

BlackBerry UEMManaging device features

Administration

12.11

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Managing device features and behavior

You have several options for controlling device behavior. You can use profiles and IT policies to turn on or limit the use of many features. You can also send commands to devices to initiate various actions.

You can specify settings for different device types in the same IT policy or profile and then assign the IT policy or profile to user accounts, user groups, or device groups.

Managing devices with IT policies

You can use IT policies to manage the security and behavior of devices in your organization. An IT policy is a set of rules that control features and functionality on devices. You can configure rules for BlackBerry 10, iOS, macOS, Android, and Windows devices in the same IT policy. The device OS determines the list of features that can be controlled using IT policies and the device activation type determines which rules in an IT policy apply to a specific device. Devices ignore rules in an IT policy that to not apply to them.

BlackBerry UEM includes a Default IT policy with preconfigured rules for each device type. If no IT policy is assigned to a user account, a user group that a user belongs to, or a device group that a user's devices belong to, BlackBerry UEM sends the Default IT policy to a user's devices. BlackBerry UEM automatically sends an IT policy to a device when a user activates it, when you update an assigned IT policy, or when a different IT policy is assigned to a user account or device.

BlackBerry UEM synchronizes daily with the BlackBerry Infrastructure over port 3101 to determine whether any updated IT policy information is available. If updated IT policy information is available, BlackBerry UEM retrieves it, and stores the updates in the BlackBerry UEM database. Administrators with the "View IT policies" and "Create and edit IT policies" permissions are notified about the update when they log in.

For more information about the IT policy rules for each device type, download the Policy Reference Spreadsheet.

Restricting or allowing device capabilities

When you configure IT policy rules, you can restrict or allow device capabilities. The IT policy rules available for each device type are determined by the device OS and version and by the device activation type. For example, depending on the device and activation type, you can use IT policy rules to:

- · Enforce password requirements for the device or the work space on a device
- Prevent users from using device features, such as the camera
- Control connections that use Bluetooth wireless technology
- Control the availability of certain apps
- Require encryption and other security features

Depending on the device activation type, you can use IT policy rules to control the entire device, only the work space on a device, or both.

For Android 8.0 and later devices, you can create a device support message that displays on the device for some features when they are disabled by IT policy rules.

For more information about the IT policy rules for each device type, download the Policy Reference Spreadsheet.

Setting device password requirements

You use IT policy rules to set the password requirements for devices. You can set requirements for password length and complexity, password expiration, and the result of incorrect password attempts. The following topics explain the password rules that apply to the various device and activation types.

For more information about the IT policy rules, download the Policy Reference Spreadsheet.

Setting iOS password requirements

You can choose whether iOS devices must have a password. If you require a password, you can set the requirements for the password.

Note: iOS devices and some of the device password rules use the term "passcode." Both "password" and "passcode" have the same meaning.

Rule	Description
Password required for device	Specify whether the user must set a device password.
Allow simple value	Specify whether the password can contain repeated or sequential characters, such as DEFG or 3333.
Require alphanumeric value	Specify whether the password must contain both letters and numbers.
Minimum passcode length	Specify the minimum length of the password. If you enter a value that is less than the minimum required by the iOS device, the device minimum is used.
Minimum number of complex characters	Specify the minimum number of non-alphanumeric characters that the password must contain.
Maximum passcode age	Specify the maximum number of days that the password can be used.
Maximum auto-lock	Specify the maximum value that a user can set for the auto-lock time, which is the number of minutes of user inactivity that must elapse before a device locks. If set to "None," all supported values are available on the device. If the selected value is outside of the range supported by the device, the device will use the closest value it supports.
Passcode history	Specify the number of previous passwords that a device checks to prevent a user from reusing a recent password.
Maximum grace period for device lock	Specify the maximum value that a user can set for the grace period for device lock, which is the amount of time that a device can be locked before a password is required to unlock it. If set to "None," all values are available on the device. If set to "Immediately," the password is required immediately after the device locks.
Maximum failed password attempts	Specify the number of times that a user can enter an incorrect password before the device is wiped.
Allow password changes (supervised only)	Specify if a user can add, change, or remove the password.

For more information about the IT policy rules password rules, download the Policy Reference Spreadsheet.

Setting macOS password requirements

You can choose whether password rules for macOS devices apply to the device or the user and whether a password is required. If you require a password, you can set the requirements for the password.

Rule	Description
IT policy rules target	This rule specifies whether the IT policy rules for the password apply only to the assigned user's account or to the entire device.

Rule	Description
Password required for device	Specify whether the user must set a device password.
Allow simple password	Specify whether the password can contain repeated or sequential characters, such as DEFG or 3333.
Require alphanumeric value	Specify whether the password must contain both letters and numbers.
Minimum password length	Specify the minimum length of the password.
Minimum number of complex characters	Specify the minimum number of non-alphanumeric characters that the password must contain.
Maximum password age	Specify the maximum number of days that the password can be used before it expires and the user must set a new password.
Maximum auto-lock	Specify the maximum number of minutes of user inactivity that must elapse before a device locks. If set to "None," the user can select any value.
Password history	Specify the maximum number of previous passwords that a device checks to prevent a user from reusing a password.
Maximum grace period for device lock	Specify the maximum value that a user can set for the grace period for device lock, which is the amount of time that a device can be locked before a password is required to unlock it.
Maximum failed password attempts	Specify the number of times that a user can enter an incorrect password before a device is wiped.

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
MDM controls	Use the global password rules to set device password requirements.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.

Activation type	Supported password rules
Work space only (Android Enterprise)	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.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.
Work and personal -	Use the global password rules to set device password requirements.
user privacy (Android Enterprise) and Work and personal - full control (Android Enterprise)	Use the work profile password rules to set the password requirements for the work profile.
	For BlackBerry devices powered by Android, you can force the work profile and device passwords to be different.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.
MDM controls (KNOX MDM)	Use the KNOX MDM password rules to set device password requirements.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.
Work space only (Samsung KNOX)	Use the KNOX Premium - Workspace password rules to set password requirements for the work space.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.
Work and personal - full control (Samsung KNOX)	Use the KNOX MDM password rules to set device password requirements.
	Use the KNOX Premium - Workspace password rules to set password requirements for the work space.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.
Work and personal - user	You have no control over the device password.
privacy (Samsung KNOX)	Use the KNOX Premium - Workspace password rules to set password requirements for the work space.
	All other password rules are ignored by the device.
	Use a compliance profile to enforce the password requirements.

Android: Global password rules

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

- MDM controls (without Samsung KNOX)
- Work space only (Android Enterprise)

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

Rule	Description
Password requirements	Specify the minimum requirements for the password. You can choose one of the following options:
	 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	Specify the number of times that a user can enter an incorrect password before a device is wiped or deactivated.
	Devices with the "MDM controls" activation type are wiped.
	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.
Maximum inactivity time lock	Specify the number of minutes of user inactivity that must elapse before the device or work space locks. This rule is ignored if no password is required.
Password expiration timeout	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.
Password history restriction	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.
Minimum password length	Specify the minimum number of characters for a numeric, alphabetic, alphanumeric, or complex password.
Minimum uppercase letters required in password	Specify the minimum number of uppercase letters that a complex password must contain.
Minimum lowercase letters required in password	Specify the minimum number of lowercase letters that a complex password must contain.
Minimum letters required in password	Specify the minimum number of letters that a complex password must contain.
Minimum non-letters in password	Specify the minimum number of non-letter characters (numbers or symbols) that a complex password must contain.

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.

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

Rule	Description
Password requirements	Specify the minimum requirements for the work space password. You can choose one of the following options:
	 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 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.
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 number of minutes of user inactivity that must elapse before the device and work space lock. If you set both this rule and the Native OS "Maximum inactivity time lock" rule, the device and work space lock when either timer expires.
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.

Android: KNOX MDM password rules

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

- MDM controls (KNOX MDM)
- Work and personal full control (Samsung KNOX)

Devices with these activation types must have a device password.

If you are activating devices with Android Enterprise activation types to use Samsung KNOX Platform for Enterprise, use the Global password rules. The Samsung KNOX activation types and KNOX MDM IT policy rules will be deprecated in a future release. For more information, visit https://support.blackberry.com/ community to read article 54614.

Rule	Description
Password requirements	Specify the minimum requirements for the password. You can choose one of the following options: 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 Complex - allows you to set specific requirements for different character types
Minimum password length	Specify the minimum length of the password. The password must be at least 4 characters.
Minimum lowercase letters required in password	Specify the minimum number of lowercase letters that a complex password must contain.
Minimum uppercase letters required in password	Specify the minimum number of uppercase letters that a complex password must contain.
Minimum complex characters required in password	Specify the minimum number of complex characters (for example, numbers or symbols) that a complex password must contain. If you set this value to 1, then at least one number is required. If you set a value greater than 1, then at least one number and one symbol are required.
Maximum character sequence length	Specify the maximum length of an alphabetic sequence that is allowed in an alphabetic, alphanumeric, or complex password. For example, if the alphabetic sequence length is set to 5, the alphabetic sequence "abcde" is allowed but the sequence "abcdef" is not allowed. If set to 0, there are no alphabetic sequence restrictions.
Maximum inactivity time lock	Specify the period of user inactivity before the device locks (key guard lock). If the device is managed by multiple EMM solutions, the device uses the lowest value as the inactivity period. If the device uses a password, the user must provide the password to unlock the device. If set to 0, the device doesn't have an inactivity timeout.
Maximum failed password attempts	Specify the number of times that a user can enter an incorrect password before a device is wiped.
Password history restriction	Specify the maximum number of previous passwords that a device checks to prevent a user from reusing a recent password. If set to 0, the device does not check previous passwords.
Password expiration timeout	Specify the maximum amount of time that the device password can be used. After the specified amount of time elapses, the password expires and a user must set a new password. If set to 0, the password does not expire.
Allow password visibility	Specify whether the device password can be visible when the user is typing it. If this rule is not selected, users and third-party apps cannot change the visibility setting.

Rule	Description
Allow fingerprint authentication	Specify whether the user can use fingerprint authentication for the device.

Android: KNOX Premium - Workspace password rules

The KNOX Premium - Workspace password rules set the work space password requirements for devices with the following activation types:

- Work space only (Samsung KNOX)
- Work and personal full control (Samsung KNOX)
- Work and personal user privacy (Samsung KNOX)

Devices with these activation types must have a work space password.

If you are activating devices with Android Enterprise activation types to use Samsung KNOX Platform for Enterprise, use the Work profile password rules. The Samsung KNOX activation types and KNOX Premium IT policy rules will be deprecated in a future release. For more information, visit https://support.blackberry.com/community to read article 54614.

Rule	Description
Password requirements	Specify the minimum requirements for the password. You can choose one of the following options:
	 Numeric - the password must include at least one number Numeric Complex - the password must include at least one number, with no repeating (4444) or ordered (1234, 4321, 2468) sequences 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
Minimum lowercase letters required in password	Specify the minimum number of lowercase letters that a complex password must contain.
Minimum uppercase letters required in password	Specify the minimum number of uppercase letters that a complex password must contain.
Minimum complex characters required in password	Specify the minimum number of complex characters (for example, numbers or symbols) that a complex password must contain. At least three complex characters are required, including at least one number and one symbol.
Maximum character sequence length	Specify the maximum length of an alphabetic sequence that is allowed in an alphabetic, alphanumeric, or complex password. For example, if the alphabetic sequence length is set to 5, the alphabetic sequence "abcde" is allowed but the sequence "abcdef" is not allowed. If set to 0, there are no alphabetic sequence restrictions.

Rule	Description
Minimum password length	Specify the minimum length of the password. If you enter a value that is less than the minimum required by KNOX Workspace, the KNOX Workspace minimum is used.
Maximum inactivity time lock	Specify the period of user inactivity in the work space before the work space locks. If set to 0, the work space doesn't have an inactivity timeout.
Maximum failed password attempts	Specify the number of times that a user can enter an incorrect password before the work space is wiped. If set to 0, there are no restrictions on the number of times a user can enter an incorrect password.
Password history restriction	Specify the maximum number of previous passwords that a device checks to prevent a user from reusing a recent password. If set to 0, the device does not check previous passwords.
Password expiration timeout	Specify the maximum number of days that the password can be used. After the specified number of days elapses, the password expires and a user must set a new password. If set to 0, the password does not expire.
Minimum number of changed characters for new passwords	Specify the minimum number of changed characters that a new password must include compared to the previous password. If set to 0, no restrictions are applied.
Allow keyguard customizations	Specify whether a device can use keyguard customizations, such as trust agents. If this rule is not selected, keyguard customizations are turned off.
Allow keyguard trust agents	Specify whether a user can keep the work space unlocked for 2 hours after the maximum inactivity timeout value. If you do not set an inactivity timeout value, the user can perform this action by default.
Allow password visibility	Specify whether the device password can be visible when the user is typing it. If this rule is not selected, users and third-party apps cannot change the visibility setting.
Enforce two-factor authentication	Specify whether a user must use two-factor authentication to access the work space. For example, you can use this rule if you want the user to authenticate using a fingerprint and a password.
Allow fingerprint authentication	Specify whether the user can use fingerprint authentication to access the work space.

Setting Windows password requirements

You can choose whether Windows devices must have a password. If you require a password, you can set the requirements for the password.

Rule	Description
Password required for device	Specify whether the user must set a device password.
Allow simple password	Specify whether the password can contain repeated or sequential characters, such as DEFG or 3333.
Minimum password length	Specify the minimum length of the password. The password must be at least 4 characters.
Password complexity	 Specify the complexity of the password. You can choose the following options: Alphanumeric - the password must contain letters and numbers Numeric - the password must contain only numbers
Minimum number of character types	Specify the minimum number of character types that an alphanumeric password must contain. Select from the following options: 1. numbers required 2. numbers and lowercase letters required 3. numbers, lowercase letters, and uppercase letters required 4. numbers, lowercase letters, uppercase letters, and special characters required Password character requirements for Windows 10 computers and tablets are determined by the user account type, not this setting.
Password expiration	Specify the maximum number of days that the password can be used. If set to 0, the password does not expire.
Password history	Specify the number of previous passwords that a device checks to prevent a user from reusing a recent password. If set to 0, the device does not check previous passwords.
Maximum failed password attempts	Specify the number of times that a user can enter an incorrect password before the device is wiped. If set to 0, the device is not wiped regardless of how many times the user enters an incorrect password. This rule does not apply to devices that allow multiple user accounts, including Windows 10 computers and tablets.
Maximum inactivity time lock	Specify the period of user inactivity that must elapse before the device locks. If set to 0, the device does not lock automatically.
Allow idle return without password	Specify whether a user must type the password when the idle grace period ends. If this rule is selected, the user can set the password grace period timer on the device. This rule does not apply to Windows 10 computers and tablets.

Setting BlackBerry 10 password requirements

On BlackBerry 10 devices, the password rules affect the password for the work space. "Work space only" devices must have a password and you can set the requirements for the password.

You can choose whether "Work and personal - Corporate" and "Work and personal - Regulated" devices must have a work space password. If you require work space passwords, you can set the minimum requirements for the password, specify whether the device must also have a password, and specify whether the work space and device passwords can or must be the same.

Rule	Details
Password required for work space	Specify whether "Work and personal - Corporate" and "Work and personal - Regulated" devices require a password for the work space. "Work space only" devices must have a password.
Minimum password length	Specify the minimum length of the work space password. The password must be at least 4 characters.
Minimum password complexity	 Specify the minimum complexity of the work space password. You can choose one of the following options: No restriction Minimum 1 letter and 1 number Minimum 1 letter, 1 number, and 1 special character Minimum 1 upper case, 1 lower case, 1 number, and 1 special character Minimum 1 uppercase, 1 lowercase, and 1 number
Security timeout	Specify the period of user inactivity before the work space locks.
Maximum password attempts	Specify the number of times that a user can enter an incorrect password before the work space is wiped. On "Work and personal - Corporate" and "Work and personal - Regulated" devices, if the work space and device have the same password, the device is wiped.
Maximum password history	Specify the number of previous passwords that a device checks to prevent a user from reusing a recent work space password. If set to 0, the device does not check previous passwords.
Maximum password age	Specify the maximum number of days that the work space password can be used. If set to 0, the password does not expire.
Require full device password	Specify whether "Work and personal - Corporate" and "Work and personal - Regulated" devices require a password for the device as well as the work space.
Define work space and device password behavior	Specify whether the work space password and device password must be different, must be the same, or whether the user can choose if the passwords are the same.

For more information about the IT policy rules password rules, download the Policy Reference Spreadsheet.

Creating and managing IT policies

You can use the Default IT policy or create custom IT policies (for example, to specify IT policy rules for different user groups or device groups in your organization). If you plan to use the Default IT policy, you should review it and, if necessary, update it to make sure that the rules meet your organization's security standards.

Create an IT policy

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Click +.
- 4. Type a name and description for the IT policy.
- **5.** Click the tab for each device type in your organization and configure the appropriate values for the IT policy rules.

Hold the mouse over the name of a rule to display help tips.

6. Click Add.

After you finish: Rank IT policies

Copy an IT policy

You can copy existing IT policies to quickly create custom IT policies for different groups in your organization.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Click the name of the IT policy that you want to copy.
- 4. Click 1.
- **5.** Type a name and description for the new IT policy.
- **6.** Make changes on the appropriate tab for each device type.
- 7. Click Add.

After you finish: Rank IT policies

Rank IT policies

Ranking is used to determine which IT policy BlackBerry UEM sends to a device in the following scenarios:

- · A user is a member of multiple user groups that have different IT policies.
- · A device is a member of multiple device groups that have different IT policies.
- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Click **↓**↑.
- 4. Use the arrows to move IT policies up or down the ranking.
- 5. Click Save.

View an IT policy

You can view the following information about an IT policy:

- IT policy rules specific to each device type
- · List and number of user accounts that the IT policy is assigned to (directly and indirectly)
- · List and number of user groups that the IT policy is assigned to (directly)
- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Click the name of the IT policy that you want to view.

Change an IT policy

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Click the name of the IT policy that you want to change.
- 4. Click /.
- 5. Make changes on the appropriate tab for each device type.
- 6. Click Save.

After you finish: If necessary, change the IT policy ranking.

Remove an IT policy from user accounts or user groups

If an IT policy is assigned directly to user accounts or user groups, you can remove it from users or groups. If an IT policy is assigned indirectly by user group, you can remove the IT policy from the group or remove user accounts from the group. When you remove an IT policy from user groups, the IT policy is removed from every user that belongs to the selected groups.

Note: The Default IT policy can only be removed from a user account if you assigned it directly to the user.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Click the name of the IT policy that you want to remove from user accounts or user groups.
- 4. Perform one of the following tasks:

Task	Steps
Remove an IT policy from user accounts	 a. Click the Assigned to users tab. b. If necessary, search for user accounts. c. Select the user accounts that you want to remove the IT policy from. d. Click
Remove an IT policy from user groups	 a. Click the Assigned to groups tab. b. If necessary, search for user groups. c. Select the user groups that you want to remove the IT policy from. d. Click

Delete an IT policy

You cannot delete the Default IT policy. When you delete a custom IT policy, BlackBerry UEM removes the IT policy from the users and devices that it is assigned to.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Select the check boxes for the IT policies you want to delete.
- 4. Click .
- 5. Click Delete.

Export IT policies

You can export IT policies to an .xml file for auditing purposes.

Note:

Profiles that are associated with IT policies are not exported.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > IT policies.
- 3. Select the check boxes for the IT policies you want to export.
- 4. Click **→**.
- 5. Click Next.
- 6. Click Export.

How BlackBerry UEM chooses which IT policy to assign

BlackBerry UEM sends only one IT policy to a device and uses predefined rules to determine which IT policy to assign to a user and the devices that the user activates.

Assigned to	Rules
User account (view Summary tab)	 An IT policy assigned directly to a user account takes precedence over an IT policy assigned indirectly by user group. If a user is a member of multiple user groups that have different IT policies, BlackBerry UEM assigns the IT policy with the highest ranking. The Default IT policy is assigned if no IT policy is assigned to a user account directly or through user group membership.
Device (view device tab)	By default, a device inherits the IT policy that BlackBerry UEM assigns to the user who activates the device. If a device belongs to a device group, the following rules apply:
	 An IT policy assigned to a device group takes precedence over the IT policy that BlackBerry UEM assigns to a user account. If a device is a member of multiple device groups that have different IT policies, BlackBerry UEM assigns the IT policy with the highest ranking.

BlackBerry UEM might have to resolve conflicting IT policies when you perform any of the following actions:

- Assign an IT policy to a user account, user group, or device group
- Remove an IT policy from a user account, user group, or device group
- Change the IT policy ranking
- Delete an IT policy
- Change user group membership (user accounts and nested groups)
- Change device attributes
- Change device group membership
- Delete a user group or device group

Allowing BlackBerry 10 users to back up device data

You can control whether BlackBerry 10 users can back up and restore device data. You can permit users to back up only data from the personal space or to back up data from both the personal and work spaces. In the IT policy that you assign to users, you can select one or both of the following IT policy rules:

IT policy rule	Applicable activation types
Allow backup and restore of device	Work and personal - RegulatedWork space only
Allow backup and restore of work space	Work and personal - CorporateWork and personal - Regulated
	Note: For devices activated with "Work and personal - Regulated," this rule is applied only if the "Allow backup and restore of device" rule is selected.

If the IT policy that is assigned to users permits device backups, users can log in to BlackBerry Link to create or restore back up files.

When users create backup files using BlackBerry Link, the files are encrypted using encryption keys that BlackBerry UEM sends to BlackBerry 10 devices. The initial encryption keys are generated when you install or upgrade to BlackBerry UEM version 12.4. If necessary, you can generate new encryption keys, import encryption keys from another BlackBerry UEM instance, or export encryption keys.

Generate encryption keys

You can generate the encryption keys that are used to encrypt the backup files when users back up data from their BlackBerry 10 devices.

- 1. On the menu bar, click Settings > General settings > BB10 backup and restore.
- 2. Click Generate new key.
- 3. Click Generate.

After you finish: The encryption keys are sent to all BlackBerry 10 devices that are activated in BlackBerry UEM.

Export encryption keys

You can export encryption keys from BlackBerry UEM so that you can import the keys to another BlackBerry UEM instance.

- 1. On the menu bar, click Settings > General settings > BB10 backup and restore.
- 2. Click Export keys.
- 3. Type and confirm a password for the file.
- 4. Click Export.
- 5. Save the file.

Import encryption keys

You can import encryption keys to BlackBerry UEM that were generated and exported from a different BlackBerry UEM instance.

Before you begin: Verify that you have the password for the encryption keys file that you will import.

- 1. On the menu bar, click Settings > General settings > BB10 backup and restore.
- 2. Click Import keys.
- 3. Click **Browse** and navigate to the encryption keys file. Click **Open**.
- **4.** Type the password for the file.
- 5. Click Import.

Remove encryption keys

When you generate a new encryption key, any previously generated keys become useful for decryption purposes only. If you no longer need previously generated keys, you can remove them from BlackBerry UEM. The most recently generated encryption key cannot be removed.

- 1. On the menu bar, click Settings > General settings > BB10 backup and restore.
- 2. To remove a decryption key, beside the key, click X.
- 3. To confirm that you want to permanently remove the key, type "blackberry." Click Remove.

Creating device support messages

For Android 8.0 and later devices, you can create a support message that displays on the device when a feature is disabled by an IT policy. The message displays in the settings screen for the feature that is disabled. If you don't create a support message, the device displays the default message for the OS.

You can also specify an administrator support message that displays on the Device administrators settings screen. For example, you may want to display a disclaimer that your organization can monitor and manage apps and data in the work profile.

If your organization has users who work in more than one language, you can add support messages in additional languages and specify the default language that displays on devices that don't use one of the available languages.

Create device support messages

Device support messages are supported by Android 8.0 and later devices.

- 1. On the menu bar, click **Settings > General settings**.
- 2. Click Custom device support messages.
- 3. On the Custom device support messages tab, click Add.
- **4.** Select the language that you want the notification to appear in.
- **5.** In the **Disabled feature notice** field, type the notice that you want to display on the device when a feature is disabled. The message can be up to 200 characters.
- **6.** Optionally, in the **Administrator support message** field, type a notice that displays on the Device administrators settings screen.
- 7. If you want to create a message in more than one language, click **Add an additional language** and repeat steps 4 to 6 for each language.
- 8. If you added messages in more than one language, select **Default language** beside the language that you want to appear on devices that don't use one of the available languages. For example, if English and French are the available languages, and English is the default language, the English message appears on devices that use German.
- 9. Click Save.

Controlling BlackBerry OS device capabilities using IT policies

If the BlackBerry UEM domain supports BlackBerry OS (version 5.0 to 7.1) devices, you can use BlackBerry OS IT policies to control and manage BlackBerry OS devices, the BlackBerry Desktop Software, and the BlackBerry Web Desktop Manager in your organization's environment.

For more information on creating or updating IT policies for BlackBerry OS devices, download the BES5 Administration Guide.

Importing IT policy and device metadata updates

BlackBerry regularly sends IT policy and device metadata updates to BlackBerry UEM installations to provide information about updates from device and OS vendors.

For example, after device vendor releases a new device model, BlackBerry may send updated device metadata to BlackBerry UEM installations so that activation and compliance profiles include the new device model and it can be allowed or restricted by the profile. After Apple, Google, or Microsoft release OS updates, a new IT policy pack may be sent to BlackBerry UEM UEM installations to allow you to control the new features in the OS update.

By default, BlackBerry UEM installs these updates automatically. If your organization's security policy does not allow automatic updates, you can turn off the automatic updates and import updates into BlackBerry UEM manually.

You can also set up event notifications to inform administrators when IT policy and device metadata updates have been installed.

Import IT policy and device metadata updates manually

BlackBerry sends notifications when new updates are available. Update files are cumulative. If you miss an update, the next update installs all previously updated IT policy rules or device metadata.

Before you begin: Download the metadata or IT policy pack according to the instructions in the update notification email.

- 1. On the menu bar, click **Settings**.
- 2. Click Infrastructure > Import configuration data.
- 3. Perform one or both of the following actions:
 - To turn off automatic updates for IT policy packs, clear the Automatically update IT policy pack data check box
 - To turn off automatic updates for device metadata, clear the Automatically update device metadata check hox
- **4.** Click the appropriate **Browse** button to find the data file that you want to import and after you locate the file, click **Open**.

Enforcing compliance rules for devices

You can use compliance profiles to encourage users to follow your organization's standards for the use of devices. A compliance profile defines the device conditions that are not acceptable in your organization. For example, you can choose to disallow devices that are jailbroken, rooted, or have an integrity alert due to unauthorized access to the operating system.

A compliance profile specifies the following information:

- Conditions that would make a device non-compliant
- Email messages and device notifications that users receive if they violate the compliance conditions
- Actions that are taken if users do not correct the issue, including limiting a user's access to the organization's resources, deleting work data from the device, or deleting all data from the device

For Samsung KNOX devices, you can add a list of restricted apps to a compliance profile. However, BlackBerry UEM does not enforce the compliance rules. Instead, the restricted app list is sent to devices and the device enforces compliance. Any restricted apps cannot be installed, or if they are already installed, they are disabled. When you remove an app from the restricted list, the app is re-enabled if it is already installed.

BlackBerry UEM includes a Default compliance profile. The Default compliance profile does not enforce any compliance conditions. To enforce compliance rules, you can change the settings of the Default compliance profile or you can create and assign custom compliance profiles. Any user accounts that are not assigned a custom compliance profile are assigned the Default compliance profile.

Create a compliance profile

Before you begin:

- If you define rules to restrict or allow specific apps, add those apps to the restricted apps list. For more information, see Add an app to the restricted app list. Note that this does not apply to built-in apps for supervised iOS devices. To restrict built-in apps you must create a compliance profile and add the apps to the restricted app list in the profile. For more information, see iOS: Compliance profile settings.
- If you want to send an email notification to users when their devices are not compliant, edit the default compliance email, or create a new email template. For more information, see Create a template for compliance email notifications.

Note: If you define rules for a jailbroken or rooted OS, restricted OS versions, or restricted device models, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.

- 1. On the menu bar, click Policies and profiles.
- 2. Click Compliance > Compliance.
- 3. Click +
- **4.** Type a name and description for the compliance profile.
- 5. If you want to send a notification message to users when their devices become non-compliant, perform any of the following actions:
 - In the Email sent when violation is detected drop-down list, select an email template. To see the default compliance email, click Settings > General settings > Email templates.
 - In the Enforcement interval drop-down list, select how often BlackBerry UEM checks for compliance.
 - Expand Device notification sent out when violation is detected. Edit the message if necessary.

You can use variables to populate notifications with user, device, and compliance information. For more information, see Variables.

- **6.** Click the tab for each device type in your organization and configure the appropriate values for each profile setting. For details about each profile setting, see Compliance profile settings.
- 7. Click Add.

After you finish: If necessary, rank profiles.

Compliance profile settings

Compliance profiles are supported on the following device types:

- BlackBerry 10
- iOS
- macOS
- Android
- Windows

Common: Compliance profile settings

For each compliance rule that you select on the device tabs, choose the action that you want BlackBerry UEM to perform if a user's device is non-compliant.

Common: Compliance profile setting	Description
Enforcement action	This setting specifies the action that BlackBerry UEM takes on devices that are not compliant.
	Possible values:
	 Prompt for compliance Untrust: On iOS, macOS, Android, and Windows devices, this option prevents the user from accessing work resources and applications from the device. Data and apps are not deleted from the device.
	Note: Untrust is not supported for BlackBerry Dynamics apps.
	 Note: On iOS devices, the work email account is removed from the native email app. Users must restore the email account settings to the app after the device returns to compliance. Quarantine: On BlackBerry 10 devices, this option prevents the user from accessing work resources and applications from the device. Data and applications are not deleted from the device. Delete only work data Delete all data Remove from server: On BlackBerry 10, iOS, Android, and Windows devices, a device can be deactivated from BlackBerry UEM if it violates the "Out of contact" rule.
	 None: Enables a compliance violation to be identified but no action taken.
	The default value is "Prompt for compliance."
	On devices activated with "Work and personal - user privacy," you cannot delete all data on a user's device. If you select, "Delete all data" BlackBerry UEM performs the same action as "Delete only work data."
	For Samsung KNOX Workspace devices that only have a work space, if you select "Delete only work data," "Delete all data," or "Remove from server," all data will be deleted from the device.
	For supervised iOS devices, enforcement actions for the "Restricted app is installed" rule are not applicable. Users are automatically prevented from installing restricted apps.
Prompt method	 The possible values are: Both Email notification Device notification The default value is "Both." This setting is valid only if the "Enforcement action" is set to "Prompt for compliance." Device notifications are not supported on Windows 10 devices.

Common: Compliance profile setting	Description
Prompt count	The number of times the user is prompted to correct the breach. The default value is "3." This setting is valid only if the "Enforcement action" is set to "Prompt for compliance."
Prompt interval	The amount of time between prompts, in minutes, hours, or days. The default value is "4 hours." This setting is valid only if the "Enforcement action" is set to "Prompt for compliance."
Prompt interval expired action	 This setting defines what happens when the user has received the total number of prompts as defined in Prompt count, and the does not correct the breach. Possible values: None Untrust: On iOS, macOS, Android, and Windows devices, this option prevents the user from accessing work resources and applications from the device. Data and applications are not deleted from the device. Note: Untrust is not supported for BlackBerry Dynamics apps. Use an alternate enforcement action. Quarantine: On BlackBerry 10 devices, this option prevents the user from accessing work resources and applications from the device. Data and applications are not deleted from the device. Delete only work data Delete all data The default value is "Untrust." This setting is valid only if the "Enforcement action" is set to "Prompt for compliance".
Enforcement action for BlackBerry Dynamics apps	This setting defines what happens with BlackBerry Dynamics apps when a device is not in compliance. Possible values: Delete BlackBerry Dynamics app data Do not allow BlackBerry Dynamics apps to run The default value is "Delete BlackBerry Dynamics app data."

iOS: Compliance profile settings

See Common: Compliance profile settings for descriptions of the possible actions if you select a compliance rule.

iOS: Compliance profile setting	Description
Jailbroken OS	This setting creates a compliance rule to ensure that iOS devices are not jailbroken. A device is jailbroken when a user or attacker bypasses various restrictions on a device to modify the OS.
	If you select this setting, users will also be unable to complete new activations for jailbroken devices, regardless of the enforcement action that you set.
Non-assigned app is installed	This setting creates a compliance rule to ensure that devices do not have apps installed that were not assigned to the user.
	When you select this setting and a non-assigned app is installed on an iOS device, a warning message and a link is displayed on the Managed Devices tab. When you click the link, a list of apps that are putting the device out of compliance is displayed.
	This setting is not valid for devices activated with the User privacy activation type.
Required app is not installed	This setting creates a compliance rule to ensure that devices have required apps installed.
	When you select this setting and a required app is not installed on an iOS device, a warning message and a link is displayed on the Managed Devices tab. When you click the link, a list of applications that are putting the device out of compliance is displayed.
Restricted OS version is installed	This setting creates a compliance rule to ensure that devices do not have a restricted OS version installed as specified in this setting.
	You can select the restricted OS versions.
	If you select this setting, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.
Restricted device model detected	This setting creates a compliance rule to restrict device models as specified in this setting.
	Possible values:
	Allow selected device modelsDo not allow selected device models
	You can select the devices models that are allowed or restricted.
	If you select this setting, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.
Device is out of contact	This setting creates a compliance rule to ensure that devices are not out of contact with BlackBerry UEM for more than a specified amount of time.
Last contact time	This setting specifies the number days a device can be out of contact with BlackBerry UEM.
	This setting is valid only if the "Device out of contact" setting is selected.

iOS: Compliance profile setting	Description
BlackBerry Dynamics library version verification	This setting creates a compliance rule that allows you to select the BlackBerry Dynamics library versions that cannot be activated. You can select the blocked library versions.
BlackBerry	This setting creates a compliance rule to ensure that BlackBerry Dynamics apps
Dynamics connectivity verification	are not out of contact with BlackBerry UEM for more than a specified amount of time. The enforcement action is applied to BlackBerry Dynamics apps.
Base connectivity interval on authentication delegate apps	This setting specifies that the connectivity verification is based on when an authentication delegate app connects to BlackBerry UEM.
	This setting is valid only if the "Connectivity verification" setting is selected.
Last contact time	This setting specifies the number of days before the device must connect to BlackBerry UEM. Possible values: 8 hours 16 hours 1 day 2 days 3 days 7 days 14 days 30 days 60 days 90 days 180 days 180 days The default value is "2 days." This setting is valid only if the "Connectivity verification" setting is selected.

iOS: Compliance profile setting	Description
Restricted app is installed	This setting creates a compliance rule to prevent users from installing specific apps.
	To restrict apps, complete any of the following tasks:
	 Select an app from the restricted app list. For more information, see Add an app to the restricted app list.
	Do one of the following:
	 To select apps using the app name, click the Select apps from the app list option. To select apps using the app package ID, click the Specify the app package ID option. You should not use the package ID to add public apps. Add public apps to the restricted app list and then use the Select apps from the app list option to select the apps instead. Select a built-in app (supervised iOS devices only)
	To remove an app from the list, click X.
	When you select this setting and a restricted app is installed on an iOS device, a warning message and a link is displayed on the Managed Devices tab. When you click the link, a list of applications that are putting the device out of compliance is displayed.
	For supervised iOS devices, enforcement actions for this rule are not applicable. Users are automatically prevented from installing restricted apps. If restricted apps (either built-in or installed by the user) are already installed, those apps are automatically removed from the device.
Show only allowed apps on device	This setting creates a compliance rule that specifies a list of apps that are allowed to be installed on users' devices. All other apps are not allowed.
	To allow specific apps, complete one of the following tasks:
	 Select an app from the restricted app list. For more information, see Add an app to the restricted app list. Select a built-in app
	Some apps are included in the allowed list by default. To remove an app from the list, click \mathbf{X} .
	This setting is valid only for supervised iOSdevices.

macOS: Compliance profile settings

See Common: Compliance profile settings for descriptions of the possible actions if you select a compliance rule.

macOS: Compliance profile setting	Description
Restricted OS version is installed	This setting creates a compliance rule to ensure that devices do not have a restricted OS version installed as specified in this setting.
	You can select the restricted OS versions.
	If you select this setting, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.
Restricted device model detected	This setting creates a compliance rule to restrict device models as specified in this setting.
	Possible values:
	Allow selected device modelsDo not allow selected device models
	You can select the the devices models that are allowed or restricted.
	If you select this setting, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.
BlackBerry Dynamics library version verification	This setting creates a compliance rule that allows you to select the BlackBerry Dynamics library versions that cannot be activated. You can select the blocked library versions.
BlackBerry Dynamics connectivity verification	This setting creates a compliance rule to ensure that BlackBerry Dynamics apps are not out of contact with BlackBerry UEM for more than a specified amount of time. The enforcement action is applied to BlackBerry Dynamics apps.
Base connectivity interval on authentication delegate apps	This setting specifies that the connectivity verification is based on when an authentication delegate app connects to BlackBerry UEM. This setting is valid only if the "Connectivity verification" setting is selected.

macOS: Compliance profile setting	Description
Last contact time	This setting specifies the number of days before the device must connect to BlackBerry UEM.
	Possible values:
	 8 hours 16 hours 1 day 2 days 3 days 7 days 14 days 30 days 60 days 90 days 180 days 365 days The default value is "2 days." This setting is valid only if the "Connectivity verification" setting is selected.

Android: Compliance profile settings

See Common: Compliance profile settings for descriptions of the possible actions if you select a compliance rule.

Android: Compliance profile setting	Description
Rooted OS or failed attestation	This setting creates a compliance rule that specifies the actions that occur if a user or attacker gains access to the root level of an Android device. A device is rooted when a user or attacker gains access to the root level of the Android OS. This rule applies to the rooted state of the device the UEM Client, the BlackBerry Dynamics SDK or KNOX Attestation detects it. If you select this setting, users will be unable to complete new activations for rooted devices, regardless of the enforcement action that you set.
SafetyNet attestation failure	This setting creates a compliance rule that specifies the actions that occur if devices do not pass SafetyNet attestation.
	When you use SafetyNet attestation, BlackBerry UEM sends challenges to test the authenticity and integrity of Android devices and apps in your organization's environment.
	For these settings to take affect, you must enable the SafetyNet attestation feature in the management console under Settings > Attestation > SafetyNet attestation frequency.
	For more information about configuring SafetyNet attestation, refer to the information in the Administration content.

Android: Compliance profile setting	Description
Non-assigned app is installed	This setting creates a compliance rule to ensure that devices do not have apps installed that were not assigned to the user.
	When you select this setting and a non-assigned app is installed on an Android device, a warning message and a link is displayed on the Managed Devices tab. When you click the link, a list of applications that are putting the device out of compliance is displayed.
	For Android Enterprise and Samsung KNOX devices, users cannot install non-assigned apps in the work space. The enforcement actions do not apply.
	This setting is not valid for devices activated with User privacy.
Required app is not installed	This setting creates a compliance rule to ensure that devices have required apps installed.
	When you select this setting and a required app is not installed on an Android device, a warning message and a link is displayed on the Managed Devices tab. When you click the link, a list of applications that are putting the device out of compliance is displayed.
	For Android Enterprise devices the enforcement actions do not apply.
	For Samsung KNOX devices, required internal apps are automatically installed. The enforcement actions apply only to required public apps.
Restricted OS version is installed	This setting creates a compliance rule to ensure that devices do not have a restricted OS version installed as specified in this setting.
	You can select the restricted OS versions.
	If you select this setting, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.
Restricted device model detected	This setting creates a compliance rule to restrict device models as specified in this setting. Possible values:
	Allow selected device modelsDo not allow selected device models
	You can select the devices models that are allowed or restricted.
	If you select this setting, users will be unable to complete new activations for devices that are not compliant, regardless of the enforcement action that you set.
Device out of contact	This setting creates a compliance rule to ensure that devices are not out of contact with BlackBerry UEM for more than a specified amount of time.
	The device verifies compliance with this rule and can delete work data, delete all data, or deactivate itself from BlackBerry UEM if it's out of compliance.
	Last contact time
	This setting specifies the number days a device can be out of contact with BlackBerry UEM.

Android: Compliance	
profile setting	Description
Required security patch level is not installed.	This setting creates a compliance rule to ensure that devices have required security patches installed as specified in this setting.
	You can specify the device models and security patch dates. Devices running a security patch equal to or later than the specified security patch dates are considered compliant.
	Enforcement action for BlackBerry Dynamics apps
	This setting defines what happens with BlackBerry Dynamics apps when a device is not in compliance with the security patch level. Possible values:
	 Delete BlackBerry Dynamics app data Do not allow BlackBerry Dynamics apps to run None
	The default value is "Do not allow BlackBerry Dynamics apps to run".
	After an upgrade, if you have previously created a compliance profiles with the 'Required security patch level is not installed' rule enabled, the value is set to 'None'.
	This setting is valid only for devices running Android 6.0 and later.
	This setting is valid only for the latest BlackBerry Dynamics apps.
BlackBerry Dynamics library version verification	This setting creates a compliance rule that allows you to select the BlackBerry Dynamics library versions that cannot be activated. You can select the blocked library versions.

Android: Compliance profile setting	Description	
BlackBerry Dynamics connectivity verification	This setting creates a compliance rule to ensure that BlackBerry Dynamics apps are not out of contact with BlackBerry UEM for more than a specified amount of time. The enforcement action is applied to BlackBerry Dynamics apps.	
	Base connectivity interval on authentication delegate apps	
	This setting specifies that the connectivity verification is based on when an authentication delegate app connects to BlackBerry UEM.	
	Last contact time	
	This setting specifies the number of days before the device must connect to BlackBerry UEM.	
	Possible values:	
	 8 hours 16 hours 1 day 2 days 3 days 7 days 14 days 30 days 60 days 90 days 180 days 365 days 	
Restricted app is installed	This setting creates a compliance rule to ensure that devices do not have restricted apps installed. To restrict apps, see Add an app to the restricted app list.	
	For Android Enterprise devices, users cannot install restricted apps in the work space. The enforcement actions do not apply.	
	For Samsung KNOX devices, restricted apps in the work space are automatically disabled. The enforcement actions do not apply.	
	This setting is not valid for devices activated with User privacy.	
	When you select this setting and a restricted app is installed on an Android device, a warning message and a link is displayed on the Managed Devices tab. When you click the link, a list of applications that are putting the device out of compliance is displayed.	
Password does not meet complexity requirements	This setting creates a compliance rule to ensure that the user has set device or work space passwords that meet the complexity requirements defined in the IT policy assigned to them.	
Enforce compliance actions in the personal space	For Samsung KNOX devices, you can select this setting to prevent users from installing a restricted app in the personal space as well as the work space.	

Windows: Compliance profile settings

See Common: Compliance profile settings for descriptions of the possible actions if you select a compliance rule.

Windows: Compliance profile setting	Description	
Required app is not installed	This setting creates a compliance rule to ensure that devices have required apps installed.	
	Internal app dispositions can't be monitored.	
Restricted OS version is installed	This setting creates a compliance rule to ensure that devices do not have a restricted OS version installed as specified in this setting.	
	You can select the restricted OS versions.	
Restricted device model detected	This setting creates a compliance rule to restrict device models as specified in this setting.	
	Possible values:	
	Allow selected device modelsDo not allow selected device models	
	You can select the device models that are allowed or restricted.	
Device out of contact	This setting creates a compliance rule to ensure that devices are not out of contact with BlackBerry UEM for more than a specified amount of time.	
BlackBerry Dynamics library version	This setting creates a compliance rule that allows you to select the BlackBerry Dynamics library versions that cannot be activated.	
verification	You can select the blocked library versions.	
BlackBerry Dynamics connectivity verification	This setting creates a compliance rule to ensure that BlackBerry Dynamics apps are not out of contact with BlackBerry UEM for more than a specified amount of time. The enforcement action is applied to BlackBerry Dynamics apps.	
Antivirus signature	This setting creates a compliance rule to ensure that devices have an antivirus signature enabled.	
Antivirus status	This setting creates a compliance rule to ensure that devices have antivirus software enabled.	
	You can select the vendors that are allowed.	
Firewall status	This setting creates a compliance rule to ensure that devices have a firewall enabled.	
Encryption status	This setting creates a compliance rule to ensure that devices require encryption.	
Windows update status	This setting creates a compliance rule to ensure that devices allow BlackBerry UEM to install Windows OS updates or notify users of required updates.	
Restricted app is installed	This setting creates a compliance rule to ensure that devices do not have restricted apps installed. To restrict apps, see Add an app to the restricted app list.	

Windows: Compliance profile setting	Description	
Grace period expired	This setting creates a compliance rule to specify actions that occur if the attestation grace period has expired.	
Attestation Identity Key not present	This setting creates a compliance rule to specify actions that occur if an AIK is not present on the device.	
Data Execution Prevention Policy is disabled	This setting creates a compliance rule to specify actions that occur if the DEP policy is disabled on the device.	
BitLocker is disabled	This setting creates a compliance rule to specify actions that occur if BitLocker is disabled on the device.	
Secure Boot is disabled	This setting creates a compliance rule to specify actions that occur if Secure Boot is disabled on the device.	
Code integrity is disabled	This setting creates a compliance rule to specify actions that occur if the Code Integrity feature is disabled on the device.	
Device is in safe mode	This setting creates a compliance rule to specify actions that occur if the device is in safe mode.	
Device is in Windows preinstallation environment	This setting creates a compliance rule to specify actions that occur if the device is in the Windows preinstallation environment.	
Early launch antimalware driver is not loaded	This setting creates a compliance rule to specify actions that occur if the early launch antimalware driver is not loaded.	
Virtual Secure Mode is disabled	This setting creates a compliance rule to specify actions that occur if Virtual Secure Mode is disabled.	
Boot debugging is enabled	This setting creates a compliance rule to specify actions that occur if boot debugging is enabled.	
OS kernel debugging is enabled	This setting creates a compliance rule to specify actions that occur if OS kernel debugging is enabled.	
Test signing is enabled	This setting creates a compliance rule to specify actions that occur if test signing is enabled.	
Boot manager revision list is not the expected version	This setting creates a compliance rule to specify actions that occur if the boot manager revision list is not the expected version.	
Code Integrity revision list is not the expected version	This setting creates a compliance rule to specify actions that occur if the code integrity revision list is not the expected version.	

Windows: Compliance profile setting	Description
Code Integrity policy hash is present and is not an allowed value	This setting creates a compliance rule to specify actions that occur if the code integrity policy hash is present and is not an allowed value.
Custom Secure Boot configuration policy hash is present and is not an allowed value	This setting creates a compliance rule to specify actions that occur if the Custom Secure Boot configuration policy hash is present and is not an allowed value.
PCR value is not an allowed value	This setting creates a compliance rule to specify actions that occur if the PCR value is not an allowed value.

BlackBerry 10: Compliance profile settings

See Common: Compliance profile settings for descriptions of the possible actions if you select a compliance rule.

BlackBerry 10: Compliance profile setting	Description	
Integrity alert	This setting creates a compliance rule if an attacker discovered how to obtain root access or escalated privileges on a BlackBerry 10 device.	
Restricted software release is installed	This setting creates a compliance rule to ensure that devices do not use a restricted software release as specified in a device SR requirements profile. For more information see, Create a device SR requirements profile for BlackBerry 10 devices. This rule does not apply to devices with the Work and personal - Corporate activation type.	
Restricted OS version is installed	This setting creates a compliance rule to ensure that devices do not have a restricted OS version installed as specified in this setting. You can specify the restricted OS versions.	
Restricted device model detected	This setting creates a compliance rule to restrict device models as specified in this setting. Possible values: Allow selected device models Do not allow selected device models You can select the the devices models that are allowed or restricted.	
Device out of contact	This setting creates a compliance rule to ensure that devices are not out of contact with BlackBerry UEM for more than a specified amount of time.	

BlackBerry 10: Compliance profile setting	Description	
Last contact time	This setting specifies the number days a device can be out of contact with BlackBerry UEM.	
	This setting is valid only if the "Device out of contact" setting is selected.	

Managing BlackBerry Dynamics compliance profiles

BlackBerry Dynamics compliance profiles are imported from Good Control when you synchronize Good Control with BlackBerry UEM. You cannot edit BlackBerry Dynamics compliance profiles, but they can be used as a reference when you are creating new compliance profiles in BlackBerry UEM. Users that were assigned to a compliance profile in Good Control remain assigned to the same profile after they are synchronized with BlackBerry UEM. When a user is assigned to a BlackBerry Dynamics compliance profile, the BlackBerry Dynamics compliance profile takes precedence over any BlackBerry Dynamics rules in the BlackBerry UEM compliance profiles that a user may also be assigned to.

Setting	Description	
Jailbroken OS	This setting specifies the actions that occur if a user or attacker bypasses various restrictions on a device to modify the OS, installs unapproved apps, or obtains elevated permissions and the actions that occur for BlackBerry Dynamics apps if a jailbroken OS is used.	
OS version verification	This setting specifies the versions of the OS that are allowed and restricted and the actions that occur for BlackBerry Dynamics apps if a restricted OS is installed on a device.	
Hardware model verification	This setting specifies the hardware models that are allowed and restricted and the actions that occur for BlackBerry Dynamics apps if a restricted hardware model is being used.	
BlackBerry Dynamics library version verification	This setting specifies the BlackBerry Dynamics libraries that can be used and the actions that occur for BlackBerry Dynamics apps if a device is using a disallowed version of the library.	
Connectivity verification	This setting specifies whether a device must connect to BlackBerry UEM within a specified number of days and the actions that occur for BlackBerry Dynamics apps if a device does not connect to BlackBerry UEM.	
	The "Base connectivity interval on auth delegate app" subsetting specifies whether the app that is set as the authentication delegate manages the connectivity interval. If you use the authentication delegate to manage the connectivity interval, less frequently used apps will not be blocked or wiped if they do not connect to. BlackBerry UEM.	

Sending commands to users and devices

You can send various commands to manage user accounts and devices. The list of commands that are available depends on the device type and activation type. You can send commands to a specific user or device, or you can send commands to multiple users and devices using bulk commands.

For example, you can use commands in the following circumstances:

- If a device is temporarily misplaced, you can send a command to lock the device or delete work data from the
 device.
- If you want to redistribute a device to another user in your organization, or if a device is lost or stolen, you can send a command to delete all data from the device.
- When an employee leaves your organization, you can send a command to the user's personal device to delete only the work data.
- If a user forgets the work space password, you can send a command to reset the work space password.
- For users with supervised DEP devices, you can send a command to trigger an OS upgrade.

Send a command to a device

Before you begin:

If you want to set an expiry period for commands that delete data from devices in BlackBerry UEM, see Set an expiry time for commands.

- 1. On the menu bar, click Users > Managed devices.
- 2. Search for a user account.
- 3. In the search results, click the name of the user account.
- 4. Click the device tab.
- 5. In the Manage device window, select the command that you want to send to the device.

Send a bulk command

You can send a command to multiple user accounts or devices at the same time by selecting the users or devices from the user list and sending a bulk command.

Before you begin: If you want to set an expiry period for commands that delete data from devices, see Set an expiry time for commands.

- On the menu bar, click Users > Managed devices.
- 2. If necessary, filter the user list.
- 3. Perform one of the following actions:
 - Select the check box at the top of the user list to select all users and devices in the list.
 - Select the check box for each user and device that you want to include. You can use Shift+click to select multiple users.
- **4.** From the menu, click one of the following icons:

Icon	Description	
€9	Locate devices You can select a maximum of 100 devices at a time. For more information, see Locate a device.	
¥	Send email For more information, see Send an email to users.	
***	Send activation email For more information, see Send an activation email to multiple users.	
1	Add to user groups You can select a maximum of 200 devices at a time. For more information, see Add users to user groups.	
€	Export For more information, see Export the user list to a .csv file.	
	Remove devices To use this bulk command, you must be a Security Administrator. You can select a maximum of 200 devices at a time. For more information, see Commands for all device types.	
П	Update device information. For more information, see Commands for all device types.	
	Delete all device data To use this command, you must be a Security Administrator. You can select a maximum of 200 devices at a time. This bulk command is not supported for macOS devices. For more information, see Commands reference.	
	Delete only work data To use this command, you must be a Security Administrator. You can select a maximum of 200 devices at a time. For more information, see Commands reference.	
	Edit device ownership You can select a maximum of 100 devices at a time. For more information, see Change the device ownership label.	

Icon	Description
	Update OS
	You can force supervised iOS devices to install an available OS update. To use this command, you must be a Security Administrator. You can select a maximum of 200 devices at a time.
	For more information, see Update the OS on supervised iOS devices.
Change console passwords	
	You can send a BlackBerry UEM Self-Service password to multiple users at one time.
	For more information, see Send a BlackBerry UEM Self-Service password to multiple users.

Set an expiry time for commands

When you send the "Delete all device data" or "Delete only work data" command to a device, the device must connect to BlackBerry UEM for the command to complete. If the device is unable to connect to BlackBerry UEM, the command remains in pending status and the device is not removed from BlackBerry UEM unless you manually remove it. Alternatively, you can configure BlackBerry UEM to automatically remove devices when the commands do not complete after a specified amount of time.

- 1. On the menu bar, click **Settings > General settings > Delete command expiry**.
- 2. For one or both of Delete all device data and Delete only work data, select Automatically remove the device if the command has not completed.
- **3.** In the **Command expiration** field, type the number of days after which the command expires and the device is automatically removed from BlackBerry UEM.
- 4. Click Save.

Commands reference

The commands you can send to devices depends on the device type and activation type. Some commands can be sent to multiple devices at the same time.

Commands for all device types

Command	Description	
Update device information	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.	
	For macOS devices, the command is "Update desktop data".	
	For Windows 10 devices, the command sends a request to the device to create a health certificate validation request. The device sends the request to the Microsoft Health Attestation Service to check for compliance.	
	To send this command to multiple devices, see Send a bulk command.	

Command	Description	
View device actions	This command displays any actions that are in progress on a device. For more information, see Viewing device actions.	
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.	
Remove device	This command removes the device from BlackBerry UEM. The device may continue to receive email and other work data. To send this command to multiple devices, see Send a bulk command.	

Commands for iOS devices

Command	Description	Activation types
Delete all device data	This command deletes all user information and app data that the device stores and returns the device to factory default settings.	MDM controls
	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.	
	To send this command to multiple devices, see Send a bulk command.	
Delete only work data	This command deletes work data, including the IT policy, profiles, apps, and certificates that are on the device.	MDM controls User privacy
	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.	
	To send this command to multiple devices, see Send a bulk command.	
Lock device	This command locks a device. The user must type the existing device password to unlock the device. If a device is temporarily lost, you might use this command.	MDM controls
	When you send this command, the device locks only if there is an existing device password. Otherwise, no action is taken on the device.	
	This command is not supported for Apple TV devices.	

Command	Description	Activation types
Unlock and clear password	This command unlocks a device and deletes the existing password. The user is prompted to create a device password. You can use this command if the user forgets the device password.	MDM controls
	This command is not supported for Apple TV devices.	
Turn on Lost Mode	This command locks the device and lets you set a phone number and message to display on the device. For example, you can display contact information for when the device is found.	MDM controls
	After you send this command, you can view the location of the device from BlackBerry UEM.	
	This command is supported for supervised iOS devices.	
	This command is not supported for Apple TV devices.	
Deactivate BlackBe 2FA	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.	MDM controls
	This command is not supported for Apple TV devices.	
Update OS	This command forces devices to install an available OS update. Supported on the following devices:	MDM controls
	supervised devices running iOS 10.3 and latersupervised DEP devices	
	For more information, see Update the OS on supervised iOSdevices.	
	To send this command to multiple devices, see Send a bulk command.	
	This command is not supported for Apple TV devices.	
Restart device	This command forces devices to restart. Supported on supervised iOS devices that are running 10.3 and later. This command is not supported for Apple TV devices.	MDM controls
Turn off device	This command forces devices to turn off. Supported on supervised iOS devices that are running 10.3 and later.	MDM controls
	This command is not supported for Apple TV devices.	
Wipe apps	This command wipes data from all Microsoft Intune- managed apps on the device. The apps are not removed from the device.	MDM controls
	For more information, see Wipe apps managed by Microsoft Intune	

Commands for macOS devices

Command	Description	Activation types
Lock desktop	This command allows you to set a PIN and lock the device.	MDM controls
Delete only work data	This command deletes work data, including the IT policy, profiles, apps, and certificates that are on the device, and optionally, deletes the device from BlackBerry UEM. To send this command to multiple devices, see Send a bulk command.	MDM controls
Delete all device data	This command deletes all user information and app data from the device. It returns the device to factory defaults, locks the device with a PIN that you set, and optionally, deletes the device from BlackBerry UEM. Not supported as a bulk command.	MDM controls

Commands for Android devices

Command	Description	Activation types
Delete all device data	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. 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.	MDM controls Work and personal - full control (Android Enterprise) Work and personal - full control (Samsung KNOX) Work space only - (Samsung KNOX)
	To send this command to multiple devices, see Send a bulk command.	
Delete only work data	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.	All (except BlackBerry 2FA)
	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.	
	To send this command to multiple devices, see Send a bulk command.	

Command	Description	Activation types
Lock device	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.	MDM controls Work and personal - full
	When you send this command, the device locks only if there is an existing device password. Otherwise, no action is taken on the device.	control (Samsung KNOX) Work and personal - full control (Android Enterprise)
		Work and personal - user privacy (Android Enterprise)
		Work space only (Android Enterprise)
Unlock device	This command unlocks the device and prompts the user	MDM controls
and clear password	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	Work and personal - full control (Samsung KNOX)
	device password.	Work and personal - user
	Note: This command is not supported on non-Samsung devices running Android 7.0 and later that are activated with MDM controls.	privacy (Samsung KNOX)
Specify device	This command lets you create a device password and then	MDM controls
password and lock	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.	Work and personal - full control (Samsung KNOX)
	Note: This command is not supported on non-Samsung devices running Android 7.0 and later that are activated	Work space only (Android Enterprise)
	with MDM controls. Note: For the Work and personal - user privacy activation	Work and personal - full control (Android Enterprise)
	types, only BlackBerry devices powered by Android 8.x and later support this command.	Work and personal - user privacy (Android Enterprise)
Reset work space password	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.	Work and personal - full control (Samsung KNOX)
		Work and personal - user privacy - (Samsung KNOX)
		Work space only - (Samsung KNOX)
Specify work space password and lock	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.	Work and personal - user privacy (Android Enterprise) Work and personal - full control (Android Enterprise)

Command	Description	Activation types
Disable/enable work space	This command disables or enables access to the work space apps on the device.	Work and personal - full control (Samsung KNOX)
		Work and personal - user privacy - (Samsung KNOX)
		Work space only - (Samsung KNOX)
Deactivate BlackBe 2FA	erryhis 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.	BlackBerry 2FA
Wipe apps	This command wipes data from all Microsoft Intune- managed apps on the device. The apps are not removed from the device.	All (except BlackBerry 2FA)
	For more information, see Wipe apps managed by Microsoft Intune	

Commands for Windows devices

Command	Description	Activation types
Lock device	This command locks a device. The user must type the existing device password to unlock the device. If a device is temporarily lost, you might use this command.	MDM controls
	When you send this command, the device locks only if there is an existing device password. Otherwise, no action is taken on the device.	
	This command is supported only on devices running Windows 10 Mobile.	
Generate device password and lock	This command generates a device password and locks the device. The generated password is sent to the user by email. You can use the preselected email address, or specify an email address. The generated password complies with any existing password rules.	MDM controls
	This command is supported only on devices running Windows 10 Mobile.	

Command	Description	Activation types
Delete only work data	This command deletes work data, including the IT policy, profiles, apps, and certificates that are on the device, and optionally, deletes the device from BlackBerry UEM.	MDM controls
	The user account is not deleted when you send this command.	
	After you send this command, you are given the option of deleting the device from BlackBerry UEM. If the device is unable to connect to BlackBerry UEM, you can remove the device from BlackBerry UEM. If the device connects to BlackBerry UEM after you removed it, only the work data is deleted from the device, including the work space, if applicable.	
	To send this command to multiple devices, see Send a bulk command.	
Delete all device data	This command deletes all user information and app data that the device stores. It returns the device to factory defaults and optionally, deletes the device from BlackBerry UEM.	MDM controls
	After you send this command, you are given the option of deleting the device from BlackBerry UEM. If the device is unable to connect to BlackBerry UEM, you can remove the device from BlackBerry UEM. If the device connects to BlackBerry UEM after you removed it, only the work data is deleted from the device, including the work space, if applicable.	
	To send this command to multiple devices, see Send a bulk command.	
Restart desktop/	This command forces devices to restart.	MDM controls
device	This command is supported only on Windows 10 devices.	

Commands for BlackBerry 10 devices

Command	Description	Activation types
Specify device password, lock device and set message	This command lets you create a device password and set a home screen message, then locks the device. You must create a password that complies with existing password rules. When the user unlocks the device, the device prompts the user to accept or reject the new password.	Work and personal - Corporate Work space only Work and personal -
	If an IT policy requires the device to have the same password for the device and the work space, this command also changes the work space password.	Regulated

Command	Description	Activation types
Delete all device data	This command deletes all user information and app data that the device stores, including information in the work space. It returns the device to factory default settings, and optionally, deletes the device from BlackBerry UEM. 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. To send this command to multiple devices, see Send a bulk command.	Work and personal - Corporate Work space only Work and personal - Regulated
Specify work space password and lock	This command lets you create a work space password on the device and lock the work space. You must create a password that complies with existing password rules. To unlock the work space, the user must type the new password you create. If an IT policy requires the device to have the same password for the device and the work space, this command also changes the device password.	Work and personal - Corporate Work and personal - Regulated
Delete only work data	This command deletes work data, including the IT policy, profiles, apps, and certificates that are on the device, and optionally, deletes the device from BlackBerry UEM. If the device has a work space, the work space information is deleted and the work space is deleted from the device. 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. To send this command to multiple devices, see Send a bulk command.	Work and personal - Corporate Work and personal - Regulated

Commands for BlackBerry OS (version 5.0 to 7.1) devices

Command	Description
Specify device password and lock	This command lets you create a device password, then locks the device. You must create a password that complies with existing password rules. If you or a user turned on two-factor content protection, you cannot use this command.
Delete only work data	This command deletes work data, including the IT policy, email messages, contacts, and work service books that are on the device. All personal data remains on the device.

Command	Description
Delete all device data	This command permanently deletes all user information and application data that the device stores, and returns the device to factory defaults.
	You can send this command to a device that you want to distribute to another user, or to a device that is lost and that the user might not recover.
Resend service books	This command resends service books to a device. Service books specify which services are available on a BlackBerry OS device.
Resend IT policy	This command resends the assigned BlackBerry OS IT policy to a device.

Deactivating devices

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.

You can deactivate a device using the "Delete only work data" command. Users can deactivate their devices using the following methods:

- For iOS and Android devices, users can select Deactivate My Device on the About screen in the BlackBerry UEM Client app.
- For Windows 10 devices, users can select Settings > Accounts > Work access > Delete.
- For BlackBerry 10 devices, users can select Settings > BlackBerry Balance > Delete work space.

For devices that use KNOX MDM, when the device is deactivated, internal apps are uninstalled, and the uninstall option becomes available for any public apps that were installed from the app list as required.

For Android Enterprise devices that only have a work profile, if you deactivate a device you have the option to delete all data from the SD card and remove factory reset protection.

For Samsung KNOX Workspace devices that have been activated using the Work and personal - full control or Work space only activation types, deactivating the device deletes all data from the device or from the work space only. You can specify which data is wiped using the "Data wipe on deactivation" IT policy rule.

Controlling the software updates that are installed on devices

You can control the device software releases that are installed on Android Enterprise devices, Samsung KNOX devices, and BlackBerry 10 devices. For Android Enterprise devices, you can also set an update period for apps that are running in the foreground.

For Android Enterprise devices with Work space only and Work and personal - full control activations, you can specify whether the user can choose when to install available software updates or whether software updates are automatically installed. You can specify different rules depending on the device model and currently installed OS version. For all Android Enterprise devices, you can also set an update period for apps that are running in the foreground because, by default, when an app is running in the foreground, Google Play can't update it. You can also control how Google Play applies the changes to the device, for example, specifying whether the user can allow the change or whether the change occurs only when the device is connected to a Wi-Fi network.

On Samsung KNOX devices, you can use Enterprise Firmware Over the Air (E-FOTA) to control when firmware updates from Samsung are installed. Controlling firmware versions ensures that users' devices are using firmware versions that their apps support and comply with your organization's policies. You can use a device SR requirements profile to create firmware rules for the Samsung KNOX devices that are activated on UEM. You can schedule when firmware updates are installed and specify when forced updates must be installed. For more information about E-FOTA, visit https://seap.samsung.com/sdk/enterprise-fota.

On devices running BlackBerry 10 OS version 10.3.1 or later that are activated with Work and personal - Regulated or Work space only, you can limit which software release versions that BlackBerry 10 devices can have installed using a device SR requirements profile. You can also add exceptions to the global settings for specific device models. For example, you may want to test a software release before making it available to your organization.

On devices with MDM controls activations, you can't control when and how users update their device OS but you can use compliance profiles to restrict a device OS version. For all devices, to enforce a particular action if a restricted software release version is installed on a device, you must create a compliance profile and assign the compliance profile to users, user groups, or device groups. The compliance profile specifies the actions that occur if the user does not remove the restricted software release from the device.

You can't control the software releases installed on iOS devices, but you can can force supervised iOS devices to install an available update. For more information, see Update the OS on supervised iOS devices.

Create a device SR requirements profile for Android Enterprise devices

OS update rules apply only to Work space only and Work and personal - full control devices. App update rules apply to all Android Enterprise devices.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Compliance > Device SR requirements
- 3. Click +.
- 4. Type a name and description for the profile.
- 5. Click the Android tab.
- **6.** For Work space only and Work and personal full control devices, perform the following steps to set rules for OS updates:

- a) In the **OS update rule** table, click +.
- b) In the **Device model** drop-down list, select a device model.
- c) In the **OS version** drop-down list, select the installed OS version.
- d) In the **Update rule** list, select one of the following options:
 - Select **Default** to allow the user to choose when to install updates.
 - Select Update automatically to install updates without prompting the user.
 - Select Update automatically between to install updates between the times you specify without prompting the user. The user can choose to install updates outside of this window.
 - Select Postpone up to 30 days to block installation of updates for 30 days. After 30 days, the user can
 choose when to install an update. Depending on the device manufacturer and wireless service provider,
 security updates might not be postponed.
- e) When you are done, click Add.
- f) Repeat step 6 for each rule that you want to add.
- 7. To specify an update period for apps that are running in the foreground, select **Enable update period for apps** that are running in the foreground, and set the following options:
 - Start time (local device time): Specifies the time when apps will start to update.
 - **Duration**: Specifies the number of hours that you will allow apps to be updated.
- **8.** To specify how Google Play applies the changes to apps running in the foreground, select App auto update policy. Select one of the following options:
 - **User can allow**: The user is prompted to allow the apps to update on the device. Note that this is the default setting if you don't select the App auto update policy option
 - Always: The apps will always update. Note that for an app that is always running, such as BlackBerry UEM
 Client, BlackBerry Work, or BlackBerry Connectivity, if you don't select the Enable update period for apps
 that are running in the foreground option, the app will not update until the user manually updates the app on
 the device.
 - Wi-Fi only: The apps will update only when the device is connected to a Wi-Fi network. Note that for an app
 that is always running, such as BlackBerry UEM Client, BlackBerry Work, or BlackBerry Connectivity, if you
 don't select the Enable update period for apps that are running in the foreground option, the app will not
 update until the user manually updates the app on the device.
 - Disable: The apps will never update.

Note:

Note that if you select **Always**, **Wi-Fi only**, or **Disable**, the user cannot select a different option on the device. For example, if you select **Disable** in the profile, the user cannot enable an app to update on the device.

9. Click Add.

After you finish: If necessary, rank profiles.

Create a device SR requirements profile for Samsung KNOX devices

Before you begin: Verify that an E-FOTA license has been added to BlackBerry UEM. To use E-FOTA, you must Allow OTA updates in the associated Android IT policy in the BlackBerry UEM management console. (For information on troubleshooting KNOX E-FOTA error codes, visit https://seap.samsung.com/html-docs/e-fota/Content/error-codes.htm.)

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Compliance > Device SR requirements
- 3. Click +.

- 4. Type a name and description for the profile.
- 5. Click the Android tab.
- 6. In the Samsung device firmware rule table, click +.
- 7. In the Device model field, enter the device model or select one from the drop-down list.
- 8. In the Language drop-down list, select a language.
- 9. In the Carrier code field, enter the CSC code for the wireless service provider for the device.
- 10.Click Get firmware version.
- 11. Repeat steps 5 to 8 for each firmware rule that you want to add.
- 12. When you are done, click Add.
- 13.In the Samsung device firmware rules table, click Schedule beside the firmware version you added.
- 14.In the Schedule forced update dialog box, do the following:
 - a) In the **Schedule forced update between** fields, select a date range when the update must be installed. The date range must be 3 and 7 days. The default value is 7 days.
 - b) In the **Schedule forced update during the hours of** drop-down lists, specify when the forced update must be installed and the time zone for the user. The time range must be between 1 and 12 hours.

15.Click Save.

After you finish: If necessary, rank profiles.

Add an E-FOTA license

You can use Enterprise Firmware Over the Air (E-FOTA) to control when firmware updates from Samsung are installed on Samsung KNOX devices. Controlling firmware versions ensures that users' devices are using firmware versions that their apps support and comply with your organization's policies.

Before you can create a device SR requirements profile to control firmware versions, you must add an E-FOTA license in UEM.

- 1. On the menu bar, click **Licensing > Licensing summary**.
- 2. In the E-FOTA section, click Add license.
- 3. In the Add an E-FOTA license dialog box, enter the name, client ID, client secret, customer ID, and license key.
- 4. Click Save.

Create a device SR requirements profile for BlackBerry 10 devices

Before you begin: Create or edit a compliance profile that specifies the actions that occur if a restricted software release is installed on a device.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Compliance > Device SR requirements.
- 3. Click +.
- 4. Type a name and description for the profile.
- 5. Click the BlackBerry tab.
- **6.** To view a list of all of the BlackBerry 10 device software releases and corresponding service provider, device model, hardware ID, software release version, and revocation status information, click **View a list of device software releases**.
- 7. Select the **Make update required** check box to force users to update their devices to a software release defined in the profile.

- 8. In the **Grace period** field, type a value, in hours, can elapse before users must update their devices. If users do not update their devices within the grace period, or if you set the grace period to 0, the software update is automatically installed on devices.
- **9.** In the **Minimum software release version** drop-down list, select the minimum software version that a BlackBerry 10 device must be running.
- **10.**In the **Maximum software release version** drop-down list, select the maximum software version that a BlackBerry 10 device must be running.
- **11.**To override the global setting for a device model, perform the following tasks:
 - a) In the **Exceptions** table, click +.
 - b) In the **Disposition** drop-down list, select whether you want to allow or disallow software release versions. If you specify a disallowed range, and you have not specified an allowed range for a device model, a second column appears where you are required to specify an allowed range. If an allowed range is not specified the global settings no longer apply to the device model, and all software release versions, other than the exception, are allowed automatically.
 - c) In the Device model drop-down list, select the device model that you want to set the exception for.
 - d) In the Minimum drop-down list, select the minimum software version that you want to allow or disallow.
 - e) In the Maximum drop-down list, select the maximum software version that you want to allow or disallow.
 - f) If you disallowed a software release version, select the minimum software version that you want to allow.
 - g) If you disallowed a software release version, select the maximum software version that you want to allow.

12.Click Save.

13.Click Add.

After you finish: If necessary, rank profiles.

View users who are running a revoked software release

You can view a list of users who are running a revoked software release. A revoked software release is a software release that is no longer accepted by a service provider but might still be installed on a user's device.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Compliance > Device SR requirements.
- **3.** Click the name of the profile that you want to view.
- 4. Click the x users running revoked SR tab to see the list of users who are running a revoked software release.

Managing OS updates on devices with MDM controls activations

You can't control when software releases are installed on devices with MDM controls activations; however, you can use compliance profiles to help manage devices that users have updated to an OS version that your organization doesn't allow. For example, Android 10 and later devices do not support MDM controls activations. If users with Android 9.x devices upgrade to Android 10, some device management features will no longer work, leaving the device in a compromised state. You can use device groups and compliance profiles to detect Android devices with the MDM controls activation type and set compliance rules to take appropriate action, such as notifying the user, untrusting the device, or unmanaging the device.

Follow these steps to manage OS updates on devices with MDM controls activations.

Step	Action
	Create a device group that includes devices that conform to the following parameters:
1	MDM controls activation typeDevice OS version that you want to restrict
	If a user upgrades a device to the specified OS it automatically becomes part of the device group.
2	Create a compliance profile and specify the device OS version as a restricted OS version.
3	In the compliance profile, specify the enforcement action that is appropriate for your organization. For example, you can notify the user that their activation type is not supported by the device OS and recommend reactivating the device with a different activation type, or you can deactivate the device.
4	Assign the compliance profile to the device group.
5	Optionally, create an event notification to inform administrators when a device is out of compliance with the compliance profile.

View available updates for iOS devices

You can see if a software update is available for your users' iOS devices so that you can have them upgrade the software to the latest version.

- 1. On the menu bar, click Users > Managed devices.
- 2. Search for a user account.
- 3. In the search results, click the name of the user account.
- 4. Select the device tab.
- **5.** In the Activated device section, see if an update is available.

Update the OS on supervised iOS devices

You can force iOS devices to install an available OS update. To update the OS on multiple devices, see Send a bulk command.

You can also control the timing of iOS software updates using the "Delay software updates and "Software update delay period" IT policy rules. For more information, download the Policy Reference Spreadsheet.

- 1. On the menu bar, click Users > Managed devices.
- 2. Search for a user account.
- 3. In the search results, click the name of the user account.
- 4. Click the device tab.

- 5. In the left pane, if a software update is available, click **Update now**.
- **6.** In the drop-down list, select one of the following options:
 - Download and install: The update is automatically downloaded and installed on the device.
 - **Download only**: The update is automatically downloaded on the device and the user is prompted to install it
 - Install downloaded update: If the update is already downloaded on a device, it is automatically installed.
- 7. Click Submit.

Configuring communication between devices and BlackBerry UEM

The Enterprise Management Agent profile ensures that devices contact BlackBerry UEM regularly for app or configuration updates. When there is an update for a device, BlackBerry UEM prompts the device to contact BlackBerry UEM to receive the updates. If for any reason the device doesn't receive the prompt, the Enterprise Management Agent profile is used to make sure that the device contacts BlackBerry UEM at intervals that you specify.

You also use the Enterprise Management Agent profile to allow BlackBerry UEM to collect a list of personal apps on users' devices. To turn off the collection of personal apps, you must deselect the "Allow personal app collection" setting. For more information, see Turn off personal apps collection.

For BlackBerry 10 devices, the Enterprise Management Agent profile allows you to restrict which cipher suites from the SSL library are supported by the device. Restricting the supported cipher suites does not affect device communication with BlackBerry UEM, but it could affect communication with other servers in your organization, depending on the requirements of those servers.

You can assign an Enterprise Management Agent profile to users, user groups, and device groups.

Create an Enterprise Management Agent profile

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Policy > Enterprise Management Agent.
- 3. Click +.
- **4.** Type a name and description for the profile.
- **5.** Set the values for each device type as required by your organization.
- 6. Click Add.

After you finish: If necessary, rank profiles.

iOS: Enterprise Management Agent profile settings

Setting	Description
Enterprise Management Agent poll rate	Specify how often, in seconds, the device polls for Enterprise Management Agent server commands. The device polls only when the UEM Client is open on the device.
	Possible values:
	• 900 to 86400
	The default value is 3600.
Allow personal app collection	This setting specifies whether BlackBerry UEM receives a list of personal apps that are installed on users' devices.
	This setting is not supported on devices with user privacy activations.

Android: Enterprise Management Agent profile settings

Setting	Description
App changes	Specify how often, in seconds, the device checks for changes in installed apps. Possible values: • 3600 to 86400 seconds The default value is 3600.
Battery level threshold	Specify the percent battery level change (from 5 to 100) required before the device sends information back to BlackBerry UEM. Possible values: • 5 to 100 percent The default value is 20.
RAM free space threshold	Specify the required change in the amount of free memory in megabytes before the device sends information back to BlackBerry UEM. By default, the device does not send this information back to BlackBerry UEM.
Internal storage threshold	Specify the required change in the amount of internal free storage space in megabytes before the device sends information back to BlackBerry UEM. The default value is 250.
Memory card threshold	Specify the required change in the amount of external free space in megabytes before the device sends information back to BlackBerry UEM The default value is 500.
Enterprise Management Agent poll rate	Specify how often, in seconds, the device polls for Enterprise Management Agent server commands. Possible values: • Minimum: 900 The default value is 900.
Allow personal app collection	This setting specifies whether BlackBerry UEM receives a list of personal apps that are installed on users' devices. This setting is not supported on devices with user privacy activations.

Windows: Enterprise Management Agent profile settings

Setting	Description
Poll interval for device configuration updates	Specify, in minutes, how often the device polls for configuration updates when push notification is not available.

Setting	Description
Poll interval for the first set of retries	Specify, in minutes, the waiting time between attempts in the first set of retries if polling for device configuration updates fails.
Number of first retries	Specify the number of attempts in the first set of retries.
Poll interval for the second set of retries	Specify, in minutes, the waiting time between attempts in the second set of retries if polling for device configuration updates fails.
Number of second retries	Specify the number of attempts in the second set of retries.
Poll interval for the remaining scheduled retries	Specify, in minutes, the waiting time between subsequent attempts after the second set of retries if polling for device configuration updates fails.
Number of remaining scheduled retries	Specify the number of subsequent attempts after the second set of retries if polling for device configuration updates fails. If set to "0", the device continues to poll until a connection is successful or the device is deactivated.
Poll on user login	Specify whether the device starts a management session on any user login.
All users poll on first login	Specify whether the device starts a management session on first user login for all users.
Allow personal app collection	This setting specifies whether BlackBerry UEM receives a list of personal apps that are installed on users' devices.

BlackBerry 10: Enterprise Management Agent profile settings

Setting	Description
Enterprise Management Web Service polling	Specify how often, in seconds, the Enterprise Management Web Service on the device polls for configuration updates.
interval	Possible values:
	• 3600 to 86400
	The default value is 3600.
Fast polling interval	Specify how often, in seconds, the device polls for configuration updates when push notification is not available for fast polling (BPDS is not registered). • Minimum: 900
	The default value is 900.
Slow polling interval	Specify how often, in seconds, the device polls for configuration updates when push notification is available for slow polling (BPDS is registered). • Minimum: 900 The default value is 900.

Setting	Description
Allow personal app collection	This setting specifies whether BlackBerry UEM receives a list of personal apps that are installed on users' devices.
	This setting is not supported on devices with Work and personal - Corporate activations.
Configuration file (.json)	This setting allows you to specify a configuration file to restrict which cipher suites from the SSL library are supported by the device.
	Specify a configuration file only if you want to remove support for a cipher suite that has a security vulnerability and your organization's resources do not require that cipher suite for communication.
	Specifying a configuration file does not affect device communication with BlackBerry UEM but could impact communication with other servers in your organization, depending on the requirements of those servers.
	The configuration file must be in .json format.
	Example:
	<pre>{"tls": {"tls_protocols": ["TLSv1"], "tls_ciphersuites": [49200, 49196, 49192, 49188, 49172, 49162, 163, 159, 107, 106, 57, 56, 136, 135, 49202, 49198, 49194, 49190, 49167, 49157, 157, 61, 53, 132, 141, 49199, 49195, 49191, 49187, 49171, 49161, 162, 158, 103, 64, 51, 50, 154, 153, 69, 68, 49201, 49197, 49193, 49189, 49166, 49156, 156, 60, 47, 150, 65, 140, 49169, 49159, 49164, 49154, 5, 4, 138, 49170, 49160, 22, 19, 49165, 49155, 10, 139, 21, 18, 9, 20, 17, 8, 6, 3], "tls_curves": ["secp256r1", "secp521r1", "brainpoolP512r1", "brainpoolP384r1", "sect283r1", "sect409k1", "sect409r1", "sect283k1", "sect283r1", "secp224k1", "secp224r1", "secp192k1", "sect193r2", "sect163k1", "sect233r1", "sect193r1", "sect193r2", "sect163k1", "sect163r1", "sect193r1", "sect193r2", "sect163k1", "sect3484", "RSA+SHA512", "ECDSA +SHA384", "DSA+SHA384", "RSA+SHA384", "ECDSA+SHA256", "DSA +SHA256", "RSA+SHA256", "ECDSA+SHA11", "RSA+SHA11"], "tls_dh_min_key_bits":768, "tls_suiteb_mode": "SUITEB_OFF"}, "vpn": {"vpn_encr": ["aes128", "aes256", "aes128_icv16_gcm", "aes256_icv16_gcm", "3des", "aes129"], "vpn_dh": ["dh2", "dh13", "dh14", "dh15", "dh16", "dh17", "dh18", "dh19", "dh20", "dh21", "dh22", "dh23", "dh24", "dh25", "dh26"], "vpn_integ": ["sha1", "sha384", "sha512", "aes", "sha256"], "vpn_prf": ["sha1", "sha384", "sha512", "aes", "sha256"], "vpn_prf": ["sha1", "sha384", "sha512", "aes", "sha256"], "vpn_prf": ["sha1", "sha384", "sha512", "aes", "sha256"],</pre>

Displaying organization information on devices

You can configure BlackBerry UEM to display organization information and custom organization notices on devices.

For BlackBerry 10, iOS, macOS, Android, and Windows 10 devices, you can create custom organization notices and have them display during activation. For example, a notice could include the conditions that a user must follow to comply with your organization's security requirements. The user must accept the notice to continue the activation process. You can create multiple notices to cover different requirements and you can create separate versions of each notice to support different languages.

You can create device profiles to display information about your organization on devices. For iOS and Android devices, organization information is displayed in the BlackBerry UEM Client on the device. For Windows 10, the phone number and email address are displayed in the support information on the device. For BlackBerry 10 and Samsung KNOX devices, you can use the device profile to display the custom organization notice when the user restarts the device.

For BlackBerry 10, Samsung KNOX, and supervised iOS devices, you can also use the device profile to add a custom wallpaper image to display information for your users. For example, you can create an image that has your support contact information, internal website information, or your organization's logo. On BlackBerry 10 and Samsung KNOX devices, the wallpaper displays in the work space.

Where organization information is displayed	How to configure the organization information
Display an organization notice on activation for BlackBerry 10, iOS, macOS, Android, and Windows 10 devices	Create an organization notice and assign it to an activation profile.
Display an organization notice on restart for Samsung KNOX devices	Create an organization notice and assign it in the Android tab of the device profile. To change the notice that displays on device restart, you must update the device profile.
Display an organization notice on restart for BlackBerry 10 devices	Create an organization notice and assign it in the BlackBerry tab of a device profile. Verify that the "Display organization notice after device restart" IT policy rule is selected. To change the notice that displays on device restart, you must update the device profile.
	Note: The IT Policy rule applies only to the "Work space only" and "Work and personal - Regulated" activation types on devices that are running BlackBerry 10 OS version 10.3.1 and later.
Display organization information in the BlackBerry UEM Client on iOS and Android devices, or in the support information on Windows 10 devices	Type the information you want to display in the appropriate tab of the device profile.
In a wallpaper image on BlackBerry 10, Samsung KNOX, or supervised iOS devices	Select an image file in the appropriate tab of the device profile.

Create organization notices

You can create custom organization notices to display during activation of BlackBerry 10, iOS, macOS, Android, and Windows 10 devices.

BlackBerry 10 and Samsung KNOX devices can also display the organization notice when a user restarts the device.

- 1. On the menu bar, click **Settings**.
- 2. In the left pane, expand General settings.
- 3. Click Organization notices.
- **4.** Click + at the right side of the screen.
- 5. In the Name field, type a name for the organization notice.
- 6. Optionally, you can reuse text from an existing organization notice by selecting it in the **Text copied from** organization notice drop-down list.
- 7. In the Device language drop-down list, select the language to use as the default language for the organization
- **8.** In the **Organization notice** field, type the text of the organization notice.
- 9. Optionally, you can click Add an additional language multiple times to post the organization notice in more languages.
- 10.If you post the organization notice in more than one language, select the Default language option below one of the messages to make it the default language.
- 11.Click Save.

After you finish:

- To display the organization notice during activation, assign the organization notice to an activation profile.
- To display the organization notice when a Samsung KNOX device restarts, assign the organization notice to a device profile.
- To display the organization notice when a BlackBerry 10 device restarts, assign the organization notice to a device profile and select the "Display organization notice after device restart" IT policy rule.

Create a device profile

Before you begin: For BlackBerry 10 and Samsung KNOX devices, create organization notices.

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Custom > Device.
- 3. Click +.
- 4. Type a name and description for the profile. Each device profile must have a unique name.
- **5.** Perform one of the following tasks:

Task	Steps
Assign an organization notice to display on BlackBerry 10 or Samsung KNOX devices during device restart	 a. Click BlackBerry or Android. b. In the Assign organization notice drop-down list, select the organization notice that you want to display on devices.

Task	Steps
For iOSand Androiddevices, define the organization information to display in the BlackBerry UEM Client app.	a. Click iOS, Android, or Windows.b. Type the name, address, phone number, and email address for your organization.
For Windows 10, define the phone number and email address to display in the support information on devices.	

6. If necessary, perform the following tasks:

Task	Steps
Add a wallpaper image to the work space on BlackBerry 10 or Samsung KNOX devices	 a. Click BlackBerry or Android. b. In the Work space wallpaper section, click Browse. c. Select the image that you want to use for the wallpaper. d. Click Open.
Add a wallpaper image to supervised iOS devices	 a. Click iOS. b. In the Device wallpaper section, select whether the wall paper displays on the Home screen, Lock screen, or Both. c. Click Browse and select the image that you want to use for the wallpaper. d. Click Open. e. In the Set wallpaper for field, select where you want the wallpaper to display.

7. Click Add.

After you finish:

- To display the organization notice when a BlackBerry 10 device restarts, select the "Display organization notice after device restart" IT policy rule.
- If necessary, rank profiles.

Using location services on devices

You can use a location service profile to request the location of devices and view their approximate locations on a map. You can also allow users to locate their devices using BlackBerry UEM Self-Service. If you enable location history for iOS and Android devices, the devices must report location information periodically and administrators can view the location history.

Location service profiles use the location services on iOS, Android, and Windows 10 Mobile devices. Depending on the device and available services, location services may use information from GPS, cellular, and Wi-Fi networks to determine the location of the device.

Configure location service settings

You can configure the settings for location service profiles, such as the unit of speed that is displayed for a device when you view its location on a map. If you enable location history for iOS and Android devices, BlackBerry UEM stores the location history for 1 month by default.

- 1. On the menu bar, click **Settings > General settings > Location service**.
- 2. In the Location history age field, specify the number of days, weeks, or months that BlackBerry UEM stores the location history for devices.
- 3. In the **Displayed unit of speed** drop-down list, click **km/h** or **mph**.
- 4. Click Save.

Create a location service profile

You can assign a location service profile to user accounts, user groups, or device groups. Users must accept the profile before the management console or BlackBerry UEM Self-Service can display iOS and Android device locations on a map. Windows 10 Mobile devices automatically accept the profile.

Before you begin: Configure location service settings

- 1. On the menu bar, click Policies and profiles.
- 2. Click Protection > Location service.
- 3. Click +
- **4.** Type a name and description for the location service profile.
- 5. Optionally, clear the check box for any device type that you do not want to configure the profile for.
- 6. Perform any of the following tasks:

Task	Steps
Enable location history for iOS devices	a. On the iOS tab, verify that the Log device location history check box is selected.
	Note: BlackBerry UEM collects a device's location hourly and, if possible, when there has been a significant change in the device's location (for example, 500 meters or more).

Task	Steps
Enable location history for Android devices	a. On the Android tab, verify that the Log device location history check box is selected.
	b. In the Device location check distance field, specify the minimum distance that a device must travel before the device location is updated.
	c. In the Location update frequency field, specify how often the device location is updated.
	Note: Both the distance and frequency conditions must be met before the device location is updated.

7. Click Add.

After you finish: If necessary, rank profiles.

Locate a device

You can locate iOS, Android, and Windows 10 Mobile devices (for example, if a device is lost or stolen). Users must accept the location service profile before the management console can display iOS and Android device locations on a map. Windows 10 Mobile devices automatically accept the profile. Location history is available for iOS and Android devices if you enabled it in the profile.

Before you begin: Create and assign a location service profile.

- On the menu bar, click Users > Managed devices.
- 2. Select the check box for each device that you want to locate.
- 3. Click S.
- **4.** Find the devices on the map using the following icons. If an iOS or Android device does not respond with the latest location information and location history is enabled in the profile, the map displays the last known location of the device.
 - Current location: 9
 - Last known location:

You can click or hover over an icon to display location information, such as latitude and longitude and when the location was reported (for example, 1 minute ago or 2 hours ago).

- 5. To view the location history for an iOS or Android device, perform the following actions:
 - a) Click View location history.
 - b) Select a date and time range.
 - c) Click Submit.

Using Lost Mode for supervised iOS devices

You can enable and manage Lost Mode for supervised iOS devices. When a device is lost, enabling Lost Mode allows you to:

 Lock the device and set the message you want to display (for example, you can display contact information for when the device is found).

- · View the current location of the device without using a Location service profile.
- Track all devices that are in Lost Mode from the management console.

Turn on Lost Mode

Lost Mode is supported on supervised iOS devices.

- 1. On the menu bar, click **Users > Managed devices**.
- 2. Click on a device that you want to turn on Lost Mode for.
- 3. In the device tab, click Turn on Lost Mode.
- 4. In the Contact phone number and Message fields, enter the appropriate information.
- **5.** Optionally, select **Replace slide to unlock text** and enter the text to display.
- 6. Click Enable.

Locate a device in Lost Mode

Before you begin: Turn on Lost Mode

- 1. On the menu bar, click **Users > Managed devices**.
- 2. Click on a device that has Lost Mode turned on.
- 3. In the device tab, click Get device location.

Turn off Lost Mode

Before you begin: Turn on Lost Mode

- 1. On the menu bar, click Users > Managed devices.
- 2. Click on a device that has Lost Mode turned on.
- 3. In the device tab, click Turn off Lost Mode.

Using Activation Lock on iOS devices

The Activation Lock feature on iOS devices allows users to protect their devices if they are lost or stolen. When the feature is enabled, the user must confirm the Apple ID and password to disable Find My iPhone, erase the device, or reactivate and use the device.

To manage the Activation Lock feature in BlackBerry UEM:

- The device must be supervised.
- · The device must have an iCloud account configured.
- The device must have Find My iPhone or Find My iPad enabled.

When a device is activated on BlackBerry UEM, Activation Lock is disabled by default. You can enable it for each device individually, or you can enforce it using the IT policy. When you enable Activation Lock, BlackBerry UEM stores a bypass code that you can use to clear the lock so that the device can be erased and reactivated without the user's Apple ID and password.

Enable Activation Lock

Complete the following steps to enable Activation Lock for each device individually. If Activation Lock is enforced using the IT policy rule, it is already enabled.

Note: When enabling the Activation Lock feature, a short delay may occur between BlackBerry UEM and Apple.

Before you begin:

- The device must be supervised.
- The device must have an iCloud account configured.
- The device must have Find My iPhone or Find My iPad enabled.
- 1. On the menu bar, click Users.
- 2. Search for a user account.
- 3. In the search results, click the name of the user account.
- **4.** Click the device tab.
- 5. In the Manage device window, click Enable Activation Lock.

After you finish: To view the list of bypass codes for devices, see View the Activation Lock bypass code

Disable Activation Lock

Complete the following steps to disable Activation Lock for each device individually. If Activation Lock is enforced using an IT policy rule, you cannot disable it.

Note: When you enable the Activation Lock feature, a short delay may occur between BlackBerry UEM and Apple.

- 1. On the menu bar, click **Users**.
- 2. Search for a user account.
- 3. In the search results, click the name of the user account.
- **4.** Click the device tab.
- 5. In the Manage device window, select Disable Activation Lock.

View the Activation Lock bypass code

You can view the Activation Lock bypass code and the date that the bypass code was generated.

- 1. On the menu bar, click Users > Apple Activation Lock.
- 2. Search for a device.
- 3. In the search results, click the device.
- 4. If necessary, scroll to the right of the main screen to view the bypass code.

Managing iOS features using custom payload profiles

You can use custom payload profiles to control features on iOS devices that aren't controlled by existing BlackBerry UEM policies or profiles.

Note: If a feature is controlled by an existing BlackBerry UEM policy or profile, a custom payload profile may not work as expected. You should use existing policies or profiles whenever possible.

You can create Apple configuration profiles using the Apple Configurator and add them to BlackBerry UEM custom payload profiles. You can assign custom payload profiles to users, user groups, and device groups.

- Control an existing iOS feature that isn't included in the BlackBerry UEM policies and profiles. For example, with BES10, your CEO's assistant was able to access both her own email account and the CEO's on an iPhone. In BlackBerry UEM, you can assign only one email profile to a device, so the assistant can only access his own email account. To solve this, you can assign an email profile to let the assistant's iPhone access the assistant's email account and a custom payload profile that lets the assistant's iPhone access your CEO's email account.
- Control a new iOS feature that was released after the latest BlackBerry UEM software release. For example, you want to control a new feature that will be available to devices when they upgrade to a recent iOS update, but BlackBerry UEM won't have an IT policy rule for the new feature until the next BlackBerry UEM software release. To solve this, you can create a custom payload profile that controls that feature until the next BlackBerry UEM software release.

Create a custom payload profile

Before you begin: Download and install the latest version of the Apple Configurator from Apple.

- 1. In the Apple Configurator, create an Apple configuration profile.
- 2. In the BlackBerry UEM management console, click Policies and Profiles.
- 3. Click Custom > Custom payload.
- 4. Click +
- 5. Type a name and description for the profile.
- **6.** In the Apple Configurator, copy the XML code for the Apple configuration profile. When you copy the text, copy only the elements in bold text as shown in the following code sample.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"</pre>
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
     <key>PayloadContent</key>
     <array>
           <dict>
                <key>CalDAVAccountDescription</key>
                <string>CalDAV Account Description</string>
                <key>CalDAVHostName</key>
                <string>caldav.server.example</string>
                <key>CalDAVPort</key>
                <integer>8443</integer>
                <key>CalDAVPrincipalURL</key>
                <string>Principal URL for the CalDAV account</string>
                <key>CalDAVUseSSL</key>
                </true>
                <key>CalDAVUsername</key>
```

```
<string>Username</string>
                <key>PayloadDescription</key>
                <string>Configures CalDAV account.
                <key>PayloadDisplayName</key>
                <string>CalDAV (CalDAV Account Description)</string>
                <key>PayloadIdentifier</key>
                <string>.caldav1</string>
                <key>PayloadOrganization</key>
                <string></string>
                <key>PayloadType</key>
                <string>com.apple.caldav.account</string>
                <key>PayloadUUID</key>
                <string>9ADCF5D6-397C-4E14-848D-FA04643610A3</string>
                <key>PayloadVersion</key>
                <integer>1</integer>
           </dict>
     </array>
     <key>PayloadDescription</key>
     <string>Profile description.</string>
     <key>PayloadDisplayName</key>
     <string>Profile Name</string>
     <key>PayloadOrganization</key>
     <string></string>
     <key>PayloadRemovalDisallowed</key>
     <false/>
     <key>PayloadType</key>
     <string>Configuration</string>
     <key>PayloadUUID</key>
     <string>7A5F8391-5A98-46EA-A3CF-C0D6EDC74632</string>
     <key>PayloadVersion</key>
     <integer>1</integer>
</dict>
</plist>
```

- 7. In the Custom payload field, paste the XML code from the Apple Configurator.
- 8. Click Add.

Setting up factory reset protection for Android Enterprise devices

You can set up a factory reset protection profile for your organization's Android Enterprise devices that have been activated using the Work space only activation type. This profile allows you to specify a user account that can be used to unlock a device after it has been reset to factory settings. Benefits of creating this profile include the ability to unlock a device if the user has forgotten the Google account credentials that are associated with the device or if the original device user is no longer in your organization.

There are three options available when you set up this profile for devices that have been reset to factory settings:

- You can disable factory reset protection if users don't need to validate the Google account credentials of the last user that used the device
- Users can use the Google account credentials that are associated with the device
- You can specify the Google account credentials that the user can use when they set up the device

BlackBerry recommends that you only implement this profile with Google credentials that are specified by an administrator after you fully understand the device user experience.

Create a Factory reset protection profile

Before you begin: You must create a user ID for a Google account if you plan to specify Google account credentials. For more information, see Obtain a user ID for a Google account.

- 1. On the menu bar, click Policies and Profiles > Managed devices > Protection > Factory reset protection.
- **2.** Type a name and description for the profile.
- 3. Choose a Factory reset protection setting. Select one of the following options:
 - **Disable factory reset protection**: If you disable factory reset protection, users are not prompted to enter a Google user ID after the device is reset to factory settings.
 - Enable and use previous Google account credentials when the device is reset to factory settings: This is the default option. If the user resets the device to factory settings using an untrusted method and a Google account existed on the device before it was reset, the account must be verified after the device is reset to factory settings. Note that if your organization uses a managed Google account structure, a Google account will not exist on the device and factory reset protection will not be available on the device
 - Enable and specify Google account credentials when the device is reset to factory settings: If you select
 this option, enter information in the User ID for specified Google account and Email address for specified
 Google account fields. For more information, see Obtain a user ID for a Google account. If the device
 is reset to factory settings using an untrusted method, the user must enter the email address and the
 password that is associated with the email address of the Google account that you enter.
 - Note that if you select this option and provide the Google account credentials, the Google account credentials that existed on the device will no longer work.
- 4. Click Save.

Obtain a user ID for a Google account

You can use an existing Google account or create one specifically for use with factory reset protection. You must then obtain the user ID that you use when you set up the factory reset protection profile.

- 1. Go to the Google developers People API site (https://developers.google.com/people/api/rest/v1/people/get).
- 2. In the resourceName field type: people/me
- 3. In the personalFields field type: metadata
- 4. Click Execute.
- 5. On the Choose an account screen, select an account to use to set up the factory reset protection profile.
- 6. On the Google APIs Explorer wants to access your Google Account screen, click Allow.
- 7. On the right-hand side of the People ID page, the 21-digit user ID displays in the "id" field. Note that the ID displays under the green header with the number 200 in it.

How factory reset protection responds to device resets

There are several ways that a device can be reset to the default factory settings. Depending on which way that the device is reset, factory reset protection responds differently. For more information about trusted and untrusted resets visit support.blackberry.com/community to read KB37660.

- Deactivation of the BlackBerry UEM Client is not considered a trusted reset because the device user is not
 verified before the device is deactivated. Therefore factory reset protection is triggered when the device resets
 and the deactivation has completed.
- Sending the "Delete all device data" command from the management console can be either a trusted or untrusted reset. If you select the "Remove factory reset protection" option when you send the command, factory reset protection is not triggered when the device resets.
- Resetting the device from device settings requires the user to authenticate themselves before the reset. This is considered a trusted reset and factory reset protection is not triggered.
- Device bootloader/recovery or debugging tools (ADB) can be used to reset the device to factory settings and are considered untrused because the user identity is not validated before the factory reset occurs.
 Therefore factory reset protection is triggered when the device resets.

Considerations for using a specific Managed Google Play account when setting up a factory rest protection profile

If your organization uses a Managed Google Play account, you might want to consider using the "Enable and specify Google account credentials when the device is reset to factory settings" option in the factory reset protection profile because a Google account does not exist on your organization's devices that you use to reset the device and therefore factory reset protection is not available on the device.

If you decide to use the "Enable and specify Google account credentials when the device is reset to factory settings" option, there are several factors for you to consider:

- Ensure that the 21-digit user ID that you enter in the profile is correct. If this number does not match your organization's Google account that you want to use, there is no way to clear factory reset protection on the device after it has been triggered. For more information, see Obtain a user ID for a Google account.
- In the IT policy for your organizations's users who you assign the factory reset protection profile
 to, BlackBerry recommends that you clear the "Allow factory reset" option. Clearing the option disables
 the factory reset option in the device settings and disables the deactivate button in the BlackBerry UEM
 Client. This ensures that users do not use the untrusted deactivation option in the UEM Client which always
 triggers Factory Reset Protection on the device. When this option is enabled, users must contact their
 organization's BlackBerry UEM administrator to have their device reset.
- Provide information to your organization's users about the factory reset protection experience on the device
 and the procedure they should use to clear factory reset protection when it is triggered on the device. For more

information, see Clear factory reset protection from a device. The BlackBerry UEM administrator must choose if they want to provide the account details to users to clear factory reset protection or if the users will need to have local support personnel unlock the device.

Clear factory reset protection from a device

When factory reset protection is triggered on the device, enterprise activation on BlackBerry UEM will no longer work. You must first clear factory reset protection using the Android out of box experience.

- 1. If you are using any form of automated activation system (such as zero-touch enrollment or Samsung KNOX Mobile Enrollment), you must disable it so that the device can go through the out of box experience.
- 2. Once the device has connectivity, on the first Android account screen, the user is prompted to enter the Google account credentials that are associated with the device. If you have set up a specific Google account in the factory reset protection profile, the user must enter the email address and the password that is associated with the account.
- **3.** Once the user has entered the Google account email address and password, they will be asked if they want to add this user to the device. The user must select the option to use a new user for the device.
 - On non-Samsung devices that are not using zero-touch enrollment: Users can enter 'afw#blackberry' or the enterprise Google account details to install the BlackBerry UEM Client, and re-activate the device against BlackBerry UEM.
 - On Samsung devices that are not using zero-touch enrollment or Samsung KNOX Mobile Enrollment: Complete the out of box experience, and use the device settings to reset the device. When the device restarts, it will be able to re-activate with the enterprise.
 - Devices using zero-touch enrollment or Samsung KNOX Mobile Enrollment: If you are using any form of
 automated activation system (such as zero-touch enrollment or Samsung KNOX Mobile Enrollment) you
 can re-enable it for the device, complete the out of box experience and use the device settings to reset the
 device. The device should now restart and use the automated activation system you have configured.

Setting up Windows Information Protection for Windows 10 devices

You can set up Windows Information Protection (WIP) for Windows 10 devices when you want to:

- · Separate personal and work data on devices and be able to wipe only work data
- Prevent users from sharing work data outside of protected work apps or with people outside of your organization
- Protect data even if it is moved to or shared on other devices, such as a USB key
- Audit user behavior and take appropriate actions to prevent data leaks

When you set up WIP for devices, you specify the apps that you want to protect with WIP. Protected apps are trusted to create and access work files, while unprotected apps can be blocked from accessing work files. You can choose the level of protection for protected apps based on how you want users to behave when they share work data. When WIP is enabled, all data sharing practices are audited. For more information about WIP, visit https://technet.microsoft.com/itpro/windows/keep-secure/protect-enterprise-data-using-wip.

The apps that you specify can be enlightened or unenlightened for enterprise. Enlightened apps can create and access work and personal data. Unenlightened apps can only create and access work data. For more information about enlightened and unenlightened apps, visit https://docs.microsoft.com/en-us/windows/security/information-protection/windows-information-protection/enlightened-microsoft-apps-and-wip.

Create a Windows Information Protection profile

- 1. On the menu bar, click Policies and Profiles.
- 2. Click Protection > Windows Information Protection.
- 3. Click +.
- 4. Type a name and description for the profile.
- **5.** Configure the appropriate values for each profile setting. For details about each profile setting, see Windows 10: Windows Information Protection profile settings.
- 6. Click Add.

Windows 10: Windows Information Protection profile settings

Windows 10: Windows Information Protection profile setting	Description
Windows Information Protection settings	This setting specifies whether Windows Information Protection is enabled and the level of enforcement. When this setting is set to "Off," data is not encrypted and audit logging is turned off. When this setting is set to "Silent," data is encrypted and any attempts to share protected data are logged. When this setting is set to "Override," data is encrypted, the user is prompted when they attempt to share protected data, and any attempts to share protected data are logged. When this setting is set to "Block," data is encrypted, users cannot share protected data, and any attempts to share protected data are logged. Possible values:
	OffSilentOverrideBlock
	The default value is "Off."
Enterprise protected domain names	This setting specifies the work network domain names that your organization uses for its user identities. You can separate multiple domains with pipes (I). The first domain is used as a string to tag files that are protected by apps that use WIP. For example, example.com example.net.
Data recovery certificate file (.der, .cer)	This setting specifies the data recovery certificate file. The file that you specify must be a PEM encoded or DER encoded certificate with a .der or .cer file extension.
	You use the data recovery certificate file to recover files that were locally protected on a device. For example, if your organization wants to recover data protected by WIP from a device.
	For information on creating a data recovery certificate, see the Microsoft Windows Information Protection documentation.
Remove the Windows Information Protection settings when a device is removed from BlackBerry UEM	This setting specifies whether to revoke WIP settings when a device is deactivated. When WIP settings are revoked, the user can no longer access protected files.
Show Windows Information Protection overlays on protected files and apps that can create enterprise content	This setting specifies whether an overlay icon is shown on file and app icons to indicate whether a file or app is protected by WIP.

Windows 10: Windows Information Protection profile setting	Description
Work network IP range	This setting specifies the range of IP addresses at work to which an app protected with WIP can share data.
	Use a dash to denote a range of addresses. Use a comma to separate addresses.
Work network IP ranges are authoritative	This setting specifies if only the work network IP ranges are accepted as part of the work network. When this setting is enabled, no attempts are made to discover other work networks.
	By default, the option is not selected.
Enterprise internal proxy servers	This setting specifies the internal proxy servers that are used when connecting to work network locations. These proxy servers are only used when connecting to the domain listed in the Enterprise cloud resources setting.
Enterprise cloud resources	This setting specifies the list of enterprise resource domains hosted in the cloud that need to be protected. Data from these resources are considered enterprise data and protected.
Cloud resources domain	This setting specifies the domain name.
Paired proxy	This setting specifies a proxy that is paired with a cloud resource. Traffic to the cloud resource will be routed through the enterprise network via the denoted proxy server (on port 80).
	A proxy server used for this purpose must also be configured in the Enterprise internal proxy servers field.
Enterprise proxy servers	This setting specifies the list of internet proxy servers.
Enterprise proxy servers are authoritative	This setting specifies whether the client should accept the configured list of proxies and not try to detect other enterprise proxies.
Neutral resources	This setting specifies the domains that can be used for work or personal resources.
Enterprise network domain names	This setting specifies a comma-separated list of domains that comprise the boundaries of the enterprise. Data from one of these domains that is sent to a device will be considered enterprise data and protected. These locations will be considered a safe destination for enterprise data to be shared to. For example, example.com, example.net.

Windows 10: Windows Information **Protection profile setting** Desktop app payload code

Description

Specify the desktop app keys and values used to configure application launch restrictions on Windows 10 devices. You must use the keys defined by Microsoft for the payload type that you want to configure.

To specify the apps, copy the XML code from the AppLocker policy .xml file and paste it in this field. When you copy the text, copy only the elements as shown in the following code sample:

```
<RuleCollection Type="Appx" EnforcementMode="Enabled">
  <FilePublisherRule Id="0c9781aa-bf9f-4352-</pre>
b4ba-64c25f36f558"
 Name="WordMobile" Description="
UserOrGroupSid="S-1-1-0" Action="Allow">
    <Conditions>
      <FilePublisherCondition
      PublisherName="CN=Microsoft Corporation, O=Microsoft
Corporation, L=Redmond, S=Washington, C=US"
     ProductName="Microsoft.Office.Word" BinaryName="*">
        <BinaryVersionRange LowSection="*"</pre>
HighSection="*" />
     </FilePublisherCondition>
    </Conditions>
  </FilePublisherRule>
</RuleCollection>
```

For more information about using AppLocker, see the Microsoft AppLocker documentation.

Windows

10: Windows Information Protection profile setting

Description

Universal Windows PlatformSpecify the Universal Windows Platform app keys and values used to configure app payload code WIP on Windows 10 devices. You must use the keys defined by Microsoft for the payload type that you want to configure.

To specify the apps, copy the XML code from the AppLocker policy .xml file and paste it in this field. When you copy the text, copy only the elements as shown in the following code sample:

```
<RuleCollection Type="Exe" EnforcementMode="Enabled>
 <FilePathRule Id="921cc481-6e17-4653-8f75-050b80acca20"</pre>
Name="(Default Rule)
 All files "Description=" UserOrGroupSid="S-1-1-0"
Action="Allow">
    <Conditions>
      <FilePathCondition Path="*" />
    </Conditions>
 </FilePathRule>
  <FilePublisherRule Id="ddd0bc90-</pre>
dada-4002-9e2f-0fc68e1f6af0" Name="WORDPAD.EXE,
from O=MICROSOFT CORPORATION, L=REDMOND, S=WASHINGTON,
C=US" Description=""
  UserOrGroupSid="S-1-1-0" Action="Deny">
    <Conditions>
      <FilePublisherCondition PublisherName="O=MICROSOFT</pre>
CORPORATION
L=REDMOND, S=WASHINGTON, C=US" ProductName="*"
BinaryName="WORDPAD.EXE">
        <BinaryVersionRange LowSection="*"</pre>
HighSection="*" />
     </FilePublisherCondition>
    </Conditions>
 </FilePublisherRule>
  <FilePublisherRule Id="c8360d06-f651-4883-</pre>
abdd-9c3a95a415ff" Name="NOTEPAD.EXE,
 from O=MICROSOFT CORPORATION, L=REDMOND, S=WASHINGTON,
C=US" Description=""
 UserOrGroupSid="S-1-1-0" Action="Allow">
    <Conditions>
      <FilePublisherCondition PublisherName="0=MICROSOFT</pre>
CORPORATION,
L=REDMOND, S=WASHINGTON, C=US" ProductName="*"
BinaryName="NOTEPAD.EXE">
        <BinaryVersionRange LowSection="*"</pre>
HighSection="*" />
      </FilePublisherCondition>
    </Conditions>
 </FilePublisherRule>
</RuleCollection>
```

For more information about using AppLocker, see the Microsoft AppLocker documentation.

Windows 10: Windows Information Protection profile setting	Description
Associated VPN profile	This setting specifies the VPN profile that a device uses to connect to a VPN when using an app protected by WIP.
	This setting is valid only if "Use a VPN profile" is selected for the "Secure connection used with WIP."
Collect device audit logs	This setting specifies whether to collect device audit logs.

Managing attestation for devices

When you turn on attestation, BlackBerry UEM sends challenges to test the authenticity and integrity of devices. You can turn on attestation for the following devices:

- · Android devices
- · Samsung KNOX devices
- · Windows 10 devices

Manage attestation for Android devices and BlackBerry Dynamics apps using SafetyNet

When you use Android SafetyNet attestation, BlackBerry UEM sends challenges to test the authenticity and integrity of Android devices and BlackBerry Dynamics apps in your organization's environment. SafetyNet helps you assess the security and compatibility of the environments in which your organization's apps run. You can use SafetyNet attestation in addition to BlackBerry's existing root and exploitation detection. For more information about SafetyNet, see the information from Google.

The following products support SafetyNet attestation:

- BlackBerry UEM
- BlackBerry UEM Client for Android
- · BlackBerry Dynamics apps for Android

Considerations for configuring SafetyNet attestation

- The Google SafetyNet attestation failure option is a compliance profile setting for Android devices
 and BlackBerry Dynamics apps that allows you to specify the actions that occur if devices or apps do not
 pass SafetyNet attestation. To set this option, navigate to Policies and profiles > Compliance > Android tab.
- If you do not enable the 'Google SafetyNet attestation failure' compliance rule, apps that are already activated will not have compliance actions enforced on them.
- When you enable SafetyNet, attestation during activation is performed; you cannot use a policy to enforce attestation during activation.
- The BlackBerry UEM Client is not required for you to enable SafetyNet attestation.
- The BlackBerry UEM Client does not appear in the list of BlackBerry Dynamics apps that you can configure for SafetyNet attestation. BlackBerry UEM sends attestation challenges to, and receives responses from, the BlackBerry UEM Client.
- BlackBerry UEM sends attestation challenges to each BlackBerry Dynamics app that you configure.
- BlackBerry UEM does not trust old versions of apps. For example, if you want to enable attestation challenges
 for BlackBerry Work, you must ensure that the version of BlackBerry Work on your organization's devices is the
 latest version or new activations will fail. Note that until you enable the "Google SafetyNet Attestation failure"
 option in your organization's compliance profile, even if your existing activated users are using older versions
 of apps, no adverse action will be taken on apps or devices.
- In addition to activation and periodic attestation, BlackBerry UEM uses new REST APIs that allow you to create
 custom server workflows. For example, if an app needs to access a specific secure remote item, before
 granting access, the app server communicates with BlackBerry UEM to enforce SafetyNet attestation on the
 app or device.
- If a user's device is out of coverage, turned off, or has a dead battery, it cannot respond to the attestation
 challenges that BlackBerry UEM sends and BlackBerry UEM will consider the device to be non-compliant. If you
 have your organization's compliance policy set to wipe the device when it is out of compliance, if the device

does not respond before the grace period expires, data on the device will be deleted when it connects to a wireless network.

- If you set a time in App grace period field, only apps that do not respond within the time frame that you set will have an action taken on them. For example, if you set the App grace period value to 7 days, and your users use BlackBerry Work every day, but do not use BlackBerry Tasks within the 7 days, only BlackBerry Tasks will have an action taken on it.
- If you add a new app to BlackBerry UEM and it fails attestation during activation, the app is not activated no matter which option you have configured in the 'Google SafetyNet attestation failure' section of your organization's compliance profile. If an app has already been activated, it is subject to the rules that you specified in the compliance profile.
- Your organization's users must have the latest version of Google Play services installed.
- If a device fails attestation, there is no indication of the failure in the OS compromised column on the Managed devices page.
- For information about developing BlackBerry Dynamics apps for Android devices, see the Developer content.

Considerations for configuring SafetyNet attestation - App versions

- Before you enable SafetyNet attestation for your organization's Android devices, ensure that the device users have upgraded the UEM Client on their devices to version 12.9 MR1 or later or the grace period compliance action will be enforced on the device.
- If you enable attestation for your organization's BlackBerry UEM instance, and you have BlackBerry UEM Client version 12.10 installed, during Android device activation, the authenticity and integrity of the device is checked. If you have BlackBerry UEM Client version 12.9 MR1 installed, device level SafetyNet attestation is performed after activation. Ensure that you have BlackBerry UEM Client for Android version 12.9 MR1 or later installed on your organization's Android devices before you enable this feature.

Version of BlackBerry UEM	When SafetyNet Attestation is performed
12.9 MR1	Post device activation
12.10	 After device activation when the BlackBerry UEM Client is installed During device activation when the BlackBerry UEM Client is installed During BlackBerry Dynamics apps activation After app activation for BlackBerry Dynamics apps On demand using REST APIs At device restart if the BlackBerry UEM Client is activated

If you installed BlackBerry UEM 12.9 MR1 in your organization's environment, and you enabled SafetyNet attestation, if you upgrade to BlackBerry UEM 12.10, you must select the "Google SafetyNet Attestation failure" option in your organization's compliance profile so that your organization's Android devices are not subject to SafetyNet attestation enforcement actions.

Configure attestation for Android devices and BlackBerry Dynamics apps using SafetyNet

- 1. On the menu bar, click **Settings > General settings > Attestation**.
- 2. To turn on attestation for Android devices, select Enable periodic attestation challenges using SafetyNet.
- 3. Select Enable CTS profile matching if you want to turn on Google's Compatibility Test Suite. For more information about CTS, see the information from Google.

- **4.** In the **Challenge frequency** section, specify, in days or hours, how often the device must return an attestation response to BlackBerry UEM. Considerations for configuring the challenge frequency:
 - While you can configure how often BlackBerry UEM tests the authenticity and integrity of the device, attestation during activation of the app is mandatory.
 - If you have deployed the BlackBerry UEM Client, it is added as one of the apps that BlackBerry UEM tests for SafetyNet attestation automatically.
 - The BlackBerry UEM Client uses a different communication channel to BlackBerry UEM than other BlackBerry Dynamics apps, which must be running and authorized to connect to BlackBerry UEM to receive policy updates. BlackBerry UEM can proactively communicate with the BlackBerry UEM Client and start the app if it is not running. If you set a challenge frequency of 3 hours, then BlackBerry UEM communicates with the BlackBerry UEM Client every 3 hours and the attestation check is performed. However, BlackBerry Dynamics app commands are stored until the app connects to BlackBerry UEM, and only the latest attestation command is stored. So, if the app is not used for 24 hours, when the user starts it, only one attestation challenge is performed.
- 5. In the Grace period section, specify a grace period in hours or days. After the grace period expires with no successful attestation response, a device is considered non-compliant and the device is subject to the conditions specified in the compliance profile that is assigned to the user. Also, if a user's device is out of coverage, turned off, or has a dead battery, it cannot respond to the attestation challenges that BlackBerry UEM sends, and BlackBerry UEM will consider the device to be non-compliant. If you have your organization's compliance policy set to wipe the device when it is out of compliance, if the device does not respond before the grace period expires, data on the device will be deleted when it connects to a wireless network.
- 6. In the App grace period section, specify a grace period in hours or days. After the grace period expires, the BlackBerry Dynamics apps are subject to the conditions specified in the compliance profile that is assigned to the user. The grace period is enforced on a per-app basis. Note that if you have deployed only the BlackBerry UEM Client to the device, then the grace period is ignored. Also, the BlackBerry UEM Client does not appear in the list of BlackBerry Dynamics apps. When you add BlackBerry Dynamics apps to the list of apps that will be subject to attestation challenges, the following rules apply:
 - · Only apps in this list are sent attestation challenges.
 - Only apps in this list are evaluated for the app grace period check.
 - Only apps in this list are subject to attestation during app activation.

Note: Only BlackBerry Dynamics apps that have been developed specifically for SafetyNet will display in the list. For more information, see the Developer content.

- 7. To add an app that will be subject to attestation challenges, click +.
- 8. Do one of the following:
 - · Click the name of an app that is already on the list.
 - · Search for and click on the name of the app.
- 9. Click Select.
- 10.Click Save.

Managing iOS app integrity checking on devices

You can use the Apple DeviceCheck framework to check the integrity of iOS work apps that have been published to the App Store. The Apple DeviceCheck framework is a way to identify that your app is running on a valid Apple device and that the app is signed with the app developer's signing key. For more information on Apple DeviceCheck, see the information from Apple. This setting is applies only to devices running iOS 11 and later.

Note: You cannot enable the iOS app integrity checking on enterprise apps that your organization has developed and distributed internally using the Apple Enterprise Distribution program.

Considerations for enabling iOS app integrity check on devices

- · The BlackBerry UEM Client is not required for you to enable iOS app integrity checking.
- The BlackBerry UEM Client does not appear in the list of BlackBerry Dynamics apps that you can configure for iOS app integrity checking. BlackBerry UEM sends attestation challenges to, and receives responses from, the BlackBerry UEM Client
- Activation of BlackBerry Dynamics apps that were built using BlackBerry Dynamics SDK for iOS version 5.0 or earlier will fail if you enable the 'Perform app integrity check on BlackBerry Dynamics app activation' option in the activation profile and if you add those apps for iOS app integrity check.
- If a BlackBerry Dynamics app that was built using BlackBerry Dynamics SDK for iOS version 5.0 or earlier is
 already activated, and you select the 'Perform periodic app integrity checks' option in the activation profile, the
 app will fail the periodic attestation check and the device will be subject to the enforcement action specified in
 the compliance profile that is assigned to the user.
- iOS app integrity check is valid only for devices running iOS 11 and later.
- Apple provides support for iOS App Integrity checking for apps from the App Store. Apple does not provide support for enabling the iOS app integrity check on enterprise apps that your organization has developed and distributed internally using the Apple Enterprise Distribution program.
- If the time on the device is incorrect, the BlackBerry Dynamics apps might fail the periodic attestation check.

Add Apple DeviceCheck keys

You can use Apple DeviceCheck keys to check the integrity of iOS work apps that have been published to the App Store. The Apple DeviceCheck framework is a way to identify your app is running on a valid Apple device and the app is published by the specified Apple Team ID. You can map DeviceCheck keys to apps when you add apps to the attestation list. You must add DeviceCheck keys to the table before you can add apps that will receive attestation challenges from BlackBerry UEM. For more information on Apple DeviceCheck, see the information from Apple. This setting is valid only for devices running iOS 11 and later.

Note: Apple does not provide support for enabling the iOS app integrity check on enterprise apps that your organization has developed and distributed internally using the Apple Enterprise Distribution program.

- 1. Click Settings > General settings > Attestation.
- 2. In the iOS app integrity check frequency section, in the Apple DeviceCheck keys table, click +.
- 3. In the **DeviceCheck key name** field, type a name for the key.
- 4. In the Apple team ID field, type your team ID. You can find this information in the Apple Developer Portal.
- 5. In the Key ID field, type the ID for the key. You can find this information in the Apple Developer Portal.
- 6. In the DeviceCheck key file field, click browse and navigate to the location where your key file is stored.
- 7. Click Add.

Enable iOS app integrity check on devices

After you add Apple DeviceCheck keys, you can create a list of apps that will receive attestation challenges from BlackBerry UEM. Note that you do not need to add the BlackBerry UEM Client to the list because is already subject to attestation challenges.

- 1. Click Settings > General settings > Attestation.
- 2. In the iOS app integrity check frequency section, click Enable iOS app integrity check on devices.
- **3.** In the **Challenge frequency** section, specify, in days or hours, how often the apps must return an attestation response to BlackBerry UEM.

- **4.** In the **Grace period** section, specify a grace period in hours or days. After the grace period expires with no successful attestation response, a device is considered non-compliant.
- 5. In the Apps to receive attestation challenges table click +.
- 6. In the DeviceCheck key name list, select one of the key names that you created in the Add Apple DeviceCheck keys topic. Note that for BlackBerry authored apps, the system will automatically use BlackBerry's own DeviceCheck key.
- 7. Select an app to receive attestation challenges.
- 8. Click Add.

Manage attestation for Samsung KNOX devices

When you turn on attestation, BlackBerry UEM sends challenges to test the authenticity and integrity of Samsung KNOX devices activated with the following activation types:

- · Work and personal full control (Samsung KNOX)
- Work space only (Samsung KNOX)
- Work and personal user privacy (Samsung KNOX)
- 1. On the menu bar, click **Settings > General settings > Attestation**.
- 2. To turn on attestation for Samsung KNOX devices, select **Enable periodic attestation challenges for KNOX Workspace devices**.
- 3. In the **Challenge frequency** section, specify, in days or hours, how often the device must return an attestation response to BlackBerry UEM.
- 4. In the Grace period section, specify a grace period in hours or days. After the grace period expires with no successful attestation response, a device is considered non-compliant and the device is subject to the conditions specified in the compliance profile that is assigned to the user. Also to consider, if a user's device is out of coverage, turned off, or has a dead battery, it cannot respond to the attestation challenges that BlackBerry UEM sends and BlackBerry UEM will consider the device to be non-compliant. If you have your organization's compliance policy set to wipe the device when it is out of compliance, when the device does not respond before the grace period expires, data on the device will be deleted.
- 5. Click Save.

After you finish: Create a compliance profile that specifies the actions that occur when a device is considered rooted. For instructions, see Enforcing compliance rules for devices

Manage attestation for Windows 10 devices

When you turn on attestation, BlackBerry UEM sends challenges to test the authenticity and integrity of Windows 10 devices. The device communicates with the Microsoft Health Attestation Service to check for compliance based on settings that you set in your organization's compliance profile.

- 1. On the menu bar, click **Settings > General settings > Attestation**.
- 2. To turn on attestation for Windows 10 devices, select Enable periodic attestation challenges for Windows 10 devices.
- **3.** In the **Challenge frequency** section, specify, in days or hours, how often the device must return an attestation response to BlackBerry UEM.
- 4. In the Grace period section, specify a grace period in hours or days. After the grace period expires with no successful attestation response, a device is considered non-compliant and the device is subject to the conditions specified in the compliance profile that is assigned to the user. Also to consider, if a user's device is out of coverage, turned off, or has a dead battery, it cannot respond to the attestation challenges

that BlackBerry UEM sends and BlackBerry UEM will consider the device to be non-compliant. If you have your organization's compliance policy set to wipe the device when it is out of compliance, when the device does not respond before the grace period expires, data on the device will be deleted.

5. Click Save.

You can view any compliance violations on the device details page.

After you finish: Create a compliance profile that specifies the actions that occur when a device is considered rooted. For instructions, see Enforcing compliance rules for devices

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