The Open Source AADL Tool Environment (OSATE)

OSATE Development Team

2019
OSATE
Open Source AADL Tool Environment

Developed and maintained by CMU/SEI
Reference implementation of AADLv2 and annexes
Dual use to serve AADL community
  • Complete support of AADL
  • Hosting third-party tools, extending capabilities
  • Research prototyping platform

Distribution:
  • No cost license under EPL license
  • Download site: https://osate.org
  • Issue tracking (public): https://github.com/osate/osate2/issues
  • Release cycle: bi-monthly stable, nightly builds
# OSA TE Workbench Capabilities

OSATE is extensible using Eclipse plug-ins

<table>
<thead>
<tr>
<th>Modeling Capabilities</th>
<th>Usability Capabilities</th>
<th>Analysis Capabilities</th>
<th>Examples of External Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADLv2</td>
<td>Syntax Sensitive Text Editor</td>
<td>Resource Budget</td>
<td>Assume/Guarantee contract modeling – Collins Aerospace</td>
</tr>
<tr>
<td>EMV2</td>
<td>Graphical Editor</td>
<td>Latency Analysis</td>
<td>Ocarina Code Generation for RTOS and ARINC653</td>
</tr>
<tr>
<td>Behavior</td>
<td>Role specific workflow</td>
<td>Safety (FHA, FTA, FMEA) – ARP4754</td>
<td>Scheduling Analysis – Cheddar by UBO</td>
</tr>
<tr>
<td>Data Model</td>
<td>Configuration Management</td>
<td>RMA/EDF scheduling</td>
<td>Scheduling Analysis – MAST by Adventium Labs</td>
</tr>
<tr>
<td>ARINC 653</td>
<td></td>
<td>Resource Allocation</td>
<td>SPICA Scheduling</td>
</tr>
<tr>
<td>FACE Import</td>
<td></td>
<td>ARINC653, MILS conformance</td>
<td>FASTAR Global Timing</td>
</tr>
<tr>
<td>Interoperability</td>
<td></td>
<td>ALISA -- Automated Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Driven Verification</td>
<td></td>
</tr>
</tbody>
</table>

### Examples of External Contributions

- Assume/Guarantee contract modeling – Collins Aerospace
- Ocarina Code Generation for RTOS and ARINC653
- Scheduling Analysis – Cheddar by UBO
- Scheduling Analysis – MAST by Adventium Labs
- SPICA Scheduling
- FASTAR Global Timing

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[Distribution Statement A] Approved for public release and unlimited distribution.
Embedded ModDevOps – leveraging AADL ecosystem

Predictive modeling as complement to DevOps and contribute to Digital Engineering vision
⇒ Capture architecture, perform early integration analysis and synthesize middleware, leverage trusted build and execution infrastructure
Resources on OSATE and AADL

OSATE:
- Download site: https://osate.org
- Release cycle: bi-monthly stable, nightly builds

AADL:
- Collection of examples: https://github.com/osate/examples
- SEI Technical reports and podcast: https://resources.sei.cmu.edu/library/asset-view.cfm?assetid=453645