Building Kaa server from source

This page describes how to build the Kaa server from the source code available on GitHub.

Before building the Kaa server from source, ensure that Oracle JDK 8 and Apache Maven are installed on your machine.

Fetching source code

It is allowed to use any Git client to fetch the Kaa source code from the repository.

Set up your Git configuration (at least the username and email) and download Kaa repository as follows:

```
$ git clone https://github.com/kaaproject/kaa.git
```

To build Kaa node Debian/RPM packages, execute the following command.

> **NOTE**
> The Debian build will work correctly on both Linux and Windows operation systems, while the RPM build will work only on Linux operated machines with the RPM tool installed.

> **NOTE**
> For the mvn command, the build number and git commit variables are set to emulate Jenkins build variables that are substituted automatically on the build machine.

> **NOTE**
> Please add "-DskipTests" suffix to the mvn command in order to skip execution of tests and speed up build process.

Available maven profiles

Maven profile	Description
build-rpm	As implied in the profile name, it will force to generate .rpm packages. This is useful if you are going to install Kaa on .rpm based Linux distribution (Red Hat Linux, Oracle Linux, etc.)
cassandra-dao	Forces Kaa to use Cassandra NoSQL storage. If none is set MongoDB used by default.
mongo-dao	Forces Kaa to use MongoDB NoSQL storage. Enabled by default.
compile-gwt	Compiles administration user interface. Can be skipped during regular builds.
compile-client-c	Compiles C endpoint SDK and executes tests.
compile-client-cpp	Compiles C++ endpoint SDK and executes tests.
compile-client-objc	Compiles Objective-C endpoint SDK and executes tests. Compiling only possible on OS X and CentOS operation systems.
compile-thrift	Forces Thrift compiler to generate code from thrift files.
cassandra	Compiles Cassandra log appender.
cdap	Compiles CDAP log appender.
couchbase	Compiles Couchbase log appender.
kafka	Compiles Kafka log appender.
oracle-nosql	Compiles Oracle NoSQL log appender.
jenkins	Forces Kaa to execute integration tests.
license	Forces Kaa to use Maven License plugin.

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⚠️ **compile-client-*** profiles are optional. All endpoint SDKs will be available in Kaa node by default. This profiles are used only for verification of endpoint SDK build during development.

Build artifacts

The following command can be used to browse the Kaa node build artifacts in case of successful build.

Installing Kaa

Follow the official installation guide.