OMG System Modeling Language™ (SysML®) v2 Release

The SysML v2 Release repository contains the latest incremental release of the SysML v2 specification documents, example models and model library. It also provides instructions for user installation of SysML v2 Pilot Implementation editors. For developer installs, please see the development repositories also available from the Systems Modeling organization on GitHub.

Team

The SysML v2 Submission Team (SST) is a joint team of over 200 individuals from over 80 industry, academia and government organizations, working together to develop the next major version of the Object Management Group (OMG) System Modeling Language (SysML). The goal is to deliver a SysML v2 specification that is validated by the user community, that is demonstrable with a pilot implementation and that provides a smooth migration path for SysML v1 users and models.

The proposed SysML v2 specification will be submitted to the OMG in response to two Requests for Proposals (RFPs), which are publicly available at http://www.omg.org:

- Systems Modeling Language (SysML) v2 RFP (ad/2017-12-02)
- Systems Modeling Language (SysML) v2 API and Services RFP (ad/2018-06-03)

Feedback

To ask questions about using this release or to provide feedback, join the SysML v2 Release Google Group.

- Go to https://groups.google.com/g/sysml-v2-release while logged into a Google account.
- Select "Apply for Membership".
    - Please provide your full name, organizational affiliation and interest in SysML.
- Once your application has been accepted, you can post to the group using the email sysml-v2-release@googlegroups.com.

Release Content

The release repository contains the items listed below. For a Zip archive of the entire repository

contents, go to https://github.com/Systems-Modeling/SysML-v2-Release/releases and download the appropriate version.

- In the `doc` directory.
  - Introductory presentations on the SysML v2 notation
    - `Intro to the SysML v2 Language-Textual Notation.pdf`
    - `Intro to the SysML v2 Language-Graphical Notation.pdf`
  - SysML v2 specification documents (PDF)
    a. Kernel Modeling Language (KerML), version 1.0
    b. OMG Systems Modeling Language (SysML), version 2.0
    c. Systems Modeling Application Programming Interface (API) and Services, version 1.0
    d. SysML v1 to SysML v2 Transformation
- In the `install` directory
  - `eclipse` - Installer for Eclipse plugins for Kernel Modeling Language (KerML) and System Modeling Language (SysML) editors
  - `jupyter` - Installer for a SysML language kernel for Jupyter, with JupyterLab integration (for more information on Jupyter, see https://jupyter.org/)
- SysML v2 model projects (textual notation)
  - `kerml` - Example models in the Kernel Modeling Language (KerML)
  - `sysml` - Example models in the Systems Modeling Language (SysML) v2
  - `sysml.library` - Normative model libraries for both KerML and SysML

Additional content can be accessed at the following URLs.

- Release notes
  - https://github.com/Systems-Modeling/SysML-v2-Pilot-Implementation/releases
  - https://github.com/Systems-Modeling/SysML-v2-API-Services/releases
  - https://github.com/Systems-Modeling/SysML-v2-API-Cookbook/releases
- OpenAPI/Swagger documentation for the current API implementation.
  - http://sysml2.intercax.com:9000/docs/
  - This page acts as an API front end to a live prototype repository implementation
- Prototype SysML v2 visualization tool
  - https://www.tomsawyer.com/demonstrations/sysml.2.0.demo/ (you will need to create an account with Tom Sawyer Software to use this demo)
  - Any model in the prototype repository can be visualized
  - Models in Jupyter can be saved to the repository using the `%publish` command (see

topic in the SysML v2 Release group for more information)

Licensing

The specification documents are copyrighted by the SST member organizations listed in those documents under the terms given there.

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