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First Progress Report on An interface between the Java VM and the Distribution Subsystem
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Short Description

This deliverable gives a brief report on the activity in WP3: Implementation of a Java API for the Distribution Subsystem during the first 18 months.

The Distribution Sybsystem (DSS) is a truly language-independant middleware and thus provides transparent distribution support to arbitrary programming languages.

The principal goal of this workpackage is to deliver an interface between the Java VM and the DSS with provides the same functionality as the DSS API (the DSS middleware itself is written in C++). We call this interface JDSS for Java DSS API.

We first studied the programming model provided by the DSS API and the Java Native Interface (JNI) API which permits to integrate Java programs with C/C++ code. Concretely the JDSS is organized in two layers coded respectively in C++ and Java; making both environment work together represents the main technical challenge of this workspace.

We started a first implementation of the JDSS based on an early version of the DSS and then adapted it to version 0.6 which introduced many changes both in the API and in the implementation of the DSS.

In the last months we concentrated our efforts on testing the JDSS software and rewriting some test examples provided with the DSS package.

Partner owning:	EPFL
Partner contributing:	EPFL
Available to:	Public