

# Windows Desktop Device Management

VMware Workspace ONE UEM 1902



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# Introduction to Windows Desktop

# 1

Workspace ONE UEM provides you with a robust set of mobility management solutions for enrolling, securing, configuring, and managing your Windows 10 device deployment.

Through the Workspace ONE UEM console, you have several tools and features for managing the entire lifecycle of corporate and employee-owned devices. You can also enable end users to perform tasks themselves, for example, through the Self-Service Portal and user self-enrollment, which saves you vital time and resources.

Workspace ONE UEM allows you to enroll both corporate and employee-owned devices to configure and secure your enterprise data and content. By using of our device profiles, you can properly configure and secure your Windows devices. Detect compromised devices and remove their access to corporate resources using the compliance engine.

Enrolling your devices into Workspace ONE UEM allows you to secure and configure devices to meet your needs.

This chapter includes the following topics:

- [Windows Desktop Enrollment Requirements](#)
- [Supported Windows Desktop Devices](#)

## Windows Desktop Enrollment Requirements

Before enrolling your Windows Desktop devices, ensure you have met the requirements. These requirements include important information to provide end users enrolling their own devices.

### Requirements

- **Active Environment** – Your active Workspace ONE UEM environment and your access to the Workspace ONE UEM Console.
- **Appropriate Admin Permissions** – A type of permission that allows you to create profiles, determine policies, and manage devices within the UEM Console.
- **Enrollment URL** – This URL is unique to your enrollment environment and takes you directly to the enrollment screen. For example, **mdm.example.com**.

- **Group ID** – This Group ID associates your device with your corporate role and is defined in the UEM Console.

**Important** If your enrollment server is behind a proxy, you must configure the Windows service WINHTTP to be proxy-aware when configuring your network settings.

## Supported Windows Desktop Devices

The Windows Desktop platform includes versions of the Windows operating system ranging from Windows 8.0 to Windows 10 and the various versions of each iteration.

## Platforms and Devices Supported

Devices running the following operating systems:

- Windows 10 Pro
- Windows 10 Enterprise
- Windows 10 Education
- Windows 10 Home
- Windows 10 S

**Important:** To see the OS version each update branch supports, see Microsoft's documentation on Windows 10 release information: <https://technet.microsoft.com/en-us/windows/release-info.aspx>.

## Windows 10 Version Matrix

Compare the MDM functionality available in each version of the Windows 10 OS. Workspace ONE UEM supports all versions of Windows 10 OS and the functions they support.

The different editions of Windows 10 (Home, Professional, Enterprise, and Education) have different functionality. Windows 10 Home edition does not support the advanced functionality available to the Windows 10 OS. Consider using Enterprise or Education editions for the most functionality.

Feature	Windows 10 OS Home	Windows 10 OS Professional	Windows 10 OS Enterprise	Windows 10 OS Education
Native Client Enrollment	✓	✓	✓	✓
Agent Based Enrollment	✓	✓	✓	✓
Requires a Windows Account ID				
Force EULA/Terms of Use Acceptance	✓	✓	✓	✓
Support for Option Prompts during Enrollment	✓	✓	✓	✓
Active Directory/ LDAP	✓	✓	✓	✓
Cloud Domain Join Enrollment		✓	✓	✓
Out of Box Experience Enrollment		✓	✓	✓

Feature	Windows 10 OS Home	Windows 10 OS Professional	Windows 10 OS Enterprise	Windows 10 OS Education
Bulk Provisioning Enrollment		✓	✓	✓
Device Staging	✓	✓	✓	✓
SMS				
Email Messages		✓	✓	✓
Password Policy	✓	✓	✓	✓
Enterprise Wipe	✓	✓	✓	✓
Full Device Wipe	✓	✓	✓	✓
Email & Exchange ActiveSync	✓	✓	✓	✓
Wi-Fi	✓	✓	✓	✓
VPN	✓	✓	✓	✓
Certificate Management	✓	✓	✓	✓
Device Restrictions and Settings	✓	✓	✓	✓
Windows Hello	✓ <sup>3</sup>	✓	✓	✓
Encryption	✓	✓	✓	✓
Application Control (AppLocker)			✓	✓
Health Attestation	✓	✓	✓	✓
Windows Update for Business		✓	✓	✓
Assigned Access			✓	✓
Application Management		✓	✓	✓
VMware Browser	✓	✓	✓	✓
VMware Content Locker	✓	✓	✓	✓
Asset Tracking		✓	✓	✓
Device Status		✓	✓	✓
IP Address				
Location	✓	✓	✓	✓
Network		✓	✓	✓
Send Support Message (Email and SMS only)		✓	✓	✓

1 – Enterprise also includes IoT Enterprise and Long-Term Servicing Branch (LTSB). LTSB is a separate Windows 10 Enterprise image with many native apps, including Microsoft Edge, Cortana, and the Microsoft Store, removed. Some Workspace ONE UEM functionality which leverage these features will not be supported.

2 – Microsoft Passport requires TPM 1.2 or 2.0 hardware based protection of credentials or keys; if no TPM exists or is configured, credentials and keys protection will be OS-based.

3 – Device encryption for home does not include BitLocker encryption.



- 4 – Can be downloaded from the Microsoft Store only. Windows 10 Home does not support pushing internal apps.
- 5 – Requires the Workspace ONE Intelligent Hub downloaded from the Microsoft Store.

# Windows Desktop Enrollment Overview

# 2

The enrollment methods for Windows Desktop devices vary based on your Workspace ONE UEM deployment, enterprise integrations, and device operating system. The Windows Desktop platform supports various OS versions and SKUs for Windows devices.

## Enrollment Basics

Before enrolling devices, ensure that you have the required enrollment information. See [Windows Desktop Enrollment Requirements](#) for more information.

Simplify end-user enrollment by setting up the Windows Auto-Discovery Services (WADS) in your Workspace ONE UEM environment. WADS supports an on-premises solution and cloud-based WADS.

The enrollment methods use either the native MDM functionality of the Windows operating system, the Workspace ONE Intelligent Hub for Windows, or Azure AD integration.

If you want to use Workspace ONE UEM to manage Windows devices managed by SCCM, you must download the VMware AirWatch SCCM Integration Client. Use this client to enroll SCCM-managed devices into Workspace ONE UEM. For more information, see the Knowledge Base article **VMware AirWatch SCCM Integration Client**: <https://support.air-watch.com/articles/115001664948>.

## Workspace ONE Intelligent Hub for Windows Enrollment

The simplest enrollment workflow uses the Workspace ONE Intelligent Hub for Windows to enroll devices. End users simply download the Workspace ONE Intelligent Hub from [awagent.com](http://awagent.com) and follow the prompts to enroll. For more information on Agent-based enrollment, see [Workspace ONE Intelligent Hub for Windows Enrollment](#).

Consider using the Workspace ONE Intelligent Hub for the Windows Enrollment workflow. Workspace ONE UEM supports additional enrollment flows that meet specific use cases.

## Azure AD Integration Enrollment

Through integration with Microsoft Azure Active Directory, Windows devices automatically enroll into Workspace ONE UEM with minimal end-user interaction. Azure AD integration enrollment simplifies enrollment for both end users and admins. Azure AD integration enrollment supports three different enrollment flows: Join Azure AD, Out of Box Experience enrollment, and Office 365 enrollment. All methods require configuring Azure AD integration with Workspace ONE UEM.

Before you can enroll your devices using Azure AD integration, you must configure Workspace ONE UEM and Azure AD. For more information, see [Configure Azure AD Identity Services Integration](#).

To enroll through Azure AD integration workflows, see [Enrollment Through Azure AD Integration](#).

## Native MDM Enrollment

Workspace ONE UEM supports enrolling Windows Desktop devices using the native MDM enrollment workflow. The name of the native MDM solution varies based on the version of Windows. This enrollment flow changes based on the version of Windows and if you use WADS.

For more information, see [Native MDM Enrollment for Windows Desktop](#).

## Device Staging

If you want to configure device management on a Windows 10 device before shipping a device to your end user, consider using Windows Desktop device staging. This enrollment workflow allows you to enroll a device through the Workspace ONE Intelligent Hub, install device-level profiles, and then ship the device to end users. The two methods of device staging are manual installation and command-line installation. Manual installation requires devices to be domain-joined to an Azure AD integration. Command-line installation works for all Windows 10 devices. See [Device Staging Enrollment](#) for more information.

## Windows Desktop Auto-Enrollment

Workspace ONE UEM supports the auto-enrollment of specific Windows Desktop devices purchased from Dell. Auto-enrollment simplifies the enrollment process by automatically enrolling registered devices following the Out-of-Box-Experience.

Windows 10 Provisioning Service by VMware AirWatch only applies to select Dell Enterprise devices with the correct Windows 10 image. The auto-enrollment functionality must be purchased as part of the purchase order from Dell.

For more information, see [Windows 10 Provisioning Service by VMware AirWatch](#) .

## Bulk Provisioning and Enrollment

Bulk provisioning creates a pre-configured package that stages Windows 10 devices and enrolls them into Workspace ONE UEM. Bulk provisioning requires downloading the Microsoft Assessment and Development Kit and installing the Imaging and Configuration Designer tool. This tool creates the provisioning packages used to image devices.

With the bulk provisioning workflow, you can include Workspace ONE UEM settings in the provisioning package so that provisioned devices automatically enroll during the initial Out of Box Experience. For more information, see [Bulk Provisioning and Enrollment](#).

This chapter includes the following topics:

- [Windows Desktop and Windows 7 Devices](#)
- [Workspace ONE Intelligent Hub for Windows Enrollment](#)
- [Native MDM Enrollment for Windows Desktop](#)
- [Device Staging Enrollment](#)
- [Windows 10 Provisioning Service by VMware AirWatch](#)
- [Enrollment Through Azure AD Integration](#)
- [Bulk Provisioning and Enrollment](#)

## Windows Desktop and Windows 7 Devices

You can enroll your Windows devices into one of two platforms. The platform determines the available device management functionality for your Windows devices.

The Windows Desktop platform supports Windows 10 devices using the native MDM enrollment. The Windows 7 platform supports Windows 7, Windows 8, and Windows 10 devices enrolled using Workspace ONE Intelligent Hub for Windows.

The table shows the differences in enrollment methods. Consider enrolling Windows 10 devices as Windows Desktop devices because of the increased device management functionality.

Functionality	Windows 7	Windows Desktop
Native MDM Enrollment Method		✓
Workspace ONE Intelligent Hub Enrollment	✓	✓
AirWatch Protection Agent Support	✓	✓
Supports Full Windows 10 functionality		✓
Supports SCCM Managed Devices	✓	✓
Supports Windows 7 Devices	✓	

## Workspace ONE Intelligent Hub for Windows Enrollment

The Workspace ONE Intelligent Hub provides a single resource for enrollment and facilitates communication between the device and the Workspace ONE UEM Console. Use the Workspace ONE Intelligent Hub to simplify enrollment and enable full MDM functionality.

Consider using the Workspace ONE Intelligent Hub for Windows to enroll your Windows Desktop devices as the Workspace ONE Intelligent Hub provides the simplest enrollment flow for users. If you have Workspace ONE configured, downloading the Workspace ONE Intelligent Hub from [awagent.com](https://www.vmware.com/resources/compatibility/path1) also downloads the Workspace ONE app. When you finish enrolling with the Workspace ONE Intelligent Hub, the Workspace ONE app auto-launches and configures based on your Workspace ONE UEM deployment.

The Workspace ONE Intelligent Hub provides extra functionality to your Windows Desktop devices including location services.

You can simplify enrollment for your end users by using Windows Auto-Discovery. Windows Auto-Discovery enables end users to enter their email address to fill in the text boxes automatically with their enrollment credentials.

## AirWatch Cloud Messaging

AirWatch Cloud Messaging (AWCM) enables real-time policy and command delivery to the Workspace ONE Intelligent Hub. Without AWCM, the Workspace ONE Intelligent Hub only receives policy and command delivery during its normal check-in intervals set in the AirWatch console. Consider using AWCM for real-time policy and command delivery to Windows Desktop devices.

## Enroll With the VMware Workspace ONE Intelligent Hub

Use the Workspace ONE Intelligent Hub to start enrollment of your Windows Desktop devices. The Workspace ONE Intelligent Hub provides a simplified enrollment flow for end users that is quick and easy enrollment.

### Procedure

- 1 On the Windows Desktop device, navigate to <https://awagent.com>.
- 2 Install the Workspace ONE Intelligent Hub. When the installation is finished, start the Workspace ONE Intelligent Hub.
- 3 Select **Connect a work or school account**. The Workspace ONE Intelligent Hub then opens the Workplace native app to complete enrollment.
- 4 Enter the email address and select **Next**.
- 5 If you are not using Windows Auto-Discovery, complete the following settings:
  - a Enter the **Server URL** and select **Next**.
  - b Enter the **Group ID** and select **Next**.
  - c Enter the **Username** and **Password**.
- 6 **Accept** the terms of use.
- 7 Select **Done**.
- 8 Open the Workspace ONE Intelligent Hub and complete the enrollment.

## Native MDM Enrollment for Windows Desktop

Windows Desktop enrollment methods all use the Work Access native MDM Client. Use the native MDM enrollment to enroll both corporate owned and BYOD devices through the same enrollment flow.

Work Access first processes an Azure AD work flow for domains connected to Office 360 or Azure AD when you select **Connect** and does not automatically complete the enrollment workflow. If you use Office 365 or Azure AD without a premium license, consider using the Workspace ONE Intelligent Hub to enroll Windows 10 devices instead of native MDM enrollment. To complete the enrollment workflow using native MDM enrollment, select **Connect** twice. If you have an Azure AD premium license, you can enable **Require Management** in your Azure instance to have native MDM enrollment complete the enrollment flow after the Azure work flow. You can use native MDM enrollment without issue if you do not use Office 365 or Azure AD.

Only users who have local admin permissions on the device can enroll a device into Workspace ONE UEM and enable MDM. Domain Admin permissions do not work for enrolling a device. To enroll a device with a standard user, you must use Bulk Provisioning for Windows 10 devices.

By using the Windows Auto-Discovery Service, you simplify enrollment for your end user by reducing the necessary interaction during enrollment. Using the Windows Auto-Discovery Service requires you to follow the steps outlined in the **VMware AirWatch Windows Auto-Discovery Service Installation Guide**.

Devices joined to a domain can enroll using the native Workplace enrollment. The email address entered in the settings is auto-populated with the Active Directory UPN attribute. If the end user wants to use a different email address, they must download the optional update.

## Enroll Through Work Access With Windows Auto Discovery

Work Access is the native MDM enrollment method for Windows 10 devices. Enrolling through Work Access and using Windows Auto Discovery provides a quick and easy enrollment flow for end users.

### Prerequisites

Registering your domain in Workspace ONE UEM removes the need to enter the Group ID during enrollment.

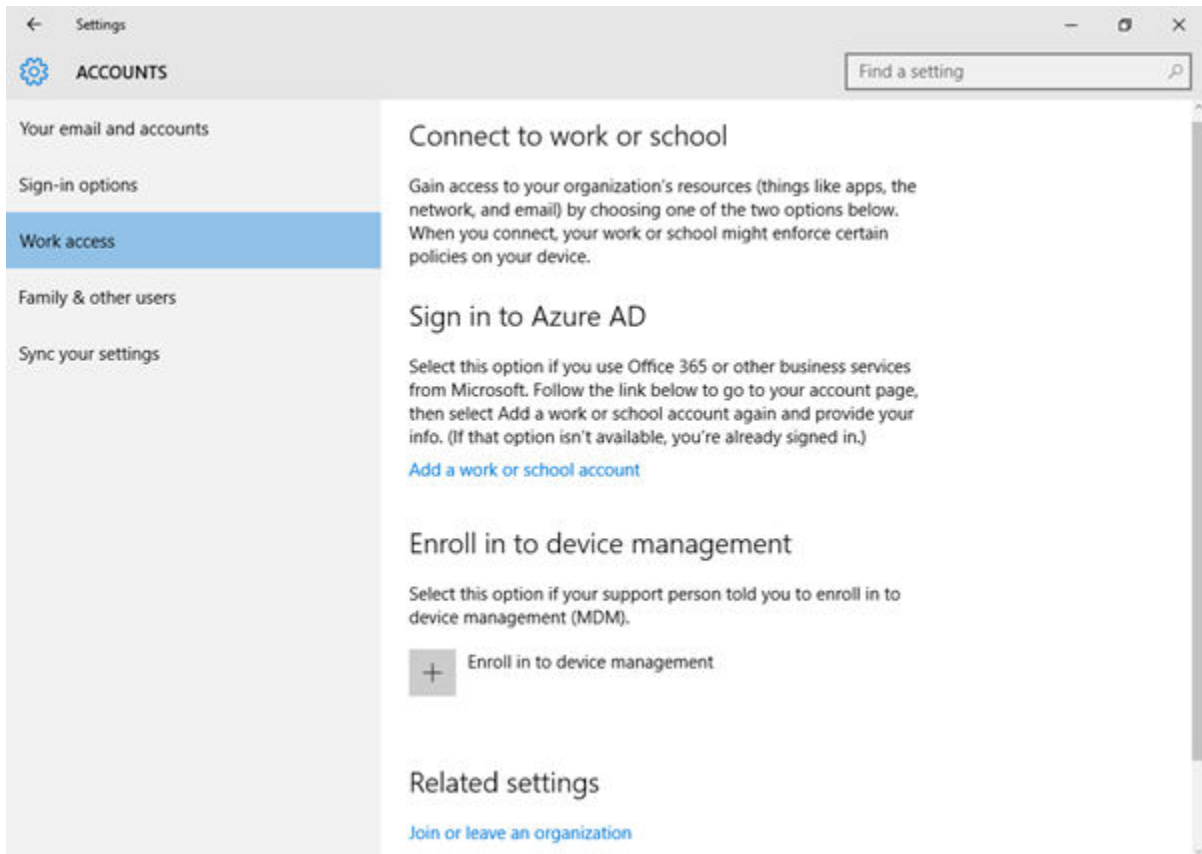
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**Note** Consider using the Workspace ONE Intelligent Hub for Windows to enroll your Windows 10 devices instead of using native MDM enrollment. The native MDM enrollment flow does not enroll devices into MDM if you use Office 365 or Azure AD on the same domain.

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## Procedure

- 1 Navigate on the device to **Settings > Accounts > Work Access** and select **Enroll in to device management**.



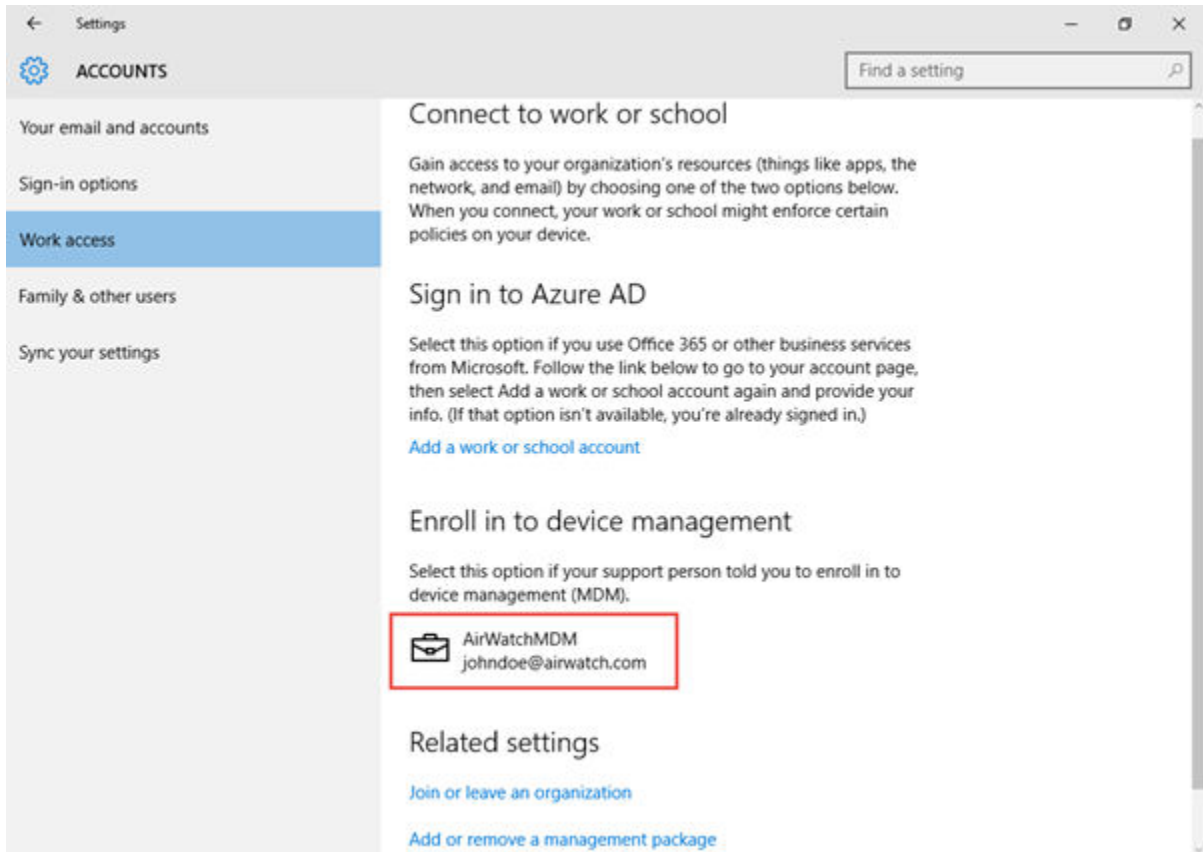
- 2 Enter the user name you provided to your end user into the **Email** text box, followed by the domain for the environment in the format Username@domain.com (such as jdoe1@acme.com). Select **Continue**.
- 3 Enter the **Group ID** and select **Next**.
- 4 Enter your **username** and **password** and select **Next**.

These credentials may be your directory services credentials or dedicated credentials specific to your Workspace ONE UEM environment.
- 5 (Optional) Review the End User License Agreement and select **Accept** to agree to the terms of use.

This step is optional and only displays if enabled in the Workspace ONE UEM Console.

6 (Optional) Select **Yes** to save sign-in info.

The device then attempts to connect to Workspace ONE UEM. If it connects successfully, a briefcase icon displays with Workspace ONE UEM written next to it. This icon shows your successful connection to Workspace ONE UEM.



## Enroll Through Work Access Without Windows Auto Discovery

Work Access is the native MDM enrollment method for Windows 10 devices. Enrolling through Work Access without WADS requires manually entering end-user credentials.

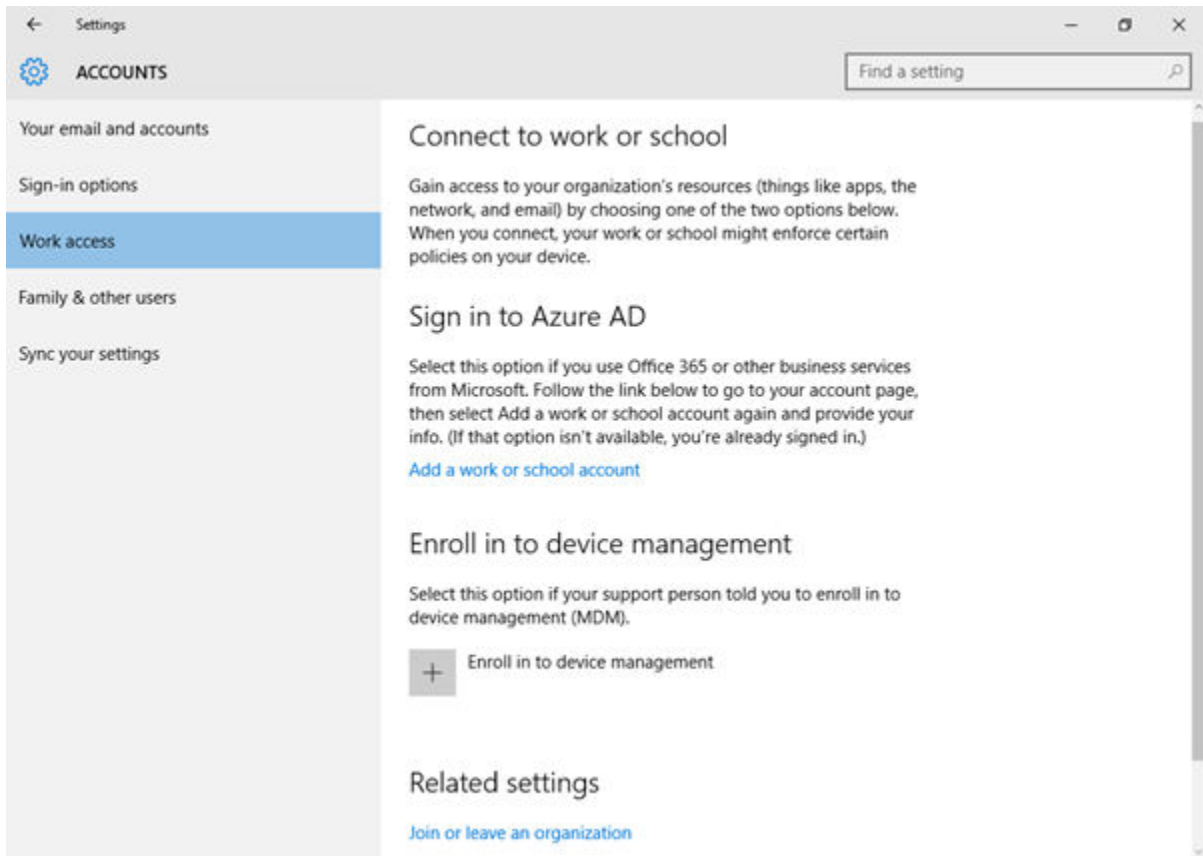
### Prerequisites

**Note** Consider using the Workspace ONE Intelligent Hub for Windows to enroll your Windows 10 devices instead of using native MDM enrollment. The native MDM enrollment flow does not enroll devices into MDM if you use Office 365 or Azure AD on the same domain.



## Procedure

- 1 Navigate on the device to **Settings > Accounts > Work Access** and select **Enroll in to device management**.



- 2 Enter the user name you provided to your end user into the **Email** text box, followed by the domain for the environment in the format Username@domain.com (such as jdoe1@acme.com).
- 3 **Enter server address** as follows: <DeviceServicesURL>/DeviceServices/Discovery.aws. Do not include 'https://' in the URL.

ds156.awmdm.com/deviceservices/discovery.aws.

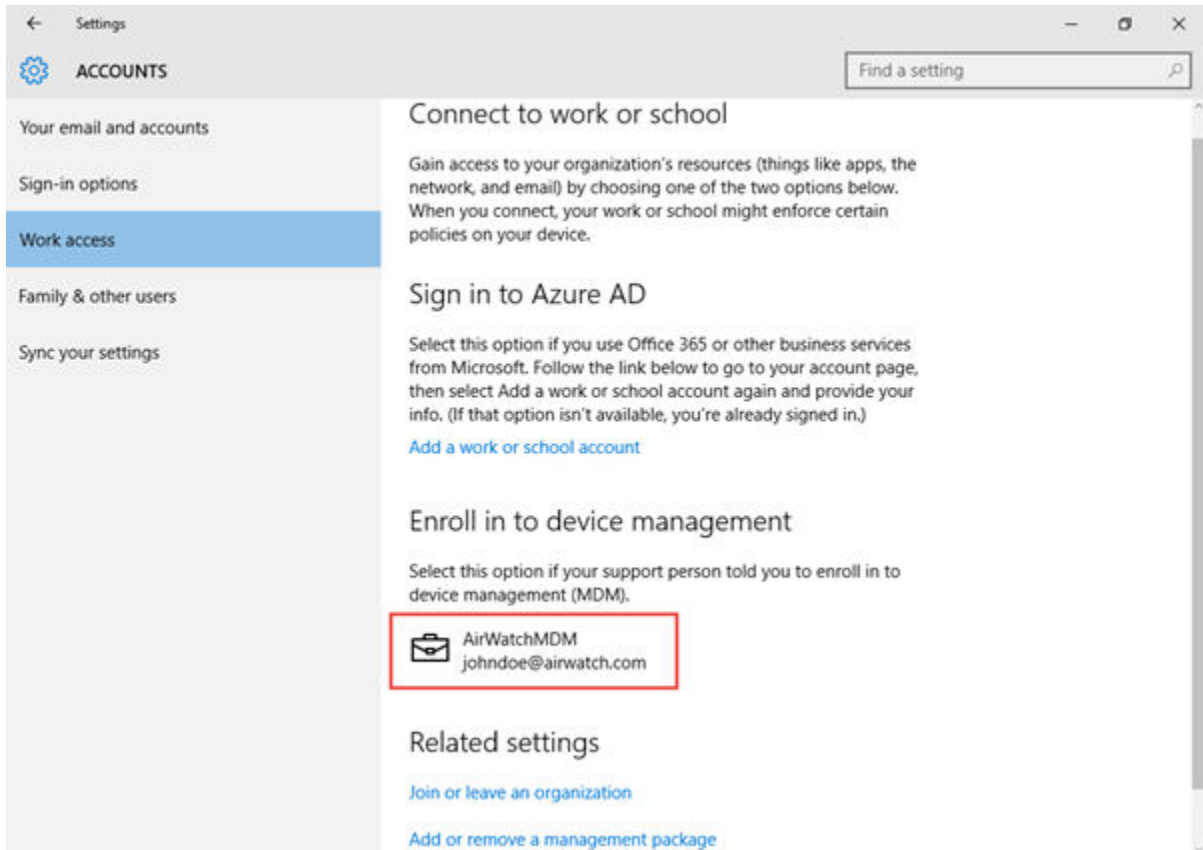
- 4 Select **Continue**.
- 5 Enter the **Group ID** and select **Next**.
- 6 Enter your **username** and **password** and select **Next**.

These credentials may be your directory services credentials, or dedicated credentials specific to your Workspace ONE UEM environment.

- 7 (Optional) Review the End-User License Agreement and select **Accept** to agree to the terms of use.  
This step is optional and only displays if you choose to enable it.

## 8 (Optional) Select **Yes** to save sign-in info.

The device then attempts to connect to Workspace ONE UEM. If it connects successfully, a briefcase icon displays with Workspace ONE UEM written next to it. This icon shows your successful connection to Workspace ONE UEM.

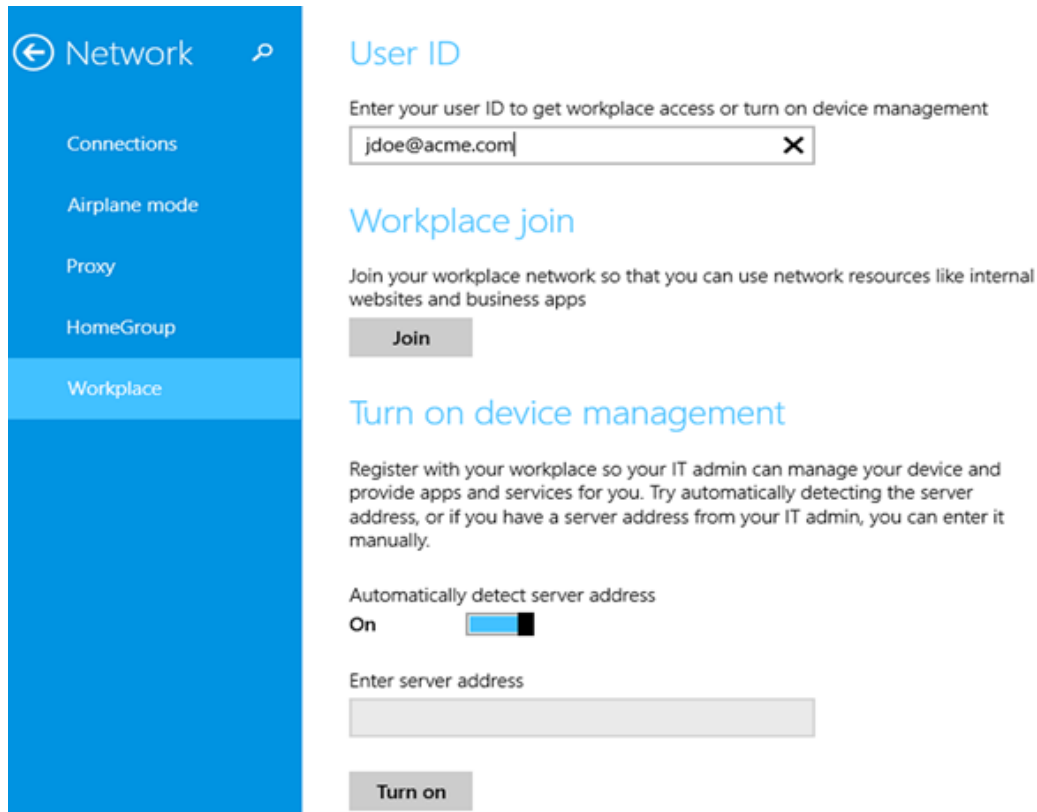


## Enroll Through Workplace With Windows Auto Discovery

Workplace is the native MDM enrollment method for Windows 8.1 devices. Enrolling through Workplace and using the Windows Auto Discovery provides a quick and easy enrollment flow for end users. Service (WADS) provides a quick and easy enrollment flow for end users.

## Procedure

- 1 Navigate on the device to **Settings > Change PC Settings > Network > Workplace**.



- 2 Enter the user name you provided to your end user into the **Email** text box, followed by the domain for the environment in the format Username@domain.com (such as jdoe1@acme.com).

The email address text box does not display for devices that are domain joined. Registering the UPN domain during WADS configuration removes the need to enter the email address for all AD users.

- 3 Under **Turn on device management**, leave the **Automatically detect server address** slider set to **On**.
- 4 Leave the **Enter server address** text box blank.
- 5 Select **Turn On**.
- 6 Enter the **Group ID** and select **Next**.

Registering your domain in Workspace ONE UEM removes the need to enter the Group ID during enrollment.

- 7 Enter your **username** and **password** and select **Next**.

These credentials may be your directory services credentials or dedicated credentials specific to your Workspace ONE UEM environment.

- 8 Select **Turn On**. If the button changes from **Turn On** to **Turn Off**, you have successfully enrolled the device. Do not select **Turn Off** or the device unenrolls from Workspace ONE UEM.

## Enroll Through Workplace Without Windows Auto Discovery

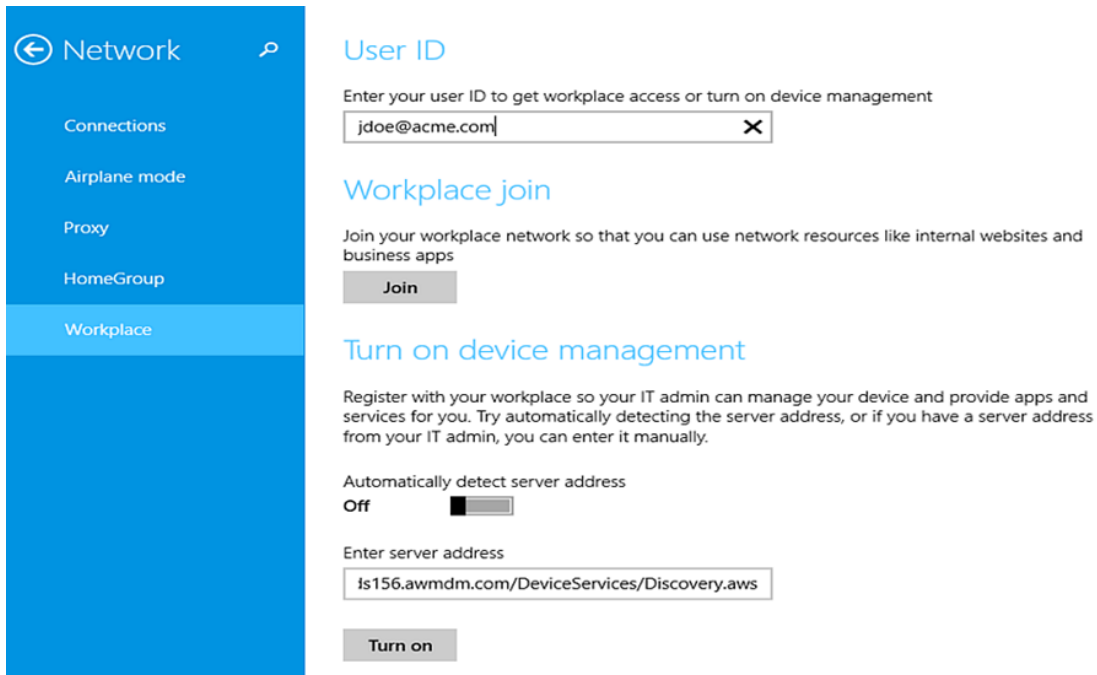
Workplace is the native MDM enrollment method for Windows 8.1 devices. Enrolling through Workplace and without WADS requires manually entering end-user credentials.

### Prerequisites

This enrollment method requires an optional update from Microsoft. For more information about this update, refer to <http://support.microsoft.com/kb/2955164>.

### Procedure

- 1 Navigate on the device to **Settings > Change PC Settings > Network > Workplace**.



- 2 Enter the user name you provided to your end user into the **Email** text box, followed by the domain for the environment in the format Username@domain.com (such as jdoe1@acme.com).

The email address text box does not display for devices that are domain joined.

- 3 Under **Turn on device management**, set the **Automatically detect server address** slider to **Off**.

- 4 **Enter server address** as follows: <DeviceServicesURL>/DeviceServices/Discovery.aws. Do not include 'https://' in the URL.

For example: ds156.awmdm.com/deviceservices/discovery.aws.

- 5 Select **Turn On**.
- 6 Enter the **Group ID** and select **Next**.
- 7 Enter your **username** and **password** and select **Next**.

These credentials may be your directory services credentials or dedicated credentials specific to your Workspace ONE UEM environment.

- 8 Complete the optional steps if you choose to allow device users the ability to make these selections.
  - a Select the **Device Ownership** type, **Employee Owned**, **Corporate-Dedicated**, or **Corporate-Shared**.
  - b Select **Next**.
  - c Review the End User License Agreement and select **Accept** to agree to the terms of use.
  - d Select the **I understand** check box to allow installation of applications and services deployed.
- 9 Select **Turn On**. If the button changes from **Turn On** to **Turn Off**, you have successfully enrolled the device. Do not select **Turn Off** or the device unenrolls from Workspace ONE UEM.

## Device Staging Enrollment

Admins often prefer to configure device management before shipping a device to an end user. By using device staging enrollment, you can enroll a device with the Workspace ONE Intelligent Hub, install device-level profiles, and ship it to an end user.

Device staging enrollment enables you to enroll your Windows 10 device into Workspace ONE UEM. This enrollment requires the Workspace ONE Intelligent Hub to start. After the device enrolls, any assigned device-level profiles download to the device. Once the device is fully enrolled and configured, you can ship the device to your end users. When the end user signs in to the device, the Workspace ONE Intelligent Hub updates the device record in the Workspace ONE UEM console. Workspace ONE UEM reassigns the device to the end user and pushes any user-level profiles to the device.

The two staging methods are:

- **Manual Installation** – Download and install the Workspace ONE Intelligent Hub and enter enrollment credentials. This method requires devices to be domain-joined before enrollment.
- **Command Line Installation** – Download the Workspace ONE Intelligent Hub and then install and enroll the device using the command line.

The enrollment completes by either updating the UEM console device registry when a user enrolls into a domain-joined device or by comparing the enrolled user name against a list of previously registers serial numbers.

## Bulk Import Device Serial Numbers

Import device serial numbers for use with device staging to quickly add devices to the Workspace ONE UEM Console. The bulk import requires a CSV file with all the serial numbers to import.

### Procedure

- 1 Navigate to **Accounts > Users > List View** or **Devices > Lifecycle > Enrollment Status**.
  - a Select **Add** and then **Batch Import** to display the **Batch Import** screen.
- 2 Complete each of the required options. **Batch Name**, **Batch Description**, and **Batch Type**.

- 3 Within the **Batch File (.csv)** option is a list of task-based templates you can use to load users and their devices in bulk.
- 4 Select the appropriate download template and save the comma-separated values (CSV) file to somewhere accessible.
- 5 Locate the saved CSV file, open it with Excel, and enter all the relevant information for each of the devices that you want to import. Each template is pre-populated with sample entries demonstrating the type of information (and its format) intended to be placed in each column.  
  
Fields in the CSV file denoted with an asterisk (\*) are required.
- 6 Save the completed template as a CSV file. In the UEM console, select the **Choose File** button from the **Batch Import** screen, navigate to the path where you saved the completed CSV file and select it.
- 7 Select **Save** to complete registration for all listed users and corresponding devices.

## Enroll through Command Line Staging

Simplify enrollment for end users by staging your Windows Desktop devices using the Windows Command Line. This enrollment method enrolls the device and downloads device-level profiles base on the user credentials entered.

---

**Important** Do not change the name of the AirWatchAgent.msi file as this breaks the staging command. Also, Do not use bulk serial number import if you want to use command-line staging.

---

**Note** This product should not be used to silently install Workspace ONE Intelligent Hub for Windows on BYOD devices. If you silently install onto BYOD devices, you are solely responsible for providing any necessary notices to your device end users regarding your use of silent installation and the data collected from the silently installed apps, obtaining any legally required consents from your device end users, and otherwise complying with all applicable laws.

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### Procedure

- 1 Navigate to [awagent.com](http://awagent.com) to download the Workspace ONE Intelligent Hub for Windows.  
  
Only download the Workspace ONE Intelligent Hub. Do not start the executable or select **Run** as that initiates a standard enrollment process and defeats the purpose of silent enrollment. If necessary, move the Workspace ONE Intelligent Hub from the download folder to a local or network drive folder.
- 2 Open a command line or create a BAT file and enter all the necessary paths, parameters, and values using information shown in [Silent Enrollment Parameters and Values](#).
- 3 Run the command. For examples of syntax, see [Silent Enrollment Parameters and Values](#).  
  
After the command runs, the device enrolls into Workspace ONE UEM. If the device is domain-joined, the Workspace ONE Intelligent Hub updates the Workspace ONE UEM Console device registry with the correct user.

## Enroll through Manual Device Staging

Simplify enrollment for end users by staging your Windows 10 devices using the Workspace ONE Intelligent Hub. This enrollment method enrolls the device and downloads device-level profiles so the end user must only log in to the device to begin using it.

### Prerequisites

These devices must be joined to a domain.

### Procedure

- 1 Navigate to [www.awagent.com](http://www.awagent.com) to download the Workspace ONE Intelligent Hub Installer.
- 2 Start the installer once the download completes.
- 3 Select **Run** to begin the installation.
- 4 Select **Email** if you have AirWatch Auto-Discovery enabled, otherwise select **Server Detail**.
- 5 Complete the settings required based on the authentication type selected:
  - a Enter the email address to auto-fill the server details screen. Select **Next** and the details are entered.
  - b Enter the Server Name and Group ID if you are not using AirWatch Auto-Discovery to complete the settings. Select **Next**.
- 6 Enter the staging **Username** and **Password** and select **Next**.
- 7 Complete any optional screens.
- 8 Select **Finish** to complete the enrollment.

Once the Workspace ONE Intelligent Hub detects a staging user, the Workspace ONE Intelligent Hub listener runs and listens for the next Windows login. When the end user logs into the device, the Workspace ONE Intelligent Hub listener reads the user UPN and email from the device registry. This information is sent to the Workspace ONE UEM Console and the device registry is updated to register the device to the user.

## Silent Enrollment Parameters and Values

Silent enrollment requires command-line entries or a BAT file to control how the Workspace ONE Intelligent Hub downloads and installs onto the device.

---

**Note** This product should not be used to silently install Workspace ONE Intelligent Hub for Windows on BYOD devices. If you silently install onto BYOD devices, you are solely responsible for providing any necessary notices to your device end users regarding your use of silent installation and the data collected from the silently installed apps, obtaining any legally required consents from your device end users, and otherwise complying with all applicable laws.

---

The following table lists all the possible enrollment parameters you can enter into a command line or into a BAT file, and the respective values for each parameter. Parameters highlighted in blue and green are the minimum parameters required for enrollment. Blue designates image only. Blue plus green designates user enrollment.

Enrollment Parameters	Values to Add to Parameter
ENROLL	Select 'Y' to enroll. Select 'N' for image only.
IMAGE	Select 'Y' for image. Select 'N' for enrollment.
SERVER	Enter the enrollment URL.
LGName	Enter organization group name.
USERNAME	Enter the user name for the user being enrolled or the staging user name if staging the device on the behalf of a user.
PASSWORD	Enter the password for the user being enrolled or the staging user password if staging the device on the behalf of a user.
ASSIGNTOLOGGEDINUSER	Select 'Y' to assign the device to the logged in domain user.
STAGEUSERNAME	Enter user name for the enrolling user.
SECURITYTYPE	Needed if user account is added to Workspace ONE UEM console during enrollment process: <ul style="list-style-type: none"> <li>■ Select 'D' for Directory.</li> <li>■ Select 'B' for Basic User type.</li> </ul>
STAGEEMAILUSRNAME*	Enter the email user name for the user being enrolled.
STAGEPASSWORD	Enter the password for the user being enrolled.
STAGEEMAIL*	Enter the email address for the user being enrolled.
DEVICEOWNERSHIPTYPE*	Select 'CD' for Corporate Dedicated. Select 'CS' for Corporate Shared. Select 'EO' for Employee Owned. Select 'N' for None.
INSTALLDIR*	Enter the directory path if you want to change installation path.  <b>Note</b> Note: If this parameter is not present, the Workspace ONE Intelligent Hub uses the default path: C:\Program Files (x86)\AirWatch.
DOWNLOADWSBUNDLE	Select 'Y' to download the VMware Workspace ONE catalog along with the Workspace ONE Intelligent Hub for Windows.

Items denoted with an asterisk (\*) are optional.

## Examples of Silent Enrollment

Below are examples of various use cases using enrollment parameters and the values that you can enter into a command line or use to create a BAT file. Initiating any one of these examples silently enrolls the Windows device without prompting the user to select any of the acknowledgment buttons.



## Agent Install for Image Only Without Enrollment

The following is an example of installing the Workspace ONE Intelligent Hub for image only without enrollment using minimum parameters required for image only.

```
AirwatchAgent.msi /quiet ENROLL=N IMAGE=Y
```

## Basic User Enrollment

The following is an example of using minimum parameters required for basic enrollment only:

```
AirwatchAgent.msi /quiet ENROLL=Y IMAGE=n SERVER=companyURL.com LGName=locationgroupid  
USERNAME=TestUsr PASSWORD=test
```

## Workspace ONE Intelligent Hub Installed Elsewhere

The following is an example of the AirwatchAgent.msi located in a different location:

```
C:\AirwatchAgent.msi /quiet ENROLL=Y IMAGE=n SERVER=companyURL.com  
LGName=locationgroupid USERNAME=TestUsr PASSWORD=test
```

## Installation Directory and Workspace ONE Intelligent Hub on Network Drive

The following is an example of the installation directory parameter with the Workspace ONE Intelligent Hub on a network drive.

---

**Important** Add extra quotes for the INSTALLDIR parameter when there is space within the parameter.

---

```
Q:\AirwatchAgent.msi /quiet INSTALLDIR="E:\Install Win32\" ENROLL=Y IMAGE=n  
SERVER=companyURL.com LGName=locationgroupid USERNAME=TestUsr PASSWORD=test
```

## All Available Parameters and Values

The following is an example of the syntax using all available parameters and values shown in the previous table.

```
<AirwatchAgent.msi>/quiet INSTALLDIR="<Directory Path>" ENROLL=<Y/N>IMAGE=<Y/  
N>SERVER=<CompanyURL>LGNAME=<Location Group  
ID>USERNAME=<Username>PASSWORD=<Username Password>STAGEUSERNAME=<Stager  
Username>SECURITYTYPE=<D/B>STAGEEMAILUSRNAME=<User  
Enrolling>STAGEPASSWORD=<Password for User Enrolling>STAGEEMAIL=<Email Address for User  
Enrolling>DEVICEOWNERSHIPTYPE<CD/CS/EO/N>ASSIGNTOLOGGEDINUSER=<Y/N>
```

## Windows 10 Provisioning Service by VMware AirWatch

Workspace ONE UEM supports the auto-enrollment of specific Windows Desktop devices purchased from Dell. Windows 10 Provisioning Service by VMware AirWatch simplifies the enrollment process by automatically enrolling registered devices following the Out-of-Box-Experience.

Windows 10 Provisioning Service by VMware AirWatch only applies to select Dell devices with the correct Windows 10 image. The auto-enrollment functionality must be purchased as part of the purchase order from Dell. Workspace ONE UEM only supports Windows 10 Pro, Enterprise, and Education SKUs for Cloud Provisioning.

Windows 10 Provisioning Service by VMware AirWatch matches registered devices with users and automatically enrolls the device following the Out-of-Box-Experience. When the end user signs in to the device, the provisioning agent on the device receives the profiles and apps assigned to the device and user. This functionality works similar to the Apple Device Enrollment Program.

When you purchase your Dell devices, Dell supplies Workspace ONE UEM with the device details of the purchased devices. To use auto-enrollment, you must register the serial numbers for all the devices purchased from Dell. Workspace ONE UEM matches the serial number to the ones provided by Dell for use with AirWatch Auto-Discovery.

You must register the devices with a user account before sending the devices to end users.

For a seamless enrollment experience, consider configuring the External Access Token authentication method for VMware Identity Manager. The External Access Token authentication enables Workspace ONE UEM to open automatically and deliver apps to the device. When the feature is enabled, Workspace ONE UEM automatically authenticates and provides the user with the first-launch experience that shows the application and policy installation progress.

---

**Important** "Devices enrolled through Windows 10 Provisioning Service by VMware AirWatch will not automatically re-enroll during a factory reset. The Windows 10 Provisioning Service by VMware AirWatch only works for the first time enrollment."

---

## Configure Windows 10 Provisioning

Configure Windows 10 Provisioning Service by VMware AirWatch to enroll Dell Windows Desktop devices automatically. Auto-enrollment compares registered device serial numbers against a list provided by Dell to enroll devices as part of the Out-of-Box-Experience.

### Prerequisites

Purchase Windows 10 Provisioning Service by VMware AirWatch as part of your purchase order from Dell.

### Procedure

- 1 Navigate to **Groups & Settings > All Settings > Devices & Users > Windows > Windows Desktop > Auto Enrollment**.
- 2 Configure the Auto Enrollment settings:

Settings	Description
<b>Auto Enrollment</b>	Select <b>Enable</b> to use Windows 10 Provisioning Service by VMware AirWatch.
<b>Sync Interval</b>	Select the amount of time between sync attempts between the Workspace ONE Intelligent Hub and the Workspace ONE UEM Console.

Settings	Description
<b>Enforce Policies Before Log In</b>	Select <b>Enable</b> to enforce the device policies before the user logs in to the device.
<b>Maximum Time Before Log In</b>	Select the maximum number of minutes that may pass before a user logs in after completing the Out-of-Box-Experience.

3 Select **Save**.

4 Register the device serial numbers with Workspace ONE UEM. Only required for On-premises customers, this step is completed for SaaS customers. Validate that device registration records exist, if not complete the following steps. There are three workflows for registering devices:

- a Navigate to **Accounts > Users > Add > Add User** and add the user account. When you are done adding the user, select **Save and Add Device**. Then complete the Add Device settings. You must set the **Platform** to **Windows Desktop**.
- b Navigate to **Accounts > Users > Add > Batch Import**. Download and complete the CSV template for User and/or Device. Upload the CSV and select **Import**. You must enter **Windows Desktop** as the **Device Platform** when completing the template. You must set the **Platform** to **Windows Desktop**.
- c Navigate to **Devices Lifecycle > Enrollment Status > Add > Register Device**. You must set the **Platform** to **Windows Desktop**.

## Enrollment Through Azure AD Integration

Through integration with Microsoft Azure Active Directory, Windows devices can automatically enroll into Workspace ONE UEM with minimal end-user interaction. Azure AD integration enrollment simplifies enrollment for both end users and admins.

Before you can enroll your devices using Azure AD Integration, you must configure Workspace ONE UEM and Azure AD. The configuration requires entering information into your Azure AD and Workspace ONE UEM deployments to facilitate communication.

Azure AD integration enrollment supports three different enrollment flows: Join Azure AD, Out of Box Experience enrollment, and Office 365 enrollment. All methods require configuring Azure AD integration with Workspace ONE UEM.

**Important** Enrollment through Azure AD integration requires Windows 10 and Azure Active Directory Premium License.

## Configure Azure AD Identity Services Integration

Before you can use Azure AD to enroll your Windows devices, you must configure Workspace ONE UEM to use Azure AD as an Identity Service. Enabling Azure AD is a two-step process which requires the MDM-enrollment details to be added to Azure.

## Prerequisites

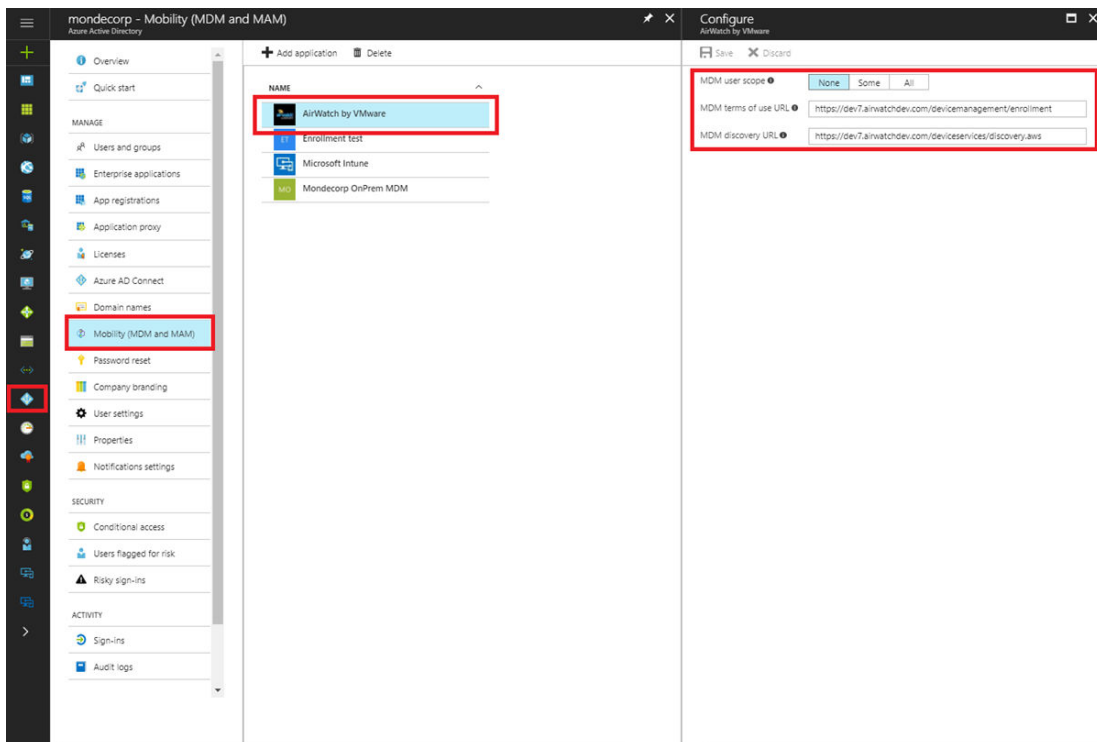
You must have a Premium Azure AD P1 or P2 subscription to integrate Azure AD with Workspace ONE UEM. Azure AD integration with Workspace ONE UEM must be configured at the tenant where Active Directory (such as LDAP) is configured.

**Important** If you are setting the **Current Setting** to **Override** on the Directory Services system settings page, the LDAP settings must be configured and saved before enabling Azure AD for Identity Services.

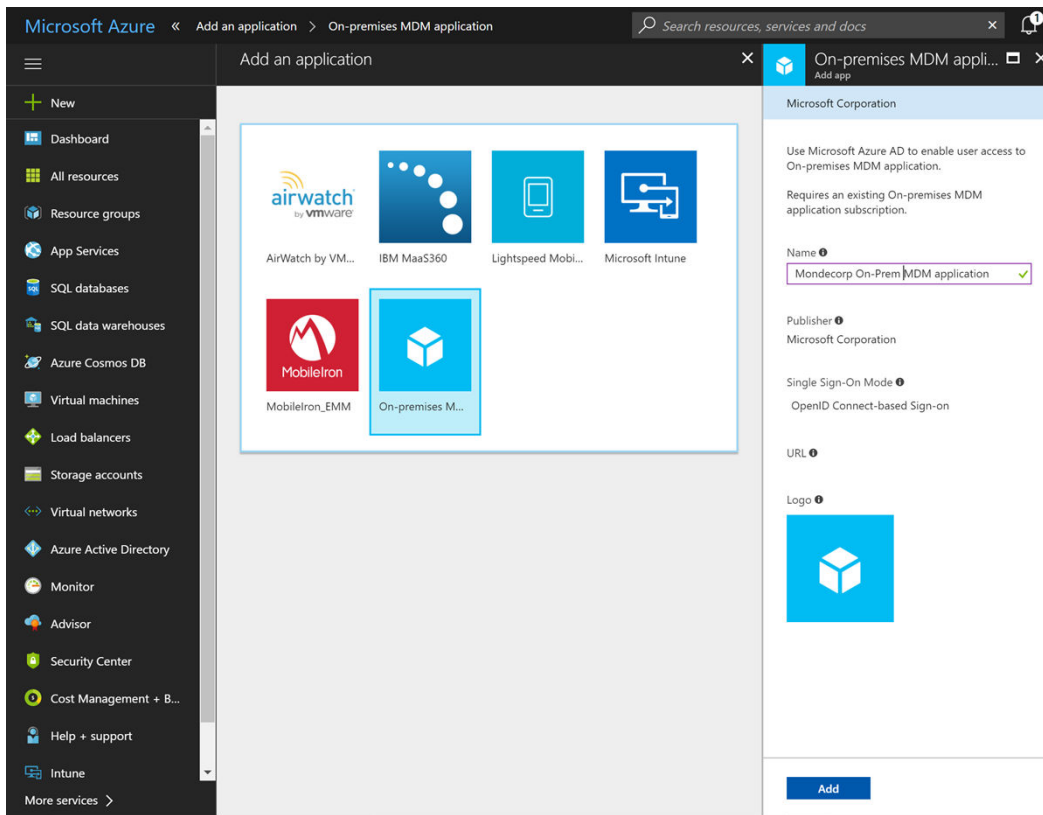
## Procedure

- 1 Navigate to **Groups & Settings > All Settings > System > Enterprise Integration > Directory Services**.
- 2 Enable **Use Azure AD for Identity Services** under **Advanced** settings. Once enabled, take note of the MDM Enrollment and MDM Terms of Use URLs as they are needed when configuring the Azure directory.
- 3 Log in to the Azure Management Portal with your Microsoft account or organizational account.
- 4 Select your directory and navigate to the **Mobility (MDM and MAM)** tab. This tab was formerly the Applications tab.
- 5 Select **Add Application** and select the AirWatch by VMware application.

You can use the default URLs if the user scope is set to none. If needed, you can also use placeholder URLs.



- 6 Leave the AirWatch by VMware application on the default settings. Change the **MDM user scope** to **None**.



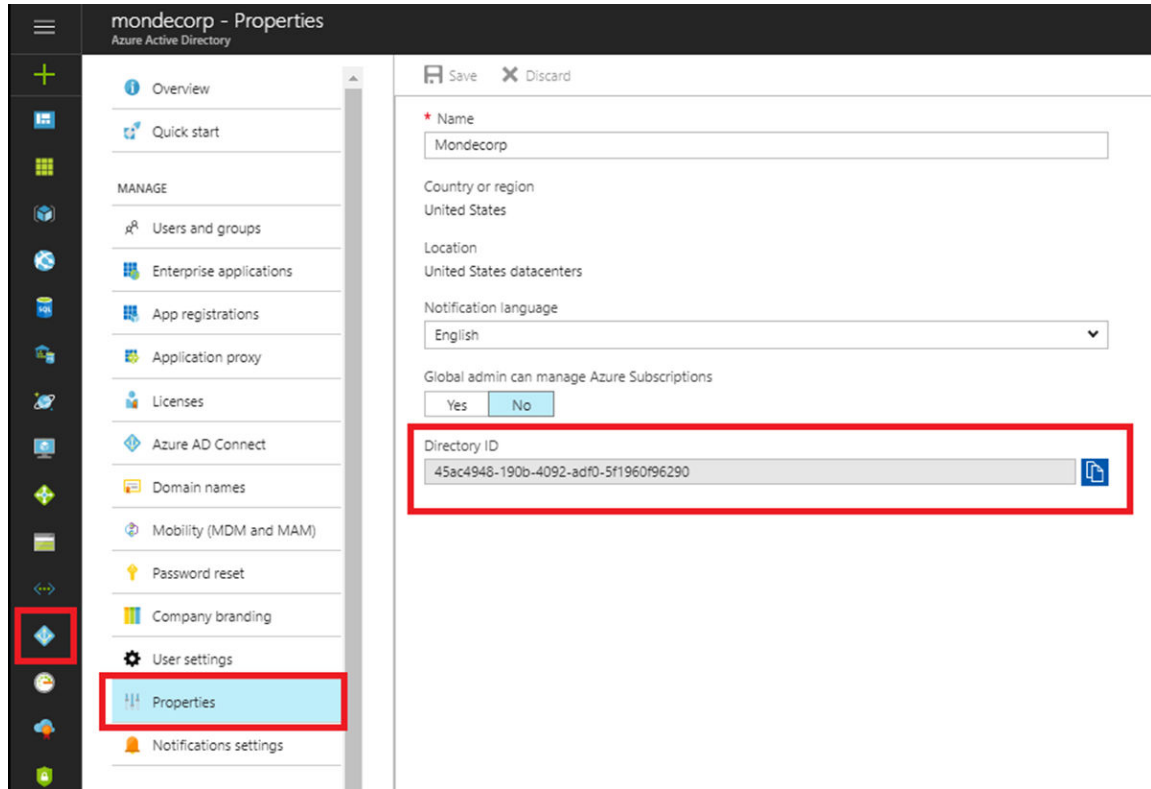
- 7 Select **Add Application** again and select the **On Premises MDM** application. You can rename the application when you add it.
- 8 Configure the On-Premises MDM application by entering the **MDM Enrollment URL** and **MDM Terms of Use** URLs from the Workspace ONE UEM Console.
- 9 Select **On-premises MDM application settings** then select **Required Permissions > Windows Azure Active Directory**.
- 10 Change the Application Permissions as follows:
- Select **Read and write directory data**.
  - Select **Read and write devices**.
- 11 Change the Delegated Permissions as follows:
- Select **Access the directory as the signed-in user**.
  - Select **Read directory data**.
  - Select **Sign in and read user profile**.
- 12 Select the Properties settings and enter your device services host in the **APP ID URI** text box.
- Use the same host that you used in the **MDM Enrollment URL** and **MDM Terms of Use** text boxes.
- https:// <MDM DS SERVER>

- 13 Set **MDM user scope** to **All** to apply these settings to all users.

You can also limit the OOBEnrollment to selected Azure AD groups by selecting **Some** and adding the preferred groups.

- 14 Select **Save** to continue.

- 15 Navigate to the Properties tab and find the Azure Directory ID. This setting was formerly called the **Tenant ID**.



- 16 Select **User Account Details** in the top right corner. The Azure **Tenant Name** is the name of your Azure Directory. You can find the name under the **Domain** tab.

- 17 Return to the UEM Console and select **Use Azure AD for Identity Services** to configure Azure AD Integration.

- 18 Enter the **Azure Directory ID** as the **Tenant Identifier**. Enter the default domain as your Azure Directory **Tenant Name**.

- 19 Select **Save** to finish the process.

## Enroll a Device With Azure AD

Enroll devices with Azure AD integration to enroll a device into the correct organization group in Workspace ONE UEM automatically. Devices enrolled through Azure AD join completely, meaning all users on the device join the domain.

This enrollment flow is for devices not already joined to Azure AD. For more information on enrolling an Azure AD managed device, see [Enroll an Azure AD Managed Device into Workspace ONE UEM](#).

**Procedure**

- 1 Navigate on the Windows 10 device to **Settings > Accounts > Access Work or School**. Select **Continue**.
- 2 Enter your **Email Address**. Select **Next**.
- 3 Ensure that the Workspace ONE UEM welcome page displays. Select **Continue**.
- 4 Select **Accept** if terms of use are enabled.
- 5 Select **Join** to confirm that you want to enroll in Workspace ONE UEM.
- 6 Select **Finish** to complete joining your device to Workspace ONE UEM. Your device now downloads the applicable policies and profiles.

## Enroll an Azure AD Managed Device into Workspace ONE UEM

Devices that are joined to Azure AD use a different enrollment flow than devices enrolling through Azure AD integration. Use this enrollment flow to enroll a device that is already joined to Azure AD into Workspace ONE UEM.

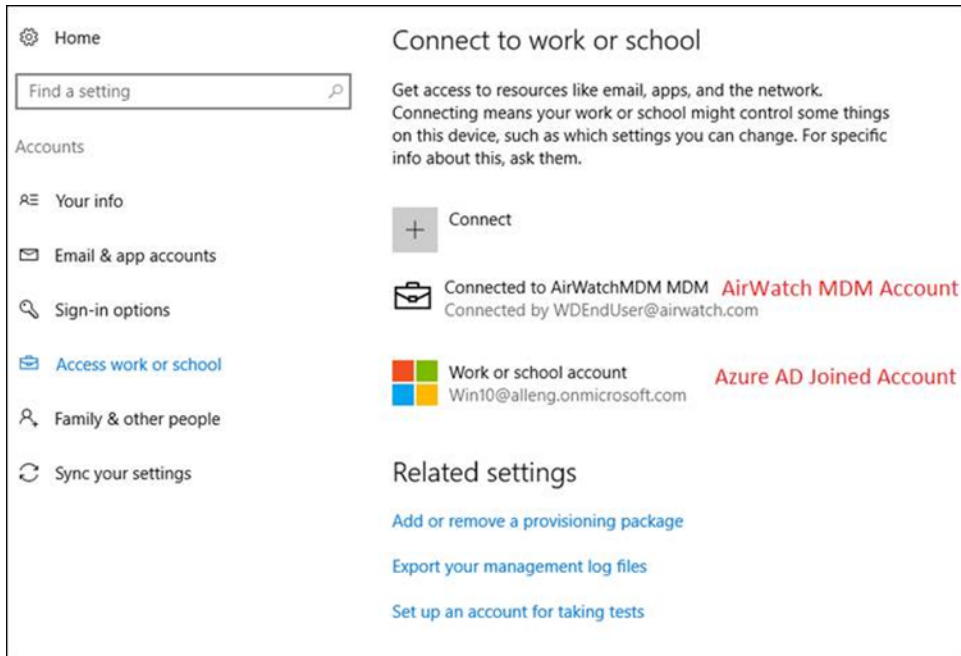
**Prerequisites**

- Windows 10 OS build 14393.82 and above.
- KB update KB3176934 installed.
- No MDM applications installed under your Azure AD management portal.
- Azure AD account configured on the device.

**Procedure**

- 1 On the device, navigate to **Settings > Accounts > Access work or school** and select **Enroll only in device management**.  
  
You may also enroll through the VMware Workspace ONE UEM Unified Agent for Windows.
- 2 Complete the enrollment process. You must enter an email address with a different domain than your Azure AD account.
  - a If you are using Windows Auto-Discovery, see [Enroll Through Work Access With Windows Auto Discovery](#).
  - b If you are not using Windows Auto-Discovery, see [Enroll Through Work Access With Windows Auto Discovery](#).

- 3 Navigate to **Settings > Accounts > Access work or school** and ensure there is an Azure AD account and a Workspace ONE UEM MDM account added.



## Enroll Through Out of Box Experience

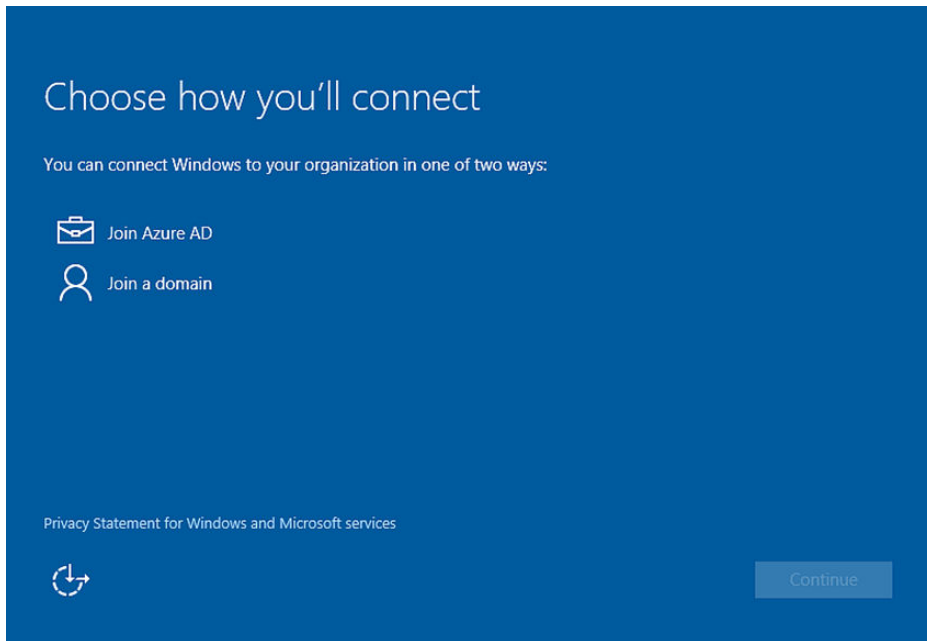
Out of Box Experience (OOBE) enrollment automatically enrolls a device into the correct organization group as part of the initial setup and configuration of a Windows 10 device.

**Important** The OOBE enrollment flow does not support Enterprise Wipe. If you perform an enterprise wipe, users cannot log into the device as connection to Azure AD has been broken. You must create a local admin account before sending an Enterprise Wipe or you will be locked out of the device and forced to reset the device.

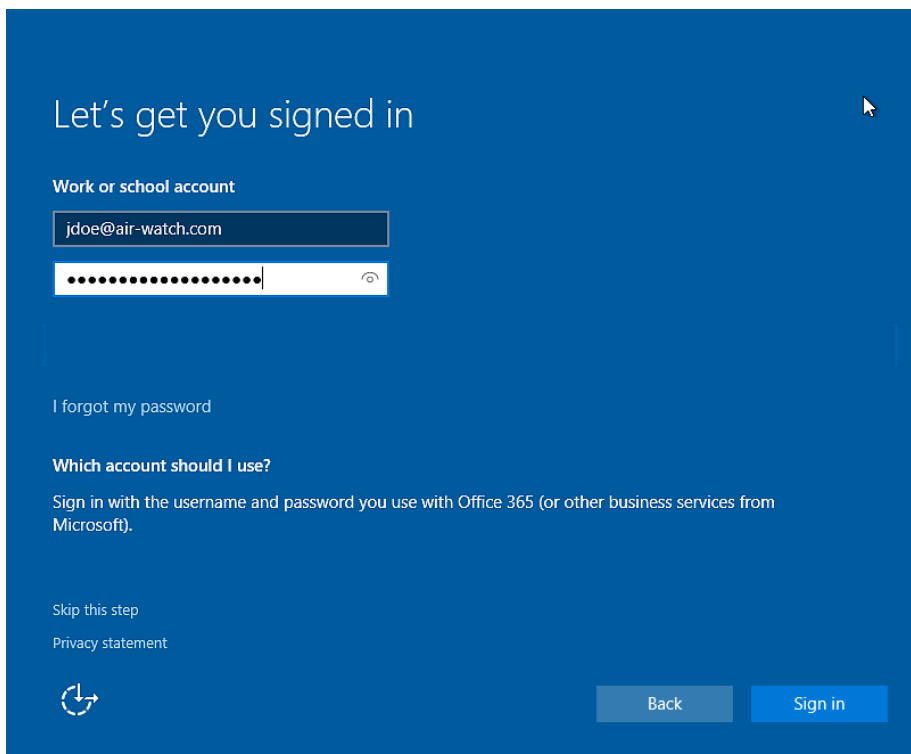


## Procedure

- 1 Power on the device and follow the steps to configure Windows until you reach the **Choose how you'll connect** screen.

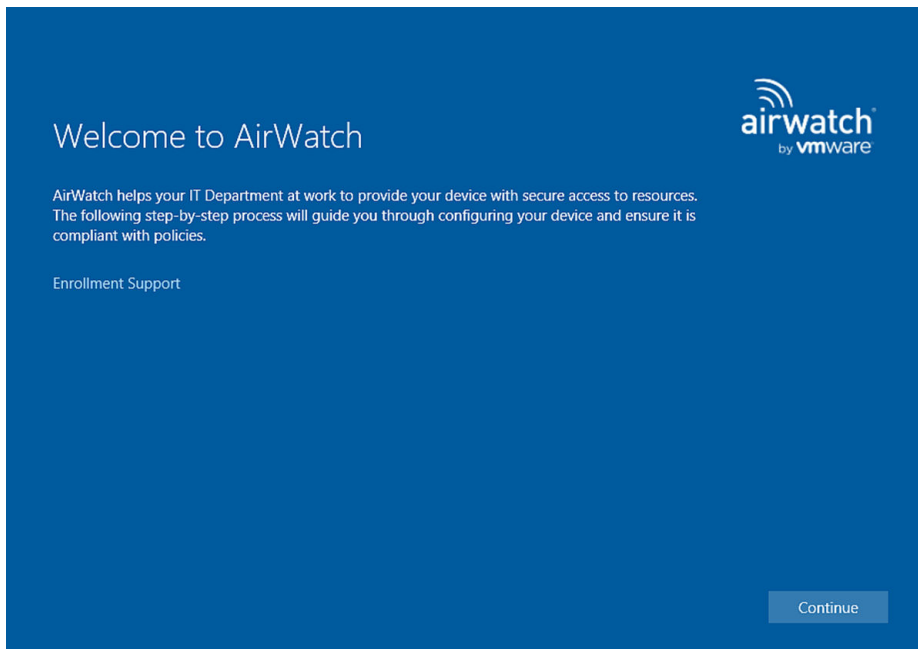


- 2 Select **Join Azure AD**. Select **Continue**.
- 3 Enter your Azure AD/Workspace ONE UEM email address as the **Work or school account**.



- 4 Enter your **Password**. Select **Sign In**.

- 5 Ensure that the **Welcome to AirWatch** screen displays. Select **Continue**.



- 6 Select **Accept** if terms of use are enabled.
- 7 Select **Join** to confirm that you want to enroll in Workspace ONE UEM.
- 8 Select **Finish** to complete joining your device to Workspace ONE UEM. Your device now downloads the applicable policies and profiles.

## Enroll Through Office 365 Apps

If your organization uses Office 365 and Azure AD integration, end users can enroll their devices the first time they open an Office 365 app.

### Procedure

- 1 Select **Add a Work Account** the first time you open an Office 365 application.
- 2 Enter your **Email Address** and **Password**. Select **Sign In**.
- 3 Ensure that the Workspace ONE UEM welcome page displays. Select **Continue**.
- 4 Select **Accept** if terms of use are enabled.
- 5 Select **Join** to confirm that you want to enroll in Workspace ONE UEM.
- 6 Select **Finish** to complete joining your device to Workspace ONE UEM. Your device now downloads the applicable policies and profiles.

# Bulk Provisioning and Enrollment

Bulk provisioning creates a pre-configured package that stages Windows 10 devices and enrolls them into Workspace ONE UEM. Use bulk provisioning to enroll and configured multiple devices with a standard user account quickly.

This enrollment flow is the only way to enroll a device with a standard user account. Admin permissions are still required run the pre-configured package. Bulk provisioning only supports single user standard staging.

To use bulk provisioning, download the Microsoft Assessment and Development Kit and installing the Imaging and Configuration Designer (ICD) tool. The ICD creates provisioning packages used to image devices. As part of these provisioning packages, you can include Workspace ONE UEM configuration settings so that provisioned devices are automatically enrolled into Workspace ONE UEM during the initial Out of Box Experience (OOBE).

To map the devices to the correct end user automatically, register the devices per user or using a bulk import before creating the provisioning package.

## Enroll With Bulk Provisioning

The Microsoft Imaging and Configuration Designer tool allows you to create a provisioning package to enroll multiple Windows 10 devices into Workspace ONE UEM quickly and easily. Once the package is installed, the device automatically enrolls into Workspace ONE UEM.

### Procedure

- 1 Download the Microsoft Assessment and Deployment Kit for Windows 10 and install the Windows Imaging and Configuration Designer tool (ICD).

- 2 Start the Windows ICD and select **New Provisioning Package**.

- 3 Enter a **Project Name** and select the settings to view and configure.

The typical choice is the **Common to all Windows desktop editions** option.

- 4 (Optional) Import a provisioning package if you want to create a provisioning package based on the settings of a previous package.

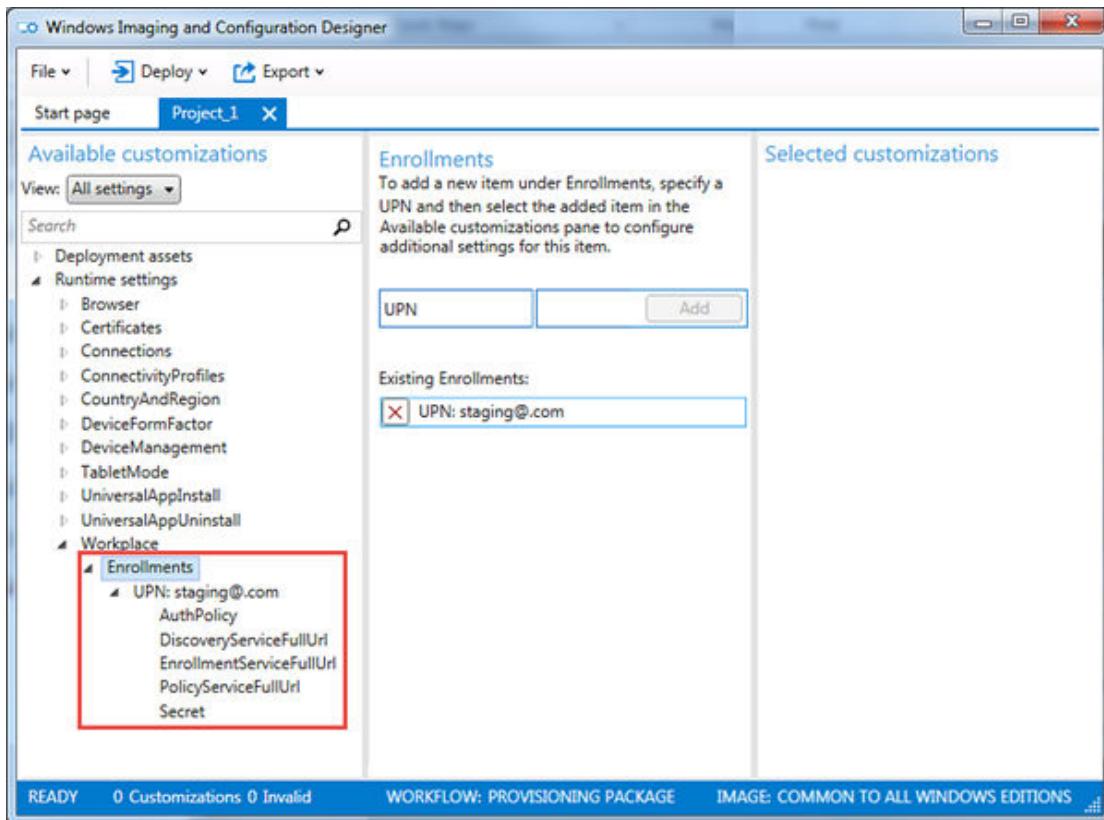
- 5 Navigate to **Runtime Settings > Workplace > Enrollments**.

- 6 In the Workspace ONE UEM console, navigate to **Groups & Settings > All Settings > Devices & Users > Windows > Windows Desktop > Staging and Provisioning**.

When you navigate to this settings page, a staging user is created and URLs pertaining to the created staging user display. You can create your own staging user for use with bulk provisioning but the settings displayed on this settings page do not apply to any created users.

- 7 Copy the **UPN** and paste it into the **UPN** text box of the ICD.

- 8 Select the down arrow next to **Enrollments** in the **Available Customizations** window.



- 9 Configure the following settings:
- Select **AuthPolicy** and select the value displayed in the UEM console.
  - Select **DiscoveryServiceFullURL** and copy the URL displayed in the UEM console.
  - Select **EnrollmentServiceFullURL** and copy the URL displayed in the UEM console.
  - Select **PolicyServiceFullURL** and copy the URL displayed in the UEM console.
  - Select **Secret** and copy the value displayed in the UEM console.
- 10 Select **File > Save** to save the project.
- 11 Select **Export > Provisioning Package** to create a package for use with bulk provisioning then select **Next**.
- 12 Save the **Encryption password** for later use if you choose to encrypt the package and then select **Next**.
- 13 Save the package to a USB drive for transfer to each device you want to provision. You can also email the package to the device.
- 14 Select **Build** to create the package.

## What to do next

Next you must install the bulk provisioning package. For more information, see [Install Bulk Provisioning Packages](#).

## Install Bulk Provisioning Packages

After you create the provisioning packages using the Microsoft Imaging and Configuration Designer, you must install the provisioning package onto the end-user devices.

### Procedure

- 1 On the device you want to provision, navigate to **Settings > Accounts > Work Access** and select **Add or remove a package for work or school**. If the package was emailed, start the package from your mail client.
- 2 Select **Add a package** and select the **Removable Media** choice as the method to add the package.
- 3 Select the correct package from the list provided.

If you added the device to the user account in the Workspace ONE UEM Console before provisioning, the device is assigned upon enrollment.

# Windows Desktop Profiles Overview

# 3

Profiles are the primary means to manage devices. Configure profiles so your Windows Desktop devices remain secure and configured to your preferred settings.

## Overview

You can think of profiles as the settings and rules that, when combined with compliance policies, help you enforce corporate rules and procedures. They contain the settings, configurations, and restrictions that you want to enforce on devices.

A profile consists of the general profile settings and a specific payload. Profiles work best when they contain only a single payload.

Windows Desktop profiles apply to a device at either the user level or the device level. When creating Windows Desktop profiles, you select the level the profile applies to. Some profiles can only be applied to the user level or device level. Workspace ONE UEM executes commands that apply to the device context even if the device has no active enrolled user login. User-specific profiles require an active enrolled user login.

## Baselines

Maintaining the best configurations to keep your devices secure can be a challenge. Workspace ONE UEM curates the best practices as Baselines. This feature allows you to simplify the process by applying industry-recommended settings and configurations. With Baselines, you only need to select a Smart Group and a baseline and your devices will remain up-to-date with industry favorites such as Microsoft Baselines or CIS Benchmarks. For more information on Baselines, see [Chapter 4 Using Baselines](#).

This chapter includes the following topics:

- [Configure a Passcode Profile \(Windows Desktop\)](#)
- [Configure a Wi-Fi Profile \(Windows Desktop\)](#)
- [VPN Profile \(Windows Desktop\)](#)
- [Credentials Profile \(Windows Desktop\)](#)
- [Configure a Restrictions Payload \(Windows Desktop\)](#)
- [Data Protection Profile \(Windows Desktop\)](#)
- [Windows Hello Profile \(Windows Desktop\)](#)

- [Configure a Firewall Profile \(Windows Desktop\)](#)
- [Configure a Single App Mode Profile \(Windows Desktop\)](#)
- [Configure an Antivirus Profile \(Windows Desktop\)](#)
- [Encryption Profile \(Windows Desktop\)](#)
- [Configure a Windows Updates Profile \(Windows Desktop\)](#)
- [Create a Proxy Profile \(Windows Desktop\)](#)
- [Configure a Web Clips Profile \(Windows Desktop\)](#)
- [Exchange ActiveSync Profile \(Windows Desktop\)](#)
- [SCEP Profile \(Windows Desktop\)](#)
- [Application Control Profile \(Windows Desktop\)](#)
- [Configure an Exchange Web Services Profile \(Windows Desktop\)](#)
- [Create a Windows Licensing Profile \(Windows Desktop\)](#)
- [Configure a BIOS Profile \(Windows Desktop\)](#)
- [Configure the OEM Updates Profile \(Windows Desktop\)](#)
- [Configure a Kiosk Profile \(Windows Desktop\)](#)
- [Configure a Personalization Profile \(Windows Desktop\)](#)
- [Use Custom Settings \(Windows Desktop\)](#)

## Configure a Passcode Profile (Windows Desktop)

Enforce a Passcode profile to protect devices with passcodes each time they return from an idle state. A passcode ensures that all sensitive corporate information on managed devices remains protected.

Passcodes set using this payload only take effect if the passcode is stricter than existing passcodes. For example, if the existing Microsoft Account passcode requires stricter settings than the Passcode payload requirements, the device continues to use the Microsoft Account passcode.

---

**Important** The Passcode payload does not apply to domain-joined devices.

---

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Passcode** profile.

## 6 Configure the Passcode settings:

Settings	Descriptions
<b>Password Complexity</b>	Set to <b>Simple</b> or <b>Complex</b> to your preferred level of password difficulty.
<b>Require Alphanumeric</b>	Enable to require the passcode to be an alphanumeric passcode.
<b>Minimum Password Length</b>	Enter the minimum number of characters a Password must contain.
<b>Maximum Password Age (days)</b>	Enter the maximum number of days that may elapse before the end user is required to change the Password.
<b>Minimum Password Age (days)</b>	Enter the minimum number of days that must elapse before the end user is required to change the Password.
<b>Device Lock Timeout (in Minutes)</b>	Enter the number of minutes before the device automatically locks and requires a passcode re-entry.
<b>Maximum Number of Failed Attempts</b>	Enter the maximum number of attempts the end user may enter before the device is restarted.
<b>Password History (occurrences)</b>	Enter the number of occurrences a password is remembered. If the end user reuses a password within the number of recorded occurrences, they cannot reuse that password. For example, if you set the history to 12, an end user cannot reuse the past 12 passwords.
<b>Reversible Encryption for Password Storage</b>	Enable to set the operating system to store passwords using reversible encryption. Storing passwords using reversible encryption is essentially the same as storing plain text versions of the passwords. For this reason, do not enable this policy unless application requirements outweigh the need to protect password information.
<b>Use Protection Agent for Windows 10 Devices</b>	Enable to use the Workspace ONE Intelligent Hub to enforce Password profile settings instead of the native DM functionality. Enable this settings if you have issues using the native DM functionality.
<b>Windows 8.0 Password Policy</b>	Enable to use the legacy Windows 8.0 Password Policy.
<b>Expire Password</b>	Enable to expire the existing password on the device and require a new password to be created. Requires Workspace ONE Intelligent Hub to be installed on the device.

## 7 Select **Save & Publish** when you are finished to push the profile to your devices.

# Configure a Wi-Fi Profile (Windows Desktop)

Create a Wi-Fi profile to connect devices to hidden, encrypted, or password-protected corporate networks. Wi-Fi profiles are useful for end users who need access to multiple networks or for configuring devices to connect automatically to the appropriate wireless network.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.



- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Wi-Fi** profile.
- 6 Configure the **General** settings:

Settings	Descriptions
<b>Service Set Identifier</b>	Enter an identifier that is associated with the name (SSID) of the desired Wi-Fi network. The SSID cannot contain spaces.
<b>Hidden Network</b>	Enable if the network is not open to broadcast.
<b>Auto-Join</b>	Enable to set the device to join the network automatically.
<b>Security Type</b>	Use the drop-down menu to select the security type (for example, WPA2 Personal) for the Wi-Fi network.
<b>Encryption</b>	Use the drop-down menu to select the encryption type used. Displays based on the <b>Security Type</b> .
<b>Password</b>	Enter the password required to join the Wi-Fi network for networks with static passwords. Select the <b>Show Characters</b> check box to disable hidden characters within the text box. Displays based on the <b>Security Type</b> .
<b>Proxy</b>	Enable to configure proxy settings for the Wi-Fi connection.
<b>URL</b>	Enter the URL for the proxy.
<b>Port</b>	Enter the port for the proxy.
<b>Protocols</b>	Select the type of protocols to use: Certificate: PEAP-MsChapv2 EAP-TTLS: Custom This section displays when the <b>Security Type</b> is set to WPA Enterprise or WPA2 Enterprise.
<b>Inner Identity</b>	Select the method of authentication through EAP-TTLS: <ul style="list-style-type: none"> <li>■ <b>Username/Password</b></li> <li>■ <b>Certificate</b></li> </ul> This section displays when the <b>Protocols</b> option is set to EAP-TTLS or PEAP-MsChapv2.
<b>Require Crypto Binding</b>	Enable to require cryptographic binding on both authentications. This limits man-in-the-middle attacks.
<b>Use Windows Log On Credentials</b>	Enable to use the Windows login credentials are the user name/password to authenticate. Displays when <b>Username/Password</b> is set as the <b>Inner Identity</b> .
<b>Identity Certificate</b>	Select an Identity Certificate, which you can configure using the Credentials payload. See <a href="#">Credentials Profile (Windows Desktop)</a> for more information. Displays when <b>Certificate</b> is set as the <b>Inner Identity</b> .

Settings	Descriptions
Trusted Certificates	Select <b>Add</b> to add Trusted Certificates to the Wi-Fi profile. This section displays when the <b>Security Type</b> is set to WPA Enterprise or WPA2 Enterprise.
Allow Trust Exceptions	Enable to allow trust decisions to be made by the user through a dialog box.

- 7 Select **Save & Publish** when you are finished to push the profile to devices.

## VPN Profile (Windows Desktop)

Workspace ONE UEM supports configuring device VPN settings so end users can remotely and securely access your organizations internal network. The VPN profile provides detailed VPN settings control including specific VPN provider settings and Per-App VPN access.

Workspace ONE UEM supports specific VPN connection types for various third-party VPN providers, including:

### Per-app VPN

Per-app VPN lets you to configure VPN traffic rules based on specific applications. When configured, the VPN connects automatically when a specified app starts and sends the application traffic through the VPN connection but not traffic from other applications. With this flexibility, you can ensure that your data remains secure while not limiting device access to the Internet at large.

Each rule group under the Per-App VPN Rules section uses the logical OR operator. So if traffic matches any of the set policies, it is allowed through the VPN.

**VPN TRAFFIC RULES**

**Per-app VPN Rules**

Policies follow OR logic operator

Application ID	AirWatchLLC.AirWatchMDMAgen	10
VPN On Demand	<input checked="" type="checkbox"/>	
Routing Policy	Force All Traffic Through VPN	
DNS Routing Rules	<input type="checkbox"/>	
Application ID	%ProgramFiles%/Internet Explor	10
VPN On Demand	<input checked="" type="checkbox"/>	
Routing Policy	Allow Direct Access to Extern	
DNS Routing Rules	<input checked="" type="checkbox"/>	

Filter Type	Filter Value	
IPAddress	10.64.0.123	
Ports	80,100-500	
IPProtocol	6	
+ Add New Filter		

Filter Types follow AND logic operator

+ Add New Per App VPN Rule

The applications for which Per-app VPN traffic rules apply can be legacy Windows applications such as EXE files or modern apps downloaded from the Microsoft Store. By designating specific applications to start and use the VPN connection, only the traffic from those apps uses the VPN and not all device traffic. This logic allows you to keep corporate data secure while reducing the bandwidth sent through your VPN.

To help you reduce VPN constraint, you can set DNS routing rules for the Per-app VPN connection. These routing rules limit traffic sent through the VPN to only that traffic that matches the rules. The logic rules use the AND operator so if you set an IP Address, Port, and IP Protocol, the traffic must match EACH of these filters to pass through the VPN.

Per-app VPN allows you to create granular, detailed control over your VPN connections on an app by app basis.

## Configure a VPN Profile (Windows Desktop)

Configure device VPN settings to access corporate infrastructure remotely and securely. You can also configure Per-app VPN connections that limit traffic through the VPN to specific applications and set the VPN to connect automatically whenever the specified application starts.

## Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile** or **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **VPN** profile.
- 6 Configure the **Connection Info** settings:

Settings	Descriptions
<b>Connection Name</b>	Enter the name of the VPN connection.
<b>Connection Type</b>	Select the type of VPN connection:
<b>Server</b>	Enter the VPN server hostname or IP Address.
<b>Port</b>	Enter the port the VPN server uses.
<b>Advanced Connection Settings</b>	Enable to configure advanced routing rules for device VPN connection.
<b>Routing Addresses</b>	Select <b>Add</b> to enter the IP Addresses and Subnet Prefix Size of the VPN server. You may add more routing addresses as needed.
<b>DNS Routing Rules</b>	Select Add to enter the <b>Domain Name</b> that governs when to use the VPN. Enter the <b>DNS Servers</b> and <b>Web Proxy Servers</b> to use for each specific domain.
<b>Routing Policy</b>	Choose either to <b>Force All Traffic Through VPN</b> or <b>Allow Direct Access to External Resources</b> . <ul style="list-style-type: none"> <li>■ <b>Force All Traffic Through VPN</b> (Force Tunnel): For this traffic rule, all IP traffic must go through the VPN Interface only.</li> <li>■ <b>Allow Direct Access to External Resources</b> (Split Tunnel): For this traffic filter rule, only the traffic meant for the VPN interface (as determined by the networking stack) goes over the interface. Internet traffic can continue to go over the other interfaces.</li> </ul>
<b>Proxy</b>	Select <b>Auto Detect</b> to detect automatically any proxy servers used by the VPN. Select <b>Manual</b> to configure the proxy server.
<b>Server</b>	Enter the IP Address for the proxy server. Displays when <b>Proxy</b> is set to <b>Manual</b> .
<b>Proxy Server Config URL</b>	Enter the URL for the proxy server configuration settings. Displays when <b>Proxy</b> is set to <b>Manual</b> .
<b>Bypass proxy for local</b>	Enable to bypass the proxy server when the device detects it is on the local network.
<b>Protocol</b>	Select the authentication protocol for the VPN: <ul style="list-style-type: none"> <li>■ EAP – Allows for various authentication methods</li> <li>■ Machine Certificate – Detects a client certificate in the device certificate store to use for authentication.</li> </ul>

Settings	Descriptions
<b>EAP Type</b>	<p>Select the type of EAP authentication:</p> <ul style="list-style-type: none"> <li>■ EAP-TLS – Smart Card or client certificate authentication</li> <li>■ EAP-MSCHAPv2 – User name and Password</li> <li>■ EAP-TTLS</li> <li>■ PEAP</li> <li>■ Custom Configuration – Allows all EAP configurations</li> </ul> <p>Displays only if <b>Protocol</b> is set to <b>EAP</b>.</p>
<b>Credential Type</b>	<p>Select <b>Use Certificate</b> to use a client certificate. Select <b>Use Smart Card</b> to use a Smart Card to authenticate.</p> <p>Displays when <b>EAP Type</b> is set to <b>EAP-TLS</b>.</p>
<b>Simple Certificate Selection</b>	<p>Enable to simplify the list of certificates from which the user selects. The certificates display by the most recent certificated issued for each entity.</p> <p>Displays when <b>EAP Type</b> is set to <b>EAP-TLS</b>.</p>
<b>Use Windows Log On Credentials</b>	<p>Enable to use the same credentials as the Windows device.</p> <p>Displays when <b>EAP Type</b> is set to <b>EAP-MSCHAPv2</b>.</p>
<b>Identity Privacy</b>	<p>Enter the value to send servers before the client authenticates the server identity.</p> <p>Displays when <b>EAP Type</b> is set to <b>EAP-TTLS</b>.</p>
<b>Inner Authentication Method</b>	<p>Select the authentication method for inner identity authentication.</p> <p>Displays when <b>EAP Type</b> is set to <b>EAP-TTLS</b>.</p>
<b>Enable Fast Reconnect</b>	<p>Enable to reduce the delay in time between an authentication request by a client and the response from the server.</p> <p>Displays when <b>EAP Type</b> is set to <b>PEAP</b>.</p>
<b>Enable Identity Privacy</b>	<p>Enable to protect the user identity until the client authenticates with the server.</p>
<b>Per-app VPN Rules</b>	<p>Select <b>Add</b> to add traffic rules for specific Legacy and Modern applications. For more information on Per-app VPN, see <a href="#">VPN Profile (Windows Desktop)</a></p>
<b>Application ID</b>	<p>First select whether the app is a Store App or a Desktop App. Then enter the application file path for Desktop apps or package family name for Store Apps to specify the app the traffic rules apply to.</p> <ul style="list-style-type: none"> <li>■ File Path example: %ProgramFiles%/ Internet Explorer/iexplore.exe</li> <li>■ Package Family Name example: AirWatchLLC.AirWatchMDMAgent_htcwk4rx2gx4</li> </ul> <p>The PFN Lookup allows you to search for the application PFN by selecting the <b>Search</b> icon. A display window opens allowing you to select the app you want to configure Per-app VPN rules to govern. The PFN is then autopopulated.</p>
<b>VPN On Demand</b>	<p>Enable to have the VPN connection automatically connect when the application is launched.</p>
<b>Routing Policy</b>	<p>Select the routing policy for the app.</p> <ul style="list-style-type: none"> <li>■ <b>Allow Direct Access to External Resources</b> allows for both VPN traffic and traffic through the local network connection.</li> <li>■ <b>Force All Traffic Through VPN</b> forces all traffic through the VPN.</li> </ul>

Settings	Descriptions
<b>DNS Routing Rules</b>	<p>Enable to add DNS routing rules for the app traffic.</p> <p>Select <b>Add</b> to add <b>Filter Types</b> and <b>Filter Values</b> for the routing rules. Only traffic from the specified app that matches these rules can be sent through the VPN.</p> <ul style="list-style-type: none"> <li>■ <b>IP Address:</b> A list of comma-separated values specifying remote IP address ranges to allow.</li> <li>■ <b>Ports:</b> A list of comma-separated values specifying remote port ranges to allow. For example, 100–120, 200, 300–320. Ports are only valid when the protocol is set to TCP or UDP.</li> <li>■ <b>IP Protocol:</b> Numeric value from 0-255 representing the IP protocol to allow. For example, TCP = 6 and UDP = 17.</li> </ul> <p>For more information on how these filters and policies function and the logic used, see <a href="#">VPN Profile (Windows Desktop)</a>.</p>
<b>Device Wide VPN Rules</b>	<p>Select <b>Add</b> to add traffic rules for the entire device.</p> <p>Select <b>Add</b> to add <b>Filter Types</b> and <b>Filter Values</b> for the routing rules. Only traffic that matches these rules can be sent through the VPN.</p> <ul style="list-style-type: none"> <li>■ <b>IP Address:</b> A list of comma-separated values specifying remote IP address ranges to allow.</li> <li>■ <b>Ports:</b> A list of comma-separated values specifying remote port ranges to allow. For example, 100–120, 200, 300–320. Ports are only valid when the protocol is set to TCP or UDP.</li> <li>■ <b>IP Protocol:</b> Numeric value from 0–255 representing the IP protocol to allow. For example, TCP = 6 and UDP = 17. For a list of the numeric value of all protocols, see <a href="https://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml">https://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml</a>.</li> </ul>
<b>Remember Credentials</b>	Enable to remember the end user login credentials.
<b>Always On</b>	Enable to force the VPN connection to be always on.
<b>VPN Lockdown</b>	<p>Enable to force the VPN to always be on, never disconnect, disable any network access if the VPN is not connected, and prevent other VPN profiles from connecting on the device.</p> <p>A VPN profile with VPN Lockdown enabled must be deleted before you push a new VPN profile to the device.</p> <p>This feature only displays if the profile is set to Device context.</p>
<b>Bypass for Local</b>	Enable to bypass the VPN connection for local intranet traffic.
<b>Trusted Network Detection</b>	Enter, separated by commas, trusted network addresses. The VPN does not connect when a trusted network connection is detected.
<b>Domain</b>	<p>Select <b>Add New Domain</b> to add domains to resolve through the VMware Tunnel server.</p> <p>Any domains added resolve through the VMware Tunnel server regardless of the app originating the traffic. For example, vmware.com will resolve through the VMware Tunnel server if you use the whitelisted Chrome or the non-whitelisted Edge apps.</p> <p>This option only displays when you create the VPN profile as a user profile.</p>

7 Select **Save & Publish** when you are finished to push the profile to devices.

## Credentials Profile (Windows Desktop)

A Credentials profile allows you to push Root, Intermediate, and Client certificates to support any Public Key Infrastructure (PKI) and certificate authentication use case. The profile pushes configured credentials to the proper credentials store on the Windows Desktop device.

Even with strong passcodes and other restrictions, your infrastructure remains vulnerable to brute force, dictionary attacks, and employee error. For greater security, you can implement digital certificates to protect corporate assets. To use certificates in this way, you must first configure a Credentials payload with a certificate authority, and then configure your Wi-Fi and VPN payloads. Each of these payloads has settings for associating the certificate authority defined in the Credentials payload.

The Credentials profile also allows you to push S/MIME certificates to devices. These certificates are uploaded under each user account and controlled by the Credentials profile.

Looking to use certificate-based EAP authentication for VPN and Wi-Fi profiles? See the Knowledge Base article : <https://support.air-watch.com/articles/115001664448>

## Configure a Credentials Profile (Windows Desktop)

A Credentials profile pushes certificates to devices for use in authentication. With Workspace ONE UEM, you can configure credentials for personal, intermediate, trusted root, trusted publisher, and trusted people certificate stores.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile** or **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Credentials** payload and configure the following settings:

Settings	Descriptions
<b>Credential Source</b>	<p>Select the credential source as either an <b>Upload</b>, a <b>Defined Certificate Authority</b>, or <b>User Certificate</b></p> <p>The remaining payload options are source-dependent.</p> <ul style="list-style-type: none"> <li>■ If you select <b>Upload</b>, you must upload a new certificate.</li> <li>■ If you select <b>Defined Certificate Authority</b>, you must choose a predefined certificate authority and Template.</li> <li>■ If you select <b>User Certificate</b>, you must select how the <b>S/MIME</b> certificate is used.</li> </ul>
<b>Upload</b>	<p>Select to navigate to the desired credential certificate file and upload it to the Workspace ONE UEM console.</p> <p>This setting displays when <b>Upload</b> is selected as the <b>Credential Source</b>.</p>
<b>Certificate Authority</b>	<p>Use the drop-down menu to select a predefined certificate authority.</p> <p>This setting displays when <b>Defined Certificate Authority</b> is selected as the <b>Credential Source</b>.</p>

Settings	Descriptions
<b>Certificate Template</b>	Use the drop-down menu to select a predefined certificate template specific to the selected certificate authority.  This setting displays when <b>Defined Certificate Authority</b> is selected as the <b>Credential Source</b> .
<b>Export Private Key</b>	Select <b>Allow</b> to let end users export certificates using Windows Certificate Manager.  Select <b>Don't Allow</b> to prohibit end users from exporting certificates.
<b>Key Location</b>	Select the location for the certificate private key: <ul style="list-style-type: none"> <li>■ <b>TPM If Present</b> – Select to store the private key on a Trusted Platform Module if one is present on the device, otherwise store it in the OS.</li> <li>■ <b>TPM Required</b> – Select to store the private key on a Trusted Platform Module. If a TPM is not present, the certificate does not install and an error displays on the device.</li> <li>■ <b>Software</b> – Select to store the private key in the device OS.</li> <li>■ <b>Passport</b> – Select to save the private key within the Microsoft Passport. This option requires the Azure AD integration.</li> </ul>
<b>Certificate Store</b>	Select the appropriate certificate store for the credential to reside in on the device: <ul style="list-style-type: none"> <li>■ <b>Personal</b> – Select to store personal certificates. Personal certificates require the Workspace ONE Intelligent Hub on the device or using the SCEP payload.</li> <li>■ <b>Intermediate</b> – Select to store certificates from Intermediate Certificate Authorities.</li> <li>■ <b>Trusted Root</b> – Select to store certificates from Trusted Certificate Authorities and root certificates from your organization and Microsoft.</li> <li>■ <b>Trusted Publisher</b> – Select to store certificates from Trusted Certificates Authorities trusted by software restriction policies.</li> <li>■ <b>Trusted People</b> – Select to store certificates from trusted people or end entities that are explicitly trusted. Often these certificates are self-signed certificates or certificates explicitly trusted in an application such as Microsoft Outlook.</li> </ul>
<b>Store Location</b>	Select <b>User</b> or <b>Machine</b> to define where the certificate is located.
<b>S/MIME</b>	Select whether the S/MIME certificate is for encryption or signing.

6 Select **Save & Publish** to push the profile to devices.

## Configure a Restrictions Payload (Windows Desktop)

Deploy a restrictions payload for added security on Windows Desktop devices. Use the Restrictions payload to disable end-user access to device features to ensure that devices are not tampered with.

The Windows version and edition you use change what restrictions apply to a device.

To enforce a Restrictions profile:

### Procedure

- 1 Navigate to **Devices > Profiles > List View** and select **Add**.
- 2 Select **Windows** and then select **Windows Desktop**.



- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Restrictions** profile.
- 6 Configure the **Administration** settings:

Settings	Description
<b>Allow Manual MDM Unenrollment</b>	Allow the end user to unenroll from Workspace ONE UEM manually through the Workplace/Work Access enrollment. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Runtime Configuration Hub to Install Provisioning Packages</b>	Enable to allow the use of provisioning packages to enroll devices into Workspace ONE UEM (bulk provisioning). This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Location</b>	Select how location services run on the device. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Runtime Configuration Agent to Remove Provisioning Packages</b>	Enable to allow the removal of provisioning packages. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Send Diagnostic and Usage Telemetry Data</b>	Select the level of of telemetry data to send to Microsoft . This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Require Microsoft Account for MDM</b>	Enable to require a Microsoft Account for devices to receive policies or applications.
<b>Require of Microsoft Account for Modern Applications</b>	Enable to require a Microsoft Account for devices to download and install Windows Apps.
<b>Provisioning Packages Must Have a Certificate Signed by a Device Trusted Authority</b>	Enable to require a trusted certificate for all provisioning packages (bulk provisioning). This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Allow User to Change Auto Play Settings</b>	Allow the user to change what program is used for Auto Play of file types. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Allow User to Change Data Sense Settings</b>	Allow the user to change the Data Sense settings to restrict data use on the device. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Date/Time</b>	Allow the user to change the Date/Time settings. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.

Settings	Description
Language	<p>Allow the user to change the language settings.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Allow User to Change Power and Sleep Settings	<p>Allow the user to change the Power and Sleep settings.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Region	<p>Allow the user to change the region.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Allow User to Change Sign-In Options	<p>Allow the user to change the Sign-In Options.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
VPN	<p>Allow the user to change the VPN settings.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Allow User to Change Workplace Settings	<p>Allow the user to change Workplace settings and change how MDM functions on the device.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Allow the User to Change Account Settings	<p>Allow the user to change Account settings.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Bluetooth	<p>Allow the use of Bluetooth on the device.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Device Bluetooth Advertising	<p>Allow the device to broadcast Bluetooth Advertisements.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Bluetooth-enabled devices can discovery the device	<p>Allow Bluetooth discovery of the device by other Bluetooth devices.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Camera	<p>Allow access the camera function of the device.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Cortana	<p>Allow access to the Cortana application.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Device Discovery UX on the Lock Screen	<p>Allow the device discovery UX on the lock screen to discover projectors and other displays.</p> <p>When enabled, the Win+P and Win+K shortcuts do not work.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>

Settings	Description
IME Logging	<p>Enable to allow the user to turn on and off the logging for incorrect conversions and saving of auto-tuning result to a file and history-based predictive input.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
IME Network Access	<p>Enable to allow the user to turn on the Open Extended Dictionary to integrate Internet searches to provide input suggestions that do not exist in a devices local dictionary.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Smart Screen	<p>Enable to allow the end user to use the Microsoft SmartScreen feature, which is a form of security requesting the end user to draw shapes on an image to unlock the device. This option also allows end users to use PINs as their passcode.</p> <p><b>Note</b> After you disable function, you cannot reenoble it through Workspace ONE UEM MDM. To reenoble it, you must factory reset the device.</p> <p>The restriction does not apply to Windows 10 Home edition devices.</p>
Search to Leverage Location Information	<p>Allow the search to use the device location information.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Storage Card	<p>Enable to allow the use of an SD card and the device USB ports.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Windows Sync Settings	<p>Allow user to sync Windows settings across devices.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Windows Tips	<p>Allow Windows Tips on the device to help the user.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
User Account Control Setting	<p>Select the level of notification sent to end users when a change to the operating system requires device admin permission.</p>
Allow Non-Microsoft Store Trusted Applications	<p>Allows the downloading and installation of applications not trusted by the Microsoft Store.</p> <p>This restriction applies to all Windows 10 devices.</p>
App Store Auto Updates	<p>Enable to allow apps downloaded from the Microsoft Store to update automatically when new versions are available.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Allow Developer Unlock	<p>Allows the use of the Developer Unlock setting for sideloading applications onto devices.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>
Allow DVR & Game Broadcasting	<p>Enable to allow the recording and broadcasting of games on the device.</p> <p>This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.</p>

Settings	Description
<b>Allow Share Data Among Multiple Users of the Same App</b>	Allows sharing of data between multiple users of an app. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Restrict App Data to System Volume</b>	Restricts app data to the same volume as the OS instead of secondary volumes or removable media. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Restrict Installation of Applications to System Drive</b>	Restricts the installation of apps to the system drive instead of secondary drives or removable media. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Auto Connect to Wi-Fi Hotspots</b>	Enable to allow the device to connect to Wi-Fi hotspots automatically using the Wi-Fi Sense functionality. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Cellular Data On Roaming</b>	Enable to allow cellular data use while roaming. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Internet Sharing</b>	Enable to allow Internet sharing between devices. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Data Usage on Roaming</b>	Enable to allow end users to transmit and receive data while roaming. This restriction applies to all Windows devices.
<b>VPN Over Cellular</b>	Allow the use of a VPN over cellular data connections. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>VPN Roaming Over Cellular</b>	Allow the use of a VPN while on roaming cellular data connections. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Auto fill</b>	Allow the use of Auto fill to complete user information. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Cookies</b>	Allow the use of cookies. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Do Not Track</b>	Allow the use of Do Not Track requests. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Password Manager</b>	Allow the use of a password manager. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.

Settings	Description
<b>Pop-ups</b>	Allow pop-up browser windows. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Search Suggestions in Address Bar</b>	Allow search suggestions to appear in address bar. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Smart Screen</b>	Allow the use of the SmartScreen malicious site and content filter. This restriction applies to Windows 10 devices only and is not supported for Windows 10 Home edition devices.
<b>Send Intranet Traffic to Internet Explorer</b>	Allow intranet traffic to use Internet Explorer. This restriction applies to all Windows 10 devices.
<b>Enterprise Site List URL</b>	Enter the URL for an enterprise site list. This restriction applies to all Windows 10 devices.

- 7 Select **Save & Publish** when you are finished to push the profile to devices.

## Data Protection Profile (Windows Desktop)

The Data Protection profile configures rules to control how enterprise applications access data from multiple sources in your organization. Using Data Protection ensures that your data is only accessible by secured, approved applications.

With personal and work data on the same device, accidental data disclosure is possible through services that your organization does not control. With the Data Protection payload, Workspace ONE UEM controls how your enterprise data moves between applications to limit leakage with a minimal impact on end users. Workspace ONE UEM uses the Microsoft Windows Information Protection (WIP) feature to protect your Windows 10 devices.

Data Protection works by whitelisting enterprise applications to give them permission to access enterprise data from protected networks. If end users move data to non-enterprise applications, you can act based on the selected enforcement policies.

WIP treats data as either unencrypted personal data or corporate data to protect and encrypt.

Applications whitelisted for Data Protection fall into four different types. These types determine how the app interacts with protected data.

- **Enlightened Apps** – These apps fully support WIP functionality. Enlightened apps can access both personal and corporate data without issues. If data is created with an enlightened app, you can save the data as unencrypted personal data or encrypted corporate data. You can restrict users from saving personal data with enlightened apps using the Data Protection profile.

- **Allowed** – These apps support WIP-encrypted data. Allowed apps can access both corporate and personal data but the apps save any accessed data as encrypted corporate data. Allowed apps save personal data as encrypted corporate data that cannot be accessed outside of WIP-approved apps. Consider slowly whitelisting allowed apps on a case-by-case basis to prevent issues accessing data. Reach out to software providers for information on WIP approval.
- **Exempt** – You determine which apps are exempt from WIP policy enforcement when you create the Data Protection profile. Exempt any apps that do not support WIP-encrypted data. If an app does not support WIP-encryption, the apps break when attempting to access encrypted corporate data. No WIP policies apply to exempt apps. Exempt apps can access unencrypted personal data and encrypted corporate data. Because exempt apps access corporate data without WIP policy enforcement, use caution when whitelisting exempt apps. Exempt apps create gaps in data protection and leak corporate data.
- **Not Allowed** – These apps are not whitelisted or exempted from WIP policies and cannot access encrypted corporate data. Not allowed apps can still access personal data on a WIP-protected device.

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**Important** The Data Protection profile requires Windows Information Protection (WIP). This feature requires the Windows Anniversary Update. Consider testing this profile before deploying to production.

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## Configure a Data Protection Profile (Windows Desktop)

Create the Data Protection (Preview) profile to use the Microsoft Windows Information Protection feature to limit user and application access to your organizational data to approved networks and applications. You can set detailed controls over data protection.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and choose **Windows Desktop** as the platform.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Data Protection** payload.
- 6 Configure the Enterprise Data Protection settings:

Settings	Descriptions
<b>Add</b>	Select to add enterprise applications to the enterprise allowed list. Applications added here are trusted to use enterprise data.
<b>App Type</b>	Select whether the application is a traditional desktop application or a Microsoft Store app. You can also select an application publisher for desktop applications or store apps. Selecting a publisher whitelists all apps from the publisher.
<b>Name</b>	Enter the app name. If the app is a Microsoft Store app, select the Search icon (🔍) to search for the app Package Family Name (PFN).

Settings	Descriptions
Identifier	Enter the file path for a desktop application or the package family name for a store app.
Exempt	<p>Select the check box if the app does not support full data protection but still needs access to enterprise data. Enabling this option exempts the app from data protection restrictions. These apps are often legacy apps not yet updated for data protection support.</p> <p>Creating exemptions creates gaps in data protection. Only create exemptions when necessary.</p>
Primary Domain	<p>Enter the primary domain that your enterprise data uses.</p> <p>Data from protected networks is accessible by enterprise applications only. Attempting to access a protected network from an application not on the enterprise allowed list results in enforcement policy action.</p> <p>Enter domains in lowercase characters only.</p>
Enterprise Protected Domain Names	<p>Enter a list of domains (other than your primary domain) used by the enterprise for its user identities. Separate the domains with the vertical bar character ( ).</p> <p>Enter domains in lowercase characters only.</p>
Enterprise IP Ranges	<p>Enter the enterprise IP ranges that define the Windows 10 devices in the enterprise network.</p> <p>Data that comes from the devices in range are considered part of the enterprise and are protected. These locations are considered a safe destination for enterprise data sharing.</p>
Enterprise Network Domain Names	<p>Enter the list of domains that are the boundaries of the enterprise network.</p> <p>Data from a listed domain that is sent to a device is considered enterprise data and is protected. These locations are considered a safe destination for enterprise data sharing.</p>
Enterprise Proxy Servers	Enter the list of proxy server that the enterprise can use for corporate resources.
Enterprise Cloud Resources	<p>Enter the list of enterprise resource domains hosted in the cloud that need to be protected by routing through the enterprise network through a proxy server (on port 80).</p> <p>If Windows cannot determine whether to allow an app to connect to a network resource, it will automatically block the connection. If you want Windows to default to allow the connections, add the /*AppCompat*/ string to the setting. For example:</p> <pre>www.air-watch.com   /*AppCompat*/</pre> <p>Only add the /*AppCompat*/ string once to change the default setting.</p>
Application Data Protection Level	Set the level of protection and the actions taken to protect enterprise data.
Show EDP Icons	<p>Enable to display an EDP icon (🔒) in the Web browser, file explorer, and app icons when accessing protected data. The icon also displays in enterprise-only app tiles on the Start menu.</p>
Revoke on Unenroll	Enable to revoke Data Protection keys from a device when the device unenrolls from Workspace ONE UEM.
User Decryption	<p>Enable to allow users to select how data is saved using an enlightened app. They can select <b>Save as Corporate</b> or <b>Save as Personal</b>.</p> <p>If this option is not enabled, all data saved using an enlightened app will save as corporate data and encrypt using the corporate encryption.</p>

Settings	Descriptions
<b>Direct Memory Access</b>	Enable to allow users direct access to device memory.
<b>Data Recovery Certificate</b>	Upload the special Encrypting File System certificate to use for file recovery if your encryption key is lost or damaged. For more information, see <a href="#">Create an Encrypting File System Certificate (Windows Desktop)</a> .

- 7 Select **Save & Publish** to push the profile to devices.

## Create an Encrypting File System Certificate (Windows Desktop)

The Data Protection profile encrypts enterprise data and restricts access to approved devices. Create an EFS certificate to encrypt your enterprise data protected by a Data Protection profile.

### Procedure

- 1 On a computer without an EFS certificate, open a command prompt (with admin rights) and navigate to the certificate store you where you want to store the certificate.
- 2 Run the command: `cipher /r:<EFSRA>`  
The value of <EFSRA> is the name of the .cer and .pfx files that you want to create.
- 3 When prompted, enter the password to help protect your new .pfx file.
- 4 The .cer and .pfx files are created in the certificate store you selected.
- 5 Upload your .cer certificate to devices as part of a Data Protection profile. For more information, see [Configure a Data Protection Profile \(Windows Desktop\)](#).

## Windows Hello Profile (Windows Desktop)

Windows Hello provides a secure alternative to using passwords for security. The Windows Hello profile configures Windows Hello for Business for your Windows Desktop devices so end users can access your data without sending a password.

Protecting devices and accounts with a user name and password creates potential security exploits. Users can forget a password or share it with non-employees, putting your corporate data at risk. Using Windows Hello, Windows 10 devices securely authenticate the user to applications, Web sites, and networks on the behalf of the user without sending a password. The user does not need to remember passwords, and man-in-the-middle attacks are less likely to compromise your security.

Windows Hello requires users to verify possession of a Windows 10 device before it authenticates with either a PIN or Windows Hello biometric verification. After authentication through Windows Hello, the device gains instant access to Web sites, applications, and networks.

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**Important** Windows Hello for Business requires Azure AD integration to work.

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## Create a Windows Hello Profile (Windows Desktop)

Create a Windows Hello profile to configure Windows Hello for Business for your Windows Desktop devices so end users can access your applications, websites, and networks without entering a password.

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**Important** Windows Hello profiles only apply to devices enrolled through Azure AD integration.

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### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Windows Hello** profile and configure the settings:

Settings	Descriptions
<b>Biometric Gesture</b>	Enable to allow end users to use the device biometric readers.
<b>TPM</b>	Set to <b>Require</b> to disable Passport use without a Trusted Protection Module installed on the device.
<b>Minimum PIN Length</b>	Enter the minimum number of digits a PIN must contain.
<b>Maximum PIN Length</b>	Enter the maximum number of digits a PIN can contain.
<b>Digits</b>	Set the permissions level for using digits in the PIN.
<b>Upper Case Letters</b>	Set the permissions level for using upper case letters in the PIN.
<b>Lower Case Letters</b>	Set the permissions level for using lower case letters in the PIN.
<b>Special Characters</b>	>Set the permissions level for using special characters (! " # \$ % & ' ( ) * + , - . / : ; < = > ? @ [ \ ] ^ _ ` {   } ~) in the PIN.

- 6 Select **Save & Publish** to push the profile to devices.

## Configure a Firewall Profile (Windows Desktop)

The Firewall profile for Windows Desktop devices allows you to configure the Windows Firewall settings for devices. With devices all having the Windows Firewall configured and enabled, you greatly increase your network security.

### Prerequisites

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**Important** The Firewall profile requires the Workspace ONE Intelligent Hub to be installed on the device.

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### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.

- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Firewall** payload.
- 6 Enable **Use Windows Recommended Settings** to use the Windows Recommended Settings and disable all other options available in this profile. The settings will automatically change to the recommended settings and you cannot change them.
- 7 Configure the **Private Network** settings:

Settings	Description
<b>Firewall</b>	Enable to use the firewall when the device is connected to private network connections.
<b>Block All Incoming Connections, Including Those on the List of Allowed Apps</b>	Enable to block all incoming connections. This setting allows outbound connections.
<b>Notify User when Windows Firewall Blocks a New App</b>	Enable to allow notifications to display when the Windows Firewall blocks a new app.

- 8 Configure the **Public Network** settings:

Settings	Description
<b>Firewall</b>	Enable to use the firewall when the device is connected to private network connections.
<b>Block All Incoming Connections, Including Those on the List of Allowed Apps</b>	Enable to block all incoming connections. This setting allows outbound connections.
<b>Notify User when Windows Firewall Blocks a New App</b>	Enable to allow notifications to display when the Windows Firewall blocks a new app.

- 9 Select **Save and Publish** when you are finished to push the profile to devices.

## Configure a Single App Mode Profile (Windows Desktop)

The Single App Mode profile allows you to limit access on the device to a single application. With Single App Mode, the device is locked into a single application until the payload is removed. The policy enables after a device reboot.

### Prerequisites

Single App Mode has some restrictions and limitations.

- Windows Universal or Modern apps only. Single App Mode does not support legacy .msi or .exe applications.
- Users must be local standard users only. They cannot be a domain user, admin user, Microsoft account, or guest. The Standard User must be a Local User. Domain Accounts are not supported.

## Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Single App Mode** Profile.
- 6 Configure the **Single App Mode** settings:

Settings	Descriptions
Application Name	<p>Enter the application friendly name.</p> <p>For Windows apps, the friendly name is the Package Name or Package ID.</p> <p>Run a PowerShell command to get the friendly name of the app installed on the device. The command "Get-AppxPackage" returns the application friendly name as "name."</p>

- 7 After configuring a Single App Mode profile, you must set up Single App Mode on the device.
  - a After receiving the Single App Mode profile on the device, reboot the device to begin.
  - b Once the device restarts, you are prompted to sign into the device with the Standard User account.

Once signed in, the policy launches and Single App Mode is ready for use.

If you must sign out of Single App Mode, press the Windows key 5X fast to launch the login screen to log in to a different user.

## Configure an Antivirus Profile (Windows Desktop)

Create an Antivirus profile to configure the native Windows Defender antivirus on Windows Desktop devices. Windows Defender configured for all your devices ensures that your end users are protected as they use the device.

**Important** The Antivirus profile requires the Workspace ONE Intelligent Hub to be installed on the device. This profile only configures native Windows Defender and not other third-party antivirus appliances.

## Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Antivirus** Profile.

## 6 Configure the **Antivirus** settings:

Settings	Descriptions
<b>Real Time Monitoring</b>	Enable to configure Windows Defender to monitor the device in real time.
<b>Set Signature Update Interval</b>	Enable to set the day and time that the device checks for updates for Defender.
<b>Set Scan Interval</b>	Enable to configure the interval between the different system scan. You can select various times and various scan types. Enabling this setting displays <b>Full Scan</b> , <b>Quick Scan</b> , and <b>Remediation Scan</b> settings.
<b>Full Scan</b>	Enable to schedule when a full system scan runs. Select the specific time and day.
<b>Quick Scan</b>	Enable to schedule when a quick system scan runs. Select the specific time and day.
<b>Remediation scan</b>	Enable to schedule when a remediation scan to fix errors runs. Select the specific time and day.
<b>Exclusions</b>	Select the file paths or processes to exclude from the Windows Defender scans. Select <b>Add New</b> to add an exception.
<b>Threat Default Action (Unknown, Low, Moderate, High, Severe threats)</b>	Set the default action for the different threat levels found during scans. <ul style="list-style-type: none"> <li>■ <b>Clean</b> – Select to clean the issues with the threat.</li> <li>■ <b>Quarantine</b> – Select to separate the threat into a quarantine folder.</li> <li>■ <b>Remove</b> – Select to remove the threat from your system.</li> <li>■ <b>Allow</b> – Select to let the threat stay.</li> <li>■ <b>User Defined</b> – Select to let the user decide what to do with the threat.</li> <li>■ <b>No Action</b> – Select to take no action with the threat.</li> <li>■ <b>Block</b> – Select to block the threat from accessing the device.</li> </ul>
<b>Scan Avg CPU Load Factor</b>	Set the maximum average percentage of CPU Windows Defender can use during scans.
<b>Scan Only If Idle Enabled</b>	Enable to restrict Windows Defender to scan only when the CPU is idle.
<b>UI Lockdown</b>	Enable to lock down completely the UI so end users cannot change settings.
<b>Catchup Full Scan</b>	Enable to allow run a full scan that was interrupted or missed previously. A catch-up scan is a scan that is initiated because a regularly scheduled scan was missed. Usually these scheduled scans are missed because the computer was turned off at the scheduled time.
<b>Catchup Quick Scan</b>	Enable to allow run a quick scan that was interrupted or missed previously. A catch-up scan is a scan that is initiated because a regularly scheduled scan was missed. Usually these scheduled scans are missed because the computer was turned off at the scheduled time.
<b>Behavior Monitoring</b>	Enable to set the virus scanner to send an activity log to Microsoft.
<b>Privacy Mode</b>	Enable to prevent users, other than administrators, from displaying threat history.
<b>Intrusion Prevention System</b>	Enable to configure the network protection against exploitation of known vulnerabilities.  This option enables Windows Defender to monitor the connections continuously and identify potentially malicious behavior patterns. In this respect, the software behaves like a classic virus scanner, except that instead of scanning files it now scans network traffic.
<b>Scan Email</b>	Enable to allow Windows Defender to scan emails.

Settings	Descriptions
Scan Mapped Network Drives	Enable to allow Windows Defender to scan network drives mapped to devices.
Scan Archives	Enable to allow Windows Defender to run a full scan archived folders.
Scan Removable Drives	Enable to allow Windows Defender to scan any removable drives attached to the device.
Remove Quarantined Files After	Set how long files are quarantined before being removed.

7 Select **Save & Publish**.

## Encryption Profile (Windows Desktop)

Secure your organization data on Windows Desktop devices with the Encryption profile. The Encryption profile sets the native BitLocker encryption policy on your Windows Desktop devices to ensure data remains secure.

BitLocker encryption is only available on Windows 8 Enterprise and Pro and Windows 10 Enterprise, Education, and Pro devices.

Because laptops and tablets are mobile devices by design, they risk your organization data being lost or stolen. By enforcing an encryption policy through Workspace ONE UEM, you can protect data on the hard drive. BitLocker is the native Windows encryption and Dell Data Protection | Encryption is a third-party encryption solution from Dell. With the Encryption profile enabled, the Workspace ONE Intelligent Hub continually checks the encryption status of the device. If the Workspace ONE Intelligent Hub finds that the device is not encrypted, it automatically encrypts the device.

If you decide to encrypt with BitLocker, a recovery key created during encryption is stored in the Workspace ONE UEM console and in the Self-Service Portal.

The Encryption profile requires the Workspace ONE Intelligent Hub to be installed on the device.

**Note** The Encryption profile does not configure or enable Dell Data Protection | Encryption. The status of the encryption is reported to the Workspace ONE UEM console and Self-Service Portal, but the encryption must be configured manually on the device.

**Caution** Windows 10 does not support devices without a pre-boot onscreen keyboard. Without a keyboard, you cannot enter the start up pin necessary to unlock the hard drive and start Windows on the device. Pushing this profile to devices without a pre-boot onscreen keyboard breaks your device.

## BitLocker Functionality

The Encryption profile uses advanced BitLocker functionality to control authentication and deployment of BitLocker encryption.

BitLocker uses the Trusted Platform Module (TPM) on devices to store the recovery password on the device to decrypt hard drives connected to the motherboard. If the drive is removed from the motherboard, the drive does not decrypt. For enhanced authentication, you can enable an encryption PIN to confirm user authentication. You can also require a password for devices as a fallback for when the TPM is not available.

## Deployment Behavior

The Windows-native BitLocker encryption secures data on Windows Desktop devices. Deploying the encryption profile requires more actions from the end user.

If the Encryption profile is pushed to an encrypted device and the current encryption settings match the profile settings, the Workspace ONE Intelligent Hub adds a new recovery key and sends it to the Workspace ONE UEM console. This new recovery key is also stored in an encrypted database on the device. With this feature, if a user or an admin attempts to decrypt the device, the Encryption profile re-encrypts the device with the new recovery key. The encryption is enforced even if the device is offline.

If the existing encryption does not meet the authentication settings of the Encryption profile, the existing protectors are removed and new protectors are applied that meet the Encryption profile settings.

If the existing encryption method does not match the Encryption profile, Workspace ONE UEM leaves the existing method in place and does not override it. This functionality also applies if you add a new version of the Encryption profile to a device managed by an existing Encryption profile. The existing encryption method is not changed.

If BitLocker is enabled and in use, you can see status reports about the encryption status in the following areas:

- Workspace ONE UEM Dashboard
  - Device Details displays recovery key information.
  - BitLocker protection displays as enabled.
- Workspace ONE UEM Self-Service Portal
  - Self-Service Portal displays that the recovery key is stored, but not the recovery key details.
  - BitLocker protection displays as enabled.

## Removal Behavior

If the profile is removed from the Workspace ONE UEM console, Workspace ONE UEM no longer enforces the encryption and the device automatically decrypts. Enterprise wiping or manually uninstalling the Workspace ONE Intelligent Hub from the Control Panel disables BitLocker encryption.

If the end user decides to unenroll during the BitLocker encryption process, the encryption process continues unless it is turned off manually from the Control Panel.


## Configure an Encryption Profile (Windows Desktop)

Create an Encryption profile to secure your data on Windows Desktop devices using the native BitLocker encryption.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Encryption** profile and configure the settings:

Settings	Descriptions
<b>Encrypted Volume</b>	Use the drop-down menu to select the type of encryption as follows: <ul style="list-style-type: none"> <li>■ Complete Hard Disk – Encrypts the entire hard disk on the device, including the System Partition where the OS is installed.</li> <li>■ System Partition – Encrypts a partition or drive in the same location Windows is installed and from which it boots.</li> </ul>
<b>Encryption Method</b>	Select the encryption method for the device.
<b>Only encrypt used space during initial encryption</b>	Enable to limit the BitLocker encryption to only the used space on the drive at the time of encryption.
<b>Recovery Key URL</b>	Enter the URL to display on the lock screen directing end users to get the recovery key. Consider entering the Self Service Portal URL as Workspace ONE UEM hosts the recovery key there.
<b>Force Encryption</b>	Enable to force encryption on the device. This enforcement means that the device immediately re-encrypts if BitLocker is manually disabled. Consider disabling this setting to prevent issues during upgrades or Enterprise Wipes.
<b>Authentication Mode</b>	Select the method for authenticating access to a BitLocker encrypted device. <ul style="list-style-type: none"> <li>■ TPM — Uses the devices Trusted Platform Module. Requires a TPM on the device.</li> <li>■ Password — Uses a password to authenticate.</li> </ul>
<b>Enforce Encryption PIN on Login</b>	Select the check box to require users to enter a PIN to unlock the device. This option locks out the OS start up and auto-resume from suspend or hibernate until the user enters the correct PIN.
<b>Use Password if TPM Not present</b>	Select the check box to use a password as a fallback to decrypt the device if the TPM is unavailable. If this settings is not enabled, any devices without a TPM do not encrypt.
<b>Minimum Password Length</b>	Select the minimum number of characters a password must be. Displays if the <b>Authentication Mode</b> is set to <b>Password</b> or if <b>Use Password if TPM Not Available</b> is enabled.
<b>Create Static BitLocker Password</b>	Select the check box if a static recovery key is enabled.

Settings	Descriptions
<b>BitLocker Recovery Password</b>	Select the <b>Generate</b> icon (  ) to generate a new recovery key.
<b>Rotation Period</b>	Enter the number of days until the recovery key rotates.
<b>Grace Period</b>	Enter the number of days after rotation that the previous recovery key still works.
<b>Enable BitLocker Suspend</b>	Select the check box to enable BitLocker Suspension. This functionality suspends BitLocker encryption during a specified time period. Use this feature to suspend BitLocker when updates are scheduled so devices can reboot without requiring end users to enter the Encryption PIN or password.
<b>Suspend BitLocker Type</b>	Select the type of suspension. <ul style="list-style-type: none"> <li>■ <b>Schedule</b> — Select to enter the specific time period that BitLocker suspends. Then set the schedule repeat to daily or weekly.</li> <li>■ <b>Custom</b> — Select to enter the day and time to begin and end BitLocker suspension.</li> </ul>
<b>BitLocker Suspend Start Time</b>	Enter the time to start BitLocker suspension.
<b>BitLocker Suspend End Time</b>	Enter the time to end BitLocker suspension.
<b>Scheduled Repeat Type</b>	Set whether the scheduled suspension repeats daily or weekly. If you select weekly, select the days of the week to repeat the schedule.

- 6 Select **Save & Publish** when you are finished to push the profile to devices.

## Configure a Windows Updates Profile (Windows Desktop)

Create a Windows Updates profile to manage the Windows Updates settings for Windows Desktop devices. The profile ensures that all your devices are up-to-date, which improves device and network security.

### Prerequisites

To use advanced settings, the Windows Update profile requires the Workspace ONE Intelligent Hub to be installed on the device.

**Important:** To see the OS version each update branch supports, see Microsoft's documentation on Windows 10 release information: <https://technet.microsoft.com/en-us/windows/release-info.aspx>.

To enforce a Windows Update profile:

### Procedure

- 1 Navigate to **Devices > Profiles > List View** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Windows Updates** profile.



## 6 Configure the Windows Updates settings:

Settings	Descriptions
<b>Windows Update Source</b>	<p>Select the source for Windows Updates:</p> <ul style="list-style-type: none"> <li>■ Microsoft Update Service– Select to use the default Microsoft Update Server.</li> <li>■ Corporate WSUS – Select to use a corporate server and enter the <b>WSUS Server URL</b> and <b>WSUS Group</b>.</li> </ul> <p>The device must contact the WSUS at least once for this setting to take effect.</p> <p>Selecting Corporate WSUS as a source allows your IT Admin to view updates installed and device status of devices in the WSUS Group.</p>
<b>Update Branch</b>	<p>Select the update branch to follow for updates.</p> <ul style="list-style-type: none"> <li>■ Windows Insider Branch - Slow</li> <li>■ Windows Insider Branch - Fast</li> <li>■ Release Windows Insider Build</li> <li>■ Semi-Annual Channel (Targeted) <ul style="list-style-type: none"> <li>■ Device receives all applicable feature updates immediately after the release of a new Windows version. Consider using this channel for your organization's testing process.</li> </ul> </li> <li>■ Semi-Annual Channel <ul style="list-style-type: none"> <li>■ This channel is the phase following targeted deployment. Consider using this channel after your testing process provides successful findings.</li> </ul> </li> </ul>
<b>Defer Feature Updates Period in Days</b>	<p>Select the number of days to delay feature updates before installing the updates on the device.</p>
<b>Pause Feature Updates</b>	<p>Enable to pause all feature updates for 60 days or until disabled. This setting overrides the <b>Defer Feature Updates Period in Days</b> setting.</p> <p>Use this option to delay an update that causes issues that can normally install following your deferral settings.</p>
<b>Defer Quality Updates Period In Days</b>	<p>Select the number of days to delay quality updates before installing the updates on the device.</p>
<b>Pause Quality Updates</b>	<p>Enable to pause all quality updates for 60 days or until disabled. This setting overrides the <b>Defer Quality Updates Period in Days</b> setting.</p> <p>Use this option to delay an update that causes issues that can normally install following your deferral settings.</p>
<b>Enable Settings for Previous Windows versions</b>	<p>Select to enable deferral settings for previous versions of Windows. The settings include:</p> <ul style="list-style-type: none"> <li>■ <b>Defer New Features (months)</b></li> <li>■ <b>Defer New Updates (weeks)</b></li> <li>■ <b>Pause Deferrals</b></li> </ul>

Settings	Descriptions
<b>Automatic Updates</b>	<p>Set how updates from the selected <b>Update Branch</b> are handled:</p> <ul style="list-style-type: none"> <li>■ Install updates automatically.</li> <li>■ Install Updates but let the user schedule the computer.</li> <li>■ Install updates automatically and restart at specified time.</li> <li>■ Install updates automatically and prevent user from modifying the control panel settings.</li> <li>■ Check for updates but let the user choose whether to download and install them.</li> <li>■ Never check for updates.</li> </ul>
<b>Active Hours Start Time</b>	<p>Enter the start time for active hours.</p> <p>Set the active hours to prevent the system from rebooting during these hours.</p>
<b>Active Hours End Time</b>	<p>Enter the end time for active hours.</p> <p>Set the active hours to prevent the system from rebooting during these hours.</p>
<b>Allow Update Service</b>	<p>Allow updates from the public Windows Update service.</p> <p>Not allowing this service can cause issues with the Microsoft Store.</p>
<b>Allow MU Updates</b>	<p>Allow updates from Microsoft Update.</p>
<b>Update Other Microsoft Products When Updating Windows</b>	<p>Allow other Microsoft Products to update when Windows is updated.</p>
<b>Install Signed Updates from 3rd Party Entities</b>	<p>Allow the installation of updates from approved third parties.</p>
<b>Insider Builds</b>	<p>Allow the download of Windows Insider builds of Windows 10.</p>
<b>Require Update Approval</b>	<p>Enable to require updates to have approval before downloading to the device.</p> <p>Enable to require admins explicitly approve updates before downloading to the device. This approval is either through Update Groups or individual update approval.</p> <p>This option requires you to accept any required EULA on behalf of your end users before the update pushes to devices. If a EULA must be accepted, a dialog box opens displaying the EULA.</p> <p>To approve updates, navigate to <b>Lifecycle &gt; Windows Updates</b>. For more information, see <a href="#">Approve Windows Updates</a>.</p>
<b>Auto-Approved Updates</b>	<p>Enable this option to set update groups that are automatically approved for download on end-user devices.</p> <p>This option requires you to accept any required EULA on behalf of your end users before the update pushes to devices. If a EULA must be accepted, a dialog box opens displaying the EULA.</p>
<b>Feature Updates</b>	<p>Set to <b>Allowed</b> to approve all feature updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Application</b>	<p>Set to <b>Allowed</b> to approve all app updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Connectors</b>	<p>Set to <b>Allowed</b> to approve all Office 365 connectors updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>

Settings	Descriptions
<b>Critical</b>	<p>Set to <b>Allowed</b> to approve all critical updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Definition</b>	<p>Set to <b>Allowed</b> to automatically approve all Windows Defender definition updates for download to assigned devices.</p> <p>Consider setting this option to <b>Allowed</b> to ensure that your devices remain protected by Windows Defender. This option is enabled by default.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Developer Kit</b>	<p>Set to <b>Allowed</b> to approve all developer kit updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Drivers</b>	<p>Set to <b>Allowed</b> to approve all driver updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Feature Pack</b>	<p>Set to <b>Allowed</b> to automatically approve all feature pack updates for download to assigned devices.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Guidance</b>	<p>Set to <b>Allowed</b> to automatically approve all guidance updates for download to assigned devices.</p>
<b>Security</b>	<p>Set to <b>Allowed</b> to automatically approve all security updates for download to assigned devices.</p> <p>Consider setting this option to <b>Allowed</b> to ensure that your devices remain secure. This option is enabled by default.</p>
<b>Service Pack</b>	<p>Set to <b>Allowed</b> to approve all service pack updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Tool Updates</b>	<p>Set to <b>Allowed</b> to approve all tool updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Update Rollups</b>	<p>Set to <b>Allowed</b> to automatically approve all update rollups for download to assigned devices.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>General</b>	<p>Set to <b>Allowed</b> to approve all general updates for download to assigned devices automatically.</p> <p>Displays if <b>Auto-Approved Updates</b> is enabled.</p>
<b>Peer-to-Peer Updates</b>	<p>Allow the use of peer-to-peer downloading of updates.</p>
<b>Allowed Peer-to-Peer Method</b>	<p>Select the method of peer-to-peer connection you want to allow.</p>
<b>Limit Peer Usage to Member with the Same Group ID</b>	<p>Limit peer-to-peer downloading to devices within the same organization group.</p>
<b>Maximum time each file is held in the delivery optimization cache (seconds)</b>	<p>Set the number of seconds a file is held in the delivery optimization cache before being pushed to devices.</p> <p>The optimization cache keeps updates available on other peers that the device can reach for quicker downloading of updates.</p>

Settings	Descriptions
<b>Maximum cache size that delivery optimization can utilize (%)</b>	Enter the percentage of the cache that delivery optimization can use.
<b>Maximum upload bandwidth that a device will use across all concurrent upload activity (KB/second)</b>	Enter the maximum upload bandwidth in KB/second that a device uses when sending updates to peers.

7 Select **Save & Publish** to push the profile to devices.

## Lifecycle Updates List View

Workspace ONE UEM supports reviewing and approving OS and OEM updates for Windows 10 devices and OS updates for specific Android updates. The Updates console page lists all updates available for Windows 10 devices.

### Windows Updates

From this tab, you can approve updates and assign the updates to the specific smart groups as meets your business needs. This tab displays all updates with their published date, platform, classification, and assigned group. Selecting the update name displays a window with detailed information, a link to the Microsoft KB page for the update, and the status of update installation.

For more information on approving an update, see [Approve Windows Updates](#).

The update installation status shows the deployment of the update across your devices. See the status of the update deployment by selecting **View**.

Status	Descriptions
Assigned	The update is approved and assigned to the device
Approved	The approved update is successfully assigned to the device.
Available	The update is available on the device for installation
Pending Installation	The installation is approved and available but not yet installed.
Pending Reboot	Installation is paused until the device reboots.
Installed	The update successfully installed
Failed	The updated failed to install.

### OEM Updates

From this tab, you can see all OEM updates deployed to your Windows Desktop devices. You can order the list view by name, level, type, and device category. You can also filter the displayed updates with filters including audio drivers, chipset drivers, BIOS updates, and more.

See the installation status of the update deployment by selecting the update name.

For more information on pushing OEM updates to devices, see [Configure the OEM Updates Profile \(Windows Desktop\)](#)

## Approve Windows Updates

Review and approve Windows Updates for installation on your Windows 10 devices. This feature allows you to ensure your devices remain up-to-date while controlling the distribution of updates to meet your business needs.

### Prerequisites

You must publish a Windows Update profile with **Require Update Approval** enabled.

### Procedure

- 1 Navigate to **Lifecycle > Updates > Windows**.
- 2 Select the check box on the left of the update. Select the **Assign** button.
- 3 Enter the smart groups to which the update applies.
- 4 Select **Add**.

### What to do next

For more information on the Windows Updates console page, see [Lifecycle Updates List View](#).

## Create a Proxy Profile (Windows Desktop)

Create a Proxy profile to configure a proxy server for your Windows Desktop devices. These settings do not apply to VPN connections.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Proxy** profile and configure the settings:

Settings	Description
<b>Automatically Detect Settings</b>	Enable to have the system automatically try to find the path to a proxy auto-config (PAC) script.
<b>Use Setup Script</b>	Enable to enter the file path to the PAC script.
<b>Script Address</b>	Enter the file path to the PAC script. This option displays when <b>Use Setup Script</b> is enabled.
<b>Use Proxy Server</b>	Enable to use a static proxy server for Ethernet and Wi-Fi connections. This proxy server is used for all protocols. These settings do not apply to VPN connections.
<b>Address to Proxy Server</b>	Enter the proxy server address. The address must follow the format: <server>[“:”<port>].

Settings	Description
Exceptions	Enter any addresses that should not use the proxy server. The system will not use the proxy server for these addresses. Separate enteries with a semicolon (;).
User Proxy for Local (Intranet) Addresses	Enable to use the proxy server for local (intranet) addresses.

- 6 Select **Save And Publish**.

## Configure a Web Clips Profile (Windows Desktop)

A Web Clips Profile allows you to push URLs on to end-user devices for easy access to important Web sites.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Web Clips** profile.
- 6 Configure the **Web Clips** settings, including:

Settings	Description
Label	Enter a description for the Web clip.
URL	Enter the target URL for the Web clip.
Show in App Catalog	Enable to show the Web clip in the app catalog.

- 7 Select **Save & Publish** when you are finished to push the profile to devices.

## Exchange ActiveSync Profile (Windows Desktop)

The Exchange ActiveSync profiles enable you to configure your Windows Desktop devices to access your Exchange ActiveSync server for email and calendar use.

Use certificates signed by a trusted third-party certificate authority (CA). Mistakes in your certificates expose your otherwise secure connections to potential man-in-the-middle attacks. Such attacks degrade the confidentiality and integrity of data transmitted between product components, and might allow attackers to intercept or alter data in transit. See [Configure a Credentials Profile \(Windows Desktop\)](#) for more information.

The Exchange ActiveSync profile supports the native mail client for Windows Desktop. The configuration changes based on which mail client you use.

## Removing Profile or Enterprise Wiping

If the profile is removed using the remove profile command, compliance policies, or through an enterprise wipe, all email data is deleted, including:

- User account/login information.
- Email message data.
- Contacts and calendar information.
- Attachments that were saved to the internal application storage.

## Username and Password

If you have email user names that are different than user email addresses, you can use the **{EmailUserName}** text box, which corresponds to the email user names imported during directory service integration. Even if your user user names are the same as their email addresses, use the **{EmailUserName}** text box, because it uses email addresses imported through the directory service integration.

## Configure an Exchange ActiveSync Profile (Windows Desktop)

Create an Exchange ActiveSync profile to give Windows Desktop devices access to your Exchange ActiveSync server for email and calendar use.

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**Note** Workspace ONE UEM does not support Outlook 2016 for Exchange ActiveSync profiles.

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### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and choose **Windows Desktop** as the platform.
- 3 Select **User Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Exchange ActiveSync** payload.
- 6 Configure the Exchange ActiveSync settings:

Settings	Descriptions
<b>Mail Client</b>	Select the Mail Client that the EAS profile configures. Workspace ONE UEM supports the Native Mail Client.
<b>Account Name</b>	Enter the name for the Exchange ActiveSync account.
<b>Exchange ActiveSync Host</b>	Enter the URL or IP Address for the server hosting the EAS server.
<b>Use SSL</b>	Enable to send all communications through the Secure Socket Layer.

Settings	Descriptions
<b>Domain</b>	Enter the email domain. The profile supports lookup values for inserting enrollment user login information. For more information, see the Username and Password section at the bottom of the page.
<b>Username</b>	Enter the email user name.
<b>Email Address</b>	Enter the email address. This text box is a required setting.
<b>Password</b>	Enter the email password.
<b>Identity Certificate</b>	Select the certificate for the EAS payload. See <a href="#">Configure a Credentials Profile (Windows Desktop)</a> for more information.
<b>Next Sync Interval (Min)</b>	Select the frequency, in minutes, that the device syncs with the EAS server.
<b>Past Days of Mail to Sync</b>	Select how many days of past emails sync to the device.
<b>Diagnostic Logging</b>	Enable to log information for troubleshooting purposes.
<b>Require Data Protection Under Lock</b>	Enable to require data to be protected when the device is locked.
<b>Allow Email Sync</b>	Enable to allow the syncing of email messages.
<b>Allow Contacts Sync</b>	Enable to allow the syncing of contacts.
<b>Allow Calendar Sync</b>	Enable to allow the syncing of calendar events.

- 7 Select **Save** to keep the profile in the Workspace ONE UEM console or **Save & Publish** to push the profile to the devices.

## SCEP Profile (Windows Desktop)

Simple Certificate Enrollment Protocol (SCEP) profiles enable you to install certificates onto devices silently without interaction from the end user.

Even with strong passcodes and other restrictions, your infrastructure remains vulnerable to brute force, dictionary attacks, and employee error. For greater security, you can implement digital certificates to protect corporate assets. To use SCEP to install these certificates to devices silently, you must first define a certificate authority, then configure a **SCEP** payload alongside your **EAS**, **Wi-Fi**, or **VPN** payload. Each of these payloads has settings for associating the certificate authority defined in the SCEP payload.

To push certificates to devices, configure a **SCEP** payload as part of the profiles you created for EAS, Wi-Fi, and VPN settings.

## Configure a SCEP Profile (Windows Desktop)

A SCEP profile silently installs certificates onto devices for use with device authentication.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile** or **Device Profile**.



- 4 Configure the profile **General** settings.
- 5 Select the **SCEP** profile.
- 6 Configure the SCEP settings, including:

Settings	Descriptions
<b>Credential Source</b>	This drop-down menu is always set to defined certificate authority.
<b>Certificate Authority</b>	Select the certificate authority you want to use.
<b>Certificate Template</b>	Select the template available for the certificate.
<b>Issuer</b>	Enter the issuer of the certificate. The issuer can be found in the subject line of the certificate.
<b>Store Location</b>	Select where the SCEP stores on the machine: <ul style="list-style-type: none"><li>■ <b>Context User</b> – Stores the SCEP with the specific user.</li><li>■ <b>Context Machine</b> – Stores the SCEP for all users on the machine.</li></ul>

- 7 Configure the Wi-Fi, VPN, or EAS profile.
- 8 Select **Save & Publish** when you are finished to push the profile to devices.

## Application Control Profile (Windows Desktop)

Limit which applications can be installed onto Windows Desktop devices with the Application Control profile. Limiting application installs protects your data from malicious apps and prevents end users from accessing unwanted apps on corporate devices.

To allow or prevent installation of applications on devices, you can enable Application Control to whitelist and blacklist specific applications. While the compliance engine monitors devices for whitelisted and blacklisted apps, Application Control prevents users from even attempting to add or remove applications. For example, prevent a certain game application from ever installing on a device, or allow only specific apps whitelisted to be installed on a device. Blacklisted apps installed on the device before the Application Control payload is pushed to the device are disabled after the profile is pushed.

The Application Control profile helps reduce the cost of device management by preventing user from running prohibited apps that cause issues. Preventing apps from causing issues reduces the number of calls your support staff must answer.

## Configure an Application Control Profile (Windows Desktop)

Enable Application Control to whitelist and blacklist specific applications to allow or prevent use of applications on devices. Application Control uses Microsoft AppLocker configurations to enforce app control on Windows 10 devices.

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### Important

- Create policies using Audit Only mode first. After verifying with the Audit Only version on a test device, create an Enforce mode version for use with your devices. Failing to test policies before general use may result in your devices becoming unusable.
  - Create default rules and any other desired rules for your organization to reduce chances of locking the default configurations or breaking devices after reboot. For more information on creating rules, see the Microsoft TechNet article on AppLocker.
- 

### Prerequisites

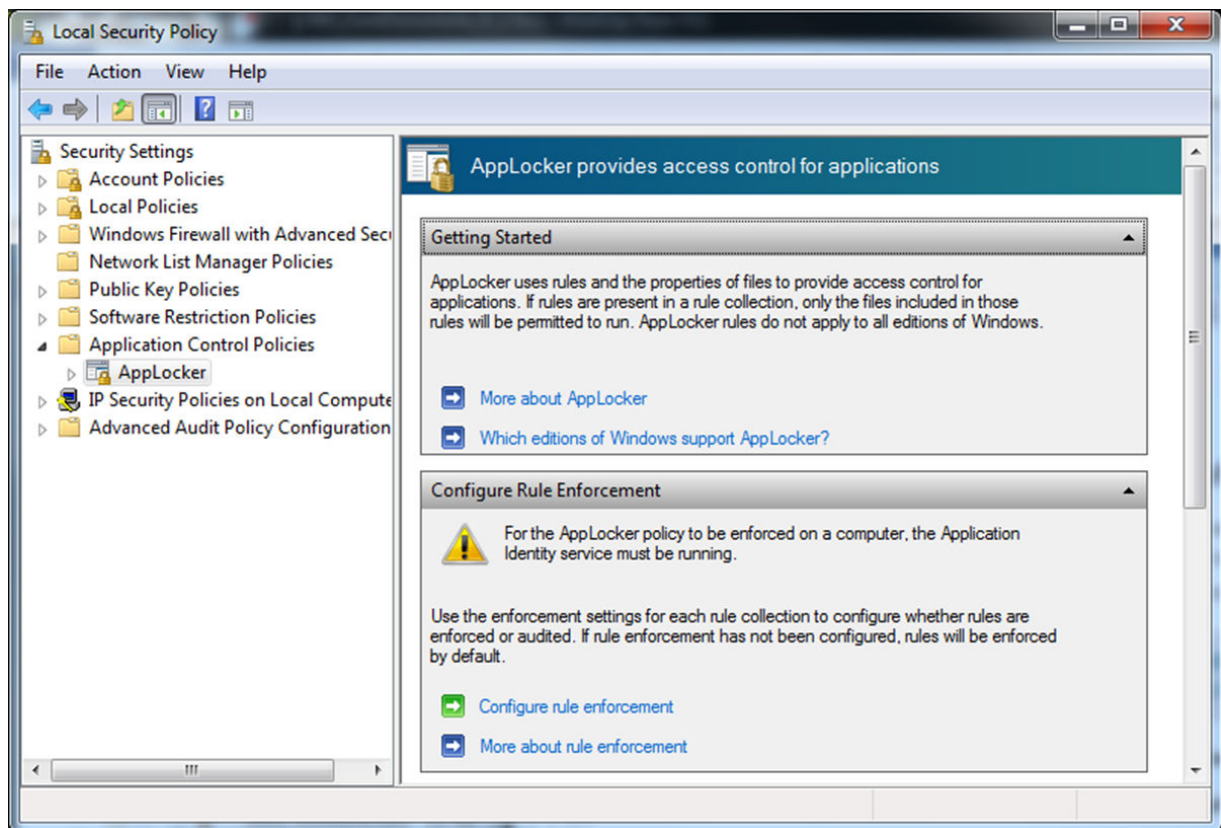
To configure an XML configuration file, you must configure the AppLocker settings on a device and export the file for use with the profile.

The Application Control profile requires Windows 10 Enterprise or Education.

### Procedure

- 1 On the configuration device, start the **Local Security Policy** editor.

- 2 Navigate to **Application Control Policies > AppLocker** and select **Configure Rule Enforcement**.



- 3 Enable **Executable Rules**, **Windows Installer Rules**, and **Script Rules** enforcement by selecting **Enforce Rules**.
- 4 Create **Executable Rules**, **Windows Installer Rules**, and **Script Rules** by selecting the folder on the right then right-clicking the folder and selecting **Create New Rule**.  
  
Remember to create Default Rules to reduce chances of locking the default configuration or breaking the device.
- 5 After creating all the rules you want, right-click **AppLocker** and select **Export Policy** and save the XML configuration file.
- 6 Navigate in the Workspace ONE UEM console to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 7 Select **Windows** and then select **Windows Desktop**.
- 8 Select **Device Profile**.
- 9 Configure the profile **General** settings.
- 10 Select the **Application Control** payload.
- 11 Select **Import Sample Device Configuration** and select **Upload** to add your **Policy Configuration File**.
- 12 Select **Save & Publish**.

## Configure an Exchange Web Services Profile (Windows Desktop)

Create an Exchange Web Services profile to allow end users to access corporate email infrastructures and Microsoft Outlook accounts from their devices.

### Prerequisites

**Important** During first-time configuration, the device must have access to the Internal Exchange Server.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Exchange Web Services** profile and configure the settings:

Settings	Descriptions
Domain	Enter the name of the email domain to which the end user belongs.
Email Server	Enter the name of the Exchange server.
Email Address	Enter the address for the email account.

- 6 Select **Save & Publish** when you are finished to push the profile to devices.

Removing an Exchange Web Services profile removes all Outlook accounts from the device.

## Create a Windows Licensing Profile (Windows Desktop)

Configure a Windows Licensing profile to provide your Windows 10 devices with a Windows 10 Enterprise or Windows 10 Education license key. Use this profile to upgrade devices that do not come with Windows 10 Enterprise.

**Important** This upgrade cannot be reversed. If you publish this profile to BYOD devices, you cannot remove the licensing through MDM. Windows 10 can only upgrade following a specific upgrade path:

- Windows 10 Enterprise to Windows 10 Education
- Windows 10 Home to Windows 10 Education
- Windows 10 Pro to Windows 10 Education
- Windows 10 Pro to Windows 10 Enterprise

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.

- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Windows Licensing** profile and configure the following settings:

Settings	Descriptions
<b>Windows Edition</b>	Select either <b>Enterprise</b> or <b>Education</b> edition.
<b>Please Enter valid License Key</b>	Enter the license key for the edition of Windows that you are using.

- 6 Select **Save & Publish** to push the profile to devices.

## Configure a BIOS Profile (Windows Desktop)

Configure BIOS settings for select Dell enterprise devices with the BIOS profile. This profile requires integration with Dell Command | Monitor.

Support for the BIOS profile settings varies by Dell Enterprise device. Workspace ONE UEM only pushes the settings a device supports.

For more information on supported devices, see [Chapter 7 Dell Command | Monitor Integration](#).

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **BIOS** payload and configure the following settings:

Settings	Descriptions
<b>BIOS Password</b>	Enter the password used to unlock the BIOS of the device. This field is required.
<b>TPM Chip</b>	Select <b>Enable</b> to enable the device Trusted Platform Module chip.
<b>Boot Mode</b>	Select whether the device boots in <b>BIOS</b> or <b>UEFI</b> mode.
<b>Boot Mode Protection</b>	Select <b>Enable</b> to prevent issues with the OS installed on the device from booting. This protection prevents a change in Boot Mode on a device with an installed OS.
<b>Secure Boot</b>	Select <b>Enable</b> to use Secure Boot settings on the device. You cannot disable Secure Boot with DCM. If your devices already use Secure Boot, you must manually disable the settings on the device. Secure Boot requires <b>Boot Mode</b> to be set to <b>UEFI</b> and <b>Legacy Option ROMS</b> to be set to <b>Disable</b> .
<b>Legacy Option ROMS</b>	Select <b>Enable</b> to allow the use of legacy option ROMS during the boot process.
<b>CPU Virtualization</b>	Select <b>Enable</b> to allow hardware virtualization support.

Settings	Descriptions
<b>Virtualization IO</b>	Select <b>Enable</b> to allow input/output virtualization.
<b>Trusted Execution</b>	<p>Select <b>Enable</b> to allow the device to use the TPM chip, CPU Virtualization, and Virtualization IO for trust decisions.</p> <p>Trust Execution requires the <b>TPM Chip</b>, <b>CPU Virtualization</b>, and <b>Virtualization IO</b> settings to be set to <b>Enabled</b>.</p>
<b>Wireless LAN</b>	Select <b>Enable</b> to allow use of the device wireless LAN functionality.
<b>Cellular Radio</b>	Select <b>Enable</b> to allow use of the device cellular radio functionality.
<b>Bluetooth</b>	Select <b>Enable</b> to allow use of the device Bluetooth functionality.
<b>GPS</b>	Select <b>Enable</b> to allow use of the device GPS functionality.
<b>SMART Reporting</b>	Select <b>Enable</b> to use SMART monitoring of the device storage solutions.
<b>Primary Battery Charge</b>	<p>Select the charging rules for the device:</p> <ul style="list-style-type: none"> <li>■ Standard Charge - Consider using this option for users who switch between battery power and an external power source. This option fully charges the battery at a standard rate. Charge time varies by device model.</li> <li>■ Express Charge - Consider using this option for users who need the battery charged over a short time period. Dell's fast charging technology allows a completely discharged battery to typically charge to 80% in about 1 hour when the computer is turned off and to 100% in approximately 2 hours. Charge time may be longer with the computer turned on.</li> <li>■ AC Charge - Consider using this option for users who primarily operate their system while plugged in to an external power source. This setting may extend your battery's lifespan by lowering the charge threshold.</li> <li>■ Auto Charge - Consider using this option for users who want to set the option and not change it. This option lets the system adaptively optimize your battery settings based on your typical battery usage pattern.</li> <li>■ Custom Charge - Consider using this option for advanced users that desire greater control over when their battery starts and stops charging.</li> </ul> <p>These rules control when the battery starts and stops charging. If you select <b>Custom Charge</b>, you can manually set the charge percentage to start and stop charging the battery.</p>
<b>Primary Battery Custom Charge Start Limit</b>	Set the battery charge percentage that must be reached before the device starts charging the battery.
<b>Primary Battery Custom Charge Stop Limit</b>	Set the battery charge percentage that must be reached before the device stops charging the battery.
<b>Peak Shift</b>	<p>Select <b>Enable</b> to use peak shift to control when a device uses battery charge or AC current. Peak shift allows you to use battery power instead of AC current during specified times.</p> <p>To set the schedule for <b>Peak Shift</b>, select the calendar icon.</p>

Settings	Descriptions
<b>Peak Shift Scheduling</b>	<p>The three parameters for peak shift scheduling control when a device uses battery or AC current and when the device charges the battery.</p> <ul style="list-style-type: none"> <li>■ <b>Peak Shift Start</b> – Set the start time for Peak Shift when devices switch to battery power.</li> <li>■ <b>Peak Shift End</b> – Set the end time for Peak Shift when devices switch to AC current.</li> <li>■ <b>Peak Shift Charge Start</b> – Set the start time for Peak Shift Charge when the devices charge the batteries while using AC current.</li> </ul>
<b>Peak Shift Battery Threshold</b>	<p>Set the battery charge percentage that must be reached before devices switch back to AC current from battery power.</p> <p>The <b>Peak Shift Charge Start</b> setting controls the time when devices charge the batteries after switching to AC current.</p>
<b>System Properties</b>	<p>Select <b>Add System Properties</b> to add a custom system property. Select the button again to add additional properties.</p> <p>These properties are advanced options. Consider reviewing Dell documentation before using these settings.</p> <p>System Properties override any pre-defined settings configured in the profile.</p>
<b>Class</b>	<p>Enter a class and select it from the drop-down menu.</p> <p>Displays after selecting <b>Add System Properties</b>.</p>
<b>System Property</b>	<p>Enter a system property and select it from the drop-down menu.</p> <p>Displays after selecting <b>Add System Properties</b>.</p>
<b>BIOS Attributes</b>	<p>Select <b>Add BIOS Attribute</b> to add a custom BIOS attribute. Select the button again to add additional attributes.</p> <p>These attributes are advanced options. Consider reviewing Dell documentation before using these settings.</p> <p>BIOS Attributes override any pre-defined settings configured in the profile.</p>
<b>BIOS Attribute</b>	<p>Enter a BIOS attribute and select it from the drop-down menu.</p> <p>Displays after selecting <b>Add BIOS Attribute</b>.</p>
<b>Value</b>	<p>Select a value for the BIOS attribute. If a value is not supplied, the BIOS Attribute is read only.</p> <p>Displays after selecting <b>Add BIOS Attribute</b>.</p>
<b>Configuration Package</b>	<p>Select <b>Upload</b> to add a Dell Command   Configure configuration package. Uploading a package allows you to configure multiple Dell devices with a single configuration.</p> <p>Configuration packages override any custom system properties or attributes.</p> <p>If you whitelist the file extensions allowed, you must add the CCTK file extension to the whitelist. Navigate to <b>Groups &amp; Settings &gt; All Settings &gt; Content &gt; Advanced &gt; File Extensions</b> to add the file extension.</p>

## 6 Select **Save & Publish**.

# Configure the OEM Updates Profile (Windows Desktop)

Configure OEM Update settings for select Dell enterprise devices with the OEM Updates profile. This profile requires integration with Dell Command | Update.

Support for the OEM Update profile settings varies by Dell Enterprise device. Workspace ONE UEM only pushes the settings a device supports.

For more information on supported devices, see [Chapter 8 Dell Command | Update Overview](#).

**Note** The OEM Updates profile only supports Dell Command | Update v2.4.

## Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **OEM Updates** payload and configure the following settings:

Settings	Description
<b>Check for Updates</b>	Select the interval used to check for updates.
<b>Day of the Week</b>	Select the day of the week to check for updates. Only displays when <b>Check for Updates</b> is set to <b>Weekly</b> .
<b>Day of the Month</b>	Select the day of the month to check for updates. Only displays when <b>Check for Updates</b> is set to <b>Monthly</b> .
<b>Time</b>	Select the time of day to check for updates.
<b>Update Behavior</b>	Select the actions to take when checking for updates. <ul style="list-style-type: none"> <li>■ Select <b>Scan Notify</b> to scan for updates and notify the user that updates are available.</li> <li>■ Select <b>Scan Download Notify</b> to scan for updates, download any available, and notify the user that updates are available for installation.</li> <li>■ Select <b>Scan Notify Apply Reboot</b> to scan for updates, download any available, install the updates, and reboot the device.</li> </ul>
<b>Reboot Delay</b>	Select the amount of time the device delays rebooting after downloading updates.
<b>Urgent Updates</b>	Select <b>Enable</b> to apply Urgent Updates to the device.
<b>Recommended Updates</b>	Select <b>Enable</b> to apply Recommended Updates to the device.
<b>Optional Updates</b>	Select <b>Enable</b> to apply Optional Updates to the device.
<b>Hardware Drivers</b>	Select <b>Enable</b> to apply hardware driver updates provided by the OEM to the device.
<b>Application Software</b>	Select <b>Enable</b> to apply application software updates provided by the OEM to the device.
<b>BIOS Updates</b>	Select <b>Enable</b> to apply BIOS updates provided by the OEM to the device. Consider disabling any BIOS passwords if you want to use the OEM Update profile to manage BIOS updates. Some BIOS updates prompt users to enter the BIOS password.
<b>Firmware Updates</b>	Select <b>Enable</b> to apply firmware updates provided by the OEM to the device.
<b>Utility Software</b>	Select <b>Enable</b> to apply utility software updates provided by the OEM to the device.



Settings	Description
Other	Select <b>Enable</b> to apply other updates provided by the OEM to the device.
Audio	Select <b>Enable</b> to apply audio device updates provided by the OEM to the device.
Chipset	Select <b>Enable</b> to apply chipset device updates provided by the OEM to the device.
Input	Select <b>Enable</b> to apply input device updates provided by the OEM to the device.
Network	Select <b>Enable</b> to apply network device updates provided by the OEM to the device.
Storage	Select <b>Enable</b> to apply storage device updates provided by the OEM to the device.
Video	Select <b>Enable</b> to apply video device updates provided by the OEM to the device.
Others	Select <b>Enable</b> to apply other device updates provided by the OEM to the device.

## 6 Select **Save & Publish**.

# Configure a Kiosk Profile (Windows Desktop)

Configure a Kiosk profile to turn your Windows Desktop device into multi-app kiosk device. This profile allows you to configure the apps that display in the device start menu.

You can upload your own custom XML to configure the Kiosk profile or create your kiosk as part of the profile. This profile does not support domain accounts or domain groups. The user is a built-in user account created by Windows.

## ■ Supported Apps

### ■ .EXE apps

- MSI and ZIP files require you to add the file path.

### ■ Built-In apps

- Select built-in apps are automatically added to the designer. These apps include:
- News
- Microsoft Edge
- Weather
- Alarms & Clock
- Sticky Notes
- Maps
- Calculator and Photos.

## Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.

#### 4 Configure the profile **General** settings.

You must add an assignment before configuring the Kiosk profile.

#### 5 Select the **Kiosk** profile.

#### 6 If you have your custom XML already, select Upload Kiosk XML and complete the settings.

Settings	Description
<b>Assign Access Configuration XML</b>	Select <b>Upload</b> and add your Assigned Access Configuration XML. You can also paste your XML into the text box. For more information, see <a href="https://docs.microsoft.com/en-us/windows/client-management/mdm/assignedaccess-csp">https://docs.microsoft.com/en-us/windows/client-management/mdm/assignedaccess-csp</a> .

#### 7 If you do not have any custom XML, select Create Your Kiosk and configure the app layout.

This layout is the device Start Menu in a grid. The apps that display on the left are the apps assigned to the assignment group you selected. Some apps have a gear icon with a red dot in the top-right corner. This icon displays for apps that require additional settings when added to the kiosk layout. After you configure the settings, the red dot disappears but the icon remains. You can select the arrow icon to change the size of the apps. For classic desktop apps, you can only select Small or Medium.

### Kiosk

X

Applications

BUILT-IN, WIN32, UWP

Start Menu Screens

Group Title

↖ ↗

🗑

Microsoft Edge

↖ ↗

🗑

Photos

Number of Groups:

1

News

Sticky Notes

Weather

Alarms & ...

Maps

Calculator

Settings

SAVE

CANCEL

- 8 Drag all the apps you want to add to the start menu to the center. You can create up to four groups for your apps. These groups combine your apps into sections on the start menu.
- 9 Once you have added all the apps and groups you want, select **Save**.
- 10 On the Kiosk profile screen, select **Save & Publish**.

The profile does not install onto the device until all apps included in the profile are installed. Once the device receives the profile, the device restarts and runs in Kiosk mode. If you remove the profile from the device, the device disables Kiosk mode, restarts, and removes the Kiosk user.

## Configure a Personalization Profile (Windows Desktop)

Configure a Personalization profile for Windows Desktop devices to configure the Windows Personalization settings. These settings include the desktop background and the start menu settings.

The options in this profile are all optional. Consider only configuring the settings you need to meet your Personalization requirements.

This profile does not create a multi-app kiosk device like the Kiosk profile. If you want to create a kiosk device, see [Configure a Kiosk Profile \(Windows Desktop\)](#).

### Procedure

- 1 Navigate to **Devices > Profiles & Resources** and select **Add**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Select the **Personalization** profile.
- 6 Configure the **Images** settings:

Settings	Descriptions
Desktop Image	Select <b>Upload</b> to add an image to use as the desktop background.
Lock Screen Image	Select <b>Upload</b> to add an image to use as the lock screen background.

- 7 **Upload** a start layout XML. This XML file overrides the default start menu layout and prevents users from changing the layout. You can configure the layout of tiles, the number of groups, and the apps in each group. You must create this XML yourself. For more information on creating a start layout XML, see <https://docs.microsoft.com/en-us/windows/configuration/customize-and-export-start-layout>.
- 8 Configure the **Start Menu Policies** settings. These settings allow you to control which shortcuts are allowed in the start menu. You can also choose to **Hide** or **Show** certain options such as the **Shut Down** option or the **App List**.
- 9 Select **Save & Publish**.

### What to do next

## Use Custom Settings (Windows Desktop)

The Custom Settings payload provides a way to use Windows Desktop functionality that Workspace ONE UEM does not currently support through its native payloads. If you want to use the new features, you can use the **Custom Settings** payload and XML code to enable or disable certain settings manually.

### Prerequisites

You must write your own SyncML code for Windows Desktop profiles. Microsoft publishes a Configuration Service Provider reference site available on their website.

Example code:

```
<characteristic>
  <Replace>
    <CmdID>2</CmdID>
    <Item>
      <Target>
        <LocURI>./Device/Vendor/MSFT/AssignedAccess/KioskModeApp</LocURI>
      </Target>
      <Meta>
        <Format xmlns="syncml:metinf">chr</Format>
      </Meta>
      <Data>{"Account":"standard","AUMID":"AirWatchLLC.AirWatchBrowser_htcwk4rx2gx4!
App"}</Data>
    </Item>
  </Replace>
</characteristic>
```

Consider visiting <https://vmwarepolicybuilder.com> for help creating your custom profile XML.

### Procedure

- 1 Navigate to **Devices > Profiles > List View > Add** and select **Add Profile**.
- 2 Select **Windows** and then select **Windows Desktop**.
- 3 Select **User Profile** or **Device Profile**.
- 4 Configure the profile **General** settings.
- 5 Configure the applicable payload (for example, Restrictions or Passcode).  
You can work on a copy of your profile, saved under a "test" organization group, to avoid affecting other users before you are ready to Save and Publish.
- 6 **Save**, but do not publish, your profile.
- 7 Select the radio button from the **Profiles List View** for the row of the profile you want to customize.
- 8 Select the **XML** button at the top to view the profile X
- 9 Find the section of text starting with <characteristic> ... <characteristic> that you configured previously, for example, Restrictions or Passcode. The section contains a configuration type identifying its purpose, for example, restrictions.

**10** Copy this section of text and close the XML View. Open your profile.

**11** Select the **Custom Settings** payload and select **Configure**.

- a Paste the XML you copied in the **Install Settings** text box. The XML code you paste must contain the complete block of code, from `<[characteristic]>` to `</[characteristic]>`.
- b Add the removal code to the Delete Settings text box. The removal code must contain `<replace></replace>` or `<delete></delete>`.

This code enables Workspace ONE UEM functionality such as Remove Profile and Deactivate Profile. Without the removal code, you cannot remove the profile from the devices besides pushing a second Custom Settings profile. For more information, see <https://docs.microsoft.com/en-us/windows/client-management/mdm/configuration-service-provider-reference>.

**12** Remove the original payload you configured by selecting the base payload section and selecting the minus [-] button. You can now enhance the profile by adding custom XML code for the new functionality.

Any device not upgraded to the latest version ignores the enhancements you create. Since the code is now custom, test the profile devices with older versions to verify the expected behavior.

**13** Select **Save & Publish**.

## Prevent Users from Disabling the AirWatch Service

Use a Custom Settings profile to prevent end users from disabling the AirWatch Service on their Windows 10 devices. Preventing end users from disabling the AirWatch Service ensures that the Workspace ONE Intelligent Hub runs regular check-ins with the Workspace ONE UEM console and receives the latest policy updates.

### Procedure

- 1** Create a **Custom Settings** profile. For more information, see [Use Custom Settings \(Windows Desktop\)](#).
- 2** Set the **Target** to **Protection Agent**.
- 3** Copy the following code and paste it into the **Custom Settings** text box:

```
<wap-provisioningdoc id="c14e8e45-792c-4ec3-88e1-be121d8c33dc" name="customprofile">
  <characteristic type="com.airwatch.winrt.awservicelockdown"
  uuid="7957d046-7765-4422-9e39-6fd5eef38174">
    <parm name="LockDownAwService" value="True"/>
  </characteristic>
</wap-provisioningdoc>
```

#### 4 Select **Save & Publish**.

If you want to remove the restriction from end user devices, you must push a separate profile using the following code:

```
<wap-provisioningdoc id="c14e8e45-792c-4ec3-88e1-be121d8c33dc" name="customprofile">
  <characteristic type="com.airwatch.winrt.awservicelockdown"
uuid="7957d046-7765-4422-9e39-6fd5eef38174">
    <parm name="LockDownAwService" value="False"/>
  </characteristic>
</wap-provisioningdoc>
```

# Using Baselines

Keep your Windows Desktop devices secure with Baselines. Workspace ONE UEM curates industry-recommended settings into one configuration to simplify securing your devices.

---

**Note** Workspace ONE UEM offers the Baselines feature as a technical preview. Technical preview features are not fully tested and some functionality does not work as expected. However, these previews help Workspace ONE UEM improve current functionality and develop future enhancements. To use a technical preview feature, contact your VMware Workspace ONE representative and ask to have the “BaselineFeatureFlag” and “BaselinePhase2FeatureFlag” enabled.

---

Keeping your devices configured to best practices is a time-consuming process. With Baselines, you can keep all your devices secure with industry-recommended settings and configurations. Workspace ONE UEM curates these best practices into configurations called Baselines. These configurations significantly reduce the time it takes to set up and configure Windows devices.

To ensure that Baselines use only the best settings and configurations, VMware is certified by CIS to provide industry favorites such as CIS benchmarks for Windows 10 to provide the easy and secure solutions. Baselines are based on the Windows OS version and can be updated whenever you want. During configuration, you can choose which baseline to use or upload a custom baseline to suit your needs. You can also add any additional policies you need as part of the configuration process. These policies are the Microsoft ADMX policies.

Once a device is enrolled into Workspace ONE UEM, you can add the device to a Smart Group and assign a baseline to the group. The device will receive and apply all the settings and configurations in the baseline after a device restart. The device checks for the baseline configurations upon publishing the baseline and at the defined check in intervals.

You can see which baselines are applied to a device in the Device Details Page.

This chapter includes the following topics:

- [Create a Baseline](#)

## Create a Baseline

Create a baseline to configure your device to industry-recommended settings and configurations. Workspace ONE UEM curates Baselines based on industry favorites including CIS Benchmarks.

### Prerequisites

Baselines require that devices are enrolled in Workspace ONE UEM and have the Workspace ONE Intelligent Hub installed.

You must add the LGPO.exe to all devices that you want to assign a baseline to. You must install the EXE at C:\ProgramData\Airwatch\LGPO\LGPO.exe.

### Procedure

- 1 Navigate to **Devices > Profiles & Resources > Baselines** and select **New**
- 2 Enter a **Baseline Name**, **Description**, and select the smart group the baseline is **Managed By**. Then select **Next**.
- 3 Select a baseline:

Setting	Description
<b>CIS Windows 10 Benchmarks</b>	Select this option to use the CIS Benchmarks for Windows 10. This baseline applies the configuration settings recommended by CIS Benchmarks. Select the OS version and benchmark level to apply.
<b>Custom Baseline</b>	Select this option to upload and use your own custom baseline. You must create this baseline outside of Workspace ONE UEM.

- 4 Select **Next**.
- 5 Add any additional policies to the baseline. These policies come from Microsoft ADMX files. Search for any policy to add and configure the policy.
- 6 Select **Next**.
- 7 Review the summary and select **Save & Assign**.

Workspace ONE UEM assigns the baseline to all devices in the smart group.

### What to do next

You must restart the device for the baseline to take affect.



# Compliance Policies

The compliance engine is an automated tool by Workspace ONE UEM that ensures all devices abide by your policies. These policies can include basic security settings such as requiring a passcode and having a minimum device lock period.

For certain platforms, you can also decide to set and enforce certain precautions. These precautions include setting password strength, blacklisting certain apps, and requiring device check-in intervals to ensure that devices are safe and in-contact with Workspace ONE UEM. Once devices are determined to be out of compliance, the compliance engine warns users to address compliance errors to prevent disciplinary action on the device. For example, the compliance engine can trigger a message to notify the user that their device is out of compliance.

In addition, devices not in compliance cannot have device profiles assigned to it and cannot have apps installed on the device. If corrections are not made in the amount of time specified, the device loses access to certain content and functions that you define. The available compliance policies and actions vary by platform.

For more information about compliance policies, including which policies and actions are supported for a particular platform, refer to the **Workspace ONE UEM Mobile Device Management Guide**, available on [docs.vmware.com](https://docs.vmware.com).

This chapter includes the following topics:

- [Compromised Device Detection with Health Attestation](#)
- [Compliance Attributes](#)
- [Create a Compliance Attribute](#)

## Compromised Device Detection with Health Attestation

Health Attestation scans devices during startup for failures in device integrity. Use Health Attestation to detect compromised Windows Desktop devices.

In both BYOD and Corporate-Owned device deployments, it is important to know that devices are healthy when accessing corporate resources. The Windows Health Attestation Service accesses device boot information from the cloud through secure communications. This information is measured and checked against related data points to ensure that the device booted up as intended and is not victim to security vulnerabilities or threat. Measurements include Secure Boot, Code Integrity, BitLocker, and Boot Manager.

Workspace ONE UEM enables you to configure the Windows Health Attestation service to ensure device compliance. If any of the enabled checks fail, the Workspace ONE UEM compliance policy engine applies security measures based on the configured compliance policy. This functionality allows you to keep your enterprise data secure from compromised devices. Since Workspace ONE UEM pulls the necessary information from the device hardware and not the OS, compromised devices are detected even when the OS kernel is compromised.

## Configure the Health Attestation for Windows Desktop Compliance Policies

Keep your devices secured by using Windows Health Attestation Service for compromised device detection. This service allows Workspace ONE UEM to check the device integrity during startup and take corrective actions.

### Procedure

- 1 Navigate to **Groups & Settings > All Settings > Devices & Users > Windows > Windows Desktop > Windows Health Attestation**.
- 2 (Optional) Select **Use Custom Server** if you are using a custom on-premises server running Health Attestation. Enter the **Server URL**.
- 3 Configure the Health Attestation settings:

Settings	Descriptions
<b>Compromised Status Definition</b>	
<b>Use Custom Server</b>	Select to configure a custom server for Health Attestation. This option requires a server running Windows Server 2016 or newer. Enabling this option displays the <b>Server URL</b> field.
<b>Server URL</b>	Enter the URL for your custom Health Attestation server.
<b>Secure Boot Disabled</b>	Enable to flag compromised device status when Secure Boot is disabled on the device. Secure Boot forces the system to boot to a factory trusted state. When Secure Boot is enabled, the core components used to boot the machine must have the correct cryptographic signatures that the OEM trusts. The UEFI firmware verifies the trust before it allows the machine to start. Secure boot prevents the startup if any it detects any tampered files.
<b>Attestation Identity Key (AIK) Not Present</b>	Enable to flag compromised device status when the AIK is not present on the device. Attestation Identity Key (AIK) is present on a device, it indicates that the device has an endorsement key (EK) certificate. It can be trusted more than a device that does not have an EK certificate.
<b>Data Execution Prevention (DEP) Policy Disabled</b>	Enable to flag compromised device status when the DEP is disabled on the device. The Data Execution Prevention (DEP) Policy is a memory protection feature built into the system level of the OS. The policy prevents running code from data pages such as the default heap, stacks, and memory pools. DEP is enforced by both hardware and software.
<b>BitLocker Disabled</b>	Enable to flag compromised device status when BitLocker encryption is disabled on the device.

Settings	Descriptions
<b>Code Integrity Check Disabled</b>	Enable to flag compromised device status when the code integrity check is disabled on the device. Code integrity is a feature that validates the integrity of a driver or system file each time it is loaded into memory. Code integrity checks for unsigned drivers or system files before they load into the kernel. The check also scans for users with administrative privileges running system files modified by malicious software.
<b>Early Launch Anti-Malware Disabled</b>	Enable to flag compromised device status when the early launch anti-malware is disabled on the device. Early launch anti-malware (ELAM) provides protection for the computers in your network when they start up and before third-party drivers initialize.
<b>Code Integrity Version Check</b>	Enable to flag compromised device status when the code integrity version check fails.
<b>Boot Manager Version Check</b>	Enable to flag compromised device status when the boot manager version check fails.
Boot App Security Version Number Check	Enable to flag compromised device status when the boot app security version number does not meet the entered number.
Boot Manager Security Version Number Check	Enable to flag compromised device status when the boot manager security version number does not meet the entered number.
<b>Advanced Settings</b>	Enable to configure advance settings in the Software Version Identifiers section.
Software Version Identifiers	
<b>Code Integrity Policy Hash Check</b>	Enable to define a whitelist of known, valid hash values for the <b>Code Integrity</b> software. If the hash is not a whitelisted value, health attestation compliance fails.
<b>Secure Boot Config Policy Hash Check</b>	Enable to define a whitelist of known, valid hash values for the <b>Secure Boot Config</b> software. If the hash is not a whitelisted value, health attestation compliance fails.
<b>PCR0 Check</b>	Enable to define a whitelist of known, valid measurements for the <b>PCR0 Check</b> software. This measurement checks the BIOS trusted code to ensure that it has not been compromised. If the measurement is not a whitelisted value, health attestation compliance fails.

4 Select **Save**.

## Compliance Attributes

Integrate the Workspace ONE UEM compliance policy engine with third-party endpoint security solutions to ensure device security and compliance and take actions against non-compliant devices.

The Compliance Attributes settings screen allows you to add custom compliance attributes to the compliance policy engine. you create the custom name, friendly name, and values. Third-party solutions report to Workspace ONE UEM over an API the values for the attribute. You can create compliance policies to enforce rules on devices based on these attributes.

The attribute keys in a compliance attribute match the keys from the third-party solution. Workspace ONE UEM checks the values returned by the third-party solution to determine compliance. The attribute values must be Boolean values.

For more information on creating a compliance attribute, see [Create a Compliance Attribute](#).

## Create a Compliance Attribute

Create a custom compliance attribute to ensure devices remain secure and compliant. These attributes use third-party endpoint security solutions to provide the values of the attributes.

### Procedure

- 1 Navigate to **Groups & Settings > All Settings > Devices & Users > General > Compliance Attribute**.
- 2 If this is your first time creating a compliance attribute, select **Configure**.
- 3 Select a **Partner** from the drop-down menu.
- 4 Select **Add Attribute**. You can create up to 5 compliance attributes per organization group.
- 5 Enter the **Attribute Key**. This key must match the key from the third-party solution.
- 6 Enter an **Attribute Friendly Name**. This name is a simple description of the attribute. The name can be anything.
- 7 Enter the **Attribute Values**. These values are the values the third-party solution returns for the attribute. They must be Boolean values.
- 8 Select **Save**.
- 9 When finished adding attributes, select **Save**.

# Windows Desktop Application Overview

# 6

You can use Workspace ONE UEM applications in addition to Workspace ONE UEM MDM features to further secure devices and configure them with added functionality.

Use the VMware Content Locker to safeguard corporate content on mobile devices and deploy the VMware Browser to enable secure Web browsing for your end users. Download the Workspace ONE Intelligent Hub for Windows to monitor your devices on a more granular level.

Deploying Win32 apps to Windows Desktop devices requires the Workspace ONE Intelligent Hub to be present on the device.

---

**Important** All public applications deployed to Windows Desktop devices are unmanaged applications. Unmanaged apps cannot be pushed to devices (end users must download the app themselves) nor can unmanaged apps be removed from devices through Enterprise Wipe.

---

This chapter includes the following topics:

- [VMware Workspace ONE for Windows Desktop](#)
- [Configure the Workspace ONE Intelligent Hub for Windows Devices](#)
- [VMware Content Locker for Windows Desktop Devices](#)

## VMware Workspace ONE for Windows Desktop

When the Workspace ONE application is installed on devices, users can sign in to Workspace ONE to securely access a catalog of applications that your organization enabled for them. When the application is configured with single sign-on, users do not need to reenter their sign-in credentials when they launch the app.

The Workspace ONE user interface works similarly on phones, tablets, and desktops. Workspace ONE opens to a Launcher page that displays resources that have been pushed to Workspace ONE. Users can tap or click to search, add, and update apps; right-click on an app to remove it from the page, and go to the Catalog page to add entitled resources.

If an app requires device enrollment, Workspace ONE uses adaptive management to start the enrollment process for the end user. For more information on Workspace ONE, see [Setting up the VMware Workspace ONE Application on Devices](#) available on the VMware Identity Manager Documentation Center (<https://docs.vmware.com>).

## **Configure the Workspace ONE Intelligent Hub for Windows Devices**

The Workspace ONE Intelligent Hub for Windows devices is pre-configured with AirWatch. Change these settings when you need the Workspace ONE Intelligent Hub to meet certain business needs.

## Procedure

- ◆ Navigate to **Groups & Settings > All Settings > Devices & Users > Windows > Windows Desktop > Hub Settings** to edit the Workspace ONE Intelligent Hub Settings:

- a Configure the **Modern Agent** settings so that the Workspace ONE Intelligent Hub transmits the desired data to the AirWatch Console:

Settings	Descriptions
<b>Heartbeat Interval (min)</b>	Defines the intervals at which the Workspace ONE Intelligent Hub and the Workspace ONE UEM console confirm a continued connection and synchronize.
<b>Data Sample Interval (min)</b>	Defines the intervals at which the Workspace ONE Intelligent Hub takes samples of data.
<b>Administrative Passcode</b>	Sets the passcode to access administrative settings on the device.
<b>MDM Channel Security</b>	Defines the app layer security between Workspace ONE UEM and the Workspace ONE Intelligent Hub. This secure channel uses the enrollment certificate to sign, encrypt, or sign and encrypt communications between the UEM console and the Workspace ONE Intelligent Hub.

- b Configure the **AirWatch Protection Agent** settings to ensure prompt communication between the device and the AirWatch Console.

Settings	Descriptions
<b>Data Sample Interval (min)</b>	Defines the intervals at which the AirWatch Protection Agent takes samples of data.

- c Configure the **Remote Management** settings to enable communication between the Workspace ONE Intelligent Hub and the Remote Management Server.

Setting	Description
<b>Download Remote Control Cab</b>	Select this link to download the cabinet (CAB) installer file for Workspace ONE UEM Remote Management.
<b>Seek Permission</b>	<p>Enable Seek Permission if you want to prompt the end user to accept or decline the remote management request from the admin.</p> <ul style="list-style-type: none"> <li>■ Enter a <b>Seek Permission Message</b> that the end user sees when a remote request is sent.</li> <li>■ Enter the <b>Yes Caption</b> message for the accept button the end user sees on the Seek Permission request.</li> <li>■ Enter the <b>No Caption</b> message for the decline button the end user sees on the Seek Permission request.</li> </ul>

### Advanced

<b>Remote Management Port</b>	<p>Enter the port used to communicate between the Remote Management Hub and the Tunnel Agent on the end-user device.</p> <p>This port is responsible for caching the different frames on the device for use with the screen sharing function. The default port is 7775. Consider leaving the default setting unless port 7775 is in use for other uses in your organization.</p>
-------------------------------	--

Setting	Description
<b>Device Log Level</b>	Set the Device Log Level to control the verbosity of the remote management application on the device.
<b>Log Folder Path</b>	Define the Log Folder Path where the application saves the remote management log file on the device.
<b>Display Tray Icon</b>	Enable Display Tray Icon to show the remote management applet on the device.
<b>Max Sessions</b>	Enter the maximum number of concurrent sessions allowed on a device.
Number of Retries	Enter the number of retries allowed before communication attempts stop.
<b>Retry Frequency (Seconds)</b>	Enter the amount of time between attempts to communicate.
Heartbeat Interval (Seconds)	Enter the amount of time (in seconds) that passes between status updates that are sent from the device.
Connection Loss Retry Frequency (Seconds)	Enter the amount of time (in seconds) that passes between attempts to reestablish the connection.

### What to do next

You can prevent end users from disabling the AirWatch Service on their device using a custom XML profile. For more information, see [Prevent Users from Disabling the AirWatch Service](#).

## VMware Content Locker for Windows Desktop Devices

VMware Content Locker is an application that enables your end users to access important content on their devices while ensuring file safety for your organization.

From the VMware Content Locker, end users can access content you upload in the UEM console, content from synced corporate repositories, or their own personal content.

Use the UEM console to add content, sync repositories and configure the actions that end users can take on content opened within the application. These configurations prevent content from being copied, shared, or saved without approval.



# Dell Command | Monitor Integration

# 7

Integrate Workspace ONE UEM with Dell Command | Monitor to enhance the information Workspace ONE UEM collects from enrolled Dell enterprise devices. This integration also allows you to configure device BIOS settings.

## Basics

Integrating with Dell Command | Monitor to enhance the device management of Dell enterprise devices. With this integration, Workspace ONE UEM reports the device battery health status and certain BIOS settings.

## Supported Devices

- Dell OptiPlex™ desktop devices
- Dell Precision Workstation™ desktop and laptop devices
- Dell Latitude™ laptop devices

## Add Dell Command | Monitor to Workspace ONE UEM

To integrate Dell Command | Monitor with Workspace ONE UEM, add the program as an internal Win32 application in the Workspace ONE UEM Console. For more information, see [Add Dell Command | Monitor to Workspace ONE UEM](#).

## BIOS Profile

Configure certain BIOS settings on Dell enterprise devices using a BIOS profile. The settings allow you to control hardware virtualization and BIOS security. For more information, see [Configure a BIOS Profile \(Windows Desktop\)](#).

## Battery Health Status

The overall health of a battery affects the lifespan of a device. With Dell Command | Monitor, monitor the health of your Dell enterprise device batteries. This health does not show the current charge of the battery but reports status of the ability to hold a charge, time to charge to full, and other factors as a percentage. According to Dell, any battery with a status under 25% should be replaced.

This chapter includes the following topics:

- [Add Dell Command | Monitor to Workspace ONE UEM](#)

## Add Dell Command | Monitor to Workspace ONE UEM

Add the Dell Command | Monitor to the Workspace ONE UEM Console to enhance management of your Dell enterprise devices. The BIOS profile requires this application before pushing to devices.

### Prerequisites

You must enable Software Distribution to push Dell Command | Monitor to your devices.

### Procedure

- 1 Navigate to <http://en.community.dell.com/techcenter/enterprise-client/w/wiki/7531.dell-command-monitor> and download the latest version of Dell Command | Monitor.
- 2 Open the EXE and select **Extract**. Save the extracted files into a folder.
- 3 Navigate to the folder and find the MSI file.
- 4 In the UEM Console, add the extracted MSI file as an internal application. Make sure to set the Supported Processor Architecture to 32-bit or 64-bit based on the device OS.
- 5 In the Deployment Options tab, set the **Admin Privileges** to **Yes**.
- 6 Add an assignment of the application to your Dell enterprise devices.

The application downloads and installs on assigned devices and you can now push BIOS profiles to the device.

# Dell Command | Update Overview

# 8

Dell Command | Update is a client-side management software and part of the Dell Client Command Suite. The software enables updating firmware, drivers, and applications for supported Dell devices.

## Basics

Integrate with Dell Command | Update to enhance the update management of Dell enterprise devices. With this integration, Workspace ONE UEM supports remotely updating firmware, drivers, and other applications. You can control when and what types of updates deploy to devices.

## Supported Devices

- Dell OptiPlex™ desktop devices
- Dell Precision Workstation™ desktop and laptop devices
- Dell Latitude™ laptop devices

## Add Dell Command | Update to Workspace ONE UEM

To integrate Dell Command | Update with Workspace ONE UEM, add the application as an internal Win32 application in the Workspace ONE UEM Console. For more information, see [Add Dell Command | Update to Workspace ONE UEM](#).

## Configure the OEM Updates Profile

Configure the OEM Updates profile to enabled Dell Command | Update on end-user devices. For more information, see [Configure the OEM Updates Profile \(Windows Desktop\)](#).

This chapter includes the following topics:

- [Add Dell Command | Update to Workspace ONE UEM](#)

## Add Dell Command | Update to Workspace ONE UEM

To enhance management of your Dell enterprise devices, add the Dell Command | Update to the Workspace ONE UEM Console. The OEM Update profile requires this application before pushing to devices.

## Prerequisites

You must enable Software Distribution to push Dell Command | Update to your devices.

## Procedure

- 1 Navigate to <http://en.community.dell.com/techcenter/enterprise-client/w/wiki/7534.dell-command-update> and download the latest version of Dell Command | Update.
- 2 In the UEM Console, add the EXE file as an internal application. Make sure to set the Supported Processor Architecture to 32-bit or 64-bit based on the device OS.
- 3 In the Deployment Options tab, set the **Admin Privileges** to **Yes**.
- 4 Add an assignment of the application to your Dell enterprise devices.

The application downloads and installs on assigned devices and you can now push OEM Update profiles to the device.

# Windows Desktop Device Management

# 9

After your devices are enrolled and configured, manage the devices using the Workspace ONE™ UEM console. The management tools and functions enable you to keep an eye on your devices and remotely perform administrative functions.

You can manage all your devices from the UEM console. The Dashboard is a searchable, customizable view that you can use to filter and find specific devices. This feature makes it easier to perform administrative functions on a particular set of devices. The Device List View displays all the devices currently enrolled in your Workspace ONE UEM environment and their status. The **Device Details** page provides device-specific information such as profiles, apps, Workspace ONE Intelligent Hub version and which version of any applicable OEM service currently installed on the device. You can also perform remote actions on the device from the Device Details page that are platform-specific.

This chapter includes the following topics:

- [Device Dashboard](#)
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## Device Dashboard

As devices are enrolled, you can manage them from the Workspace ONE UEM **Device Dashboard**.

The **Device Dashboard** provides a high-level view of your entire fleet and allows you to act on individual devices quickly.

You can view graphical representations of relevant device information for your fleet, such as device ownership type, compliance statistics, and platform and OS breakdowns. You can access each set of devices in the presented categories by selecting any of the available data views from the **Device Dashboard**.

From the **List View**, you can take administrative action: send messages, lock devices, delete devices, and change groups associated with the device.

- **Security** – View the top causes of security issues in your device fleet. Selecting any of the doughnut charts displays a filtered **Device List** view comprised of devices affected by the selected security issue. If supported by the platform, you can configure a compliance policy to act on these devices.
  - **Compromised** – The number and percentage of compromised devices (jailbroken or rooted) in your deployment.
  - **No Passcode** – The number and percentage of devices without a passcode configured for security.
  - **No Encryption** – The number and percentage of devices that are not encrypted for security. This reported figure excludes Android SD Card encryption. Only those Android devices lacking disc encryption are reported in the donut graph.
- Ownership** – View the total number of devices in each ownership category. Selecting any of the bar graph segments displays a filtered **Device List** view comprised of devices affected by the selected ownership type.
- **Last Seen Overview/Breakdown** – View the number and percentage of devices that have recently communicated with the Workspace ONE UEM MDM server. For example, if several devices have not been seen in over 30 days, select the corresponding bar graph to display only those devices. You can then select all these filtered devices and send them a message requesting that they check in.
- **Platforms** – View the total number of devices in each device platform category. Selecting any of the graphs displays a filtered **Device List** view comprised of devices under the selected platform.
- **Enrollment** – View the total number of devices in each enrollment category. Selecting any of the graphs displays a filtered **Device List** view comprised of devices with the selected enrollment status.
- **Operating System Breakdown** – View devices in your fleet based on operating system. There are separate charts for Apple iOS, Android, Windows Phone, and Windows Rugged. Selecting any of the graphs displays a filtered **Device List** view comprised of devices running the selected OS version.

## Device List View

Use the UEM console's Device List View to see a full listing of all devices in the currently selected organization group.

The **Last Seen** column displays an indicator showing the number of minutes elapsed since the device has checked-in. The indicator is red or green, depending on the number of minutes defined in **Device Inactivity Timeout (min)**. This indicator can be set by navigating to **Groups & Settings > All Settings > Devices & Users > General > Advanced**.

Select a device in the **General Info** column at any time to open the details page for that device.

Sort by columns and configure information filters to review device activity based on specific information. For example, sort by the **Compliance Status** column to view only devices that are currently out-of-compliance and target only those devices. Search all devices for a friendly name or user name to isolate one device or user.

## Customize Device List View Layout

Display the full listing of visible columns in the **Device List** view by selecting the **Layout** button and select the **Custom** option. This view enables you to display or hide Device List columns per your preferences.

There is also an option to apply your customized column view to all administrators. For instance, you can hide 'Asset Number' from the **Device List** views of the current OG and of all the OGs underneath.

Once all your customizations are complete, select the **Accept** button to save your column preferences and apply this new column view. You can return to the **Layout** button settings at any time to tweak your column display preferences.

## Search in Device List View

You can search for a single device for quick access to its information and take remote action on the device.

To run a search, navigate to **Devices > List View**, select the **Search List** bar and enter a user name, device friendly name, or other device-identifying element. This action initiates a search across all devices, using your search parameter, within the current organization group and all child groups.

## Windows Desktop Device Details Page

Use the Device Details page to track detailed device information and quickly access user and device management actions.

You can access Device Details by selecting a device Friendly Name from the Device List View, using one of the Dashboards, or with any of the search tools.

From the Device Details page, you can access specific device information broken into different menu tabs. Each menu tab contains related device information depending on your Workspace ONE UEM deployment.

## Remote Actions

The **More Actions** drop-down on the Device Details page enables you to perform remote actions over the air to the selected device.

The actions vary depending on factors such as the device platform, Workspace ONE UEM console settings, and enrollment status:

- **Add Tag** – Assign a customizable tag to a device, which can be used to identify a special device in your fleet.
- **Apps (Query)** – Send an MDM query command to the device to return a list of installed apps.

The Apps (Query) action requires an active enrolled user login.

- **Certificates (Query)** – Send an MDM query command to the device to return a list of installed certificates.

The Certificates (Query) requires an active enrolled user login.

- **Change Organization Group** – Change the device's home organization group to another pre-existing OG. Includes an option to select a static or dynamic OG.
- **Request Device Log** – Request the debug log on the selected device, after which you may view the log by selecting the **More** tab and choosing **Attachments > Documents**. You cannot view the log within the Workspace ONE UEM console. The log is delivered as a ZIP file that can be used to troubleshoot and provide support.

When you request a log you can choose to receive the logs from the **System** or the **Hub**. **System** provides system-level logs. **Hub** provides logs from the multiple agents running on the device.

- **Delete Device** – Delete and unenroll a device from the console. Sends the enterprise wipe command to the device that gets wiped on the next check-in and marks the device as **Delete In Progress** on the console. If the wipe protection is turned off on the device, the issued command immediately performs an enterprise wipe and removes the device representation in the console.
- **Device Information (Query)** – Send an MDM query command to the device to return basic information on the device such as friendly name, platform, model, organization group, operating system version and ownership status.
- **Device Wipe** – Send an MDM command to wipe a device clear of all data and operating system. This puts the device in a state where recovery partition will be needed to reinstall the OS. This action cannot be undone.
  - For Windows Desktop Devices, you can choose the type of device wipe.
    - **Wipe** - This option wipes the device of all content.
    - **Wipe Protected** - This option is similar a normal device wipe, but this option cannot be circumvented by the user. The Wipe Protected command keeps trying to reset the device until it is successful. In some device configurations, this command can leave the device unable to boot.



- **Wipe and Persist Provisioning Data** - This option wipes the device but specifies that provisioning data should be backed up to a persistent location. After the wipe executes, the provisioning data is restored and applied to the device. The provisioning folder is saved. You can find the folder by navigating on the device to %ProgramData%\Microsoft\Provisioning .
- **Edit Device** – Edit device information such as **Friendly Name**, **Asset Number**, **Device Ownership**, **Device Group** and **Device Category**.
- **Enterprise Wipe** – Enterprise Wipe a device to unenroll and remove all managed enterprise resources including applications and profiles. This action cannot be undone and re-enrollment will be required for Workspace ONE UEM to manage this device again. Includes options to prevent future re-enrollment and a **Note Description** field for you to add any noteworthy details about the action.
  - Enterprise Wipe is not supported for cloud domain-joined devices.
- **Enterprise Reset** – Enterprise Reset a device to factory settings, keeping only the Workspace ONE UEM enrollment.  
  
Enterprise Reset restores a device to a Ready to Work state when a device is corrupted or has malfunctioning applications. It re-installs the Windows OS while preserving user data, user accounts and managed applications. The device will re-sync auto-deployed enterprise settings, policies, and apps after reset while remaining managed by Workspace ONE.
- **Lock Device** – Send an MDM command to lock a selected device, rendering it unusable until it is unlocked.

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**Important** When locking a device, an enrolled user must be signed into the device for the command to process. The lock command locks the device and any user signed in must reauthenticate with Windows. If an enrolled user is signed-in to the device, a lock device command locks the device. If an enrolled user is not signed in, the lock device command is not processed.

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- **Query All** – Send a query command to the device to return a list of installed apps (including Workspace ONE Intelligent Hub, where applicable), books, certificates, device information, profiles and security measures.
- **Reboot Device** – Reboot a device remotely, reproducing the effect of powering it off and on again.
- **Remote Management** – Take control of a supported device remotely using this action, which launches a console application that enables you to perform support and troubleshoot on the device. Android devices require Remote Control Service to be installed on the device.
- **Security (Query)** – Send an MDM query command to the device to return the list of active security measures (device manager, encryption, passcode, certificates, etc.).
- **Send Message** – Send a message to the user of the selected device. Choose between **Email**, **Push Notification** (through AirWatch Cloud Messaging), and **SMS**.

## Advanced Remote Management

Advanced Remote Management (ARM) allows you to connect remotely to end-user devices so you can help with troubleshooting and maintenance. ARM requires your computer and the end-user device to connect to the Advanced Remote Management Server to facilitate communication between the Workspace ONE UEM console and the end-user device.

For more information, see **VMware Workspace ONE Advanced Remote Management Documentation** on docs.vmware.com.

## Product Provisioning Overview

Product provisioning enables you to create, through Workspace ONE™ UEM, products containing profiles, applications, files/actions, and event actions (depending on the platform you use). These products follow a set of rules, schedules, and dependencies as guidelines for ensuring your devices remain up-to-date with the content they need.

Product provisioning also encompasses the use of relay servers. These servers are FTP(S) servers designed to work as a go-between for devices and the UEM console. Create these servers for each store or warehouse to store product content for distribution to your devices.

For more information on product provisioning for Windows Desktop devices, see the **Product Provisioning for Windows Desktop Guide**.