

NDFS Java wrapper HOWTO:

Here is what you need to build the java wrapper:

Prerequisites:

1. Before starting these steps, you must have compiled your Smartflow2 project.
2. Add this java folder into your SF2_ROOT directory.
3. Windows users must define a JAVA_HOME environment that point to the installation folder of the Java development kit (JDK).

Let's assume that your Smartflow2 project is located in the folder SF2_ROOT

Building :

Step 1: C++/JNI

You can choose between two methods to build the JNI wrapper:

1. Using the Xcode or Visual Studio IDE (OSX and Windows)

Xcode:

Load the solution file for the Smartflow2 (SF2_ROOT/sf2.xcodeproj)
Select the "Smartflow2java" target and make sure that the "Active Configuration" is set to "Release".
Build the "Smartflow2java" target.

Visual Studio:

Load the solution file for the Smartflow2 (SF2_ROOT/sf2.sln)
Select "Release" as "Active solution configuration"
Build the "Smartflow2java" solution.

2. Traditional Make configuration (Linux and OSX)

Step 2: Java

Using Netbeans open and build the project named "smartflow2" located at SF2_ROOT/java.

Examples:

The folder SF2_ROOT/java/demo contains two java examples that use the wrapper to access the NDFS C++ API:

Provider : provides a flow of "double".

Consumer: consumes the flow and display the data on the standard output.

Build:

Using Netbeans, open and build the two projects : "SF2_ROOT/java/demo/consumer" and "SF2_ROOT/java/demo/provider".

Run:

1. Run the "sf2d" server.
2. Run the provider : `java -Djava.library.path=$SF2_ROOT/lib -jar $SF2_ROOT/java/demo/Provider/dist/Provider.jar`
3. Run the consumer: `java -Djava.library.path=$SF2_ROOT/lib -jar $SF2_ROOT/java/demo/Consumer/dist/Consumer.jar`