Choco3 Documentation

Release 3.2.0

Charles Prud'homme, Jean-Guillaume Fages

March 25, 2014

Contents:

CHAPTER

ONE

INSTALLING CHOCO 3.2.0

Choco 3.2.0 is a java library based on Java 7. First of all, you need to be make sure that the right version of java is installed.

1.1 Update the classpath

Simply add the jar file to the classpath of your project (in cli or in your favorite IDE).

```
$ java -cp .:choco- |version|.jar my.project.Main
```

1.2 Which jar to select ?

We provide a zip file which contains the following files:

apidocs-3.2.0.zip Javadoc of Choco-3.2.0

choco-solver-3.1.1-jar-with-dependencies.jar An ready-to-use jar file which contains *choco-environment* and *choco-solver* artifacts and dependencies; it enable modeling and solving CP problems.

choco-solver-3.2.0-sources.jar The source of the artifacts *choco-environment* and *choco-solver*.

choco-parser-3.2.0.jar A jar file base on the artifact *choco-parser* without any dependency; it should be selected to input FlatZinc files.

choco-parser-3.2.0-jar-with-dependencies.jar A ready-to-use jar file which contains the following artifacts: *choco-environment*, *choco-solver* and *choco-parser* and the required dependencies. **This should be the default choice**.

choco-samples-3.2.0-sources.jar The source of the artifact *choco-samples* made of problems modeled with Choco.

1.3 As a Maven Dependency

Choco is build and managed using Maven3. To declare Choco as a dependency of your project, simply update the `pom.xml` of your project by adding the following instruction:

```
<dependency>
  <groupId>choco</groupId>
  <artifactId>choco-solver</artifactId>
  <version>|version|</version>
</dependency>
```

You need to add a new repository to the list of declared ones in the `pom.xml` of your project:

```
<repository>
  <id>choco.repos</id>
  <url>http://www.emn.fr/z-info/choco-repo/mvn/repository/</url>
</repository>
```

1.4 Compiling sources

As a Maven-based project, Choco can be installed in a few instructions. First, run the following command:

```
$ mvn install -DskipTests
```

This instruction downloads the dependencies required for Choco3 (such as the trove4j and logback) then compiles the sources. The instruction `-DskipTests` avoids running the tests after compilation (and saves you a couple of hours). Regression tests are run on a private continuous integration server.

Maven provides commands to generate files needed for an IDE project setup. For example, to create the project files for your favorite IDE:

IntelliJ Idea `$ mvn idea:idea`

Eclipse `$ mvn eclipse:eclipse`

CHAPTER

TWO

OVERVIEW OF CHOCO 3.2.0

CHAPTER

THREE

DECLARING VARIABLES

CHAPTER

FOUR

POSTING CONSTRAINTS

CHAPTER

FIVE

FINDING SOLUTIONS

St

todo

todo

todo

todo

CHAPTER

SIX

OVERVIEW OF CHOCO 3.2.0

todo

todo

todo

todo

todo

todo

todo

todo

todo

todo

todo

todo

CHAPTER

SEVEN

INDICES AND TABLES

- *genindex*
- *modindex*
- *search*