Chapter 1: Overview

This guide describes how to migrate from PostCap mechanism to SDK mechanism for posting alerts from IIM to BlackBerry AtHoc Management Server. Previously, alerts were published from IIM to BlackBerry AtHoc server using the PostCap mechanism. Now, alerts can be published from IIM to BlackBerry AtHoc server using the SDK mechanism.
Chapter 2: How the PostCap and SDK mechanisms work

This section describes the steps to send alerts from IIM to BlackBerry AtHoc management server using the PostCap and SDK mechanisms.

PostCap mechanism

The BlackBerry AtHoc IIM device has a push button console attached to it. The following steps describe how the PostCap mechanism works:

1. Press the push button. An alert template is picked from the AlertTemplate folder and its time, date, and other fields are updated. A CAP message is created from the alert template.
2. The CAP message is placed in the Encode folder.
3. If an encoder is configured in IIM, that encoder processes the CAP message and activates the strobe light.
4. The CAP message gets posted to the BlackBerry AtHoc management system using the PostCap Web API.
5. On successful posting of CAP message to the BlackBerry AtHoc management system, a relay gets closed and the led light glows indicating that the alert was sent.
6. In the BlackBerry AtHoc management system, the mapping activates the template and publishes the alert.
7. If the alert has the industrial strobe selected to target the IIM, the strobe is activated again unless the CAP alert is already marked as processed.
8. Sometimes the alert has new CAP payload which the IIM processes separately.

For detailed information about how CAP is mapped to an alert template, see "BlackBerry AtHoc CAP Publishing and Processing Guide".

PostCap mechanism activation diagram
SDK mechanism

The following steps describe the working of SDK mechanism:

1. Press the push button. An alert template is picked from the AlertTemplate folder and its time, date, and other fields are updated. A CAP message is created from the alert template.

2. The CAP message is placed in the Encode folder.

3. If an encoder is configured in IIM, that encoder processes the CAP message and activates the strobe light.

4. The AtHoc SDK call is made and the SDK payload is posted to the BlackBerry AtHoc management system and an alert is triggered.

5. After successful posting of SDK payload to the BlackBerry AtHoc management system, a relay gets closed and the led light glows indicating that the SDK payload was posted.

6. On receiving the SDK call, the BlackBerry AtHoc management system processes the request, activates the alert template, and publishes the alert.

SDK mechanism diagram

[Diagram of the SDK mechanism process]

BlackBerry AtHoc Server

- SDK call received
- Processed
- Alert template is activated

[Diagram of the BlackBerry AtHoc Server process]
Chapter 3: Migrate from PostCap to SDK

To migrate from PostCap to SDK, complete the following steps:

1. Log in to IIM.
2. Stop the capnode service.
3. Obtain and download the capnode.zip folder that has the push button solution. Contact your BlackBerry AtHoc Implementation Engineer to download the ZIP file.
4. Right-click the capnode.zip and select extract to C://Program files/capnode folder.
5. Copy the following parameters to the system.private.config file and modify the values as required:

   **Note:** You can also add these values to the system.config file. However, if you are using system.config file, ensure that similar parameters are not included in system_private.config file. The parameter values in the system_private.config file overrides the values in the system.config file.
# Value of this parameter can be SDK or PostCap.
# Since we are migrating to SDK keep the value as SDK
AlertPostingMechanism=SDK
SDKPostingTarget=True
#
#
# Here replace <server.url.com> with actual server url.
# For example, (integration7.athoc.com)
SDKAlertPosting.Url= https:\//<server.url.com>/sdk/listener/listen.asp
#
#
# Provide the Org Id from the BlackBerry AtHoc site.
SDKAlertPosting.VPS_ID=
#
#
# Provide the BlackBerry AtHoc username.
# This user must have SDK posting privileges.
SDKAlertPosting.Username=
#
#
# This parameter indicates if the password provided in
# SDKAlertPosting.Password Parameter is an encrypted
# or plain text password.
# Initially the value of this parameter should be kept as 'no'.
# After the first run SDKAlertPosting.Password Parameter will be
# updated by the IIM application with the encrypted password and the
# value of SDKAlertPosting.IsPasswordEncrypted will be updated to 'yes'
#
SDKAlertPosting.IsPasswordEncrypted=no
#
#
# Initially, you need to enter plain text password here.
# After the first run it will get encrypted as explained above.
SDKAlertPosting.Password=
#
#
#Parameters to custom map between Digital Input and AlertTemplate File.
#For detailed information about how to get common name for alert
templates, see "Create alert template" section.
#
DigitalInputToCommonName.1=<common name of IWS alert template1>
DigitalInputToCommonName.2=<common name of IWS alert template2>
DigitalInputToCommonName.3=<common name of IWS alert template3>
DigitalInputToCommonName.4=<common name of IWS alert template4>
DigitalInputToCommonName.5=<common name of IWS alert template5>
DigitalInputToCommonName.6=<common name of IWS alert template6>
DigitalInputToCommonName.7=<common name of IWS alert template7>
DigitalInputToCommonName.8=<common name of IWS alert template8>

# Provide the relay number to be activated on successful Posting of
# SDK alert to BlackBerry AtHoc
PushButtonActivator.Relay.PostedToIWS=1

# The following parameters are for the debounce mechanism.
# The debounce mechanism ensures that IIM sees a network failure
# on predefined (NumInputHighToTrigger) “consecutive” polling failures.
# This is to prevent a quick voltage spike that can trigger the input.
# InputPollInterval is the duration between two consecutive relay polls.

InputPollInterval=200
NumInputHighToTrigger=3

# The following parameters are for software improvements performed
# in Connectivity Indicator only.
# When the number of CONSECUTIVE failures is equal to or greater than
# the value of ConnectivityProblemIndicatorCount the relay opens.

ConnectivityProblemIndicatorCount=3
delayBetweenRxPolls=7
ClosedRelayForMonitoring=5

6. Remove the following post cap parameters from the system.config and system_private.config files:
   - CapPostingTarget=True
   - CapPostingTarget.capUrl=http://alert.emn.com/syndication/PostCap
   - CapPostingTarget.user=
   - CapPostingTarget.password=

7. Start the capnode service.

Create alert template

The common name for the alert template is automatically generated when you create a new alert template.

To create an alert template, complete the following steps:
1. Log in to the BlackBerry AtHoc management system as an administrator.
2. Click Alerts > Alert Templates.
4. In the Alert Template section, enter a template name and description.
5. In the Content section, enter the title and content of the alert.
6. In the Mass Devices section, select the device you want to publish the alert to.
7. In the Schedule section, set a time in the Alert Duration field.
8. Click Save. A confirmation message is displayed at the top of the Alert Templates screen.
9. Scroll down to the end of the template. The Info section displays the common name.
Appendix 4: SDK payload

**Note:** Do not copy and paste the following XML anywhere in the capnode folder.

```xml
<AtHocSdk>
  <client>_VPS_ID_</client>
  <validation>
    <username>_USERNAME_</username>
    <password>_PASSWORD_</password>
  </validation>
  <payload type='INFOCASTING'>
    <infocasting type='ALERTSCENARIO'>
      <alertData>
        <scenario>
          <commonName>_COMMON_NAME_</commonName>
        </scenario>
      </alertData>
    </infocasting>
  </payload>
</AtHocSdk>
```
Chapter 5: Contact BlackBerry AtHoc technical support

If you encounter any problems or have questions regarding the BlackBerry AtHoc software, contact BlackBerry AtHoc technical support using any of the following methods:

- **Web Site Form**: [https://support.athoc.com/customer-support-portal/-login.html](https://support.athoc.com/customer-support-portal/-login.html)
- **Telephone**: (650) 685-3000 or (888) GO-ATHOC (462-8462)
- **Email**: athocsupport@blackberry.com

**Tip**: The Web-based support form is the primary method for contacting AtHoc technical support.