IBM Intelligent Operations Center Version 1 Release 6

Installing and Configuring IBM Intelligent Operations Center for Emergency Management



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Note

Before using this information and the product it supports, read the information in "Notices" on page 11.

This edition applies to IBM Intelligent Operations Center for Emergency Management version 1, release 6, modification 0. This edition applies to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Installing and configuring the emergency management server and client

Before you install IBM[®] Intelligent Operations Center for Emergency Management, install the emergency management server and client and configure single sign-on.

Installing the emergency management server

Install the emergency management server by using a provided control script file.

Before you begin

Before you install the emergency management server, ensure that the required minimal operating system is installed. IBM Intelligent Operations Center for Emergency Management version 1.6 supports Red Hat Enterprise Linux version 6.5. If you need to use Red Hat version 6.6 for security reasons, first install Red Hat kernel version 2.6.32-573.7.1.el6.x86_64 or later. Otherwise, IBM Intelligent Operations Center for Emergency Management might fail to install or to work. For more information about Red Hat updates, see https://access.redhat.com/articles/3078.

You must also have the emergency management server 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 servers.

Procedure

To install the emergency management server:

- 1. Create the /root/taccs_install directory and copy the emergency management server control script taccs_ctl file to the new directory.
- Configure the server to bootstrap by running the following command: ./taccs_ctl bootstrap

Running the bootstrap command configures a firewall, installs the Docker container manager, creates an optional administrator user account, and restarts all modified services.

- 3. Copy the emergency management server image CN60YEN.iso to the /root/taccs_install directory, and change directory to that directory.
- 4. Extract the image archive and load it into Docker on the server by running the following command as the root user:

./taccs_ctl load_image --archive-file=image_archive_file_name

For example: ./taccs_ctl load_image --archive-file=ibm-x64-5.0.1-release.docker.xz

- 5. Run the setup configuration package as the p5admin user. The p5admin user was created during bootstrap configuration.
 - a. Create a /p5data directory that is owned by the p5admin user by running the following commands:
 # mkdir /p5data

chown -R p5admin:p5admin /p5data

b. Locate the image file by running the Docker images command. For example,

# docker images				
REPOSITORY	TAG	IMAGE ID	CREATED	VIRTUAL SIZE
<pre>quay.io/priority5/taccs_ibm</pre>	ibm-x64-5.0.1-release	f736ffee72d2	2 weeks ago	1.164 GB

c. Load the sample configuration by running the following commands with the REPOSITORY and TAG values that are returned in the previous step:

```
# su - p5admin
./taccs_ctl sample_config --image=REPOSITORY_path:TAG --config-dir=/home/p5admin/deploy_5.0
chown -R p5admin:p5admin /home/p5admin/deploy_5.0
```

For example,

```
./taccs_ctl sample_config --image=quay.io/priority5/taccs_ibm:ibm-x64-5.0.1-release
--config-dir=/home/p5admin/deploy_5.0
chown -R p5admin:p5admin /home/p5admin/deploy 5.0
```

d. As the p5admin user, set the values for the base settings that are needed to run the server by running the following commands:

```
su - p5admin
cd /home/p5admin/deploy_5.0
./taccs_ctl setup --host-data-dir=host_data_directory
--db-username=db_user --db-password=db_password
--ext-hostname=external hostname
```

For example,

```
$ cd /home/p5admin/deploy_5.0
$ ./taccs_ctl setup --host-data-dir=/p5data --db-username=p5 --db-password=db_password
    --ext-hostname=host.example.com
```

e. Copy the license file to the configuration directory. For example, copy the license file taccs_license.json to the /home/p5admin/deploy_5.0/config/taccs_es/ directory. You can rename the taccs_license.json file, but be sure to update the /home/p5admin/deploy_5.0/config/taccs_es/base.conf.in configuration file with the new file name.

Ensure that the license file is owned by the p5admin user.

f. Verify that you can run the taccs_ct1 control script file from the configuration directory by running the following command:

\$ cd /home/p5admin/deploy_5.0
./taccs ctl update

6. Initialize the database cluster that stores local application data by running the following command: ./taccs_ctl init_db. For example,

\$ cd /home/p5admin/deploy_5.0
[p5admin@xyznn deploy 5.0]\$./taccs ctl init db

7. Start the emergency management server by running the following command: ./taccs_ctl start. For example,

```
$ cd /home/p5admin/deploy_5.0
[p5admin@xyznnn deploy_5.0]$ ./taccs_ctl start
```

This command starts each of the required containers and checks their status as they start. View the output from the command to see that start is proceeding and for details of any issues.

8. Check the status of the server by running the following command: ./taccs_ctl status.

Configuring signed security certificates

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

Procedure

To configure security certificates:

- 1. Log on to the emergency management server as the p5admin user.
- 2. Copy your signed security certificates to the /home/p5admin/deploy_5.0/config/ssl directory on the emergency management server.
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3. Back up the /home/p5admin/deploy_5.0/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. Stop and restart the emergency management server by running the following commands:

```
p5admin> cd /home/p5admin/deploy_5.0
p5admin> ./taccs_ctl stop
p5admin> ./taccs_ctl start
```

Configuring single sign-on

Before you install and configure IBM Intelligent Operations Center for Emergency Management, configure single sign-on with the IBM Intelligent Operations Center LDAP server.

About this task

After the emergency management server is installed, configure single sign-on by modifying files on the emergency management server.

Procedure

To configure single sign-on (SSO):

- Ensure that the emergency management server and the IBM Intelligent Operations Center server are in the same domain. If the emergency management server is on a different domain, add the emergency management server domain name in Global Security > Web and SIP security > Single sign-on (SSO) in the WebSphere[®] Application Server Deployment Manager console. Separate multiple domain names with a semi-colon (;).
- 2. Increase the LTPA timeout value to 500 minutes in Global Security > LTPA in the WebSphere Application Server Deployment Manager console. Restart the web server and portal.
- 3. Modify the /home/p5admin/deploy_5.0/config/taccs_es/base.conf.in file as the p5admin user.
 - a. Add the following code after the line <usage service enabled="false"/>:

```
<rest_service>
    <access_control method="ioc_ltpa2">
        <access_control method="ioc_ltpa2">
        <access_control method="ioc_ltpa2">
        <access_control method="ioc_ltpa2">
        <access_control>
        </access_control>
        </access_control>
        </rest service>
```

Important: Replace IOC_web_server_host_name with the host name for your IBM HTTP Server.

4. Start the emergency management server by running the following commands:

```
su p5admin
cd /home/p5admin/deploy_5.0/
./taccs_ctl stop
./taccs_ctl start
```

- 5. Verify that you can log on with single sign-on.
 - a. Log on to IBM Intelligent Operations Center as the wpsadmin user.
 - b. Log on to the emergency management server with the following URL: https:// IOC Emergency Management server address/mobile/index.html.
 - c. Log on to the emergency management server administration interface with the following URL: https://IOC_Emergency_Management_server_address/web/admin.html#/user.

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

- https://IOC_web_server_address/mobile/index.html
- https://IOC_web_server_address/web/admin.html#/user

Installing the emergency management client

After you configure single sign-on, install and configure the emergency management client.

Before you begin

The emergency management client runs only on a physical computer that runs Microsoft Windows. Virtual machines are not supported.

Procedure

To install the emergency management client:

- Download the emergency management client installation program from the following URL: https://IOC_web_server_address/web/client_install.html. The installation program runs automatically on download.
- 2. Respond to the prompts from the installation program.
- 3. Start the emergency management client by running the C:\p5\TACCS\taccs\apps\dve\taccs_dve.exe file.
- 4. Copy the **Machine ID** value when it is displayed. The machine ID is required to grant the emergency management client access to the emergency management server.
- 5. Log on to the emergency management server as the p5admin user.
- 6. Change directory to /home/p5admin/deploy_5.0/config/dve.
- 7. Copy any existing directory to a directory named with the machine ID captured in step 4. For example:

8. Restart the emergency management server by running the following commands:

```
su - p5admin
cd /home/p5admin/deploy_5.0
./taccs_ctl stop
./taccs_ctl start
```

Configuring missions to KPIs forwarding

Configure communication between emergency management missions and IBM Intelligent Operations Center KPIs.

About this task

Missions in IBM Intelligent Operations Center for Emergency Management correspond to KPIs in IBM Intelligent Operations Center. You can configure communication between missions and KPIs.

Important: To ensure that all child rules are correctly mapped to the KPI Dashboard, create new missions instead of cloning existing missions.

Procedure

To configure missions to KPIs forwarding:

- 1. Configure the emergency management server with an encrypted API key for the wsadmin user ID. To obtain an API token and generate an encrypted API key:
 - a. Log on to the emergency management administrator console. For example, https:// emergency_management_server.example.com/web/admin.html.
 - b. Click wpsadmin > API Token.
 - c. Copy the API key.
 - d. Using SSH, log on to the emergency management server as the p5admin user and encode the key. For example, run the following commands:

```
[p5admin@xyznn deploy_5.0]$ cd /home/p5admin/deploy_5.0
[p5admin@xyznn deploy_5.0]$ ./taccs_ctl encode API_encryption_key
ENC:encoded_API_encryption_key
```

2. Add the following text to the end of the /home/p5admin/deploy_5.0/config/taccs_es/base.conf.in file, before the </taccs> element:

Update the web server host name and API for your environment.

3. Add the following text to the end of the /home/p5admin/deploy_5.0/config/dve/base/base.conf.in file, before the closing </taccs> element:

```
<!-- KPI Config - url: The url for the IOC api. Ex: https://<hostname>/ibm/ioc/api/
-->
<ioc url="https://<IOC web server>.example.com/ibm/ioc/api"/>
```

4. Stop and start the emergency management server by running the following commands:

```
su - p5admin
cd /home/p5admin/deploy_5.0
./taccs_ctl stop
./taccs_ctl start
```

Command results are written to the /p5data/taccs/log/taccs es worker 01.log file.

 To refresh the KPI to missions, run an HTTP get command on the following URL: https://IOC server/ibm/ioc/api/publicsafety/taccs-service/taccs/kpi/createKpiHiearchy

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

After you install and configure the emergency management server and client, install and configure IBM Intelligent Operations Center for Emergency Management V1.6 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

You must already have IBM Intelligent Operations Center V1.6.0.3 Fix Pack PO03764, or later, installed and running before you install IBM Intelligent Operations Center for Emergency Management. See the documentation for *IBM Intelligent Operations Center 1.6.0.3 full installer at* http://www.ibm.com/support/docview.wss?uid=swg24039491 for instructions on downloading and installing the required software.

Ensure that the /etc/hosts file includes the emergency management server IP addresses.

Procedure

To install IBM Intelligent Operations Center for Emergency Management:

- Copy the IBMIOC-Linux-EmergencyManagement.zip file into the maintenance directory of the APAR Installer Framework. For example, copy the compressed file to /installHome/ioc16/tools/ aparInstaller/maintenance or /opt/ibm/IOC16install/ioc16/tools/aparInstaller/maintenance.
- 2. Update the iop.std.properties file with the following properties:
 - TACCS.1.HOST TAACS.1.ACCOUNT TACCS.1.ACCOUNT.PWD TACCS.1.SSH_PORT
- 3. Run the APAR installer by running the following commands:

cd /opt/ibm/IOC16install/ioc16/tools/aparInstaller IOC_PCT_PASSWORD=IOC_control_password ./update.sh -f /opt/ibm/IOCInstall/ioc16/topology/iop.std.properties -t std -m /distributionMedia/ -p topology password

Note: The value for *IOC_control_password* is the IOCControl password, which is typically the same as the topology password.

- 4. Update the system properties to point to the emergency management server.
 - a. To ensure that your browser has a valid cookie that includes an LTPA token to authenticate with the emergency management server, log on to IBM Intelligent Operations Center as the wpsadmin user.
 - b. Log on to the emergency management server at https://IBM_HTTP_Server_address/web/ admin.html.
 - c. Click wpsadmin > API Token and copy the API key.
 - d. Log on to IBM Intelligent Operations Center and go to the Solution Administration view.
 - e. Select System Properties.

f. Update the following system properties to match your system:

taccsHost

The value is typically the IBM HTTP Server host name.

taccsApiKey

The value is the API key that you copied in step 4.c.

- 5. Stop and restart the WebSphere Portal cluster by using the IOCControl command.
- 6. 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

Configuring alert forwarding

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

Procedure

- 1. Log on 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.

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>
    </Period>
    </Period>
</Metric>
```

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