



BlackBerry UEM

Managing Android devices

Administration

12.12

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Managing Android devices

BlackBerry UEM provides precise management of how Android devices connect to your network, what device capabilities are enabled, and what apps are available. Whether devices are owned by your organization or your users, you can provide mobile access to your organization's information while protecting it from anyone who should not have access.

This guide describes the options you have to manage Android devices and helps you find the details you need to take advantage of all available features.

Managing wearable devices

You can activate and manage certain Android based wearable devices in BlackBerry UEM. Wearable devices, such as smart glasses provide users with hands-free access to visual information such as notifications, step-by-step instructions, images, and video and allow users to issue voice commands, scan barcodes and use GPS navigation.

BlackBerry UEM supports the following wearable devices:

- Vuzix M300 Smart Glasses

To manage wearable devices, follow the instructions for Android devices. The following BlackBerry UEM features are supported for wearable devices:

- Device activation using a QR Code
- IT policies
- Wi-Fi, VPN, enterprise connectivity, compliance, and certificate profiles
- BlackBerry Secure Connect Service
- Device commands
- App management
- Device groups
- Location services

Wearable devices use the BlackBerry UEM Client for activation. You can activate wearable devices using a QR code instead of an activation password. For more information, see [Activate a device using a QR Code](#).

What you can control on Android devices

BlackBerry UEM provides all of the tools you need to control the features that Android devices allow you to manage. It also includes features that allow you to give device users secure access to work resources without fully managing the device.

Control level	Description
<p>Unmanaged devices</p> <p>User privacy activations</p>	<p>You can activate a device on BlackBerry UEM with the "User privacy" activation type to provide secure access to work resources without managing the device. This option is often used for BYOD devices.</p> <p>These activations can allow users to access your network over VPN using BlackBerry 2FA, share files securely using BlackBerry Workspaces, and install BlackBerry Dynamics apps such as BlackBerry Work and BlackBerry Access to access work email and your work intranet.</p>
<p>Managed devices with a work profile</p> <p>Work and personal - user privacy (Android Enterprise) activations</p>	<p>Android Enterprise devices can be managed but allow for personal use by creating a work profile on the device that separates work and personal data. This option maintains privacy for user's personal data in the personal profile but lets you manage work data using commands and IT policy rules. You can manage work apps on the device, including BlackBerry Dynamics apps.</p> <p>You can wipe work data, but not personal data, from the device. Work and personal data are both protected using encryption and password authentication. This option is often used for corporate-owned, personally enabled (COPE) and BYOD devices.</p>
<p>Fully managed devices with a work profile</p> <p>Work and personal - full control (Android Enterprise) activations</p>	<p>Android Enterprise 8.0 and later devices can be fully managed but allow for some personal use by creating a work profile on the device that separates work and personal data but allows your organization to maintain full control over the device and wipe all data from the device. Some IT policy rules can be applied separately to the work and personal profiles. You can manage work apps on the device, including BlackBerry Dynamics apps.</p> <p>You can log SMS, MMS, and phone calls sent and received on the device. Work and personal data are both protected using encryption and password authentication. This option is often used for COPE devices.</p>
<p>Fully managed devices</p> <p>Work space only (Android Enterprise) activations</p>	<p>Android Enterprise devices can be fully managed and have a work profile but no personal profile. This option lets you manage the entire device using commands and IT policy rules. You can manage work apps on the device, including BlackBerry Dynamics apps.</p> <p>You can log SMS, MMS, and phone calls sent and received on the device. All data on the device is protected using encryption and a method of authentication such as a password. This option is often used for corporate-owned, business only (COBO) devices.</p>

Control level	Description
Device administration MDM controls activations	<p>You can manage Android 9.x and earlier devices using commands and IT policy rules. A separate work space is not created on the device, and there is no added security for work data. To provide security for work data you can install BlackBerry Dynamics apps.</p> <p>This activation type is deprecated for Android 10 devices. For more information, visit https://support.blackberry.com/community to read article 48386.</p> <p>You can use device groups and compliance profiles to manage what happens for devices activated with "MDM controls" activations that are updated to Android 10. For more information, see the Administration content.</p>

Android Enterprise provides full support for managing Android devices, including the following features:

- Enforce password requirements
- Control device capabilities using IT policies (for example, disable the camera or Bluetooth)
- Enforce compliance rules
- Create Wi-Fi and VPN connection profiles (with proxy)
- Sync email, contacts, and calendar with devices
- Send CA and client certificates to devices for authentication and S/MIME
- Manage required and allowed public and internal apps
- Locate and protect lost or stolen devices

Android Enterprise devices that are activated with BlackBerry UEM also support additional controls available only for Samsung Knox Platform for Enterprise devices and for BlackBerry devices powered by Android.

BlackBerry UEM also supports devices with Samsung Knox Workspace activations in addition to supporting Samsung Knox Platform for Enterprise; however, Samsung Knox activation types will be deprecated in a future release. For more information, visit <https://support.blackberry.com/community> to read article 54614.

Licenses consumed by Android devices

When you or a user activates an Android device with BlackBerry UEM, you associate the device with BlackBerry UEM so that you can manage devices and users can access work data on their devices. Some Android activation types require a minimum of a Silver BlackBerry UEM license or a BlackBerry Secure UEM & Productivity Suites – Choice license, but other licenses may be required depending on the features that you want to enable for users.

Feature	Minimum Required license
MDM controls, User privacy activation, or Android Enterprise activation	One of the following: <ul style="list-style-type: none"> • Silver • BlackBerry Secure UEM & Productivity Suites – Choice
Samsung Knox Workspace activation	One of the following: <ul style="list-style-type: none"> • Gold Cross-Platform • Gold - KNOX Workspace • BlackBerry Secure UEM & Productivity Suites – Freedom
BlackBerry Secure Connect Plus	One of the following: <ul style="list-style-type: none"> • Gold • BlackBerry Secure UEM & Productivity Suites – Freedom For more information about BlackBerry Secure Connect Plus, see the BlackBerry UEM Administration content .
BlackBerry Access app	BlackBerry Secure UEM & Productivity Suites – Choice
BlackBerry Work and BlackBerry Tasks apps	BlackBerry Secure UEM & Productivity Suites – Choice
All other BlackBerry and ISV BlackBerry Dynamics apps	BlackBerry Secure UEM & Productivity Suites – Freedom
Device registration for BlackBerry 2FA only	One of the following: <ul style="list-style-type: none"> • BlackBerry 2FA • BlackBerry Secure UEM & Productivity Suites – Freedom

For more information about licenses, see the [Licensing content](#).

Steps to manage Android devices

Step	Action
1	Install and configure BlackBerry UEM according to the Installation instructions .
2	If your organization intends to manage Android Enterprise devices, configure a managed Google Play account or a connection to your Google Cloud or G Suite domain .
3	Verify that you have the required licenses to activate Android devices with the features that you want to enable.
4	Configure IT policies for devices. Assign IT policies to user groups or individual users.
5	Configure profiles for devices. Assign profiles to to user groups or individual users.
6	Specify the apps that devices can or must install .
7	Activate devices .
8	Manage and monitor devices .

Supporting Android Enterprise activations

Organizations that use Android Enterprise devices have several options for connecting to Google services. How your organization uses Google services determines how you connect BlackBerry UEM to Google services and how you activate devices. For more information on configuring BlackBerry UEM to connect to a Google domain or use managed Google Play accounts, see the [see the on-premises Configuration content](#) or the [UEM Cloud Configuration content](#).

Your organization may interact with Google services in the following ways:

Google services connection	Description	More information
Managed Google Play accounts	BlackBerry UEM is not connected to a Google domain. You can use managed Google Play accounts to allow users to download and install work apps using Google Play.	<p>Support Android Enterprise activations using managed Google Play accounts</p> <p>Activate an Android Enterprise device with the Work and personal - user privacy activation type</p> <p>Activate an Android Enterprise device using a managed Google Play account</p>
G Suite domain	Your organization has a G Suite domain, which supports all G Suite services such as Gmail, Google Calendar, and Google Drive.	<p>Support Android Enterprise activations with a G Suite domain</p> <p>Activate an Android Enterprise device with the Work and personal - user privacy activation type</p> <p>Activate an Android Enterprise device when BlackBerry UEM is connected to a Google domain</p>
Google Cloud domain	Your organization has a Google Cloud domain, which provides managed Google accounts to users. Your organization doesn't use G Suite services such as Gmail, Google Calendar, and Google Drive for your organization's email, calendar, and data management.	<p>Support Android Enterprise activations with a Google Cloud domain</p> <p>Activate an Android Enterprise device with the Work and personal - user privacy activation type</p> <p>Activate an Android Enterprise device when BlackBerry UEM is connected to a Google domain</p>
No Google services	Your organization's security policies do not allow you to use Google services.	<p>Support Android Enterprise devices without access to Google Play</p> <p>Activate an Android Enterprise device without a Google Play account</p>

If you support Android Enterprise activations, you can provide users with BlackBerry Hub which allows them to manage both work and personal email messages and calendar data in a unified view. For more information, see [Enable a unified BlackBerry Hub](#).

Support Android Enterprise activations using managed Google Play accounts

If you don't have or don't want to connect BlackBerry UEM to a Google domain, you can activate Android Enterprise devices to use managed Google Play accounts. When you use managed Google Play accounts you can use any Google or Gmail account to connect BlackBerry UEM to Google and no personally identifiable information about your users is sent to Google. For more information on managed Google Play accounts, see <https://support.google.com/googleplay/work/>.

Once you have connected BlackBerry UEM to Google you can allow users to activate Android Enterprise devices and download work apps using Google Play. For information about configuring BlackBerry UEM to support Android Enterprise devices, see the [on-premises Configuration content](#) or the [UEM Cloud Configuration content](#).

Support Android Enterprise activations with a G Suite domain

If you have configured BlackBerry UEM to connect to a G Suite domain, you must perform the following tasks before users can activate Android Enterprise devices.

Before you begin: Configure BlackBerry UEM to support Android Enterprise devices. For information about configuring BlackBerry UEM to support Android Enterprise devices, see the [on-premises Configuration content](#) or the [UEM Cloud Configuration content](#).

1. In your G Suite domain, create user accounts for your Android users.
2. Select the **Enforce EMM Policy** setting in the G Suite domain.
This setting is required for devices with the Work space only and Work and personal - full control activation types and strongly recommended for devices with other activation types. If this setting is not selected, users can add a managed Google account to the device that can access work apps outside of the work profile.
3. If you intend to assign the Work space only or Work and personal - full control activation type, select the **Enforce EMM Policy** setting in the G Suite domain.
4. In BlackBerry UEM, create local user accounts for your Android users. Each account's email address must match the email address in the corresponding G Suite account.
5. Make sure that your users know the passwords for their G Suite accounts.
6. In BlackBerry UEM, assign an email profile and productivity apps to users, user groups, or device groups.

Support Android Enterprise activations with a Google Cloud domain

If you have configured BlackBerry UEM to connect to a Google Cloud domain, you must perform the following tasks before users can activate devices using Android Enterprise.

Before you begin: Configure BlackBerry UEM to support Android Enterprise. When you configure BlackBerry UEM to connect to a Google Cloud domain, you must select whether BlackBerry UEM can create user accounts in the domain. This selection affects the tasks that you must perform before users can activate Android Enterprise devices. For information about configuring BlackBerry UEM to support Android Enterprise devices, see the [on-premises Configuration content](#) or the [UEM Cloud Configuration content](#).

1. In BlackBerry UEM, add directory user accounts for your Android Enterprise users.

2. If you choose not to allow BlackBerry UEM to create user accounts in your Google Cloud domain, you must create user accounts in your Google Cloud domain and in BlackBerry UEM. Perform one of the following actions:
 - In your Google Cloud domain, create user accounts for your Android Enterprise users. Each email address must match the email address in the corresponding BlackBerry UEM user account. Make sure that your Android Enterprise users know the password for their Google Cloud accounts.
 - Use the Google Apps Directory Sync tool to synchronize your Google Cloud domain with your company directory. If you do this, you don't need to create user accounts manually in your Google Cloud domain.
3. If you intend to assign the Work space only or Work and personal - full control activation types, select the **Enforce EMM Policy** setting in the Google Cloud domain.

This setting is required for devices with the Work space only and Work and personal - full control activation types and strongly recommended for devices with other activation types. If this setting is not selected, users can add a managed Google account to the device that can access work apps outside of the work profile.
4. In BlackBerry UEM, assign an email profile and productivity apps to users, user groups, or device groups.

Support Android Enterprise devices without access to Google Play

To activate devices that don't have access to Google Play (for example, due to local restrictions) with UEM, you must install the latest BlackBerry UEM Client on the device that you want to activate. The method that you use to download the UEM Client depends on the activation type:

- **Work space only (Android Enterprise) and Work and personal - full control (Android Enterprise):** You must manually download the BlackBerry UEM Enroll app from BlackBerry and install it on a secondary device. The device that you want to activate must be reset to default factory settings and, before you complete the out-of-box device setup on the device, you use the UEM Enroll app on the secondary device to download the UEM Client using NFC.
- **Work and personal - user privacy (Android Enterprise):** After the out-of-box device setup is completed on the device that you want to activate, you must manually download the UEM Client from BlackBerry and install it.


To download the .apk file of the latest UEM Enroll or UEM Client app, visit support.blackberry.com/community to read article 42607.

For more information about supporting Android Enterprise devices without access to Google Play, visit support.blackberry.com/community to read article 57492.

Requirements

If you want to activate devices that don't have access to Google Play, verify the following:

Requirement	Description
BlackBerry UEM environment	Verify the following: <ul style="list-style-type: none"> • BlackBerry UEM server version 12.11 or later • Integration with Android Enterprise: You are not required to integrate UEM with Android Enterprise if you want to support only devices that don't have access to Google Play. If you want to support a mix of devices that do and don't have access to Google Play, you must integrate the UEM environment with Android Enterprise.

Requirement	Description
Activation profile settings	<p>The following activation types are supported for devices that don't have access to Google Play:</p> <ul style="list-style-type: none"> • Work space only (Android Enterprise) • Work and personal - full control (Android Enterprise) • Work and personal - user privacy (Android Enterprise) <p>Verify the following settings in the activation profile:</p> <ul style="list-style-type: none"> • Deselect the Add Google Play account to workspace option. This option is available only if your UEM environment is integrated with Android Enterprise. • If you want to enable BlackBerry Secure Connect Plus, select the When activating Android Enterprise devices, enable premium UEM functionality such as BlackBerry Secure Connect Plus option. You must upload the BlackBerry Connectivity app as an internal app and assign it to users.
IT policy settings	<p>Only for users that are assigned the Work and personal - user privacy (Android Enterprise) activation type, verify the following in the IT policy:</p> <ul style="list-style-type: none"> • Enable the Allow installation of non Google Play apps IT policy rule to allow the installation of apps outside of Google Play.
Non-BlackBerry Dynamics apps	<p>For non-BlackBerry Dynamics apps, add the apps to UEM as internal apps and assign them to users.</p> <ol style="list-style-type: none"> 1. Obtain the .apk files of the apps that you want to assign. For example, to download the latest version of the BlackBerry Connectivity app, visit the BlackBerry myAccount portal. 2. In the BlackBerry UEM management console, on the menu bar, click Apps. 3. Click  > Internal apps. 4. Click Browse and select the .apk file. 5. In the Send to field, select All Android devices. 6. Deselect Publish app in Google domain. 7. Click Add. 8. Repeat the previous steps for each app that you want to add. 9. Assign the apps to users. The app disposition must be set to Required.

Requirement	Description
BlackBerry Dynamics apps	<p>For BlackBerry Dynamics apps, upload the internal app source file and assign the app to users.</p> <p>Perform the following steps to install or update internal apps on devices that don't have access to Google Play:</p> <ol style="list-style-type: none"> 1. Obtain the .apk files of the BlackBerry Dynamics apps that you want to assign. For example, to download BlackBerry Work, visit support.blackberry.com/community and read article 42607. 2. In the BlackBerry UEM management console, on the menu bar, click Apps. 3. Click a BlackBerry Dynamics app (for example, BlackBerry Work). 4. Click the Android tab. 5. Click Add internal app source file. 6. Click Browse and select the .apk file. 7. Click Add. 8. Click Save. 9. Repeat the previous steps for each app that you want to add. 10. Assign the apps to users. The app disposition must be set to Required.
Activating the devices	<p>For devices assigned the Work space only (Android Enterprise) and Work and personal - full control (Android Enterprise) activation types, use the UEM Enroll app to initiate the download of the UEM Client. For more information, see the BlackBerry UEM Enroll documentation.</p> <p>For devices assigned the Work and personal - user privacy (Android Enterprise) activation type, manually download and install the UEM Client app. For more information, visit support.blackberry.com/community and read article 42607.</p> <p>Note:</p> <ul style="list-style-type: none"> • The device on which you install UEM Enroll must be running Android 9 or earlier. • The device that you want to activate must be running Android 9 or earlier.
BlackBerry UEM Client app update	<p>To update the UEM Client app on devices, users must manually download the latest version of the .apk file and install it. For more information, visit support.blackberry.com/community and read article 42607.</p>

Controlling Android devices with an IT policy

BlackBerry UEM sends an IT policy to each device. You can use a default IT policy or create your own IT policies. You can create as many IT policies as you require for different situations and different users, but only one IT policy is active on a device at any time.

The IT policy rules for Android are based on the the capabilities of the device and the device configuration options provided by Apple. As Apple releases new OS updates with new features and configuration options, new IT policy rules are added to UEM at the next possible opportunity.

You can download the searchable and sortable [IT Policy rule spreadsheet](#). The spreadsheet documents all available rules in UEM, including the minimum device OS that supports the rule.

Device behavior you control with an IT policy includes the following options:

- Device [password requirements](#)
- Allowing device features such as the camera and, Bluetooth
- Allowing apps in one profile to access data in another profile
- Restricting functionality only for apps and data in the work profile.

For more information on sending IT policies to devices, [see the Administration content](#).

Setting Android password requirements

There are four groups of IT policy rules for Android passwords. The group of rules that you use depends on the device activation type and whether you are setting requirements for the device password or the work space password.

Activation type	Supported password rules
Work and personal - user privacy (Android Enterprise) and Work and personal - full control (Android Enterprise)	<p>Use the global password rules to set device password requirements.</p> <p>Use the work profile password rules to set the password requirements for the work profile.</p> <p>For BlackBerry devices powered by Android, you can force the work profile and device passwords to be different.</p> <p>Knox password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p>
Work space only (Android Enterprise)	<p>Use the global password rules to set password requirements for the device. Because the device only has a work space, the password is also the work space password.</p> <p>All other password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p>

Activation type	Supported password rules
MDM controls	<p>Use the global password rules to set device password requirements.</p> <p>All other password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p> <p>Note: The MDM controls activation type is deprecated for devices with Android 10. For more information, visit https://support.blackberry.com/community to read article 48386.</p>
MDM controls (Knox MDM)	<p>Use the Knox MDM password rules to set device password requirements.</p> <p>All other password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p>
Work and personal - user privacy (Samsung Knox)	<p>You have no control over the device password.</p> <p>Use the Knox Premium - Workspace password rules to set password requirements for the work space.</p> <p>All other password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p> <p>Note: The Samsung Knox activation types will be deprecated in a future release. Devices that support Knox Platform for Enterprise can be activated using the Android Enterprise activation types. For more information, visit https://support.blackberry.com/community to read article 54614.</p>
Work and personal - full control (Samsung Knox)	<p>Use the Knox MDM password rules to set device password requirements.</p> <p>Use the Knox Premium - Workspace password rules to set password requirements for the work space.</p> <p>All other password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p>
Work space only (Samsung Knox)	<p>Use the Knox Premium - Workspace password rules to set password requirements for the work space.</p> <p>All other password rules are ignored by the device.</p> <p>Use a compliance profile to enforce the password requirements.</p>

Android: Global password rules

The global password rules set the device password requirements for devices with the following activation types:

- Work and personal - user privacy (Android Enterprise)
- Work and personal - full control (Android Enterprise)
- Work space only (Android Enterprise)
- MDM controls (without Samsung Knox)

Note: The MDM controls activation type is deprecated for devices with Android 10. For more information, visit <https://support.blackberry.com/community> to read article 48386.

Rule	Description
Password requirements	<p>Specify the minimum requirements for the password. You can choose one of the following options:</p> <ul style="list-style-type: none"> • Unspecified - no password required • Something - the user must set a password but there are no requirements for length or quality • Numeric - the password must include at least one number • Alphabetic - the password must include at least one letter • Alphanumeric - the password must include at least one letter and one number • Complex - allows you to set specific requirements for different character types
Maximum failed password attempts	<p>Specify the number of times that a user can enter an incorrect password before a device is wiped or deactivated.</p> <p>Devices with the "MDM controls" activation type are wiped.</p> <p>Devices with the "Work and personal - user privacy " and the "Work and personal - user privacy (Premium)" activation types are deactivated and the work profile removed.</p>
Maximum inactivity time lock	<p>Specify the maximum number of minutes of user inactivity that must elapse before the device or work space locks. On Android devices with a work profile, the work space also locks. Users can set a shorter time period on the device. This rule is ignored if no password is required.</p>
Password expiration timeout	<p>Specify the maximum amount of time that the password can be used. After the specified amount of time elapses, the user must set a new password. If set to 0, the password does not expire.</p>
Password history restriction	<p>Specify the maximum number of previous passwords that a device checks to prevent a user from reusing a recent numeric, alphabetic, alphanumeric, or complex password. If set to 0, the device does not check previous passwords.</p>
Minimum password length	<p>Specify the minimum number of characters for a numeric, alphabetic, alphanumeric, or complex password.</p>
Minimum uppercase letters required in password	<p>Specify the minimum number of uppercase letters that a complex password must contain.</p>
Minimum lowercase letters required in password	<p>Specify the minimum number of lowercase letters that a complex password must contain.</p>
Minimum letters required in password	<p>Specify the minimum number of letters that a complex password must contain.</p>
Minimum non-letters in password	<p>Specify the minimum number of non-letter characters (numbers or symbols) that a complex password must contain.</p>

Rule	Description
Minimum numerical digits required in password	Specify the minimum number of numerals that a complex password must contain.
Minimum symbols required in password	Specify the minimum number of non-alphanumeric characters that a complex password must contain.

For more information about the IT policy password rules, [download the Policy Reference Spreadsheet](#).

Android: Work profile password rules

The work profile password rules set the work space password requirements for devices with the following activation types:

- Work and personal - user privacy (Android Enterprise)
- Work and personal - full control (Android Enterprise)

Rule	Description
Password requirements	<p>Specify the minimum requirements for the work space password. You can choose one of the following options:</p> <ul style="list-style-type: none"> • Unspecified - no password required • Something - the user must set a password but there are no requirements for length or quality • Numeric - the password must include at least one number • Alphabetic - the password must include at least one letter • Alphanumeric - the password must include at least one letter and one number • Complex - allows you to set specific requirements for different character types • Numeric Complex - the password must contain numeric characters with no repeating sequence (4444) or ordered sequence (1234, 4321, 2468). • Biometric Weak - the password allows for low-security biometric recognition technology <p>For BlackBerry devices powered by Android, you can force the work space and device passwords to be different using the BlackBerry devices "Force the device and work space passwords to be different" rule.</p>
Maximum failed password attempts	Specify the number of times that a user can enter an incorrect work space password before the device is deactivated and the work profile is removed.
Maximum inactivity time lock	Specify the maximum number of minutes of user inactivity that must elapse before the device and work space lock. If you set both this rule and the Android global "Maximum inactivity time lock" rule, the device and work space lock when either timer expires. Users can set a shorter time period on the device.
Password expiration timeout	Specify the maximum amount of time that the work space password can be used. After the specified amount of time elapses, the user must set a new work space password. If set to 0, the password does not expire.

Rule	Description
Password history restriction	Specify the maximum number of previous work space passwords that a device checks to prevent a user from reusing a recent numeric, alphabetic, alphanumeric, or complex password. If set to 0, the device does not check previous passwords.
Minimum password length	Specify the minimum number of characters for a numeric, alphabetic, alphanumeric, or complex work space password.
Minimum uppercase letters required in password	Specify the minimum number of uppercase letters that a complex work space password must contain.
Minimum lowercase letters required in password	Specify the minimum number of lowercase letters that a complex work space password must contain.
Minimum letters required in password	Specify the minimum number of letters that a complex work space password must contain.
Minimum non-letters in password	Specify the minimum number of non-letter characters (numbers or symbols) that a complex work space password must contain.
Minimum numerical digits required in password	Specify the minimum number of numerals that a complex work space password must contain.
Minimum symbols required in password	Specify the minimum number of non-alphanumeric characters that a complex work space password must contain.

For more information about the IT policy password rules, [download the Policy Reference Spreadsheet](#).

Controlling Android devices with profiles

BlackBerry UEM includes several profiles that you can use to control various aspects of device functionality. The most commonly used include the following profiles:

Profile name	Description	Configure
Activation	Specifies the device activation settings for users, such as the activation type, method, and the number and types of devices a user can activate.	Create an activation profile
Wi-Fi	Specifies settings for devices to connect to your work Wi-Fi network.	Create a Wi-Fi profile
VPN	Specifies settings for devices to connect to a work VPN.	Create a VPN profile
Proxy	Specifies how devices use a proxy server to access web services on the Internet or a work network.	Create a proxy profile
Email	Specifies how devices connect to a work mail server and synchronize email messages, calendar entries, and organizer data. If you install and configure BlackBerry Work on devices, you don't need to set up an email profile.	Create an email profile
BlackBerry Dynamics	Allows devices to access BlackBerry Dynamics apps such as BlackBerry Work, BlackBerry Access, and BlackBerry Connect.	Create a BlackBerry Dynamics profile
BlackBerry Dynamics connectivity	Defines the network connections, Internet domains, IP address ranges, and app servers that devices can connect to when they use BlackBerry Dynamics apps.	Create a BlackBerry Dynamics connectivity profile
Compliance	Defines the device conditions that are not acceptable in your organization and sets enforcement actions.	Create a compliance profile
Enterprise connectivity	Specifies whether devices can use BlackBerry Secure Connect Plus.	Enable BlackBerry Secure Connect Plus
CA certificate	Specifies a CA certificate that devices can use to establish trust with a work network or server.	Create a CA certificate profile
User credential	Specifies how devices obtain client certificates used to authenticate with a work network or server.	Create a user credential profile

Profile name	Description	Configure
SCEP	Specifies the SCEP server that devices use to obtain a client certificate used to authenticate with a work network or server.	Create a SCEP profile

For more information on sending profiles to devices, [see the Administration content](#).

Profiles reference - Android devices

The following table lists all BlackBerry UEM profiles supported on Android devices:

Profile name	Description	Configure
Policy		
Activation	Specifies the device activation settings for users, such as the activation type and the number and types of devices.	Create an activation profile
BlackBerry Dynamics	Allows devices to access BlackBerry Dynamics apps such as BlackBerry Work, BlackBerry Access, and BlackBerry Connect.	Create a BlackBerry Dynamics profile
App lock mode	Specify a single app to run on devices. Samsung Knox devices activated with MDM only	Create an app lock mode profile
Enterprise Management Agent	Specifies when devices connect to BlackBerry UEM for app or configuration updates when a push notification is not available.	Create an Enterprise Management Agent profile
Compliance		
Compliance	Defines the device conditions that are not acceptable in your organization and sets enforcement actions.	Create a compliance profile
Compliance (BlackBerry Dynamics)	This is a read-only profile that displays the compliance settings that were imported from Good Control into an on-premises BlackBerry UEM.	Managing BlackBerry Dynamics compliance profiles
Device SR requirements	Defines the software release versions that devices must have installed and specifies an update period for apps that are running in the foreground.	Create a device SR requirements profile
Email, calendar, and contacts		

Profile name	Description	Configure
Email	Specifies how devices connect to a work mail server and synchronize email messages, calendar entries, and organizer data using Exchange ActiveSync or IBM Notes Traveler.	Create an email profile Create an email profile
IMAP/POP3 email	Specifies how devices connect to an IMAP or POP3 mail server, and how to synchronize email messages.	Create an IMAP/POP3 email profile
Gatekeeping	Specifies the Microsoft Exchange servers to use for automatic gatekeeping.	Create a gatekeeping profile
Networks and connections		
Wi-Fi	Specifies how devices connect to a work Wi-Fi network.	Create a Wi-Fi profile
VPN	Specifies how devices connect to a work VPN.	Create a VPN profile
Proxy	Specifies how devices use a proxy server to access web services on the Internet or a work network.	Create a proxy profile
Enterprise connectivity	Specifies how devices can connect to your organization's resources using enterprise connectivity. For Android Enterprise and Samsung Knox Workspace devices, the enterprise connectivity profile specifies whether devices can use BlackBerry Secure Connect Plus.	Enable BlackBerry Secure Connect Plus
BlackBerry Dynamics connectivity	Defines the network connections, Internet domains, IP address ranges, and app servers that devices can connect to when using BlackBerry Dynamics apps.	Create a BlackBerry Dynamics connectivity profile
BlackBerry 2FA	Enables two-factor authentication for users and specifies the configuration of the preauthentication and self-rescue features.	Create a BlackBerry 2FA profile
Access Point Name profile	Allows you to specify APNs for devices to use to connect to carriers.	Create an Access Point Name profile
Protection		
Microsoft Intune app protection	Allows you to manage apps protected by Microsoft Intune.	Create a Microsoft Intune app protection profile
Location service	Allows you to request the location of devices and view the approximate locations on a map.	Create a location service profile

Profile name	Description	Configure
Do not disturb	Allows you to block BlackBerry Work for Android notifications during off-work days and hours that you define.	Create a Do not disturb profile
Custom		
Device	Allows you to configure the information that displays on devices.	Create a device profile
Certificates		
CA certificate	Specifies a CA certificate that devices can use to establish trust with a work network or server.	Create a CA certificate profile
Shared certificate	Specifies a client certificate that devices can use to authenticate users with a work network or server.	Create a shared certificate profile
User credential	Specifies the CA connection that devices use to obtain a client certificate that is used to authenticate with a work network or server.	Create a user credential profile
SCEP	Specifies the SCEP server that devices use to obtain a client certificate that is used to authenticate with a work network or server.	Create a SCEP profile
CRL	Specifies the CRL configurations that BlackBerry UEM can use to check the status of certificates. BlackBerry devices powered by Android only	Create a CRL profile
Certificate mapping profile	Specifies which client certificates apps must use	Create a certificate mapping profile

Managing apps on Android devices

You can create a library of apps that you want to manage and monitor on devices. For Android Enterprise devices, only apps that you allow can be installed to the work profile. BlackBerry UEM provides the following options for managing apps on Android devices:

- [Assign public apps](#) from Google Play as optional or required on devices.
- [Upload custom apps](#) to UEM and deploy them as optional or required apps.
- [Preconfigure app settings](#), such as connection settings, when allowed by the app.
- [Block users from accessing apps](#).
- [Configure public, ISV, and custom BlackBerry Dynamics apps](#) to allow users to access work resources.
- [Connect UEM to Microsoft Intune](#) to set Intune app protection policies from within the UEM management console to deploy and manage Office 365 apps.
- [View the list of personal apps installed on devices](#).
- [Allow users to rate and review apps](#) for other users in your environment.

App behavior on Android Enterprise devices

For devices enabled for BlackBerry Dynamics, the work app catalog appears in the BlackBerry Dynamics Launcher if you have if you have assigned the "Feature - BlackBerryApp Store" entitlement to the user. For more information, see [Add the work app catalog to the BlackBerry Dynamics Launcher](#).

For devices activated with "Work and personal - user privacy," "Work and personal - full control," or "Work space only," the following behavior occurs:

App type	When the app is assigned to a user	When apps are updated	When the app is unassigned from a user	When the device is removed from BlackBerry UEM
Public apps with a required disposition	Apps are automatically installed.	Apps are automatically updated.	Apps are automatically removed from the device.	The work profile and assigned work apps are removed from the device.
Public apps with an optional disposition	The user can choose whether to install the apps. Apps appear in Google Play for Work.	Google Play for Work notifies users about updates.	Apps are automatically removed from the device.	The work profile and assigned work apps are removed from the device.
Internal apps with a required disposition hosted in BlackBerry UEM	Supported only for Work space only devices. Apps are automatically installed.	Supported only for Work space only devices. Apps are automatically installed.	Apps are automatically removed from the device.	Apps are automatically removed from the device.

App type	When the app is assigned to a user	When apps are updated	When the app is unassigned from a user	When the device is removed from BlackBerry UEM
Internal apps with an optional disposition hosted in BlackBerry UEM	<p>The user can choose whether to install the apps.</p> <p>Apps appear in Google Play for Work.</p>	Google Play for Work notifies users about updates.	Apps are automatically removed from the device.	The work profile and assigned work apps are removed from the device.
Internal apps with a required disposition hosted in Google Play	Apps are automatically installed on the device.	Google Play for Work notifies users about updates.	Apps are automatically removed from the device.	The work profile and assigned work apps are removed from the device.
Internal apps with an optional disposition hosted in Google Play	<p>The user can choose whether to install the apps.</p> <p>Apps appear in Google Play for Work.</p>	Google Play for Work notifies users about updates.	Apps are automatically removed from the device.	The work profile and assigned work apps are removed from the device.

Activating Android devices

When you or a user activates an Android device with BlackBerry UEM, you associate the device with BlackBerry UEM so that you can manage devices and users can access work data on their devices.

Activation types: Android devices

For Android devices, you can select multiple activation types and rank them to make sure that BlackBerry UEM assigns the most appropriate activation type for the device. For example, if you rank "Work and personal - user privacy (Android Enterprise)" first and "MDM controls" second, devices that support Android Enterprise receive the first activation type.

The Android activation types are organized in the following tables:

- Android Enterprise devices
- Android devices without a work profile
- Samsung Knox Workspace devices

Android Enterprise devices

The following activation types apply only to Android Enterprise devices.

Activation type	Description
Work and personal - user privacy (Android Enterprise with work profile)	<p>This activation type maintains privacy for personal data but lets you manage work data using commands and IT policy rules. This activation type creates a work profile on the device that separates work and personal data. Work and personal data are both protected using encryption and password authentication.</p> <p>To allow Google Play app management for Android Enterprise devices, select Add Google Play to the workspace. This setting is enabled by default. If the device does not have access to Google Play, then this setting must be deselected and the BlackBerry UEM Enroll app must be used from a secondary device during the activation process.</p> <p>To enable BlackBerry Secure Connect Plus and Knox Platform for Enterprise support, you must select the When activating Android Enterprise devices, enable premium UEM functionality such as BlackBerry Secure Connect Plus option.</p> <p>Users do not have to grant Administrator permissions to the BlackBerry UEM Client.</p>

Activation type	Description
Work and personal - full control (Android Enterprise fully managed device with work profile)	<p>This activation type lets you manage the entire device using commands and IT policy rules. This activation type creates a work profile on the device that separates work and personal data. Data in the work space is protected using encryption and a method of authentication such as a password, PIN, pattern, or fingerprint. This activation type supports the logging of device activity (SMS, MMS, and phone calls) in BlackBerry UEM log files.</p> <p>To allow Google Play app management for Android Enterprise devices, select Add Google Play account to the work space. This setting is enabled by default. If the device does not have access to Google Play, then this setting must be deselected and the BlackBerry UEM Enroll app must be used from a secondary device during the activation process.</p> <p>Following activation, Work and personal - full control devices have only a limited set of the standard pre-installed apps, such as Camera, Phone, and Settings, in the personal space. The list of retained pre-installed apps depends on the device vendor and OS version.</p> <p>To enable BlackBerry Secure Connect Plus and Knox Platform for Enterprise support, you must select the When activating Android Enterprise devices, enable premium UEM functionality such as BlackBerry Secure Connect Plus option.</p> <p>To specify whether BlackBerry UEM can limit activation by device ID, select Allow only approved device IDs.</p> <p>During activation users must grant Administrator permissions to the BlackBerry UEM Client.</p> <p>This activation type is supported only for Android 8.0 and later.</p>

Activation type	Description
Work space only (Android Enterprise fully managed device)	<p>This activation type lets you manage the entire device using commands and IT policy rules. This activation type requires the user to reset the device to factory settings before activating. The activation process installs a work profile and no personal profile. The user must create a password to access the device. All data on the device is protected using encryption and a method of authentication such as a password.</p> <p>To allow Google Play app management for Android Enterprise devices, select Add Google Play to the workspace. This setting is enabled by default. If the device does not have access to Google Play, then this setting must be deselected and the BlackBerry UEM Enroll app must be used from a secondary device during the activation process.</p> <p>During activation, the device installs the BlackBerry UEM Client automatically and grants it Administrator permissions. Users cannot revoke the Administrator permissions or uninstall the app.</p> <p>Following activation, Work space only devices have only a limited set of the standard pre-installed apps, such as Camera, Phone, and Settings, plus any apps you have assigned with a required disposition. The list of retained pre-installed apps depends on the device vendor and OS version.</p> <p>To enable BlackBerry Secure Connect Plus and Knox Platform for Enterprise support, you must select the When activating Android Enterprise devices, enable premium UEM functionality such as BlackBerry Secure Connect Plus option.</p> <p>To specify whether BlackBerry UEM can limit activation by device ID, select Allow only approved device IDs.</p>

Android devices without a work profile

The following activation types apply to all Android devices.

Activation type	Description
MDM controls	<p>This activation type lets you manage the device using commands and IT policy rules. A separate work space is not created on the device, and there is no added security for work data.</p> <p>If the device supports Knox MDM, this activation type applies the Knox MDM IT policy rules. If you do not want to apply Knox MDM policy rules, clear the Activate Samsung KNOX on Samsung devices that have the MDM controls activation type assigned check box.</p> <p>During activation, users must grant Administrator permissions to the BlackBerry UEM Client.</p> <p>Note: This activation type is deprecated for devices with Android 10. Attempts to activate Android 10 and later devices with the MDM controls activation type will fail. For more information, visit https://support.blackberry.com/community to read article 48386.</p>

Activation type	Description
User privacy	You can use the User privacy activation type to provide basic control of devices, including work app management, while making sure that users' personal data remains private. With this activation type, no separate container is installed on the device. To provide security for work data you can install BlackBerry Dynamics apps. Devices activated with User privacy can use services such as Find my Phone and Root Detection, but administrators cannot control device policies.
Device registration for BlackBerry 2FA only	<p>This activation type supports the BlackBerry 2FA solution for devices that BlackBerry UEM does not manage. This activation type does not provide any device management or controls, but allows devices to use the BlackBerry 2FA feature. To use this activation type, you must also assign the BlackBerry 2FA profile to users.</p> <p>When a device is activated, you can view limited device information in the management console, and you can deactivate the device using a command.</p> <p>This activation type is supported only for Microsoft Active Directory users.</p> <p>For more information, see the BlackBerry 2FA content.</p>

Samsung Knox Workspace devices

The following activation types apply only to Samsung devices that support Knox Workspace.

Note: Samsung Knox activation types will be deprecated in a future release. Devices that support Knox Platform for Enterprise can be activated using the Android Enterprise activation types. For more information, [visit https://support.blackberry.com/community](https://support.blackberry.com/community) to read article 54614.

Activation type	Description
Work and personal - user privacy - (Samsung Knox)	<p>This activation type maintains privacy for personal data, but lets you manage work data using commands and IT policy rules. This activation type does not support the Knox MDM IT policy rules. This activation type creates a separate work space on the device and the user must create a password to access the work space. Data in the work space is protected using encryption and a method of authentication such as a password, PIN, pattern, or fingerprint. The user must also create a Screen lock password to protect the entire device and will not be able to use USB debugging mode.</p> <p>During activation, users must grant Administrator permissions to the BlackBerry UEM Client.</p>
Work and personal - full control (Samsung Knox)	<p>This activation type lets you manage the entire device using commands and the Knox MDM and Knox Workspace IT policy rules. This activation type creates a separate work space on the device and the user must create a password to access the work space. Data in the work space is protected using encryption and a method of authentication such as a password, PIN, pattern, or fingerprint. This activation type supports the logging of device activity (SMS, MMS, and phone calls) in BlackBerry UEM log files.</p> <p>During activation users must grant Administrator permissions to the BlackBerry UEM Client.</p>

Activation type	Description
Work space only - (Samsung Knox)	<p>This activation type lets you manage the entire device using commands and the Knox MDM and Knox Workspace IT policy rules. This activation type removes the personal space and installs a work space. The user must create a password to access the device. All data on the device is protected using encryption and a method of authentication such as a password, PIN, pattern, or fingerprint. This activation type supports the logging of device activity (SMS, MMS, and phone calls) in BlackBerry UEM log files.</p> <p>During activation, users must grant Administrator permissions to the BlackBerry UEM Client.</p>

Activate an Android Enterprise device with the Work and personal - user privacy activation type


These steps apply to devices that are assigned the Work and personal - user privacy (Android Enterprise) activation type whether you are using managed Google Play accounts or UEM is connected to a Google domain.

Send the following activation instructions to the device users, or send them a link to the following workflow: [Activate your Android device](#).

Before you begin: Your device administrator sent you one or more email messages with the information that you need to activate your device. If you received an activation QR Code from your administrator, you can use it to activate your device and you don't need to type any information. If you did not receive a QR Code, make sure you received the following information:

- Your work email address
- BlackBerry UEM activation username
- BlackBerry UEM activation password
- BlackBerry UEM server address


1. On the device, install the BlackBerry UEM Client from Google Play.
2. Open the UEM Client.
3. Read the license agreement and tap the **I accept the License Agreement** checkbox.
4. Do one of the following:

Task	Steps
Use a QR Code to activate the device	<ol style="list-style-type: none"> a. Tap . b. Tap Allow to allow the UEM Client to take pictures and record video. c. Scan the QR Code in the activation email message that you received.
Manually activate the device	<ol style="list-style-type: none"> a. Type your work email address. Tap Next. b. Type your activation password. Tap Activate My Device. c. If necessary, type the server address. You can find the server address in the activation email message you received or in BlackBerry UEM Self-Service. Tap Next. d. If necessary, type your username and activation password. Tap Next.

5. Tap **Allow** to allow the UEM Client to make and manage phone calls.

6. Wait while the profiles and settings are pushed to your device.
7. On the **Set up your profile** screen, tap **Set up** and wait while a work profile is set up on the device.
8. If you are prompted, log in to your Google account with your Google email address and password.
9. On the unlock selection screen, choose a screen unlock method.
10. If you are prompted with the **Secure start-up** screen, tap **Yes** to require a password when the device starts.
11. Type a device password and type it again to confirm it. Tap **OK**.
12. Select one of the options for how you want your notifications to show. Tap **Done**.
13. Create a UEM Client password and tap **OK**. If you are using BlackBerry Dynamics apps, you will also use this password to sign in to all of your BlackBerry Dynamics apps.
14. On the next screen, tap **Enroll** and follow the instructions on the screen if you want to set up fingerprint authentication for the UEM Client and any BlackBerry Dynamics apps that you have. Otherwise, tap **Cancel**.
15. If you are signed out of your device, unlock your device to complete the BlackBerry UEM activation.
16. If you are prompted, tap **OK** to allow the connection to BlackBerry Secure Connect Plus and wait while the connection is turned on.
17. If you are prompted, follow the instructions on the screen to install work apps on your device.

After you finish: To verify that the activation process completed successfully, perform one of the following actions:

- In the UEM Client, tap  > **About**. In the **Activated Device** section, verify that the device information and the activation time stamp are present.
- In the BlackBerry UEM Self-Service console, verify that your device is listed as an activated device. It can take up to two minutes for the status to update after you activate the device.


Activate an Android Enterprise device using a managed Google Play account

These steps apply to devices that are assigned the Work space only (Android Enterprise) or Work and personal - full control (Android Enterprise) activation type. To activate devices with the Work and personal - user privacy activation type, see [Activate an Android Enterprise device with the Work and personal - user privacy activation type](#).

Send the following activation instructions to the device user, or send them a link to the following workflow: [Activate your Android device using a managed Google Play account](#).


Before you begin: Your device administrator sent you one or more email messages with the information you need to activate your device. If you received an activation QR Code from your administrator, you can use it to activate your device and you don't need to type any information. If you did not receive a QR Code, make sure you received the following information:

- Your work email address
 - BlackBerry UEM activation username
 - BlackBerry UEM activation password
 - BlackBerry UEM server address
1. If you do not see the device setup Welcome screen, reset your device to the factory default settings.
 2. During the device setup, type `afw#blackberry` in the Google account login screen.
 3. Tap **Install** to install the BlackBerry UEM Client.
 4. Read the license agreement and tap the **I accept the License Agreement** checkbox.
 5. Do one of the following:

Task	Steps
Use a QR Code to activate the device	<ol style="list-style-type: none"> Tap . Tap Allow to allow the UEM Client to take pictures and record video. Scan the QR Code in the activation email message that you received.
Manually activate the device	<ol style="list-style-type: none"> Type your work email address. Tap Next. Type your activation password. Tap Activate My Device. If necessary, type the server address. You can find the server address in the activation email message you received or in BlackBerry UEM Self-Service. Tap Next. If necessary, type your username and activation password. Tap Next.

- Wait while the profiles and settings are pushed to your device.
- On the **Set up your profile** screen, tap **Set up** and wait while a work profile is set up on the device.
- If you are prompted, log in to your Google account with your Google email address and password.
- On the unlock selection screen, choose a screen unlock method.
- If you are prompted with the **Secure start-up** screen, tap **Yes** to require a password when the device starts.
- Type a device password and type it again to confirm it. Tap **OK**.
- Select one of the options for how you want your notifications to show. Tap **Done**.
- Create a UEM Client password and tap **OK**. If you are using BlackBerry Dynamics apps, you will also use this password to sign in to all of your BlackBerry Dynamics apps.
- On the next screen, tap **Enroll** and follow the instructions on the screen if you want to set up fingerprint authentication for the UEM Client and any BlackBerry Dynamics apps that you have. Otherwise, tap **Cancel**.
- If you are signed out of your device, unlock your device to complete the BlackBerry UEM activation.
- If you are prompted, tap **OK** to allow the connection to BlackBerry Secure Connect Plus and wait while the connection is turned on.
- If you are prompted, follow the instructions on the screen to install work apps on your device.

After you finish: To verify that the activation process completed successfully, perform one of the following actions:

- In the UEM Client, tap  > **About**. In the **Activated Device** section, verify that the device information and the activation time stamp are present.
- In the BlackBerry UEM Self-Service console, verify that your device is listed as an activated device. It can take up to two minutes for the status to update after you activate the device.

Activate an Android Enterprise device when BlackBerry UEM is connected to a Google domain


These steps apply to devices that are assigned the Work space only (Android Enterprise) or Work and personal - full control (Android Enterprise) activation type. To activate devices with the Work and personal - user privacy activation type, see [Activate an Android Enterprise device with the Work and personal - user privacy activation type](#).

Send the following activation instructions to the device user, or send them a link to the following workflow: [Activate your Android device when UEM is connected to a Google Domain](#).

Before you begin: Your device administrator sent you one or more email messages with the information that you need to activate your device. If you received an activation QR Code from your administrator, you can use it to activate your device and you don't need to type any information. If you did not receive a QR Code, make sure you received the following information:

- Your work email address
- BlackBerry UEM activation username
- BlackBerry UEM activation password
- BlackBerry UEM server address

1. If you do not see the device setup Welcome screen, reset your device to the factory default settings.
2. During the device setup, in the Google account login screen, enter your work Google email address and password.
3. On the device, tap **Install** to install the BlackBerry UEM Client.
4. Read the license agreement and tap the **I accept the License Agreement** checkbox.
5. Do one of the following:

Task	Steps
Use a QR Code to activate the device	<ol style="list-style-type: none"> a. Tap . b. Tap Allow to allow the UEM Client to take pictures and record video. c. Scan the QR Code in the activation email message that you received.
Manually activate the device	<ol style="list-style-type: none"> a. Type your work email address. Tap Next. b. Type your activation password. Tap Activate My Device. c. If necessary, type the server address. You can find the server address in the activation email message you received or in BlackBerry UEM Self-Service. Tap Next. d. If necessary, type your username and activation password. Tap Next.

6. Wait while the profiles and settings are pushed to your device.
7. On the **Set up your profile** screen, tap **Set up** and wait while a work profile is set up on the device.
8. If you are prompted, log in to your Google account with your Google email address and password.
9. On the unlock selection screen, choose a screen unlock method.
10. If you are prompted with the **Secure start-up** screen, tap **Yes** to require a password when the device starts.
11. Type a device password and type it again to confirm it. Tap **OK**.
12. Select one of the options for how you want your notifications to show. Tap **Done**.
13. Create a UEM Client password and tap **OK**. If you are using BlackBerry Dynamics apps, you will also use this password to sign in to all of your BlackBerry Dynamics apps.
14. On the next screen, tap **Enroll** and follow the instructions on the screen if you want to set up fingerprint authentication for the UEM Client and any BlackBerry Dynamics apps that you have. Otherwise, tap **Cancel**.
15. If you are signed out of your device, unlock your device to complete the BlackBerry UEM activation.
16. If you are prompted, tap **OK** to allow the connection to BlackBerry Secure Connect Plus and wait while the connection is turned on.
17. If you are prompted, follow the instructions on the screen to install work apps on your device.

After you finish: To verify that the activation process completed successfully, perform one of the following actions:

- In the UEM Client, tap  > **About**. In the **Activated Device** section, verify that the device information and the activation time stamp are present.

- In the BlackBerry UEM Self-Service console, verify that your device is listed as an activated device. It can take up to two minutes for the status to update after you activate the device.

Activate an Android Enterprise device without a Google Play account


These steps apply to devices that do not have access to Google Play. The devices may be assigned the Work space only (Android Enterprise), Work and personal - full control (Android Enterprise), or Work and personal - user privacy (Android Enterprise) activation type.

A secondary device that has the BlackBerry UEM Enroll app installed is required. The same device can be used to activate an unlimited number of devices.

Send the following activation instructions to the device user.

Before you begin:

- Your device administrator sent you one or more email messages with the information that you need to activate your device. If you received an activation QR Code from your administrator, you can use it to activate your device and you don't need to type any information. If you did not receive a QR Code, make sure you received the following information:
 - Your Work email address
 - BlackBerry UEM activation username
 - BlackBerry UEM activation password
 - BlackBerry UEM server address
 - You must have a secondary device that has the BlackBerry UEM Enroll app installed. To download and install the BlackBerry UEM Client on the secondary device, visit support.blackberry.com/community to read article 42607.
1. On the device that you want to activate, if you do not see the device setup Welcome screen, reset your device to the factory default settings.
 2. On the secondary device, open the BlackBerry UEM Enroll app. Make sure that NFC is enabled on the device.
 3. Tap **Activate device**.
 4. Tap the backs of both devices together. When you are prompted, tap anywhere on the screen of the secondary device.
 5. On the device that you want to activate, follow the instructions on the screen to download and install the BlackBerry UEM Client.
 6. Read the license agreement and tap the **I accept the License Agreement** checkbox.
 7. Do one of the following:

Task	Steps
Use a QR Code to activate the device	<ol style="list-style-type: none"> a. Tap . b. Tap Allow to allow the UEM Client to take pictures and record video. c. Scan the QR Code in the activation email message that you received.
Manually activate the device	<ol style="list-style-type: none"> a. Type your work email address. Tap Next. b. Type your activation password. Tap Activate My Device. c. If necessary, type the server address. You can find the server address in the activation email message you received or in BlackBerry UEM Self-Service. Tap Next. d. If necessary, type your username and activation password. Tap Next.

8. Wait while the profiles and settings are pushed to your device.
9. On the **Set up your profile** screen, tap **Set up** and wait while a work profile is set up on the device.
10. On the unlock selection screen, choose a screen unlock method.
11. If you are prompted with the **Secure start-up** screen, tap **Yes** to require a password when the device starts.
12. Type a device password, and type it again to confirm it. Tap **OK**.
13. Select one of the options for how you want your notifications to show. Tap **Done**.
14. Create a UEM Client password and tap **OK**. If you are using BlackBerry Dynamics apps, you will also use this password to sign in to all of your BlackBerry Dynamics apps.
15. On the next screen, tap **Enroll** and follow the instructions on the screen if you want to set up fingerprint authentication for the UEM Client and any BlackBerry Dynamics apps you have. Otherwise, tap **Cancel**.
16. If you are signed out of your device, unlock your device to complete the BlackBerry UEM activation.
17. If you are prompted, tap **OK** to allow the connection to BlackBerry Secure Connect Plus and wait while the connection is turned on.
18. If you are prompted, follow the instructions on the screen to install work apps on your device.
19. If necessary, open the email app that your organization wants you to use (for example, BlackBerry Hub) and follow the instructions to set up email on your phone.

After you finish: To verify that the activation process completed successfully, perform one of the following actions:


- In the UEM Client, tap **⋮** > **About**. In the **Activated Device** section, verify that the device information and the activation time stamp are present.
- In the BlackBerry UEM Self-Service console, verify that your device is listed as an activated device. It can take up to two minutes for the status to update after you activate the device.

Activate an Android device with the MDM controls activation type

Note: These steps apply only to devices that are assigned the MDM controls activation type. This activation type is deprecated for devices with Android 10. Attempts to activate Android 10 and later devices with the MDM controls activation type will fail. For more information, visit <https://support.blackberry.com/community> to read article 48386.

Send the following activation instructions to the device user.

1. On the device, install the BlackBerry UEM Client from Google Play.
2. Open the UEM Client.
3. Read the license agreement and tap the **I accept the License Agreement** checkbox.
4. Do one of the following:

Task	Steps
Use a QR Code to activate the device	<ol style="list-style-type: none"> a. Tap . b. Tap Allow to allow the UEM Client to take pictures and record video. c. Scan the QR Code in the activation email message that you received.
Manually activate the device	<ol style="list-style-type: none"> a. Type your work email address. Tap Next. b. Type your activation password. Tap Activate My Device. c. If necessary, type the server address. You can find the server address in the activation email message you received or in BlackBerry UEM Self-Service. Tap Next.

Task

Steps

d. If necessary, type your username and activation password. Tap **Next**.

5. Tap **Next**.
6. Tap **Activate** to activate the device administrator. You must activate the device administrator to access work data on your device.
7. If you are prompted, tap **OK** to allow the connection to BlackBerry Secure Connect Plus and wait while the connection is turned on.
8. If you are prompted, follow the instructions on the screen to install work apps on your device.

After you finish: To verify that the activation process completed successfully, perform one of the following actions:

- In the UEM Client, tap **⋮** > **About**. In the **Activated Device** section, verify that the device information and the activation time stamp are present.
- In the BlackBerry UEM Self-Service console, verify that your device is listed as an activated device. It can take up to two minutes for the status to update after you activate the device.

Activate a device using a QR Code

QR Code activation is supported on iOS and Android devices.

To activate devices using a QR Code, send the following instructions to the device user.

Before you begin: You need a QR Code. You can find it in the activation email that you received from your administrator, or you can generate one in BlackBerry UEM Self-Service.

1. On the device, install the BlackBerry UEM Client app. For iOS devices, download the app from the App Store. For Android devices, download the app from Google Play.
2. On the device, tap **UEM Client**.
3. Read the license agreement and tap **I Agree**.
4. Scan the QR Code that you received in the activation email or that you generated in BlackBerry UEM Self-Service.
5. If you are prompted to enter the password for your email account or the passcode for your device, follow the instructions on the screen.

After you finish: To verify that the activation process completed successfully, you can perform one of the following actions:

- On the device, open the BlackBerry UEM Client app and tap **About**. In the **Activated Device and Compliance Status** sections, verify that the device information and the activation time stamp are present.
- In BlackBerry UEM Self-Service, verify that your device is listed as an activated device. It can take up to two minutes for the status to update after you activate the device.

Managing and monitoring activated Android devices

After devices are activated and managed by an IT policy and profiles, you have several features available to control users' devices.

You have the following options:

Option	Description
Control which software updates are installed on devices and the timing of updates	<p>You can use a the device SR requirements profile to specify if and when OS updates are installed on the following devices:</p> <ul style="list-style-type: none"> • Android Enterprise devices that have a Work space only activation • Samsung Knox devices <p>For more information, see the Administration content</p> <p>You can use Compliance profiles to specify restricted OS versions. For more information, see the Administration content.</p>
Turn on location settings and locate a device	<p>You can turn on location settings to track the location of Android devices.</p> <p>For more information, see the Administration content.</p>
Retrieve device logs	<p>You can retrieve logs from devices for monitoring and troubleshooting purposes.</p> <p>For more information, see the Administration content.</p>
Deactivate a device	<p>When you or a user deactivates a device, the connection between the device and the user account in BlackBerry UEM is removed. You can't manage the device and the device is no longer displayed in the management console. The user can't access work data on the device.</p> <p>You can deactivate a device using the "Delete all device data" or "Delete only work data" command.</p> <p>Users can deactivate an Android device by selecting Deactivate My Device on the About screen in the BlackBerry UEM Client app.</p>

Commands for Android devices

Command	Description	Activation types
View device report	This command displays detailed information about a device. You can export and save the device report on your computer. For more information, see View and save a device report .	All (except BlackBerry 2FA)
View device actions	This command displays any actions that are in progress on a device. For more information, see Viewing device actions .	All (except BlackBerry 2FA)

Command	Description	Activation types
Lock device	<p>This command locks the device. The user must type the existing device password to unlock the device. If a device is temporarily lost, you might use this command.</p> <p>When you send this command, the device locks only if there is an existing device password. Otherwise, no action is taken on the device.</p>	<p>MDM controls</p> <p>Work and personal - full control (Android Enterprise)</p> <p>Work and personal - user privacy (Android Enterprise)</p> <p>Work space only (Android Enterprise)</p>
Delete all device data	<p>This command deletes all user information and app data that the device stores, including information in the work space and returns the device to factory default settings.</p> <p>If the device is unable to connect to BlackBerry UEM when you send this command, you can either cancel the command or remove the device from the console. If the device connects to BlackBerry UEM after you remove it, only the work data is deleted from the device, including the work space, if applicable.</p> <p>To send this command to multiple devices, see Send a bulk command.</p>	<p>MDM controls</p> <p>Work and personal - full control (Android Enterprise)</p> <p>Work and personal - full control (Samsung Knox)</p> <p>Work space only - (Samsung Knox)</p>
Delete only work data	<p>This command deletes work data, including the IT policy, profiles, apps, and certificates that are on the device and deactivates the device. If the device has a work space, the work space information and the work space are deleted from the device. For more information, see Deactivating devices.</p> <p>When you use this command on Android Enterprise Work and personal - user privacy devices, you can type a reason that appears in the notification on the user's device to explain why the work profile was deleted.</p> <p>If the device is unable to connect to BlackBerry UEM when you send this command, you can either cancel the command or remove the device from the console. If the device connects to BlackBerry UEM after you remove it, the work data is deleted from the device, including the work space, if applicable.</p> <p>To send this command to multiple devices, see Send a bulk command.</p>	<p>MDM controls</p> <p>Work and personal - user privacy (Android Enterprise)</p> <p>Work and personal - user privacy (Samsung Knox)</p> <p>Work and personal - full control (Samsung Knox)</p> <p>Work space only - (Samsung Knox)</p>

Command	Description	Activation types
Unlock device and clear password	<p>This command unlocks the device and prompts the user to create a new device password. If the user skips the "Create device password" screen, the previous password is retained. You can use this command if a user forgets the device password.</p> <p>Note: This command is not supported on non-Samsung devices that are activated with MDM controls.</p>	<p>MDM controls</p> <p>Work and personal - full control (Samsung Knox)</p> <p>Work and personal - user privacy (Samsung Knox)</p>
Specify device password and lock	<p>This command lets you create a device password and then lock the device. You must create a password that complies with existing password rules. To unlock the device, the user must type the new password.</p> <p>Note: This command is not supported on non-Samsung devices running Android 7.0 and later that are activated with MDM controls.</p> <p>Note: For the Work and personal - user privacy activation types, only BlackBerry devices powered by Android 8.x and later support this command.</p>	<p>MDM controls</p> <p>Work and personal - full control (Samsung Knox)</p> <p>Work space only (Android Enterprise)</p> <p>Work and personal - full control (Android Enterprise)</p> <p>Work and personal - user privacy (Android Enterprise)</p>
Reset work space password	<p>This command deletes the current work space password from the device. When the user opens the work space, the device prompts the user to set a new work space password.</p>	<p>Work and personal - full control (Samsung Knox)</p> <p>Work and personal - user privacy - (Samsung Knox)</p> <p>Work space only - (Samsung Knox)</p>
Specify work space password and lock	<p>You can specify a work profile password and lock the device. When the user opens a work app, they must type the password that you specified.</p>	<p>Work and personal - user privacy (Android Enterprise)</p> <p>Work and personal - full control (Android Enterprise)</p>
Disable/enable work space	<p>This command disables or enables access to the work space apps on the device.</p>	<p>Work and personal - full control (Samsung Knox)</p> <p>Work and personal - user privacy - (Samsung Knox)</p> <p>Work space only - (Samsung Knox)</p>
Deactivate BlackBerry 2FA	<p>This command deactivates devices that are activated with the BlackBerry 2FA activation type. The device is removed from BlackBerry UEM and the user can't use the BlackBerry 2FA feature.</p>	<p>BlackBerry 2FA</p>

Command	Description	Activation types
Wipe apps	<p>This command wipes data from all Microsoft Intune-managed apps on the device. The apps are not removed from the device.</p> <p>For more information, see Wipe apps managed by Microsoft Intune</p>	All (except BlackBerry 2FA)
Update device information	<p>This command sends and receives updated device information. For example, you can send newly updated IT policy rules or profiles to a device, and receive updated information about a device such as OS version or battery level.</p> <p>To send this command to multiple devices, see Send a bulk command.</p>	All (except BlackBerry 2FA)
Request bug report	<p>This command sends a request to the device for the client logs. The device user must accept or decline the request.</p>	<p>Work space only (Android Enterprise)</p> <p>Work and personal - full control (Android Enterprise)</p>
Restart device	<p>This command sends a request to the device to restart. A message displays to the user that the device will restart in one minute. The device user has the option to snooze the restart for 10 minutes.</p>	<p>Work space only (Android Enterprise)</p> <p>Work and personal - full control (Android Enterprise)</p>
Remove device	<p>This command removes the device from BlackBerry UEM but does not remove data from the device. The device may continue to receive email and other work data.</p> <p>This command is intended for devices that have been irretrievably lost or damaged and are not expected to contact the server again. If a device that has been removed attempts to contact BlackBerry UEM, the user receives a notification and the device won't be able to communicate with BlackBerry UEM unless it is reactivated.</p> <p>To send this command to multiple devices, see Send a bulk command.</p>	All (except BlackBerry 2FA)

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