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IBM Opportunity Detect and IBM Interact Advanced Patterns Upgrade Guide

IBM

Contents

Chapter 1. Upgrade overview

An upgrade of Opportunity Detect is complete when you upgrade, configure, and deploy Opportunity Detect. The Opportunity Detect Upgrade Guide provides detailed information about upgrading, configuring, and deploying Opportunity Detect.

Use the *Upgrade roadmap* section to obtain a broad understanding about using the Opportunity Detect Upgrade Guide.

If you are upgrading IBM Interact Advanced Patterns

The installation procedure is nearly identical for Opportunity Detect and Interact Advanced Patterns. For the sake of brevity, this guide generally uses the Opportunity Detect product name to stand for both products.

Topics that apply to Interact Advanced Patterns only are clearly labeled.

See the *IBM Interact Advanced Patterns and IBM Interact Integration Guide* for more configuration information.

Upgrade roadmap

Use the upgrade roadmap to scan the tasks that must be completed to install Opportunity Detect or Interact Advanced Patterns.

Table 1. Opportunity Detect and Interact Advanced Patterns upgrade roadmap

Topic	Information
Chapter 1, "Upgrade overview"	This section provides the following information: • "If you are upgrading IBM Interact Advanced Patterns" • "How the installers work" on page 3 • "Modes of installation" on page 3 • "Opportunity Detect documentation and help" on page 5
Chapter 2, "Planning the Opportunity Detect upgrade," on page 7	This section provides the following information: • "Prerequisites" on page 7 • "Opportunity Detect and Interact Advanced Patterns upgrade scenarios" on page 9
Upgrading Opportunity Detect from version 9.1.1.x or 9.1.2.x	If you are upgrading from a version prior to 10.0, you must first upgrade to version 10.1 and then upgrade to version 11.0. For information about upgrading to version 10.1, see the IBM Opportunity Detect 10.1 Upgrade Guide.
Chapter 4, "Upgrading Opportunity Detect from version 10.1 with automatic migration," on page 13	This section describes how to upgrade Opportunity Detect or Interact Advanced Patterns from version 10.1 with automatic migration.
Chapter 5, "Upgrading Opportunity Detect from version 10.1 with manual migration," on page 17	This section describes how to upgrade Opportunity Detect or Interact Advanced Patterns from version 10.1 with manual migration.

Table 1. Opportunity Detect and Interact Advanced Patterns upgrade roadmap (continued)

Topic	Information
Chapter 6, "Deploying Opportunity Detect," on page 21	This section describes how to deploy the Opportunity Detect or Interact Advanced Patterns web application.
Chapter 7, "Configuring Opportunity Detect and IBM InfoSphere Streams after deploying Opportunity Detect," on page 25	This section provides the following information: • "Clearing the application server cache" on page 25 • "Setting Opportunity Detect or Interact Advanced Patterns configuration properties" on page 25 • "Configuring your upgraded Streams installation" on page 26 • "Configuring the Streams database adapter for Oracle" on page 27 • "Configuring the Streams database adapter for DB2" on page 28 • "Creating new Streams instances and synchronizing Streams instances in Opportunity Detect" on page 29 • "Starting the Opportunity Detect Run Time server and Interact service" on page 29 • "Verifying the Opportunity Detect installation" on page 30 • "Modifying log levels for Opportunity Detect" on page 30
Chapter 8, "Uninstalling Opportunity Detect," on page 33	This section describes how to uninstall Opportunity Detect or Interact Advanced Patterns.

Opportunity Detect components

Opportunity Detect contains two components: Design Time and Run Time. You use the Design Time component to define events. You must install a single instance of Design Time. The system uses the Run Time component to process transactions and produce Outcomes. You can install multiple instances of Run Time.

For best performance, install a Run Time server on a host where no other IBM® Marketing Software products are installed.

The following table describes the components that you can select when you install Opportunity Detect.

Table 2. Opportunity Detect components

Component	Description
Opportunity Detect Design Time	The design environment consists of the following. • Opportunity Detect Design Time - Required. The web application where you design and run trigger systems • Interact Service - A service that is part of the environment that enables Interact integration. Required for Interact Advanced Patterns.

Table 2. Opportunity Detect components (continued)

Component	Description
Opportunity Detect Run Time	The run time environment consists of the following. • Streams Server - Required. Selecting this option installs InfoSphere Streams along with IBM Opportunity Detect. You can add multiple servers in your environment to create an IBM InfoSphere Streams instance. You can map the instance to a server group. • Server Files - Required. • RealTime Connector - Required if you want to operate using a queue connector or the Web Service. • Streams Remote Control Service - Required.

If you are upgrading a clustered installation

If your environment is a clustered real time installation, allow the installer to upgrade the primary installation, and then create the secondary nodes by copying the RealTimeConnector folder from the primary installation.

How the installers work

Use the IBM Marketing Software installer with the Opportunity Detect installer when you install Opportunity Detect.

The IBM Marketing Software suite installer starts the individual product installers during the installation process.

Use the following guidelines to install Opportunity Detect.

• Make sure that the IBM Marketing Software installer and the Opportunity Detect installer are in the same directory on the server where you want to install Opportunity Detect. When multiple versions of the Opportunity Detect installer are present in the directory with the IBM Marketing Software installer, the IBM Marketing Software installer shows the latest version of Opportunity Detect on the IBM Marketing Software Products screen in the installation wizard.

• If you are planning to install a patch immediately after you install Opportunity Detect, make sure that the patch installer is in the same directory as that of the IBM Marketing Software and the Opportunity Detect installer.

Opportunity Detect is installed in the /opt/IBM/IMS directory by default.

However, you can change the directories during installation.

Modes of installation

The IBM Marketing Software suite installer can run in one of the following modes: X Window System mode, console mode, or silent mode (also called the unattended mode). Select a mode that suits your requirements when you install Opportunity Detect.

For upgrades, you use the installer to perform many of the same tasks that you perform during the initial installation.

X Window System mode mode

Use the X Window System mode for UNIX to install Opportunity Detect by using the graphical user interface.

Console mode

Use the console mode to install Opportunity Detect by using the command line window.

Note: To display the Installer screens correctly in console mode, configure your terminal software to support UTF-8 character encoding. Other character encoding, such as ANSI, will not render the text correctly, and some information will not be readable.

Silent mode

Use the silent or unattended mode to install Opportunity Detect multiple times. The silent mode uses response files for installation, and does not require user input during the installation process.

Note: Silent mode is not supported for upgrade installations in clustered web application or clustered listener environments.

Sample response files

You must create response files to set up a silent installation of Opportunity Detect. You can use sample response files to create your response files. The sample response files are included with the installers in the `ResponseFiles` compressed archive.

The following table provides information about sample response files:

Table 3. Description of sample response files

Sample response file	Description
`installer.properties`	The sample response file for the IBM Marketing Software master installer.
`installer_product initials and product version number.properties`	The sample response file for the Opportunity Detect installer.

Correcting the registry file when upgrade installation fails

If installation fails because the installer could not detect the base version of your installed product, you can correct the registry file as described here.

The InstallAnywhere Global registry file, named `.com.zerog.registry.xml,` is created when a IBM Marketing Software product is installed. The registry file tracks all installed IBM Marketing Software products, including their features and components, on that server.

1. Locate the `.com.zerog.registry.xml` file.

   Depending on the server on which you are installing, the `.com.zerog.registry.xml` file is in one of the following locations.

   - On Windows servers, the file is in the `Program Files/Zero G Registry` folder.

Zero G Registry is a hidden directory. You must enable the setting to view hidden files and folders.
- On UNIX systems, the file is in one of the following directories.
    - Root user - /var/
    - Non-root user - $HOME/
- On Mac OSX servers, the file is in the /library/preferences/ folder.

2. Make a backup copy of the file.
3. Edit the file to change all entries that refer to the version of your installed product.

   For example, this is a section of the file that corresponds to IBM Campaign version 8.6.0.3.

   ```
   <product name="Campaign" id="dd6f88e0-1ef1-11b2-accf-c518be47c366"
   version=" 8.6.0.3 " copyright="2013" info_url="" support_url=""
   location="<IBM_Unica_Home>\Campaign" last_modified="2013-07-25 15:34:01">
   ```

   In this case, you would change all entries that refer to version=" 8.6.0.3 " to the base version, which is 8.6.0.0 in this case.

Opportunity Detect documentation and help

Opportunity Detect provides documentation and help for users, administrators, and developers.

Use the following table to get information about how to get started with Opportunity Detect

Table 4. Get up and running

Task	Documentation
View a list of new features, known issues, and workarounds	*IBM Opportunity Detect Release Notes*
Learn about the structure of the Opportunity Detect database	*IBM Opportunity Detect System Tables*
Install or upgrade Opportunity Detect and deploy the Opportunity Detect web application	One of the following guides: • *IBM Opportunity Detect Installation Guide* • *IBM Opportunity Detect Upgrade Guide*

Use the following table to get information about how to configure and use Opportunity Detect.

Table 5. Configure and use Opportunity Detect

Task	Documentation
• Configure data sources • Configure interactive event detection • Automate tasks using the command line interface	*IBM Opportunity Detect Administrator's Guide*
• Create trigger systems to detect events • Deploy and run trigger systems	*IBM Opportunity Detect User's Guide*
Configure IBM Interact Advanced Patterns for use with IBM Interact	*IBM Interact Advanced Patterns and IBM Interact Integration Guide*

Use the following table to get information about how to get help when you use Opportunity Detect.

Table 6. Get help

Task	Instructions
Open online help	1. Choose **Help > Help for this page** to open a context-sensitive help topic. 2. Click the **Show Navigation** icon in the help window to display the full help. You must have web access to view context-sensitive online help. Contact IBM Support for more information about accessing and installing IBM Knowledge Center locally for offline documentation.
Obtain PDFs	Use either of the following methods: • Choose **Help > Product Documentation** to access Opportunity Detect PDFs. • Choose **Help > All IBM Marketing Software Suite Documentation** to access all available documentation.
IBM Knowledge Center	To access the IBM Knowledge Center, choose **Help > Support for this product**.
Get support	Go to http://www.ibm.com/ and click **Support & downloads** to access the IBM Support Portal.

Chapter 2. Planning the Opportunity Detect upgrade

You can upgrade your current version of Opportunity Detect to bring it up-to-date with the latest features.

Prerequisites

Before you install or upgrade any IBM Marketing Software product, you must ensure that your computer complies with all of the prerequisite software and hardware.

System requirements

For information about system requirements, see the *Recommended Software Environments and Minimum System Requirements* guide.

In order for Opportunity Detect to connect to the DB2 database, the DB2 installation must include the install header files in the `/home/db2inst1/include` directory on client machine. To include the header files in the installation, select the **Custom Install** option when you install DB2 and select the **Base Application Development Tools** feature.

DB2 requirements

In order for Opportunity Detect to connect to the DB2 database, the DB2 installation must include the install header files in the `home/db2inst1/include` directory on client machine. To include the header files in the installation, select the **Custom Install** option when you install DB2 and select the **Base Application Development Tools** feature.

Network domain requirements

The IBM Marketing Software products that are installed as a suite must be installed on the same network domain to comply with the browser restrictions that are designed to limit the security risks that can occur with cross-site scripting.

JVM requirements

IBM Marketing Software applications within a suite must be deployed on a dedicated Java™ virtual machine (JVM). IBM Marketing Software products customize the JVM that is used by the web application server. If you encounter errors that are related to the JVM, you must create a WebSphere® domain that is dedicated to the IBM Marketing Software products.

Knowledge requirements

To install IBM Marketing Software products, you must have a thorough knowledge of the environment in which the products are installed. This knowledge includes knowledge about operating systems, databases, and web application servers.

Internet browser settings

Make sure that your internet browser complies with the following settings:
- The browser must not cache web pages.
- The browser must not block pop-up windows.

Access permissions

Verify that you have the following network permissions to complete the installation tasks:
- Administration access for all necessary databases
- Read and write access to the relevant directory and subdirectories for the operating system account that you use to run the web application server and IBM Marketing Software components
- Write permission for all files that you must edit
- Write permission for all directories where you must save a file, such as the installation directory and backup directory if you are upgrading
- Appropriate read, write, and execute permissions to run the installer
- Root access for the Linux operating system.

Verify that you have the administrative password for your web application server.

For UNIX, all installer files for IBM products must have full permissions, for example, rwxr-xr-x.

JAVA_HOME environment variable

If a **JAVA_HOME** environment variable is defined on the computer where you install an IBM Marketing Software product, verify that the variable points to a supported version of JRE. For information about system requirements, see the *IBM Marketing Software Recommended Software Environments and Minimum System Requirements* guide.

If the **JAVA_HOME** environment variable points to an incorrect JRE, you must clear the **JAVA_HOME** variable before you run the IBM Marketing Software installers.

You can clear the **JAVA_HOME** environment variable by running the following command in the terminal:

export JAVA_HOME= (leave empty)

The IBM Marketing Software installer installs a JRE in the top-level directory for the IBM Marketing Software installation. Individual IBM Marketing Software application installers do not install a JRE. Instead, they point to the location of the JRE that is installed by the IBM Marketing Software installer. You can reset the environment variable after all installations are complete.

For more information about the supported JRE, see the *IBM Marketing Software Recommended Software Environments and Minimum System Requirements* guide.

DETECT_HOME environment variable

The **DETECT_HOME** environment variable must point to the full path to the location where Opportunity Detect Run Time is installed, for example:

```
DETECT_HOME=/home/streamsadmin/OpDetection/
```

Marketing Platform requirement

You must install or upgrade Marketing Platform before you install or upgrade any IBM Marketing Software products. For each group of products that work together, you must install or upgrade Marketing Platform only once. Each product installer checks whether the required products are installed. If your product or version is not registered with Marketing Platform, a message prompts you to install or upgrade Marketing Platform before you proceed with your installation. Marketing Platform must be deployed and running before you can set any properties on the **Settings > Configuration** page.

Marketing Platform database requirement

Ensure that IBM Marketing Platform is installed using the same database type for the Marketing Platform system tables that you are using for the Opportunity Detect system tables.

Opportunity Detect and Interact Advanced Patterns upgrade scenarios

Upgrade your installation of Opportunity Detect or Interact Advanced Patterns after you understand the guidelines that apply to your current version of Opportunity Detect or Interact Advanced Patterns.

Follow the guidelines in the following table for upgrading Opportunity Detect and Interact Advanced Patterns.

Table 7. Opportunity Detect and Interact Advanced Patterns upgrade scenarios

Source version of Opportunity Detect or Interact Advanced Patterns	Upgrade path
Versions earlier than 9.1.1.x	Upgrades from versions earlier than 9.1.1.x are not supported. You must perform a fresh installation. Only Opportunity Detect has versions earlier than 9.1.1.x.
9.1.1.x or 9.1.2.x	Upgrade your installation of Opportunity Detect or Interact Advanced Patterns as follows. 1. You cannot upgrade directly to version 10.1. You must first upgrade to version 10.1 and then upgrade to version 11.0. For information about upgrading to version 10.1, see the IBM Opportunity Detect 10.1 Upgrade Guide. 2. Upgrade to version 11.0 by following the instructions in this document. **Note:** If you are changing your database type, data migration is not supported. Perform a complete installation in a new location instead.

Source version of Opportunity Detect or Interact Advanced Patterns	Upgrade path
11.0	Upgrade your installation of Opportunity Detect or Interact Advanced Patterns as follows. • The installer can automatically complete the data migration that is required for an upgrade. Upgrade to version 11.0 by following the instructions in Chapter 4, "Upgrading Opportunity Detect from version 10.1 with automatic migration," on page 13 • If your organization's policy does not allow automatic data migration, you can select the **Manual database setup** option and then perform additional tasks to complete the upgrade. Follow the instruction provided in Chapter 5, "Upgrading Opportunity Detect from version 10.1 with manual migration," on page 17 **Note:** If you are changing your database type, data migration is not supported. Perform a complete installation in a new location instead.

Chapter 3. Preparing for the Streams upgrade

Perform these steps before you run the upgrade installer.

1. Confirm that the **streamsadmin** user exists.
2. Install the required Streams RPMs for RHEL6.

   See the topic "Required RPMs for RHEL 6 and CentOS 6 on x86_64 systems": http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/ com.ibm.swg.im.infosphere.streams.install-admin.doc/doc/ ibminfospherestreams-install-prerequisites-rpm-tables.html

3. Run the Streams dependency checker script.

   See the topic "Running the InfoSphere Streams dependency checker script": http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/ com.ibm.swg.im.infosphere.streams.install-admin.doc/doc/ ibminfospherestreams-install-dependency-checker-running.html.

Chapter 4. Upgrading Opportunity Detect from version 10.1 with automatic migration

Automatic migration allows the installer to run the SQL scripts and insert the configuration properties that are required to upgrade your Marketing Platform system tables. If your company policy does not allow automated updates to your system table database, you must use manual migration, described elsewhere in this guide.

Note: Important: If you are upgrading from a version prior to 10.1, you must first upgrade to version 10.1 and then upgrade to version 10.1. For information about upgrading to version 10.1, see the IBM Opportunity Detect 10.1 Upgrade Guide.

Ensure that you have the following installers in the same directory.
- The IBM Marketing Software master installer
- The Opportunity Detect installer

Use the following guidelines as a best practice.
- Place the installers in the same directory where you originally placed the installers for the earlier versions of your products.
- Remove any earlier versions of the IBM Marketing Software product installers from the directory to avoid having the master installer attempt to install the earlier versions.

Upgrading from version 10.1 is an in-place upgrade. In an in-place upgrade, you install the new version of Opportunity Detect to the directory where your current version of Opportunity Detect is installed.

See "Opportunity Detect and Interact Advanced Patterns upgrade scenarios" on page 9 for information about upgrading from other versions.

Note: If you are changing your database type, data migration is not supported. Perform a complete installation in a new location instead.

1. Ask all users to log out of Opportunity Detect and stop all running services, including StreamsRCS, Interact Design Service, Real Time Connector, and the Streams instance.
2. Create a back-up copy of your Opportunity Detect system table database.

   Important: Do not skip this step. If the upgrade operation fails, you cannot roll back your database and your data is corrupted.
3. Undeploy Opportunity Detect in your web application server.
4. Run the IBM Marketing Software master installer. The IBM Marketing Software master installer starts. Complete the following steps in the IBM Marketing Software master installer.
   - On the IBM Marketing Software Products window, do the following.
     - De-select IBM Marketing Platform 11.0
     - Select IBM Opportunity Detect 11.0

- When the IBM Marketing Software master installer prompts you to choose an installation directory, choose the IBM Marketing Software installation directory, not the Opportunity Detect installation directory, which is under this root directory.
- When the IBM Marketing Software master installer prompts you to enter Marketing Platform database connection information, enter the information that pertains to your current Marketing Platform system tables.

The IBM Marketing Software master installer pauses and launches the Opportunity Detect installer.

5. Complete the following steps in the Opportunity Detect installer.

   a. When the Opportunity Detect installer prompts you for an installation directory, select the directory of your current Opportunity Detect installation.

   b. Allow the installer to create a back-up copy of your previous installation of Opportunity Detect.

   c. On the Opportunity Detection Components window, select the components you want to install.

   You can run the installer multiple times to install components on different hosts.

   d. On the DesignTime Database Setup window, select **Automatic database setup**.

   e. Follow the remaining steps in the installation wizard and enter the requested information.

   Note: Pay close attention to the installation summary windows. If errors are reported, check the installer log files and contact IBM technical support if necessary.

6. If you are using DB2 for your system tables, and if you have installed the DB2 client in a location that is different from the default location, you must update the function.xml file as follows.

   The function.xml file is located in the /home/streamsadmin/OpDetection/ toolkits/unica_db_access/db.access/native.function directory.

   a. Locate the following section in the file.

   ```
   <library>
       <cmn:description></cmn:description>
           <cmn:managedLibrary>
               <cmn:lib>UnicaDatabaseAccessLib</cmn:lib>
               <cmn:lib>db2</cmn:lib>
               <cmn:libPath>../../impl/lib</cmn:libPath>
               <cmn:libPath>/IBM_DB2_installation_directory/
                       lib64</cmn:libPath>
               <cmn:includePath>../../impl/include</cmn:includePath>
               <cmn:includePath>/IBM_DB2_installation_directory/
                       include</cmn:includePath>
           </cmn:managedLibrary>
       </library>
   ```

   b. Correct the path in the following lines to reflect the location of your DB2 client. In the following example, the DB2 install path is /data/dbclient/DB2.

   ```
   <cmn:libPath>/data/dbclient/DB2/lib64</cmn:libPath>

    <cmn:includePath>/data/dbclient/DB2/include</cmn:includePath>
   ```

7. If you are using Interact Advanced Patterns, run the following update statements against your system table database.

   ```
   update DeploymentConfiguration set inputMode = 3;
   ```

```
update DeploymentHistory set inputMode = 3;
```
These statements set the input mode to TCP.

8. If you are using Opportunity Detect and use the Web Service connector, run the following update statements against your system table database.

```
update DeploymentConfiguration set inputMode = 2;
```

```
update DeploymentHistory set inputMode = 2;
```
These statements set the input mode to Web.

Complete post-installation steps as described elsewhere in this guide.

Chapter 5. Upgrading Opportunity Detect from version 10.1 with manual migration

The Opportunity Detect upgrade installer can perform all of the data migration that is required for an upgrade automatically. However, if the policy of your organization does not allow automatic migration, you must complete the migration procedure to upgrade Opportunity Detect manually.

Ensure that you have the following installers in the same directory.
- The IBM Marketing Software master installer
- The Opportunity Detect installer

To upgrade to Opportunity Detect manually, you must run SQL scripts and run the Marketing Platform configTool command line utility to populate the system tables. Ensure that your installation of Marketing Platform is fully functional so that you can run the utilities. Complete information about using the configTool utility, including example commands for common tasks, is available in Chapter 9, "configTool," on page 35.

The configTool utility is located in the `tools/bin` directory under your Marketing Platform installation.

See "Opportunity Detect and Interact Advanced Patterns upgrade scenarios" on page 9 for information about upgrading from other versions.

Note: If you are changing your database type, data migration is not supported. Perform a complete installation in a new location instead.

1. Create a back-up copy of your Opportunity Detect system table database.

   Important: Do not skip this step. If the upgrade operation fails, you cannot roll back your database and your data is corrupted.

2. Ask all users to log out of Opportunity Detect and stop all running services, including StreamsRCS, Interact Design Service, Real Time Connector, and the Streams instance.

3. Undeploy Opportunity Detect in your web application server.

4. Run the IBM Marketing Software master installer. The IBM Marketing Software master installer starts. Complete the following steps in the IBM Marketing Software master installer.
   - On the IBM Marketing Software Products window, do the following.
     - De-select IBM Marketing Platform 11.0.
     - Select IBM Opportunity Detect 11.0.
   - When the IBM Marketing Software master installer prompts you to choose an installation directory, choose the IBM Marketing Software installation directory, not the Opportunity Detect installation directory, which is under this root directory.
   - When the IBM Marketing Software master installer prompts you to enter Marketing Platform database connection information, enter the information that pertains to your current Marketing Platform system tables.

The IBM Marketing Software master installer pauses and launches the Opportunity Detect installer.

5. Complete the following steps in the Opportunity Detect installer.

   a. When the Opportunity Detect installer prompts you for an installation directory, select the directory of your current Opportunity Detect installation.

   b. Allow the installer to create a back-up copy of your previous installation of Opportunity Detect.

   c. On the Opportunity Detection Components window, , select the components you want to install.

      You can run the installer multiple times to install components on different hosts.

   d. On the DesignTime Database Setup window, select **Manual database setup**.

   e. Follow the remaining steps in the installation wizard and enter the requested information.

6. Execute the following SQL scripts on the Design Time database schema after installation is complete.

   - `Migration101.sql`

   These files are located under your Opportunity Detect installation in the `database/DB_Type/Upgrade` directory, where *DB_Type* is DB2 or Oracle.

   Use the script appropriate for your database type.

7. If you are using Interact Advanced Patterns, run the following update statements against your system table database.

   `update DeploymentConfiguration set inputMode = 3;`

   `update DeploymentHistory set inputMode = 3;`

   These statements set the input mode to TCP.

8. If you are using Opportunity Detect and use the Web Service connector, run the following update statements against your system table database.

   `update DeploymentConfiguration set inputMode = 2;`

   `update DeploymentHistory set inputMode = 2;`

   These statements set the input mode to Web.

9. If you install Interact Advanced Patterns over Opportunity Detect, and you select the manual option, you must manually update the `password` attribute of the `properties` tag in the `server.xml` file.

   This file is located in the `InteractService/wlp/usr/servers/InteractService` directory under your Opportunity Detect installation.

   You can use the `securityUtility` located under the `InteractService/wlp/bin` directory under your Opportunity Detect installation to encrypt the password.

   For example:

   `./securityUtility encode your_password`

10. If you are using DB2 for your system tables, and if you have installed the DB2 client in a location that is different from the default location, you must update the `function.xml` file as follows.

    The function.xml file is located in the `/home/streamsadmin/OpDetection/toolkits/unica_db_access/db.access/native.function` directory.

    a. Locate the following section in the file.

```
<library>
   <cmn:description></cmn:description>
      <cmn:managedLibrary>
         <cmn:lib>UnicaDatabaseAccessLib</cmn:lib>
         <cmn:lib>db2</cmn:lib>
         <cmn:libPath>../../impl/lib</cmn:libPath>
         <cmn:libPath>/IBM_DB2_installation_directory
                 /lib64</cmn:libPath>
         <cmn:includePath>../../impl/include</cmn:includePath>
         <cmn:includePath>/IBM_DB2_installation_directory/
                 include</cmn:includePath>
      </cmn:managedLibrary>
</library>
```

b. Correct the path in the following lines to reflect the location of your DB2 client. In the following example, the DB2 install path is /data/dbclient/DB2.

```
<cmn:libPath>/data/dbclient/DB2/lib64</cmn:libPath>
```

```
 <cmn:includePath>/data/dbclient/DB2/include</cmn:includePath>
```

Complete post-installation steps as described elsewhere in this guide.

Chapter 6. Deploying Opportunity Detect

To deploy Opportunity Detect, you must deploy Opportunity Detect Design Time using an EAR or WAR file.

You must know how to work with your web application server. Consult your web application server documentation for details such as navigation in the Administration console.

Switching to IBM JDK 1.7 on the WebSphere application server

Install IBM JDK 1.7 and enable this version on the WebSphere application server for the profile on which Opportunity Detect is deployed.

Follow instructions in the WebSphere documentation: https://www-01.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_pln_jdk7.html.

Deploying Opportunity Detect Design Time

When you run the IBM Marketing Software installer, you can either include Opportunity Detect in an EAR file, or you can choose to deploy the Opportunity Detect WAR file. If you include Marketing Platform or other products in an EAR file, you must follow all the deployment guidelines that are detailed in the individual installation guides for the products that are included in the EAR file.

After you install Opportunity Detect, Design Time is deployed automatically when you deploy the `detect.war` file. The `detect.war` file is in the Opportunity Detect installation directory.

Deploying Opportunity Detect on WAS from a WAR file

You can deploy the Opportunity Detect application from a WAR file on WAS.

Complete the following tasks before you deploy Opportunity Detect:
- Confirm that your version of WebSphere meets the requirements in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- Confirm that you created the data sources and database provider in WebSphere.
- Please follow the below steps while deploying Campaign.war file on
  IBM Websphere Application Server 8.5.5.x Fix Pack 9 or below versions
  a) Go to <app_server_install_directory>/properties location
  Example: /data/webservers/IBM/WebSphere8.5.5/properties
  b) Edit "amm.filter.properties" file to include "com.thoughtworks.xstream"
  Example:
  Ignore-Scanning-Packages = javassist, \
  org.antlr, \
  org.apache.avalon, \
  org.apache.batik, \

org.apache.bcel, \

org.apache.commons, \

org.apache.log4j, \

org.apache.poi, \

org.apache.regexp, \

org.apache.xalan, \

org.apache.xerces, \

org.apache.xml, \

org.apache.xpath, \

org.ajax4jsf, \

org.dbunit, \

org.richfaces, \

org.jboss.el, \

org.jchrontab, \

org.omg, \

org.seasar, \

org.slf4j, \

com.thoughtworks.xstream

By doing this, WebSphere will disable the annotation scanning for the xstream jar

and allow the application deployed properly.

This is also mentioned in here http://x-stream.github.io/faq.html

This steps are not required for Websphere version 8.5.0.x or 8.5.5 Fix Pack 10 or higher.

1. Go to the WebSphere Integrated Solutions Console.

2. Complete the following steps if your system tables are in DB2®:

   a. Click the data source that you created. Go to the Custom Properties for the data source.

   b. Select the Custom properties link.

   c. Set the value for the **resultSetHoldability** property to 1.

      If you do not see the **resultSetHoldability** property, create the **resultSetHoldability** property and set its value to 1.

3. Go to **Applications > Application Types > WebSphere enterprise applications** and click **Install**.

4. In the Preparing for the application installation window, select the **Detailed - Show all options and parameters** check box and click **Next**.

5. Click **Continue** to see the Install New Application wizard.

6. Accept the default settings on the windows of the Install New Application wizard except the following windows:

   • In step 1 of the Install New Application wizard, select the **Precompile JavaServer Pages files** check box.

   • In step 3 of the installation wizard, set the **JDK Source Level** to 17.

7. In the left navigation panel of WebSphere Integrated Solutions Console, navigate to **Applications > Application Types > WebSphere enterprise applications**.

8. In the Enterprise Applications window, click the detect.war file.

9. In the **Web Module Properties** section, click **Session Management** and select the following check boxes:

   - **Override session management**
   - **Enable Cookies**

10. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.

11. In the **Applications > Enterprise Applications** section of the server, select the WAR file that you deployed.

12. In the **Detail Properties** section, select **Class loading and update detection**.

13. In the **Class loader order** section, select the **Classes loaded with local class loader first (parent last)** option.

14. In the **Modules** section, select **Manage modules > detect**, and under **Class loader order** select the **Classes loaded with local class loader first (parent last)** option.

15. For **WAR class loader policy**, select **Single class loader for application**.

16. Go to **Application Servers > your server > Process definition > Java Virtual Machine**.

17. In the **Generic JVM arguments** section, enter the following JVM arguments:

```
-Dcom.ibm.websphere.webservices.DisableIBMJAXWSEngine=true
-Dibm.cl.verbose=PersistenceProvider
-Dibm.cl.verbose=PersistenceProviderImpl
-agentlib:getClasses -verbose:dynload
-Dcom.ibm.xml.xlxp.jaxb.opti.level=3
```

18. Start your deployment.

Deploying Opportunity Detect on WAS from an EAR file

You can deploy Opportunity Detect by using an EAR file if you included Opportunity Detect in an EAR file when you ran the IBM Marketing Software installer.

- Confirm that your version of WebSphere meets the requirements in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- Confirm that you created the data sources and database provider in WebSphere.

1. Go to the WebSphere Integrated Solutions Console.

2. Complete the following steps, if your system tables are in DB2:

   a. Click the data source that you created. Go to the **Custom Properties** for the data source.

   b. Select the Custom properties link.

   c. Set the value for the **resultSetHoldability** property to 1.

      If you do not see the **resultSetHoldability** property, create the **resultSetHoldability** property and set its value to 1.

3. Go to **Applications > Application Types > WebSphere enterprise applications** and click **Install**.

4. In the Preparing for the application installation window, select the **Detailed - Show all options and parameters** check box and click **Next**.

5. Click **Continue** to see the Install New Application wizard.

6. Accept the default settings on the windows of the Install New Application wizard except the following windows:

- In step 1 of the Install New Application wizard, select the **Precompile JavaServer Pages files** check box.
- In step 3 of the installation wizard, set the **JDK Source Level** to 17.

7. In the left navigation panel of WebSphere Integrated Solutions Console, navigate to **Applications > Application Types > WebSphere enterprise applications**.

8. In the Enterprise Applications window, select the EAR file that you want to deploy.

9. In the **Web Module Properties** section, click **Session Management** and select the following check boxes:
   - **Override session management**
   - **Enable Cookies**

10. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.

11. In the **Detail Properties** section, select **Class loading and update detection**.

12. In the **Class loader order** section, select the **Classes loaded with local class loader first (parent last)** option.

13. For **WAR class loader policy**, select the **Class loader for each WAR file in application** option.

14. Go to **Application Servers > your server > Process definition > Java Virtual Machine**.

15. In the **Generic JVM arguments** section, enter the following JVM arguments:

```
-Dcom.ibm.websphere.webservices.DisableIBMJAXWSEngine=true
-Dibm.cl.verbose=PersistenceProvider
-Dibm.cl.verbose=PersistenceProviderImpl
-agentlib:getClasses -verbose:dynload
-Dcom.ibm.xml.xlxp.jaxb.opti.level=3
```

16. Start your deployment.

   For more information about WebSphere Application Server version 8.5, see Welcome to the WebSphere Application Server information center.

Chapter 7. Configuring Opportunity Detect and IBM InfoSphere Streams after deploying Opportunity Detect

After you deploy Opportunity Detect, perform the additional configuration tasks described in this chapter.

- Clear the application server cache and restart the application server.
- Set values for Opportunity Detect or Interact Advanced Patterns configuration properties
- Synchronize the new Streams servers.
- Start the Opportunity Detect run time and design time servers
- Optionally, you can modify Opportunity Detect logging levels.
- If you are using Interact Advanced Patterns, see the *IBM Interact Advanced Patterns and IBM Interact Integration Guide* for additional required setup tasks.

When you have completed configuration, verify your installation as described in this section.

When you have verified the basic installation, configure Opportunity Detect server groups and data sources within the application. If you are upgrading, you previously configured data sources and server groups are migrated to the new version.

Clearing the application server cache

After you deploy the web application, stop the application server, clear the application server cache, and restart the web server.

1. Stop the web application server.
2. For UNIX platforms, run the `osgiCfgInit.sh` script in each profile.

   The script is located in the `profiles/profile_name/bin` directory under your WebSphere installation.
3. For Windows, Linux and AIX platforms only, run the `clearClassCache.sh` script to clear the JVM class cache.

   The script is located in the `bin` directory under your WebSphere installation.
4. Restart the web application server.

Setting Opportunity Detect or Interact Advanced Patterns configuration properties

You must set the configuration properties for Opportunity Detect or Interact Advanced Patterns.

The configuration properties are located on the **Settings > Configuration** page.

Set the following properties whether you are using Opportunity Detect or Interact Advanced Patterns.

- Set one of the following properties, as appropriate for your environment.
  - **IBM Opportunity Detect and Interact Advanced Patterns | Navigation | httpPort**

Set this property if you are not using SSL.

– **IBM Opportunity Detect and Interact Advanced Patterns | Navigation | httpsPort**

Set this property if you are using SSL.

- **IBM Opportunity Detect and Interact Advanced Patterns | Navigation | serverURL**
- **IBM Opportunity Detect and Interact Advanced Patterns | System | Streams Remote Control Web Service | ServerURL**
- **IBM Opportunity Detect and Interact Advanced Patterns | System | Real Time Connector | ServerURL**
- **IBM Opportunity Detect and Interact Advanced Patterns | logging | log4jConfig**

If you are using Interact Advanced Patterns, set the following additional configuration property.

- **IBM Interact Advanced Patterns | System | Interact Design Service | ServerURL**

See the context help for the properties to learn more about what they do and how to set them.

Verifying the IBM InfoSphere Streams installation

Check your Streams installation.

Confirm that the streamsadmin user exists.

Check the `ReleaseNotes.html` file located under the `home/streamsadmin/InfoSphereStreams` directory to confirm that the version has been upgraded.

Configuring your upgraded Streams installation

Some additional steps are required to configure your Streams installation because it is upgraded to a new version in the 9.1.2 release of Opportunity Detect.

1. Execute the Firststeps script as described in the topic "Performing postinstallation tasks using the InfoSphere Streams First Steps application": `http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/com.ibm.swg.im.infosphere.streams.install-admin.doc/doc/ibminfospherestreams-install-first-steps-application.html?lang=en`

2. Update the JAVA_HOME entry in the .bashrc file of streamsadmin user.

   Change this:

   `JAVA_HOME=/opt/ibm/java-x86_64-60`

   to this:

   `JAVA_HOME=/home/streamsadmin/InfoSphereStreams/java`

3. Set up ulimit parameters.

   See the topic "Guidelines for configuring Linux ulimit settings for InfoSphere Streams": `http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/com.ibm.swg.im.infosphere.streams.install-admin.doc/doc/ibminfospherestreams-install-operating-system-settings.html?lang=en`.

4. Refer to the following topics for instructions on completing the Streams configuration for your Opportunity Detect installation.

- "Configuring a secure shell environment for InfoSphere Streams": http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/com.ibm.swg.im.infosphere.streams.cfg.doc/doc/ibminfospherestreams-user-configuring-secureshellaccess.html
- "Creating and managing instances for InfoSphere Streams": http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/com.ibm.swg.im.infosphere.streams.admin.doc/doc/ibminfospherestreams-instance-main.html
- "Running InfoSphere Streams": http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/com.ibm.swg.im.infosphere.streams.admin.doc/doc/ibminfospherestreams-instance-running.html

In addition, see "Monitoring and managing IBM InfoSphere Streams" for instructions on using Streams tools to monitor and manage your Streams installation: http://www-01.ibm.com/support/knowledgecenter/SSCRJU_3.2.1/com.ibm.swg.im.infosphere.streams.admin.doc/doc/ibminfospherestreams-instance-admin-main.html

Configuring the Streams database adapter for Oracle

This procedure is necessary only if you plan to use an Oracle database.

Ensure that the following prerequisites are met.
- The Oracle 12c client is installed on the machine where the Streams server is installed.
- Use UnixODBC 2.3.2

1. On the machine where the Streams server is installed, edit the Streamsadmin user's /home/streamsadmin/.bashrc file to add the following environment variable commands.

Example commands:

```
export ORACLE_HOME=/data/DatabaseServer/Oracle12C/product/12.1.0/dbhome_1
export LD_LIBRARY_PATH=/data/DatabaseServer/Oracle12C/product/12.1.0/dbhome_1
/lib:/data/DatabaseServer/Oracle12C/product/12.1.0/dbhome_1/lib64:/usr/local
/lib:/usr/local/lib64
export ODBCINI=/home/streamsadmin/ODBCINI/odbc.ini
export STREAMS_ADAPTERS_ODBC_ORACLE=true
export STREAMS_ADAPTERS_ODBC_INCPATH=/usr/local/include
export STREAMS_ADAPTERS_ODBC_LIBPATH=/usr/local/lib
```

Table 8. Environment variables for Oracle on Streams

Environment variable	Example value
Variables for compiling Streams adapters with Oracle	
STREAMS_ADAPTERS_ODBC_ORACLE	True
STREAMS_ADAPTERS_ODBC_INCPATH	/mydir/unixodbc/include
STREAMS_ADAPTERS_ODBC_LIBPATH	/mydir/unixodbc/lib
Variables for running Streams adapters with Oracle	
ODBCINI	/mydir/odbc.ini
ORACLE_HOME	/home/oracle/oracle/112client/oracle/product/11.2.0/client_1

Table 8. Environment variables for Oracle on Streams (continued)

Environment variable	Example value

LD_LIBRARY_PATH	• If you use static linking:
	
	  /home/oracle/oracle/112client/oracle/product/11.2.0/client_1/lib
	• If you do not use static linking:
	
	  /home/oracle/oracle/112client/oracle/product/11.2.0/client_1/lib:/mydir/unixodbc/lib

2. Configure UNIX ODBC as follows.

   a. Untar UnixODBC and execute following commands.

      ```
      ./configure
      make
      make install
      ```

   b. Create a file named `odbc.ini` under `/home/streamsadmin/ODBCINI` with the following content.

      ```
      [Your_Oracle_database_instance_name]
      Driver = Driver_path
      description = description
      ServerName = IP:port/Your_Oracle_database_instance_name
      server = IP
      port = Port_No
      Longs = F
      ```

      Use the Oracle database instance name, server name, and port appropriate for your environment. You must use the exact name of your Oracle database instance in this file.

      For example, if your Oracle database instance is named `orcl`, your `odbc.ini` file would look like this.

      ```
      [orcl]
      Driver=/data/DatabaseServer/Oracle12C/product/12.1.0/dbhome_1
      /lib/libsqora.so.12.1
      description = test
      serverName = 11.22.33.44:9002/orcl
      server = 11.22.33.44
      port = 9002
      Longs = F
      ```

3. To test your configuration, run the following command as the streamsadmin user.

   Use the Oracle database instance name, user name, and password appropriate for your environment.

   ```
   isql Oracle_database_instance_name user_name password
   ```

   If the test fails, check your execution of the preceding steps. Remember that names are case-sensitive.

Configuring the Streams database adapter for DB2

This procedure is necessary only if you plan to use a DB2 database.

1. On the machine where the Streams server is installed, edit the Streamsadmin user's `/home/streamsadmin/.bashrc` file to add the following environment variable commands.

Table 9. Environment variables for DB2 on Streams

Environment variable	Example value
Variables for compiling Streams adapters with DB2	

Table 9. Environment variables for DB2 on Streams (continued)

Environment variable	Example value
STREAMS_ADAPTERS_ODBC_DB2	True
STREAMS_ADAPTERS_ODBC_INCPATH	\<DB2 Home>/sqllib/include/
STREAMS_ADAPTERS_ODBC_LIBPATH	\<DB2 Home>/sqllib/lib64
Variable for running Streams adapters with DB2	
DB2INSTANCE	myDB2InstanceName

2. To test your configuration, run the following command as the streamsadmin user.

   Use the DB2 instance name, user name, and password appropriate for your environment.

   `isql DB2_instance_name user_name password`

   If the test fails, check your execution of the preceding steps. Remember that names are case-sensitive.

   If the DB2 environment variables are not set correctly and the DB2 command line client does not work, you must source the `/home/db2inst1/sqllib/db2profile` script in the `.bashrc` script to initialize DB2 environment variables correctly.

Creating new Streams instances and synchronizing Streams instances in Opportunity Detect

If your previous version of Opportunity Detect did **not** have FixPack 9.1.1.2 applied, your Streams installation was upgraded to version 3.2.1. You created new Streams instances in a previous procedure. Perform the steps in this procedure to synchronize the new Streams instances in Opportunity Detect.

If you have installed FixPack 3.2.1, your Streams instances has already been synchronized and you do not have to perform these steps.

1. Recreate the Streams instances in your environment.

   You should give your new instances the same names as used in your old version. If you give the instances new names, you must go to the **Settings > Detect Settings > Server Groups** and point your server groups to the new Streams instances.

2. Log in to Opportunity Detect or Interact Advanced Patterns.

3. Navigate to **Detect Settings > Server Groups**.

4. Click **Synchronize with changed streams configuration**.

   If you did not use new names when you created new Streams instances in step 1, this action brings the new Streams instances into your server groups.

5. If you used new names when you created new Streams instances in step 1, go to the **Settings > Detect Settings > Server Groups** page and point your server groups to the new Streams instances.

Starting the Opportunity Detect Run Time server and Interact service

You must start the Run Time server and RealTimeConnector service after you have deployed and configured Opportunity Detect.

1. Complete the following steps to start the Run Time server.

a. Log in as the streamsadmin user to the Streams server where Run Time is installed.

b. Navigate to the StreamsRemoteControlService liberty service.

   Use the following path as a guideline.

   `/home/streamsadmin/OpDetection/StreamsRemoteControlService/wlp/bin`

c. Use the following command to start the StreamsRemoteControlService liberty service.

   `./server start StreamsRCS --clean`

d. Navigate to the RealTimeConnector service.

   Use the following path as a guideline.

   `/home/streamsadmin/OpDetection/RealTimeConnector/wlp/bin`

e. Use the following command to start the RealTimeConnector service.

   `./server start RealTimeConnector --clean`

2. Complete the following steps to start the Interact Service

   a. Log in as the root user to the server where Design Time is installed.

   b. Navigate to the following path.

      `Opportunity_Detect_Install_Home/InteractService/wlp/bin`

   c. Run the following command.

      `./server start InteractService --clean`

Verifying the Opportunity Detect installation

To verify whether Opportunity Detect is correctly installed, confirm that you can access the interactive channels and the Opportunity Detect runtime URL.

1. To verify that the Opportunity Detect design time environment is installed, log in to Opportunity Detect and confirm that you can access **Detect > Workspace Manager**.

2. Run the following URL in a web browser:

   http://*host.domain.com*:port/axis2/services/InteractService?wsdl

   Confirm that you get the WSDL for the Interact Design Service.

3. Run the following URL in a web browser:

   http://*host.domain.com*:port/axis2/services/RemoteControl?wsdl

   Confirm that you get the WSDL for the Remote Control Service.

4. Run the following URL in a web browser:

   http://*host.domain.com:port*/servlets/StreamServlet?command=ping

   Confirm that you see the following message in the browser:

   `OK`

Modifying log levels for Opportunity Detect

You can modify log levels for Opportunity Detect Design Time and RunTime.

1. Log in to Opportunity Detect by root.

2. In the *Opportunity_Detect_installation_home*/conf directory, modify the `detect_log4j.properties` file to reflect the following information:

   `log4j.logger.com.ibm.unica.detect=INFO, FILE`

3. In the *Opportunity_Detect_installation_home*/InteractService/wlp/usr/
   servers/InteractService directory, change the console log level in the
   server.xml file For example, the server.xml file can reflect the following
   settings:

   ```
   <logging logDirectory="/opt/Detect/FakeInstall/OpDetection/
    InteractService/wlp/usr/servers/InteractService/logs"
    consoleLogLevel="ERROR" messageFileName="messages.log"/>
   ```

4. Log in to StreamsRemoteControl as the streamsamdin user.

5. In the /home/streamsadmin/OpDetection/StreamsRemoteControlService/wlp/
   usr/servers/StreamsRCS directory, change the console log level in the
   server.xml file. For example, the server.xml file can reflect the following
   setting:

   ```
   consoleLogLevel="DEBUG"
   ```

6. Log in to RealTimeConnector as the streamsamdin user.

7. In the /home/streamsadmin/OpDetection/RealTimeConnector/wlp/usr/servers/
   RealTimeConnector directory, change the console log level in the server.xml
   file. For example, the server.xml file can reflect the following setting:

   ```
   consoleLogLevel="DEBUG"
   ```

8. Restart the server for your changes to take effect.

Naming requirement for deployment configurations

If you plan to use the monitoring tool, the names of your deployment
configurations must be unique across your entire Opportunity Detect installation.

If you have used the same name for multiple deployment configurations, change
the names to ensure that they are unique.

Additional configuration for enhanced security

The procedures in this section describe some additional configurations in the web
application server. They are optional, but you might want to perform them for
enhanced security.

Disabling the X-Powered-By flag

If your organization is concerned that the X-Powered-By flag in the header variable
is a security risk, you can disable it using this procedure.

1. If you are using WebLogic, in the administration console, under *domainName* >
   Configuration > Web Application, set **X-Powered-By Header** to **X-Powered-By
   Header will not be sent**.

2. If you are using WebSphere, perform the following steps.

   a. In the WebSphere administration console, navigate to **Servers > Server
      Types > WebSphere application servers >** *server_name* **> Web Container
      Settings > Web container**.

   b. Under **Additional Properties** select **Custom Properties**.

   c. On the Custom Properties page, click **New**.

   d. On the Settings page, create a custom property named
      com.ibm.ws.webcontainer.disableXPoweredBy and set the value to false.

   e. Click **Apply** or **OK**.

   f. Click **Save** on the console task bar to save your configuration changes.

   g. Restart the server.

Configuring a restrictive cookie path

In your web application server, you can restrict cookie access to a specific application for enhanced security. If not restricted, cookies are valid across all the deployed applications.

1. If you are using WebLogic, perform the following steps.

   a. Extract the `weblogic.xml` file from the WAR or EAR package where you want to add the restrictive cookie path.

   b. Add the following to the `weblogic.xml` file, where *context-path* is the context path for the deployed application. For IBM Marketing Software applications the context path is typically /unica.

   ```
   <session-descriptor>
       <session-param>
         <param-name>CookiePath</param-name>
         <param-value>/context-path> </param-value>
       </session-param>
   </session-descriptor>
   ```

   c. Rebuild the WAR or EAR file.

2. If you are using WebSphere, perform the following steps.

   a. In the WebSphere administration console, navigate to the **Session Manager > Cookie** tab.

   b. Set the **Cookie Path** to the context path of your application.

   For IBM Marketing Software applications the context path is typically /unica.

Chapter 8. Uninstalling Opportunity Detect

Run the Opportunity Detect uninstaller to uninstall Opportunity Detect. When you run the Opportunity Detect uninstaller, the files that were created during the installation process are removed. For example, files such as configuration files, installer registry information, and user data are removed from the computer.

When you install IBM Marketing Software products, an uninstaller is included in the `Uninstall_Product` directory, where *Product* is the name of your IBM product.

If you manually remove the files in your installation directory instead of running the uninstaller, the result might be an incomplete installation if you later reinstall an IBM product in the same location. After uninstalling a product, its database is not removed. The uninstaller only removes default files that are created during installation. Any file that is created or generated after installation is not removed.

Note: On UNIX, the same user account that installed Opportunity Detect must run the uninstaller.

1. If you have deployed the Opportunity Detect web application, undeploy the web application from WebSphere .

2. Shut down WebSphere .

3. Stop the processes that are related to Opportunity Detect.

4. Complete one of the following steps to uninstall Opportunity Detect:

   - Click the Opportunity Detect uninstaller that exists in the `Uninstall_Product` directory. The uninstaller runs in the mode in which you installed Opportunity Detect.

   - In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Opportunity Detect by using the console mode:

     `Uninstall_Product -i console`

   - In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Opportunity Detect by using the silent mode:

     `Uninstall_Product -i silent`

     When you uninstall Opportunity Detect by using the silent mode, the uninstallation process does not present any dialogs for user interaction.

   Note: If you do not specify an option for uninstalling Opportunity Detect, the Opportunity Detect uninstaller runs in the mode in which Opportunity Detect is installed.

Chapter 9. configTool

The properties and values on the Configuration page are stored in the Marketing Platform system tables. You can use the `configTool` utility to import and export configuration settings to and from the system tables.

When to use configTool

You might want to use `configTool` for the following reasons.

- To import partition and data source templates that are supplied with Campaign, which you can then modify and duplicate by using the Configuration page.
- To register (import configuration properties for) IBM Marketing Software products, if the product installer is unable to add the properties to the database automatically.
- To export an XML version of configuration settings for backup or to import into a different installation of IBM Marketing Software.
- To delete categories that do not have the **Delete Category** link. You do this by using `configTool` to export your configuration, then manually deleting the XML that creates the category, and by using `configTool` to import the edited XML.

Important: This utility modifies the `usm_configuration` and `usm_configuration_values` tables in the Marketing Platform system table database, which contains the configuration properties and their values. For best results, either create backup copies of these tables, or export your existing configurations by using `configTool` and back up the resulting file so you have a way to restore your configuration if you make an error when you use `configTool` to import.

Syntax

`configTool -d -p "`*`elementPath`*`" [-o]`

`configTool -i -p "`*`parent ElementPath`*`" -f `*`importFile`*` [-o]`

`configTool -x -p "`*`elementPath`*`" -f `*`exportFile`*

`configTool -vp -p "`*`elementPath`*`" -f `*`importFile`*` [-d]`

`configTool -r `*`productName`*` -f `*`registrationFile`*` [-o] configTool -u `*`productName`*

Commands

`-d -p "`*`elementPath`*`" [o]`

Delete configuration properties and their settings, specifying a path in the configuration property hierarchy.

The element path must use the internal names of categories and properties. You can obtain them by going to the Configuration page, selecting the wanted category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

Note the following.
- Only categories and properties within an application can be deleted by using this command, not whole applications. Use the -u command to unregister a whole application.
- To delete categories that do not have the **Delete Category** link on the Configuration page, use the -o option.

When you use -d with the -vp command, the configTool deletes any child nodes in the path you specify if those nodes are not included in the XML file you specify.

-i -p "*parentElementPath*" -f *importFile* [o]

Import configuration properties and their settings from a specified XML file.

To import, you specify a path to the parent element under which you want to import your categories. The configTool utility imports properties under the category you specify in the path.

You can add categories at any level below the top level, but you cannot add a category at same level as the top category.

The parent element path must use the internal names of categories and properties. You can obtain them by going to the Configuration page, selecting the required category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

You can specify an import file location relative to the tools/bin directory or you can specify a full directory path. If you specify a relative path or no path, configTool first looks for the file relative to the tools/bin directory.

By default, this command does not overwrite an existing category, but you can use the -o option to force an overwrite.

-x -p "*elementPath*" -f *exportFile*

Export configuration properties and their settings to an XML file with a specified name.

You can export all configuration properties or limit the export to a specific category by specifying a path in the configuration property hierarchy.

The element path must use the internal names of categories and properties, which you can obtain by going to the Configuration page, selecting the wanted category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

You can specify an export file location relative to the current directory or you can specify a full directory path. If the file specification does not contain a separator (/ on UNIX, / or \ on Windows), configTool writes the file to the tools/bin directory under your Marketing Platform installation. If you do not provide the xml extension, configTool adds it.

-vp -p "*elementPath*" -f *importFile* [-d]

This command is used mainly in manual upgrades, to import configuration properties. If you applied a fix pack that contains a new configuration property, and you then upgrade, importing a configuration file as part of a manual upgrade process can override values that were set when the fix pack was applied. The -vp command ensures that the import does not override previously set configuration values.

Important: After you use the configTool utility with the -vp option, you must restart the web application server on which Marketing Platform is deployed so the changes are applied.

When you use -d with the -vp command, the configTool deletes any child nodes in the path you specify if those nodes are not included in the XML file you specify.

-r *productName* -f *registrationFile*

Register the application. The registration file location can be relative to the tools/bin directory or can be a full path. By default, this command does not overwrite an existing configuration, but you can use the -o option to force an overwrite. The *productName* parameter must be one of those names that are listed above.

Note the following.
- When you use the -r command, the registration file must have <application> as the first tag in the XML.

    Other files can be provided with your product that you can use to insert configuration properties into the Marketing Platform database. For these files, use the -i command. Only the file that has the <application> tag as the first tag can be used with the -r command.
- The registration file for the Marketing Platform is named Manager_config.xml, and the first tag is <Suite>. To register this file on a new installation, use the populateDb utility, or rerun the Marketing Platform installer as described in the *IBM Marketing Platform Installation Guide*.
- After the initial installation, to re-register products other than the Marketing Platform, use configTool with the -r command and -o to overwrite the existing properties.

The configTool utility uses product names as parameters with the commands that register and unregister products. With the 8.5.0 release of IBM Marketing Software, many product names changed. However, the names that are recognized by configTool did not change. The valid product names for use with configTool are listed below, along with the current names of the products.

Table 10. Product names for configTool registration and unregistration

Product name	Name used in configTool
Marketing Platform	Manager
Campaign	Campaign
Distributed Marketing	Collaborate
eMessage	emessage
Interact	interact
Contact Optimization	Optimize
Marketing Operations	Plan

Table 10. Product names for configTool registration and unregistration (continued)

Product name	Name used in configTool
Opportunity Detect	Detect
IBM SPSS® Modeler Advantage Enterprise Marketing Management Edition	SPSS
Digital Analytics	Coremetrics

-u *productName*

Unregister an application that is specified by *productName*. You do not have to include a path to the product category; the product name is sufficient, and it is required. The process removes all properties and configuration settings for the product.

Options

-o

When used with **-i** or **-r**, it overwrites an existing category or product registration (node).

When used with **-d**, you can delete a category (node) that does not have the **Delete Category** link on the Configuration page.

Examples

- Import configuration settings from a file named `Product_config.xml` in the `conf` directory under the Marketing Platform installation.

  `configTool -i -p "Affinium" -f Product_config.xml`

- Import one of the supplied Campaign data source templates into the default Campaign partition, partition1. The example assumes that you placed the Oracle data source template, `OracleTemplate.xml`, in the `tools/bin` directory under the Marketing Platform installation.

  `configTool -i -p "Affinium|Campaign|partitions|partition1|dataSources" -f OracleTemplate.xml`

- Export all configuration settings to a file named `myConfig.xml` in the `D:\backups` directory.

  `configTool -x -f D:\backups\myConfig.xml`

- Export an existing Campaign partition (complete with data source entries), save it to a file named `partitionTemplate.xml`, and store it in the default `tools/bin` directory under the Marketing Platform installation.

  `configTool -x -p "Affinium|Campaign|partitions|partition1" -f partitionTemplate.xml`

- Manually register an application named productName, by using a file named `app_config.xml` in the default `tools/bin` directory under the Marketing Platform installation, and force it to overwrite an existing registration of this application.

  `configTool -r product Name -f app_config.xml -o`

- Unregister an application named productName.

  `configTool -u productName`

Chapter 10. Opportunity Detect and Interact Advanced Patterns configuration properties

This section describes the Opportunity Detect and Interact Advanced Patterns configuration properties on the Configuration page.

IBM Opportunity Detect and Interact Advanced Patterns | Navigation

Properties in this category specify values that are used internally to navigate among IBM Marketing Software products.

welcomePageURI

Description

The Uniform Resource Identifier of the IBM Opportunity Detect index page. This value is used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

`/index.jsp`

seedName

Description

Used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

`Detect`

type

Description

Used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

`Detect`

httpPort

Description

The port number that is used by the application server for connections to the Opportunity Detect application.

Default value

`7001`

httpsPort

Description

The port number that is used by the application server for secure connections to the Opportunity Detect application.

Default value

7001

serverURL

Description

The URL of the Opportunity Detect installation. Accepts either the HTTP or HTTPS protocol. If you are on a clustered environment and choose to use ports that are different from the default ports 80 or 443 for your deployment, do not use a port number in the value of this property.

If users access Opportunity Detect with the Chrome browser, use the fully qualified domain name (FQDN) in the URL. If the FQDN is not used, the Chrome browser cannot access the product URLs.

Important: If IBM Marketing Software products are installed in a distributed environment, you must use the machine name rather than an IP address in the navigation URL for all of the applications in the suite.

Default value

[server-url]

logoutURL

Description

Used internally. Changes to this value are not recommended.

IBM Marketing Platform uses this value to call the logout handler of each registered application if the user clicks the logout link in IBM Marketing Software.

serverURLInternal

Description

Used internally. Changes to this value are not recommended.

displayName

Description

Used internally. Changes to this value are not recommended.

Default value

Opportunity Detect

IBM Opportunity Detect and Interact Advanced Patterns | System | Streams Remote Control Web Service

The property in this category specifies the URL for the IBM InfoSphere Streams remote control web service. Opportunity Detect Design Time communicates with Opportunity Detect Run Time over this service.

ServerURL

Description

The person who installs the product sets this property value during installation. The default port number is 8080.

Default value

http://[SRCSHost]:[SRCSPort]/axis2/services/RemoteControl

IBM Opportunity Detect and Interact Advanced Patterns | System | Real Time Connector

The property in this category specifies the URL for the web service used when Interact is integrated with Interact Advanced Patterns or when the Web Service connector is used for input data.

ServerURL

Description

The person who installs the product sets this property value during installation. The default port number is 8282.

Default value

http://[RealTimeConnectorHost]:[RealTimeConnectorPort]/servlets/
StreamServlet

IBM Opportunity Detect and Interact Advanced Patterns | System | Monitoring

Properties in this category specify values that affect the monitoring tool.

Poll Interval (In Seconds)

Description

The number of seconds that the monitoring service waits between two successive polls of the Streams server for the statistics. The default is 300 seconds, or 5 minutes.

Default value

300

Retaining Time (In Days)

Description

The number of days the monitoring service should keep the polled data in the database. The default is 10 days. Data that is older than the time specified here is purged.

Default value

10

IBM Opportunity Detect and Interact Advanced Patterns | System | Processing Options

Properties in this category specify values that affect the monitoring tool.

Cache profile records

Description

Opportunity Detect can cache profile data, which provides optimal performance. To enable caching of profile data, set the value of this property to `True`.

If you have very large profile data sets, you might want to retain the default value of this property, which is `False`. This disables caching of profile data and eliminates the out of memory issues that caching large amounts of profile data can cause.

If you change this property value, you must restart your web application server, the Streams instance, and the StreamsRCS service, and redeploy all affected deployments.

Default value

`False`

IBM Opportunity Detect and Interact Advanced Patterns | logging

The property in this category specifies the location of the Opportunity Detect log file.

log4jConfig

Description

The location of the configuration file that Opportunity Detect uses for logging. This value is set automatically during installation, but if you change this path, you must restart the web application server to apply the change.

Default value

`[absolute-path]/conf/detect_log4j.properties`

IBM Interact Advanced Patterns | System | Interact Design Service

The property in this category specifies the URL for the web service that allows Interact to automatically create and deploy advanced patterns when Interact is integrated with Interact Advanced Patterns.

ServerURL

Description

This web service is the integration point between Interact and Interact Advanced Patterns design time. The person who installs the product sets this property value during installation. The default port number is 8181.

Default value

`http://[InteractServiceHost]:[InteractServicePort]/axis2/services/`
`InteractDesignService`

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- Detailed steps to reproduce the issue.
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