SysML

v. 0.10.1-SNAPSHOT

Project Documentation

Eclipse foundation **2017-01-05**

Table Of Content

1 Developer

1.1 Download

The developer guide could be downloaded as a pdf here

1.2 Requirements

1.2.1 Eclipse

Use Eclipse, at least Neon version

1.2.2 Maven

Use Maven 3.3.1 at least

1.2.3 Eclipse plugins

Install M2e plugin in your Eclipse

Install Tycho Configurator as an additional maven connector

No specific extra from papyrus

1.2.4 SysML

Have a look to the normative document of OMG: Embedded norm

1.2.5 Check your installation by a basic checkout, compilation

- Clone the sysml 14 git repository git clone https://git.eclipse.org/r/papyrus/org.eclipse.papyrus-sysml.
- Run maven at the root of the repo: mvn clean install; it should pass
- Get sysml14 plugins in your eclipse workspace
- Et “Voila” you are good to go.

1.2.6 Target Environment

We have developed a target-platform-configuration artifact located at /org.eclipse.papyrus-sysml/org.eclipse.papyrus.sysml14.targetdef/org.eclipse.papyrus.sysml14.targetdef.target

Open it and click at the upper right corner to set it has the target platform.

1.3 Product Life Management

The PLM is Maven with Tycho plugins for OSGI.

1.3.1 Run a default installation

```
mvn clean install
```

1.3.2 To build also the modules relatives to RCP and Product, please activate the following profile:

```
mvn clean install -Pproduct
```

It could be necessary to use the following workaround to ensure the version of Neon plugins, you used to build against:

```
mvn clean install -Pproduct -Dtycho.localArtifacts=ignore
```

Sometimes when Ecvlipse realse train is on the move, you will need to add the following option, to force to download directly from Eclipse main download site:

```
-Dtycho.disableP2Mirrors=true
```

1.3.3 Generate and deploy the web site

```
mvn clean site site:stage-deploy scm-publish:publish-scm -Pdocumentation
```

1.3.4 A minimal iteration

This section describes the different steps relative to the integration of a new feature or to the correction of a bug: from bug definition, to requirement, to code integration through gerrit review with the continuous integration system.

- Describe in Bugzilla the bug, feature you are working on. Please use the component SysML. And begins with [SysML 1.4] for Summary.
- Get the code from the master with git,git clone https://git.eclipse.org/r/papyrus/org.eclipse.papyrus-sysml, and work on a local branch,
- Add the new requirement in the different sysml 1.1 models located in the doc folder of the relevant plugin. have a look to SOP4: Requirement
- Modify the code
- Push on Gerrit ssh://{ECLISPEUSERLOGIN}@git.eclipse.org:29418/papyrus/org.eclipse.papyrus-sysml
- Ask for a review https://git.eclipse.org/r/#/dashboard/self
- After a few iteration, you code should be merged and accessible in the master.

Have a look to default rules miscellaneous.html

1.3.5 Tips

If you are working with multiple version of Papyrus, it is possible that Tycho do not pull the right one. You can force it by using the following parameter in the build command. More details here

```
mvn clean install -Dtycho.localArtifacts=ignore
```

Please find additional information here: Miscellaneous

1.4 Standard Operating Procedures and FAQ

1.4.1 SOPS

- SOP1: OMG Norm requirements automanual extraction
- SOP2: From a OMG profile to a dedicated Papyrus application (elementype, palette etc...)

- SOP3: Extended the norm by adding a new operation.
- SOP4: Add a new requirement.
- SOP5: Make the release.

1.4.2 Dev FAQ

- FAQ.

1.5 Miscellaneous

1.5.1 Libraries

QUDV and others

2 User

2.1 Download

The user guide could be downloaded as a pdf here

2.2 SysML

2.2.1 Context

The Systems Modeling Language (SysML) is a general-purpose modeling language for systems engineering applications. It supports the specification, analysis, design, verification and validation of a broad range of systems and systems-of-systems.

SysML was originally developed by an open source specification project, and includes an open source license for distribution and use.[2] SysML is defined as an extension of a subset of the Unified Modeling Language (UML) using UML's profile mechanism.

2.2.2 Tutorials

- Creation of a SysML project.

2.2.3 User FAQ

- FAQ.

2.2.4 References

http://www.omgsysml.org/

Embedded norm as pdf