

IBM InfoSphere Identity Insight



# Installation Guide

*Version 9 Release 0*



IBM InfoSphere Identity Insight



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*Version 9 Release 0*

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 41.

**Edition notice**

This edition applies to version 9 release 0 of IBM InfoSphere Identity Insight (product number 5724-L71) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Preface

IBM InfoSphere Identity Insight helps organizations solve business problems related to recognizing the true identity of someone or something ("Who is Who") and determining the potential value or danger of relationships ("Who Knows Who") among customers, employees, vendors, and other external forces. This analysis occurs in real time and in the context of existing business applications. IBM InfoSphere Identity Insight provides immediate and actionable information to help prevent threat, fraud, abuse, and collusion in all industries.

### About this publication

This installation guide provides information about how to install and configure IBM InfoSphere Identity Insight.

### Intended audience

This installation guide is intended for installers, system administrators, and IBM Professional Services personnel to successfully deploy the product in your environment.

### Prerequisite and related information

Before using this installation guide, become familiar with the following information:

- IBM InfoSphere Identity Insight information center ([http://www.ibm.com/support/knowledgecenter/SS2HSB\\_9.0.0](http://www.ibm.com/support/knowledgecenter/SS2HSB_9.0.0))
- IBM InfoSphere Identity Insight Version 9 Release 0 Release Notes
- WebSphere Liberty Server documentation
- Your database software documentation
- Depending on your deployment, any of the following information:
  - Your message queuing software documentation
  - Your address correction software documentation
  - Your ETL tool software documentation

### How to send your comments

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other IBM InfoSphere Identity Insight documentation, use the following form to send us your comments:

<http://www.ibm.com/software/data/rcf/>

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## Contacting IBM Software Support

IBM Software Support provides assistance with product defects.

## Before you begin

Before contacting IBM Software Support, your company must have an active IBM software maintenance contract, and you must be authorized to submit problems to IBM. For information about the types of maintenance contracts available, see “Enhanced Support” in the *Software Support Handbook* at [techsupport.services.ibm.com/guides/services.html](http://techsupport.services.ibm.com/guides/services.html)

## About this task

Complete the following steps to contact IBM Software Support with a problem:

### Procedure

1. Define the problem, gather background information, and determine the severity of the problem. For help, see the “Contacting IBM” in the *Software Support Handbook* at [techsupport.services.ibm.com/guides/beforecontacting.html](http://techsupport.services.ibm.com/guides/beforecontacting.html)
2. Gather diagnostic information.
3. Be prepared to provide the following information in the problem report to assist IBM Software Support:
  - Product name and version
  - Database type and version
  - Operating system name and version
4. Submit your problem to IBM Software Support in one of the following ways:
  - Online: Click **Submit and track problems** on the IBM Software Support site at <http://www.ibm.com/software/support/probsub.html>
  - By phone: For the phone number to call in your country, go to the Contacts page of the IBM Software Support Handbook at [techsupport.services.ibm.com/guides/contacts.html](http://techsupport.services.ibm.com/guides/contacts.html)

## What to do next

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



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## Chapter 1. System requirements and planning

This reference section contains information about supported platforms, system requirements, and system architecture.

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### Detailed System Requirements

These requirements identify the hardware and software products that you must install and use before opening a problem report with the IBM Support team.

#### System requirements when running on IBM AIX

The following list identifies the products that are supported when IBM® InfoSphere® Identity Insight runs on the AIX® operating system.

*Table 1. System requirements when running on IBM AIX*

<b>Operating Systems</b>	<ul style="list-style-type: none"><li>• IBM AIX 7.1L</li></ul>
<b>Hardware Requirements</b>	<ul style="list-style-type: none"><li>• POWER7® (64-bit)</li><li>• POWER6®</li><li>• POWER5</li></ul>
<b>Java™</b>	The following is installed with the product: <ul style="list-style-type: none"><li>• IBM 64-bit Java Runtime Environment, Version 8</li></ul>
<b>Databases</b>	<ul style="list-style-type: none"><li>• IBM DB2® Database for Linux, UNIX, and Windows 11.1</li><li>• IBM DB2 Database for Linux, UNIX, and Windows 10.5</li><li>• Oracle 12c</li><li>• Oracle 11g Release 2 (11.2.0.1, 11.2.0.2, or greater)</li></ul>
<b>Database Clients</b>	<ul style="list-style-type: none"><li>• DB2 client v11.1 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1</li><li>• DB2 client v10.5 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5</li><li>• Oracle 12c client when connecting to Oracle 12c.</li><li>• Oracle 11g Release 2 client when connecting to Oracle 11g Release 2.</li></ul>

Table 1. System requirements when running on IBM AIX (continued)

<b>Java Database Connectivity (JDBC) Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1.</li> <li>• DB2 client v10.5 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5.</li> <li>• Oracle 12c JDBC drivers when connecting to Oracle 12c.</li> <li>• Oracle 11g JDBC drivers when connecting to Oracle 11g.</li> </ul>
<b>Web Browsers</b>	<ul style="list-style-type: none"> <li>• Mozilla Firefox</li> </ul>
<b>Message Queuing Software</b>	<ul style="list-style-type: none"> <li>• IBM WebSphere® MQ</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• IBM C++ Runtime Environment Components for AIX, For more information about this requirement, review this support information: <a href="http://www-01.ibm.com/support/docview.wss?uid=swg24025181">http://www-01.ibm.com/support/docview.wss?uid=swg24025181</a></li> </ul>

## System requirements when running on Linux for System x

The following list identifies the products that are supported when IBM InfoSphere Identity Insight runs on the Linux for System x operating system.

Table 2. System Requirements when running on Linux for System x

<b>Operating Systems</b>	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, Version 7.0</li> <li>• Red Hat Enterprise Linux AS, Version 6.0</li> </ul>
<b>Hardware Requirements</b>	<ul style="list-style-type: none"> <li>• Intel x86_64</li> </ul>
<b>Java</b>	<p>The following is installed with the product:</p> <ul style="list-style-type: none"> <li>• IBM 64-bit Java Runtime Environment, Version 8</li> </ul>
<b>Databases</b>	<ul style="list-style-type: none"> <li>• IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c</li> <li>• Oracle 11g Release 2 (11.2.0.1, 11.2.0.2, or greater)</li> </ul>
<b>Database Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• DB2 client v10.5 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c client when connecting to Oracle 12c.</li> <li>• Oracle 11g Release 2 client when connecting to Oracle 11g Release 2.</li> </ul>

Table 2. System Requirements when running on Linux for System x (continued)

<b>Java Database Connectivity (JDBC) Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1.</li> <li>• DB2 client v10.5 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5.</li> <li>• Oracle 12c JDBC drivers when connecting to Oracle 12c.</li> <li>• Oracle 11g JDBC drivers when connecting to Oracle 11g.</li> </ul>
<b>Web Browsers</b>	<ul style="list-style-type: none"> <li>• Mozilla Firefox</li> </ul>
<b>Supported Message Queuing Software</b>	<ul style="list-style-type: none"> <li>• IBM WebSphere MQ</li> </ul>

## System requirements when running on Linux for Power Systems

The following list identifies the products that are supported when IBM InfoSphere Identity Insight runs on the Linux for Power Systems operating system, Little Endian version.

Table 3. System Requirements when running on Linux for Power Systems

<b>Operating Systems</b>	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, Version 7.0</li> <li>• Ubuntu, Version 15</li> </ul>
<b>Hardware Requirements</b>	<ul style="list-style-type: none"> <li>• IBM Power System, POWER8, Little Endian</li> </ul>
<b>Java</b>	<p>The following is installed with the product:</p> <ul style="list-style-type: none"> <li>• IBM 64-bit Java Runtime Environment, Version 8</li> </ul>
<b>Databases</b>	<ul style="list-style-type: none"> <li>• IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c</li> <li>• Oracle 11g Release 2 (11.2.0.1, 11.2.0.2, or greater)</li> </ul>
<b>Database Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• DB2 client v10.5 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c client when connecting to Oracle 12c.</li> <li>• Oracle 11g Release 2 client when connecting to Oracle 11g Release 2.</li> </ul>

Table 3. System Requirements when running on Linux for Power Systems (continued)

<b>Java Database Connectivity (JDBC) Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1.</li> <li>• DB2 client v10.5 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5.</li> <li>• Oracle 12c JDBC drivers when connecting to Oracle 12c.</li> <li>• Oracle 11g JDBC drivers when connecting to Oracle 11g.</li> </ul>
<b>Web Browsers</b>	<ul style="list-style-type: none"> <li>• Mozilla Firefox</li> </ul>
<b>Supported Message Queuing Software</b>	<ul style="list-style-type: none"> <li>• IBM WebSphere MQ</li> </ul>

## System requirements when running on Linux for System z

The following list identifies the products that are supported when IBM InfoSphere Identity Insight runs on the 64-bit Linux for System z<sup>®</sup> operating system.

Table 4. System requirements when running 64-bit Linux on System z

<b>Operating Systems</b>	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, Version 7.0</li> </ul>
<b>Hardware Requirements</b>	<ul style="list-style-type: none"> <li>• IBM System z</li> </ul>
<b>Java</b>	<p>The following is installed with the product:</p> <ul style="list-style-type: none"> <li>• IBM 64-bit Java Runtime Environment, Version 8</li> </ul>
<b>Databases</b>	<ul style="list-style-type: none"> <li>• IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c</li> <li>• Oracle 11g Release 2 (11.2.0.1, 11.2.0.2, or greater)</li> </ul>
<b>Database Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• DB2 client v10.5 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 10g Release 2 (10.2.0.2.0) client when connecting to Oracle 11g Release 1 (11.2.0.1) or 11g Release 2 (11.2.0.2)</li> </ul>
<b>Java Database Connectivity (JDBC) Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1.</li> <li>• DB2 client v10.5 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5.</li> <li>• Oracle 10g Release 2 (10.2.0.2.0) client when connecting to Oracle 11g Release 1 (11.2.0.1) or 11g Release 2 (11.2.0.2)</li> </ul>

Table 4. System requirements when running 64-bit Linux on System z (continued)

<b>Web browsers</b>	<ul style="list-style-type: none"> <li>• Mozilla Firefox</li> </ul>
<b>Supported Message Queuing Software</b>	<ul style="list-style-type: none"> <li>• IBM WebSphere MQ</li> </ul>

## System requirements when running on Microsoft Windows Server

The following list identifies the products that are supported when IBM InfoSphere Identity Insight runs on an Microsoft Windows Server 64-bit operating system.

Table 5. System requirements when running on Microsoft Windows Server

<b>Operating Systems</b>	<ul style="list-style-type: none"> <li>• Microsoft Windows Server 2008 R2</li> <li>• Microsoft Windows Server 2012 R2</li> </ul>
<b>Hardware Requirements</b>	<ul style="list-style-type: none"> <li>• Intel x86_64</li> </ul>
<b>Java</b>	The following is installed with the product: <ul style="list-style-type: none"> <li>• IBM 64-bit Java Runtime Environment, Version 8</li> </ul>
<b>Databases</b>	<ul style="list-style-type: none"> <li>• IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c</li> <li>• Oracle 11g Release 2 (11.2.0.1, 11.2.0.2, or greater)</li> </ul>
<b>Database Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1</li> <li>• DB2 client v10.5 when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5</li> <li>• Oracle 12c client when connecting to Oracle 12c.</li> <li>• Oracle 11g Release 2 client when connecting to Oracle 11g Release 2.</li> </ul>
<b>Java Database Connectivity (JDBC) Clients</b>	<ul style="list-style-type: none"> <li>• DB2 client v11.1 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 11.1.</li> <li>• DB2 client v10.5 JDBC driver when connecting to IBM DB2 Database for Linux, UNIX, and Windows 10.5.</li> <li>• Oracle 12c JDBC drivers when connecting to Oracle 12c.</li> <li>• Oracle 11g JDBC drivers when connecting to Oracle 11g.</li> </ul>
<b>Web Browsers</b>	<ul style="list-style-type: none"> <li>• Windows Internet Explorer 10 and above</li> <li>• Mozilla Firefox</li> </ul>
<b>Supported Message Queuing Software</b>	<ul style="list-style-type: none"> <li>• IBM WebSphere MQ</li> </ul>

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## Defining the system architecture

You must plan out the database and server configurations of your product installation.

### Pipeline deployments

Pipelines can be installed on a single server or multiple servers, depending on the system requirements and the server resources.

When deploying pipelines, consider the following performance factors:

- Pipelines can be run in single form, or configured to run concurrent parallel processing threads.
- Each CPU can handle 1.5 to 2 pipelines or parallel processing pipeline threads.
- Parallel processing pipelines can receive data from multiple data sources at once, so you do not need to split the files manually to equal the number of single pipelines.

When deploying pipelines, also consider the following factors:

- Pipelines can be executed on any supported hardware and operating system configuration.
- Although possible, do not run the pipelines on the machine where the database is located.
- Parallel processing pipelines are less work to configure than multiple pipelines.
- Multiple server configurations require more work and maintenance to administer.
- Single server configurations require expensive hardware that increases exponentially with the number of CPUs.

### Creating a protected user for non-Windows installations

For all non-Windows platforms, create a protected user to run the product installation program.

#### About this task

Do not run the product installation program as a ROOT user.

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## User roles and responsibilities

User roles help categorize the typical tasks that must be completed to effectively deploy and use IBM InfoSphere Identity Insight. Many different types of users might use IBM InfoSphere Identity Insight for various purposes; that is, users take on the responsibilities of one or more roles in using the product.

You can define groups of users based on the various user roles and responsibilities.

The most common user roles include these roles:

#### Analyst

Analyzes the data and reviews entities, relationships, and alerts. The analyst defines what results are most valuable and makes sure that the system returns those results. The analyst works closely with the operator and application administrator.

**Operator**

Loads data into the system, runs the pipelines, and verifies that the system is running acceptably, providing load-quality reports as necessary. The operator also reviews the results, exceptions, and events. The operator works closely with the analyst, data source administrator, and application administrator.

**Data source administrator**

Prepares the data for loading it into the system, which includes converting the data to a UMF file and validating the file. The data source administrator works closely with the operators, application administrators, and database administrators.

**Application administrator**

Configures the application, including the configuration of the data, entity model, and rules. The application administrator works closely with the data source administrators and operators to define the entity model, and coordinates configuration changes with the database administrator, data source administrator, and operators. The application administrator also coordinates and consults with overall system administrators, if they exist.

**Database administrator**

Ensures that the database is configured and tuned appropriately for use with the application. The database administrator works closely with the operator, data source administrator, and application administrator.

**System architect**

Sizes and estimates the hardware and software requirements in planning for the deployment of the application. The system architect works closely with the installer, database administrator, data source administrator, and application administrator to ensure the deployment achieves the vision, strategies, and objectives and integrates into your business processes while delivering expected results.

**Installer**

Manages the installation and initial configuration of the application. The Installer sets up initial users in the system. Frequently, IBM Professional Services works with the system architect to complete these responsibilities.

**Programmer**

Designs and develops graphical interfaces or customizes graphical interfaces for the various functions, such that the deployment of the application integrates seamlessly into your environment. The programmer works closely with the system architect and the application administrator, often to disseminate alerts to the appropriate people in the most effective manner for your environment.

**Security architect**

Ensures that the project team adheres to and implements a secure system. The security architect works closely with the system architect, installer, and database administrator.





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## Chapter 2. Setting up the databases

Before you install the product, you must set up the required databases.

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### Setting the environment variables

For DB2 or Oracle databases, you must set environment variables.

#### DB2 environment variables

Set all of the following required environment variables for your operating system on the target machine.

#### AIX environment variables

**Note:** You must ensure these environment variable values prepend any existing entries of the same environment variables.

All environment variables must be capitalized.

Table 6. AIX environment variables for DB2 databases

Environment Variable	Value	Conditions
<i>DB2DIR</i>	DB2 software installation path	where <i>DB2DIR</i> is the location where the DB2 client/server software is installed.
<i>DB2INSTANCE</i>	DB2 database instance name	where <i>DB2INSTANCE</i> is the name of the DB2 database instance you have created.
<i>LIBPATH</i>	$\$DB2DIR/$ $lib64:INSTALLDIRECTORY/lib$	where <i>DB2DIR</i> is the location where the DB2 client/server software is installed, and where <i>INSTALLDIRECTORY</i> is the location where the product will be installed.

#### Linux environment variables

Table 7. Linux environment variables for DB2 databases

Environment Variable	Value	Conditions
<i>DB2DIR</i>	DB2 software installation path	where <i>DB2DIR</i> is the location where the DB2 client/server software is installed.
<i>DB2INSTANCE</i>	DB2 database instance name	where <i>DB2INSTANCE</i> is the name of the DB2 database instance you have created.

Table 7. Linux environment variables for DB2 databases (continued)

Environment Variable	Value	Conditions
<i>LD_LIBRARY_PATH</i>	<i>\$DB2DIR/lib64:INSTALLDIRECTORY/lib</i>	where <i>DB2DIR</i> is the location where the DB2 client/server software is installed, and where <i>INSTALLDIRECTORY</i> is the location where the product will be installed.

## Microsoft Windows environment variables

You must use the Microsoft Windows 8.3 naming convention when setting up environment variables in a Microsoft Windows environment. The environment variables must not contain any spaces.

Table 8. Microsoft Windows environment variables for DB2 databases

Environment Variable	Value	Conditions
<i>DB2DIR</i>	DB2 software installation path	where <i>DB2DIR</i> is the location where the DB2 instance was created. Some versions of DB2 instead set <i>DB2_HOME</i> or <i>DB2PATH</i> . The installer will look for these if <i>DB2DIR</i> is not found.
<i>DB2INSTANCE</i>	DB2 database instance name	where <i>DB2INSTANCE</i> is the name of the DB2 database instance you have created.
<i>DB2CODEPAGE</i>	Set equal to the CODEPAGE value of the DB2 database.	A mismatch can cause encoding issues for Latin-1/UTF-8 data on data-load.

## Oracle environment variables

Set all of the following required environment variables for your operating system on the target machine.

**Note:** You must ensure these environment variable values prepend any existing entries of the same environment variables.

All environment variables must be capitalized.

## AIX environment variables

Table 9. AIX environment variables for Oracle databases

Environment Variable	Value	Conditions
<i>ORACLE_HOME</i>	Oracle client software installation directory	where <i>ORACLE_HOME</i> is the location where the Oracle client software is installed.

Table 9. AIX environment variables for Oracle databases (continued)

Environment Variable	Value	Conditions
<i>LIBPATH</i>	<code>\$ORACLE_HOME/ lib:&lt;product install directory&gt;/lib</code>	where <i>ORACLE_HOME</i> is the Oracle client software installation directory, and where <i>&lt;product_install_directory&gt;</i> is the location where the product will be installed.

## Linux 64-bit environment variables

Table 10. Linux 64-bit environment variables for Oracle databases

Environment Variable	Value	Conditions
<i>ORACLE_HOME</i>	Oracle client software installation directory	where <i>ORACLE_HOME</i> is the location where the Oracle client software is installed.
<i>LD_LIBRARY_PATH</i>	<code>\$ORACLE_HOME/ lib:&lt;product install directory&gt;/lib</code>	where <i>ORACLE_HOME</i> is the Oracle client software installation directory, and where <i>&lt;product_install_directory&gt;</i> is the location where the product will be installed.

## Microsoft Windows environment variables

You must use the Microsoft Windows 8.3 naming convention when setting up environment variables in a Microsoft Windows environment. The environment variables must not contain any spaces.

Table 11. Microsoft Windows environment variables for Oracle databases

Environment Variable	Value	Conditions
<i>ORACLE_HOME</i>	Oracle client software installation directory	where <i>ORACLE_HOME</i> is the location where the Oracle client software is installed.

---

## Granting Oracle users CREATE VIEW privileges

In order for the product to run successfully, Oracle database users need to be granted CREATE VIEW privileges.

### About this task

The CREATE VIEW privileges must be assigned to the user directly, and not a role-based assignment.

---

## Creating and configuring the databases

You create a single database, known as the entity database for all components of the product to use.

## Creating the entity database

You must create a database for the pipeline to store identities, entities, relationships, and alerts, and to also store Configuration Console configuration information and the application monitoring information.

### About this task

See your database documentation for instructions about creating new databases.

Use UPPERCASE letters for database names.

## Configuring client authentication

Client authentication allows users to connect to the entity database without supplying additional user name or password credentials in the pipeline's .ini file.

### About this task

Client authentication is also known as trusted OS database authentication. Client authentication allows the connection to be made by using the currently logged in user name. This authentication scheme trusts that the operating system already properly authenticated the user. Client authentication can be used on DB2, and Oracle database platforms. The pipelines and IBM WebSphere processes must be executed by the O/S user who can access the entity database in trusted mode. If multiple users must execute these processes, contact IBM Support for further details.

### Configuring client authentication for DB2 databases

Set up DB2 to use client authentication.

#### Procedure

1. Set the following global database server configuration options:
  - a. Set **authentication** to the value `client`.
  - b. Set **trust\_allclnts** to the value `yes`.
  - c. Set **trust-clntauth** to the value `server`.
2. Catalog the product databases using the **authentication client** parameter of the **db2 catalog database** command.
3. Synchronize the operating system and DB2 database user names.
4. Ensure you have the DB2 JDBC Type-2 Driver in addition to the standard DB2 JDBC Type-4 Driver. This should be contained in the file `db2java.zip`.
5. Enable trusted authentication when installing the product.

### Configuring client authentication for Oracle databases

Set up Oracle to use client authentication.

#### Procedure

1. Set the following global database server configuration options:
  - a. Set **os\_authent\_prefix** to the value `OP$`.
  - b. Set **remote\_os\_authent** to the value `TRUE`.
2. Create Oracle database users so the user can use both external and database authentication methods. Example syntax:

```
CREATE USER OPS$<user> IDENTIFIED BY <dbpassword> DEFAULT
TABLESPACE <tablespace> TEMPORARY TABLESPACE <temp-tablespace>
QUOTA UNLIMITED ON <tablespace>;
GRANT CONNECT, RESOURCE TO OPS$<user>;
```

3. Ensure you have the Oracle JDBC Type-2 Driver in addition to the standard Oracle JDBC Type-4 Driver. For Oracle this should be contained in the file `ojdbc16.zip`
4. Enable trusted authentication when installing the product. Provide a username with the OPS\$ prefix when asked for database credentials in the product installer.

## Sizing the Oracle Statement Cache

Oracle database administrators must appropriately size their statement cache.

### About this task

The product can be very statement intensive, which means that the Oracle statement cache can grow very quickly and exceed the default Oracle database settings. For more information about sizing and tuning these parameters, see your Oracle documentation.

### Procedure

Configure the following parameters at the server level using the **ALTER SYSTEM SET** Oracle command:

#### **SESSION\_CACHED\_CURSORS**

A good value for this parameter is about 20 simultaneous cursors per pipeline or parallel processing pipeline thread.

#### **OPEN\_CURSORS**

A good value for this parameter is about 20 simultaneous cursors per pipeline or parallel processing pipeline thread.

#### **CURSOR\_SHARING**

This parameter greatly affects performance. Configure this parameter based on the fact that the product widely uses bind variables, and the application will benefit from cursor sharing



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## Chapter 3. Installing and configuring the product

You install and configure the product using the following steps.

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### Starting the installation program

You must complete the following steps to start the product installation program.

#### Before you begin

##### On Microsoft Windows:

You must copy the product installation files to a local drive. The product installation program will not run from a network drive.

##### On AIX and Linux:

To enable the License-print function within the Installer running in GUI mode, you need to define your printer within the X-windows subsystem that you are running on the client machine.

To enable the License-print function within the Installer running in command line mode, you need to set up a default print-queue and printer on the machine you are installing on.

#### Procedure

1. Obtain the IBM InfoSphere Identity Insight product software .tar file.
2. Unzip the .tar file to a temporary directory on a local drive of the target installation machine.

**Note:** Copy the product installation file to a local drive. The product installation program will not run from a network drive. Ensure that the .tar file is unzipped with the directory structure intact.

Ensure that the product installation file's parent directory structure of `\Disk1\InstData\VM` is retained if you copy the installation file to another location.

3. Navigate to the `\Disk1\InstData\VM` directory, and run the installer program.
  - To run the installer in GUI mode, double-click or execute the installer program.

**Note:** On a Microsoft Windows system, run the installation by right clicking on the executable and choosing Run As Administrator. On a UNIX system, it is strongly advised not to run the installation as the root userid.

- To run the installer in command line mode, from the command line, append `-i console` when executing the installer program.

For example: `prompt> ISII_900_aix_ppc.bin -i console`

**Note:** Copy the product installation file to a local drive. The product installation program will not run from a network drive. Ensure that the .tar file is unzipped with the directory structure intact.

Ensure that the product installation file's parent directory structure of `\Disk1\InstData\VM\` is retained if you copy the installation file to another location.

Operating System platform	Installer file
Microsoft Windows Server x86_64	ISII_900_win_x64.exe
IBM AIX	ISII_900_aix_ppc.bin
Linux 64-bit for IBM System x	ISII_900_linux_x64.bin
Linux 64-bit for IBM z Systems	ISII_900_linux_s390x.bin
Linux 64-bit for IBM Power Systems - Little Endian	ISII_900_plnx_x64_le.bin

- Follow the instructions on the installation program wizard or the command line.

## Completing the product installation

Complete the following installation program panels to install the product.

### About this task

Identity Insight v9.0 installs all product features. On an upgrade installation, all product features are installed, even if the previous installing did not have the feature installed.

### Procedure

- On the splash screen panel, select the language for the product install.
- On the **Introduction** panel, review the screen.
- On the **Licence Agreement - Installation Environment** panel, select if this installation will be used in a production or non-production environment.
- On the **License Agreement - Software License Agreement** panel, review the license agreement and select **I accept the terms in the license agreement to continue**.
- On the **Destination - Choose Install Folder** panel, type or browse to the directory (fully qualified path) in which to install IBM InfoSphere Identity Insight. If browsing to an installation directory, you must click the **Browse** button, then browse to the directory one level above the install directory (create the new directory if needed). Then select the install directory and click the **Open** button.
- On the **Database Configuration - Type of Database** panel, select the database product that you want to use.
- On the **Database Configuration - Trusted Authentication** panel, specify if you want to use system users to access the entity database.
- On the **Database Configuration - JDBC Driver Location** panel, type or browse to the directory (fully qualified path) where the database product Java database connectivity (JDBC) client is located.
- On the **Database Configuration - Database Information** panel, enter the configuration information for the type of database installed.
- On the **Database Configuration - Database Population** panel, review the screen and select the option to generate and update the database schema.
- On the **WebSphere Configuration - WebSphere Information** panel, enter the WebSphere Application Server installation information.
- On the **WebSphere Configuration - Identity Insight Security** panel, enter the administrator username and password that will be used when accessing the Identity Insight web applications.



13. On the **WebSphere Configuration - Pipeline Input Transports** panel, enter the port number that will be used for communication between the pipeline and the web services.
14. On the **Pre-Installation Summary** panel, review the summary (click the **Previous** button if any changes are needed), and then click the **Install** button to start the product installation.

## IBM InfoSphere Identity Insight installation panel worksheet

This worksheet includes all of the installation panel settings. Use this worksheet to keep a record of your settings.

### Type of database

Table 12. Database configuration - type of database

Setting	Version supported	My setting
IBM DB2 Universal Database™	Version 10.5, 11.1	
Oracle Standard Edition	Version 11.2.0.2 and 12c	

### Trusted authentication

Table 13. Database configuration - trusted authentication

Setting	Description	My setting
Yes	Use system users for authentication. If selected, you must also refer to your database product documentation for instructions and enable trusted authentication for your database.	
No	Do not use trusted authentication for the database type selected.	(Default setting)

### JDBC file location

Table 14. Database configuration - JDBC file location

Setting	Description	JDBC location
IBM DB2 Universal Database	The location for the IBM DB2 client JDBC driver.	
Oracle Standard Edition	The location for the Oracle client JAR file.	

### Database information

Table 15. Database configuration - database information

Setting	Description	My setting
Database server hostname	The fully qualified hostname of the server or the IP address of the server hosting the entity database.	

Table 15. Database configuration - database information (continued)

Setting	Description	My setting
Database name (IBM DB2 UDB)	The name of the entity database.	
Database SID/Service Name (Oracle databases only)	The Oracle ID of the entity database.	
Database schema (IBM DB2 databases only)	The name of the DB2 database schema.	
User name	Administrator user name for this database. You must provide a valid user name. <b>Note:</b> If using Oracle trusted/client authentication, the OPS\$ prefix is required when entering the username. For example: OPS\$johndoe.	
Password	Administrator database password for the user name provided for this database	
Database port	The TCP/IP database port number.	

## Database population

Table 16. Database configuration - database population

Setting	Description	My setting
Create tables automatically	Generates the SQL necessary to create the database schemas and tables necessary for your installation and executes it.	(Default setting)
Generate SQL only.	Generates the SQL necessary to create and populate the tables necessary for your installation and writes to .sql files in the <installation_directory>/sql/ directory.  On Microsoft Windows: The ISQL Utility is not supported since it cannot handle large scripts. Using the ISQL utility results in a failure with an error message that reads "Insufficient memory to continue". Allowing the installer to generate and execute the SQL scripts avoids this problem altogether.	
Skip database population		

## WebSphere information

Table 17. WebSphere configuration - WebSphere Liberty information

Setting	Description	My setting
Fully Qualified Host Name	The fully qualified hostname of the server or the IP address of the server hosting the WebSphere Liberty server.	(Default to server running installation program)
Web server port number (http)		(Default 13510)
Secure web server port number (https)		(Default 13511)

## Identity Insight security

Table 18. WebSphere configuration - Identity Insight Security

Setting	Description	My setting
User Name	The user that will have administration access to all Identity Insight web configuration and search capabilities.	(Default admin)
Password		

## Pipeline Input Transport

Table 19. WebSphere configuration - Pipeline Input Transport

Setting	Description	My setting
Port	The port number that will be used for communication between the web interface and the pipeline	(Default 13512)



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## Chapter 4. Upgrading the product

You upgrade the product using the following steps.

### Before you begin

Before you upgrade your IBM InfoSphere Identity Insight installation, consult with IBM Professional Services and consider additions and changes to the database schema.

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## Upgrading the product

You upgrade the product using the following steps.

### Before you begin

Before you upgrade your IBM InfoSphere Identity Insight installation, consult with IBM Professional Services and consider additions and changes to the database schema.

## Supported upgrade versions

You can use the product installer to upgrade only versions 8.1 or greater. If you are upgrading from an earlier version, contact IBM Software Support for assistance.

## Upgrade items

The following information is relevant to all product upgrades.

### Modified tables and columns

As of product version 9.0, the following tables and columns have been modified from previous versions.

#### Modified tables / columns when upgrading to IBM InfoSphere® Identity Insight 9.0

Updated tables

- CONFLICT\_RULES - new column added: ENABLED
- COMPONENT\_GROUP - new column added: ENABLE\_TAGS
- UMF\_QUERY\_RESULT - modified to include data source codes for each entity
- UMF\_SEARCH\_RESULT - modified to include data source codes for each entity
- COMPONENT\_GROUP
- COMPONENT\_GROUP\_DESC

#### Modified tables / columns when upgrading to IBM InfoSphere® Identity Insight 8.1 fix pack 4

Updated tables

- COMPONENT\_CONFIG\_TAGS
- DQM\_RULE
- DQM\_RULE\_PARAM

- DQM\_RULE\_SET
- LDR\_MESSAGE\_TYPE
- SYSTEM\_PARAM
- UMF\_DQM\_MAPPING
- UMF\_OUTPUT\_FORMAT
- UMF\_OUTPUT\_PARAM
- UMF\_OUTPUT\_RULE

### **Modified tables/columns when upgrading to IBM InfoSphere® Identity Insight 8.1 fix pack 3**

Changed columns from decimal to integer

- CONFLICT\_RULES.MIN\_ALERT\_THRESHOLD
- MATCH\_MERGE\_ATTR.CONF\_WEIGHT
- MATCH\_MERGE\_ATTR.DENIAL\_WEIGHT
- MATCH\_MERGE\_CONF.SCORE\_WEIGHT
- MATCH\_MERGE\_RULES.REL\_CONF
- MATCH\_MERGE\_RULES.LAS\_SCORE
- MATCH\_MERGE\_RULES.LAS\_GN\_SCORE
- MATCH\_MERGE\_RULES.LAS\_SN\_SCORE

Recreated Index

- IX\_CONF\_RL\_ID\_DESC

Column addition

- ENTITY\_TYPE.INCLUDE\_SAME\_TYPE\_AS\_CANDIDATE

**Note:** The product installer does not support upgrades from versions below 8.1; The information below is provided for reference only.

### **Deprecated columns when upgrading from IBM InfoSphere® Identity Insight version 8.0 or version 8.0 fix pack 1 or version 8.0 fix pack 2**

- MAX\_CONFLICT\_DEGREE column from the SEP\_CONFIG table

### **Deprecated tables when upgrading from IBM® InfoSphere Identity Insight version 8.0 or version 8 fix pack 1**

The following tables used for enhanced name hashing with IBM Global Name Recognition functionality are now deprecated:

- LAS\_CONFIG
- LAS\_CULTURE\_CODES

These tables are not automatically dropped by upgrading the product schema to version 8 fix pack 2. However, users can safely drop these tables manually, since their functionality is no longer used by the product.

### **Deprecated tables when upgrading from IBM Relationship Resolution version 4.1**

RELATION - If you want to migrate the data from the old RELATION table to the new DISCLOSED\_RELATIONS table, you must run the appropriate

DISCLOSED\_RELATION\_MIGRATION.<database platform>.sql file located in the \<platform>\Software\sql\etc\common directory on the product CD.

- REL\_TYPE
- SEP\_LOG
- SEP\_CONFIG\_PRE42
- UMF\_EXCEPT\_PRE42

#### **Deprecated columns when upgrading from IBM Relationship Resolution version 4.1**

- HAS\_ACCOUNT\_ID from the DD\_TABLE table
- HAS\_ENTITY from the DD\_TABLE table
- DISCLOSED from the SEP\_RELATIONS table
- REVERSE\_DELETE from the UMF\_TABLE\_RELATION table

#### **Customized views overwritten or deleted during upgrade**

In version 9.0 the following views are overwritten when upgrading your product installation.

**Note:** Backing up your modified view and tables to prevent loss is necessary if you are upgrading. It is the responsibility of the customer to reapply any custom changes to the schema or views.

#### **Customized views overwritten or deleted during upgrade to IBM InfoSphere Identity Insight version 9.0:**

BEST\_NAME\_CONFLICT  
COG\_CONFLICT\_PATHS  
COG\_ENTITY\_CONDATA  
COG\_ENTITY\_DATA  
COG\_RELATIONSHIP\_SUMMARY  
COG\_RESUME\_CONFLICTS  
SOA\_COMPONENT\_CONFIG\_GROUPS  
SOA\_ROLE\_ALERT\_HDR\_MULTI  
VIS\_0DEGREE\_EXISTS  
VIS\_CONFLICT\_LOG  
VIS\_ENTITY\_CONDATA  
VIS\_ER\_STATE\_DT

#### **Customized views overwritten or deleted during upgrade from IBM InfoSphere Identity Insight version 8.1 fix pack 3:**

COG\_CONFLICT\_PATHS  
COG\_RESUME\_CONFLICTS  
CONFLICT\_RPT  
RESUME\_CONFLICTS  
SOA\_CONFLICT\_RULE  
SOA\_ER\_RESULT\_HEADER  
SOA\_ROLE\_ALERT\_HDR\_ENT

SOA\_ROLE\_ALERT\_HDR\_MULTI  
VIS\_CONFLICT\_DESC  
VIS\_CONFLICT\_LOG  
VIS\_ENTITY\_CONFLICTS  
VIS\_ENTITY\_PROPERTIES  
VIS\_INBOX\_ROLE\_ALERT  
VIS\_INBOX\_ROLE\_ALERT\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_CLSD

**Customized views overwritten or deleted during upgrade from IBM InfoSphere Identity Insight version 8.1 fix pack 2:**

BEST\_ENTITY\_INFO  
COG\_CONFLICT\_PATHS  
COG\_INBOX\_ROLE\_ALERT  
COG\_RELATED\_ENTITIES  
COG\_RELATIONSHIP\_SUMMARY  
COG\_RESUME\_CONFLICTS  
COG\_ROLE\_ALERT\_DETAIL  
COG\_RPT\_RE\_UNION  
CONFLICT\_RPT  
RESUME\_CONFLICTS  
RPT\_RE\_UNION  
RPT\_RESUME\_RELS1\_SUB  
RPT\_RESUME\_RELS2\_SUB  
SOA\_ALERT\_ENTITY\_LIST  
SOA\_ENT\_NTWRK\_STATS  
SOA\_ENTITY\_SUMMARIES  
SOA\_RELATED\_ENTITIES  
VIS\_GEM\_EVENT\_ALERT\_ASGN\_DET  
VIS\_GEM\_EVENT\_ALERT\_DET  
VIS\_GEM\_EVENT\_ALERT\_UNASGN\_DET  
VIS\_INBOX\_GET\_RULE  
VIS\_INBOX\_ROLE\_ALERT  
VIS\_INBOX\_ROLE\_ALERT\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_CLSD  
VIS\_INBOX\_ROLE\_ALERT\_RAW  
VIS\_INBOX\_ROLE\_ALERT\_RAW\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_RAW\_CLSD  
VIS\_MAA\_ASGN\_DET



VIS\_MAA\_UNASGN\_DET  
VIS\_RA\_UNASGN\_SUM  
VIS\_RELATEDENTITIES  
VIS\_RELATIONSHIP\_SUMMARY

**Customized views overwritten or deleted during upgrade from IBM InfoSphere Identity Insight version 8.1 fix pack 1:**

BEST\_ENTITY\_INFO  
COG\_DISCLOSURES\_NAMES  
COG\_ENTITY\_DISCLOSURES  
COG\_INBOX\_ROLE\_ALERT  
COG\_ROLE\_ALERT\_DETAIL  
COG\_RELATED\_ENTITIES  
COG\_RPT\_RE\_UNION  
CONFLICT\_RPT  
RPT\_RESUME\_RELS1\_SUB  
RPT\_RESUME\_RELS2\_SUB  
RPT\_RE\_UNION  
SOA\_ENTITY\_SUMMARIES  
VIS\_DISTINCT\_COUNTS  
VIS\_ENTITY\_PROPERTIES

**Note:** The product installer does not support upgrades from version 8.0 or earlier; Information below is provided for reference only.

**Customized views overwritten or deleted during upgrade from IBM InfoSphere Identity Insight version 8.0, IBM InfoSphere Identity Insight version 8.0 fix pack 1, and IBM InfoSphere Identity Insight version 8.0 fix pack 2:**

BEST\_NUMBER\_ALL  
VIS\_RELATIONSHIP\_SUMMARY  
RESUME\_CONFLICTS  
VIS\_GEM\_EVENT\_ALERT\_UNASGN\_DET  
VIS\_GEM\_EVENT\_ALERT\_ASGN\_DET  
VIS\_GEM\_EVENT\_ALERT\_DET  
RPT\_CONFLICT\_ENTITIES  
RPT\_RESUME\_RELS1\_SUB  
RPT\_RESUME\_RELS2\_SUB  
SOA\_ENT\_NTWK\_STATS  
SOA\_ADDR\_MATCHED\_DURING\_ER

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 8.0 fix pack 1, and IBM Relationship Resolution version 8.0 fix pack 2:**

SOA\_IDENTITIES\_AT\_ALERT\_TIME

SOA\_NAMES\_MATCHED\_DURING\_ER  
SOA\_ADDR\_MATCHED\_DURING\_ER  
SOA\_NBR\_MATCHED\_DURING\_ER  
SOA\_EMAILS\_MATCHED\_DURING\_ER  
SOA\_ATTR\_MATCHED\_DURING\_ER  
SOA\_NAME SOA\_ADDRESS  
SOA\_NUMBER  
SOA\_CHARACTERISTIC  
SOA\_EMAIL  
SOA\_IDENTITIES  
SOA\_ER\_RESULT\_HEADER  
SOA\_BEST\_NAME  
SOA\_BEST\_ADDRESS  
SOA\_BEST\_NUMBER  
SOA\_BEST\_EMAIL  
VIS\_INBOX\_GET\_RULE  
VIS\_INBOX\_ROLE\_ALERT\_RAW  
VIS\_INBOX\_ROLE\_ALERT\_RAW\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_RAW\_CLSD  
VIS\_INBOX\_ROLE\_ALERT  
VIS\_INBOX\_ROLE\_ALERT\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_CLSD  
VIS\_RA\_UNASGN\_SUM  
VIS\_ENTITY\_DISCLOSURES

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 8.0, IBM Relationship Resolution version 8.0 fix pack 1, and IBM Relationship Resolution version 8.0 fix pack 2:**

VIS\_INBOX\_GET\_RULE  
VIS\_INBOX\_ROLE\_ALERT\_RAW  
VIS\_INBOX\_ROLE\_ALERT\_RAW\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_RAW\_CLSD  
VIS\_INBOX\_ROLE\_ALERT  
VIS\_INBOX\_ROLE\_ALERT\_ASGN  
VIS\_INBOX\_ROLE\_ALERT\_CLSD  
VIS\_RA\_UNASGN\_SUM

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 4.2, IBM Relationship Resolution version 4.1, IBM Relationship Resolution version 4.1 fix pack 1, and IBM Relationship Resolution version 4.1 fix pack 2:**

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1, IBM Relationship Resolution version 4.2, IBM Relationship Resolution version 4.1 fix pack 1, or IBM Relationship Resolution version 4.1 fix pack 2:

- VIS\_MAA\_UNASGN\_SUM
- VIS\_SEARCH\_SUMMARY\_RPT
- VIS\_SEARCH\_HISTORY\_RPT
- VIS\_GEM\_EVENT\_ALERT\_UNASGN\_SUM

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 4.2, IBM Relationship Resolution version 4.1, and IBM Relationship Resolution version 4.1 fix pack 1:**

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1, IBM Relationship Resolution version 4.2, or IBM Relationship Resolution version 4.1 fix pack 1:

- VIS\_CONFLICT\_DETAIL
- VIS\_ENTITY\_CONDATA
- VIS\_DISTINCT\_COUNTS
- SEARCH\_RESULT\_DETAIL
- VIS\_ENTITY\_DATA
- VIS\_ENTITY\_EMAIL\_ADDR
- BEST\_EMAIL\_BY\_IDENTITY
- VIS\_GEM\_EVENT
- VIS\_GEM\_EVENT\_SUMMARY
- VIS\_ENTITY\_ATTRIBUTE
- BEST\_ATTRIBUTE
- BEST\_ENTITY\_INFO
- VIS\_ENTITY\_DATA
- VIS\_ASGN\_CONFLICT\_MM\_RULE
- BEST\_ATTRIBUTE\_ALL
- BEST\_ATTRIBUTE\_ALL\_BY\_IDENTITY
- BEST\_ATTRIBUTE\_BY\_IDENTITY

**Customized views overwritten during upgrade from IBM Relationship Resolution version 4.2 and IBM Relationship Resolution version 4.1:**

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1 or IBM Relationship Resolution version 4.2:

- CONFLICT\_RPT
- BEST\_ATTRIBUTE
- SEARCH\_RESULT\_DETAIL
- BEST\_ENTITY\_INFO

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 4.1:**

The following views are obsolete, and are deleted when upgrading from IBM Relationship Resolution version 4.1:

- RESUME\_ATTRIBUTES
- RESUME\_NUMBERS

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1:

- CONFLICT\_RPT
- CONFLICT\_DISP
- RESUME\_CONFLICTS
- BEST\_NAME
- BEST\_ADDRESS
- SEARCH\_DISP
- QUALITY\_SUMMARY
- VIS\_RELATEDENTITIES
- VIS\_MAA\_UNASGN\_SUM
- VIS\_MAA\_ASGN\_DET
- VIS\_MAA\_UNASGN\_DET
- VIS\_ENTITY\_DISCLOSURES
- VIS\_ENTITY\_CONFLICTS
- SEARCH\_RESULT\_DETAIL
- VIS\_CONFLICT\_MM\_RULE
- SEARCH\_RESULT\_RPT

If any of the following deprecated views have been modified, you must repeat your modifications after the upgrade to the new view after upgrading from IBM Relationship Resolution version 4.1:

- ENTITY1\_DATA is replaced by VIS\_CONFLICT\_DETAIL
- ENTITY2\_DATA is replaced by VIS\_CONFLICT\_DETAIL

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 4.2, IBM Relationship Resolution version 4.1, IBM Relationship Resolution version 4.1 fix pack 1, and IBM Relationship Resolution version 4.1 fix pack 2:**

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1, IBM Relationship Resolution version 4.2, IBM Relationship Resolution version 4.1 fix pack 1, or IBM Relationship Resolution version 4.1 fix pack 2:

- VIS\_MAA\_UNASGN\_SUM
- VIS\_SEARCH\_SUMMARY\_RPT
- VIS\_SEARCH\_HISTORY\_RPT
- VIS\_GEM\_EVENT\_ALERT\_UNASGN\_SUM

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 4.2, IBM Relationship Resolution version 4.1, and IBM Relationship Resolution version 4.1 fix pack 1:**

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1, IBM Relationship Resolution version 4.2, or IBM Relationship Resolution version 4.1 fix pack 1:

- VIS\_CONFLICT\_DETAIL

- VIS\_ENTITY\_CONDATA
- VIS\_DISTINCT\_COUNTS
- SEARCH\_RESULT\_DETAIL
- VIS\_ENTITY\_DATA
- VIS\_ENTITY\_EMAIL\_ADDR
- BEST\_EMAIL\_BY\_IDENTITY
- VIS\_GEM\_EVENT
- VIS\_GEM\_EVENT\_SUMMARY
- VIS\_ENTITY\_ATTRIBUTE
- BEST\_ATTRIBUTE
- BEST\_ENTITY\_INFO
- VIS\_ENTITY\_DATA
- VIS\_ASGN\_CONFLICT\_MM\_RULE
- BEST\_ATTRIBUTE\_ALL
- BEST\_ATTRIBUTE\_ALL\_BY\_IDENTITY
- BEST\_ATTRIBUTE\_BY\_IDENTITY

**Customized views overwritten during upgrade from IBM Relationship Resolution version 4.2 and IBM Relationship Resolution version 4.1:**

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1 or IBM Relationship Resolution version 4.2:

- CONFLICT\_RPT
- BEST\_ATTRIBUTE
- SEARCH\_RESULT\_DETAIL
- BEST\_ENTITY\_INFO

**Customized views overwritten or deleted during upgrade from IBM Relationship Resolution version 4.1:**

The following views are obsolete, and are deleted when upgrading from IBM Relationship Resolution version 4.1:

- RESUME\_ATTRIBUTES
- RESUME\_NUMBERS

If any of the following views have been modified, you must repeat your modifications after upgrading from IBM Relationship Resolution version 4.1:

- CONFLICT\_RPT
- CONFLICT\_DISP
- RESUME\_CONFLICTS
- BEST\_NAME
- BEST\_ADDRESS
- SEARCH\_DISP
- QUALITY\_SUMMARY
- VIS\_RELATEDENTITIES
- VIS\_MAA\_UNASGN\_SUM
- VIS\_MAA\_ASGN\_DET
- VIS\_MAA\_UNASGN\_DET

- VIS\_ENTITY\_DISCLOSURES
- VIS\_ENTITY\_CONFLICTS
- SEARCH\_RESULT\_DETAIL
- VIS\_CONFLICT\_MM\_RULE
- SEARCH\_RESULT\_RPT

If any of the following deprecated views have been modified, you must repeat your modifications after the upgrade to the new view after upgrading from IBM Relationship Resolution version 4.1:

- ENTITY1\_DATA is replaced by VIS\_CONFLICT\_DETAIL
- ENTITY2\_DATA is replaced by VIS\_CONFLICT\_DETAIL

### **Files moved during upgrade**

In version 9.0 the following files are moved when upgrading your product installation.

**Note:** Certain directories will be retained in case customization was performed and needs to be recreated.

#### **WebSphere migrated from embedded WebSphere Application server to WebSphere Liberty:**

Old configuration retained in the ewas.81 directory. New configuration performed in the wlp directory

Allows individual environments to leverage the enhanced ability to configure Liberty.

Removes the Configuration Utility tool as Liberty has simplified configuration of WebSphere elements

#### **Start and stop scripts**

startEAS and stopEAS scripts replaced with startIIServer, stopIIServer which can be found in the bin directory.

#### **srd-home directory renamed to ibm-home**

A snapshot of srd-home from before upgrade is retained in the srd-home.81 directory.

## **Starting the installation program**

You must complete the following steps to start the product installation program.

### **Before you begin**

#### **On Microsoft Windows:**

You must copy the product installation files to a local drive. The product installation program will not run from a network drive.

#### **On AIX and Linux:**

To enable the License-print function within the Installer running in GUI mode, you need to define your printer within the X-windows subsystem that you are running on the client machine.

To enable the License-print function within the Installer running in command line mode, you need to set up a default print-queue and printer on the machine you are installing on.

### **Procedure**

1. Obtain the IBM InfoSphere Identity Insight product software .tar file.

- Unzip the .tar file to a temporary directory on a local drive of the target installation machine.

**Note:** Copy the product installation file to a local drive. The product installation program will not run from a network drive. Ensure that the .tar file is unzipped with the directory structure intact.

Ensure that the product installation file's parent directory structure of \Disk1\InstData\VM is retained if you copy the installation file to another location.

- Navigate to the \Disk1\InstData\VM directory, and run the installer program.
  - To run the installer in GUI mode, double-click or execute the installer program.

**Note:** On a Microsoft Windows system, run the installation by right clicking on the executable and choosing Run As Administrator. On a UNIX system, it is strongly advised not to run the installation as the root userid.

- To run the installer in command line mode, from the command line, append -i console when executing the installer program.

For example: prompt> ISII\_900\_aix\_ppc.bin -i console

**Note:** Copy the product installation file to a local drive. The product installation program will not run from a network drive. Ensure that the .tar file is unzipped with the directory structure intact.

Ensure that the product installation file's parent directory structure of \Disk1\InstData\VM\ is retained if you copy the installation file to another location.

Operating System platform	Installer file
Microsoft Windows Server x86_64	ISII_900_win_x64.exe
IBM AIX	ISII_900_aix_ppc.bin
Linux 64-bit for IBM System x	ISII_900_linux_x64.bin
Linux 64-bit for IBM z Systems	ISII_900_linux_s390x.bin
Linux 64-bit for IBM Power Systems - Little Endian	ISII_900_plnx_x64_le.bin

- Follow the instructions on the installation program wizard or the command line.

## Completing the product upgrade

Complete the following installation program panels to upgrade the product.

### Before you begin

On Microsoft Windows: If you have previously installed the pipeline executables as services, you must stop the pipeline services manually, and de-register them before running the upgrade.

## About this task

When upgrading your installation, the installation program will find and upgrade any previously installed product features. It will also pre-enter previously entered configuration values.

## Procedure

1. On the splash screen panel, select the language for the product install.
2. On the **Introduction** panel, review the screen.
3. On the **Licence Agreement - Installation Environment** panel, select if this installation will be used in a production or non-production environment.
4. On the **License Agreement - Software License Agreement** panel, review the license agreement and select **I accept the terms in the license agreement to continue**.
5. On the **Destination - Choose Install Folder** panel, type or browse to the directory (fully qualified path) where a supported upgradeable version of IBM Identity Insight is installed. If browsing to an installation directory, you must click the **Browse** button, then browse to the directory one level above the install directory (create the new directory if needed). Then select the install directory and click the **Open** button.
6. On the **Database Configuration - Database Information** panel, verify the configuration information for the type of database installed and enter your password.
7. On the **Database Configuration - Database Population** panel, review the screen and select the option to generate and update the database schema.
8. On the **WebSphere Configuration - WebSphere Information** panel, verify the configuration information for the WebSphere upgrade.
9. On the **WebSphere Configuration - Identity Insight Security** panel, enter the administrator username and password that will be used when accessing the Identity Insight web applications.
10. On the **WebSphere Configuration - Pipeline Input Transports** panel, verify the port number that will be used for communication between the pipeline and the web services.
11. On the **Pre-Installation Summary** panel, review the summary (click the **Previous** button if any changes are needed), and then click the **Install** button to start the product installation.

## IBM InfoSphere Identity Insight upgrade panel worksheet

This worksheet includes all of the upgrade panel settings. Use this worksheet to keep a record of your settings.

### Database information

Table 20. Database configuration - database information

Setting	Description	My setting
Database server hostname	The fully qualified hostname of the server or the IP address of the server hosting the entity database.	
Database name (IBM DB2 UDB)	The name of the entity database.	



Table 20. Database configuration - database information (continued)

Setting	Description	My setting
Database SID/Service Name (Oracle databases only)	The Oracle ID of the entity database.	
Database schema (IBM DB2 databases only)	The name of the DB2 database schema.	
User name	Administrator user name for this database. You must provide a valid user name. <b>Note:</b> If using Oracle trusted/client authentication, the OPS\$ prefix is required when entering the username. For example: OPS\$johndoe.	
Password	Administrator database password for the user name provided for this database	
Database port	The TCP/IP database port number.	

## Database population

Table 21. Database configuration - database population

Setting	Description	My setting
Create tables automatically	Generates the SQL necessary to create the database schemas and tables necessary for your installation and executes it.	(Default setting)
Generate SQL only.	Generates the SQL necessary to create and populate the tables necessary for your installation and writes to .sql files in the <installation_directory>/sql/ directory.  On Microsoft Windows: The ISQL Utility is not supported since it cannot handle large scripts. Using the ISQL utility results in a failure with an error message that reads "Insufficient memory to continue". Allowing the installer to generate and execute the SQL scripts avoids this problem altogether.	
Skip database population		

## Identity Insight User Information

Table 22. WebSphere configuration - Identity Insight Information

Setting	Description	My setting
User Name	Administrator name for the Identity Insight web applications	(Default: admin)
Password		

---

## Chapter 5. Verifying the installation

The following is a set of tasks you can complete to verify your installation was successful.

### About this task

The specific tasks you complete should match the product components you have installed.

### Procedure

1. Review the installation logs at <product installation directory>/installer/logs
2. Starting the WebSphere Liberty server.
3. Starting the pipeline.
4. Logging in to the Configuration Console.

---

## Starting the WebSphere Liberty server

To access the Analyst Toolkit applications, you must first run the bin/startIIServer batch command to start the Application Server.

### Starting the WebSphere Liberty server by using the batch command

To start the embedded WebSphere Liberty server, follow these steps.

#### Procedure

1. Navigate to the product installation's bin directory.
2. Run the batch command file.
  - For the Windows operating system, run startIIServer.bat
  - For the non-Windows operating system, run startIIServer

### Stopping the WebSphere Liberty server by using the batch command

To stop the WebSphere Liberty server, follow these steps.

#### Procedure

1. Navigate to the product installation's bin directory.
2. Run the batch command file.
  - For the Windows operating system, run stopIIServer.bat
  - For the non-Windows operating system, run stopIIServer

---

## Starting pipelines

Before a pipeline can receive and process data, it must be started. It is common to run multiple pipelines to increase data throughput or process different types of source data. Use these steps to start a pipeline or re-start a pipeline that is down.

## Before you begin

- The pipeline node hosting this pipeline must have the pipeline executable installed.
- There must be at least one pipeline configuration file configured for use with the pipeline that you want to start. You can specify the pipeline configuration file to use as part of the start pipeline command. If you do not specify the name of configuration file as part of the pipeline command, the pipeline configuration file must be located on the pipeline node, and it must match the name of the executable (pipeline name specified). For example, pipeline.ini.
- The database environment variables must be set. See Setting the environment variables.
- If you use a script to start pipelines, make sure the script is located in the same directory where you start the pipeline.
- If the *DEFAULT\_CONCURRENCY* system parameter value is set to greater than 1 or if you configured the *concurrency* parameter in the pipeline configuration file for the pipeline node, you can start multiple parallel pipeline processing threads using a single start pipeline command.

## About this task

There are three steps to starting a pipeline:

### Procedure

1. Each pipeline must have a name unique to its pipeline node, so make sure there are no other pipelines running with the same name as the pipeline you want to start. (The default pipeline name is pipeline.) To verify this, type the following command at a command prompt: `pipeline -n pipelinename -l` where *pipelinename* is the name you want to use to start the new pipeline. Make sure that this name matches the name registered in the Configuration Console for this pipeline.
2. At a command prompt, start one or more pipelines by specifying the type the appropriate pipeline command options and parameters using this format:  
`pipeline -option parameter`
3. Verify that the command worked, and the pipeline is started and active.
  - a. If your system is running on a Microsoft Windows platform and you are using the services pipeline option, you can see the status of the pipeline in the Microsoft Windows Services control panel.
  - b. If your system is running on a UNIX platform and you are using the daemons pipeline option, you can type the following command to check for running processes:  
`ps -fu userid`  
where *userid* is the identification of the user starting the pipeline.
  - c. Or at a command prompt, type the following command:  
`pipeline -n pipelinename -l`  
where *pipelinename* is the name of the pipeline you just started. If the pipeline is active, the command prompt returns Running.

---

## Logging in to the Configuration Console

Logging in to the Configuration Console allows you to view and change system configuration settings.

## Before you begin

- A Pipeline must be running before starting the Configuration Console.
- The WebSphere Liberty server must be started to enable access to the Configuration Console.

## About this task

You can log in using the **user ID** and **password** selected during installation, or a **user ID** and **password** provided by the system administrator.

## Procedure

1. In a supported Web browser, browse to: `http://<hostname_or_ip_address>:<http_port>/console`
2. In the Login window, type your user ID and password. By default, the userid is **admin**.
3. Click **Login**.

**Note:** Most configuration changes made in the Configuration Console will require that all running pipelines be stopped and restarted, to pick up the new configuration.



---

## Chapter 6. Uninstalling the product

You remove the product by running the uninstallation program.

### Before you begin

1. Stop the pipelines.
2. Stop the WebSphere Application Server.

### About this task

The uninstall function does not address the databases, schemas, and tables created during the installation process. These must be manually uninstalled.

### Procedure

1. Run the uninstall program:

Option	Description
On Windows, in GUI mode from a GUI	<ul style="list-style-type: none"><li>• Navigate to the <code>/&lt;install_location&gt;/_uninst</code> directory.</li><li>• Double-click the <code>Uninstall.exe</code> file.</li></ul>
On Windows, in GUI mode from a command line	<ul style="list-style-type: none"><li>• Change directory to the <code>/&lt;install_location&gt;/_uninst</code> directory.</li><li>• Run the <code>Uninstall.exe</code> file. prompt&gt; <code>Uninstall.exe</code></li></ul>
On Windows, in command line mode	<ul style="list-style-type: none"><li>• Change directory to the <code>/&lt;install_location&gt;/_uninst</code> directory.</li><li>• Run the <code>Uninstall.exe</code> file <b>-i console</b> option. prompt&gt; <code>Uninstall.exe -i console</code></li></ul>
On AIX and Linux, in GUI mode from a GUI	<ul style="list-style-type: none"><li>• Navigate to the <code>/&lt;install_location&gt;/_uninst</code> directory.</li><li>• Double-click the <code>Uninstall</code> file.</li></ul>
On AIX and Linux, in GUI mode from a command line	<ul style="list-style-type: none"><li>• Change directory to the <code>/&lt;install_location&gt;/_uninst</code> directory.</li><li>• Run the <code>Uninstall</code> file. prompt&gt; <code>Uninstall</code></li></ul>
On AIX and Linux, in command line mode	<ul style="list-style-type: none"><li>• Change directory to the <code>/&lt;install_location&gt;/_uninst</code> directory.</li><li>• Run the <code>Uninstall</code> file <b>-i console</b> option. prompt&gt; <code>Uninstall -i console</code></li></ul>

2. Follow the on-screen instructions.



---

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