

Tuscany Distributions

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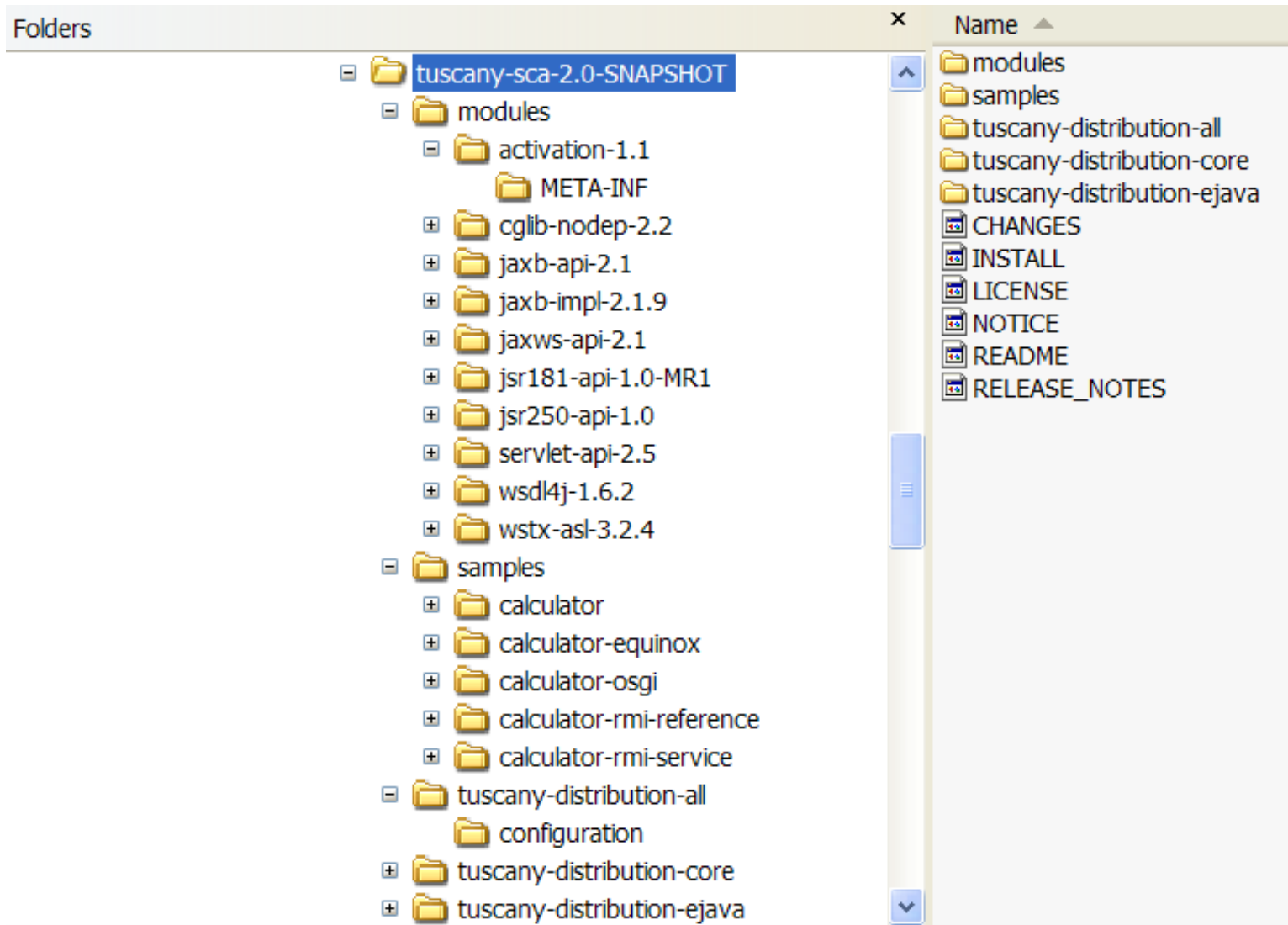
Overview

- A distribution is a downloadable archive that can be extracted into the file system and it serves as a local repository to the artifacts for Tuscany, including the modules, samples and configurations.
- We plan to ship multiple distributions in Tuscany based on the functional features, such as core, webservice, web20, ejava, process and all.

Distributions for 2.x M1

- api
 - the API modules, such as sca-api, node-api
- core (extends from api)
 - core modules, implementation.java and osgi
- ejava (extends from ejava)
 - binding.rmi
- all (We'll ship this one only for M1)
 - api + core + ejava

Distribution Structure



The modules

- The “modules” folder contains the Tuscany modules and 3rd-party dependencies.
 - An OSGi bundle is shipped as-is as a jar file under modules folder
 - `modules/tuscany-assembly-2.0-SNAPSHOT.jar`
 - A plain jar is wrapped inside a sub folder with generated
 - `modules/wsd4j-1.6.2/META-INF/MANIFEST.MF`
 - `modules/wsd4j-1.6.2/wsd4j-1.6.2.jar`
- The “modules” structure is simple for both JSE and OSGi.

Grouping modules

- Each distribution represents a group of modules which deliver certain level of functional capabilities.
- The distribution is a maven pom project that lists the required dependencies
- The distribution-specific configurations:
 - All the artifacts are placed under the a sub folder named after the distro
 - A manifest.jar that configures the classpath
 - A tuscan.target file that defines the target platform
 - A configuration folder that defines the set of bundles to be installed/started for Equinox

<distro-name>/manifest.jar

- A manifest.jar is generated for each distribution to configure the classpath in the META-INF/manifest.mf
- To run a distro:
 - `java -jar tuscanany-distribution-core\manifest.jar`

<distro-name>/configuration

- A config.ini file is generated under <distro-name>/configuration. It lists a set of OSGi bundles to be installed/started.
- To bootstrap an Equinox runtime, run:
 - `java -jar modules\osgi-3.3.0-v20070530.jar -console -configuration tuscan-distribution-core\configuration`

Use a distro in the sample

- **Maven dependency:**

```
<dependency>  
  <groupId>org.apache.tuscany.sca</groupId>  
  <artifactId>tuscany-distribution-core</artifactId>  
  <version>2.0-SNAPSHOT</version>  
  <type>pom</type>  
</dependency>
```

- **ANT classpath:**

```
<classpath>  
  <fileset dir="../../tuscany-distribution-core">  
    <include name="manifest.jar" />  
  </fileset>  
</classpath>
```