

IBM Intelligent Operations Center Interim Feature  
Version 1.5.0.2

*IBM Intelligent Operations Center  
for Emergency Response*

**IBM**



IBM Intelligent Operations Center Interim Feature  
Version 1.5.0.2

*IBM Intelligent Operations Center  
for Emergency Response*

**IBM**

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 37.

This edition applies to IBM Intelligent Operations Center version 1, release 5, modification 0. This edition applies to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2012, 2013.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

## Chapter 1. IBM Intelligent Operations Center for Emergency Response

<b>overview</b>	<b>1</b>
Intended audience	1
Users and benefits	1
IBM Intelligent Operations Center for Emergency Response content	3
Weather	6

## Chapter 2. Installing and configuring IBM Intelligent Operations Center for Emergency Response.

Installation prerequisites	7
Installation modes	8
Installing IBM Intelligent Operations Center for Emergency Response	8
Unpack the installation bundle	8
Update JAVA_HOME	8
Update host information	9
Configure email notification	10
Run the installation script	10
Configure Tivoli Netcool/Impact for IBM Intelligent Operations Center for Emergency Response	11
Verify the Tivoli Service Request Manager deployment	12
Run the installation verification test	12
Update the Emergency Response SOP definitions.	13
Configure the refresh rate	13
Configure Tivoli Access Manager WebSEAL for a cloud environment	14
Troubleshooting installation failure at portal deployment stage	14
Troubleshooting installation failure at portal restart	14

## Chapter 3. Configuring the Weather component.

Weather operations framework properties	17
Configuring lightning strike KPI events	17
Editing the Weather Radar Image portlet shared settings.	18
Configuring the weather alert e-mail service	18
Weather operation database tables.	19

## Chapter 4. Using IBM Intelligent Operations Center for Emergency Response

Refreshing presented data	21
Incident Action Plan	21
Emergency Response Incidents	21
Changing the Situation Status	21
Adding an event to the map.	22
Viewing events on the map	23

Triaging Events	23
Details portlet	24
Ongoing Incidents portlet	24
Reference Library	24
Defining notification templates	25
Standard Operating Procedures.	25
Creating a Standard Operating Procedure definition	26
Standard Operating Procedure XML import and export	28
Viewing and updating an existing Standard Operating Procedure portlet	28
Standard Operating Procedure Activity Director	29
SOP Security Model	29

## Chapter 5. Troubleshooting IBM Intelligent Operations Center for Emergency Response

General troubleshooting procedures	31
Troubleshooting integration and display problems	31
New comments not appearing in SOP details view.	31
Problem occurs when a Standard Operating Procedure definition with automation activities is created	31
No entries available in the Job Plan menu	32
CIYAS0048E: Automation could not be started error message	32
Resolving all other problems that occur when automation activities are defined, started, or stopped	32
JDBC connectivity problems with Tivoli Netcool/Impact	33
The Incident Management tab has two Triage Events portlets, the Ongoing Incidents portlet is not displayed.	33
Weather Service Key performance indicator status display problem.	33
Dialogs appear to need to be clicked twice to close or are duplicated.	34
Events cannot be created in Internet Explorer 9	34
Troubleshooting Standard Operating Procedure problems	34
Common Alerting Protocol (CAP) event does not instantiate a Standard Operating Procedure.	34
Multiple Standard Operating Procedure instances are displayed.	35
Conflicts occur when multiple users use the same account.	35
Contacting IBM Support	35

## Notices

Trademarks	38
------------	----



---

# Chapter 1. IBM Intelligent Operations Center for Emergency Response overview

IBM® Intelligent Operations Center for Emergency Response allows operations to respond rapidly to situations in their city or venue. Operators monitor and respond to events by executing Standard Operating Procedures, correlating events across affected areas to gain situational awareness and effectively communicating to coordinate physical responses to the incident.

The IBM Intelligent Operations Center for Emergency Response interim feature runs on top of IBM Intelligent Operations Center and is displayed as a tab in the IBM Intelligent Operations Center interface. IBM Intelligent Operations Center for Emergency Response provides a deployment installer that installs the IBM Intelligent Operations Center for Emergency Response interim feature into the existing IBM Intelligent Operations Center. IBM Intelligent Operations Center for Emergency Response consists of Standard Operating Procedure and Weather components.

Features of IBM Intelligent Operations Center for Emergency Response span the plan, preparation, response, and recovery for incidents and events including:

- Capability to respond to extreme situations by correlating data to gain insight into the overall situation, executing standard operating procedures, and reviewing performance after the fact.
- The ability to respond to and recover from incidents more quickly.
- The ability to visually and spatially correlate incidents.
- The ability to view alerts in context of other incidents in the city or venue.
- The ability to coordinate response through the execution of previously planned workflows and standard operating procedures.

---

## Intended audience

This document is intended for people who are using, installing, administering, and maintaining IBM Intelligent Operations Center for Emergency Response.

This document assumes that users have prior knowledge of, or proficiency with, the prerequisite software. If you require training for these products, ask your systems integrator or IBM representative where you can obtain information about base component training opportunities.

---

## Users and benefits

IBM Intelligent Operations Center for Emergency Response is designed for emergency response operations and management personnel to help optimize and more efficiently manage emergency response systems and networks across a geographically dispersed infrastructure.

The following table describes the users and associated benefits of using IBM Intelligent Operations Center for Emergency Response.

Table 1. Benefits of IBM Intelligent Operations Center for Emergency Response

If you are	This software can help you
Incident Response Operator	<ul style="list-style-type: none"> <li>• Communicate with management and with field personnel and resources. During an incident, it is the field resources that have the most communication with the operations staff.</li> <li>• Identify and act on conflicts and issues that are shown on maps and alerts.</li> <li>• Manage events by adding new events, editing existing events, canceling events, and escalating events to incidents.</li> <li>• Communicate quickly and easily on matters of importance about the event.</li> <li>• Monitor the status, create, and edit events and incidents to be shown in lists.</li> <li>• Automate the notification of field resources and management to allow quicker coordination.</li> <li>• Communicate quickly and easily in emergencies and other situations that require a response.</li> </ul>
Team member	<ul style="list-style-type: none"> <li>• Use the Standard Operating Procedures as guidance to ensure all steps and information from operations are done.</li> <li>• Other teams can monitor and respond to incidents, receiving activities from the Standard Operating Procedures or viewing and responding to general events.</li> </ul>
Supervisor	<ul style="list-style-type: none"> <li>• Supervisors can monitor the activities for delays or issues, being proactive during the incident, and then use the same information to improve procedures after the incident has been resolved.</li> <li>• For audits and legal actions, a timeline log can be produced to understand the incident and what was and was not done.</li> </ul>
Operations (non-incident or emergency) For example, aircraft operations or stadium maintenance operations	<ul style="list-style-type: none"> <li>• Use the tooling to help automate discovery of issues and the proper response.</li> </ul>
Security staff Medical staff	<ul style="list-style-type: none"> <li>• Monitor events that are associated with their scope/profession, and then proactively respond if needed.</li> </ul>
Executive	<ul style="list-style-type: none"> <li>• Gain an executive level summary of events and incidents through maps, dashboards, and alerts.</li> <li>• Identify and track incidents and emergencies.</li> <li>• Direct priorities and implementation of policy that uses the data provided.</li> </ul>



---

## IBM Intelligent Operations Center for Emergency Response content

IBM Intelligent Operations Center for Emergency Response combines event data, resource data, and standard operating procedures, allowing operators to track issues, understand impact, and respond to issues more quickly.

### Incident action plan

An incident response starts with a plan of action. The incident action plan is specific to the scenario for which it is created, for example the location, or group. While normally explicitly stated and referenced, an action plan might be implied based on the scope of the defined Standard Operating Procedures. While a plan is not explicitly required, any Standard Operating Procedures (by definition) is scoped to a plan.

Standard Operating Procedures are the set of steps and activities to perform when dealing with the incident, for a specific location. The Standard Operating Procedures are specific to the scope of this incident action plan.

IBM Intelligent Operations Center for Emergency Response has tabbed pages that contain portlet information.

IBM Intelligent Operations Center for Emergency Response has the following tabbed pages:

- Operations
- Incident Management
- Reference Library
- Team Member
- Executive
- Standard Operating Procedures
- Response Coordination

### IBM Intelligent Operations Center for Emergency Response portlet content

IBM Intelligent Operations Center for Emergency Response has the following portlets:

**Map** The Map portlet is used to:

- Add incidents and events.
- View incidents and events.
- Select contents.

#### **Situation Status**

The Situation Status portlet is used to set the status for an incident and event. The situation status can be:

- **Not set**
- **Green** acceptable
- **Orange** caution
- **Red** critical.

#### **Triage Events**

The Triage Events portlet is used to:

- Manage incidents and events.
- Update incidents and events.
- Escalate events to incidents.
- Cancel incidents and events.
- View Standard Operating Procedures, nearby resources, and properties.

- Associate with and create Standard Operating Procedures.

### **Details**

The Details portlet is used to:

- Manage incidents and events.
- Update incidents and events.
- Escalate events to incidents.
- Cancel incidents and events.
- View Standard Operating Procedures, nearby resources, and properties.
- Associate with and create Standard Operating Procedures.
- Work with resources.

### **Ongoing Incidents**

The Ongoing Incidents portlet is used to:

- Manage incidents and events.
- Update incidents and events.
- Cancel incidents and events.
- View Standard Operating Procedures, nearby resources, and properties.
- Associate with and create Standard Operating Procedures.
- Work with resources.

### **Activity Director**

The Activity Director portlet is used to:

- Direct the activities (active SOP instances) of a Standard Operating Procedure.
- Add, plan, edit, and delete activities.

**Status** The status portlet details the status for sectors. The status can be:

- **Not set.**
- **Green** acceptable.
- **Orange** caution.
- **Red** critical.

### **Reference Library**

The Reference Library portlet contains links that are useful and easily accessible for completing Standard Operating Procedures, for example, phone lists, email addresses, or pertinent forms. Reference Library details can be added, viewed, edited, deleted, or launched if a user has the correct authority.

### **Standard Operating Procedures**

The Standard Operating Procedure portlet is used to create and manage Standard Operating Procedures.

### **My Activities**

The My Activities portlet is similar to the activity director and is used to:

- Direct the activities (active SOP instances) of a Standard Operating Procedure.
- Display the activities that are owned by the group that the user belongs to.
- View details about a Standard Operating Procedure.
- Add, plan, edit, and delete activities.

## **IBM Intelligent Operations Center for Emergency Response portal content**

Portlets are accessed by authorized users through the IBM Intelligent Operations Center for Emergency Response portal tabs.

The following table lists the tabs and associated content:

Tab	Content
Operations	<ul style="list-style-type: none"> <li>• Map</li> <li>• Situation Status</li> <li>• Details</li> <li>• Activity Director</li> </ul>
Incident Management	<ul style="list-style-type: none"> <li>• Map</li> <li>• Ongoing Incidents</li> <li>• Triage Events</li> <li>• Situation Status</li> </ul>
Reference Library	<ul style="list-style-type: none"> <li>• Reference Library</li> <li>• Situation Status</li> </ul>
Standard Operating Procedures	<ul style="list-style-type: none"> <li>• Standard Operating Procedures</li> <li>• Situation Status</li> </ul>
Team member	<ul style="list-style-type: none"> <li>• Map</li> <li>• Situation Status</li> <li>• My Activities</li> <li>• Details</li> </ul>
Executive	<ul style="list-style-type: none"> <li>• Map</li> <li>• Situation Status</li> <li>• Activity Director</li> <li>• Status (KPI indicators)</li> </ul>
Response Coordination	<ul style="list-style-type: none"> <li>• My Activities</li> <li>• Contacts</li> <li>• Sametime® Contact List</li> <li>• Mail</li> <li>• Situation Status</li> </ul>

The interface is available in the following languages:

- Arabic
- Brazilian Portuguese
- French
- German
- Italian
- Japanese
- Korean
- Russian
- Simplified Chinese
- Spanish
- Traditional Chinese

---

## Weather

In the United States you can receive weather alerts through the Weather for Operations Framework application in IBM Intelligent Operations Center for Emergency Response. The application uses a timer manager to schedule asynchronous calls to weather alert adapters that process subscriptions to weather alerts. The following alerts adapters are available for installation:

- Earth Networks Lightning Strikes Alerts adapter (for lightning strike alerts)
- National Weather Service Weather Alerts adapter (for severe weather alerts)

**Note:** IBM Intelligent Operations Center for Emergency Response does not support the addition of custom adapters. However, the provided adapters might be able to be modified to subscribe to other services. For information on modifying the provided adapters to access additional information provided by Earth Networks or the National Weather Service, contact IBM.

The Weather for Operations framework:

- Provides database tables to store weather operations-related tables.
- Provides RESTful services that interact with database tables.
- Provides an adapter interface for different weather service providers.
- Provides a timer service to subscribe to weather alerts.
- Provides a timer service to track and cancel weather alerts.
- Provides a portlet that displays weather radar images from the National Weather Service.
- Provides a subscription management portlet to subscribe alerts.
- Provides an email service to send out weather alerts.

---

## Chapter 2. Installing and configuring IBM Intelligent Operations Center for Emergency Response

The IBM Intelligent Operations Center for Emergency Response interim feature requires IBM Intelligent Operations Center. IBM Intelligent Operations Center for Emergency Response provides a deployment installer that installs the IBM Intelligent Operations Center for Emergency Response interim feature into the existing IBM Intelligent Operations Center installation. IBM Intelligent Operations Center for Emergency Response consists of Standard Operating Procedure and Weather components.

---

### Installation prerequisites

The IBM Intelligent Operations Center for Emergency Response interim feature has the following prerequisites:

- A fully operational IBM Intelligent Operations Center environment with all servers and nodes operational. The status of the IBM Intelligent Operations Center environment can be determined by logging into to the management server as the `ibmadmin` user and running the following script:

```
/opt/IBM/ISP/mgmt/scripts/IOCControl.sh status all IOC_Password
```

#### Note:

If the optional IBM Intelligent Operations Center cyber hygiene steps were run after IBM Intelligent Operations Center was installed, root log in must be re-enabled prior to installing IBM Intelligent Operations Center for Emergency Response. Re-enable root user log in by ssh to the IBM Intelligent Operations Center application, data, event, and management servers as follows:

- Log in to the application, data, event, and management servers one at a time as `ibmadmin`. Run the `su` command to root, and then change the `PermitRootLogin` to `yes` in the `/etc/ssh/sshd_config` file. Restart the `sshd` service. For example:

```
ssh -l ibmadmin server-host-name
su -
vi /etc/ssh/sshd_config
Find the line with PermitRootLogin
/PermitRootLogin - if it says PermitRootLogin is no then
change No to yes save the changes by
pressing esc > wq (write changes and quit), and then press Enter.
service sshd restart
```

- Ensure that the Tivoli® Service Request Manager® instance is operational. Check for a response at the following URL from the event server:

```
http://event_server:82/maximo/ui
```

For **Username** use `maxadmin` and for **password** use `IOC_password`.

- Unlock Tivoli Netcool/Impact. The Tivoli Netcool/Impact instance must be free from Source Control File Locking

1. Log on to the server with Tivoli Netcool/Impact installed
2. Open a browser window, and then enter the following URL:

```
http://event_server:9080/nci/main
```

3. Log on to the Tivoli Netcool/Impact suite with the user name `admin` and password `netcool`,
4. Click **Global**, and then click **Clear All Source Control File Locking**.

- Ensure that there is not going to be a portlet conflict by clearing any previously installed portlets:

1. Open a browser, and then enter the following URL:

```
http://application_server/wps/portal
```

2. Log in as `wpsadmin`

3. Select **Administration > Portlet Management > Web Modules**
4. In the Manage Web Modules window, for **Search By** select **Filename Starts**, and for **Search** enter `ioc_weather`. Click **Search**.
5. If web modules are displayed in the result, then click the **wastebin** icon to delete them.

---

## Installation modes

The IBM Intelligent Operations Center for Emergency Response installer can be run in two different modes.

- Full installation mode: The installer will install the entire IBM Intelligent Operations Center for Emergency Response package. No prior IBM Intelligent Operations Center for Emergency Response installation is expected on the target systems.
- Upgrade mode: The installer will upgrade a previously installed IBM Intelligent Operations Center for Emergency Response package.

The installation mode is automatically detected. When the installer is run, pre-check components will determine the installation mode based on whether or not IBM Intelligent Operations Center for Emergency Response was previously installed on the system. If the latest version of IBM Intelligent Operations Center for Emergency Response is already installed, the installer will not attempt to reinstall IBM Intelligent Operations Center for Emergency Response.

---

## Installing IBM Intelligent Operations Center for Emergency Response

Follow the steps in this section to install IBM Intelligent Operations Center for Emergency Response.

### Unpack the installation bundle

Copy the IBM Intelligent Operations Center for Emergency Response installation bundle to a server outside the IBM Intelligent Operations Center environment and then extract it to a temporary folder, for example `/tmp`.

```
mkdir /tmp/ER_Install
cp IOCv15_ER_FeaturePack_Release_Build_date.tar /tmp/ER_Install
cd IOCv15_ER_FeaturePack_Release_Build_date.tar
tar -xvf IOCv15_ER_FeaturePack_Release_Build_date.tar
```

In the rest of these instructions, the temporary folder will be referred to as *tmp\_folder*.

**Important:** Do not unpack the IBM Intelligent Operations Center for Emergency Response installation bundle to any of the IBM Intelligent Operations Center production servers:

- application server
- management server
- event server
- data server

If the IBM Intelligent Operations Center installation server is still available, the IBM Intelligent Operations Center for Emergency Response installation bundle can be unpacked on that server. Alternately, another Linux host with network access to the IBM Intelligent Operations Center environment can be used.

### Update JAVA\_HOME

When the bundle is extracted, update the `tmp_folder/ER_Install/asset/bin/install.props` file to point to the correct location on the server. Update the properties file as follows:

Property	Description	Sample Value
JAVAHOME	Location of the Java™ JRE	/opt/ibm/java-x86_64-60/jre

## Update host information

Review and update the properties file provided with IBM Intelligent Operations Center for Emergency Response to values appropriate for your IBM Intelligent Operations Center installation.

Open the following file in an editor:

`tmp_folder/ER_Install/asset/topology/iop_lite_topo.properties`

and change the properties that are listed in the following table to values appropriate for your IBM Intelligent Operations Center 1.5 installation:

Property	Sample Value
DB.1.HOST	badb.ibmplatform.com
DB.1.ACCOUNT.PWD	passwd
APP.1.HOST	baapp.ibmplatform.com
APP.1.ACCOUNT.PWD	passwd
EVENT.1.HOST	baevent.ibmplatform.com
EVENT.1.ACCOUNT.PWD	passwd
MGMT.1.HOST	bangmt.ibmplatform.com
MGMT.1.ACCOUNT.PWD	passwd
LDAP.SEED	ibmdop2056789
LDAP.SALT	thisismysalt
WBM.DB.USER	db2ibm
WBM.DB.USER.PWD	ibmdop20
WAS.ADMIN.ACCOUNT	waswebadmin
WAS.ADMIN.ACCOUNT.PWD	ibmdop20
WAS.LTPA.PWD	ibmdop20
PORTAL.ADMIN.ACCOUNT	waswebadmin
WAS.ADMIN.ACCOUNT.PWD	ibmdop20
WAS.LTPA.PWD	ibmdop20
PORTAL.ADMIN.ACCOUNT	waswebadmin
PORTAL.ADMIN.ACCOUNT.PWD	ibmdop20
PORTAL.ADMIN.UID	wpsadmin
PORTAL.ADMIN.UID.PWD	ibmdop20
Portal.DB.USER	db2port1
Portal.DB.USER.PWD	ibmdop20
OMNIBUS.ADMIN.ACCOUNT	netcool
OMNIBUS.ADMIN.ACCOUNT.PWD	ibmdop20
IMPACT.WAS.ACCOUNT	wasadmin
IMPACT.WAS.ACCOUNT.PWD	netcool
TSRM.WAS.ADMIN	waswebadmin
TSRM.WAS.ADMIN.PWD	ibmdop20

Property	Sample Value
TSRM.DB.USER	maximo
TSRM.DB.USER.PWD	ibmdop20
TSRM.ADMIN.USER	maxadmin
TSRM.ADMIN.USER.PWD	ibmdop20
MGMT.WAS.ADMIN	waswebadmin
MGMT.WAS.ADMIN.PWD	ibmdop20
MQM.CONN.USER	mqmconn
MQM.CONN.USER.PWD	ibmdop20
DB.INSTANCE.USER	db2inst1
DB.INSTANCE.PASSWORD	ibmdop20
TSRM.DB.ADMIN.ACCOUNT	db2inst6
TSRM.DB.ADMIN.PASSWORD	ibmdop20
LDAP.COGNOS.ADMIN.NAME	wpsadmin
LDAP.COGNOS.ADMIN.PWD	password

## Configure email notification

Email can be sent from the IBM Intelligent Operations Center for Emergency Response user interface. Email recipients can be specified by email address, or as LDAP user or user groups. Both mail server and LDAP access details are specified as system property values.

Edit the following file in the IBM Intelligent Operations Center for Emergency Response installation bundle to include the correct values for your IBM Intelligent Operations Center environment:

*tmp\_folder/ER\_Install/topology/ioc\_topo\_sop.template.xml*

### MailServerHostname

Host name of the mail (SMTP) server

### MailServerPort

Server SMTP port, default is 25

### MailSender

Sender address of email, default is S0P4BA@ioc.ibm.com

## Run the installation script

Run the installation script to install IBM Intelligent Operations Center for Emergency Response.

### Procedure

1. Access the folder where the installation bundle was extracted: *tmp\_folder/ER\_Install*.
2. Change to the *tmp\_folder/ER\_Install/asset/bin* directory.  

```
cd tmp_folder/ER_Install/asset/bin
```
3. Run the following command:  

```
./install-FP.sh -p IOC_Password
```

**Note:** Ensure that you updated the host details.



## Results

The installation script takes approximately sixty minutes to run. On completion of the script, the logs are copied to the following location:

```
/opt/IBM/IOC/BA/ioc/log/installSolution_solution-spec_ER_date.log
```

---

## Configure Tivoli Netcool/Impact for IBM Intelligent Operations Center for Emergency Response

### About this task

**Restriction:** These steps cannot be run in Internet Explorer 9 Standards mode. Change to a different mode or browser before starting these steps.

To configure Tivoli Netcool/Impact for IBM Intelligent Operations Center for Emergency Response do the following.

### Procedure

1. In a browser window on the IBM Intelligent Operations Center event server, enter the following URL:  
`http://event_server:9080/nci/main`
2. Log in to the Tivoli Netcool/Impact suite.
3. In **Projects**, select **iocer\_sopba**.
4. Expand **Wizards**, and then click **XML DSA**.
5. In the wizard:
  - a. In **Policy Name**, enter `ForCustomization`, and then click **Next**.
  - b. Select **XmlHttp**.
  - c. For **Base URL for HTTP server**, enter `http://IOC_APP_Server_Hostname:10039/ioc_er_sopba_rest`.
  - d. Select **HTTP method POST**.
  - e. For **Path to the executable providing data**, enter `/sopDefinition/testEventId/checkEvent`.
  - f. Select **User credentials required for HTTP authentication**.
  - g. For **Username under the HTTP server authentication**, enter the Portal server administrator user, the default is `wpsadmin`.
  - h. For **Password under the HTTP server authentication**, enter the Portal server administrator password. Click **Next**.
  - i. Select **XSD Source**.
  - j. For **Path (relative to \$IMPACT\_HOME) to the XSD file**, enter the following:  
`/dsa/XmlDsa/ioc_er_sopba_interface.xsd`
  - k. Click **Next**.
  - l. For **Super type name**, enter `XmlStringIocErSopba`. Click **Next**.
  - m. Click **Finish**.
6. Expand **Policies**, and then delete the policy created **ForCustomization**.
7. In the **Services Status** panel, stop, and then restart the **IOC\_CAP\_Event\_Reader**.
8. To ensure that SOP for BA Impact policies is activated, stop, and then restart Tivoli Netcool/Impact.
9. To verify the required setup, in the **Policies** panel, which is under **Projects**, click **VerificationTest**. If the **Policies** panel does not list the **VerificationTest**, the installation did not successfully complete.
10. Click the **green triangle** (Trigger Policy) in the toolbar, and then click **execute**

**Note:** A green success message must show Successfully triggered policy 'VerificationTest'. Refer to the policy log for policy output.

---

## Verify the Tivoli Service Request Manager deployment

### Procedure

After you run the installation script, follow these steps to verify that the Maximo® EAR file is deployed and running correctly:

1. Verify the correct deployment of the Maximo EAR
  - a. Ensure that you can access the Tivoli Service Request Manager user interface with a browser that is running on the event server under the following URL:  
`http://event_server:82/maximo/ui`

**Note:** If there is a file not found error message, ensure that the HTTP server configuration is updated. To update the HTTP server configuration:

- 1) In the WebSphere® Application Server administrative console, select **Servers > Web Servers**.
  - 2) On the Web Servers window, select the server **ihstsrn1**, click **Generate Plug-in**, and then click **Propagate Plug-in**.
2. Verify that the Web Service is successfully deployed in Tivoli Service Request Manager:
    - a. Using a browser that is running locally on the Event Server, enter the following URL:  
`http://event_server:82/meaweb/os/PLUSIMXJOBPLAN`

A message similar to the following is displayed  
Servlet is running. Use HTTP POST to post data.

3. Verify that the SOP REST service can access Tivoli Service Request Manager.

**Note:** Ensure that the Configure for Tivoli Service Request Manager Workflow Orders task is complete before this verification step.

- a. In your browser, enter the following URL:  
`http://application_server:10039/ioc_er_sopba_rest/activity/0/listautomations`

**Note:** You must authenticate with the username and password that are used to log on to the Portal Server.

A message similar to the following is displayed

"PLUSIRESPO": "Evacuate impacted areas (Respond and Recover)"

---

## Run the installation verification test

### Procedure

To verify that the setup was successful, run the following test scenario:

1. Create a SOP definition named TSRM Integration Test. Select **Start SOP automatically when triggered**.
2. Add a single activity definition named Automated Test Activity. Select **Activity Type** as **Automation Activity**. If Job Plans are available, for example, **Evacuate impacted areas (Respond and Recover)**, **Prepare for severe weather evacuation (Prepare)**, **Initial preparation for severe weather (Mitigate)**, then communication between SOP and Tivoli Service Request Manager is successful.
3. Add a trigger with **Property** as category, **Operation** as Equals, and **Criteria** as Transportation. Save the SOP definition.
4. Submit the SOP definition for approval, and then approve it.

5. On the **Emergency Response > Incident Management** page, right-click on the map, and then add an event with the **event type** as Severe Traffic Accidents. The Tivoli Service Request Manager Integration Test SOP will display one active instance in the **Standard Operating Procedures** page.
6. Start the activity **Automated Test Activity** using any **Activity Director** portlet.

## Results

If no error occurs during the test, then the integration with Tivoli Service Request Manager and the event integration is set up successfully.

---

## Update the Emergency Response SOP definitions

SOP definitions are provided in template form as part of the IBM Intelligent Operations Center for Emergency Response interim feature. The templates provide an optional starting point and can be replaced or not installed if you do not require the template.

### Procedure

1. Log in to the WebSphere Application Server administrative console.
2. Select **Applications > Enterprise WebSphere application**.
3. Select **Install**, and browse to the location of the SOP content WAR file (`ioc_sop_content_venue.war`).
4. In the Module mapping section, select **PortalCluster** as the target.
5. Enter `/ioc_sop_content_venue` for context root. Click **Next**.
6. When the WAR is imported, import the SOP definitions:
  - a. Browse to the `/opt/IBM/WebSphere/wp_profile1/installedApps/cell11/ioc_sop_content_venue_war.ear/ioc_sop_content_venue.war/sop/venue` directory where the WAR file was imported. Open the `ER_SopDefinitions.xml` file in an editor, and then **Search and Replace All** to insert the correct application server name:

```
Search for: "ba15app01.ibmplatform.com"
Replace with: your_application_server_hostname
```
  - b. In the IBM Intelligent Operations Center administration console, go to the Emergency Response page.
  - c. Go to the Emergency Reference Library page. In the SOP definition portlet, select **Import**.
  - d. Browse to the `/opt/IBM/WebSphere/wp_profile1/installedApps/cell11/ioc_sop_content_venue_war.ear/ioc_sop_content_venue.war/sop/venue` directory where the WAR file was imported.
  - e. Select to import the `SopDefinitions.xml` file.
  - f. Refresh the page (navigate off / on) The SOP definitions are displayed in the Emergency Response Library.

---

## Configure the refresh rate

The refresh rate for the Standard Operating Procedures portlet and Activity Director portlet can be configured.

### Procedure

- To modify the refresh rate, do the following:
  1. Go to the WebSphere Portal administration portlet.
  2. Click **Portlet Management > Portlets**.
  3. Select the Standard Operating Procedures portlet or the Activity Director portlet.
  4. Add a preference named `com.ibm.iss.ioc.er.status.refreshRate`.
  5. Set the desired refresh rate in milliseconds.

- To disable automatic refresh for either portlet, do the following:
  1. Go to the WebSphere Portal administration portlet.
  2. Click **Portlet Management > Portlets**.
  3. Select the Standard Operating Procedures portlet or the Activity Director portlet.
  4. Add a preference named `com.ibm.iss.ioc.er.status.autoRefresh`.
  5. Set `com.ibm.iss.ioc.er.status.autoRefresh` to `false`.

---

## Configure Tivoli Access Manager WebSEAL for a cloud environment

If IBM Intelligent Operations Center for Emergency Response is being run in a cloud environment, there are two Tivoli Access Manager WebSEAL instances. Both of these instances require configuration changes. This change must be performed for both Tivoli Access Manager WebSEAL instances.

### About this task

Do the following on the application server and the DMZ.

### Procedure

1. Change to the `/opt/pdweb/www-default/lib` directory.
2. Edit the `jmt.conf` file.
3. Add the following line to the file: `/wpsv70 /ioc_er_sopba_rest/*`
4. Save the changes.
5. Run the following command: `pdadmin -a sec_master -p password server task WebSEAL_server jmt load`.
6. Run the following command: `pdweb stop`
7. Run the following command: `pdweb start`

---

## Troubleshooting installation failure at portal deployment stage

This installation failure occurs quickly during the portal deployment stage, the problem might occur because of a Tivoli Netcool/Impact locking problem.

### Procedure

An error message similar to the following is displayed

```
CIYBA0254I: Install component [PORTAL] on host [hostname]
CIYBA0241E: Command failed : the following error occurred while executing this line:
/opt/IBM/IOC/BA/ioc/spec//SOLUTION/portal_content/build.xml:16:
CIYBA0241E: Command failed with return code 1.
Solution failed: unable to install solution ER_Feature_Pack
```

To resolve this installation failure

Return to the Tivoli Netcool/Impact console and follow the instructions that are outlined in the prerequisites to **Clear all source control file locking**.

---

## Troubleshooting installation failure at portal restart

This installation failure occurs because the Portal server fails to stop correctly, and then tries to restart and connect to a port that it is already using.

## About this task

If installation fails during the portal restart, there is a log similar to the following:

```
#####  
# Restart Portal Server  
  
#####  
ADMU0116I: Tool information is being logged in file  
/opt/IBM/WebSphere/wp_profile1/logs/WebSphere_Portal/stopServer.log  
ADMU0128I: Starting tool with the wp_profile1 profile  
ADMU3100I: Reading configuration for server: WebSphere_Portal  
ADMU3201I: Server stop request issued. Waiting for stop status.  
ADMU3111E: Server stop requested but failed to complete.  
ADMU0111E: Program exiting with error:  
com.ibm.websphere.management.exception.AdminException:  
ADMU3060E:Timed out waiting for server shutdown.  
ADMU1211I: To obtain a full trace of the failure, use the -trace option.  
ADMU0211I: Error details may be seen in the  
file:  
/opt/IBM/WebSphere/wp_profile1/logs/WebSphere_Portal/stopServer.log  
ADMU0116I: Tool information is being logged in  
file  
/opt/IBM/WebSphere/wp_profile1/logs/WebSphere_Portal/startServer.log  
ADMU0128I: Starting tool with the wp_profile1 profile  
ADMU3100I: Reading configuration for server: WebSphere_Portal  
ADMU3028I: Conflict detected on port 10025. Likely causes:  
a) An instance of the server WebSphere_Portal is already running  
b) some other process is using port 10025  
ADMU3027E: An instance of the server may already be running:  
WebSphere_Portal  
  
ADMU0111E: Program exiting with error:  
com.ibm.websphere.management.exception.AdminException:  
ADMU3027E: An instance of the server may already be running:  
WebSphere_Portal  
  
ADMU1211I: To obtain a full trace of the failure, use the -trace option.
```

## Procedure

To resolve this installation failure, manually stop and start the portal server using the IOCCControl script:

1. Log on to the Management server-host-name.
2. Switch to the ibmadmin user, run:  
`su ibmadmin`
3. Go to the following directory:  
`cd /opt/IBM/ISP/mgmt/scripts/`
4. Run the following control script to stop the Portal server:  
`./IOCCControl.sh stop wpe password`
5. Run the following control script to start the Portal server-host-name:  
`./IOCCControl.sh start wpe password`
6. To continue, restart the installation.



---

## Chapter 3. Configuring the Weather component

This section contains information for configuring the Weather component.

---

### Weather operations framework properties

Framework properties control the runtime behavior in the database IOC.SysProp tables.

The following information shows the framework properties that control the framework runtime behavior. The weather framework properties are in schema="WFO."

WFO	*	TestMode	Boolean	true	WFO test mode indicator
WFO	*	CancelExpiredAlerts	Boolean	true	WFO cancel expired alerts indicator
WFO	*	CancelExpiredAlertsL...	Integer	15	WFO frequency (in minutes) to check for expired weather alerts
WFO	*	SubscriptionsStartDelay	Integer	3	WFO frequency (in minutes) to wait before starting subscriptions when the system is started
WFO	*	Alerts#EmailRecipients	String	john.doe@us.ibm.com	WFO email recipients list separated by semicolons. Default is empty string indicator.
WFO	*	AlertsEmailSender	String		WFO email sender. The sender string format is <i>email_id@domain</i>

These properties are explained below.

Name	Value	Description
TestMode	Boolean [ true   false (default) ].	If the value is true, the weather framework creates alerts in the ioc_common.event tables. If the value is false, the weather framework publishes alerts to the message broker queue.
CancelExpiredAlerts	Boolean [ true (default)   false ].	Some providers send out canceled alert events, but some do not. Use this property to tell the framework if it should generate canceled alert events based on alert event expiration date.
CancelExpiredAlertsInterval	Integer (15), minutes	Indicates the interval in minutes for the framework timer listener to cancel expired alerts.
SubscriptionsStartDelay	Integer (3), minutes	The number of minutes for the framework to wait before starting subscriptions after IBM Intelligent Operations Center is started.
AlertsEmailRecipients	String (default: empty string)	Email recipients list separated by a semicolon. The default is an empty string which indicates that no email will be sent.
AlertsEmailSender	String (default: empty string)	Email sender. The sender string format is <i>email_id@domain</i> .

---

### Configuring lightning strike KPI events

IBM Intelligent Operations Center for Emergency Response can be configured to trigger a KPI when a lightning strike event occurs within a specific range.

#### About this task

When the Earth Networks Lightning Strikes adapter receives an alert, the adapter will calculate the distance to the defined center location and area. If the calculated distance is less than the defined threshold value, a KPI alert is sent to IBM Intelligent Operations Center. A lightning alert email can also be sent.

To configure a lightning strikes KPI event, do the following:

## Procedure

1. Access the subscription portlet by clicking **Administration > Intelligent Operations > Weather Operation**.
2. In Weather Alert Subscription click **Create** to create an Earth Networks subscription.
3. Specify the lightning strike boundary top left and bottom right area to be monitored. If an alert is received within the defined area, a KPI will be triggered.
4. Specify the **Lightning strike level** to be monitored.
5. Click **Create** to create the subscription.
6. Edit the DB2® IOC.SysProp table using the DB2 Control Center or any SQL tool and change the following values:

### **ENDistanceThreshold**

to the distance in miles from the defined area to be monitored. For example: 15 for 15 miles.

### **ENCenterLatitude**

to the latitude of the center of the area. For example: 25.100.

### **ENCenterLongitude**

to the longitude of the center of the area. For example: -85.123.

### **ENSendNotification**

to true or false. The value true specifies that a severe weather alert email will also be sent when the KPI is triggered.

---

## Editing the Weather Radar Image portlet shared settings

This topic explains the properties and values that you can configure in the shared setting menu.

### About this task

Use the following information to configure the Weather Radar Image portlet shared settings.

Property name	Value
com.ibm.iss.ioc.weather.alerts.ui.radar.radarLocation	3 characters location code can be found on Help page.
com.ibm.iss.ioc.weather.alerts.ui.radar.autoRefresh	[true   false]
com.ibm.iss.ioc.weather.alerts.ui.radar.intervalForAutoRefresh	Integer (180), in seconds
com.ibm.iss.ioc.weather.alerts.ui.radar.width	Integer [0 – 600]
com.ibm.iss.ioc.weather.alerts.ui.radar.height	Integer [0 – 550]
com.ibm.iss.ioc.weather.alerts.ui.radar.showCities	[true (default)   false]
com.ibm.iss.ioc.weather.alerts.ui.radar.showCounties	[true (default)   false]
com.ibm.iss.ioc.weather.alerts.ui.radar.showHighways	[true (default)   false]
com.ibm.iss.ioc.weather.alerts.ui.radar.showTopology	[true (default)   false]
com.ibm.iss.ioc.weather.alerts.ui.radar.showRivers	[true (default)   false]
com.ibm.iss.ioc.weather.alerts.ui.radar.showWarnings	[true (default)   false]

---

## Configuring the weather alert e-mail service

The weather framework sends out weather alert e-mail when adapters receive alerts that you subscribed to. This topic explains the e-mail service.



First, follow the installation instructions to configure the mail session in the WebSphere Application Server administrative console. Make sure that you configure an SMTP mail server that can send e-mail. If the outgoing mail server requires user authentication, specify the username and password of the mail account. You also need to update IBM Intelligent Operations Center database IOC.SysProp table to add alerts e-mail recipients and alerts e-mail senders. Then restart the application ioc\_weather\_alerts\_ear file from the WebSphere Application Server administrative console.

The Earth Networks adapter also sends e-mail when lightning alerts meet the threshold defined in the Earth Networks system property.

---

## Weather operation database tables

This topic lists and explains the database tables that are used by the Weather component.

The Weather component uses these database tables:

- WFO.ProcessedAlerts - This table tracks alert IDs and alert expiration dates for duplicated and canceled alerts; for example, alerts for a county or city.
- WFO.WeatherSubscription - This table is for persisting subscription information.
- WFO.WeatherLocation - This table is for persisting weather locations.
- WFO.WeatherTopLocation - This table is for persisting weather locations; for example, country, state, or province.
- WFO.WeatherAlertType - This table is for persisting weather alert types from different providers.
- WFO.WeatherAlertThreshold - This table is for persisting weather alert thresholds from different providers.



---

## Chapter 4. Using IBM Intelligent Operations Center for Emergency Response

This section describes how to use the IBM Intelligent Operations Center for Emergency Response. Common tasks that are associated with the IBM Intelligent Operations Center for Emergency Response portlets are documented.

---

### Refreshing presented data

IBM Intelligent Operations Center for Emergency Response tabbed pages and portlets should be refreshed to view the most current data.

To refresh the data presented in a page or portlet, click **Refresh**, if available, or refresh the browser view.

---

### Incident Action Plan

The Incident Action Plan is a document that describes the scope and use of the stated Standard Operation Procedures. The documents are often Microsoft Word documents and provide all portions of the plan, but often contain only general referenced Standard Operation Procedures. A formal Incident Action Plan has sections that generally describe the usage and scope of the document, provide a chain of command, roles and responsibilities, contact lists, and so on.

While generally explicitly stated, an action plan may be implicit, depending on the intended use of the Standard Operating Procedures. For example, a formal plan might be defined by a city that uses the IBM Intelligent Operations Center for Emergency Response to plan for incidents such as severe weather, natural disasters, or even terrorist attacks. However, an airline that uses Standard Operating Procedures to ensure proper maintenance of their aircraft might have a less formal plan, or the plan may be implicit, since it might be related to normal operations.

The plan also addresses the four business aspects, which are operations, planning, logistics, and finance.

**Note:** A plan may exist implicitly, as it is not required for the IBM Intelligent Operations Center for Emergency Response Standard Operating Procedure engine.

---

## Emergency Response Incidents

### Changing the Situation Status

There is a situational status portlet that is included on all pages within the IBM Intelligent Operations Center for Emergency Response.

#### About this task

This common status can be updated by the operations staff and is viewable by all users of the system so that they can know the status of the situation. The situations status can be changed to reflect the nature of an incident. Options include acceptable green, caution yellow, critical red.

#### Procedure

1. In the Situation Status portlet, right-click the existing status.
2. Select the required situation status from dialog. The updated situation status and color is displayed in the Situation Status portlet.

## Adding an event to the map

New events can be added to the map on the Map portlet and are created with a wizard. The events are displayed on the map as an icon.

### About this task

Events can be added using the map, these events can then be processed as required.

For example, an operator receives a call about a fire on Main St. In response to that call, an event can be entered on the map:

- The event can be associated to a SOP.
- Nearby resources can be located, closest fire-station, fire hydrants, and so on.
- Field resources might be dispatched.
- Other requirements that are related to the event can be processed.

### Procedure

To add an event to the map:

1. Go to the required location on the map, right click, and select **Add Event**. The **Add Event** window is displayed
2. In the Who section, enter the following details:
  - Enter the Sender name.
  - Enter the Contact name.
  - Enter a Contact e-mail.
  - Enter a Contact telephone.
3. In the What section, enter the following details:
  - Select an **Event type**.
  - Select an **Event status**.
  - Select an **Event scope**.
  - Enter any required **Restrictions**
  - Enter a **Headline**

**Note:** A default headline is set depending on the selected event type.

- Select the **Severity**

**Note:** A default severity is set depending on the selected event type.

- Select the **Certainty**

**Note:** A default certainty is set depending on the selected event type.

- Select the **Urgency**

**Note:** A default urgency is set depending on the selected event type.

- Enter the Message type
- Enter a Description.
- Enter a Web address.

4. In the When section, enter the following details:
  - Enter a Sent date and Sent Time

**Note:** The Sent date and Sent time details are automatically added when you create an event.

- Enter a Effective date and Effective Time
  - Enter a Onset date and Onset Time
  - Enter a Expiration date and Expiration Time
5. In the Where section, enter the following details:
- Enter the Area description.
  - Enter the Latitude and Longitude location for the event.

**Note:** The Latitude and Longitude are automatically populated based on your map selection.

- Select the **Location map area**

## Viewing events on the map

Events can be viewed and filtered on the map.

### About this task

For example, by viewing an event:

- You can see what resources are located close to the event
- Understand the event location within the city or venue
- You can see potential risks areas that might cause an event escalation.

### Procedure

- Hover over an event on the map to view details for the specific event.
- Click a specific event to select it.
- To filter specific event content on a map. Click **Select Content**, and then select the required content to view.

## Triaging Events

The Triage Events portlet displays untriaged events and incidents that are also displayed on the map, and offers various options to triage them.

### About this task

The following are triage events options:

- Update event
- Escalate to incident
- Cancel event
- View Standard Operating Procedure details
- View nearby resources. For example, you might need to find the closest fire station to a reported fire event or locate mobile tow-trucks in response to a traffic accident event.
- View Properties
- Associate the selected event to a set of activities that are defined by an existing Standard Operating Procedure. For example, an event that causes a set of activities to be started, and this event is also associated with that set of activities. Such as multiple calls about a fire in a building, where the same set of activities from the same Standard Operating Procedure are used and are related.
- Create a set of activities that are based on a defined Standard Operating Procedure.

**Note:** This menu option allowing the selection of a Standard Operating Procedure that is used to handle a specific event. For example, an emergency call operator might create an event that represents a traffic accident location reported on the call, and then start a new set of activities that are based on the Standard Operating Procedure that best suits that event.

## Procedure

In the Triage Events window, right click the required event to display the following triage options.

- Update Event
- Escalate to Incident
  - Add the required escalation changes, and then click **OK**
- Cancel Event
  - Add the required changes, and then click **OK**. The event is canceled and removed from the list.
- View Standard Operating Procedure Details
- View Nearby Resources
  - Select a maximum required distance amount. The resources are displayed. For example, the closest fire station to a reported fire event.
- Properties
  - Add the required property changes, and then click **OK**
- Associate with SOP instance. You can associate an event with a SOP instance.
- Create a SOP instance. You can create a SOP instance for the event.

## Details portlet

The Details portlet displays events and incidents that are also displayed on the map. The portlet displays triaged and untriaged events.

### About this task

Use the Events and Incidents tab to process ongoing incidents and events in the list. See *Triaging Events* for procedure.

Use the Resources tab to process resources for events and incidents.

## Ongoing Incidents portlet

The Ongoing Incidents in the Incident Management portlet displays events and incidents that are also displayed on the map. The portlet displays triaged and untriaged events.

### About this task

Use the Events and Incidents tab to process ongoing incidents and events in the list. See *Triaging Events* for procedure.

---

## Reference Library

The Reference Library contains links that are useful and easily accessible for completing Standard Operating Procedures. For example, for phone lists, email addresses, or pertinent forms. Reference Library details can be added, viewed, edited, deleted, or launched if a user has the correct authority.

To add a reference

1. Select **Reference Library**
2. In the Reference Library portlet, click **Add**.
3. In the Add a reference window:
  - Enter the reference name
  - Enter the reference URI

**Note:** The URI must contain a fully-qualified hostname so it can be resolved correctly by the user's web browser. Do not use localhost in the URI.

- Enter the Description
- Optionally select **Private**

**Note:** Use **Private** to make a reference library entry unavailable for other users to view.

4. Click **Add**, the reference is added to the Reference Library list.

To access and launch an existing reference:

1. Select **Reference Library**.
2. In the Reference Library portlet, search for the required reference as required.

**Note:** You can enter a search string and also filter the search with options that include, **Show Archived**, and **Show Private**.

3. Select the reference, and then click **Launch URL**.

---

## Defining notification templates

Create a notification template that can be used to send an email.

The notification template is created with the Reference Library portlet.

1. Create a text file that includes the email template, and post it to a website. A sample of the simple email template format that is used, is as follows:

```
To:  
Subject:This is a test notification  
Body:This is just some text here to  
show how multiple lines can be added for  
the body.
```

2. Create a shared Reference Library item. Select **Library > Reference Library > Add**.
3. In the Add a reference window:
  - Enter the reference Name.
  - Enter the URL to the text file.
  - Enter the description - ensure that the first line of the description contains only the word NOTIFICATION. Further descriptions details can be added to other lines.
  - Click **Save**
4. The system automatically presents the email description in the list of choices for notification activities in dialogs for creating or editing activity definitions.
5. When the Standard Operating Procedure is instantiated and the activity started, the user is presented with an email form populated from the template.

---

## Standard Operating Procedures

A Standard Operating Procedure is a set of instructions that detail all relevant steps and activities of a process or procedure. Standard Operating Procedures are essential to an organization to deliver consistent, measured, high-quality responses to complex and unpredictable events.

The Standard Operating Procedure works as follows:

1. List all the issues that might occur in a target environment and need a managed response. The list is made up from previous experience and applied knowledge.
2. A subject matter expert writes a procedure to manage the issue, for example:
  - Who is involved
  - When they are involved

- How they are involved
  - What supplies the update data or receives the action
3. When the response procedure is defined, it can be configured into the SOP editor.
  4. Standard Operating Procedures can be started manually or automatically during runtime.
  5. Standard Operating Procedures operations can be tracked and integrated inside the IBM Intelligent Operations Center for Emergency Response interface.

The following are Standard Operating Procedure types and definitions:

#### **Incident Action Plan**

A document that describes the content and use of the stated Standard Operating Procedures. This Incident Action Plan has sections that generally describe the usage and scope of the document, provide a chain of command, roles and responsibilities, and contact lists.

#### **Standard Operating Procedure definition**

A set of tasks that comprise a Standard Operating Procedure. It is these planned activities that a coordinator must work through to deal with an incident.

#### **Standard Operating Procedure instance**

A response to a specific set of incidents or events. There might be multiple incidents or events that are associated to the Standard Operating Procedure instance.

#### **Standard Operating Procedure template**

The template is initial draft of a usable Standard Operating Procedure definition. It is composed of

- Set of steps and activities
- Referenced Plan
- Auto-triggers
- Notifications

#### **Common Alerting Protocol (CAP) Event**

The Common Alerting Protocol (CAP) is used to exchange event information between the IBM Intelligent Operations Center and external systems.

## **Creating a Standard Operating Procedure definition**

Within IBM Intelligent Operations Center for Emergency Response a Standard Operating definition is a set of tasks that comprise a Standard Operating Procedure. It is these pre-planned activities that must be worked through to deal with an incident. These activities might include incident management, team communication, medical support, automated alerts (based on KPIs), and other associated activities. A modal dialog is used to create a Standard Operating Procedure.

### **About this task**

The following is Standard Operating Procedure definition content:

- References to Emergency Action Plan or Emergency Response Plan providing scoping for all associated Standard Operating Procedures
- List of steps, sequential, or order independent. Activity types can be:
  - Manual
    - An activity that contains only a description and is manual.
  - Automation
    - An automation activity initiates and tracks a particular work order in Tivoli Service Request Manager.
  - Notification



- Event
  - Sends a CAP event message with the specified criteria, often used to launch a child SOP.
- If-Then-Else
  - Allows branching based on specific criteria.
- SOP
  - Allows including an SOP into another SOP.
- Automation triggers for automatic Standard Operation Procedure instantiation.
- Owners and interested parties

## Procedure

The Standard Operating Procedure editor allows you to convert the activities that are needed to be taken to deliver a response. These activities can be configured and managed inside IBM Intelligent Operations Center for Emergency Response.

1. In the Standard Operating Procedures portal, click **Create**. The Create Standard Operating Procedure Definition window is displayed.
2. For the Basics option:
  - a. Enter the procedure name
  - b. Optional: Enter a description if required
  - c. Optional: For General Settings:
    - Select **Start SOP automatically when triggered** as required.
    - Select **Activities are done in order** as required.
  - d. Optional: For Event Settings:
    - Select **Close event when SOP finishes** as required.
    - Select **Match any trigger** or **Match all triggers** as required
  - e. Optional: To add a reference
    - Click **Add Reference**.
    - In the Add a reference window, enter any required reference, and then click **Add**.
  - f. Click **Next**
3. For the Owners option:
  - a. In the Available roles list select the required Roles, and then click **Add**. The required roles appear in a Selected Roles list.
  - b. In the Selected Roles list, select **Owner** or **Readers** for each role as required. Owners are able to read and make changes to the SOP or activities. Readers are only able to view the SOP or activities.
  - c. Click **Next**
4. For the Activities option specific activities can be added in required order:
  - a. For **Activity Title:**, enter the activity title. Assign fire houses
  - b. For **Roles:**, enter the required roles separated by a comma. Operator, Supervisor
  - c. For **Duration:**, specify time format, and then enter the required duration for the activity. The Standard Operating Procedure due date is calculated from when the Standard Operating Procedure instance was started, not from when the activity was started.
 

If the activities in the Standard Operating Procedure are unordered, the due date is the duration of the activity from the time the Standard Operating Procedure was started. For example, if the duration of the activity is five minutes and the Standard Operating Procedure was started at 12:45, then the due date is 12:50.

If the activities in the Standard Operating Procedure are ordered, the due date of all previous activities are added together from the beginning of the Standard Operating Procedure. The due

date is calculated from that point. For example, assume the duration of this activity is 10 minutes and there are two activities in the ordered list before this activity and those earlier activities are five minutes each. If the Standard Operating Procedure was started at 12:45, then the due date of this activity is 1:05. (12:45 plus five minutes for the first activity in the ordered list, plus five minutes for the second activity, plus 10 minutes for this activity.)

- d. Select the required activity type from **Manual, Automated, Notification, Event, If-Then-Else, or SOP**.
  - e. Click **Add**. The new activity is added.
  - f. Add further activities as required.
  - g. Use drag and drop to change the activity sequence.
  - h. Click **Next**
5. For the Triggers option, define the characteristics of the trigger to start the procedure:
    - a. Click **Add**.
    - b. In the Add Trigger window, select the required **Property, Operation** and **Criteria**, and then click **Add**.
    - c. Click **Next**
  6. On the **Summary** window, verify the required details, and then click **Save**

## Standard Operating Procedure XML import and export

Predefined Standard Operating Procedure definition can be imported and exported in the Standard Operating Procedures portlet

1. Select **Library**
2. In the Standard Operating Procedures portlet, export or import the required SOP configuration XML file:
  - Click the drop-down menu beside **Create Copy Delete Refresh**.
  - Select **Import** to locate and import the **.xml** file.
  - Select **Export** to locate and export the **.xml** file.
  - When approved, the updates are reflected in IBM Intelligent Operations Center for Emergency Response.

## Viewing and updating an existing Standard Operating Procedure portlet

An existing Standard Operating Procedure definition can be viewed and updated in the Standard Operating Procedure portlet.

### Procedure

1. In the Standard Operating Procedure portal, select the **Standard Operating Procedure definition** in the portlet to view.

**Note:** Use the search box to filter your search as required.

2. Click the required tab to view the **Activities, Roles, Triggers, References, Change Log, and Instances** associated to the selected Standard Operating Procedure definition.
3. A draft can be edited, submitted for approval, and then approved or disapproved.
4. Activities can be moved by clicking and dragging the activity to the preferred location in the list.  
Note: The visual cue indicating where the activity will be placed when dragging to a new location indicates a location one activity above where the activity will actually be placed. This is a known limitation.
5. To view details of any changes, click **Change Log**.

## Standard Operating Procedure Activity Director

Use the Activity Director portlet to direct the activities (active SOP instances) of a Standard Operating Procedure.

The Activity Director portlet displays a general overview, for example details on Past Due, Due Today, and Future events. Use the Activity Director to carry out the following tasks:

- To start an activity, in the Activity Director expand the required heading, and then click **Start** for the required activity. The activity is started, and the option **Complete** is now displayed.  
If the activity is an If-Then-Else activity, two options are available: **Start Then** and **Start Else**. These will start the branches defined for the activity.
- To skip an activity, select **Skip** for the required activity in the drop-down list.
- To add a reference, select **Add Reference** for the required activity in the drop-down list.
- To add a comment, select **Add Comment** for the required activity in the drop-down list.
- To view the activity details, select **Show Details** for the required activity in the drop-down list.
- To send a notification email, select **Send Email** for the required activity in the drop-down list. Enter the required details in the Notification template, and then click send.
- To complete an already started activity, click **Complete**. The completion date is displayed under the activity.

**Note:** You can view details for a completed activity until the parent SOP instance is completed.

## SOP Security Model

The SOP Application uses all the standard security features of the IBM Intelligent Operations Center, including its authentication and single sign-on technology. The application can obtain the current authentication credentials to determine what features, if any, are appropriate for the user. The features are based on the LDAP Roles that the user is assigned to, and must match the Distinguished Name used in association with the SOP objects.

The following are specific security features for each object:

Feature	Role Required
New SOP Definition Creation	CityWideSupervisor
Existing SOP Definition Read	CityWideSupervisor Any role granted "read" access by the creator/editor
Existing SOP Definition Update/Delete	CityWideSupervisor Any role granted "write" access by the creator/editor
New SOP Creation	CityWideSupervisor Any role granted "write" access on the SOP Definition by the creator/editor
SOP Read	CityWideSupervisor Any role granted "read" access on the SOP Definition by the creator/editor Any role granted "read" access on the Activity Definition by the creator/editor

Feature	Role Required
SOP Update/Delete	CityWideSupervisor  Any role granted "write" access on the SOP Definition by the creator/editor  Any role granted "write" access on the Activity Definition by the creator/editor
Activity Read	CityWideSupervisor  Any role that granted "read" access on the Activity by the creator/editor or initially populated from the Activity Definition roles
Activity Update	CityWideSupervisor  Any role granted "write" access on the SOP by the creator/editor or initially populated from the Activity Definition roles
Exception Activity Creation	CityWideSupervisor  Any role granted "write" access on the SOP by the creator/editor or initially populated from the SOP Definition roles

---

## Chapter 5. Troubleshooting IBM Intelligent Operations Center for Emergency Response

To isolate and resolve problems with IBM Intelligent Operations Center for Emergency Response, you can use the troubleshooting and support information.

---

### General troubleshooting procedures

For user interface problems, check the JavaScript console for errors. The error might contain information such as the URL requested and more information about why the error occurred. Ensure that the URL is still accessible and if not, ensure that the following two enterprise applications are running from the WebSphere Application Server administrative console:

- ioc\_er\_sopba\_portal\_ear
- ioc\_er\_sopba\_rest\_ear

For other issues, check the WebSphere Application Server server logs for any errors from the SopbaLogger. Examples of issues that might occur include:

- Database password expired
- Performance of an action on an activity in an incorrect state, for example:
  - Stop an already stopped activity
  - Start an already started activity

---

### Troubleshooting integration and display problems

#### New comments not appearing in SOP details view

New comments added in the SOP details might not automatically display in the comments list. If this happens, refresh the view to update the comments list.

#### Problem occurs when a Standard Operating Procedure definition with automation activities is created

This problem might occur when a Standard Operating Procedure definition with automation activities is created. The assumption is that Tivoli Service Request Manager is used as the automation engine.

##### Problem

An error message is displayed when a Standard Operating Procedure with an Activity Type = Automation Activity is created.

##### Resolution

- Check that Tivoli Service Request Manager is up and running.
- Log in to Tivoli Service Request Manager on the IBM Intelligent Operations Center event server, by opening a web browser and entering the following URL `http://event_server:82/maximo/ui`:
  - On the main page, click **Go To**, and then select **Integration > Object Structures**
  - For filter enter PLUSI, and then verify that the entries **PLUSIMXJOBPLAN** and **PLUSIMXCOMM** exist.
- Check that the following IOC system properties in the table **IOC.SYSPROP** of the IOC database exist and have the correct values:

##### **tsrm.endPointProcEngine**

Tivoli Service Request Manager integration endpoint.

The default is `http://event_server:82/meaweb/`

**tsrm.defaultSite**

Tivoli Service Request Manager default site.

The default is PMSCRTP

**tsrm.startAutomation.workflowName**

Tivoli Service Request Manager workflow name

The default is APPFWFO

**tsrm.listAutomation.whereClause**

Query for clause to get automations

The default is `JPNUM LIKE 'PLUSI%'`

**Note:** Ensure that `tsrm.listAutomation.whereClause` contains a valid where clause.

## No entries available in the Job Plan menu

This problem occurs when a Standard Operating Procedure definition with automation activities is created. When the activity type is selected, the **Job Plan** menu option might be empty.

### Resolution

- Check that the IOC system property in table **IOC.SYSPROP** of the IOC database `tsrm.listAutomation.whereClause` contains a reasonable **where** clause.
- Log in to Tivoli Service Request Manager on the IBM Intelligent Operations Center event server, by opening a web browser and entering the following URL `http://event_server:82/maximo/ui:`
  - On the main page, click **Go To**, and then select **Planning > Job Plans**
  - Enter the filter that is specified in the `tsrm.listAutomation.whereClause`. If the default value **JPNUM LIKE 'PLUSI%'** is used, then enter `PLUSI%` for filter.
  - If no entries are found, define new job plans matching the filter, or change the **where** clause to ensure that the existing job plans are found. Update the system property `tsrm.listAutomation.whereClause` accordingly.

## CIYAS0048E: Automation could not be started error message

If the error message CIYAS0048E: Automation could not be started error occurs when an automation activity is not started:

- If the error details contain BMXAA5359E - enter a classification for the object before adding a new attribute, then the job plan specification is missing a classification. To add the classification:
  - Log in to Tivoli Service Request Manager on the IBM Intelligent Operations Center event server, by opening a web browser and entering the following URL `http://event_server:82/maximo/ui:`
    - On the main page, click **Go To**, and then select **Planning > Job Plans**
    - Search for the required job plan, and then add the missing classification
- If the error details contain any other message with a BMX prefix, search for the error message resolution in the Tivoli Service Request Manager documentation.

## Resolving all other problems that occur when automation activities are defined, started, or stopped

To resolve other problems that occur when automation activities are defined, started, or stopped:

- Contact IBM Support.

## JDBC connectivity problems with Tivoli Netcool/Impact

This scenario occurs because of JDBC connectivity problems with Tivoli Netcool/Impact.

### Diagnosis

The source of the problem is with the data sources in Tivoli Netcool/Impact, IOC\_CAP cannot make a connection. The Primary Source Host Name is wrong. It is set to `ba15data01.ibmplatform.com:50000` when it must be set to the host name of the data server.

### Resolution

To resolve this problem, change the Primary Source host name to ensure connectivity:

1. Log into Tivoli Netcool/Impact on the Event Server at:  
`http://event_server:9080/nci/main`
2. Select **Projects** the left, and then select the **IOC project** in the projects drop-down.
3. Select **IOC\_CAP**.
4. Change the **Primary Source host name** to the data server.
5. Ensure that the password is set to the topology password.
6. Click **Test Connection**, the following message is displayed  
DB2: Connection OK

**Note:** If the connection fails, check that username is set to `db2inst1`, and that the password is set to match the Topology password.

## The Incident Management tab has two Triage Events portlets, the Ongoing Incidents portlet is not displayed

The scenario occurs if the Incident Management tab displays two Triage Events portlets, but the Ongoing Incidents portlet is not displayed. The expected configuration is one Ongoing Incidents portlet and one Triage Events portlet.

Resolve this configuration issue by configuring the filter to show only incidents:

1. Go to **Emergency Response > Incident Management**.
2. Select **Edit shared settings** from the drop-down menu. The Shared Settings options are displayed.
3. For **Portlet Title**, ensure that Ongoing Incidents is entered.
4. For **Conditions**, to display incidents only, ensure the that following string is entered:  

```
[{"selector": "commonevents.user1" , "operator":  
"notEquals" , "values": ["SOP"]},  
{"selector": "commonevents.eventType" , "operator":  
"equals" , "values": ["Incident"]}]]
```
5. Click **Save**.

## Weather Service Key performance indicator status display problem

This scenario occurs, if the Weather Service Key performance indicator (KPI) statuses are not displayed.

To resolve this problem, delete the installed Weather KPI hierarchy, and then defining it manually:

1. On your Portal Administration window, expand **Intelligent Operations > Customization > KPI**
2. To delete the Weather KPI owning organization, right click **Weather Service**, and then select **Remove**.
3. Re-add the Weather KPI definition with the following hierarchy
  - Weather Service
    - Lightning Severity



- Rainfall
  - Rainfall Granular KPI
- Wind Speed
  - Wind Speed Granular KPI

## Dialogs appear to need to be clicked twice to close or are duplicated

To resolve the problem where dialogs appear to need to be clicked twice to close, or where dialogs are duplicated, either a WebSphere Portal APAR must be applied or a manual configuration change made. The problem where dialogs appear to need to be clicked twice to close is due to there being two dialogs stacked one on the other. The user is actually closing two dialogs; not clicking the same dialog twice to close.

Do one of the following:

1. Apply WebSphere Portal APAR CF015 (APAR PM65283 for V7.0.0.1 and PM65284 for V7.0.0.2.) Released 29 June 2012 to your IBM Intelligent Operations Center for Emergency Response system.
2. Manually configure your IBM Intelligent Operations Center for Emergency Response system:
  - a. In the Portlet Menu for one of the portlets, choose **Shared Settings**.
  - b. Locate the following attributes and set their value to true.
    - ignoreEventCreation
    - ignoreEventTasks
  - c. Save the changes.

## Events cannot be created in Internet Explorer 9

In Internet Explorer 9 the event dialog will be displayed but when **OK** is clicked there is no response.

The solution depends on the environment. Possible solutions are:

- Running Internet Explorer 9 in Admin mode.
- Increasing user privileges.
- Placing IBM Intelligent Operations Center for Emergency Response in the trusted sites list.

---

## Troubleshooting Standard Operating Procedure problems

### Common Alerting Protocol (CAP) event does not instantiate a Standard Operating Procedure

Triggers are defined with a Standard Operating Procedure definition. In this scenario, an event that matches the trigger criteria does not cause a Standard Operating Procedure instance to be created.

- Check that the IOC event subsystem is up and running.
- Log in to the Netcool<sup>®</sup> Suite on the IBM Intelligent Operations Center event server, by opening a web browser and entering the URL `http://event_server:9080/nci/main`.
  - Select the project **ioc\_er\_sopba**
  - Open the policy **VerificationTest**. Click **Execute** in the pop-up menu. The expected result is the following message:
 

```
Successfully triggered policy 'VerificationTest'.
Refer to the policy log for policy output
```

**Note:** Repeat the “Configure Tivoli Netcool/Impact for IBM Intelligent Operations Center for Emergency Response” on page 11 steps if the successful message is not displayed.

- In the Services window, stop, and then restart the **IOC\_CAP\_Event\_Reader**



## Multiple Standard Operating Procedure instances are displayed

After updating an event, multiple Standard Operating Procedure instances are displayed.

This behavior is expected. Updating an event will cause the IBM Intelligent Operations Center infrastructure to repost the Common Alerting Protocol (CAP) message. If the Standard Operating Procedure is set to auto-start on a trigger, and if the event update matches that trigger, then a new Standard Operating Procedure instance will be created.

## Conflicts occur when multiple users use the same account

Conflicts can occur if two users are using the same IBM Intelligent Operations Center for Emergency Response user account.

When an SOP is created, a temporary transaction is created. If another user using the same account creates an SOP, the second user will be prompted to commit, delete, or cancel the first transaction. Committing will save the first user's partially created SOP. Deleting the transaction will delete the first user's temporary transaction which will result in WebSeal errors for the first user.

If the first user retries the transaction, the second user can see similar symptoms.

To avoid these problems, users should not use the same user account.

---

## Contacting IBM Support

IBM Support provides assistance with product defects, answers to FAQs, and helps users resolve problems with the product.

### Before you begin

After trying to find your answer or solution by using other self-help options such as technotes, you can contact IBM Support. Before contacting IBM Support, your company or organization must have an active IBM software subscription and support contract, and you must be authorized to submit problems to IBM. For information about the types of available support, see the Support portfolio topic in the *“Software Support Handbook”*.

### Procedure

To contact IBM Support about a problem:

1. Define the problem, gather background information, and determine the severity of the problem. For more information, see the Getting IBM support topic in the *Software Support Handbook*.
2. Gather diagnostic information.
3. Submit the problem to IBM Support in one of the following ways:
  - Online through the IBM Support Portal: You can open, update, and view all of your service requests from the Service Request portlet on the Service Request page.
  - By phone: For the phone number to call in your region, see the Directory of worldwide contacts web page.

### Results

If the problem that you submit is for a software defect or for missing or inaccurate documentation, IBM Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Support provides a workaround that you can implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM Support website daily, so that other users who experience the same problem can benefit from the same resolution.



---

## Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing  
Legal and Intellectual Property Law  
IBM Japan, Ltd.  
19-21, Nihonbashi-Hakozakicho, Chuo-ku  
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM web sites are provided for convenience only and do not in any manner serve as an endorsement of those web sites. The materials at those web sites are not part of the materials for this IBM product and use of those web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
Department T81B F6/Building 503  
4205 S. Miami Boulevard  
Durham NC 27709-9990  
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

---

## Trademarks

IBM, WebSphere, Cognos<sup>®</sup>, DB2, and GPFS<sup>™</sup> are trademarks of the IBM Corporation in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Java is a registered trademark of Oracle and/or its affiliates.

Other names may be trademarks of their respective owners. Other company, product, and service names may be trademarks or service marks of others.



---

## Readers' Comments — We'd Like to Hear from You

**IBM Intelligent Operations Center Interim Feature**  
**IBM Intelligent Operations Center**  
**for Emergency Response**  
**Version 1.5.0.2**

We appreciate your comments about this publication. Please comment on specific errors or omissions, accuracy, organization, subject matter, or completeness of this book. The comments you send should pertain to only the information in this manual or product and the way in which the information is presented.

For technical questions and information about products and prices, please contact your IBM branch office, your IBM business partner, or your authorized remarketer.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you. IBM or any other organizations will only use the personal information that you supply to contact you about the issues that you state on this form.

Comments:

Thank you for your support.

Submit your comments using one of these channels:

- Send your comments to the address on the reverse side of this form.
- Send a fax to the following number: 1-800-227-5088 (US and Canada)

If you would like a response from IBM, please fill in the following information:

\_\_\_\_\_

Name

\_\_\_\_\_

Address

\_\_\_\_\_

Company or Organization

\_\_\_\_\_

Phone No.

\_\_\_\_\_

Email address



Fold and Tape

Please do not staple

Fold and Tape



NO POSTAGE  
NECESSARY  
IF MAILED IN THE  
UNITED STATES

# BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 40 ARMONK, NEW YORK

POSTAGE WILL BE PAID BY ADDRESSEE

IBM  
Information Development Department DLUA  
P.O. Box 12195  
Research Triangle Park, NC  
USA 27709-9990



Fold and Tape

Please do not staple

Fold and Tape







Printed in USA