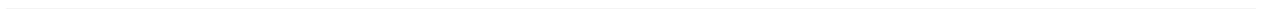


Surface Hub 2S Admin Guide



Surface Hub 2S coming soon; Pre-release products shown; products and features subject to regulatory certification/approval, may change, and may vary by country/region.

Surface Hub 2S has not yet been authorized under U.S. Federal Communications Commission (FCC) rules; actual sale and delivery is contingent on compliance with applicable FCC requirements.

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Introduction

This document includes a summary of what's new in Surface Hub 2S and provides prescriptive guidance for configuring accounts, policy settings, management, and related administrative tasks.

Welcome to Surface Hub 2S

Enable teamwork anywhere with Surface Hub 2S, a modern, all-in-one collaborative canvas and meetings platform that brings the power of Windows 10 to teams. It's light, thin, and easy to integrate into any workspace. Wherever your teams go, Surface Hub 2S can go too.

Teamwork flows seamlessly with Surface Hub 2S. Sign in to work with your Office 365 files, project content wirelessly with Miracast, and brainstorm together in Microsoft Whiteboard, a teamworking app you can share across devices. Natively run your must-have Microsoft apps and essential business apps.

New User Experience and Features

Features

60 percent thinner display than original Surface Hub*

40 percent lighter than original Surface Hub*

4.7x the pixels of original Surface Hub*

Over 50 percent faster graphics than original Surface Hub*

Highest screen resolution in its class**

The lightest device in its class**

The thinnest edge of any device in its class**

Thinnest bezel in its class**

Only device in its class to run third-party applications natively**

Only device in its class to enable live editing of Office content natively**

Only device in its class that allows sign-in to the device to access personal cloud content**

* Compared with a 55" Microsoft Surface Hub.

** Comparison by Microsoft of Surface Hub 2S to all other devices within the Futuresource-defined Integrated Unified Communications Displays category (integrated solutions incorporating video, content and audio conferencing features with a display providing an end to end hardware and platform solution, optimized to support a specific UC platform), as of April 2019.

Microsoft Teams

Microsoft Teams is your hub for teamwork in Office 365. With a range of intelligent and interactive devices and services, Teams empowers everyone to connect and collaborate in more immersive ways.

Microsoft Teams for Surface Hub has full Teams calling and meeting capabilities, including one-touch join and up to four incoming video streams—all with side-by-side compatibility with Skype for Business.

New form factor and hardware changes

Surface Hub 2S has a 4K 50.5" display with a 3:2 aspect ratio. To enhance the remote meeting experience, Surface Hub 2S includes a new 4K camera for a clearer, better image. Sound is also better with the new 3-way full-range front speakers and the full-band 8 microphones array with omnidirectional features capable of accurately switching between active speakers in a meeting room.

Surface Hub 2S compared with Surface Hub

The following table details the differences between Surface Hub and Surface Hub 2S:

Component	Surface Hub 55"	Surface Hub 84"	Surface Hub 2S
Form Factor	55"	84"	50"
Size	31.75" x 59.62" x 3.38" (806.4mm x 1514.3mm x 85.8mm)	46.12" x 86.7" x 4.15" (1171.5mm x 2202.9mm x 105.4mm)	29.2" x 43.2" x 3.0" (741 mm x 1097 mm x 76 mm)
Weight	105 lbs. (48 kg)	280 lbs. (127 kg)	61.6 lbs. (28 kg)
Display	Resolution: 1920 x 1080 @ 120Hz Contrast ratio: 1300:1 Touch: 100-point multi-touch Projective Capacitance optically bonded sensor	Resolution: 3840 x 2160 @ 120Hz Contrast Ratio: 1400:1 Touch: 100-point multi-touch Projective Capacitance optically bonded sensor	Resolution: 3840 x 2560 @ 60Hz
Aspect Ratio	16:9	16:9	3:2
Storage	SSD 128 GB	SSD 128 GB	SSD 128 GB
RAM	8 GB RAM	8 GB RAM	8 GB RAM
Processor	4th Generation Intel® Core i5	4th Generation Intel Core i7	Quad-core 8th Generation Intel Core i5 processor
Graphics	Intel HD 4600	NVIDIA Quadro K2200	Intel UHD Graphics 620
Network	Wi-Fi (802.11 a/b/g/n/ac) Ethernet 1 Gbps Bluetooth 4.0 low energy Miracast enabled	Wi-Fi (802.11 a/b/g/n/ac) Ethernet 1 Gbps Bluetooth 4.0 low energy Miracast enabled	Wi-Fi 5 (IEEE 802.11 a/b/g/n/ac) Ethernet 1 Gbps Bluetooth Wireless 4.1 technology Miracast Display

Ports	(1) USB 3.0 (bottom) + (1) USB 3.0 (side access) (2) USB 2.0 DisplayPort Video Output 3.5mm Stereo Out RJ11 Connector for system-level control DisplayPort Video Input HDMI Video Input VGA Video Input 3.5mm Stereo Input (1) USB 2.0 type B Touchback Output	(1) USB 3.0 (bottom) + (1) USB 3.0 (side access) (4) USB 2.0 DisplayPort Video Output 3.5mm Stereo Out RJ11 Connector for system-level control DisplayPort Video Input HDMI Video Input VGA Video Input 3.5mm Stereo Input (1) USB 2.0 type B Touchback Output	(1) USB-A Mini-DisplayPort Video Output HDMI Video Input USB-C with DisplayPort Input (4) USB-C (on display) RJ45 Gigabit Ethernet
Sensors	(2) Passive Infrared Presence Sensors, Ambient Light Sensors	(2) Passive Infrared Presence Sensors, Ambient Light Sensors	Doppler occupancy sensor, Accelerometer, Gyroscope
NFC	NFC reader	NFC reader	N/A
Speakers	(2) Front-facing stereo speakers	(2) Front-facing stereo speakers	Full range front facing 3-way stereo speakers
Microphone	High-Performance, 4-Element Array	High-Performance, 4-Element Array	Full band 8-element MEMS microphone array
Camera	(2) Wide angle HD cameras 1080p @ 30fps	(2) Wide angle HD cameras 1080p @ 30fps	(1) Microsoft Surface Hub 2 Camera, 4K, USB-C connection, 90-degree horizontal field of view
Pen	(2) Powered, active, subpixel accuracy	(2) Powered, active, subpixel accuracy	(1) Microsoft Surface Hub 2 Pen (active)
Physical buttons	Power, Input Select, Volume, Brightness	Power, Input Select, Volume, Brightness	Power, Volume, Source
Software	Windows 10 + Office (Word, PowerPoint, Excel)	Windows 10 + Office (Word, PowerPoint, Excel)	Windows 10 + Office (Word, PowerPoint, Excel)

NOTE: The NFC reader available Surface Hub v1 is discontinued in Surface Hub 2S and is no longer available.

New licensing options

Take advantage of the [Microsoft Teams Meeting Room License](#) available in Office 365. This license covers Skype for Business, Microsoft Teams, and Intune.

Using Microsoft Whiteboard

Microsoft Whiteboard provides an infinite canvas where imagination has room to grow. Draw, type, or add images. Use sticky notes to organize ideas. Stack things up and move them around. Designed for pen, touch, and keyboard, Whiteboard allows you to share your ideas, naturally. Intelligent ink recognizes shapes and makes creating tables a snap. And because the canvas expands along with your creations, you never have to worry about running out of space.

Microsoft Whiteboard brings a team together – and gives them space to create. Teammates can huddle around a large touchscreen in the same room or work together on their own devices from around the world. And avatars on the canvas help you keep track of who is doing what and bring a natural rhythm to the interaction.

Preparing your environment for Surface Hub 2S

Office 365 readiness

You may use Exchange and Skype for Business on-premises with Surface Hub 2S. However, if you use Exchange Online, Skype for Business Online, Microsoft Teams or Microsoft Whiteboard, and if you wish to manage Surface Hub 2S with Intune, it's recommended that you familiarize yourself with the Office 365 requirements for endpoints.

You can optimize your network by sending all trusted Office 365 network requests directly through your firewall, bypassing all additional packet level inspection or processing. This reduces latency and your perimeter capacity requirements. Identifying Office 365 network traffic is the first step in providing optimal performance for your Surface Hub 2S.

Microsoft is continuously improving the Office 365 service and adding new functionality, which means the required ports, URLs, and IP addresses may change over time. It's recommended that you subscribe via RSS to receive notifications when this information is updated or changed.

Device affiliation

Device affiliation determines which users are allowed to access the Settings app on Surface Hub 2S. Due to the nature of the Windows 10 Team Edition operating system, only authorized users are permitted to adjust settings via the settings app. Choosing the affiliation may have an impact on several Surface Hub 2S features, so it's recommended to plan in advance before choosing your device's affiliation.

NOTE: Device Affiliation can only be set during the out-of-box experience (OOBE) setup. It cannot be changed without resetting Surface Hub 2S and going through OOBE again.

No affiliation

No affiliation is like having Surface Hub 2S in a workgroup. Every Surface Hub 2S can have a different local admin account. When you choose this option, you must locally save the Bitlocker Key to a USB thumb drive. You can still enroll the device with Intune, however access to the Settings app can only be done with the local admin's username and password that you configured during OOB. You can change the admin account's password from the Settings app at any time.

Active Directory Domain Services

If you affiliate your Surface Hub 2S with your on-premises Active Directory Domain Services, you will need to set the user permissions for accessing the Settings app via a Security Group on your domain that limits access to members of the security group. The users in this group don't have to be Domain Admin; they will only have permissions to change settings on Surface Hub 2S. Note also the following:

- When Surface Hub 2S is affiliated with your on-premises Active Directory Domain Services, the Bitlocker key is saved in the AD Schema and can be exported to a file if needed. Your organization's Trusted Root CAs are pushed to the same container in Surface Hub 2S so you don't need to import them using a provisioning package.
- You can still enroll the device with Intune to centrally manage settings on your Surface Hub 2S.

Azure Active Directory

When choosing to affiliate your Surface Hub 2S with Azure AD, any user in the Global Admins Security Group can sign in to the Settings app on Surface Hub 2S. Currently, no other group can be delegated to sign in to the Settings app on Surface Hub 2S.

If you enabled Intune Automatic Enrollment for your organization, Surface Hub 2S will automatically enroll itself with Intune. The device's Bitlocker key will be automatically saved in Azure AD.

A known issue when affiliating Surface Hub 2S with Azure AD – Single Sign-on and Streamlined Sign-On on Surface Hub 2S will not work.

Creating Surface Hub 2S device account

Creating a Surface Hub device account (Room mailbox) allows Surface Hub 2S to receive, approve or decline meeting requests, and join meeting using Microsoft Teams or Skype for Business. The device account can be configured during OOB and can be changed later if required.

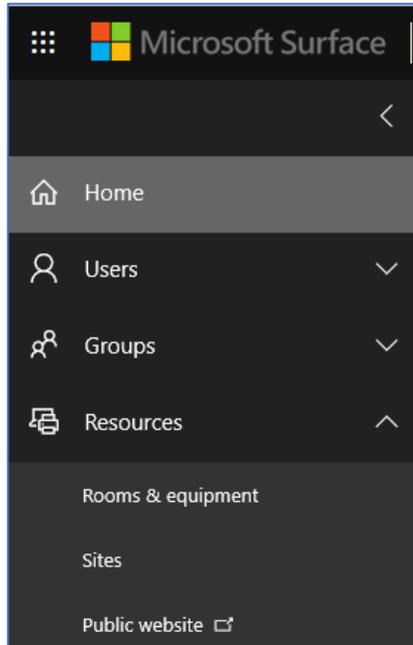
Unlike traditional Room mailboxes that are disabled by default, the Surface Hub 2S device account must be enabled and allowed to sign on to Microsoft Teams and Skype for Business.

Surface Hub 2S uses Exchange ActiveSync, which requires you to configure an ActiveSync Mailbox Policy to the device account. The default ActiveSync Mailbox Policy that comes with Exchange Online can be applied to Surface Hub 2S. If it was already modified, you may need to create and assign a new ActiveSync Mailbox Policy using Exchange Online PowerShell, as described in the section [Configuring accounts using PowerShell](#). Exchange Online PowerShell is also required to configure the custom auto-response sent by Surface Hub 2S.

NOTE: Calendar processing must be configured for every Surface Hub device account using PowerShell.

Online – Configuring Microsoft Teams

1. In the Office 365 Admin portal, go to **Resources** and choose **Rooms & Equipment**



2. Provide a **name** and **email address** for the device account. Leave all other settings in the default state.

Add

Type

Name *

Email *
 @

Capacity

Location

Phone number

[Add](#) [Cancel](#)

Surface Hub 2S Room

[Delete mailbox](#)

Name	Surface Hub 2S	Edit
Email	surfacehub2s@hubdemos.com	
Capacity		
Location		
Phone number		
Allow repeating meetings	On	Edit
Automatic processing	On	
Delegates (0)		Edit
Exchange settings	Edit Exchange settings	

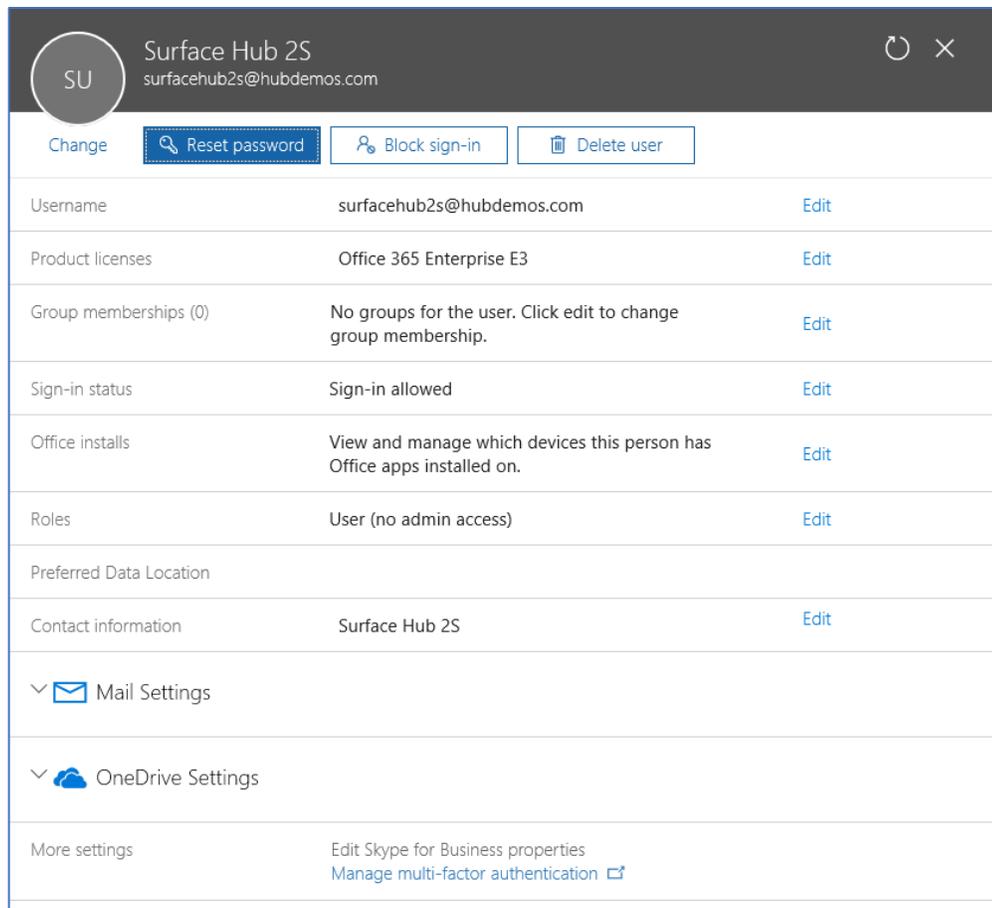
[Close](#)

- Set the password for the device account. Ensure that the user is not required to change the password on the next logon.

The screenshot shows a 'Reset password' dialog box for a user named 'SU' with the email 'surfacehub2s@hubdemos.com'. The dialog is titled 'Reset password' and has a 'Password' label with 'Admin-created' next to it. There are two radio button options: 'Auto-generate password' (unselected) and 'Let me create the password' (selected). Below the second option is a password input field with a red asterisk and a strength indicator showing 'Strong'. A callout box points to the strength indicator with the text: 'You need to create a strong password 8-16 characters long that combines at least three of the following: uppercase letters, lowercase letters, symbols, and numbers.' At the bottom of the dialog are 'Reset' and 'Cancel' buttons.

4. Assign the room with an Office 365 license.

NOTE: It's recommended to assign a **Meeting Room** license.



The account is now configured.

NOTE: You must also use PowerShell to configure Calendar Auto processing for this account. Refer to [Setting Calendar Auto processing](#) below.

Configuring accounts using PowerShell

Connect to Exchange Online PowerShell

```
$365Session = New-PSSession -ConfigurationName Microsoft.Exchange -
ConnectionUri https://ps.outlook.com/powershell -Credential (Get-Credential) -
Authentication Basic -AllowRedirection
```

```
$ImportResults = Import-PSSession $365Session
```

Create a new Room Mailbox

```
New-Mailbox -MicrosoftOnlineServicesID account@YourDomain.com -Alias
SurfaceHub2S -Name SurfaceHub2S -Room -EnableRoomMailboxAccount $true -
RoomMailboxPassword (ConvertTo-SecureString -String "<Enter Strong Password>"
-AsPlainText -Force)
```

Set Calendar Auto processing

```
Set-CalendarProcessing -Identity "account@YourDomain.com" -AutomateProcessing  
AutoAccept -AddOrganizerToSubject $false -AllowConflicts $false -  
DeleteComments $false -DeleteSubject $false -RemovePrivateProperty $false -  
AddAdditionalResponse $true -AdditionalResponse "This room is equipped with a  
Surface Hub"
```

Assign a license

```
Connect-MsolService
```

```
Set-Msoluser -UserPrincipalName account@YourDomain.com -UsageLocation IE
```

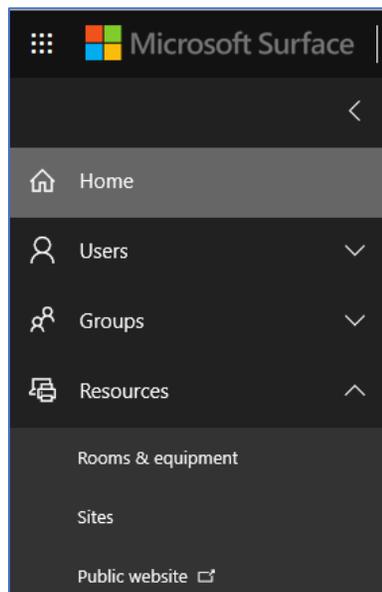
```
Set-MsolUserLicense -UserPrincipalName "account@YourDomain.com" -AddLicenses  
"contoso:MEETING_ROOM"
```

The account is now configured.

Online – Configuring Skype for Business

Web Portal

1. In the Office 365 Admin portal, go to Resources and choose Rooms & Equipment:



2. Provide a name and email address for the Device account. Leave all other settings in the default state.

Add

Type
 Room

Name *
 Surface Hub 2S

Email *
 surfacehub2s @ hubdemos.com

Capacity

Location

Phone number

Add Cancel

Surface Hub 2S
 Room

Delete mailbox

Name	Surface Hub 2S	Edit
Email	surfacehub2s@hubdemos.com	
Capacity		
Location		
Phone number		
Allow repeating meetings	On	Edit
Automatic processing	On	
Delegates (0)		Edit
Exchange settings	Edit Exchange settings	

Close

- Set the password for the device account. Ensure that the user is not required to change the password on the next logon.

Surface Hub 2S
surfacehub2s@hubdemos.com

Reset password

Admin-created

Auto-generate password

Let me create the password

Password *

..... Strong

Make this user change their password when they first sign in

You need to create a strong password 8-16 characters long that combines at least three of the following: uppercase letters, lowercase letters, symbols, and numbers.

Reset Cancel

4. Assign the room with an Office 365 license.

NOTE: It's recommended to assign a Meeting Room license.

Surface Hub 2S
surfacehub2s@hubdemos.com

Change **Reset password** Block sign-in Delete user

Username	surfacehub2s@hubdemos.com	Edit
Product licenses	Office 365 Enterprise E3	Edit
Group memberships (0)	No groups for the user. Click edit to change group membership.	Edit
Sign-in status	Sign-in allowed	Edit
Office installs	View and manage which devices this person has Office apps installed on.	Edit
Roles	User (no admin access)	Edit
Preferred Data Location		
Contact information	Surface Hub 2S	Edit
Mail Settings		
OneDrive Settings		
More settings	Edit Skype for Business properties Manage multi-factor authentication	

The account is now configured. To configure Calendar Auto processing for this account, refer to Set Calendar Auto processing below.,

Configuring via PowerShell

Connect to Exchange Online PowerShell

```
$365Session = New-PSSession -ConfigurationName Microsoft.Exchange -  
ConnectionUri https://ps.outlook.com/powershell -Credential (Get-Credential) -  
Authentication Basic -AllowRedirection  
  
$ImportResults = Import-PSSession $365Session
```

Create a new Room Mailbox

```
New-Mailbox -MicrosoftOnlineServicesID account@YourDomain.com -Alias  
SurfaceHub2S -Name SurfaceHub2S -Room -EnableRoomMailboxAccount $true -  
RoomMailboxPassword (ConvertTo-SecureString -String "<Enter Strong Password>"  
-AsPlainText -Force)
```

Set Calendar Auto processing

```
Set-CalendarProcessing -Identity "account@YourDomain.com" -AutomateProcessing  
AutoAccept -AddOrganizerToSubject $false -AllowConflicts $false -  
DeleteComments $false -DeleteSubject $false -RemovePrivateProperty $false -  
AddAdditionalResponse $true -AdditionalResponse "This room is equipped with a  
Surface Hub"
```

Assign a license

```
Connect-MsolService  
  
Set-Msoluser -UserPrincipalName account@YourDomain.com -UsageLocation IE  
  
Set-MsolUserLicense -UserPrincipalName "account@YourDomain.com" -AddLicenses  
"contoso:MEETING_ROOM"
```

Connecting to Skype for Business Online using PowerShell

Install prerequisites

- [Visual C++ 2017 Redistributable](#)
- [Skype for Business Online PowerShell Module](#)

```
Import-Module LyncOnlineConnector  
  
$SfBSession = New-CsOnlineSession -Credential (Get-Credential)  
  
Import-PSSession $SfBSession -AllowClobber
```

Enable the Skype for Business meeting room

```
Enable-CsMeetingRoom -Identity account@YourDomain.com -RegistrarPool (Get-CSTenant).RegistrarPool -SipAddressType EmailAddress
```

Configuring on-premises accounts using PowerShell

Connect to Exchange Server PowerShell

NOTE: It is important that you know the FQDN of the Client Access service of the on-premises Exchange server.

```
$ExchServer = Read-Host "Please Enter the FQDN of your Exchange Server"

$ExchSession = New-PSSession -ConfigurationName Microsoft.Exchange -
ConnectionUri http://$ExchServer/PowerShell/ -Authentication Kerberos -
Credential (Get-Credential)

Import-PSSession $ExchSession
```

Create the device account

```
New-Mailbox -UserPrincipalName Hub01@contoso.com -Alias Hub01 -Name "Hub 01" -
Room -EnableRoomMailboxAccount $true -RoomMailboxPassword (ConvertTo-
SecureString -String <password> -AsPlainText -Force)
```

Set automatic calendar processing

```
Set-CalendarProcessing -Identity "HUB01@contoso.com" -AutomateProcessing
AutoAccept -AddOrganizerToSubject $false -AllowConflicts $false -
DeleteComments $false -DeleteSubject $false -RemovePrivateProperty $false -
AddAdditionalResponse $true -AdditionalResponse "This room is equipped with a
Surface Hub"
```

Enable the Skype for Business object

NOTE: It is important that you know the FQDN of the Skype for Business Registrar Pool.

```
Enable-CsMeetingRoom -Identity Contoso\HUB01 -SipAddressType emailaddress -
RegistrarPool SfbIEFE01.contoso.local
```

Mobile Device Mailbox Policy

You may need to create a new Mobile Device Mailbox Policy (also known as ActiveSync Policy) to allow your Surface Hub to connect to your online or on-premises environment.

Create a Surface Hub mobile device mailbox policy

```
New-MobileDeviceMailboxPolicy -Name "Surface Hubs" -PasswordEnabled $false
```

Additional settings

For Microsoft Teams it's recommended to set `-DeleteComments` to `$True` and add a MailTip to Surface Hub rooms so users remember to make the meeting a Skype for Business or Teams meeting:

```
Set-Mailbox "Surface Hub 2S" -MailTip "This is a Surface Hub room. Please make sure this is a Microsoft Teams meeting."
```

Surface Hub room account password rotation

Surface Hub can manage a device account's password by changing it frequently without requiring you to manually update the device account's information.

If you turn on Password Rotation, Surface Hub 2S will change the password every 7 days. The automatically generated passwords contain 15-32 characters and include a combination of uppercase and lowercase letters, numbers, and special characters.

Passwords will not change during a meeting or if Surface Hub 2S is turned off. In this case, Surface Hub 2S will attempt to change the password immediately when turned on or every 10 minutes until successful.

Provision Surface Hub 2S with a provisioning package

You can use Windows Configuration Designer (WCD) to create provisioning packages to automate the deployment process of Surface Hub 2S.

Use provisioning packages to add certificates, configure proxies, set up device administrators and device accounts. You can also use provisioning packages in conjunction with a configuration file to deploy multiple Surface Hubs with a single USB thumb drive.

Installing Windows Configuration Designer

Install Windows Configuration Designer from the Windows Assessment and Deployment Kit (ADK) for Windows 10. Download and install the ADK for Windows 10, version 1703.

Adding certificates

You can import Certificate Authority certificates to Surface Hub 2S.

To add certificates to Surface Hub 2S, you'll need a copy of each certificate as X.509 in .cer format. You cannot import .crt, .pfx or other container formats.

Certificates must be imported into Windows Configuration Designer and arranged by hierarchy:

Steps

- Add certificates ✓
- Configure proxy settings ✓
- Set up device admins ✓
- Enroll in device management ✓
- Add applications ✓
- Add a configuration file ✓
- Finish

Add certificates
Customize which certificates are provisioned on the device

+ Add a certificate

Install order
You can click and drag applications to specify the order of installation.

- 1 Root
C:\Users\yoabar\OneDrive - Microsoft\Surface Hub_Hub2\Adm
- 2 Intermediate
C:\Users\yoabar\OneDrive - Microsoft\Surface Hub_Hub2\Adm

Configuring proxy during OOB

In Windows Configuration Designer, go to the **Configure proxy settings** tab and enter the appropriate settings as shown below.

Steps

- Add applications ✓
- Add certificates
- Configure proxy settings**
- Set up device admins
- Enroll in device management
- Add a configuration file
- Finish

Configure proxy settings
 Yes

Automatically detect settings: No

Setup script URL: `http://proxysrv.domain.local/proxy.pa`

Static proxy server*: 192.168.1.18080

Exceptions for proxy: *.office365.com

Use proxy for local addresses*: No

Automatic proxy setup
Use a proxy server for Ethernet or Wi-Fi connections. These settings don't apply to VPN connections.

Automatically detect settings: On

Use setup script: Off

Script address: [Redacted]

Save

Manual proxy setup
Use a proxy server for Ethernet or Wi-Fi connections. These settings don't apply to VPN connections.

Use a proxy server: Off

Address: [Redacted] Port: [Redacted]

Use the proxy server except for addresses that start with the following entries. Use semicolons (;) to separate entries.
[Redacted]

Don't use the proxy server for local (intranet) addresses

NOTE: When configuring proxy:

Turn off **Automatically detect settings** if you intend to use a setup script or a proxy server.

You can use a setup script or a proxy server, not both.

Joining Hub 2S to Azure Active Directory

You can join Surface Hub 2S to Azure AD using a provisioning package:

As an administrator, you can join large numbers of new Windows devices to Azure Active Directory and Intune using a bulk token.

To create a bulk token, give it a friendly name, configure the expiration date (maximum of 30 days) and use your Admin credentials to acquire the token as shown below:

The screenshot shows the 'Set up device admins' step in the provisioning process. On the left, a 'Steps' sidebar lists: Add certificates (checked), Configure proxy settings (checked), Set up device admins (active), Enroll in device management (checked), Add applications (checked), Add a configuration file (checked), and Finish. The main area is titled 'Set up device admins' and contains three radio button options: 'Use Active Directory', 'Use Azure Active Directory' (selected), and 'Use a local admin account'. Below these options, a note states: 'Join Surface Hub to your Azure AD tenant to allow global administrators and other specified admins to use the Settings app. You'll need to get a bulk token for Surface Hub to join your Azure AD tenant.' There are two input fields: 'Friendly name for Bulk Token *' with the value 'Surface Hub 2S' and 'Expiration date for bulk token *' with the value '04/17/2019'. A 'Sign in to get bulk token *' button is located below the expiration date field, with a 'Get Bulk Token' button positioned directly under it.

This screenshot is similar to the previous one but includes a password prompt overlay. The 'Steps' sidebar and 'Set up device admins' options are the same. The 'Sign in to get bulk token *' button is now active, and a 'Surface' login dialog is displayed in the foreground. The dialog shows the email 'admin@microsoft.com' and the text 'Enter password' above a masked password field. There is a 'Forgot my password' link and a 'Sign in.' button. At the bottom of the dialog, it says '©2019 Microsoft Terms of use Privacy & cookies ...'. At the bottom of the main interface, there are links for 'Switch to advanced editor', 'Learn more', 'Back', and 'Next'.

Provisioning multiple devices (.csv file)

In addition to the provisioning package, you can use a Surface Hub configuration file to make it even easier to set up your devices. A Surface Hub configuration file contains a list of device accounts and friendly names for wireless projection. During first run, you'll get an option to choose a device account and friendly name from a configuration file.

To create a Surface Hub configuration file

1. Using Microsoft Excel or another CSV editor, create a CSV file named:
SurfaceHubConfiguration.csv
2. Enter a list of device accounts and friendly names in this format:
<DeviceAccountName>,<DeviceAccountPassword>,<FriendlyName>

```
SurfaceHub2s_1,P@ssword,Mount Olympus
SurfaceHub2s_2,P@ssword,Mount Shuksan
SurfaceHub2s_3,P@ssword,Mount Baker
SurfaceHub2s_4,P@ssword,Glacier Peak
```

3. Save the file to your ICD project folder and copy it to the USB key with your provisioning package.

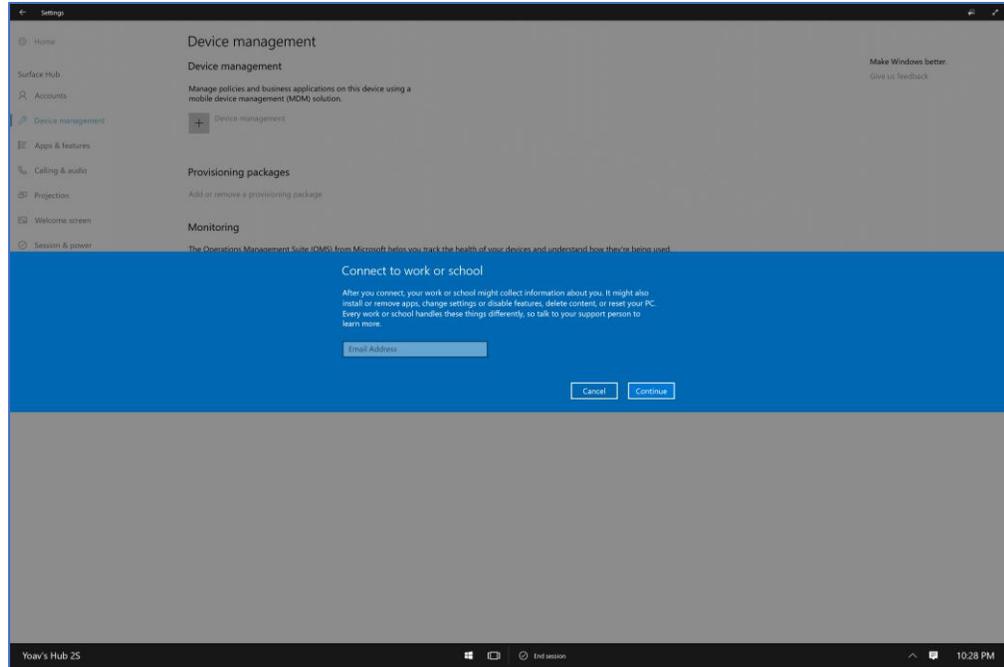
Managing Surface Hub 2S with Microsoft Intune

Registering Surface Hub with Intune

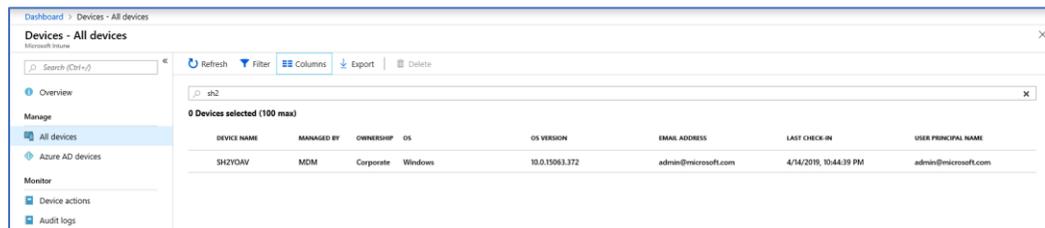
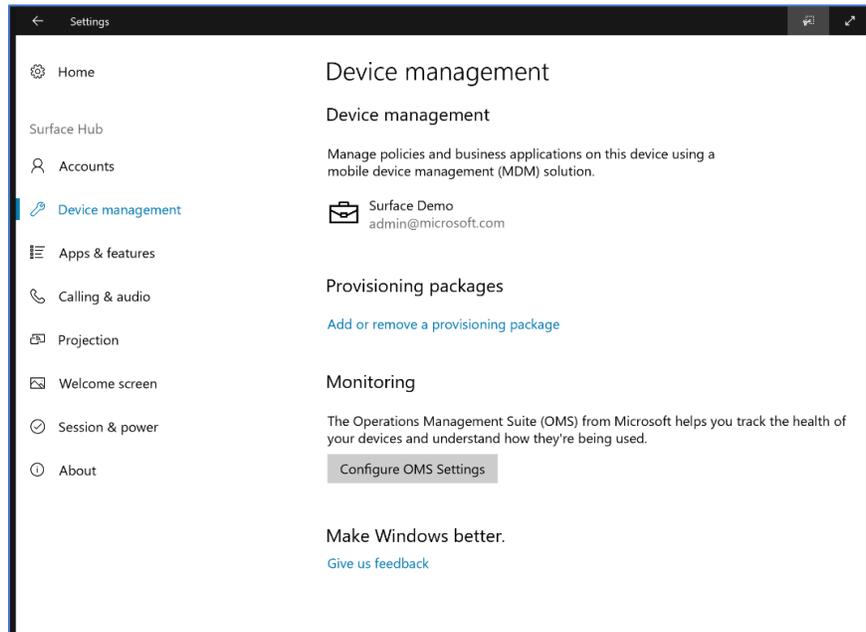
Surface Hub 2S allows IT administrators to manage settings and policies using a mobile device management (MDM) provider. A built-in management component communicates with the management server, so there is no need to install additional clients on the device.

Manual registration

1. From the Settings app on Surface Hub 2S, go to **Surface Hub, Device management**, and click the + sign for Device management:



2. After authenticating, the device will automatically register with Intune:

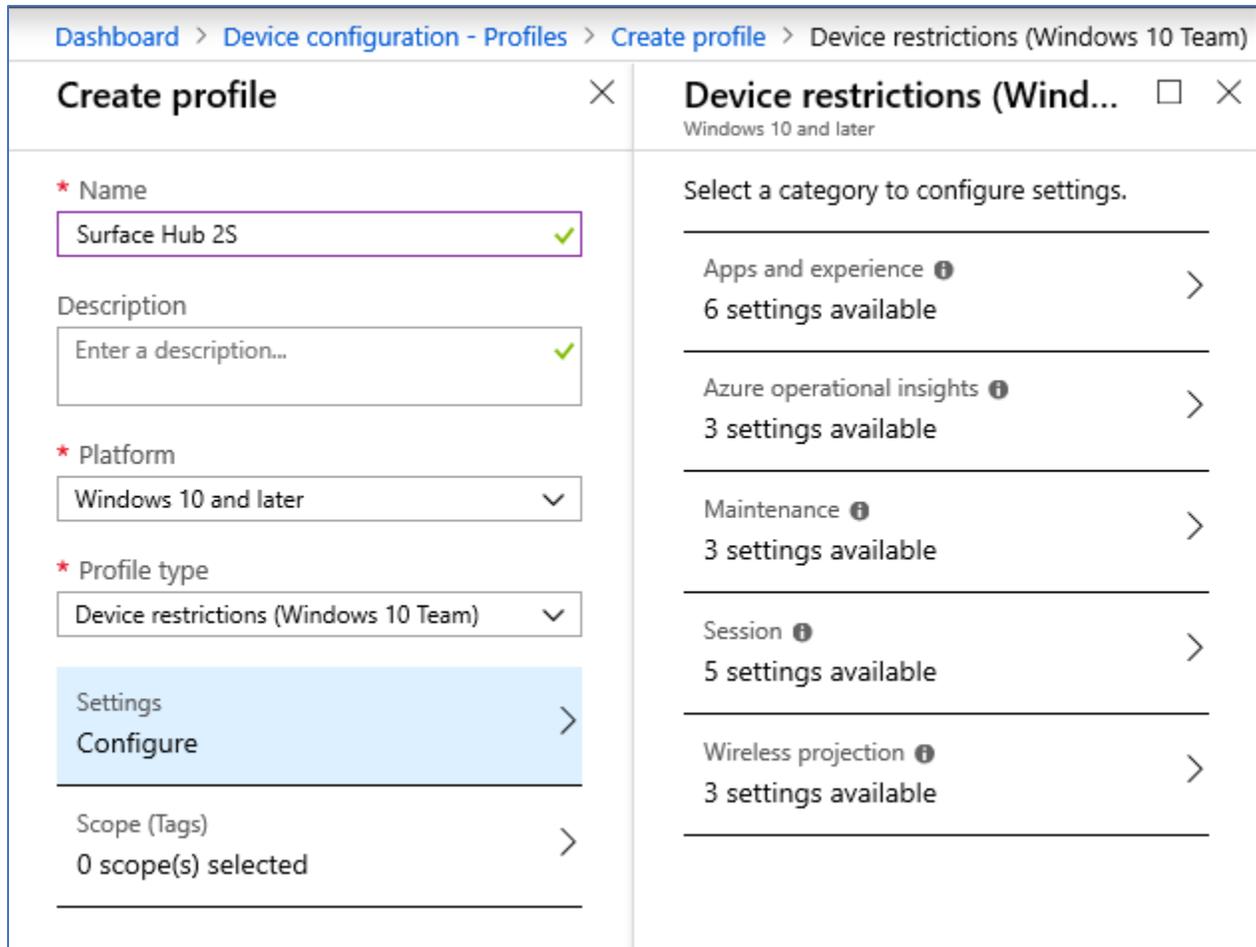


Auto registration — Azure Active Directory Affiliated

When affiliating Surface Hub 2S with a tenant that has Intune Autoenrollment enabled, the device will automatically enroll with Intune.

Windows 10 Team Edition settings

Intune has preset device restriction settings for Surface Hub and Surface Hub 2S, under 'Windows 10 Team':



The screenshot displays the Intune console interface. The breadcrumb navigation at the top reads: Dashboard > Device configuration - Profiles > Create profile > Device restrictions (Windows 10 Team). The interface is split into two main panels. The left panel, titled 'Create profile', contains several fields: 'Name' with the value 'Surface Hub 2S' and a green checkmark; 'Description' with the placeholder 'Enter a description...' and a green checkmark; 'Platform' set to 'Windows 10 and later'; 'Profile type' set to 'Device restrictions (Windows 10 Team)'; a 'Settings Configure' button; and 'Scope (Tags)' showing '0 scope(s) selected'. The right panel, titled 'Device restrictions (Windows 10 Team)', shows a list of categories to configure settings: 'Apps and experience' (6 settings available), 'Azure operational insights' (3 settings available), 'Maintenance' (3 settings available), 'Session' (5 settings available), and 'Wireless projection' (3 settings available). Each category has a right-pointing chevron icon.

These settings include user experience and app behavior, Azure Log Analytics registration, Maintenance windows configuration, Session settings and Miracast settings.

Additional supported CSPs

In addition to the preset device restrictions, [the following CSPs are supported on Surface Hub 2S](#): (List may change).

Communications app QoS DSCP settings

To ensure best video and audio quality on Surface Hub, it is recommended to deploy the following QoS settings to the device.

The settings are identical for Skype for Business and Teams:

Name	Desc	OMA-URI	Type	Value
Audio Ports	Audio Port range	./Device/Vendor/MSFT/NetworkQoSPolicy/HubAudio/SourcePortMatchCondition	String	50000-50019
Audio DSCP	Audio ports marking	./Device/Vendor/MSFT/NetworkQoSPolicy/HubAudio/DSCPAction	Integer	46
Video Ports	Video Port range	./Device/Vendor/MSFT/NetworkQoSPolicy/HubVideo/SourcePortMatchCondition	String	50020-50039
Video DSCP	Video ports marking	./Device/Vendor/MSFT/NetworkQoSPolicy/HubVideo/DSCPAction	Integer	34

NOTE: These are the default port ranges. Administrators may change the port ranges in the Skype for Business and Teams control panel

Microsoft Teams Mode settings

You can set the Microsoft Teams app mode using Intune.

Modes:

- Mode 0 – Skype for Business with Microsoft Teams functionality for scheduled meetings.
- Mode 1 – Microsoft Teams with Skype for Business functionality for scheduled meetings.
- Mode 2 – Microsoft Teams only.

To set the desired mode, add the following settings to a custom Device Configuration Profile:

Name	Description	OMA-URI	Type	Value
Teams App ID	App name	./Vendor/MSFT/SurfaceHub/Properties/VtcAppPackageld	String	Microsoft.MicrosoftTeamsforSurfaceHub_8wekyb3d8bbwe!Teams
Teams App Mode	Teams mode	./Vendor/MSFT/SurfaceHub/Properties/SurfaceHubMeetingMode	Integer	0 or 1 or 2

NOTE: Surface Hub 2S comes installed with Teams in mode 0.

Learn more

For more information about Surface Hub, visit the [Microsoft Docs](#) site.