IBM Intelligent Operations Center
Version 5 Release 1

Installing and Configuring IBM Intelligent Operations Center for Emergency Management

IBM

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After you install IBM® Intelligent Operations Center for Emergency Management V5.1, configure the application to work with the base installation of IBM Intelligent Operations Center and with your data sources.

Installing IBM Intelligent Operations Center for Emergency Management

After you ensure that prerequisites are in place, install IBM Intelligent Operations Center for Emergency Management.

Before you begin

IBM Intelligent Operations Center for Emergency Management V5.1 requires IBM Intelligent Operations Center V5.1. Ensure all installation and postinstallation steps of V5.1 have been completed, and that you can log in to the server.

Important: To ensure that you have the latest version of IBM Intelligent Operations Center, download the installer that is referenced in IBM Intelligent Operations Center V5.1 installation updates (http://www-01.ibm.com/support/docview.wss?uid=swg21963326), and follow the installation instructions in Installing IBM Intelligent Operations Center V5.1 (http://www-01.ibm.com/support/docview.wss?uid=swg27046083).

IBM Intelligent Operations Center for Emergency Management also requires an additional server with Red Hat Enterprise Linux version 7.0 or later.

Ensure that the following Linux packages are installed on all servers:
- dos2unix.x86_64
- gettext.x86_64
- openssh-clients.x86_64
- openssl.x86_64
- unzip.x86_64

You must also have the IBM Intelligent Operations Center for Emergency Management license file. If you do not have the license file, contact your IBM representative.

Ensure that the /etc/hosts file includes IP addresses for all IBM Intelligent Operations Center and emergency management servers.

Procedure

To install IBM Intelligent Operations Center for Emergency Management:
1. Log on to the anayltics server as the `root` user.

   Note: The analytics server is the installation server, and the following steps on the installation server are run as the `root` user.
2. Create an *installation_home* directory. For example, create the directory /opt/IBM/em51install to use as your *installation_home* directory.

3. Download the package to the installation server and extract the contents of the package to the *installation_home* directory.

4. Create a user ID for the installation program to use during installation:

   a. On each of the servers in the environment, create a user ID with full **sudo** permissions that does not require a TTY connection. For example, create a user named `eminstallid` on each server.

      Note: This user ID is only used during the installation of IBM Intelligent Operations Center for Emergency Management.

   b. On the installation server, run the `ssh-keygen` command to generate an SSH key for authentication of the installation user. For example, the following command generates an SSH key that is stored in a file named `ioc4em_install_key` on the installation server:

      `ssh-keygen -t rsa -b 4096 -C "optional_comment" -P "" -f /installation_home/bin/ioc4em_install_key`

   c. On the installation server, run the `ssh-copy-id` command for each server to add the SSH key to the list of authorized keys for the specified server. In the following example, the SSH key in the `/installation_home/bin/ioc4em_install_key` file is added to the authorized key list for the `eminstallid` user on the IBM Intelligent Operations Center for Emergency Management server:

      `ssh-copy-id -i /installation_home/bin/ioc4em_install_key eminstallid@em_server_host_name`

   d. Rename the `/installation_home/bin/90_ioc4em_sudoers_template` file to `90_ioc4em_sudoers`.

   e. Edit the `90_ioc4em_sudoers` file and enter the installation user group name between the "at" (@) characters.

   f. Copy the `90_ioc4em_sudoers` file to the `/etc/sudoers.d` directory on all the servers.

5. Copy the license file `em_license.json` to the `/installation_home/applications/em51/ioc4em/` directory.

6. Update the `/cfg/ioc4em.install.properties` file to reflect your IBM Intelligent Operations Center V5.1 environment. For example:

   ```
   ioc4em.install.group = ioc4eminstaller
   ioc4em.install.key = ioc4em_install_rsa
   ioc4em.install.passphrase =
   ioc4em.license.file = em_license.json
   ihs.server.hostname = web_server_hostname
   ihs.server.ip = web_server_ip
   ioc4em.external.hostname = public_web_hostname
   ioc4em.external.ip = public_web_ip_address
   ```

   Note: If your environment does not have an external host name, then set the value of the **ioc4em.external.hostname** property to be the same as the value of the **ihs.server.hostname** property. Similarly, set the value of the **ioc4em.external.ip** property to be the same as the value of the **ihs.server.ip** property.

7. Optional: Start a screen session.

8. Change to the `/installation_home/bin` directory and run the installation program by running the following command:

   `./installEmergencyManagement.sh`

9. Tune the KPI refresh interval frequency, which is controlled by the system property **KpiReadRefreshRate**. The default refresh interval is 30 minutes.

Results

After IBM Intelligent Operations Center for Emergency Management is installed, the login URLs are:

- IBM Intelligent Operations Center for Emergency Management user: `https://IOC_web_server_address/mobile/index.html`

- IBM Intelligent Operations Center for Emergency Management administrator: `https://IOC_web_server_address/web/admin.html#/user`

Log files are in the */installation_home*/logs/ directory.

Configuring security certificates

To further ensure security, configure security certificates and update the emergency management server with IBM Intelligent Operations Center certificates.

Before you begin

Ensure that you have completely configured security in IBM Intelligent Operations Center before configuring security in IBM Intelligent Operations Center for Emergency Management. You will use the same security certificates.

Procedure

To configure security certificates:

1. Log in to the emergency management server as the `p5admin` user.

2. Copy your security certificates to the /home/*emergency_management_administrator*/*deployment_dir* directory on the emergency management server. The values for *emergency_management_administrator* and *deployment_dir* are in the `ioc4em.install.properties` file. For example:
   - ioc4em.server.user=p5admin
   - ioc4em.install.dir=deploy_6.0

3. Back up the /home/*emergency_management_administrator*/*deployment_dir*/deployment_config.py file, then modify the original file to include the new security certificate file name in the following parameters:

   ```
   server_pem_path = '/config_repo/site/ssl/emergency_management_server_host_name.pem'
   pg_cert_file = '/config_repo/site/ssl/emergency_management_server_host_name.crt'
   pg_key_file  = '/config_repo/site/ssl/emergency_management_server_host_name.key'
   ```

4. Optional: If you are using self-signed certificates then change `db_verify_cert = "full"` to `db_verify_cert = ""`.

5. Stop and restart the emergency management server by running the following commands:

   ```
   p5admin> cd /home/emergency_management_administrator/deployment_dir
   p5admin> ./taccs_ctl stop
   p5admin> ./taccs_ctl start
   ```

What to do next

Consider changing the certificate to a signed `*.domain.com` certificate after installation. Add the new certificate to the IBM HTTP Server keystore. For instructions on how to add a security certificate to the keystore, see the IBM HTTP Server documentation for WebSphere® Application Server Liberty Profile for your operating system. For example, see **Securing IBM HTTP Server**

Related information:

➙ Importing SSL certificates for HTTPS connections

Configuring alert forwarding

You can configure IBM Intelligent Operations Center to be displayed in IBM Intelligent Operations Center for Emergency Management.

Procedure

1. Log in to IBM Intelligent Operations Center and go to Solution Administration view.
2. Create a data source.
3. Map the new data source to alert properties in the emergency management server.

- The data source name is the source of the alert (**From**)
- The property that is mapped to the minimal property **Name** is the alert title.
- The following target properties map to alert specific columns:
  - alert_description
  - alert_author
  - alert_address
  - alert_priority (must be a number)
4. Select **Emergency Management** > **Data Forwarder**, click **Create**, and select **Data Source**, **Alert Type**, and **Data Group**.

Configuring weather alerts

Configure data sources to receive and process weather alerts

About this task

You can configure data sources for IBM Intelligent Operations Center for Emergency Management to receive weather alerts from either the National Weather Service (NWS) or Weather Underground (http://www.wunderground.com). To receive alerts you must subscribe to either or both services. You can purchase an API key from Weather Underground at http://www.wunderground.com/weather/api/.

Procedure

To configure weather alerts:

1. Create a weather alerts data source. Select **User defined source to database mapping** for the data source definition, and select **NWS Public Alerts** or **Weather Underground** as the acquisition method.
   - For alerts from the National Weather Service, select a state to receive alerts for, and specify the source URL. NWS alerts are available by state.
   - For alerts from Weather Underground, enter your subscription key and the city and country to which you subscribed. You can subscribe to multiple cities and countries.
2. Set an appropriate polling interval for your needs. The default polling interval is 15 minutes.

Creating KPIs from data source properties

Select asset properties from imported data sources to track as KPIs. The results can be viewed in resource reports.

About this task

When you import data about community assets and resources, you might want to track some of the properties of those assets and resources as KPIs.

Procedure

To create KPIs from data source properties:

1. Create or edit the data source.
2. On the Properties page, click **Add resource property** and select a property from the data source to track as a KPI. You can add as many properties as needed.
3. To generate KPIs, click **Generate KPI**. If you need to delete or change a KPI, click **Delete KPI**.

Results

The generated KPIs will appear in the **Indicators** panel, where you can apply filters or display graphs.

Appendix. License usage metrics

IBM License Metric Tool helps Passport Advantage® clients determine their full and sub-capacity PVU licensing requirements.

Learn more: IBM License Metric Tool.

The IBM Intelligent Operations Center for Emergency Management installer adds a product-specific tag file for the authorized user metric.

Usage information is written to Software License Metric Tag (SLMTag) files using a script provided with IBM Intelligent Operations Center for Emergency Management. These files have the extension .slmtag and are read periodically by the IBM License Metric Tool (ILMT) after it has been configured to scan for these files. You can generate reports that summarize usage.

For more information on using IBM License Management Tool, see the IBM License Management Tool 9.0 Knowledge Center.

SLMTag logging

Each time IBM Intelligent Operations Center for Emergency Management starts, license management information is logged to the /opt/IBM/ioc/properties/slmtags directory. The logged .slmtag file contains usage information in the following format:

```
<Metric logTime="2015-05-28T11:25:46-04:00">
  <Type>APPLICATION</Type>
  <SubType></SubType>
  <Value>1</Value>
  <Period>
    <StartTime>2015-05-28T11:25:46-04:00</StartTime>
    <EndTime>2015-05-28T11:25:46-04:00</EndTime>
  </Period>
</Metric>
```

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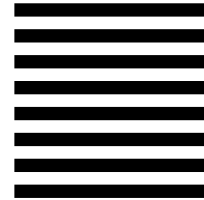
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