



BlackBerry AtHoc



BlackBerry AtHoc Networked Crisis Communication

BlackBerry UEM Notifications Installation and Administration Guide

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Chapter 1: 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.

Chapter 2: Software requirements

UEM Notifications version 1.0 requires UEM release 12.7 or later and BlackBerry AtHoc release 7.3 or later.

Chapter 3: Deploy BlackBerry UEM Notifications to a production BlackBerry UEM domain

Follow these instructions when the BlackBerry UEM Notifications plug-in is complete and ready to deploy to a production BlackBerry UEM domain. The deployment process will stop the BlackBerry 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 BlackBerry 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 you will need. To have an account provisioned in the BlackBerry AtHoc system, contact athocsupport@blackberry.com.

To deploy BlackBerry UEM Notifications, complete the following steps:

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>"**
"*<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\`.

Chapter 4: 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.

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).

To log in to UEM, complete the following steps:

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.

Chapter 5: Synchronize users

Before you use BlackBerry 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 by configuring Active Directory to synchronize users between the two systems, or by exporting your UEM users to a CSV file, and then importing them to BlackBerry AtHoc.

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 from Active Directory to UEM

To synchronize users from Active Directory to UEM, complete the following tasks:

- [Create an Active Directory connection](#)
- [Configure sync settings and schedule](#)
- [Create a group in UEM and link it to a group in Active Directory](#)
- [Synchronize user groups](#)
- [View a synchronization report](#)

Create an Active Directory connection

To create a connection between UEM and Active Directory, complete the following steps:

1. Log in to BlackBerry UEM.
2. Click **Settings** > **External integration** > **Company directory**. The Company directory connection window opens.
3. Click **Add a Microsoft Active Directory connection**. The Add a Microsoft Active Directory connection window opens.
4. Enter a name for your connection.
5. Enter your Active Directory username, domain, and password.
6. Leave the Kerberos Key Distribution Center selection and Global catalog selection fields set to their default values.
7. Click **Continue**. The Company directory connection window opens. The new connection appears in the Configured directory connections table.

Configure sync settings and schedule

1. In the Company directory connection window in UEM, click the name of a connection in the Directory connection column. The Edit a Microsoft Active Directory connection window opens.

2. Select the **Sync settings** column.
3. Select the **Enable directory-linked groups** check box.
4. Select the **Enable onboarding** check box. The Onboarding directory groups table appears.
5. Click **+** on the **Onboarding directory groups** table. The Search company directory window opens.
6. Type a name in the search box to find the group you want to synchronize.
7. Select the group in the **Directory group name** column.
8. Click **Add**. You are returned to the Edit a Microsoft Active Directory connection screen.
9. Enter a number in the **Sync limit** field to specify the number of groups that can be synchronized. Enter 0 to configure unlimited groups.
10. Leave all other fields set to their default values.
11. Click **Save**.
12. Select the **Sync schedule** tab.
13. In the Synchronization schedule table, click **+**. The Add a synchronization schedule window opens.
14. Select **Interval**, **Once a day**, or **No recurrence** from the Recurrence list.
15. (Optional) If you selected **Interval**, specify the interval in the **Interval** field. Select a time to perform the synchronization.
16. (Optional) If you selected **Once a day** or **Interval**, select the days of the week to perform the synchronization.
17. Click **Add**. You are returned to the Edit a Microsoft Active Directory Connection window.
18. Click **Save**.



Create a group in UEM and link it to a group in Active Directory

To create a group in UEM and link it to a group in Active Directory, complete the following steps:

1. Log in to BlackBerry UEM.
2. Click **Groups**.
3. Click the name of a group in the Group name column. The settings page for the selected group opens to the Settings tab.
4. In the Linked directory groups section, click **+**. The Search company directory window opens.
5. Enter the name of your group in the search field.
6. Select the group and click **Add**. You are returned to the group settings page. The new group appears in the Linked directory groups section.


Synchronize user groups

To preview and synchronize user groups in UEM and Active Directory, complete the following steps:

1. Log in to UEM.
2. Click **Settings > External integration > Company directory**. The Company directory connection window opens.
3. Click  to preview the results of the user synchronization.
4. Click  to begin a manual synchronization.

View a synchronization report

To view a directory synchronization report, complete the following steps:

1. Log in to BlackBerry UEM.
2. Click **Settings > External integration > Company directory**. The Company directory connection window opens.
3. Click a link to a report in the **Last report** column. The Directory synchronization report opens in a new window.
4. (Optional) Select a date from the list to view a report for a previous synchronization.
5. (Optional) Click  to export the report to a CSV file.

The synchronization report displays the following information:

- Start time, stop time, total time, and status of the synchronization
- User information that was updated in UEM
- Users added to UEM
- Group membership updates in UEM
- Users removed from onboarding groups
- Users removed from UEM
- Devices removed from UEM

Synchronize users to BlackBerry AtHoc

To synchronize users to BlackBerry AtHoc, you can use the LDAP data integration process, or the CSV import process.

Synchronize users with the LDAP data integration module

To synchronize users to BlackBerry AtHoc using the LDAP data integration module, complete the following tasks:

- [Download the AD Sync Tool](#)
- [Map attributes and devices to the BlackBerry AtHoc system](#)

Download the AD Sync Tool

To download the AD Sync Tool, complete the following steps:

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 **AD Sync Tool** from the list.
3. Click **Next**.
4. Download and save the ZIP file to your system.

Update the configuration file

The `AtHocDataIntegration.config` file provides instructions for obtaining LDAP data.

To update the `AtHocDataIntegration.config` file, complete the following steps:

1. Open the `AtHocDataIntegration.config` file in your BlackBerry UEM Notifications package.
2. Update the following Active Directory parameters (`<AdParameters>`):
 - `<server>`—An optional IP address or the LDAP server name. This field can be blank. If blank, the synchronization module searches the default domain controller. For an SSL-secured LDAP, you must specify the fully-qualified domain name of the LDAP server. Specifying the port is optional. By default, the LDAP service port is 389 and the SSL-secured LDAP service port is 636.
 - `<username>`—The username of the account that accesses the LDAP server. If the server is not specified, the username is ignored. For an SSL-secured LDAP server, you must specify a fully-qualified user DN (FQDN). For example: `CN=User Common Name,OU=Admin Accounts,DC=SomeDomain,DC=com`.
 - `<password>`—The password of the user account which accesses the LDAP server. If the server is not specified, the password is ignored.
 - `<rootNodeDistinguishedName>`—Enter the node in Active Directory that you want to export.
3. Specify the attributes that you want to export from Active Directory in the `<attributes>` parameter.

Example:

```
<attributes>
  <attribute memberExport="true">samaccountname</attribute>
  <attribute>sn</attribute>
  <attribute>givenname</attribute>
```

```

    <attribute>displayname</attribute>
    <attribute>userAccountControl</attribute>
    <attribute>Mail</attribute>
    <attribute>Phone</attribute>
  </attributes>

```

4. Update the following BlackBerry AtHoc (<sdkParameters>) parameters:

- <providerID>—The ID of the BlackBerry AtHoc organization whose data will be synchronized.
- <url>—The location of your BlackBerry AtHoc server. This parameter must be appended with /sdk/listener/listen.asp.
- <username>—An operator in the BlackBerry AtHoc system with SDK User permissions.
- <password>—The password of an operator with SDK User permissions.

Example:

```

<providerId>1234567</providerId>
<url>https://pilot.athoc.com/sdk/listener/listen.asp</url>
<username>SDKUser1</username>
<password isEncrypted="false">yourpassword</password>

```

5. Save the file.

Map attributes and devices to the BlackBerry AtHoc system

To map Active Directory user attributes and devices to the BlackBerry AtHoc system, complete the following steps:

1. Open the Sample.xml file in your BlackBerry UEM Notifications package.
2. Update the following Active Directory user attributes to attributes in BlackBerry AtHoc:
 - Mail—Map to the mid attribute.
 - givenname—Map to the firstName attribute.
 - sn—Map to the lastName attribute.

Example:

```

<xsl:element name="user">
  <xsl:attribute name="seqId">
    <xsl:value-of select="position()" />
  </xsl:attribute>
  <xsl:for-each select="attributes">
    <xsl:element name="mid">

```

```
        <xsl:value-of select="Mail"/>
    </xsl:element>
    <xsl:element name="firstName">
        <xsl:value-of select="givenname"/>
    </xsl:element>
    <xsl:element name="lastName">
        <xsl:value-of select="sn"/>
    </xsl:element>
```

3. Update the following Active Directory device attributes to BlackBerry AtHoc attributes:

- Mail—Map to the Email-Work attribute.
- phone—Map to the mobilePhone attribute.
- phone—Map to the sms attribute.

Example:

```
<xsl:element name="devices">
    <xsl:call-template name="GetDevice">
        <xsl:with-param name="commonName" select="'Email-Work'" />
        <xsl:with-param name="address" select="mail" />
    </xsl:call-template>
    <xsl:call-template name="GetDevice">
        <xsl:with-param name="commonName" select="'mobilePhone'"
    />
        <xsl:with-param name="address" select="phone" />
    </xsl:call-template>
    <xsl:call-template name="GetDevice">
        <xsl:with-param name="commonName" select="'sms'" />
        <xsl:with-param name="address" select="phone" />
    </xsl:call-template>
</xsl:element>
```

4. Save the file.

5. Run the `AtHocDatIntegrator.exe` file as an administrator.

For more information about using the LDAP data integration module with BlackBerry AtHoc, see the *BlackBerry AtHoc LDAP Data Integration Module Guide* at the following URL:

<http://help.blackberry.com/en/blackberry-athoc/current/ldap/BlackBerry-AtHoc-ldap-integration.pdf>


Synchronize users with a CSV file

To synchronize users between BlackBerry UEM and BlackBerry AtHoc with the CSV 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

To export UEM users to a CSV file, complete the following steps:

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.

To map the user data, complete the following steps:

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

To import users from the CSV file you exported from BlackBerry UEM, complete the following steps:

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click **Users**.
3. Click the **Users** link.
4. Click the **More Actions** list.
5. Select the **Import** option.
6. Click the **Browse** button.
7. Navigate to the location of the UEM user CSV file on your computer.
8. Open the file to enter or modify the user data.
9. 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 following 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"
```

10. After you have entered your data in Excel, save and close the file.
11. 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.

12. Review the syntax, and then save the modified file as a `.txt` file.

13. 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.

14. Click the file and then click **Open** to upload the file into the system.

The file name 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.

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 the **Import** button. The Importing Users window opens. The import happens in batches of 5000 users.

18. While the import file 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 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 Enterprise User Guide*, available at the following URL:

<http://help.blackberry.com/en/blackberry-athoc/current/enterprise-user/BlackBerry-AtHoc-enterprise.pdf>

Troubleshoot issues with user synchronization

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.

Chapter 6: Configure BlackBerry AtHoc settings in UEM

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

To configure BlackBerry AtHoc settings in UEM, complete the following steps:

1. Log in to the UEM console as an administrator.
2. On the left panel select **Settings > BlackBerry AtHoc**. The BlackBerry AtHoc connection settings page opens.
3. Enter the BlackBerry AtHoc system URL in the format `https://<athocserver.domain.com>`.
4. Enter the BlackBerry AtHoc organization ID provided by your BlackBerry AtHoc support representative.
5. Enter the Username of an administrator user with the SDK User role in the BlackBerry AtHoc system.
6. Enter a password.
7. Click **Test connection** to verify your settings.
8. Click **Save**.

Chapter 7: BlackBerry AtHoc customer 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 Portal:

<http://www.athoc.com/customers/customer-support.html>

The BlackBerry AtHoc Customer portal also provides support through computer-based training, Operator checklists, best practice resources, reference manuals and user guides.