MBSE Initiative Workshop

Systems Engineering Tools Database Update

www.incose.org/IW2021
SETDB Working Group

SE Tools Database (incose.org)

https://connect.incose.org/WorkingGroups/ToolsDatabase/Pages/Home.aspx

14 SETDB Dev Team Members
44 General Members

www.systemsengineeringtools.com
SETDB: The People and Groups

- **Systems Engineering Tools Database Team**
  - **Project Leaders:**
    - Robert Halligan (PPI) and John Nallon (INCOSE) are the Project Technical Directors
    - Stephane Lacrampe is the INCOSE Project Leader
    - Rene King is the PPI Project Leader
  - **Team Members:**
    - Wesley Hewitt (Cornell Univ) : System Models, Use Cases and OCD diagrams
    - David Sellnow (LGC Group) : Jira administration and V&V
    - Lamont Mcaliley (Veracity Engineering) : UIF Mockups, V&V, tool vendor liaison
    - Donna Long (Vitech Corp) : Requirements Analysis, Taxonomy, tool vendor SME
    - Nicolas Castan (NC Lab) : Lead Website and Database Designer

- **Collaborating with:** Requirements WG, CM WG, Risk WG, Architecture WG, and the MBSE Initiative

- **Vital Support of:** INCOSE Technical Operations, INCOSE Central, the INCOSE CIO and IT, MARCOM, PPI Management, PPI Marketing, and PPI IT
Project Team

• The **Development Team** is located in:
  • 5 states in the USA
  • Vancouver, Canada
  • Victoria, Australia
  • Knysna, South Africa
  • Toulouse, France

• We have been **operating virtually since the beginning**:  
  • Zoom for weekly meetings  
  • Zoom and Skype for instant meetings  
  • Added **JIRA** for collaboration, tasking, V&amp;V and Issue Management  
  • Artifact management (CONNECT), and  
  • Communication tools  
    – E-mail,  
    – WhatsApp,  
    – Skype,  
    – Google Docs
Project Life Cycle

- **Time Line:**
  
  - The SETDB Project was initiated at IS 2018 and became official at IW 2019
  
  - A **SETDB Working Prototype** was released at IW 2020
  
  - The **First Release** was scheduled for IS 2020 in Cape Town, SA (did not happen)
  
  - A **Beta version** was released in September 2020 (v0.6) – (User views)
  
  - An **Early Adapter version** was released in late November 2020 (v0.8) – (User and Vendor views)
  
  - Then……
January 28th, 2021

The Systems Engineering Tools Database (v0.9) Is Back!!

WWW.SYSTEMENGINEERINGTOOLS.COM
System Engineering Tools Database

Welcome from the International Council of Systems Engineering (INCOSE) and Project Performance International (PPI) to the Systems Engineering Tools Database (SETDB). We hope that the SETDB helps you to find appropriate software tools and cloud services that support your engineering activities. In order to access the SETDB, you need to be an INCOSE member logged in to the INCOSE website, or a PPI alumni, alumni or guest logged in to PPI’s Systems Engineering Goldmine website, from which you can navigate to a SETDB landing page without further login. This home page is for the benefit of members of the engineering community who are not already members of INCOSE or account holders with PPI. You can explore example content of the SETDB from this page. This page also provides access for SETDB administration.

Login
- Via the INCOSE account
- Via the PPI Goldmine account
- Via your Vendor account
- Via your Admin account

Join
Not a member yet? SE tools database access is reserved for INCOSE members and PPI alumni and guests. Join today!
- Become an INCOSE Member
- Engage with PPI
- Register as Tool Vendor

About Systems Engineering

Systems Engineering is a transdisciplinary and integrative approach to successful realization and evolution of engineered systems based on systems principles and concepts, together with technological and management methods, enabling beneficial use of the system and subsequent retirement. The approach aims to capture stakeholder needs and objectives and to transform these into a holistic, life-cycle balanced system solution that both satisfies stakeholder thresholds of acceptability, and maximizes overall system effectiveness in accordance with the values of the stakeholders.

The approach is proven to reduce costs, reduce development times and increase stakeholder satisfaction, regardless of the specific problem or opportunity being addressed, and regardless of the technologies of solution. As would be expected, the more complex the problem or solution, the more valuable systems engineering is. Systems engineering is widely embraced by leading technology-based organizations worldwide, is widely taught at Master's level, and is increasingly appearing in undergraduate engineering degree programs across North America.
SETDB Explore Page

System Engineering Tools Database
Developed to help you find the right tools to support your System Engineering activities.

EXPLORE TOOLS

EXPLORE TOOL VENDORS

EXPLORE TOOL CATEGORIES

Quick Links
INCOSE - International Council on Systems Engineering
INCOSE Working Groups
INCOSE News and Events
INCOSE Privacy Statement
Condition of Use and liabilities
SETDB Frequently Asked Questions (FAQ)
SETDB Definitions
Contact SETDB
Project Performance International
PPI Privacy Statement
### SETDB Explore Tools

#### Refine your search
- **Latest version only**
- by Capability Question
- by Category
- by Keyword
- by PPI Process Element
- by SEH Process
- by Tool Name
- by Vendor

#### SETDB Explore Tools

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Vendor</th>
<th>Version</th>
<th>Tool Categories</th>
<th>Created</th>
<th>Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another Req Tool</td>
<td>Tool Vendor Deleted</td>
<td>0.0.0alpha</td>
<td>SCE Tool Integration Software</td>
<td>2020-03-16</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo Business Modeler</td>
<td>CATIA No Magic</td>
<td>1.0</td>
<td>Modeling &amp; Simulation (excluding CAD, Math &amp; Value Modeling)</td>
<td>2020-07-14</td>
<td>2020-05-25</td>
</tr>
<tr>
<td>Cameo Collaborator for Alfresco</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>Modeling &amp; Simulation (excluding CAD, Math &amp; Value Modeling)</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo Collaborator for Teamwork Cloud</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>Modeling &amp; Simulation (excluding CAD, Math &amp; Value Modeling)</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo DataHub</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>SCE Tool Integration Software</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo E2E Bridge</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>Modeling &amp; Simulation (excluding CAD, Math &amp; Value Modeling)</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo E2E Builder</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>Modeling &amp; Simulation (excluding CAD, Math &amp; Value Modeling)</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo Enterprise Architecture</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>Modeling &amp; Simulation (excluding CAD, Math &amp; Value Modeling)</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo Inter-Op</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>SCE Tool Integration Software</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
<tr>
<td>Cameo RiskManager</td>
<td>CATIA No Magic</td>
<td>?</td>
<td>Risk Management</td>
<td>2020-07-14</td>
<td>2020-07-14</td>
</tr>
</tbody>
</table>
SETDB Exploring the Categories

Tools listed in the SETDB are linked to specific tool categories. These categories are linked to Systems Engineering processes as defined in the INCOSE Systems Engineering Handbook 4th Edition and to PPI Process Elements, to help you find the right tool depending on your need and activity.

---

Model Based Systems Engineering

**Description:**
MBSE is a digital artifact approach to Systems Engineering where the system information is captured in a system model or set of models.

**Keywords:**
INCOSE processes:
- SEH v6.2 Stakeholder Needs and Requirements Definition Process
- SEH v6.8 System Requirements Definition Process
- SEH v6.4 Architecture Definition Process
- SEH v6.5 Design Definition Process
- SEH v6.6 System Analysis Process
- SEH v6.9 Verification Process
- SEH v6.11 Validation Process

PPI processes:
- Requirements Analysis
- Effectiveness Evaluation and Decision
- Specification of System Elements
- System Integration
- Verification
- Validation

---

January 25, 2021
www.incose.org/IW2021
Any Questions?

The Systems Engineering Tools Database (SETDB)

WWW.SYSTEMSENGINEERINGTOOLS.COM
• **SETDB WG Activities at IW 2021:**
  - **Monday January 25th**: CCB Issue Review and Release Analysis
  - **Tuesday and Weds**: Operational Procedure Development
  - **Thursday**: 1st SETDB: Overview and Demonstration, SETDB Release to INCOSE
  - **Saturday**: 2nd SETDB: Overview and Demonstration, MBSE SETDB Update
  - **Sunday**: Deep Dive on the SETDB Tool Categories and Process Mapping
  - **Monday**: Tool Vendor Introduction: Requesting an Account, Entering POC information, loading single tools and families of tools.