection to Microsoft 365 cloud servers, you can run the optional “Microsoft 365 network connectivity test” on this page. Click Next when complete.

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Test connectivity from your network to Microsoft 365

ⓘ Is this deployment guide not adequate for your needs? If you qualify for the FastTrack for Microsoft 365 benefit, then deployment assistance from a FastTrack specialist is available. View the [FastTrack assistance](#) page for more information.

Before setting up your device, we recommend running the Microsoft 365 network connectivity test to check the quality of your connection between your network and Microsoft 365. Run this test from the same network that the device will be set up.

Get started

The Microsoft 365 network connectivity test measures the connectivity between your device and the internet, and from there to Microsoft's network. Insights from these metrics help you discover and understand connectivity problems, improve connections to Microsoft 365, and optimize the end-user experience to increase productivity in your org. Learn more about [What happens at each test step](#).

[Go to the Microsoft 365 network connectivity test page](#)

Learn more

- [Microsoft 365 network connectivity test tool](#)
- [Microsoft 365 endpoints](#)

Click the Add and check resource accounts option to create a new resource account for the Neat device. Notice the password disclaimer at the top of this screen. You will want to set the password for this resource account and also set the password to not expire.

Overview

- Preparation
- Deployment
- Resource account**
- Teams Rooms on Windows
- Teams Rooms on Android
- Recommendations

Create and configure your resource account

ⓘ Need assistance with this product? FastTrack helps customers with [eligible Microsoft 365 subscriptions](#) deploy Microsoft 365 cloud solutions at no additional cost. To get help, submit a FastTrack [request for assistance](#).

Once you've created your resource account, you will want to select one of the options from this article, [Password Management \(Surface Hub\)](#), if setting up a Surface Hub device, and set the password to never expire if setting up a Microsoft Teams Rooms device.

To take full advantage of the benefits and features that Microsoft Surface Hub and Microsoft Teams Rooms devices have to offer, we recommend using a resource account. We will assist with account creation and help ensure your resource account is configured correctly. Select the following Add and check resource accounts button to either create and configure a new resource account or configure an existing one.

[Add and check resource accounts](#)

Perform password configuration after this wizard is completed.

Creating a resource account

From the Add a device account screen, select No and add the appropriate resource account information similar to the screenshot below.

Add a resource account

Account Information | Licenses

If you already have a resource account that you'd like to use, we'll check the account and fix any incorrect property values. See the required values at [Microsoft Exchange properties for device account](#). Otherwise, enter information for a new resource account.

You'll also need to confirm that you have the correct license assigned to the resource account. To do so, select the Licenses tab.

Do you have an existing resource account?

☐ Yes

☒ No

To create a resource account, enter the following information.

Display name *

Conf Room

Alias * Domain

confroom @ neat.no

Select location *

United States

Auto response message *

Your meeting has been scheduled with the [conf room](#).

Process external meeting messages ⓘ

☒ True

Capacity

10

The number of people who can fit in the room or use the equipment at the same time.

Mail tooltip

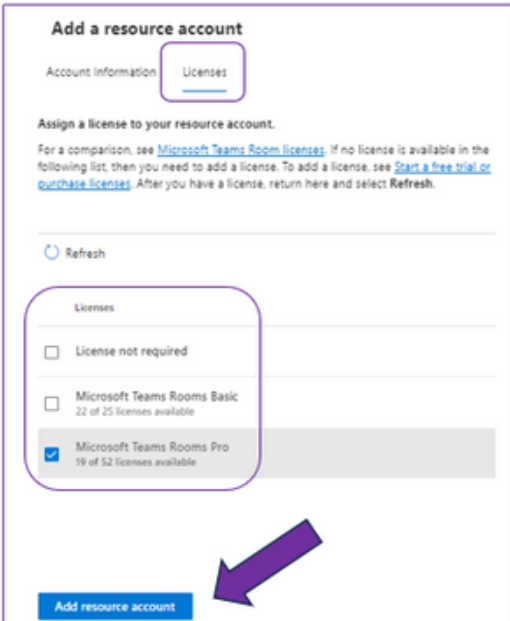
This room is equipped with a Neat Bar Pro

If you would like to be able to process meetings from external entities, enable the Process external meeting messages. If this setting is disabled meeting invites from external exchange entities will not process and therefore will not appear on your MTRoA device.

Note: We recommend setting up a new resource account for your Neat device but you can use an existing resource account if there is one already created that you would like to use – if so select “yes” and search for the account to be reused.

Creating a resource account

Select the Licenses tab at the top screen. Check the appropriate license for this resource account. For a comparison of license features see this documentation from Microsoft <https://learn.microsoft.com/en-us/microsoftteams/rooms/rooms-licensing>.



Add a resource account

Account Information Licenses

Assign a license to your resource account.

For a comparison, see [Microsoft Teams Room licenses](#). If no license is available in the following list, then you need to add a license. To add a license, see [Start a free trial or purchase licenses](#). After you have a license, return here and select Refresh.

Refresh

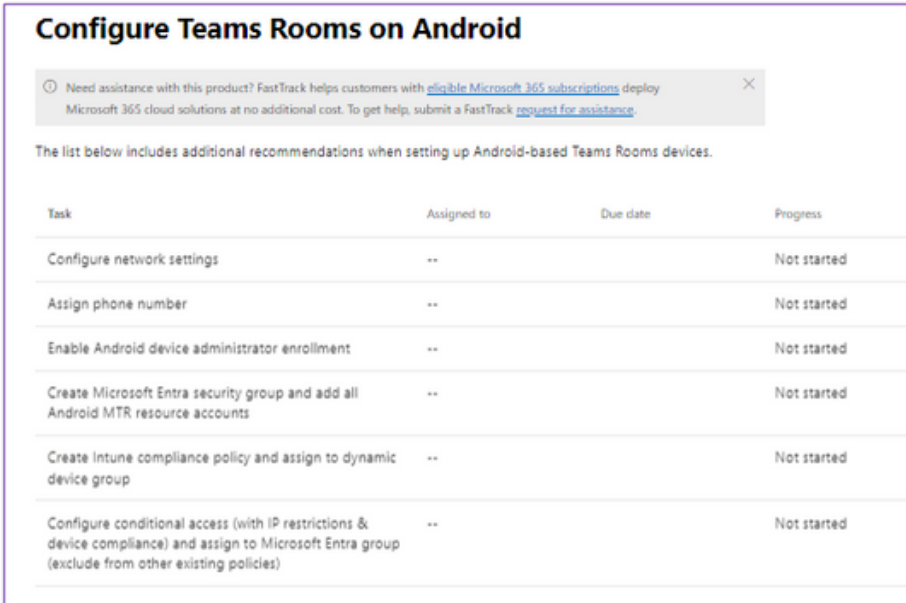
Licenses

- ☐ License not required
- ☐ Microsoft Teams Rooms Basic
22 of 25 licenses available
- ☒ Microsoft Teams Rooms Pro
19 of 52 licenses available

Add resource account

The Configure Teams Room on the Windows page is not applicable for Neat devices. Click Next.

Review recommended tasks on the Configure Teams Room on Android page and assign to internal resources if desired.



Configure Teams Rooms on Android

Need assistance with this product? FastTrack helps customers with [eligible Microsoft 365 subscriptions](#) deploy Microsoft 365 cloud solutions at no additional cost. To get help, submit a [FastTrack request for assistance](#).

The list below includes additional recommendations when setting up Android-based Teams Rooms devices.

Task	Assigned to	Due date	Progress
Configure network settings	--		Not started
Assign phone number	--		Not started
Enable Android device administrator enrollment	--		Not started
Create Microsoft Entra security group and add all Android MTR resource accounts	--		Not started
Create Intune compliance policy and assign to dynamic device group	--		Not started
Configure conditional access (with IP restrictions & device compliance) and assign to Microsoft Entra group (exclude from other existing policies)	--		Not started

Creating a resource account

Select whether to exclude this resource account/device from multi-factor authentication (if multi-factor authentication is detected). Click Next.

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✓ Overview

✓ Preparation

✓ Device account

Recommendations

○ Setup

○ Finish

Exclude your device account from multifactor authentication

ⓘ Is this deployment guide not adequate for your needs? If you qualify for the FastTrack for Microsoft 365 benefit, then deployment assistance from a FastTrack specialist is available. View the [FastTrack assistance](#) page for more information.

In Azure AD, you can limit a Conditional Access policy to a set of users. You can also configure exclusions by selecting Azure AD roles, individual users, or guests. Keep in mind that when exclusions are configured, the policy can't be enforced on excluded users. To learn more, see [Use access reviews to manage users excluded from Conditional Access policies](#).

We've detected that you don't have multifactor authentication enabled either via conditional access policies nor security defaults. If you plan on implementing multifactor authentication in the future, we recommend using a conditional access policy and excluding your device account from the policy. To learn more, see [Conditional Access: Require MFA for all users](#).

Feature	Status	MFA method
Multifactor authentication (MFA)	● Off	All

Learn more

[Troubleshooting Conditional Access using the What If tool](#)

Click Next at the Set up your device screen.

Home > Advanced deployment guides & assistance > Surface Hub and Microsoft Teams Rooms setup guide

✓ Overview

✓ Preparation

✓ Device account

✓ Recommendations

Setup

○ Finish

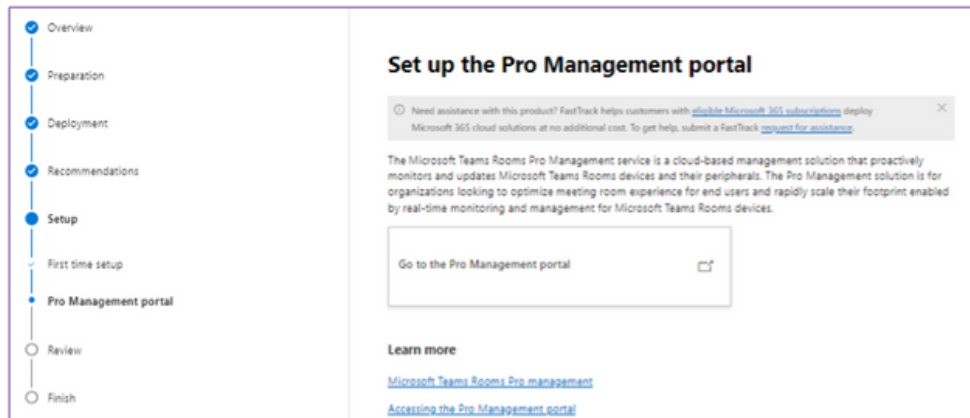
Set up your device

ⓘ Is this deployment guide not adequate for your needs? If you qualify for the FastTrack for Microsoft 365 benefit, then deployment assistance from a FastTrack specialist is available. View the [FastTrack assistance](#) page for more information.

Now that you've completed the prerequisites and have created your device account, you can sign into your device with your device account.

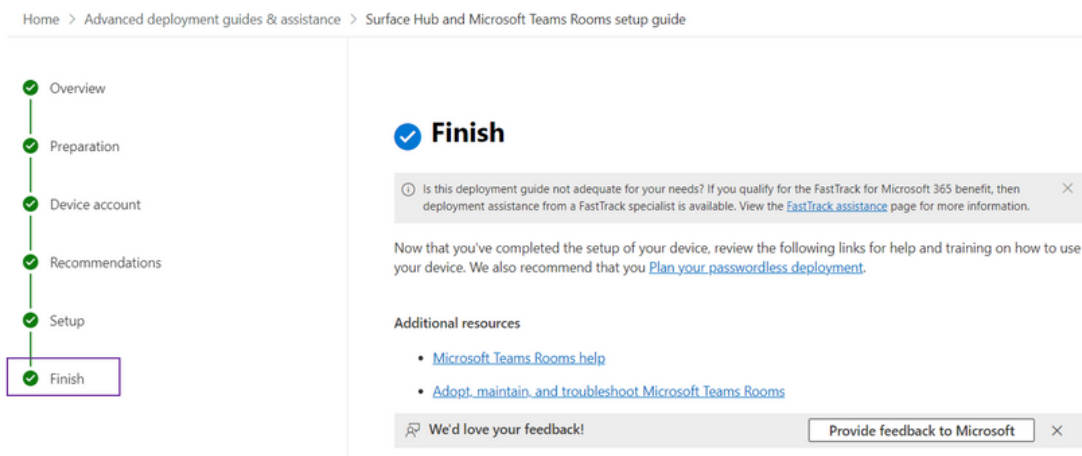
Creating a resource account

Review the Set up the Pro Management portal screen.



Click Next at the Review your progress screen.

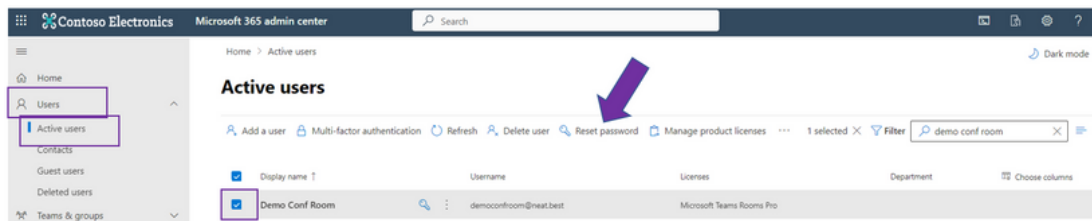
Click done on the Finish Screen.



Creating a resource account

Configure the password for the Neat device resource account

With an Administrator account sign into the Microsoft 365 admin center <https://admin.microsoft.com>. From the Microsoft 365 admin center main menu, select the Users and Active Users option and then search for the Neat device resource account. Select the user by checking the box and click the Reset Password button.



Reset password

democonfroom@neat.best

☐ Automatically create a password

Passwords must be between 8 and 256 characters and use a combination of at least three of the following: uppercase letters, lowercase letters, numbers, and symbols.

Password *

RealStrongPassword!@#456 Strong

☐ Require this user to change their password when they first sign in

☒ Email the sign-in info to me

Your email *

user@neat.best

If you would like Microsoft to create a strong password automatically, check the Automatically create a password option. If you would like to create your own password, enter it in the “Password” box.

Do not check the “Require this user to change their password when they first sign in” option.

If you would like to email the password information to yourself or another user, check the “Email the sign-in info to me” box and add the appropriate email address(es).

Click the “Reset password” button at the bottom of the screen when finished.

Configure the resource account password to never expire

To set the password of the resource account to never expire, run the following cmdlet by using the UPN or the user ID of the resource account.

```
Set-AzureADUser -ObjectId <user ID> -PasswordPolicies DisablePasswordExpiration
```

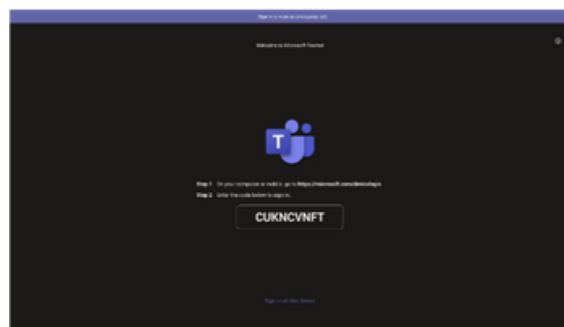
Additional Microsoft information on Password expiration: <https://learn.microsoft.com/en-us/microsoft-365/admin/add-users/set-password-to-never-expire?view=o365-worldwide>

Test resource account

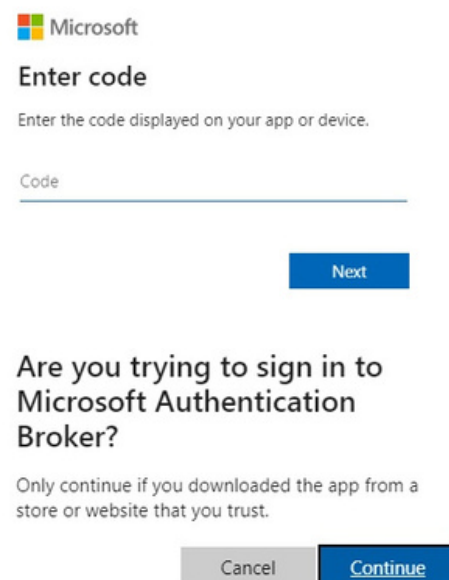
Prior to logging into the Neat MTR device, it is recommended to test the resource account credentials on a Teams web client (accessed at <http://teams.microsoft.com> from an internet browser on a PC/laptop). This will confirm that the resource account is generally working and that you have the correct username and password. If possible, test logging in on the Teams web client in the same network where device will be installed and confirm you can successfully participate in a Teams meeting with audio and video.

Neat MTR device - log in process

The login process on Neat MTR devices begins when you see the Microsoft device login screen with a nine-character code displayed on the screen. Each Neat device will need to be logged into Teams individually including Neat Pads. So, if you have a Neat Bar, a Neat Pad as a controller and a Neat Pad as a scheduler, you will need to login three times using the unique code on each device. This code is available for approximately 15 minutes – and will auto-refresh if the code has not been used.



1. Using a computer or mobile phone, open an internet browser and go to: <https://microsoft.com/devicelogin>
2. Once there, type in the code displayed on your Neat MTR device (the code is not caps specific).
3. Select an account to login from the list or select 'Use another account' to specify login credentials.
4. If specifying login credentials, enter the username and password of the resource account that was created for this Neat MTR device.
5. Select 'Continue' when asked: "Are you trying to sign into Microsoft Authentication Broker".



Neat MTR device - log in process

Understanding the Microsoft Teams room and Android terminology

During the sign in process for a Neat MTR device, you may see some verbiage on-screen that may not be familiar. As part of this process, the device is registered within Azure Active Directory and security policies are evaluated by Microsoft Intune via the Company Portal Application.

Azure Active Directory – a cloud-based directory that houses identity and access management elements for the Microsoft cloud. Some of those elements correspond to both the accounts and physical MTR devices.

Microsoft Intune – controls how your organization's devices and applications are used by configuration of specific policies to ensure that devices and applications are compliant with corporate security requirements.

Company Portal – an Intune application that resides on the Android device and allows the device to do common tasks such as enrolling the device in Intune and securely accessing company resources.

Microsoft Endpoint Manager – an administrative platform that provides services and tools to manage and monitor devices. The Microsoft Endpoint Manager is the primary location to manage Intune security policies for Neat MTR devices within Office 365.

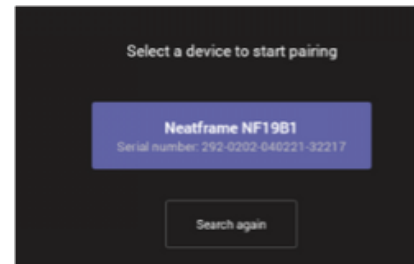
Compliance Policies - rules and settings that devices must meet to be considered compliant. This could be a minimum operating system version or encryption requirements. Device not in compliance with these policies may be blocked from accessing data and resources.

Conditional Access Policies – provide access controls to keep your organization safe. These policies are essentially requirements that must be satisfied before a gaining access to company resources. With a Neat MTR device, conditional access policies secure the sign-in process by ensuring all security requirements have been met.

Neat MTR device - log in process

6. If you are logging into a Neat Bar/Bar Pro and a Neat Pad you will need to also pair the Neat Pad to the Bar/Bar Pro.

a. Once both devices have been successfully registered to a Microsoft Teams account via the device login page, the Pad will ask you to select a device to begin the Teams level pairing process.



b. Once the correct Neat Bar/Bar Pro has been selected, a code will appear on the Neat Bar/Bar Pro to enter on the Pad and complete Microsoft Teams level pairing between the Neat Pad and the Neat Bar/Bar Pro.



For additional information regarding the Neat and Microsoft Pairing process on Neat MTR devices, visit: <https://support.neat.no/article/understanding-neat-and-microsoft-pairing-on-neat-devices/>

The following video shows 'Signing in to Microsoft Teams with Neat and getting started'. To see an example of the login process, visit: <https://www.youtube.com/watch?v=XGD1xGWVADA>

Authentication and Intune considerations

Microsoft recommends a specific set of best practices when considering authentication for Android based devices. For example, multi-factor authentication isn't recommended/supported with shared devices as shared devices are tied to a room or space rather than to an end user. For a full explanation of these best practices please see <https://docs.microsoft.com/en-us/microsoftteams/devices/authentication-best-practices-for-android-devices>.

If Intune is currently set up for only Android mobile phone, Neat MTRoA devices will likely fail on current mobile device conditional access and/or compliance policies. Please see <https://docs.microsoft.com/en-us/microsoftteams/rooms/supported-ca-and-compliance-policies?tabs=mtr-w> for specifics on supported policies for MTRoA devices.

If your Neat MTRoA device does not login with credentials that login correctly on Teams web client, this can typically be an element of Microsoft Intune that is causing the device to not successfully login. Please provide your security administrator with the documents above.

For additional Intune information and Neat device troubleshooting, we have a troubleshooting guide available. To obtain, please contact your Product Specialist, Customer Success Manager, or support@neat.no.

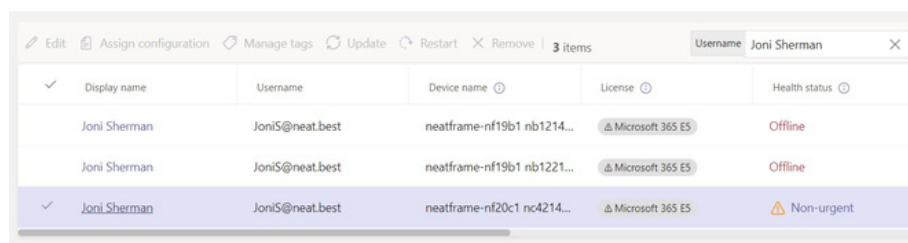
Updating Neat device firmware

By default, Neat specific firmware (but not Microsoft Teams specific software) is configured to update automatically when newer versions are posted to the Neat over-the-air update server. This occurs at 2AM local time after the update is posted to the OTA server. Microsoft Teams Admin Center ("TAC") is used to update Teams specific firmware.

Update Neat device's Teams software via Teams Admin Center (TAC)

1. Login to the Microsoft Teams Admin Center with an account with at minimum Teams Device Administrator rights. <https://admin.teams.microsoft.com>
2. Navigate to the 'Teams devices' tab and select
 - a. Teams Rooms on Android...Teams Rooms on Android tab option for Neat Bar or Bar Pro.
 - b. Teams Rooms on Android...Touch consoles tab option for Neat Pad used as controller.
 - c. Panels for Neat Pad as a scheduler.
 - d. Displays for Neat Frame.
3. Search for the appropriate Neat device by clicking the magnifying glass icon. The easiest method may be to search the Username logged into the device.
4. Click on the device that you would like to update.

Note: Neat Pad as Controller must be updated separately from the Neat front of room device. Make sure you have independently updated both devices.



✓	Display name	Username	Device name ⓘ	License ⓘ	Health status ⓘ
	Joni Sherman	JoniS@neat.best	neatframe-nf19b1 nb1214...	Microsoft 365 ES	Offline
	Joni Sherman	JoniS@neat.best	neatframe-nf19b1 nb1221...	Microsoft 365 ES	Offline
✓	Joni Sherman	JoniS@neat.best	neatframe-nf20c1 nc4214...	Microsoft 365 ES	Non-urgent

5. From the bottom section of the device screen, click on the Health tab.
6. In the Software Health list, confirm if the Teams App is showing 'See available updates.' If so, click on the 'See available updates' link.

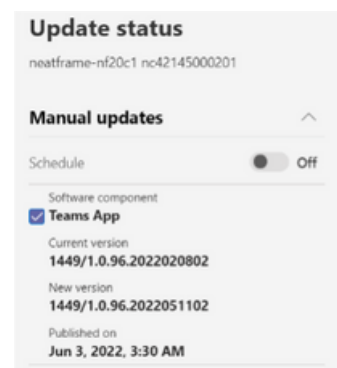
Teams App

1449/1.0.96.2022020802

[See available updates](#)

Updating Neat device firmware

7. Confirm that the new version is newer than the Current version. If so, select the software component and then click Update.



8. Click on the History tab to confirm the software update has been queued. You should see the Neat device begin the Teams update shortly after it has been queued.



✓	Action	Status	Scheduled at	Modified on	Diagnostics file	Initiated by
	SoftwareUpdate	InProgress	*	Jun 27, 2022, 2:09 PM	*	Darin Worthing

9. After the update is completed, click back on the health tab to confirm that the Teams App is now showing “Up to date”.

Teams App 1449/1.0.96.2022051102 Up to date

10. Update via TAC is now completed.

Note: The Teams Administrator can set up Neat MTRoA devices to Auto-update automatically with a frequency of: As soon as possible, Defer by 30 days, or Defer by 90 days. This automatic update applies only to Neat Firmware updates. Teams app updates must be initiated manually.

Appendix A - resource account scripting

Creating a resource account for Neat Microsoft Teams Room via power shell

If you prefer to utilize PowerShell scripting for account creation, see below for account creation.

- Create a Resource Account via Microsoft 365 Admin Center - https://learn.microsoft.com/en-us/microsoftteams/rooms/with-office-365?tabs=m365-admin-center%2Cazure-active-directory2-password#tabpanel_1_m365-admin-center
- Create a Resource Account via Exchange Online Powershell - https://learn.microsoft.com/en-us/microsoftteams/rooms/with-office-365?tabs=exchange-online%2Cazure-active-directory2-password#tabpanel_1_exchange-online

Configuring the resource account

Below are resource account configuration considerations that can improve the experience for Neat MTR devices.

Turn off password expiration – if the password for these resource accounts expires, the Neat device will not be able to sign in after the expiration date. The password will then need to be reset by the administrator since self-service password resets are typically not set for shared device passwords.

Assign a meeting room license – assign the appropriate Microsoft Teams License that was discussed previously. Microsoft Teams Room Pro (or Microsoft Teams Room standard if available) will provide a full featured MTR experience. Microsoft Teams Room Basic licenses can be a good choice to quickly test/evaluate MTR devices or if only core conferencing features are needed.

Configure mailbox properties (as needed) – resource account mailbox calendar processing settings can be modified to provide the calendar experience desired. The Exchange Online administrator should set these options via the Exchange Online powershell.

- AutomateProcessing: this configuration describes how the resource account will automatically process room reservation invites. Typically [AutoAccept] for MTR.
- AddOrganizerToSubject: this configuration determines if the meeting organizer is added to the subject of the meeting request. [\$false]
- DeleteComments: this configuration determines if the message body of incoming meetings remains or is deleted. [\$false]
- DeleteSubject: this configuration determines if the Subject of the incoming meeting request is deleted. [\$false]
- ProcessExternalMeetingMessages: Specifies whether to process meeting requests that originate outside the Exchange organization. Required to process external meetings. [confirm desired setting with security administrator]

Example: Set-CalendarProcessing -Identity "ConferenceRoom01" -AutomateProcessing AutoAccept -AddOrganizerToSubject \$false -DeleteComments \$false -DeleteSubject \$false -ProcessExternalMeetingMessages \$true

Appendix B - network requirements

Use the resources below to confirm Network and Firewall requirements are met for Neat devices and Microsoft Teams.

Neat Network and firewall requirements - <https://support.neat.no/article/network-and-firewall-requirements-for-neat/>

Microsoft Office 365 URLs and IP address ranges - <https://learn.microsoft.com/en-us/microsoft-365/enterprise/urls-and-ip-address-ranges?view=o365-worldwide#skype-for-business-online-and-microsoft-teams>