Sync4j

Sync4j Server DM Administration Guide
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1. Introduction

This document is intended for developers and administrators who have to manage Sync4j Server DM. The document will guide you through the following items:

- Installation of the Sync4j Server DM
- Starting and stopping Sync4j Server DM

Related Documents

The following documents are related to this quick start guide:

- Sync4j Server DM Programming Guide, this guide provides more detail on how to develop your own extenstions for the Sync4j Server DM.

1.1. Definitions

This section provides information on how to interpret the use of references to directories.

INDICATOR	meaning
<SYNCSERVER_HOME>	The directory where the syncserver implementation resides. For a unbundled installation this is **Sync4j/server-dm.**
<J2EE_HOME>	This is the directory where the application server resides. For a jBoss installation this is the directory where jBoss resides.
<JAVA_HOME>	This is the directory where the Java Development Kit is installed. For more information is refered to the JDK documentation.

1.2. Download the Sync4j Server DM

The Sync4j homepage (http://www.sync4j.org) provides you general information about the project, documentation, support, development and downloads. Click for the downloads on the 'Download'.

First a selection of stable release or developer release is needed.
- The **stable version** is tested for the provided feature set.
- The **developer version** is work in progress, but may have additional features you also need. It must be noted that a released developer release will work for the common use of the Syncserver, it may have still unknown problems.

About the Sync4j Server DM only a developer version is provided as unbundled version.

2. Installation of a Default Sync4j Server DM

This section describes how to get you a Sync4j Server DM up and running.

2.1. Installation of the required packages for the Sync4j Server DM

Java Development Kit

A Java Development Kit 1.4.x must be installed and can be downloaded from http://java.sun/com. For installation is refered to the installation produre that comes with your JDK.
Ensure the JAVA_HOME environment variabale is set (it should point to the top directory of the JDK) because it is required by the Sync4j Server DM.

Application Server

An application server must be installed and one of the following application servers is suggested:
  • JBoss 3.0.x
  • JBoss 3.2.x
Other application server may work, but the Sync4j Server DM has not been tested with them. For the specific installation and configuration procedures of the application server is refered to the documentation of that application server.
Ensure your J2EE_HOME environment variabale is set (it should point to the top directory of the application server) because it is required by the Sync4j Server DM.

JDBC compatible database

A JDBC compliant database must be installed, for installation and configuration is refered to the documentation of the database of your choice. A good choice could be the PostgreSQL database which is also used by the developers of Sync4j.
The usage of the database by Sync4j Server DM requires that you have created a database and a user that can access this database with the granted permissions for connecting, creating, deleting, reading and and writing tables.
Default values used by the Sync4j Server DM are, database=sync4j and username=sync4j, but you are free to choose which ever names you like, but remember them for later during the Sync4j Server DM installation.

2.1.1. Installation of the Sync4j Server DM

The Sync4j Server DM is a component of your application server which perform the SyncML Server functionality.

To install Sync4j Server DM, follow the procedure below:

1. Unpack the downloaded Sync4j Server DM in a directory of your choice. We will refer to that directory as SYNCSERVER_HOME and change to that directory

    shell) **cd <SYNCSERVER_HOME>**

2. Customize *install.properties* to reflect your system.
    Two configuration parts are needed to be correct,
    *   the server-name property that must be the URL via which your clients will access the SyncServer. If you client is on the same system you can use the localhost as hostname of the URL.
    *   your choosen JDBC compliant database must match the properties 'dbms', 'jdbc.classpath',' jdbc.driver', 'jdbc.url', 'jdbc.user', 'jdbc.password''.
3. **JBOSS:** Verify that your environment variables JAVA_HOME and J2EE_HOME point respectively to your JDK/JRE home and to your JBoss home.

4. Deploy/install the Sync4j Server DM. During the installation you will be asked if you want to create the database for the server. If this is your first (from scratch) installation you MUST respond with yes ('y').

    JBOSS 3.0.x
    (for windows)
    shell dir=<SYNCSERVER_HOME>) **bin\install.cmd jboss**

    (for UNIX)
    shell dir=<SYNCSERVER_HOME>) **bin/install.sh jboss**

    JBOSS 3.2.x
    (for windows)
    shell dir=<SYNCSERVER_HOME>) **bin\install.cmd jboss32**

    (for UNIX)
    shell dir=<SYNCSERVER_HOME>) **bin/install.sh jboss32**

NOTE: The Sync4j Server DM database structure is a bit different and not compliant with Sync4j Server DS database. It's suggested to install the DM on other database schema.

3. Starting and Stopping Sync4j Server

This section explains how to start and stop Sync4j Server DM.

The way Sync4j Server DM is started and stopped usually depends on how the application server on top of which SyncServer is running starts and stops J2EE applications. In this section, we assume Sync4j Server DM is installed as a standalone application, therefore when SyncServer is stopped, the entire application server is stopped and when it is started, the entire application server is started.

3.1.1. Starting Sync4j Server DM

To start the unbundled version one should have installed the Sync4j Server DM as was documented in the previous section and have made sure that the environment is created correctly.

1. The following commands would start the Sync4j Server DM.

    (for windows)
    shell dir=<SYNCSERVER_HOME>) **bin\start.cmd**

    (for UNIX)
    shell dir=<SYNCSERVER_HOME>) **bin/start.sh**

2. Point the browser to *http://<server>:<port>/dmdemo* to check that Sync4j Server DM is properly started (you should get the DM Demo welcome page).

3.1.2. Stopping Sync4j Server

Stopping the Sync4j Server depends on the application server used.

JBOSS

If it is running in foreground, pressing Ctrl+C should be sufficient: otherwise you have to discover the process id and kill it with an operation system command or tools.

Tomcat 5.0.x

    (for windows)
    shell dir=<CATALINA_HOME>) **bin\shutdown.cmd**

    (for UNIX)
    shell dir=<CATALINE_HOME>) **bin/shutdown.sh**