OMG System Modeling Language™ (SysML®) v2 Release 2020-09

This is an incremental release of the SysML v2 specification and pilot implementation.

Team

The SysML v2 Submission Team (SST) is a joint team of over 160 individuals from over 70 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/2018-16-03)

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/forum/#!forum/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 directory at https://github.com/systems-modeling/sysml-v2-release contains the following items.

- Archive of the entire release directory
  - `sysml-v2-release.zip`
- SysML v2 specification documents (PDF)
  - Part 1 – Kernel Modeling Language (KerML), version 1.0
  - Part 2 – OMG Systems Modeling Language (SysML), version 2.0
  - Part 3 – Systems Modeling Application Programming Interface (API) and Services, version 1.0
- Introductory presentation on the SysML v2 textual notation
  - `Intro to the SysML v2 Language.pdf`
- Release notes
  - `sysml-v2-release-notes.pdf`
- Installer for Jupyter Notebook with a SysML language kernel
  - Unzip `sysml-v2-jupyter-installation.zip` and follow the instructions in its `README` file.
  - For more information on Jupyter Notebook, see https://jupyter.org/.
- Installer for Eclipse plugins for Kernel Modeling Language (KerML) and System Modeling Language (SysML) editors
  - Unzip `sysml-v2-eclipse-installation.zip` and follow the instructions in its `README` file.
- Generated client software for using the REST/HTTP API implementation.
  - *Java.* Unzip `sysml-v2-api-java-client.zip` and follow the instructions in its `README` file.
  - *Python.* Unzip `sysml-v2-api-python-client.zip` and follow the instructions in its `README` file.

Additional content can be accessed at the following URLs.

- 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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