

# **GENESYS**

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# iWD Deployment Guide

Installing Runtime Node

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iWD Deployment Guide

# Installing Runtime Node

This section describes the procedures that are used to install iWD Runtime Node.

## Prerequisites

The iWD Runtime Node must be installed as a standalone Java application server before it can run iWD services. When deploying services for multiple solutions, each solution should have its own dedicated Runtime Node and the installation procedure must be repeated for each of them.

- The environment meets the requirements that are described in Installation Prerequisites.
- The computer on which the iWD Runtime Node is going to be installed has network access to the computer that is hosting Genesys Configuration Server, Interaction Server and Message Server databases.
- You have access rights to execute **install.sh** or **setup.exe**, depending on the operating system.
- For upgrades from 8.5.1 to 9.0.0:
  - iWD Runtime Node is stopped.
  - The previous version of iWD Runtime Node is uninstalled.

## **Important**

Genesys recommends 12GB memory for the Runtime Node application.

## On Windows

## Purpose

To install the iWD Runtime Node application on the Windows platform.

## Summary

Installation of iWD Runtime Node saves the required database scripts and Kettle files in the working directory. For more information about the database go to the Create the Data Mart Database section. The current procedure assumes that the application already exists in Configuration Server. If not, see the required steps in the iWD Runtime Node Application Definition section.

## **Important**

If you are upgrading, ensure that you have uninstalled the previous version and proceed with the current installation procedure. Also make sure not to skip the Application Definition step, because new versions might deliver new options.

#### Procedure

- 1. Locate and double-click **setup.exe** in the iWD Runtime Node directory of the iWD DVD.
- 2. The iWD Runtime 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. Select application from proposed list. Those selection will provide details for rest of dialog.
- 5. Click Next.
- 6. The installer suggests an installation path. Change it if needed, then accept by clicking Next'.
- 7. In the **Ready to Install** screen, click **Install** to begin the installation of iWD Runtime Node.
- 8. When installation has been completed, click Finish.
- 9. The installed JavaServerStarter.ini file should not require any updates but you can review it.
- 10. The appropriate Windows service should be created and should appear on the list of Windows services. This allows you to start/stop it.
- 11. Turn on any of the plug-ins by editing the plugins.properties file, if needed.
- 12. Start the iWD Runtime Node Windows service.

#### **End of procedure**

## On UNIX

#### Purpose

To install the iWD Runtime Node application on the UNIX platform.

## Summary

Installation of iWD Runtime Node saves the required database scripts and Kettle files in the working directory. For more information about the database go to the Create the Data Mart Database section. The current procedure assumes that the application already exists in Configuration Server. If not, see the required steps in the iWD Runtime Node Application Definition section.

## **Important**

If you are upgrading, ensure that you have uninstalled the previous version and proceed with the current installation procedure. Also make sure not to skip the Application Definition step, because new versions might deliver new options.

#### Procedure

- 1. As the iWD Runtime Node user, browse to 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 Runtime Node, version 9.0.XXX.XX
Please enter the hostname or press enter for "HOSTNAME" =>
Please enter the following information about your Configuration Server:
Configuration Server Hostname => CONFIGURATION SERVER HOSTNAME
Network port =>CONFIGURATION SERVER PORT
User name =>CONFIGURATION SERVER USERNAME
Password =>CONFIGURATION SERVER PASSWORD
Please choose which application to install:
1 : iWD_Runtime_Node
Please enter full path of the destination directory for installation =>/YOUR_PATH/iwd/
YOUR APP NAME/
Extracting tarfile: data.tar.gz to directory: /YOUR PATH/iwd/YOUR APP NAME/
etl/
etl/plugins/
etl/plugins/all plugins example.properties
etl/plugins/plugins.properties
iWD Runtime Service.sh
iwd_dm.jar
iwd runtime.sh
sql scripts/
sql scripts/mssql/
sql_scripts/mssql/iwd_dm_mssql.sql
```

```
sql_scripts/oracle/
sql_scripts/oracle/iwd_dm_oracle.sql
```

Installation of iWD Runtime Node, version 9.0.XXX.XX has completed successfully.

- 3. Turn on any of the plug-ins by editing the **plugins.properties** file, if needed.
- 4. Review and make changes, if needed, to the **iwd\_runtime.sh** or **iWD\_Runtime\_Service.sh** file, for example, providing flags to Java. White characters (such as spaces) are not supported in the script variables—for example, DM APPL=iWD Runtime Node is illegal.

## **Important**

Please note that the path must be provided in the application configuration.

5. Start the iWD Runtime Node process.

## iWD Runtime Node Application Definition

- 1. Log into Genesys Administrator or GAX and import the iWD Runtime Node Application template from the iWD DVD.
- Create a new **Application** object based on the template. For upgrades from 8.5.1 to 9.0.x you can either create a new application in place of the previous one or simply update the application by using the new template. To begin the Create procedure, navigate to **Configuration > Environment > Applications** and click **New**.
- 3. On the General tab:
  - a. Enter your chosen name, for example, iWDRuntimeSolutionName. Using spaces is not recommended.
  - b. Select the application **Template**—Use type iWD Runtime Node.
  - c. **Version**, **Tenant** and **Is Application Server** boxes are pre-selected according to the template type.
  - d. Fill in fields **Working Directory**, **Command Line** and **Command Line Arguments** per the example below:

Attribute name	Windows	Unix
Working Directory	C:\Program Files (x86)\GCTI\ iWD Runtime Node	/IWD_APP_PATH/ iWDRuntimeNode/
Command Line	JavaServerStarter.exe	/INIT_PATH/ iWD_Runtime_Service.sh
Command Line Arguments	-host YOUR_CFG_SRV_HOST -port YOUR_CFG_SRV_PORT -app YOUR_APP_NAME -service YOUR_SERVICE_NAME	start

e. Choose the host where the application will run.

#### f. Optional fields

- Certificate—The security certificate value. In Windows, select the certificate value from the list of installed certificates. In UNIX, enter the full path to the <serial\_#>\_<host\_name>\_cert.pem file.
- Certificate Description—An optional description of the Certificate.
- Certificate Key—The full path to the <serial\_#>\_<host\_name>\_priv\_key.pem file of
  the security certificate key. This field is used only if Genesys Security is deployed on UNIX;
  otherwise this field is empty.
- **State Enabled** If selected, indicates that the object is in regular operating condition and can be used without any restrictions.
- Login As Account
   — Select a user account that has full access to the relevant Tenant, as
   well as to Applications, Applications Templates and Switches. These fields are displayed
   after the application is created.

## **Important**

The Load Config service will need to read certain settings from your Tenant and parent tenant (if the latter exists). For example, it needs to have read permission to all applications involved in the Solution, including Capture Points and their application templates. The Statistics Adapter service will need to update the options in the Stat Server application, as well as create Virtual Queue objects under Multimedia Switch, and it does this through the iWD Runtime Node application that has been configured in Configuration Server. For this reason iWD Runtime Node should be configured so that it can make the required changes to both the Stat Server application and Multimedia Switch on behalf of a user with appropriate security permissions.

#### 7. On the **Connections** tab, add:

- A Data Mart DAP to point at the database that will be used. It should contain the following parameters:
  - jdbc / url = "jdbc:sqlserver://<hostname>:<port>;databaseName=<Datamart\_DB>" (example for Microsoft SQL)
- History Node—The iWD History Node application defined in Installing iWD History Node.
- Configuration Server—If you have both primary and backup Configuration Servers, add a connection only to the primary.
- A Configuration Server DAP to point to Configuration Server's database. It should contains the following parameters:
  - iWD / role = "cfgserver".
  - jdbc / url = "jdbc:sqlserver://<hostname>:<port>;databaseName=<config\_server\_DB>" (example for Microsoft SQL).
- 8. 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 ports. You need to add two ports:
  - webservice—With http connection type. This will be used to communicate between the GAX Data Mart Dashboard and iWD Runtime Node.

- admin—Provides administrative tasks.
- 9. On the **Tenants** tab choose only one Tenant where your solution is located.
- 10. Ignore the **Options** tab.
- 11. Ignore the **Application Options** tab.
- 12. Click **Save** to save the Application object.

If you have re-created the iWD Runtime Node application you should go to **GAX > Configuration > Data Mart** section to confirm that the selected application for your solution is correct and has a suitable configuration.

## **Important**

Any changes made to application settings require iWD Runtime Node restart in order to be applied.

## Create the Data Mart Database

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.

#### **Prerequisites**

- · iWD Runtime Node must be installed.
- A Database Access Point (DAP) application with connection type JDBC needs to created.

## Important

Remember to set up the port in that DAP to the value of the database server port—for example, for MSSQL the default port is 1433. This number needs to be set up as the port in the DAP configuration.

#### **Procedure**

- 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, iwddatamartuser).
- 4. Create a new database (for example, iwddatamartdb).

- 5. Ensure that there is a user, who has access to the Data Mart database, who has the following permissions:
  - CREATE TABLE
  - CREATE INDEX
  - CREATE VIEW
  - CREATE TRIGGER (Oracle)
  - CREATE SEQUENCE (Oracle)
- 6. The iWD Data Mart database will be initialized automatically the first time the Database Service and Kettle ETL Service are started. If the Database Service's **Auto Sync** option is selected, this initialization is automatic, and the Database Service will also check for updates to the iWD Data Mart database whenever a new version of iWD Data Mart is installed. The **Auto Sync** option will also initialize ETL plug-ins.

## **Important**

You can find the **Auto Sync** option by following this path: **GAX** (with iWD plugin installed) -> **Configuration** -> **Datamart** -> **YOUR\_SOLUTION**-> **Database**. Any changes to these options require iWD Runtime Node to be restarted take effect.

## Using Data Mart Database with Genesys Historical Reporting

The previous reporting product, Genesys Interactive Insights (GI2), is not supported by iWD 9.0. GI2 has entered End of Life (EOL) phase for all versions. Please refer to the Interactive Insights product page for detailed information.

For information about built-in iWD historical reporting product, please refer to the CX Insights for iWD reports guide.

If you will be using the CX Insights for iWD product for historical reporting based on the iWD Data Mart, you must enable several aggregates that are not enabled by default. Please read Before using the iWD reports for detailed information.

## High Availability for iWD Runtime Node

#### Overview

iWD Runtime Node supports High Availability in cold standby mode. That means for every iWD Runtime Node you should configure a redundant application which is manually brought up in case of outage of a given iWD Runtime Node.

#### Configuration of a redundant iWD Runtime Node

Create a new Application as described in iWD Runtime Node Application Definition or clone an

existing one. Make sure that, for the new redundant application and the primary one:

- They have the same Connections, Permissions and linked Tenant.
- They have the same Options and Application Options, except for logging options and [settings] / etl-scripts-directory.
- The ETL scripts pointed to in option [settings] / etl-scripts-directory are the same.

## **Important**

During deployment on different servers, the locations of ETL scripts and written logs might differ. However, it is important to have the same scripts distributed across these servers.

## Manual switch-over procedure

- 1. In GAX, navigate to Configuration > intelligent Workload Distribution > Datamart > [tenant\_name] > [solution\_name].
- 2. On the **General** tab, change the Application to the corresponding redundant iWD Runtime Node application.
- 3. Save your changes.
- 4. Make sure that iWD History Node is listed within the connections of the selected iWD Runtime Node.
- 5. Start iWD Runtime Node.

## Configuring TLS

## **Important**

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