



BlackBerry AtHoc

Cape Aural Warning System Installation and Configuration Guide

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Getting started

The BlackBerry AtHoc management system uses the IIM add-on module interface with Giant Voice (GV) outdoor warning devices to enable wide-area Mass Notification System (MNS) broadcasts. Giant Voice features can broadcast critical information using voice messages, wave files, musical tones, or text-to-speech (TTS) conversion. Cape Aural Warning System (CAWS) supports outdoor Public Address (PA) systems that have large amplified speakers. Typically, speakers are set on poles in an array that covers a specified area with enough acoustic sound to override the ambient noise with emergency notification.

After the BlackBerry AtHoc management system is integrated with a CAWS, operators can disseminate emergency alerts to the siren system from the BlackBerry AtHoc management console. Alert messages can be delivered using text-to-speech or pre-recorded audio files to up to three pre-defined target zones by using the external call key inputs. A fourth external call key input is reserved for sending a "Cancel" command to all poles.

Configure the CAWS device


Configure the CAWS device in the Settings section of the BlackBerry AtHoc management system to enable the BlackBerry AtHoc alerts system to publish alerts through CAWS.


Configure the CAWS device on the BlackBerry AtHoc application server


Log in to the BlackBerry AtHoc management system and check the Delivery Gateways section to verify that the CAWS and XML Feed device gateways have been installed. If they are installed, skip this section.

1. Log in to the BlackBerry AtHoc application server as an administrator.
2. Navigate to the following folder <IWSAlerts Install Path>\ServerObjects\Tools and run the `AtHoc.Applications.Tools.InstallPackage.exe` file.
3. On the **Configure Device Support** screen, select **CAWS** and **Xml Feed**.
4. Click **Enable** to install the devices.
5. When the Installation Complete pop-up window is displayed, click **OK**.
6. Click **Close**.

Configure the delivery gateway

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click .
3. In the **Devices** section, click **CAWS Giant Voice**.
4. On the **CAWS Giant Voice** page, click **Copy default settings**.
5. Click **Save**.


Alerts Account Situation Users Organizations Reports
CAWS AND ... (2050556) Admin User



CAWS Giant Voice

Configure support for CAWS Giant Voice

[Copy default settings](#)

General Settings

Convert Line Breaks: ☐ Yes ☒ No
Replace line break characters with spaces in content delivered to the IIM

Expected Polling Rate:

Output Format: ☒ Standard ☐ Eaton WAVES ☐ CentrAlert

CAP Parameter Defaults

Sender:
The identifier of the sender of the alert message

Event:
The text denoting the type of the subject event of the alert message

CAP URLs


Use following URLs within IIM configuration and for debugging purposes. Replace placeholders with appropriate values before using.

CAP Index URL:
IIMs poll this URL to retrieve all Live Alerts from system.


CAP Message URL:
IIMs poll this URL to retrieve details for a specific Alert.

CAP Event Logs Submission URL:
IIMs post event logs from Giant Voice systems to this system using this URL.

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- In the navigation bar, click .
- In the **Devices** section, click **Xml Feed**.
- Click **Copy default settings**.
- In the **Feed Source** section, select **Delivery Gateway ID**.

10. Click

 **Xml Feed**
Configure support for content feed publishing. Select Copy Default Settings to ensure that the feed format for CAP is compatible with the feed source.


[Copy default settings](#)

Feed Formats:

☐ Syndication: Atom
☒ Syndication: Caplim
☒ Syndication: CapIndex
☐ Syndication: RSS 2.0



Feed Source:

☐ End User
☒ Delivery Gateway ID
☐ Custom Identity

[<< Back](#) Save  Reset

Save.

Enable the CAWS device

1. In the navigation bar, click .
2. In the **Devices** section, click **Devices**.
3. On the **Devices** page, click the **Mass Devices** tab.
4. Click **CAWS Giant Voice**.
5. On the **CAWS Giant Voice** page, click **Edit**.
6. In the **Delivery Gateway** section, click **Add a Delivery Gateway > CAWS Giant Voice**.
7. On the **CAWS Giant Voice** row, click .
8. On the **Configure Gateway** window, check for XML code in the **Configuration XML** field. If the XML statements are not provided, copy and paste the following code into the field:

```
<Configuration>
<CapParams>
  <DefaultKeyActivationCode>1</DefaultKeyActivationCode>
  <KeyMode>2</KeyMode>
  <GVSystemType>CAWS</GVSystemType>
  <AllMode>0</AllMode>
  <ZoneMode>1</ZoneMode>
  <PoleMode>2</PoleMode>
  <UnusedMode>0</UnusedMode>
  <DefaultAllCall>0</DefaultAllCall>
  <NoPARequired>0</NoPARequired>
  <PARequired>1</PARequired>
  <IsInfoParameter>No</IsInfoParameter>
  <!--should be present if device has output method
dependencies-change ActivationCode value to 0 if given
output method will not be used --value to 0 if given
output method will not be used -->
  <GVParameterDependencies><GVParameter>
    <GVSystemType>Outdoor_PA</GVSystemType>
```



```

    <ActivationCode>1</ActivationCode>
  </GVParameter><GVParameter>
    <GVSystemType>EDIS</GVSystemType>
    <ActivationCode>0</ActivationCode>
  </GVParameter><GVParameter>
    <GVSystemType>AM_Radio</GVSystemType>
    <ActivationCode>0</ActivationCode>
  </GVParameter><GVParameter>
    <GVSystemType>Cable</GVSystemType>
    <ActivationCode>0</ActivationCode>
  </GVParameter></GVParameterDependencies>
  <IsCancelable>false</IsCancelable>
  <ContentSource>GiantVoice</ContentSource>
</CapParams>
</Configuration>

```

9. Click **Submit**.
10. Click **Save**.
11. Click **More Actions > Enable**.

Enable the Xml Feed device

1. In the navigation bar, click .
2. In the **Devices** section, click **Devices**.
3. On the **Devices** page, click the **Mass Devices** tab.
4. Click **Xml Feed**.
5. On the **Xml Feed** page, click **Edit**.
6. In the **Delivery Gateways** section, click **Add a Delivery Gateway > Xml Feed**.
7. On the **Xml Feed** row, click .
8. On the **Configure Gateway** window, check for XML code in the **Configuration XML** field. If the XML statements are not provided, copy and paste the following code into the field:

```

<Configuration>
  <DeviceType>FEED</DeviceType>
</Configuration>

```


9. Click **Submit**.
10. Click **Save**.

Set up mass device endpoints (targets)

This section describes the steps to create the mass device external call key and key endpoint.

Create mass device external call key endpoints

Create a new mass device endpoint for each static call key that is used.

1. Log in to BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click .
3. In the **Devices** section, click **Mass Devices Endpoints**.
4. On the **Mass Device Endpoints** page, click **New**.
5. Select **CAWS Giant Voice** from the list.


6. In the **General** section, enter a name in the **Endpoint Name** field.
7. In the **Configuration** section, select the **Pole** option for **Giant Voice type**.
8. In the **Address** field, enter call key: "**A,0**". Ensure that there are no spaces anywhere in the character string.
9. Click **Save**.

Create and publish a CAWS Giant Voice alert template

Prerequisites

- Before you start sending test alerts through CAWS Giant Voice, consider the impact it has on everyone within hearing distance of the poles you are using during the test.
- This process assumes that the IIM is not configured to download data from the BlackBerry AtHoc management server and is not connected to the Giant Voice equipment.
- Consult with your POC about the acceptable content of the test alert. For example, the word "test" should appear at, or very near to, the start of the broadcast message.
- Although the initial use of this template is to test the data creation process, this template can be used during the audio tuning phase after the IIM and Giant Voice hardware are connected.

To confirm that the CAWS Giant Voice device is installed correctly on the BlackBerry AtHoc management system, create a template.

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. Click **Alerts > Alert Templates**.
3. Click **New**.
4. On the **New Template** screen, in the **Alert Template** section, enter a template name and description.
5. Select a folder from the **Folder** list.
6. Select **Available for quick publish** or **Available for mobile publishing**.
7. In the **Content** section, enter the title and content of the alert.
8. In the **Mass Devices** section, select the **CAWS Giant Voice** check box and then from the list select one or more **Mass Alert Endpoints**.
9. Click **Options** in the top right corner of the **Mass Device** section.
10. On the **Mass Devices Options** screen, select **Text to Speech** and **Alert Body** or **Custom Text**.
11. Click **Apply**.
12. In the **Schedule** section, change the **Alert Duration** to 15 minutes.
13. Click **Save**.
14. Click  to go to the Home page.
15. In the **Quick Publish** section, find the Alert Template you created.
16. Click **Review and Publish**.
17. Click **Publish**.

Verify the published alert

To verify that the alert was published successfully to the syndication feed, complete the following steps:

1. Open a browser and navigate to the following URL: `https://<url>/syndication/caws/<vps-id>/capindex`.

Where <url> is the base URL of the BlackBerry AtHoc management system (for example, `https://integration7.athoc.com`) and <vps-id> is the 7 or 8-digit Org ID.

2. Copy the content in the <url> field into another browser. The "capIndex" XML format must be similar to the content in the following image:

```

▼<capIndex xmlns="http://www.incident.com/cap_index/1.0">
  <title>Current CAP Messages</title>
  <updated>2018-07-25T01:58:00.6067497-07:00</updated>
  ▼<item xmlns="http://www.incident.com/cap_index/1.0">
    <id>62C79905-F136-4E6B-9B3A-A9E50824E98F</id>
    <identifier>62C79905-F136-4E6B-9B3A-A9E50824E98F</identifier>
    <sender>AtHoc Admin</sender>
    <status>System</status>
    <msgType>Alert</msgType>
    <firstEffective>2018-07-25T01:57:54.763</firstEffective>
    <lastExpires>2018-07-25T05:57:54.763</lastExpires>
    ▼<url>
      https://integration7.athoc.com/Syndication/CAP_CAWS_2050336/CapIim/1143935
    </url>
    <bounds/>
    <format>http://www.incident.com/cap/1.1</format>
  </item>
</capIndex>

```

3. Verify the <addresses> and <code> and match with the following format. The "alert" XML format must be similar to the content in the following image:

```

▼<alert xmlns="urn:oasis:names:tc:emergency:cap:1.1">
  ▼<identifier>
    CAP_CAWS|572621|62C79905-F136-4E6B-9B3A-A9E50824E98F|1143935|PUBLISH
  </identifier>
  <sender>IWSAlerts</sender>
  <sent>2018-07-25T01:57:54-07:00</sent>
  <status>Actual</status>
  <msgType>Alert</msgType>
  <source>System Default</source>
  <scope>Public</scope>
  <addresses>CAWS,1,1</addresses>
  <code>0,1</code>
  ▼<info>
    <category>Other</category>
    <event/>
    <urgency>Unknown</urgency>
    <severity>Unknown</severity>
    <certainty>Unknown</certainty>
    ▼<eventCode>
      <valueName>ATHOC</valueName>
      <value>IWSA</value>
    </eventCode>
    <effective>2018-07-25T01:57:54-07:00</effective>
    <expires>2018-07-25T05:57:54-07:00</expires>
    <senderName>CAWS and ADT Mass Device Testing Only</senderName>
    <headline>[Enter Title]</headline>
    <description>[Enter Title]. [Enter Body]</description>
    <instruction/>
    <contact>support@athoc.com</contact>
    ▼<parameter>
      <valueName>Outdoor_PA</valueName>
      <value>1</value>
    </parameter>
    ▼<parameter>
      <valueName>EDIS</valueName>
      <value>0</value>
    </parameter>
    ▼<parameter>
      <valueName>AM_Radio</valueName>
      <value>0</value>
    </parameter>
    ▼<parameter>
      <valueName>Cable</valueName>
      <value>0</value>
    </parameter>
  </info>
</alert>

```

4. If any of the formatting does not match, review the CAWS Giant Voice Gateway XML content and Mass Communication Users' CAWS Giant Voice device addressing.

Configure IIM IP connectivity

This section describes the steps to configure the IP Integration Module (IIM) to communicate with the BlackBerry AtHoc CAWS device.

Prerequisite

Ensure that the following packages are installed and configured before performing any tasks:

- Latest CAWS BlackBerry AtHoc device package
- Latest CAWS IIM Capnode package
- Latest IIM Agent

To work as part of the BlackBerry AtHoc system, IIM must be able to communicate with the BlackBerry AtHoc server to download the CAP packets.

Collect the following initial configuration data:

- The BlackBerry AtHoc Alerts system base URL
- The BlackBerry AtHoc Alerts Organization ID
- Customer's proxy server and port information

To find this information, use a local PC to log in to your local instance of the BlackBerry AtHoc management console. The URL can be a base "https" address used to access a specific system. You can obtain the URL of the system from the local system administrator or from the BlackBerry Customer support team. Launch the management console. The URL from the "https" to the last character before the third forward slash (/) is the "base URL" of the system. For example, in the following URL address bar, the full URL for the sign-on page is: "https://integration7.athoc.com/client/auth/login?ReturnUrl=%2fclient%2fathoc-iws". The "base-URL" of the system is "https://integration7.athoc.com".

The organization ID is a 7 or 8-digit numerical identifier of the specific system of that customer. To obtain this Organization ID, log in to the BlackBerry AtHoc management system for the customer. Once logged in, you can find the system's organization ID at the top right of the Home Page of the system.

Navigate to the settings page of the browser and determine if you are using any type of Proxy server for routing of internet traffic. For example, if the browser you are using is Microsoft Internet Explorer (IE), go to the LAN settings, in IE, select **Tools > Internet Options**. On the **Internet Options** screen, click the **Connections** tab. At the bottom of the window, click **LAN settings**.

In the **Proxy Server** section, click **Advanced**. The **Proxy Settings** screen displays the Proxy Server Address.

Record the proxy server address and the port number. You can now close these settings windows and exit IE.

Note: It is also possible that your IE instance may not use proxy servers. If this is the case when you click the LAN settings button, no proxy server is used for internet traffic on this network.

Configure the system_private.config file

To configure the `system_private.config` file, complete the following steps:

1. Open Microsoft Notepad as an administrator.
2. Click **File > Open**.
3. Navigate to `C:\Program Files\capnode` and change the file selection from Text Documents (*.txt) to All Files (*.*)
4. Select the **system_private** file.
5. Click **Open**.

6. Verify the following items in the `system_private.config` file:
 - a. The `indexURL` variable should be formatted similar to the following image. The base URL should be followed by `"/syndication/"`, then the device gateway protocol ID (for example, `CAP_CAWS` for a CAWS system), the Organization ID number, followed by `"/capindex"`.
 - b. The `"#"` at the beginning of a line in the `system_private.config` file is used to comment out an unused line. The `"#"` should be removed from a line to use the variable.
 7. Enter the proxy server and proxy port information you collected earlier in the **proxyServer** and **proxyPort** parameters.
- If the settings on the machine that you tested with is set for "Automatic" in the proxy settings, the settings for those two lines displays as follows:
- `proxyServer=none`
 - `proxyPort=8080`
8. Update the `CapPostingTarget` variables to reflect the correct URL using the same base URL as in the `indexURL` variable.

```

system_private - Notepad
File Edit Format View Help
#Private System Properties For CapCon
#Configured 20150918 Athoc

#Site Specific
encoders=com.ha.capnode.drivers.sirencentral.SirenCentralEncoder
indexURL=https://integration4.athoc.com/Syndication/CAP_WHELEN_V2/2060520/capindex?ast=00E06F2669DF
proxyServer=none
proxyPort=8080
delayBetweenRxPolls=

#TTS
encoder.SirenCentralEncoder.TTS_SynthesizerIndex=0
encoder.SirenCentralEncoder.TTS_VoiceIndex=1
encoder.SirenCentralEncoder.TTS_Volume=91
encoder.SirenCentralEncoder.TTS_Speed=65
encoder.SirenCentralEncoder.TTS_Pitch=120
encoder.SirenCentralEncoder.TTS_Range=15

#Relay
encoder.SirenCentralEncoder.SirenCentralDriverWhelen.shortdelay=500
encoder.SirenCentralEncoder.SirenCentralDriverWhelen.Delay_for_PAcodex_TX=5000
encoder.SirenCentralEncoder.relay=1;3;4
encoder.SirenCentralEncoder.ptt_before=100;100;1000
encoder.SirenCentralEncoder.ptt_after=100;100;1000

#PostCap
CapPostingTarget=True
CapPostingTarget.capurl=https://integration4.athoc.com/syndication/PostCap
CapPostingTarget.user=
CapPostingTarget.password=
  
```

9. Click **File > Save**.
10. Close the `system_private.config` file.
11. Restart the CapCon service.

Restart the CapCon service

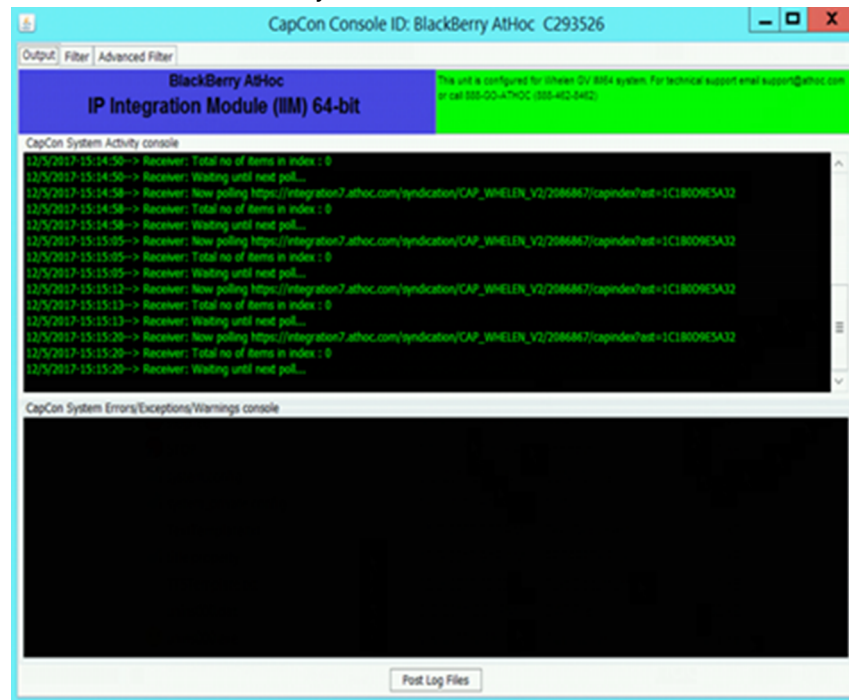
1. Navigate to IIM system.
2. Go to **Start > Run > Services**.
3. Launch an instance of the Services Manager application. There should be a quick-launch icon in the taskbar of the desktop.
4. Scroll down to the IIM CapCon Service.
5. Right-click on the **CapCon Services** row and select either **Restart** or **Stop** and then start the CapCon Service.

Verify the CapCon system activity console (GUI)

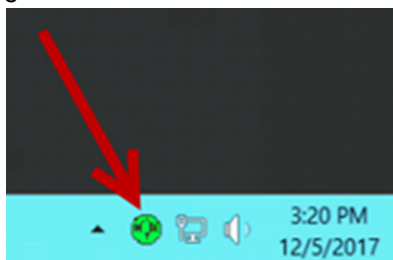
1. Log in to the IIM console as an administrator. The CapCon Console loads automatically.

The data in the CapCon System Activity console polls at the rate set by the `delayBetweenRXpolls` variable in the `system_private.config` file. The default is 7 seconds. A message indicates the total number of items in the index. The index number is the number of active alerts on the BlackBerry AtHoc system at that time.

2. Verify that the IIM console does not show any new errors.



3. Verify that the console icon in the task tray appears green, indicating that the connectivity between the IIM and the BlackBerry AtHoc Alerts system is good.



Troubleshooting

If the CapCon System Activity console indicates anything other than a total number of items in the index and a number, or if the CapCon System Errors/Exceptions/Warnings console has content in red, this indicates that the configuration has not been executed correctly.

To troubleshoot the configuration, complete the following steps:

1. If the BlackBerry AtHoc management system, for example, <https://integration7.athoc.com/athoc-iws> is available on IE on a local workstation, then the indexURL should also be available. Enter the indexURL in the browser. For example, https://integration7.athoc.com/syndication/cap_caws/2050336/capindex.

If there are no items in the syndication feed, an XML similar to the following image should be displayed:

```
<?xml version="1.0"?>
- <capIndex xmlns="http://www.incident.com/cap_index/1.0">
  <title>Current CAP Messages</title>
  <updated>2017-12-14T08:11:25.2276647-08:00</updated>
</capIndex>
```

If there are items in the feed, an XML similar to the following image should be displayed:

```
<capIndex xmlns="http://www.incident.com/cap_index/1.0">
  <title>Current CAP Messages</title>
  <updated>2018-07-25T01:58:00.6067497-07:00</updated>
  <item xmlns="http://www.incident.com/cap_index/1.0">
    <id>62C79905-F136-4E6B-9B3A-A9E50824E98F</id>
    <identifier>62C79905-F136-4E6B-9B3A-A9E50824E98F</identifier>
    <sender>AtHoc Admin</sender>
    <status>System</status>
    <msgType>Alert</msgType>
    <firstEffective>2018-07-25T01:57:54.763</firstEffective>
    <lastExpires>2018-07-25T05:57:54.763</lastExpires>
    <url>
      https://integration7.athoc.com/Syndication/CAP_CAWS_2050336/CapIim/1143935
    </url>
    <bounds/>
    <format>http://www.incident.com/cap/1.1</format>
  </item>
</capIndex>
```


2. If connectivity is still not good, try commenting out the proxyServer and proxyPort variables.
3. If an HTTP or HTTPS error is displayed instead of XML, this may indicate a firewall or certificate issue or a configuration problem with the BlackBerry AtHoc server syndication folder or subfolders.
4. Check the indexURL and proxy settings in the system_private.config file for any misspellings. If any line have been misspelled, repeat the configuration steps.
5. Check the capnodelog file for errors. Open Windows Explorer by right-clicking on the IIM Start button and navigate to C:/Program Files/capnode/capnodelogs and open the capnode.log file with Notepad. Browse the file to find the time that the indexURL was changed and the CapCon service restarted.
6. Contact BlackBerry AtHoc technical support. Be prepared to provide the system_private.config and capnode.log files and screen shots of the console screen and the BlackBerry AtHoc management console pages.

Publish and verify a pre-test alert template

Prerequisite

- Before you start sending test alerts through CAWS Giant Voice, consider the impact on everyone within hearing distance of the poles you are using during the test.
- Consult with your POC about the acceptable content, user targeting, and device selection of the pre-test notification.

To create a template that targets end users using Desktop Popup, email, and messages to other devices to inform them of a Giant Voice System test, complete the following steps:

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. Click **Alerts > Alert Templates**.
3. Click **New**.
4. On the **New Template** screen, in the **Alert Template** section, enter a template name and description.
5. Select a folder from the **Folder** list. Select **Test** if available.
6. Select **Available for quick publish** or **Available for mobile publishing**.
7. Select **Informational** from the **Severity** list.
8. Select **Other** from the **Type** list.
9. In the **Content** section, enter an alert title. The title can be the same as the template name.
10. Enter the text to be read by the text-to-speech in the **Alert Body** field. The Body should contain the details of the testing with information such as the time testing will start and finish and any actions that should be taken as a result.
11. In the **Target Users** section, select the appropriate targeting group, individual users, or query to send the pre-test notification.
12. Click **Select Personal Devices**.
13. Select **Desktop App** and **Email-Personal**.
14. Click **Options** in the top right corner of the **Personal Devices** section.
15. On the **Personal Device Options** screen, select **App Template** and **App Audio** from the list.
16. Click **Apply**.
17. In the **Schedule** section, change the **Alert Duration** to the expected duration of the testing.
18. Click **Save**.
19. Click  to go to the Home page.
20. Find the **Giant Voice System Test Notification** template in the **Quick Publish** section.
21. Click **Review and Publish**.
22. Review the settings and selections.
23. Click **Publish**.
24. To verify that the alert was published correctly, observe the receipt of Desktop Popup or email messages on the POC workstation.

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://support.athoc.com>

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

The BlackBerry AtHoc documentation team strives to provide accurate, useful, and up-to-date technical documentation. If you have any feedback or comments about AtHoc documentation, email athocdocfeedback@blackberry.com. Please include the name and version number of the document in your email.

To view additional BlackBerry AtHoc documentation, visit <https://docs.blackberry.com/en/id-comm-collab/blackberry-athoc>. To view the BlackBerry AtHoc Quick Action Guides, see <https://docs.blackberry.com/en/id-comm-collab/blackberry-athoc/Quick-action-guides/latest>.

For more information about BlackBerry AtHoc products or if you need answers to questions about your BlackBerry AtHoc system, visit the Customer Support Portal at <https://support.athoc.com>.

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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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