



# **UEM Notifications**

## **Installation and Administration Guide**

3.0



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# What is BlackBerry UEM Notifications?

With UEM Notifications, BlackBerry UEM administrators message users via SMS, phone, and email directly from the UEM console. This add-on simplifies communications to end users and user groups by eliminating the need for additional messaging solutions. BlackBerry UEM Notifications cuts through the clutter of everyday messages, resulting in more users taking action.

BlackBerry UEM Notifications provides the following key capabilities:

- Leverage UEM for simplified communication
- Multiple delivery methods (text, phone, and email)
- Increased engagement from users

## Unify communication processes and tools for improved productivity

- **Take control of user messaging:** Effective device management requires UEM administrators to communicate with the users they manage. With UEM Notifications, administrators can manage devices and notifications within their UEM, eliminating the need to manage and reconcile user contact information across multiple systems as well as external system access issues. Managing user messaging from a single solution empowers administrators with more control and improves their productivity.
- **Replace email blasts with messages that users will actually read:** When email is used as the main tool to notify users, messages can easily get lost, overlooked, or ignored, reducing their effectiveness. This leads to increased support calls, raising your costs and hampering productivity. With flexible delivery options such as Text-To-Speech voice calls, SMS, and email, employees get alerts via their preferred channel, increasing the likelihood of action and compliance.
- **Trust that users will receive and view your notifications:** Common communications channels lack an easy way to track and store the status and history of messages, forcing administrators to reconcile against external notification systems. With UEM Notifications' FedRAMP-authorized delivery services, you can rest easy knowing the messages sent reach their intended destination. UEM Notifications features a comprehensive report of all sent messages and their statuses.

## Simplify notifications to users

- **Single interface for messaging users and managing devices:** This "single pane of glass" approach eliminates confusion and streamlines two functions: managing devices, and notifying users of important announcements.
- **Mobile device information identifies which users are affected:** UEM Notifications leverages information collected from mobile devices to identify the specific users who need a given notification. This means there is less noise for the user, because each notification is relevant to them. This targeted approach means that users always know that the alerts they receive are reliable.
- **Improved end-to-end message workflow:** Administrators can test and review messages before sending them broadly to ensure accuracy.
- **Active Directory sync streamlines user data:** Your company's active directory contains all user data, including telephony, email, and user groups. UEM Notifications leverages contact information via an active directory sync to ensure notifications reach your users.
- **Supports text-to-speech (phone), email, and SMS notifications:** Multiple delivery options enable UEM administrators to choose which methods are best for each type of message.
- **View message details and history:** Track and manage notifications sent including detailed message status by delivery method.

## Common use cases

- **Planned downtime:** Inform affected users of scheduled upgrades and outages ahead of time.
- **Manage email outages:** Let affected users know an unexpected outage has occurred and provide an anticipated timeline for the issue to be resolved. This can help you avoid support line flooding.
- **Compliance warning:** Alert users to upgrade their software in order to comply with corporate policies and external regulations.

# Software requirements

UEM Notifications version 3.3.0.x requires UEM release 12.16, 12.17, 12.18, 12.19 or later and BlackBerry AtHoc release 7.15 or later release.

# Deploy UEM Notifications to a production BlackBerry UEM domain

Follow these instructions when the UEM Notifications plug-in is complete and ready to deploy to a production UEM domain. The deployment process will stop the UEM services for a short time, so you should perform this task when there will be minimal impact to users.

## Prerequisite

Before you can deploy UEM Notifications, you must have an account provisioned for you in the BlackBerry AtHoc system. This provisioning provides the needed organization ID, username, and password. To have an account provisioned in the BlackBerry AtHoc system, contact your BlackBerry Technical Sales Manager.

1. Go to the Software Download for BlackBerry UEM Notifications page at the following URL:

<https://swdownloads.blackberry.com/Downloads/entry.do?code=6B1A864B240FC77E3A901E3470B243F9>

2. Select **BlackBerry UEM Notifications** from the list.
3. Click **Next**.
4. Download and save the .zip file to your system.
5. Copy the .zip file to each computer that hosts a production BlackBerry UEM instance, then perform the following steps on each computer:
  - a. Open the command line as an administrator and change the directory to <drive>:\Program Files\BlackBerry\UEM\tools\plugins\onprem.
  - b. Execute the following command:

**plugin-deploy.bat --plugins "<file\_path>" --iacceptEULA**

"<file\_path>" is the location of the plug-in package (.zip). The file path must be enclosed in double quotation marks. If you want to integrate more than one plug-in, you can type a comma-separated list of file paths in one set of double quotation marks (for example, "<file\_path>,<file\_path>,<file\_path>").

The command validates the plug-in, integrates it with the BlackBerry UEM components, and restarts the BlackBerry UEM services. This process may take some time (approximately 10 minutes). After the plug-in is integrated, the plug-in files are located at: <drive>:\Program Files\BlackBerry\UEM\ext\.

# Log in to UEM

The UEM management console allows you to perform administrative tasks for devices in your organization that are managed by BlackBerry UEM.

**Note:** You must have UEM administrator permissions with the "Send email to users" role enabled to access UEM Notifications.

## Before you begin:

- Locate the web address (for example, <https://<hostname>/admin/index.jsp>.) and login information for the management console. You can find the information in the inbox of the email account that is associated with your BlackBerry UEM account.
  - You must know the authentication method and the domain (applicable for Microsoft Active Directory authentication only).
1. In the browser, type the web address for the BlackBerry UEM management console of your organization.
  2. In the **Username** field, type your username.
  3. In the **Password** field, type your password.
  4. If necessary, in the **Sign in using** list, do one of the following:
    - Click **Direct authentication**.
    - Click **LDAP authentication**.
    - Click **Microsoft Active Directory authentication**. In the **Domain** field, type the Microsoft Active Directory domain.
  5. Click **Sign in**.

**After you finish:** You can change your login password by clicking the user icon in the top-right corner of the management console.

## UEM user roles

Users with the Enterprise Administrator, Senior Help Desk, or Security Administrator UEM user role can perform the following UEM Notifications tasks:

- Access the BlackBerry AtHoc connection settings page in UEM
- Synchronize users
- Pair and unpair BlackBerry AtHoc devices
- Send notifications from All user's or Group panels


**Note:** The Junior Help Desk user role does not provide any permissions to configure or use UEM Notifications.

# Configure BlackBerry AtHoc settings for UEM Notifications


Take note of the values generated in the following tasks. You will need them to [configure BlackBerry AtHoc settings in UEM](#).

- [Copy the organization code](#)
- [Generate the client ID and client secret](#)
- [Create an operator](#)

## Copy the organization code

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. Click .
3. On the **Settings** page, in the **Basic** section, click **General Settings**.
4. On the **General Settings** page, in the **Organization Details** section, copy the value in the **Organization Code** field. You will need to enter this value in the **Organization code** field on **BlackBerry AtHoc connection settings** screen in UEM.
5. Click **Save**.

## Generate the client ID and client secret

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. Click .
3. On the **Settings** page, in the **System Setup** section, click **API Applications**.
4. On the **API Applications** page, click **New**.
5. On the **New API Application** page, in the **Basic** section, enter a name and select the **Enabled** option.
6. Click **Save**.  
A Success message is displayed. Copy the Client ID and the Client Secret that are displayed. You will need to enter these values in the **BlackBerry AtHoc connection settings** screen in UEM.

## Create an operator

To perform a user sync between UEM and BlackBerry AtHoc, you must create an operator that has one of the following sets of roles:

- Alert Publisher and Alert Manager
  - Enterprise Administrator
  - Organization Administrator
  - Advanced Alert Manager and Advanced Alert Publisher
1. Log in to the BlackBerry AtHoc management system as an administrator.
  2. In the navigation bar, click **Users > Users**.
  3. On the **Users** page, click **New**.

4. On the **New User** page, in the **Basic Information** section, enter a Username, Mapping ID, First Name and Last name.
5. Click **Save**.
6. On the user details page, click **Grant Operator Permissions**.
7. On the **Operator Permissions** page, select the required roles from the **Operator Roles** pull-down menu.
8. Click **Save**.

## Create an alert template for the UEM messages

If the default alert template UEM\_DEFAULT\_MESSAGE does not exist, you must create an alert template for the UEM messages.

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click **Alerts > Alert Templates**.
3. On the **Alert Templates** page, click **New**.
4. On the **New Template** page, select or enter values in each of the alert template sections. For details, see the [BlackBerry AtHoc Create and Publish Alerts](#) guide.
5. Configure the schedule for the alert template. For details, see "[Configure the schedule for an alert or alert template](#)" in the [BlackBerry AtHoc Alert Templates](#) guide.
6. Click **Preview and Save**.
7. On the preview screen, review the settings and selections.
8. Click **Save**.

# Configure BlackBerry AtHoc settings in UEM

Before you begin sending messages using UEM Notifications, you must configure BlackBerry AtHoc settings in the UEM console.

1. Log in to the UEM console as an administrator.
2. On the left panel select **Settings > BlackBerry AtHoc**.
3. On the **BlackBerry AtHoc connection settings** screen, enter the BlackBerry AtHoc system URL in the format:  
`https://<athocserver.domain.com>`.
4. In the **Username** field, enter the username of the operator that you created in [Create an operator](#).
5. In the **Password** field, enter a password.
6. In the **Client id** field, enter the client ID that you copied in [Generate the client ID and client secret](#).
7. In the **Client secret** field, enter the client secret that you copied in [Generate the client ID and client secret](#).
8. In the **Organization code** field, enter the organization code that you copied in [Copy the organization code](#).
9. Click **Test connection** to verify your settings.
10. In the **Alert Template** field, enter the alert template common name provided by BlackBerry AtHoc during system provisioning. The default alert template for a UEM-enabled organization in BlackBerry AtHoc is "UEM\_DEFAULT\_MESSAGE." If the default alert template does not exist, [create an alert template](#).
11. Click **Verify** to validate your settings.
12. Click **Save**.

# Synchronize users

Before you use UEM Notifications, you should ensure that the users in UEM are synchronized with the users in the BlackBerry AtHoc system. You can synchronize UEM users to BlackBerry AtHoc using any of the following methods:

- [Synchronize users from UEM to BlackBerry AtHoc using the UEM console](#)
- [Synchronize users from UEM to BlackBerry AtHoc using the CSV export-import process](#)

UEM users must have reachable devices in the BlackBerry AtHoc system in order to receive UEM notifications. Before you import the UEM users to BlackBerry AtHoc, make sure that each user has data in the BlackBerry AtHoc system for at least one the following devices:

- Device: Email - Work
- Device: Phone - Work
- Device: Text Messaging

## Synchronize users directly from UEM to BlackBerry AtHoc

To synchronize users directly from UEM to BlackBerry AtHoc, you can use the UEM console or the .csv export-import process.

When you synchronize users from UEM to BlackBerry AtHoc from the UEM console, the UEM users are created in BlackBerry AtHoc with their primary UEM email used as their username. If a user already exists in BlackBerry AtHoc, but their username in BlackBerry AtHoc is not their primary email, a duplicate user may be created in BlackBerry AtHoc for that user. To avoid having a duplicate user created in BlackBerry AtHoc, ensure that any users in your organization that are already in the BlackBerry AtHoc system are using their primary email as a username and mapping ID in BlackBerry AtHoc.

### Edit the attribute mapping in UEM

Before you can synchronize users from UEM to BlackBerry AtHoc, you must update the attribute mapping settings in UEM to ensure that devices are paired between UEM and BlackBerry AtHoc. The Email device is paired between UEM and BlackBerry AtHoc by default. However, you must still edit the attribute mapping for the email device to ensure that the UEM device is mapped to the correct BlackBerry AtHoc device common name.

1. In UEM, on the menu bar, click **Settings > BlackBerry AtHoc > User sync settings**.
2. On the **User sync settings** page, click **Edit attribute mapping and sync schedule**.
3. Click the **Attribute mapping** tab. The device mapping table lists the paired UEM attributes and BlackBerry AtHoc devices.
4. Select an attribute from the **UEM Attribute** pull-down menu.
5. Select a device from the **BlackBerry AtHoc Device** pull-down menu.
6. Click **Pair**. The device mapping is added to the table.
7. Click **Save**.

## Edit attribute mapping and sync schedule

Attribute mapping

Sync schedule

UEM Attribute \*

Work Phone

BlackBerry AtHoc Device \*

Phone - Work

Pair

UEM Attribute	BlackBerry AtHoc Device
Email Address	Email - Work
Work Phone	Phone - Work

UnPair

Cancel

Save

- Optionally, select a pairing in the table and click **UnPair** to remove it.

### Synchronize users from UEM to BlackBerry AtHoc using the UEM console


You can synchronize users from UEM to BlackBerry AtHoc from the UEM console manually, or by configuring a sync schedule.

#### Perform a manual user sync

Before performing a manual user sync, [edit the attribute mapping in UEM](#).

- In UEM, on the menu bar, click **Settings** > **BlackBerry AtHoc** > **User sync settings**.
- Click **Sync now**.

The **User sync settings** page displays **Currently syncing users into AtHoc**:

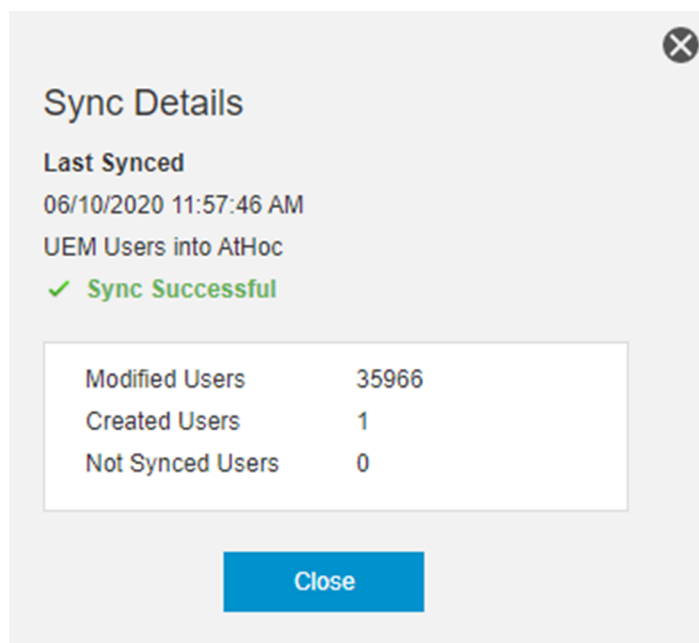
 **Currently syncing users into AtHoc**  
[Stop sync](#)

**Last Synced**  
06/10/2020 11:57:46 AM  
UEM Users into AtHoc  
✓ **Sync Successful** [View details](#)

**Next scheduled sync**  
None

**Sync now**

- When the sync is complete, **Sync Successful** is displayed in the **Last Synced** section. Click **View details** to view the number of users who were created or modified in BlackBerry AtHoc:

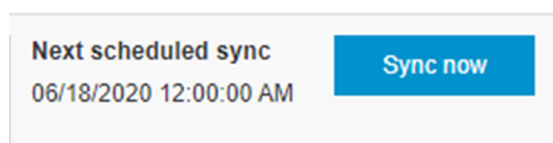


### Configure a sync schedule

To perform recurring user syncs, configure a sync schedule. Before configuring a sync schedule, [edit the attribute mapping in UEM](#).

1. In UEM, on the menu bar, click **Settings > BlackBerry AtHoc > User sync settings**.
2. Click **Edit attribute mapping and sync schedule**.
3. Click the **Sync schedule** tab.
4. Select a **Recurrence** from the pull-down menu.
5. Select a time to start the synchronization.
6. Click **Save**.
7. Click **User sync settings**.
8. On the **User sync settings** page, select the **Enable user sync** option.
9. Click **Save**.

The time and date of the next scheduled sync is displayed on the **User sync settings** page:



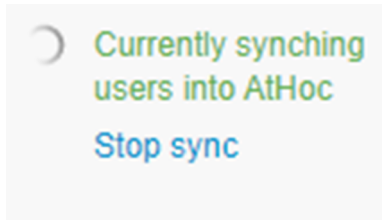
When the scheduled user sync starts, the **User sync settings** page displays **Currently syncing users into AtHoc**.

10. When the sync is complete, **Sync Successful** is displayed in the **Last Synced** section. Click **View details** to view the number of users who were created or modified in BlackBerry AtHoc.

### Stop a user sync

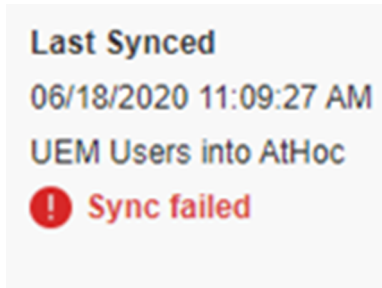
When a user sync is in progress, you can stop the sync.

1. In UEM, on the menu bar, click **Settings > BlackBerry AtHoc > User sync settings**.
2. On the **User sync settings** page, click **Stop sync**:



3. On the **Stop User Sync** window, click **Continue**.

**Requested stop sync in progress** is displayed while the stop request is in progress. When the sync is stopped, **Sync Failed** is displayed in the **Last Synced** section:





## Synchronize users from UEM to BlackBerry AtHoc using the CSV export-import process

To synchronize users from UEM to BlackBerry AtHoc using a CSV export-import process, complete the following tasks:

- [Export UEM users to a CSV file](#)
- [Map the UEM email addresses to Mapping ID and Username in BlackBerry AtHoc](#)
- [Import UEM users to BlackBerry AtHoc](#)

### Export UEM users to a CSV file

1. In UEM, on the menu bar, click **Users > Managed devices**.
2. Click  at the top of the user list and perform any of the following actions:
  - Click **Select all** or select the check box for each column that you want to display. You must include the Username column.
  - Clear the check box for each column that you want to remove.
  - Click **Reset** to return to the default selections.
3. To sort the user list, click a column header.
4. To reorder the columns, click a column header and drag it to the left or right.
5. Perform one of the following actions:
  - Select the check box at the top of the user list to select all users.
  - Select the check box for each user that you want to include in the file. You can use Shift+click to select multiple users.
6. Click  and save the file.

## Map the UEM email addresses to Mapping ID and Username in BlackBerry AtHoc

To ensure that UEM users receive UEM messages, the email addresses of the UEM users must be mapped to the Username and Mapping ID in your BlackBerry AtHoc system.

1. Open the .csv file you exported from UEM in the previous task.
2. Copy the data in the **Contact Email** column.
3. Insert a new column called **Mapping ID**.
4. Paste the data from the **Contact Email** column into the new **Mapping ID** column.
5. Rename the Contact Email column to Username.
6. Save the .csv file.

## Import UEM users to BlackBerry AtHoc

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click **Users**.
3. Click **Users**.
4. Click **More Actions > Import**.
5. Click **Browse**.
6. Navigate to the location of the UEM user .csv file on your computer.
7. Open the file to enter or modify the user data.
8. Ensure that columns with multiple values have the correct format to import correctly.
  - The entire entry must be enclosed within double-quotes. This rule is true even if the multi-select picklist has only a single entry.
  - A comma must be used to separate each of the values. There can be no spaces before or after the comma.

### Examples:

- This example shows two column names, separated by a comma (no space before or after the comma).  
POSITIONS is a multi-select picklist column.  
`USERNAME,POSITIONS`
- The next example shows a multi-select picklist attribute column with multiple entries.  
`Cadiz,"ESH Team Tech Supv,FMT Coordinator,SITE 300,Exercise Call Out,Field Monitoring Team,Coordinator DOC"`
  - The entire entry starts and ends with regular double-quote characters (not the "smart quotes" used by some word-processors).
  - Each picklist entry is separated by a comma (no spaces before or after the comma).
  - An entry can have a space within it. For example: Field Monitoring Team
- This example shows a multi-select picklist attribute with a single entry.  
`East,"LEDO"`

9. After you have entered your data, save and close the file.
10. Open and review the file in Notepad or a text editor utility.

**Note:** Excel hides some characters from view. If you edit the file in Excel, it might format your entries with extra characters. The incorrect format might cause the import operation to fail.

11. Review the syntax, and then save the modified file as a .txt file.
12. Edit the file name and manually change the extension from .txt to .csv.

The import function requires a .csv file type. This method preserves the formatting in the text file.

13. Click the filename, and then click **Open** to upload the file into the system.

The filename appears in the **User CSV File** field on the **Import User File** screen. Each of the columns from the import file are listed in the **Select the columns to import** section.

14. Optionally, select **Partial User Import Enabled** to enable partial user data to be imported. When selected, if a user entry contains an invalid value the rest of the user's data is still imported.
15. Select each of the columns of data you want to import or click **Select All**.
16. Review the **Columns that cannot be imported** field list to make sure it does not contain important data that you must be able to view within BlackBerry AtHoc. If the list contains important columns of information, contact BlackBerry AtHoc Technical Support for help.
17. Click **Import**. The **Importing Users** window opens. The import happens in batches of 5000 users.
18. While the import is in progress, a **Stop Import** button appears on the Importing Users window. Clicking this button stops the import process immediately and prevents the next batch of users from being imported from the file. However, records that have already been added are not removed and records that have been updated are not restored to previous values.

When the import completes, an import summary screen appears, listing the following information:

- Total number of users in the import file
- Total number of users who were processed
- Number of users who were successfully processed
- Number of users who were partially processed
- Number of users who failed to be processed
- Username of the person who imported the file
- Time the file import process started and ended

For more information about managing users in BlackBerry AtHoc, see the [BlackBerry AtHoc Manage Users](#) guide.

# Uninstall UEM Notifications

The uninstall process will stop the UEM services for a short time, so you should perform this task when there will be minimal impact to users.

1. Open the **Control Panel**.
2. Click **Programs and Features**.
3. Right-click **BlackBerry AtHoc snapin** and select **Uninstall**.
4. On the confirmation window, click **Yes**.

A Windows command prompt window opens and the following command is executed: `<drive>:\Program Files\BlackBerry\UEM\tools\plugins\onprem\plugin-undeploy.bat`.

The uninstall process may take some time. Do not close the Windows command prompt window until the uninstall process is completed.

# Troubleshoot issues with UEM Notifications

**Issue:** I attempted to send a notification from the UEM user manager and it says the limit is 2000.

**Possible causes:** You selected more than the allowed number of recipients from the UEM user manager, which is 2000. If you want to alert more users in a single notification, use a group in the Notifications menu or send multiple notifications.

**Issue:** I sent a notification to a large number of users inside a group and it failed.

**Possible causes:** You can send a notification to a maximum of 30,000 users in a group.

**Issue:** I sent a notification, but the end users did not receive it.

**Possible causes:**

- The users do not exist in your BlackBerry AtHoc system.
- The users exist in the BlackBerry AtHoc system, but do not have a Username or Mapping ID attribute in their profile.
- The users exist in the BlackBerry AtHoc system, but do not have any of the selected delivery methods.

**Issue:** I sent a notification to 1000 UEM users, but when I look at the notification report, it shows that the message was sent to only 990 users.

**Possible cause:** Some of your UEM users are not mapped in your BlackBerry AtHoc system. Notification reports only reflect the users in the BlackBerry AtHoc system, not users in UEM.

**Issue:** I want to send myself a test notification, but do not see the Send only to me option on the New notification screen.

**Possible cause:** You are an operator in UEM, but you do not have a user profile in the BlackBerry AtHoc system.

**Issue:** I can see the Notifications plug-in in the UEM console, but I cannot send notifications and I see errors when viewing settings and sent alerts.

**Possible cause:** The UEM Notifications plug-in is not installed on the UEM core server. Go to **Settings > Infrastructure > Instances**. Expand the BlackBerry UEM instance and view the installed plug-ins and their versions in the **BlackBerry UEM - UEM Core** and **BlackBerry UEM - Management console** rows.

**Issue:** I sent a stop sync request and it is taking a long time to complete.

**Possible cause:** If you submit a stop sync request within 5 seconds of the sync start, the stop request processes quickly. If the stop sync request occurs after the sync request has been processing, the stop request takes longer because it needs to roll back the changes already made by the in-progress sync.

**Issue:** User import through .csv file displays an error when more than 1000 users are imported.

**Possible cause:** User import is restricted to 1000 users at a time.

# BlackBerry AtHoc Customer Support Portal

BlackBerry AtHoc customers can obtain more information about BlackBerry AtHoc products or get answers to questions about their BlackBerry AtHoc systems through the Customer Support Portal:

<https://www.blackberry.com/us/en/support/enterpriseapps/athoc>

The BlackBerry AtHoc Customer Support Portal also provides support via computer-based training, operator checklists, best practice resources, reference manuals, and user guides.

# Documentation feedback

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BlackBerry Limited  
2200 University Avenue East  
Waterloo, Ontario  
Canada N2K 0A7

BlackBerry UK Limited  
Ground Floor, The Pearce Building, West Street,  
Maidenhead, Berkshire SL6 1RL  
United Kingdom

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