
BlackBerry AtHoc Networked Crisis Communication

# IPAWS Alerts User Guide

Release 7.5, May 2018

### Contact Information

BlackBerry Limited

2988 Campus Drive, Suite 100

San Mateo, CA 94403

Tel: 1-650-685-3000

Email: athocsupport@blackberry.com

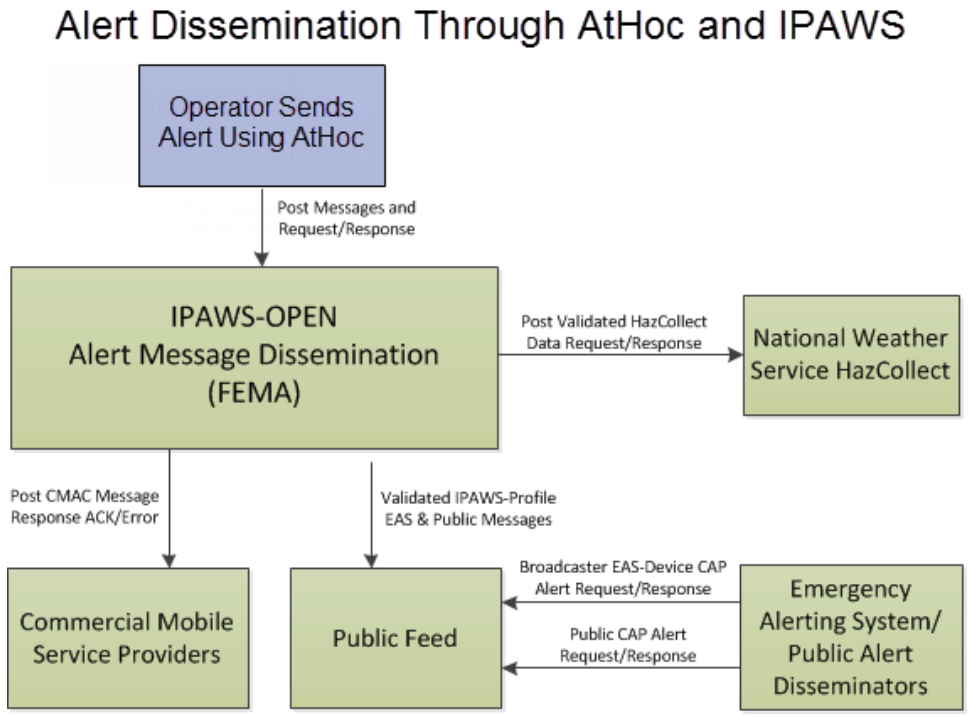
Web: http://www.athoc.com

# Contents

# Chapter 1: Overview

In an emergency, response officials need to provide the public with life-saving information quickly. The Integrated Public Alert and Warning System (IPAWS), a modern version of the national alert and warning infrastructure, helps organizations collaborate and alert the public in order to save lives and property.

The Open Platform for Emergency Networks (OPEN) enables the sharing of emergency alerts and incident-related data between different standards-compliant incident management systems. IPAWS OPEN serves as the IPAWS Alerts Aggregator, collecting and routing IPAWS emergency alerts to and from emergency systems that serve the public. IPAWS OPEN integrates with the various alert dissemination methods of IPAWS.




IPAWS provides a process for emergency communities at the federal, state, territorial, tribal, and local levels to communicate with each other through alerts. IPAWS helps integrate alerting systems that use Common Alerting Protocol (CAP) standards with the IPAWS infrastructure.

The BlackBerry AtHoc IPAWS plug-in provides support for sending alerts from one Collaborative Operating Group (COG) to other COGs and to public alerting systems such as the Emergency Alert System (EAM), and Wireless Emergency Alerts (WEA).

Using the AtHoc Notification Delivery Server (NDS) console, users first configure the plug-in and set up accounts. They then use BlackBerry AtHoc to set up the IPAWS gateways and configure the IPAWS device. In BlackBerry AtHoc, they also create a mass device endpoint for each device as well as their own COG and other COGs with which they want to communicate. Operators can then send alerts through the BlackBerry AtHoc management tool and can customize the content for the IPAWS devices. Additionally, users can use the out of the box IPAWS COG to COG Alert Template to notify operators that other COGS have sent alerts to their local system.

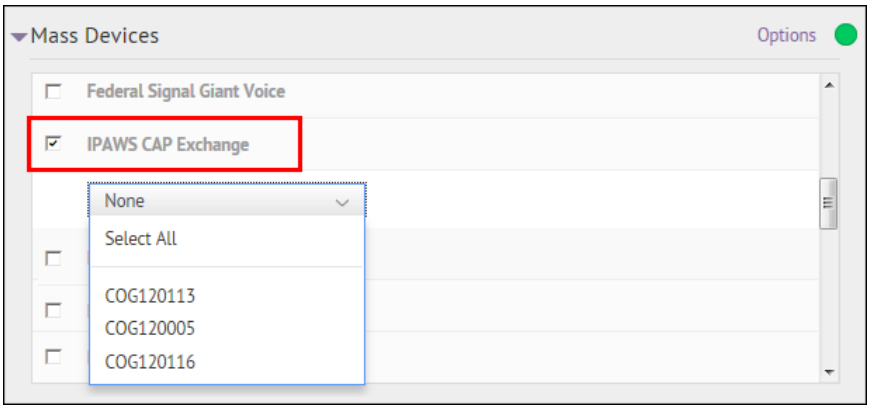
# Chapter 2: S end and receive IPAWS alerts

From BlackBerry AtHoc, you can send and receive alerts to and from other COGs with IPAWS CAP exchange. You can also send public alerts using IPAWS public services, such as EAS, NWEM, and WEA. The following sections describe how to publish and manage IPAWS alerts.

## Send a test alert to target COGs

You can create alerts and send them to target COGs using standard alert processes. To create an alert, complete the following steps:

1. Log in to the BlackBerry AtHoc management system with an administrator account.
2. Do one of the following:
   - On the BlackBerry AtHoc home page, in the Quick Publish section, click **Create a Blank Alert**.
   - In the Navigation bar, click **Alerts** > **New Alert**. On the New Alert screen, click an existing alert to edit an alert template or click **Create a Blank Alert**.
3. On the **New Alert** screen, in the **Content** section, enter the title and content of the alert.
4. Select the severity and type of the alert.
5. In the **Mass Devices** section, select the **IPAWS Cap Exchange** check box and then from the drop-down list select one or more COGs.




6. Click the **Options** link in the right top corner of the Mass Devices section.
7. On the Mass Devices Options screen, complete the following steps:
   a. Select the FEMA event type to be used for the alert from the Event Type list.
   b. (Optional) Select a severity from the Severity list. The default is Severe.
   c. (Optional) Select a certainty from the Certainty list. The default is Observed.
   d. (Optional) Select an urgency from the Urgency list. The default is Immediate.
   e. In the IPAWS Alert Content section, select the **Alert Title and Body** option to use the content that you specified in the Content section.

8. If you are sending an alert to multiple audiences, you might want to customize the text for the FEMA recipient. For example, you send an alert to your emergency team with instructions for handling the emergency. If you also include a COG, you might want to alert them to the situation without providing instructions. In this case, you should select the **Custom Text** radio button and then provide alert text that is appropriate for COG alerts.


9. Click **Apply**.
10. Click **Review & Publish** to review the alert.
11. Click **Publish** to send the alert.

**Note:** The severity you selected in the IPAWS device options is not the severity that is displayed on the Review and Publish page. The severity displayed on the Review and Publish page is the severity of the delivered IPAWS alert.

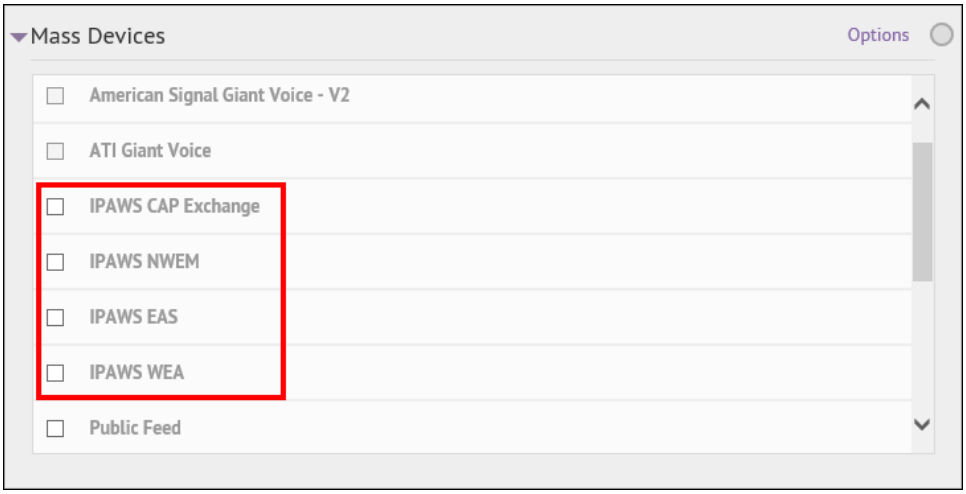
## Send a test alert to public alerting devices

You can create and send alerts to the public using standard alert processes. You can select a map shape to specify which FIPS codes are selected for the IPAWS public alert devices such as, NMEW, EAS, and WEA.

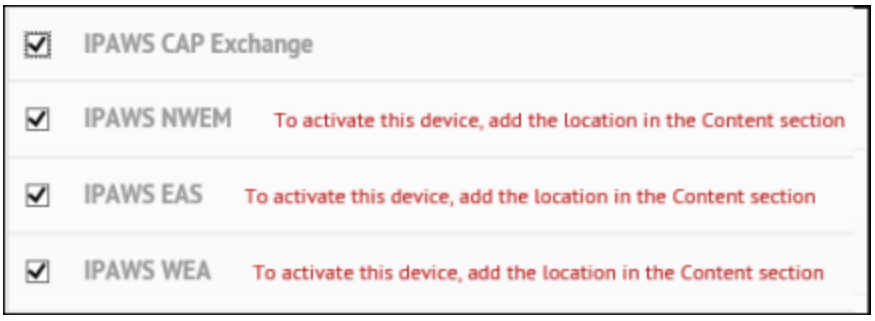
**Note:** Public alerting devices are activated by geolocation. When you target by location (with a map shape), FIPS codes are automatically appended to the alert and sent to FEMA.

To create an alert, complete the following steps:

1. Log in to the BlackBerry AtHoc management system with an administrator account.
2. Do one of the following:
   - On the BlackBerry AtHoc homepage, in the Quick Publish section, click **Create a Blank Alert**.
   - In the Navigation bar, click the **Alerts** > **New Alert**. On the New Alert screen, click an existing alert to edit an alert template or click **Create a Blank Alert**.
3. On the **New Alert** screen, enter the title and content of the alert in the **Content** section.
4. Select the severity and type of the alert.
5. In the Location field, click **Add**.
6. On the map that appears, use the drawing tools to specify an alert location and click **Apply**.
7. In the **Mass Devices** section, select one or more of the IPAWS public devices check boxes. For example, IPAWS EAS.




**Note:** You must select an area on the map in the Content section to activate the IPAWS public alert devices. If you do not, warnings appear next to the selected devices.



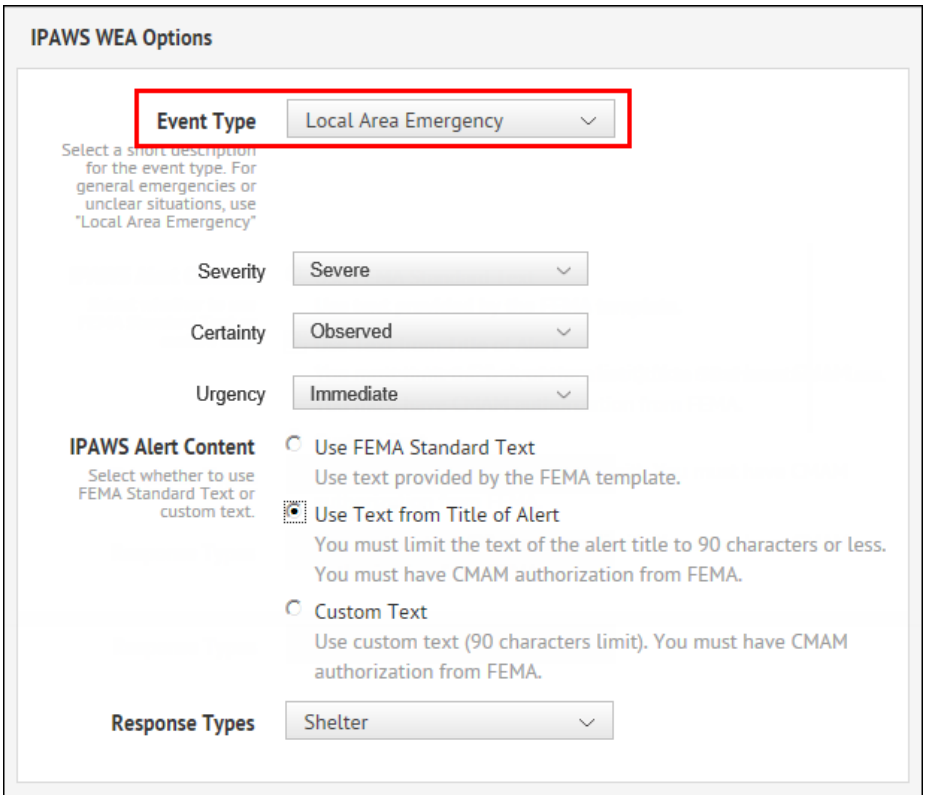

8. Click the **Options** link in the top corner of the Mass Devices section.
9. On the Mass Devices Options screen, complete the following steps:

a. Select the tab for the device you need to customize.
b. Select an **Event Type** from the list.
c. (Optional) Select a **Severity** from the list. The default is Severe.
d. (Optional) Select a **Certainty** from the list. The default is Observed.
e. (Optional Select an **Urgency** from the list. The default is Immediate.
f. Select the content of the alert.

   If you are sending an alert to both your team and to the public, you might want to customize the text for public recipients. For example, you send an alert to your emergency team with instructions for where to report for work. You would customize text for the general public to alert them to the situation without providing work instructions.

   - For NWEM and EAS, you can choose between the alert title and body text, or custom text.
   - For WEA, you can use the FEMA text. If you have authorization from FEMA you can use Commercial Mobile Alert Message (CMAM) content. Choose one of the following:
     - Use the **FEMA** template text.
     - (Requires CMAM authority) Use the title text from the alert Content section.
     - (Requires CMAM authority) **Custom Text** to enter alert content that is appropriate for public alerts.

**Note:** WEA has text limit of 90 characters.




g. Select a response type from the **Response Types** list. This option tells the public how to respond to the alert.

**Tip:** Before sending an alert to the public, test it thoroughly to avoid providing confidential, confusing, or incorrect information.

10. Click **Apply**.
11. Click **Review & Publish** to review the alert.
12. Click **Publish** to send the alert.

**Note:** The severity you selected in the IPAWS device options is not the severity that is displayed on the Review and Publish page. The severity displayed on the Review and Publish page is the severity of the delivered IPAWS alert.

# Duplicate alerts

In some situations, you might want to create an alert based on another alert displayed in the Alert Manager.

To duplicate an existing alert, complete the following steps:

1. Log in to the BlackBerry AtHoc management system with an administrator account.
2. From the navigation bar, click **Alerts**> **Sent Alerts**.

3. Select an alert in the Sent Alert list.
4. Click **Duplicate**.

   The Alert Publisher displays a copy of the selected alert.
5. Edit the new alert and publish when you are ready.

   The default duration of a duplicate alert is four hours.

   **Note:** The new alert has the same header as the original, but has the word "copy" at the end. You should change the alert title.

# End live alerts

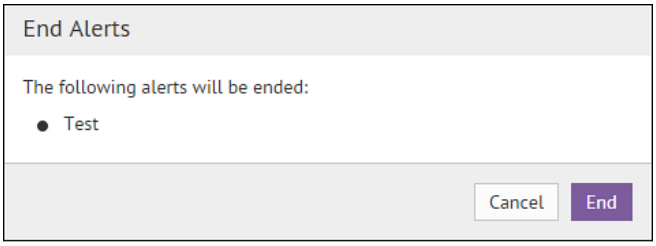
You can end the delivery of a live alert and place it in an Ended state.

When ending an alert, note that some users might have already received and viewed the alert, depending on the amount of time that elapsed between publishing and ending the alert, and how quickly the system can deliver alerts.

To end a live alert, perform the following steps:

1. Log in to the BlackBerry AtHoc management system with an administrator account.
2. From the navigation bar, click **Alerts** > **Sent Alerts**.
3. From the list, select one or more Live status alerts.
4. Click **More Actions** and then select **End**.

   The following pop-up screen is displayed.




5. Click **OK** to end the alert.

# Delete alerts

You can delete alerts in a standby or scheduled status by performing the following steps:

1. Log in to the BlackBerry AtHoc management system with an administrator account.
2. From the navigation bar, click **Alerts** > **Sent Alerts**.
3. From the list, select one or more alerts and click **Delete**.
4. In the confirmation screen, click **OK**.

   The alert is removed from Sent Alerts.

# View alerts from other COGs

When an IPAWS alert arrives from another COG, the message is received by BlackBerry AtHoc as an incoming alert. If you have specified an alert template for the incoming alert, this triggers the alert targeted to an operator account. The operator can view the alert on the devices enabled for their user profile.

**Note**: IPAWS incoming alerts do not appear in the Inbox. To see the alerts, you must trigger an alert to notify the operator.

To learn how to set up the incoming alert and triggered alert template, see “Configure BlackBerry AtHoc to receive alerts from external COGs” in the *IPAWS Plug-in for NDS Installation and Configuration Guide*.

# Chapter 3: Track alerts through BlackBerry AtHoc reports

The following sections describe how to track IPAWS alert usage.

## Monitor alerts in sent alerts

You can track alerts that you send to other COGs and the public from the Sent Alerts screen in the BlackBerry AtHoc management system. You can access the Sent Alerts screen, by clicking on **Alerts** > **Sent Alerts** in the Navigation bar.

All saved and sent alerts display in the Sent Alerts list. By default, alerts display in order of the start date, with the most recently created alert displaying first.

You can open a sent alert to view alert summary reports, batch delivery results, and a summary of recipients and responses. For detailed information about these reports, refer to the *BlackBerry AtHoc Enterprise User Guide* or the BlackBerry AtHoc online help.

## Track published alerts

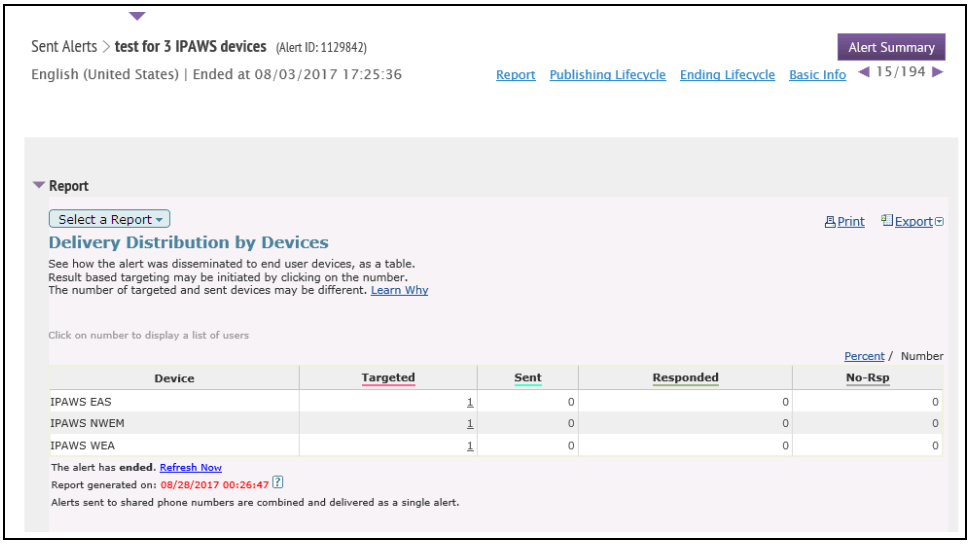
In an alert summary, the Reports list provides access to a set of reports that allow you to analyze the effectiveness of published alerts. Charts and summary data indicate if an alert has reached all intended recipients and also help you gauge their responses.

For example, if an alert did not reach all of the targeted recipients, there might be a problem with specific delivery devices. If you need to drill down to the user level, open one of the user tracking reports to see the alert delivery statistics for each target recipient. All tracking reports can be printed and exported.

To view detailed alert tracking information, perform the following steps:

1. Do one of the following:
    - On the BlackBerry AtHoc home page, in the Live Alerts section, click **Sent Alerts**.
    - In the navigation bar, click **Alerts** > **Sent Alerts**.
2. On the Sent Alert list, open an alert and click on **Advanced Reports**.
3. In the Reports section:
    - The default report displayed is Delivery Distribution by Devices, which graphically shows whether an alert reached all intended recipients and how they responded.
    - The Targeted number represents the number of users selected to receive the alert when the Operator selected targets using distribution lists, attributes, or organizations.
    - The Sent number represents the number of alerts sent by the BlackBerry AtHoc sys-

tem.

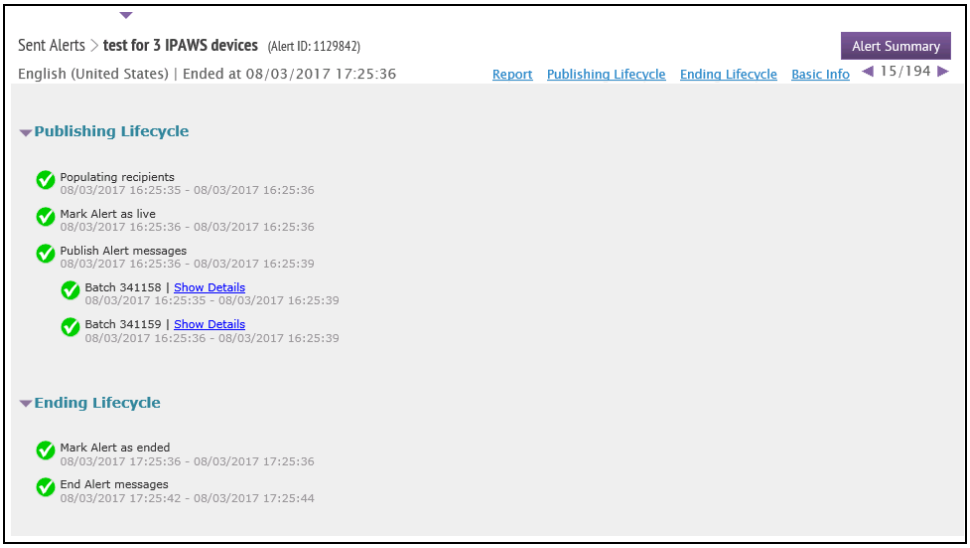



4. Compare the number of alerts sent with the number of responses by the intended audience.

   The report also displays the number of user responses received for each response option. The response values are based on the number of sent alerts.

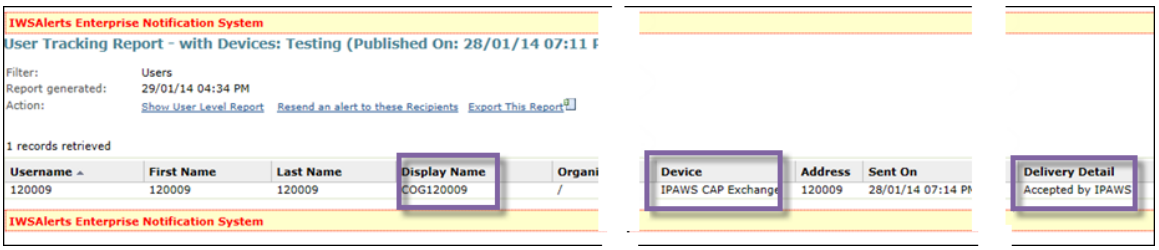
5. In the Publishing Lifecycle section, check if there were delivery errors. Click **Show Details** to see the batch log.

6. The Ending Lifecycle section displays the end time of the alert.

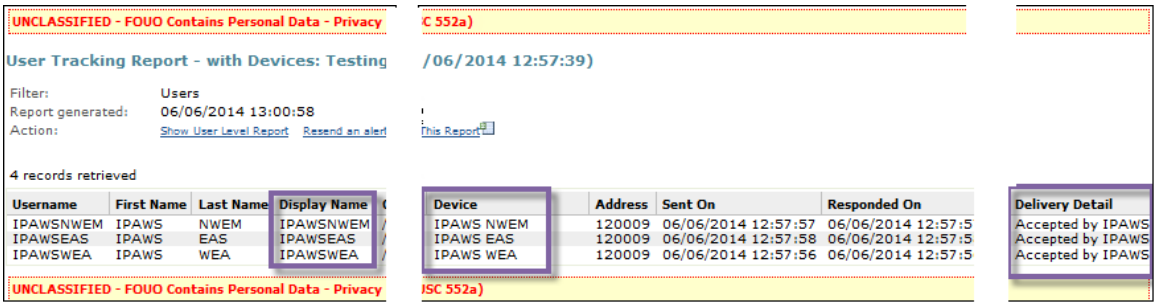



7. Click **Select a Report** drop-down to view different types of reports.

   For COG to COG alerts, the **User Tracking Report - with Devices** provides detail by COG and shows the delivery status. For example, the following image highlights the target COG name, the IPAWS CAP Exchange device, and the delivery detail status "Accepted by IPAWS".




For public alerts, the **User Tracking Report - with Devices** provides similar details by device type. For example, the following image highlights the device name, the IPAWS public devices (EAS, NWEM, and WEA), and the delivery detail status "Accepted by IPAWS".




# Export report data

To manipulate the report data for data mining or format the report before printing, use the export feature to create a Comma Separated Values (CVS) format file. Use an application such as Microsoft Excel to open the CSV file and for editing or formatting purposes. For each report, there is an option to export only the data shown in the report or to export data for all targeted recipients of the selected alert.

Complete the following steps to export a report.

1. Send an alert.
2. Click the **Alert Summary** button from the completed alert or double-click to open the alert from the **Sent Alerts** list.
3. On the Alert Summary screen, click **Advanced Reports**.
4. Hover over the **Export** link in the top corner of the report.
5. Do one of the following from the Export drop-down list:
   - Select **Export Full Report** to view the list of all the targeted recipients.
   - Select **Export Current Report** to view information for only the recipients who received the alerts successfully.
6. The report is exported to a .CSV file. You can see the status of each user.

   When an export option is selected, a dialog provides the option to open the CSV file in

Microsoft Excel or save it as file.

| User ID | Username | Display Name | Device | Address | Delivery Date | Delivery Status | Delivery Detail | Message Code |
|---|---|---|---|---|---|---|---|---|
| 2050443 | IPAWS_CAP_EX113 | IPAWS_CAP_EX113 | IPAWS CAP Exchange | 120113 | Mar 20 2017 10:02:16:000AM | Sent | Sent | 5200: IPAWS code: 200 Accepted by IPAWS |
| 2050443 | IPAWS_CAP_EX113 | IPAWS_CAP_EX113 | IPAWS CAP Exchange | 120113 | Mar 20 2017 10:02:17:000AM | Responded | Accepted by IPAWS | 5900:Responded |
| 2050444 | test WEA | test WEA | IPAWS WEA | 120009 | Mar 20 2017 10:02:28:000AM | Not Sent | invalid-CAPEXCHANGE-message | 5221:invalid-CAPEXCHANGE-message |
| 2050445 | IPAWS_NWEM | IPAWS_NWEM | IPAWS NWEM | 120009 | Mar 20 2017 10:02:22:000AM | Not Sent | invalid-CAPEXCHANGE-message | 5221:invalid-CAPEXCHANGE-message |

# Chapter 4: Monitor system health

You can monitor and supervise the operational status of the following system components:

- BlackBerry AtHoc internal modules and processes
- Integrated systems and devices

System health monitoring visibility is based on the following user roles:

- Enterprise administrators have access to the Global System Health option in the System Setup section.
- Organization administrators have access to the System Health option in the System Setup section.
- Operators can view the system health on the BlackBerry AtHoc home page.

## Create an IPAWS health monitor

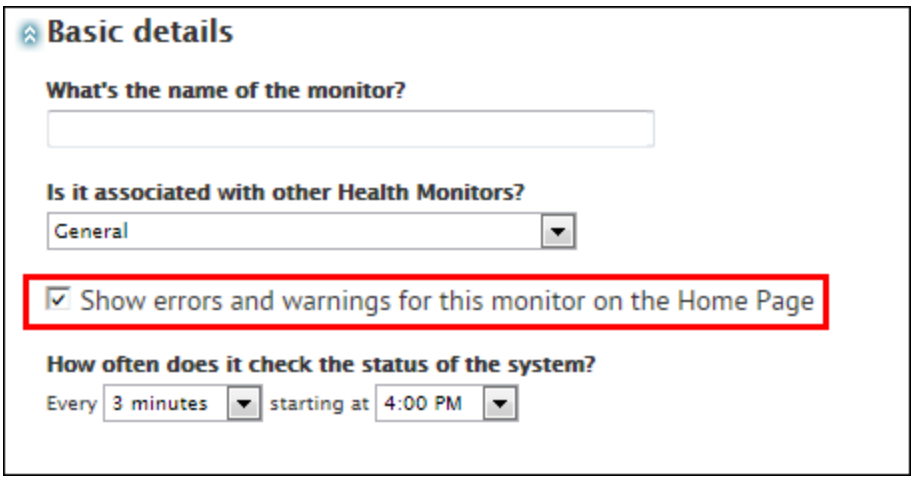
Two kinds of health monitors can be created to monitor IPAWS connectivity and other statuses:

- **IPAWS COG Health**—Checks the connectivity of IPAWS and the validity of COG accounts in the IPAWS system.
- **IPAWS Health Monitor**—Monitors the Unified Alerting Protocol (UAP) connectivity between the BlackBerry AtHoc server and the NDS application server.

To create these health monitors, perform the tasks in the following sections.

### Create an IPAWS COG health monitor

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click the **(Settings)** icon.
3. In the System Setup section, click **System Health**. The Organization Visibility Console opens.
4. In the General section, click **Create new monitor**.
5. Enter a name for the monitor, such as `IPAWS COG Health`.
6. From the **Is it associated with other Health Monitors?** drop-down, select **General**.
7. If you want to show warnings and errors on the home page, select the **Show errors and warnings for this monitor on the Home page** check box.




8. Specify how often and at what time you want the monitor to check the system status.
9. In the How does this Monitor test the system section, from the **Choose a test** list, select the **AtHoc Event Logs** option.
10. Copy the following sample configuration XML text into the Test Configuration field:

```
<EventLogTestConfig>
   <Filters>
     <Filter>
        <A>shortMessage</A>
        <B>IPAWS PING Error. COG: <COGID></B>
        <OffsetSeconds>0</OffsetSeconds>
        <Comparison>Contains</Comparison>
     </Filter>
     <Filter>
        <A>time</A>
        <B>[NOW]</B>
        <OffsetSeconds>-330</OffsetSeconds>
        <Comparison>GreaterThan</Comparison>
     </Filter>
   </Filters>
   <WarningConditions />
   <WarningCountThreshold>2</WarningCountThreshold>
   <ErrorConditions />
   <ErrorCountThreshold>1</ErrorCountThreshold>
</EventLogTestConfig>
```

11. Add the *current* organization COGID in the following line:

```
<B>IPAWS PING Error. COG: <COGID></B>.
```

12. Configure the rest of the Health Monitor as appropriate. For more information about health monitors, see the *BlackBerry AtHoc Enterprise User Guide*.
13. Click **Save**.

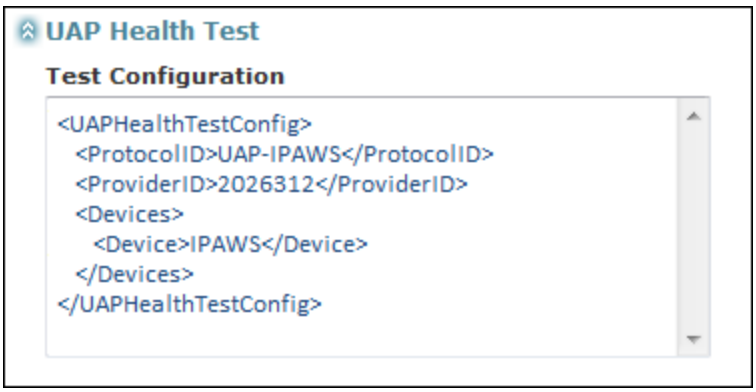
## Create an IPAWS health monitor (UAP)

1. Log in to the BlackBerry AtHoc management system as an administrator.
2. In the navigation bar, click the **(Settings)** icon.
3. In the System Setup section, click **System Health**. The Organization Visibility Console opens.
4. In the General section, click **Create new monitor**.
5. Enter a name for the monitor, such as `IPAWS Health Monitor`.
6. From the **Is it associated with other Health Monitors?** drop-down, select **General**.
7. If you want to show warnings and errors on the home page, select the **Show errors and warnings for this monitor on the Home page** check box.
8. Specify how often and at what time you want the monitor to check the system status.
9. In the How does this Monitor test the system section, from the **Choose a test** list, select the **AtHoc Event Logs** option.
10. Copy the following sample configuration XML text into the Test Configuration field:

```
<UAPHealthTestConfig>
   <ProtocolID>UAP-IPAWS</ProtocolID>
   <ProviderID>yourVPSID</ProviderID>
   <Devices>
       <Device>IPAWS</Device>
   </Devices>
</UAPHealthTestConfig>
```

11. Enter your organization ID for `yourVPSID`.

    For example, the following image shows that the <Provider ID> has been updated with the system ID of the current organization.




12. Configure the rest of the Health Monitor as appropriate. For more information about health monitors, see the *BlackBerry AtHoc Enterprise User Guide*.
13. Click **Save**.

# View system status through BlackBerry AtHoc system health

Each time a health monitor system status test runs, the result is recorded. You can see the results as collected over time. System status is available for administrators with proper access privileges.

You can view monitors created through either of the System Setup sub-tabs Global System Health or Virtual System Health windows. However, you can edit a monitor only through the sub-tab where it was created.

To view system monitor status, complete the following steps:

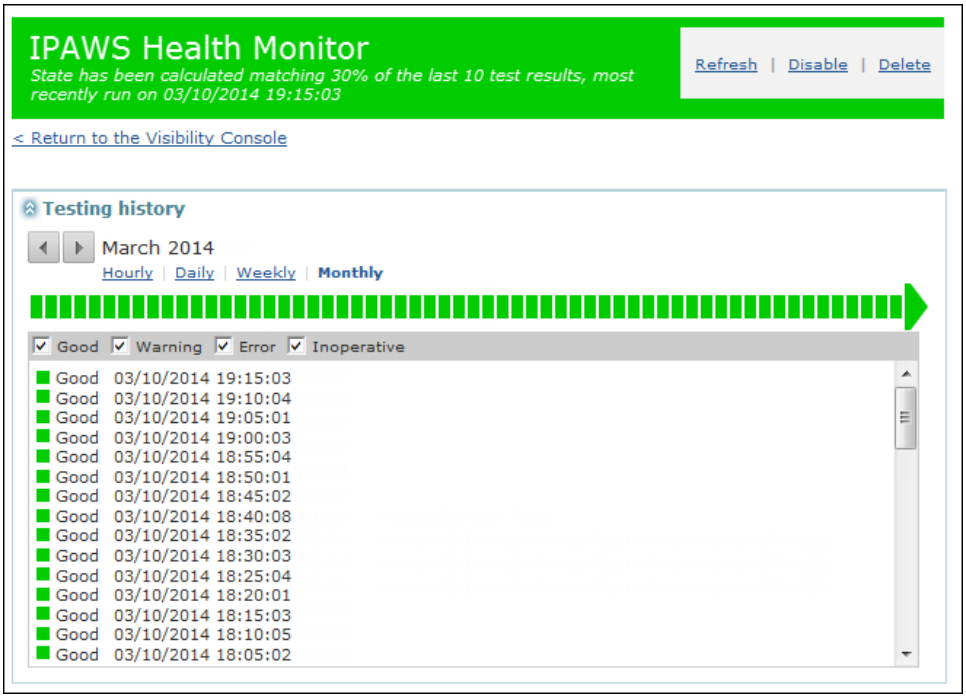
1. Log in to BlackBerry AtHoc management system as an Enterprise Administrator or a System Administrator.
2. In the navigation bar, click the **(Settings)** icon.
3. In the System Setup section, select the system health option that corresponds to your login access **Global System Health** or **System Health**.

   The relevant visibility console opens, displaying monitors organized into the following categories: Errors & Warnings, Database, Web Applications, Services, Delivery Gateways, and General. The following table describes the different icons that appear on the screen.

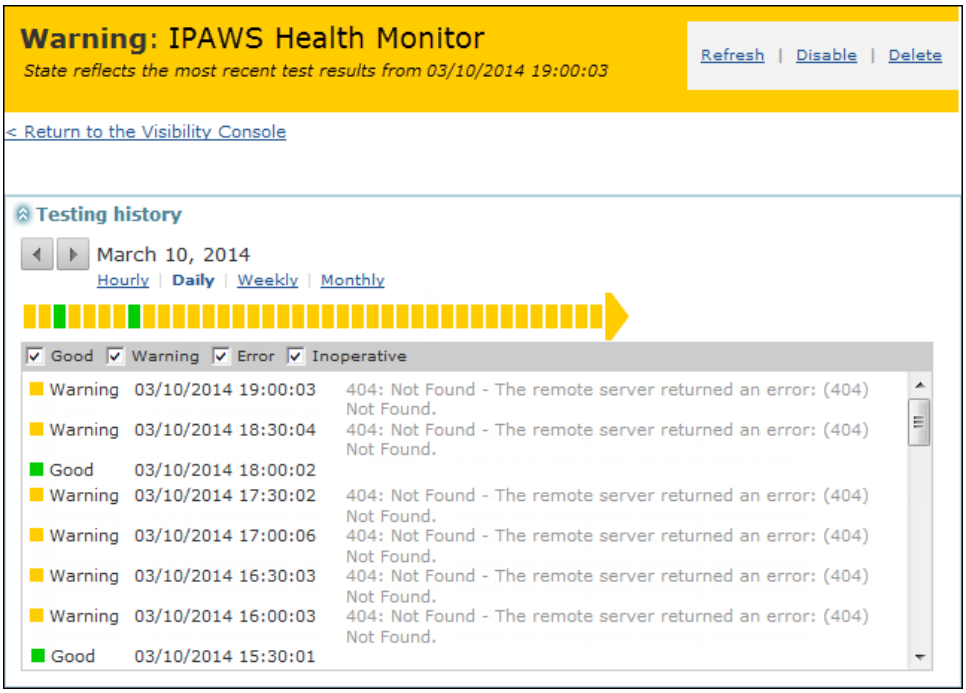
| Icon | Description |
|---|---|
| | Error status. Indicates that the monitor test results meet the defined criteria for an error status. |
| | Warning status. Indicates that the monitor test results meet the defined criteria for a warning status. |
| | Good status. Indicates that the monitor test results meet the defined criteria for a good status. |

4. Click the link to the monitor whose status you want to view.

   When all tests for a monitor return the same result, the overall status of the monitor is assigned that result status. In the following example, all tests have returned a Good status, so the overall monitor status is Good.

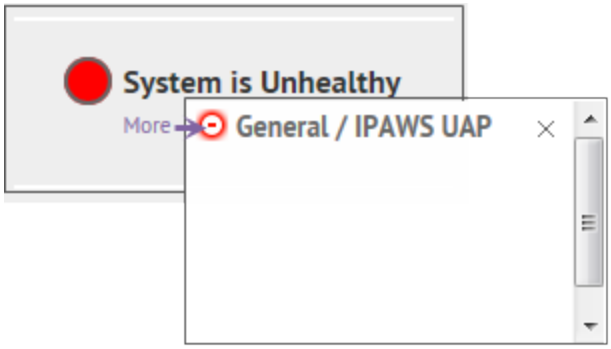



5. When a predetermined number of test cycles returns the same status, the status of the monitor changes. In the following example, even though two tests have returned a Good status, the overall monitor is in a Warning state.



# BlackBerry AtHoc home page system status

On the Home page you have an option to view the status of selected BlackBerry AtHoc system monitors. This is available to all system users: general operators, enterprise, and system administrators. The System Status area displays the status of system monitors that are configured to be viewable from the Home page. Typically, the System Status area is used to display the status of critical functions that are required for system operations. This is not intended for day-to-day monitors.




The System Status area messages display the following items:

- Status icon
- Monitor group name
- Monitor name

See the **Global System Health** or **System Health** screen for an expanded view of the monitor status.

# Glossary

**CAP**
The Common Alerting Protocol (CAP) is an XML-based data format for exchanging public warnings and emergencies between alerting technologies.

**COG**
A Collaborative Operating Group as defined by FEMA. A COG can have members from multiple organizations that act as a mutual aid organization. Examples of organizations include local, territorial, tribal, state, or federal governmental organizations of the United States.

**COG ID**
The six-digit identifier for a COG provided by FEMA.

**EAS**
Emergency Alerting Service as defined by FEMA.

**FEMA**
Federal Emergency Management Administration. FEMA created the IPAWS system to communicate and mobilize organizations during emergencies.

**IPAWS**
The Integrated Public Alert and Warning System developed by FEMA. This sytem provides a process for emergency communities to communicate with each other through alerts. Federal, State, territorial, tribal, and local alerting authorities can use IPAWS and integrate local systems that use Common Alerting Protocol standards with the IPAWS infrastructure.

**NWEM**
Non-Weather Emergency Messages as defined by FEMA.

**Peer COG**
Any COG from which you receive alerts, or to which you send alerts.

**Public Alert Device**
One of the devices IPAWS uses to send alerts to the general public. BlackBerry AtHoc supports several public alert devices, including NWEM, EAS, and WEA.

**Sender COG**
The COG sending an alert to other organizations. Typically your own COG.

**Target COG**
The COG to which you are sending a message. Typically, another COG with whom you need to communicate about situations that affect both organizations.

**UAP**
Unified Alerting Protocol. Protocol to exchange data between the AtHoc server and the NDS application server.

**WEA**
Wireless Emergency Alerts as defined by FEMA. Formerly known as Commercial Mobile Alert System (CMAS).