

# **GENESYS**

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# iWD Deployment Guide

Installing iWD History Node

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iWD Deployment Guide

# Installing iWD History Node

# Prerequisites

- The environment meets the requirements that are described in *Installation Prerequisites*
- The computer on which the iWD History Node is going to be installed has network access to the computer that is hosting Genesys Configuration Server.
- You have access rights to execute **install.sh** or **setup.exe**, depending on the operating system.

# Creating the Database Schema and DAP

This is a general procedure. Work with your enterprise's database administrator to follow the specific procedure that is required by your database management system and your enterprise policies.

- 1. Ensure that the database server is running.
- 2. Log on to the database server's administrative interface (such as Oracle Enterprise Manager).
- 3. Create a new database user account (for example, iwdhistorynodeuser).
- 4. Create a new database (for example, iwdhistorynodedb).
- 5. Ensure that there is a user who has access to the iWD History Node database, who has the following permissions:
  - CREATE TABLE
  - CREATE INDEX
  - CREATE VIEW
  - CREATE TRIGGER (Oracle)
  - CREATE SEQUENCE (Oracle)
- 6. Create a Database Access Point (DAP), filling in the usual mandatory settings on the **General** and **DB Info** tabs. This DAP must have a **[jdbc]** section in the configuration application options, with the following parameters:

#### Microsoft SQL

- driver-class = "com.microsoft.sqlserver.jdbc.SQLServerDriver"
- url = "jdbc:sqlserver://<hostname>:<port>;databaseName=<history\_node\_DB>;"
- validation-query = "select 1"

#### Oracle

• driver-class = "oracle.jdbc.OracleDriver"

- url = "jdbc:oracle:thin:@//<hostname>:<port>/<history node DB>"
- validation-query = "select 1 from dual"

#### **Postgres**

- driver-class = "org.postgresql.Driver"
- url = "jdbc:postgresql://<hostname>:<port>/<history node DB >"
- validation-query = "select 1"

## On Windows

#### **Prerequisites**

• Installation Packages have been installed.

#### **Purpose**

To install the iWD History Node application on the Windows platform. The current procedure assumes that the application already exists in Configuration Server—the required steps are described in iWD History Node Application Definition.

#### Procedure

- 1. Locate and double-click **setup.exe** in the iWD History Node directory of the iWD DVD.
- 2. The iWD History Node Installation Wizard opens. Click Next in the Welcome screen.
- 3. In the **Connection Parameters** to the Configuration Server screen, enter the login details to connect to Genesys Configuration Server and then click **Next**:
  - Host name—The host of Genesys Configuration Server.
  - **Port**—The port that is used by Genesys Configuration Server.
  - **User name**—The user name of the Person (or User) as defined in Genesys Configuration Manager or Genesys Administrator.
  - Password—The password that is associated with the Person (or User).
- 4. From the list of available choices, choose the iWD History Node application that you want to install and click **Next**.
- 5. Choose the destination location for iWD History Node.
- 6. Click Next.
- 7. In the **Ready to Install** screen, click **Install** to begin the installation of iWD History Node.
- 8. When installation has been completed, click Finish.

#### **End of procedure**

## On UNIX

## Prerequisites

• Installation Packages have been installed.

#### **Purpose**

To install the iWD History Node application on the UNIX platform. The current procedure assumes that the application already exists in Configuration Server—the required steps are described in iWD History Node Application Definition.

#### Procedure

- 1. Locate the install directory and enter ./install.sh.
- 2. When the following output is displayed, enter the required information, as indicated at each prompt.

```
^st Welcome to the Genesys 9.0 Installation Script ^st
Installing iWD History Node, version 9.0.000.xx
Please enter the hostname or press enter for "xx-yy-zzzzzz" =>
Please enter the following information about your Configuration Server:
Configuration Server Hostname =>xx-yy-zzzzzz
Network port =>8888
User name =>default
Password =>
Please choose which application to install:
1 : iwd history 1
2 : iwd mgr 1 server
=>1
Press ENTER to confirm /genesys/iwd history 1 as
the destination directory or enter a new one =>
Extracting tarfile: data.tar.gz to directory: /genesys/iwd_history_1
config/
config/iwd history.yaml
iwd_history.jar
iwd_history.sh
iwd history service.sh
lib/
Installation of iWD History Node, version 9.0.000.xx has completed successfully.
```

# iWD History Node Application Definition

- Log into Genesys Administrator or GAX and import the iWD History Node Application template from the iWD DVD. Double-check to see whether metadata were correctly imported. This is important for definition of roles in Genesys Administrator. For GAX, importing the IP automatically also imports privileges. In that case, metadata are options since you would manage roles using GAX in those circumstances.
- 2. Create a new **Application** object based on the iWD History Node Application template.
  - To begin the create procedure, navigate to Configuration > Environment > Applications and click New.
  - 2. On the General tab:
    - 1. Enter a name for the iWD History Node.
    - 2. Select the application **Template**—This must of type:
      - Third Party Server for releases prior to 9.0.005.
      - Genesys Generic Server for release 9.0.005+.
    - 3. Version and Is Application Server boxes are pre-selected according to the template type.
    - 4. Enter the name of the **Tenant** for which History Node will be working.
    - 5. **State Enabled**—If selected, indicates that the object is in regular operating condition and can be used without any restrictions.
  - 3. On the **Connections** tab:
    - 1. Add a connection to the Configuration Server. If you have both primary and backup Configuration Servers, add a connection only to the primary.
    - 2. Add a connection to the History Node database's Database Access Point (DAP).
    - Add a connection to an Event Logger DAP in one of the following ways: Either:
      - Add a connection to an existing Interaction Server Event Logger DAP. You can use either JMS or Kafka Event Logger;

Or;

- Create a new Event Logger DAP:
- 1. To create a JMS Event Logger DAP:
  - Import the iWD\_IXN\_Logger\_JMS\_DAP template from the {HISTORY NODE INSTALLATION DIR}/event logger templates folder.
  - 2. Create a new application based on the **iWD\_IXN\_Logger\_JMS\_DAP** template.
  - 3. Redefine required parameters according to specific IMS vendor documentation:
    - ActiveMQ
    - IBMMQ
    - Tibco
- 2. To create a Kafka Event Logger DAP:

- Import the iWD\_IXN\_Logger\_Kafka\_DAP template from the {HISTORY NODE INSTALLATION DIR}/event logger templates folder.
- 2. Create a new application based on the **iWD\_IXN\_Logger\_Kafka\_DAP** template.
- Redefine the following required parameters from the [kafka-settings] section in the Options tab:
  - **servers** = <comma-separated list of the Kafka broker(s) to connect to initially>
- 4. Refer to Using Kafka Event Logger with History Node for detailed information.

This Event Logger must use the same JMS/Kafka instance as Interaction Server Event Logger uses.

- 3. Add the DAP to the **Connections** tab of the Interaction Server application.
- 3. Add a Redelivery Policy.

## **Important**

The order of events must not be broken in case of redelivery or database failure.

- Example for ActiveMQ:
  - Update the JMS DAP configuration object's jms-provider-url option under the logger-settings section by adding the following parameters (highlighted in bold) to the URI:

```
jms-provider-url =
```

tcp://<hostname>:<port>?jms.redeliveryPolicy.maximumRedeliveries=-1&jms.rede
liveryPolicy.redeliveryDelay=0&jms.redeliveryPolicy.initialRedeliveryDelay=0

- IBMMQ and Tibco do not require additional redelivery settings. Redelivery Policy should work by default.
- Refer to the vendor specific documentation for other IMS.
- 4. Add other connection details:
  - 1. If you need to, specify the port ID and its number that iWD History Node will connect to.
  - Optionally, specify the **Connection Protocol**—simple or addp
  - Optionally, specify the **Local Timeout** and the **Remote Timeout**—Leave empty. These values are required only if you specified addp in **Connection Protocol**. This value specifies the heartbeat polling interval, measured in seconds, on the client side. This indicates how often the client application sends polling signals to the server application. To enable this functionality, specify any integer as the value.
  - 2. Specify a Trace Mode—The connection trace mode used between a server and its client.
    - **Trace Is Turned Off**—Select if you do not want either the client or the server application to print ADDP-related messages in its log.
    - **Trace On Client Side**—Select if you want the client application to print ADDP-related messages in its log.
    - **Trace On Server Side**—Select if you want the server application to print ADDP-related messages in its log.

- Trace On Both Sides—Select if you want both the client and server applications to print ADDPrelated messages in their log.
- 3. Specify **Transport Protocol Parameters**—Any text, usually key/value pairs, separated by a semicolon (;). This property is application-specific.
- 4. Specify **Application Parameters**—Any text, usually key/value pairs, separated by a semicolon (;). This property is application-specific.

## **Important**

These connection parameters are effective for Configuration Server and ignored for DAPs.

## **Important**

JDBC and JMS drivers do not require any configuration, but they are not delivered in the iWD software distribution artifacts. However their .jar files must be put into the **{HISTORY NODE INSTALLATION DIR}/lib** directory.

- 5. The **Ports** tab lists communication ports used by the clients of an application to connect to a server. To support specific high-availability configurations, more than one server can be registered on the same port within the same host. Otherwise, do not assign the port number to any other server on the same host. Click **Add** to add a connection. You need to add two ports:
  - · default—Provides History Node's main functionality.
  - admin—Provides administrative tasks.
- 6. In the **Application Options** tab in the **[IWD]** section, set the value of these two options:
  - process-dm—true
  - process-gtl—true

## **Important**

See also the 'Configuring History Node to Process Single Event Type' section of the iWD History Node Configuration topic.

- 7. Ignore the **Options** tab.
- 8. Click **Save** to save the Application object.

# Creating the Database Schema

To create the History Node database schema, perform the migration steps described in iWD History Node Database Schema Migration to ensure that the database schema is created correctly.

# Installing an iWD History Node Cluster

- 1. Create an application for every History Node application in the cluster as described in *iWD History Node Application Definition*.
- 2. Create a new **Application** object based on the Application Cluster template.
  - To begin the create procedure, navigate to Configuration > Environment > Applications and click New.
  - b. On the **General** tab:
    - i. Enter a name for the iWD History Node Cluster.
    - ii. Select the application **Template**—This must of type Application Cluster.
  - c. On the **Connections** tab, add connections to all History Node applications working in this cluster.

# Configuring TLS

## **Important**

To configure TLS, please refer to the Configuring TLS for iWD guide.