

MagicDraw™ Publisher Family

*Export or Migrate Systems Models to
Cameo Systems Modeler™/ MagicDraw™*

GLOBAL PRODUCT DATA
INTEROPERABILITY
S U M M I T
2021



Presenters Bio

Global Product Data Interoperability Summit | 2021

- **Jeff Pilato** is the Chief Strategy Officer for Sodius Corp. and has broad responsibilities in supporting the Sodius and Willert executive leadership teams in defining and executing on the company's long-term growth strategies and key business development initiatives. In addition, he's responsible for Sodius Corp.'s U.S. sales revenues, human resources, and contracts. Jeff has been in sales for over 30-years and worked for companies such as; Harris Corp., Mentor Graphics, Wind River, Telelogic, IBM, Oracle, and ANSYS. His focus has been in the aerospace, defense and automotive industries. [linkedin.com/in/jeffpilato](https://www.linkedin.com/in/jeffpilato)
- **Robin Mikola** is a Principal Solution Architect for Sodius supporting all US Markets for the Publisher Product Family. She has also been re-elected VP(2021)/President(2022) of the Michigan Chapter of INCOSE. Robin has over a decade of experience in complex system architecture and design for US defense Aerospace and Automotive domains. Robin is a certified provisional ASPICE assessor and has vast experience across Automotive and Defense in training, coaching, designing, implementing, deploying, improving and auditing global corporate processes for quality, safety, security, and capability to the MIL and ISO standards for quality and process.

MagicDraw™ Publisher Family

*Export or Migrate Systems Models to
Cameo Systems Modeler™/ MagicDraw™*

Introduction

Sodius Corp. is a U.S. company and is the global leader in **software solutions for Data Transformation, Enterprise Interoperability, and Model-Based Code Generation** to improve data exchange, transformation, traceability, and the linking of engineering data in highly regulated industries thereby enabling digital engineering workflows.

We primarily deploy these solutions in:

- **U.S. Aerospace & Defense Companies**
- **DoD Agencies**

MagicDraw™ Export & Migration Solutions

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Whether you need to **deliver in MagicDraw** (or Cameo), or **move data out of Rhapsody, System Architect, or Rational Software Architect**, you will face two main challenges:

How do you get years of modeling IP migrated quickly?

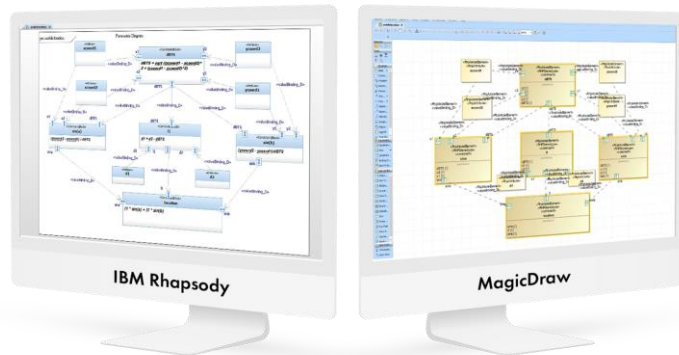
How do you transfer data consistently and accurately, including the diagrams, for very large models?

The Sodus MagicDraw Publisher family of products are the only safe, automatic, and fast answer to these questions.

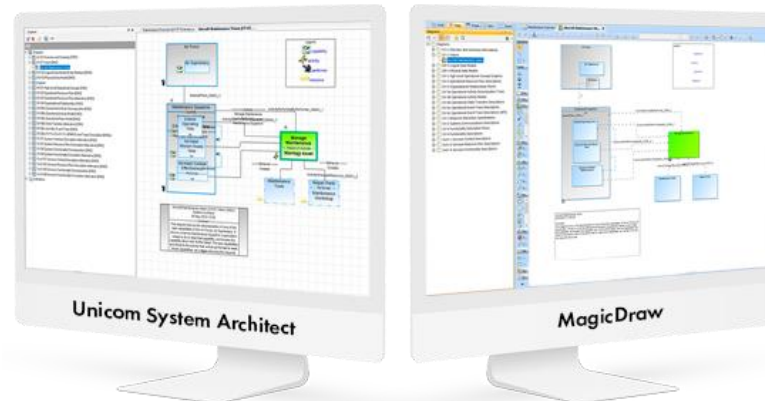
Publisher Export & Migration Solutions

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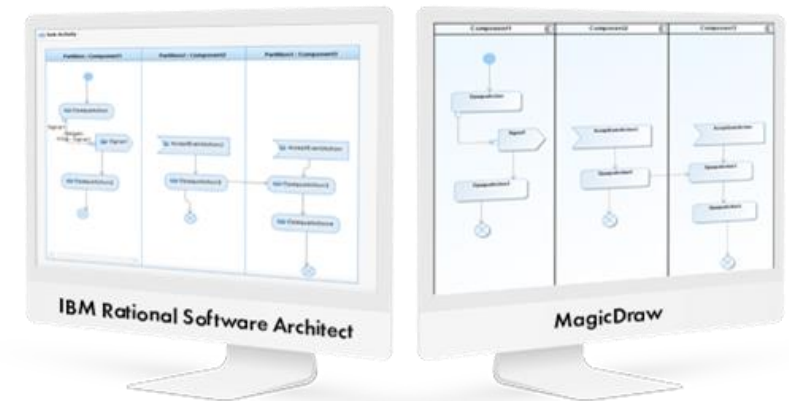
IBM® Rhapsody®



Unicom® System Architect®



IBM® Rational Software Architect®



Use Cases

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Export

You want to maintain the knowledge base in your current systems modeling tool but deliver to a customer in MagicDraw.

- Objective is to have no manual work for moving data
- Need the **same form and function but in a different tool**
- MagicDraw model should not require manual updates after publish
- Legacy model must be well-formed
- **Action occurs many times**

Migrate

You need to move your data out of your current systems modeling tool and want to further develop in MagicDraw.

- Objective is to **minimize manual work of moving data**
- **Used for one-time transfer of data**
- **MagicDraw model can be manually changed after migration**
 - To handle inconsistent element usage in the legacy model
 - To update the MagicDraw model for specific needs
- Used for changes in tools, processes, or methods



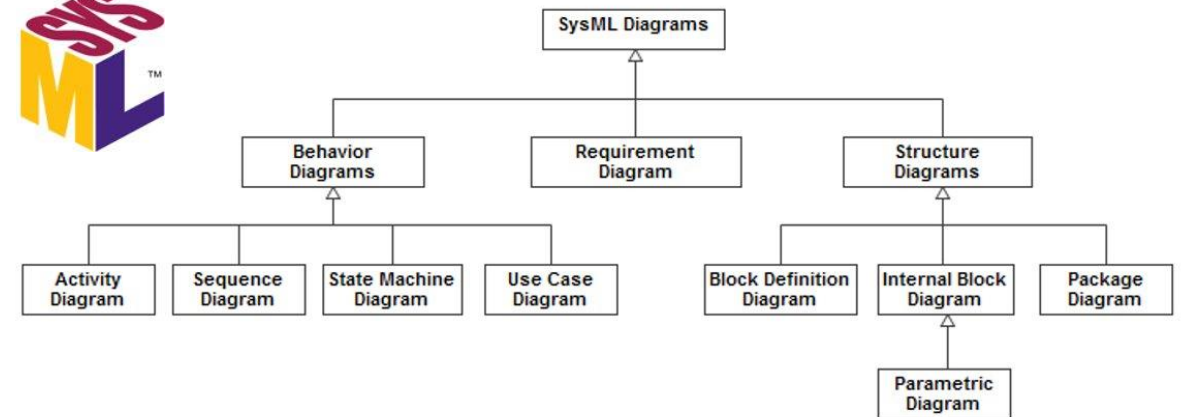
Publisher for Rhapsody®

Publisher for Rhapsody SysML Features

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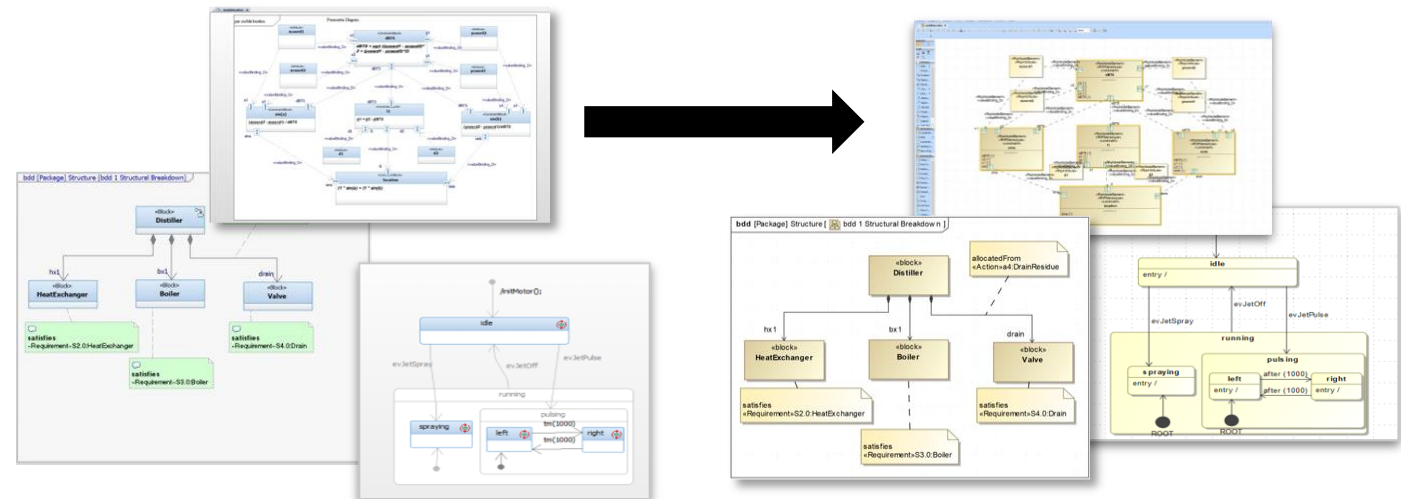
The **Publisher for Rhapsody SysML** is a plug-in that automatically generates complete MagicDraw models from Rhapsody, including:

- **All Model Elements**, structure, and hierarchy
- **SysML Diagrams** - maintaining layout
- **Full Logging** of model transformation actions
- **Detailed metrics and reporting**
- **User Configurable**
 - Diagram layouts
 - Color/font schemas
 - Many other settings



Rhapsody SysML

MagicDraw SysML

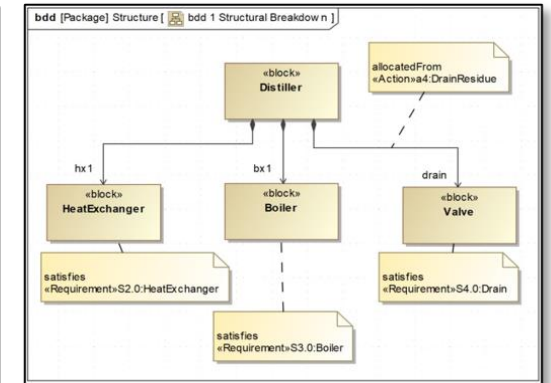
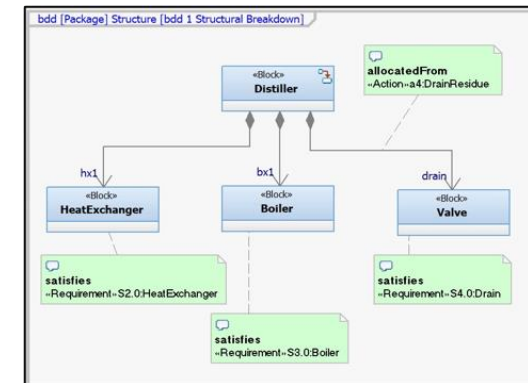
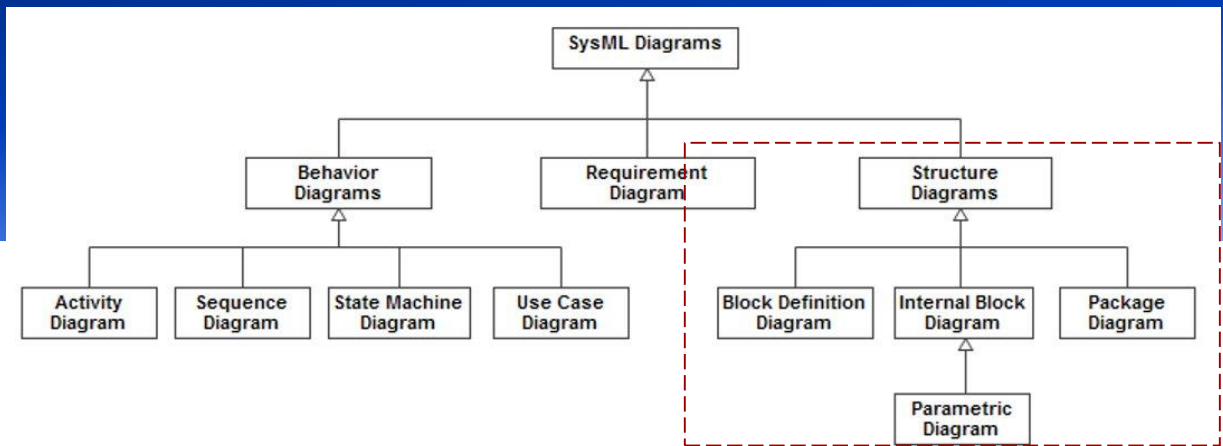
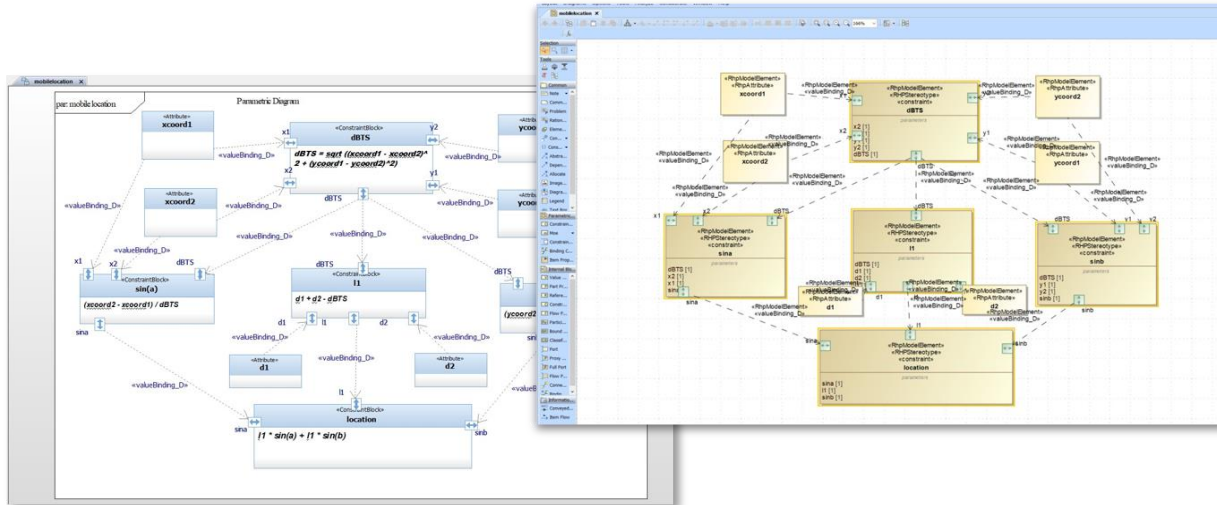


Convert Structure Diagrams

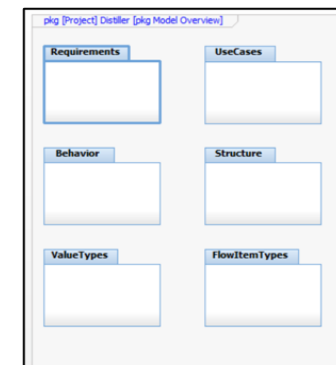
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The Publisher converts SysML Structure Diagrams:

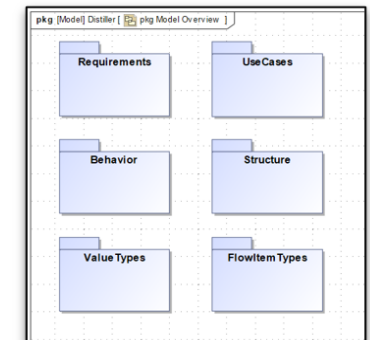
- Block Definition Diagrams
- Internal Block Diagrams
- Package Diagrams
- Parametric Diagrams



Rhapsody



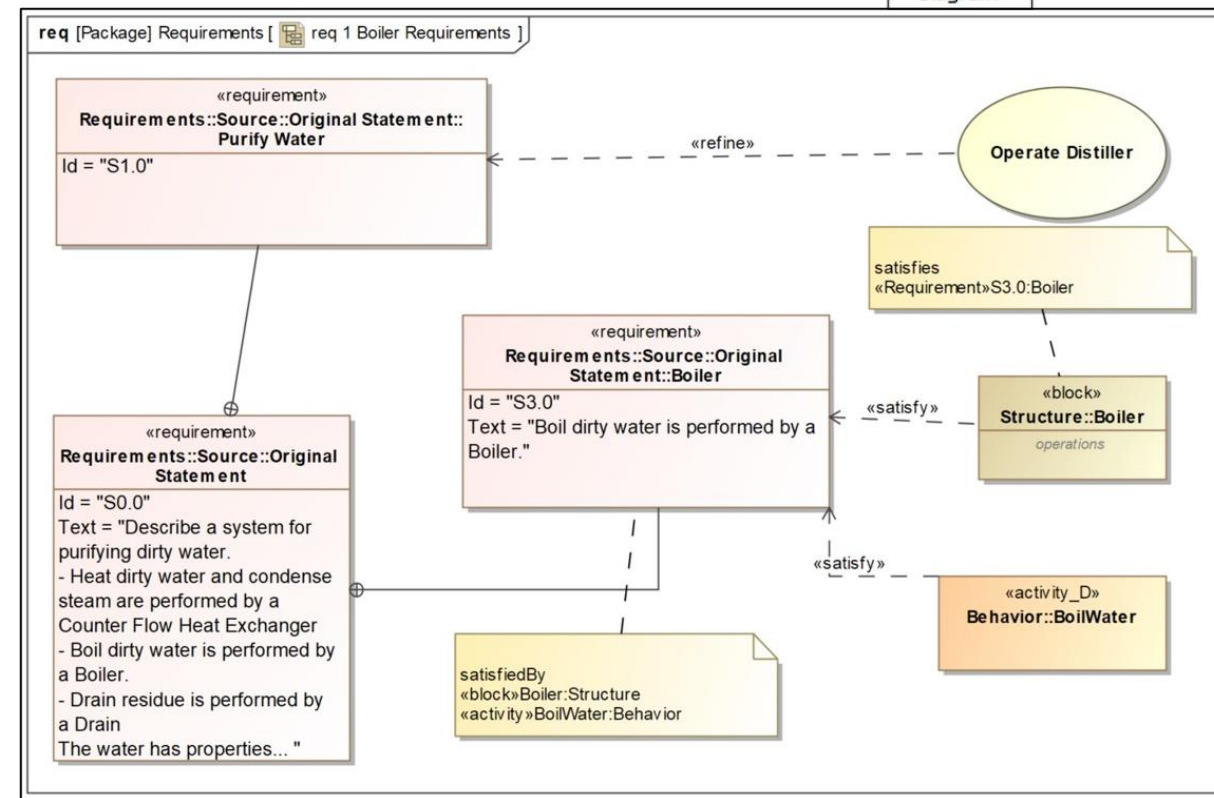
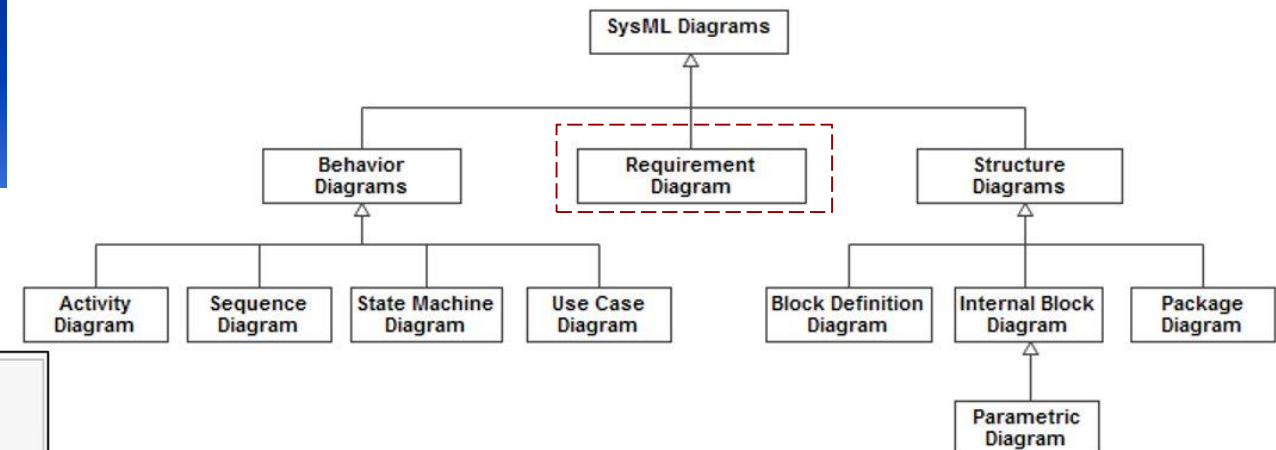
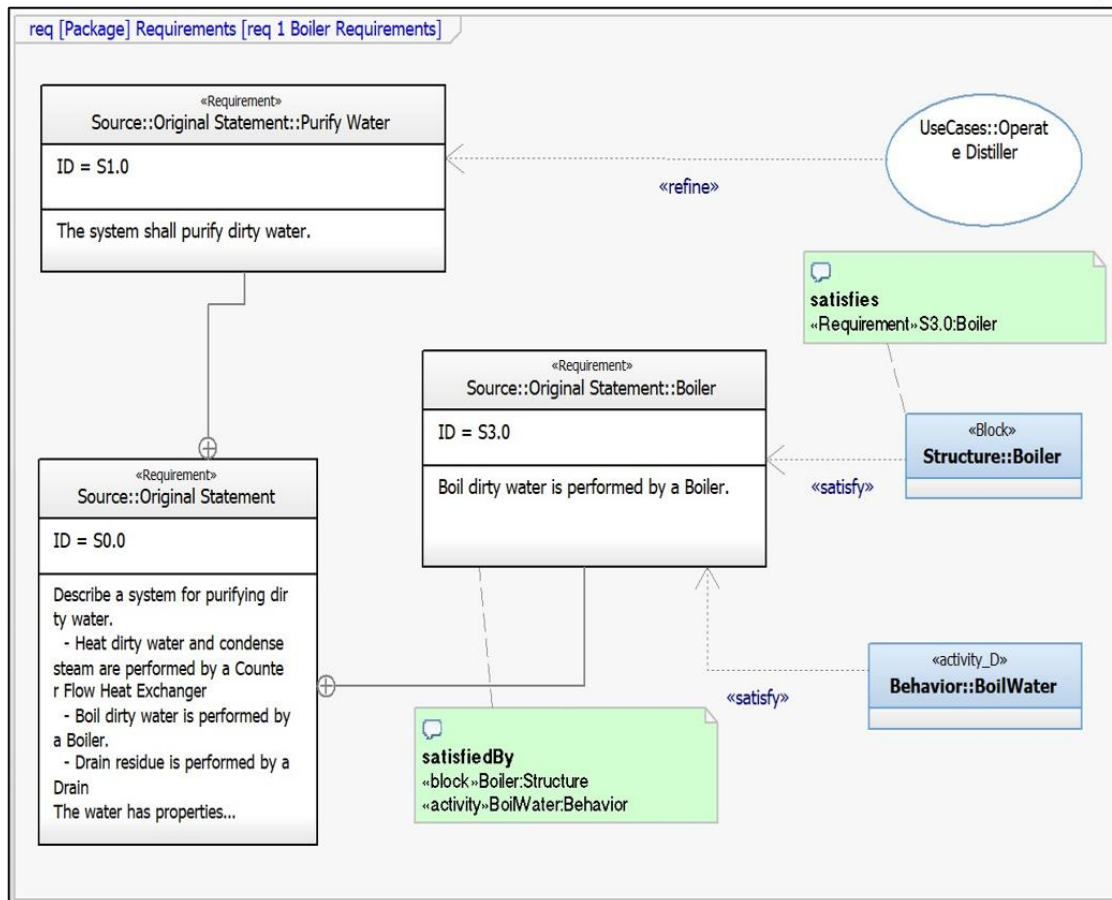
MagicDraw



Convert Requirement Diagrams

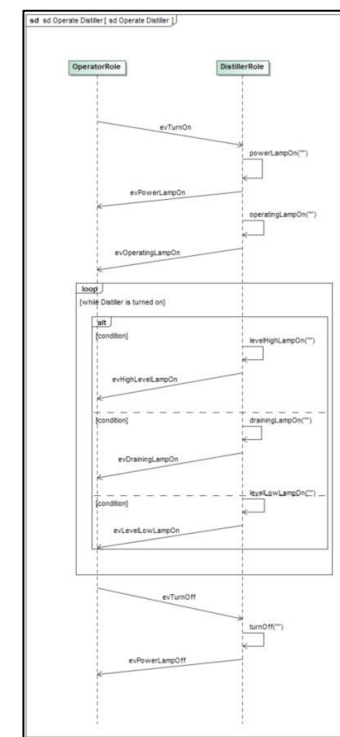
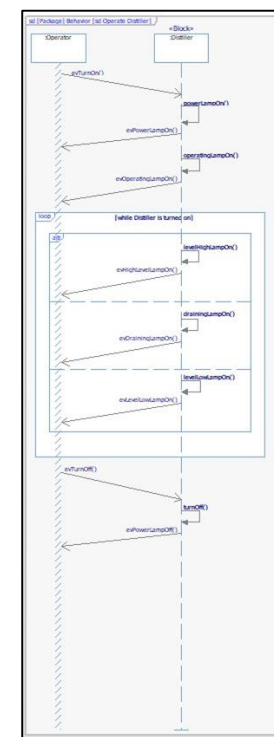
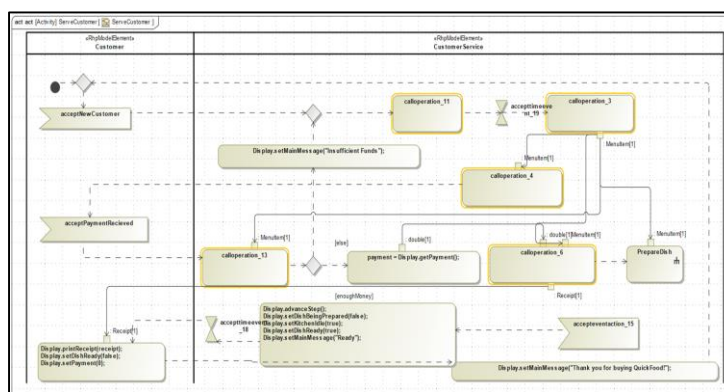
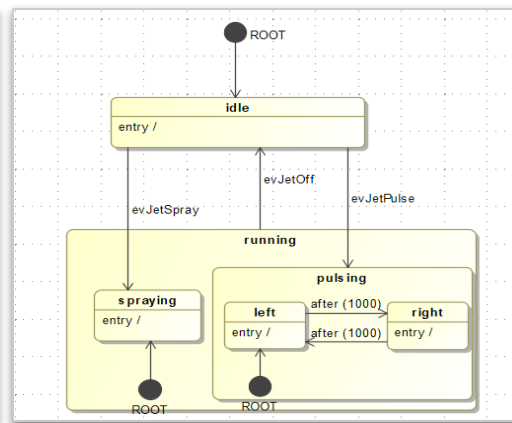
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Publisher converts SysML Requirement Diagrams



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- Activity Diagrams
- Sequence Diagrams
- State Machine Diagrams
- Use Case Diagrams

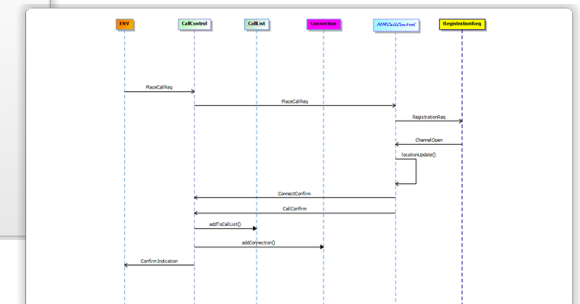
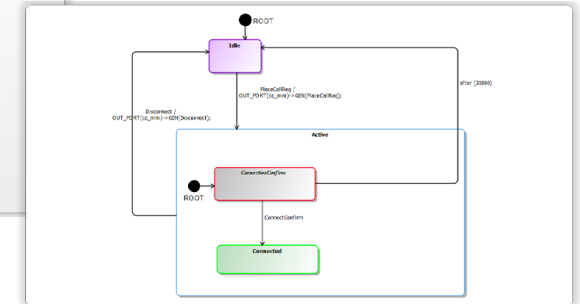
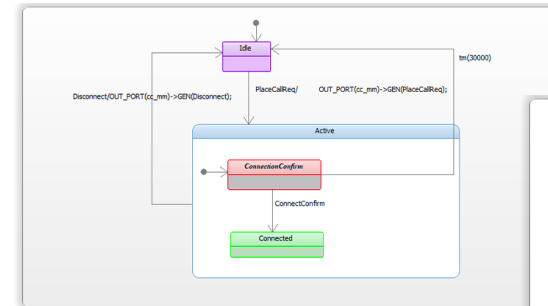
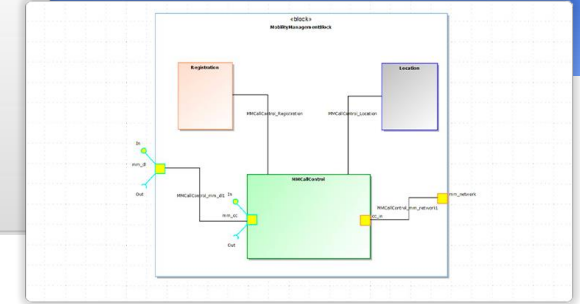
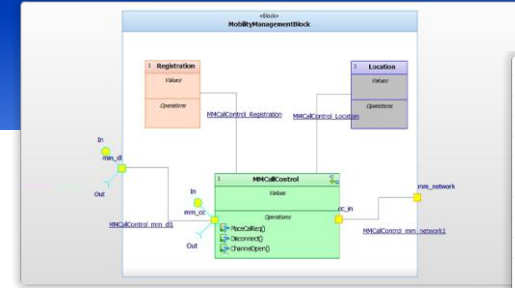


Configure Layout Options

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The Publisher provides a large range of configurable options to adjust the diagrams' layout for:

- elements' names
- display of compartments
- line jumps management
- stereotypes' display
- colors and images
- ...

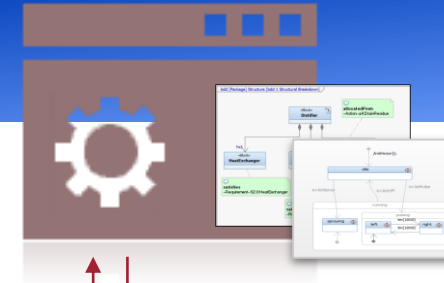


Silent Mode

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- The publisher can fully automate your publication activities in silent mode by using the batch mode and a fully configurable options set.
- The Rhp2MDSilent.bat file will automate the following actions:
 - Launch Rhapsody
 - Open a project in Rhapsody
 - Run the Rhapsody to MagicDraw transformation
 - Close Rhapsody
- Silent mode also handles typical options :
 - Rhapsody model file path
 - Semantic options
 - Diagram formatting configurations
 - Cameo .mdzip output file path

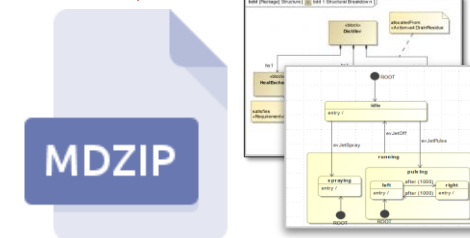
Rhapsody



Silent Mode Configuration



```
SET RHP2MD_PATH=<current_publisher_path>
SET RHP_PATH=<rhapsody_path>
SET RHP_PROJECT_PATH=<rhapsody_project_path>
start "" "%RHP_PATH%\rhapsody.exe" -cmd=open %RHP_PROJECT_PATH%
start /wait timeout 50
"%RHP2MD_PATH%\publisher.exe" -headless -nosplash --launcher.suppressErrors
-launch "%RHP2MD_PATH%\launch\Rhp2MDSilent.main.launch"
Taskkill /IM Rhapsody.exe /F
```

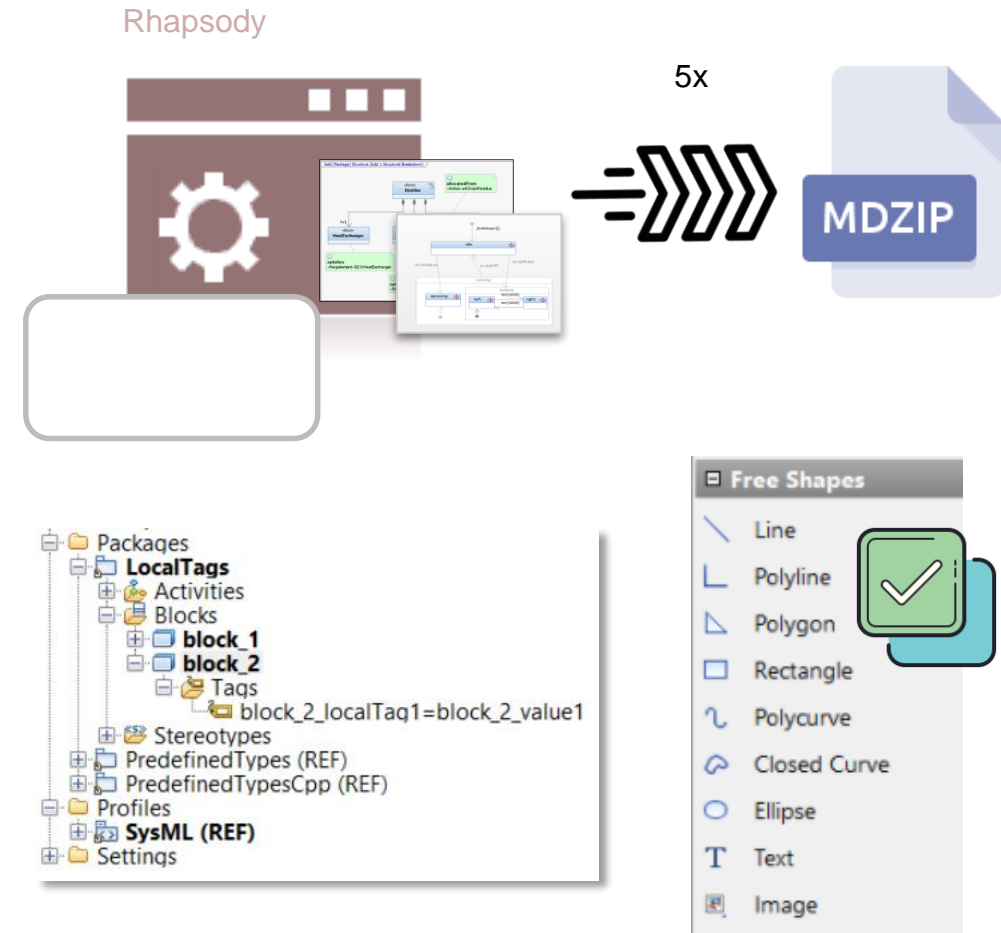


Cameo/ MagicDraw Output File

Release 2.5 Summary

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- The MagicDraw Publisher for Rhapsody is released on a quarterly cadence. It includes both feature enhancements and support of new versions of Rhapsody and Cameo tools.
- Version 2.5.0 was released in June. Key feature and enhancements include:
 - **Performance Optimization** : 5x faster on large models!
 - *Using a new embedded mode in Rhapsody, we've been able to drastically improve publication speed and guarantee same quality of exports.*
 - **Mapping Enhancements**
 - *Improvements of Rhapsody local tags*
 - *Improvements to Dependencies, Constraints, Custom Stereotypes*
 - **Diagram Enhancements**
 - *Support of Custom Stereotypes for Diagrams*
 - *Free Shape Management (requires Rhapsody 9.0.1)*





Publisher for System Architect®

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- **All Model Elements**, structure, and hierarchy
- **DoDAF Diagrams** - maintaining layout and colors
- **Full Logging** of model transformation actions

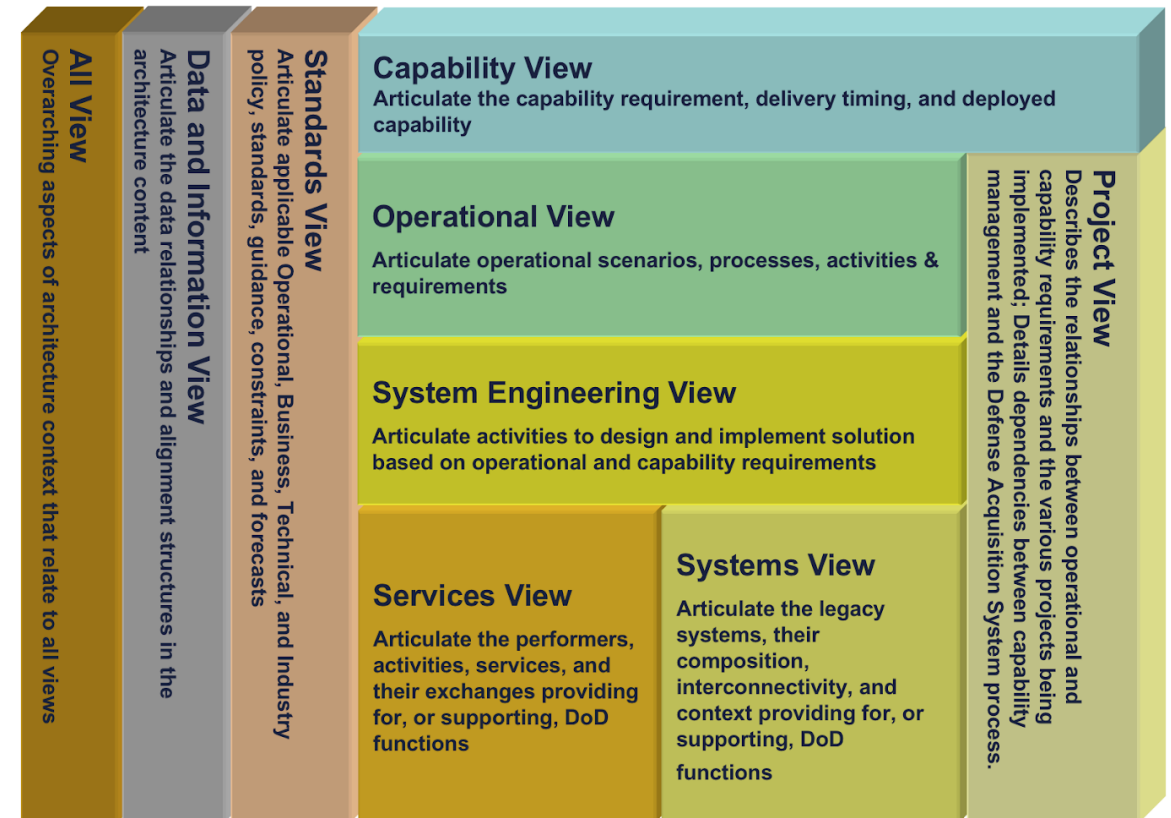


System Architect DoDAF 2.0 Mapping

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System Architect DoDAF 2.0 definitions and relations are managed for main viewpoints:

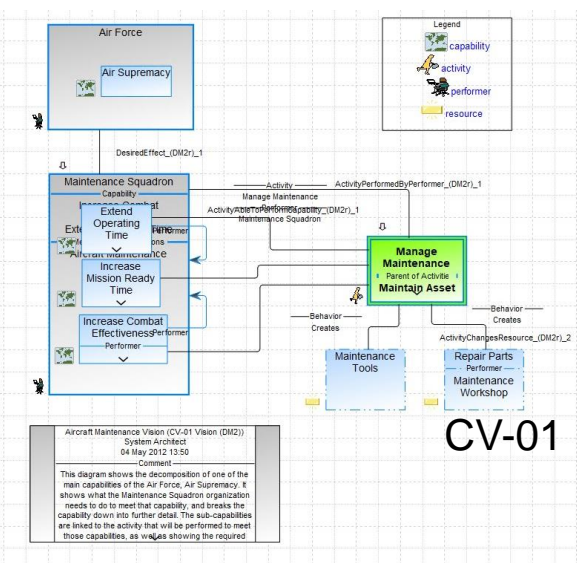
- **All Viewpoint (AV)**
- **Capability Viewpoint (CV)**
- **Operational Viewpoint (OV)**
- **System Viewpoint (SV)**
- **Service Viewpoint (SvcV)**
- **Data and Information Viewpoint (DIV)**



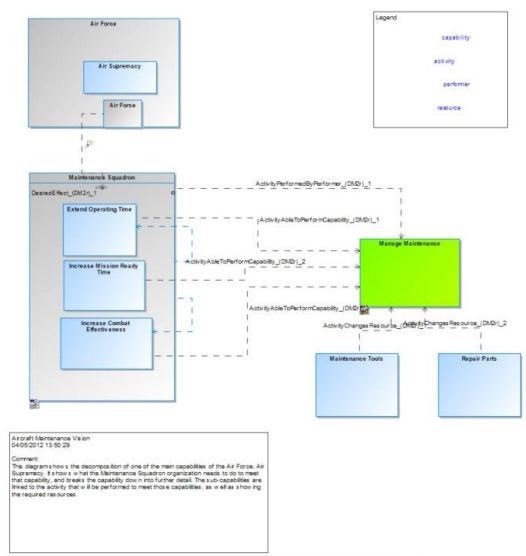
DoDAF 2.0 CVs, OV Examples

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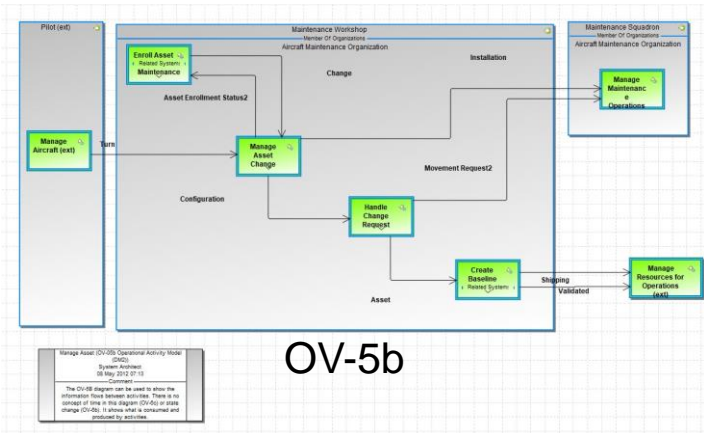
System Architect



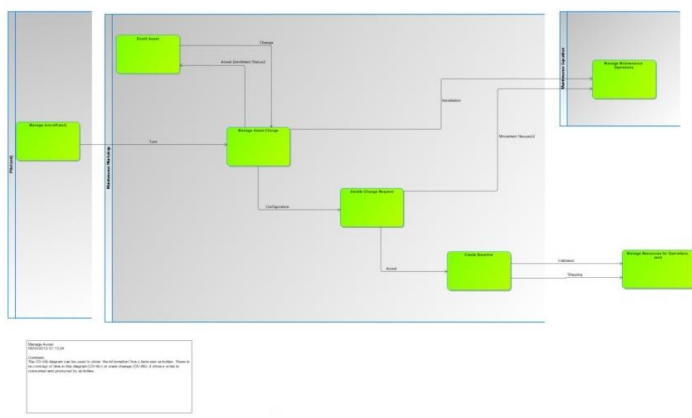
MagicDraw



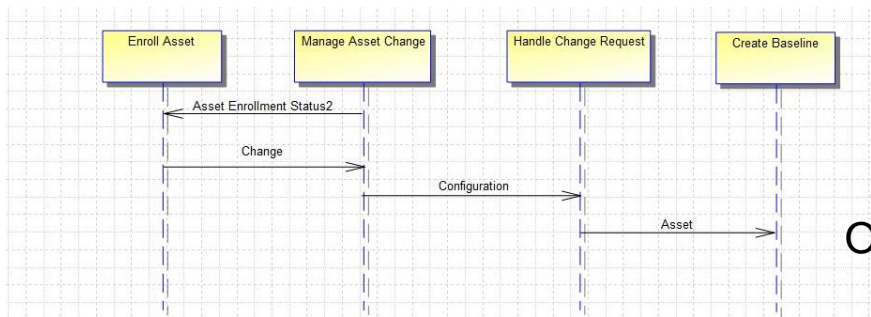
System Architect



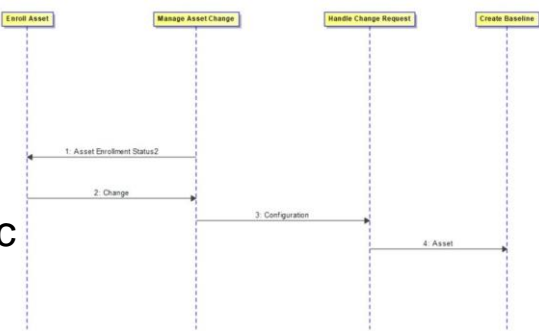
MagicDraw



System Architect



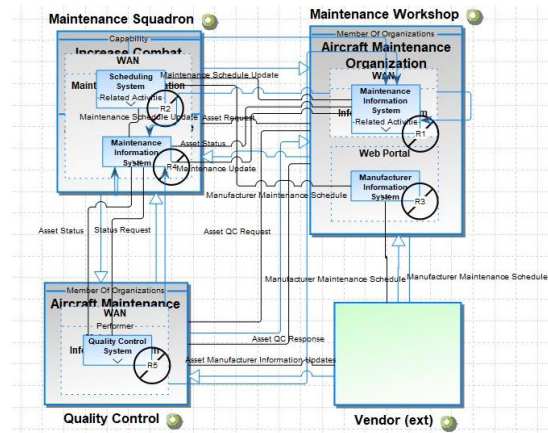
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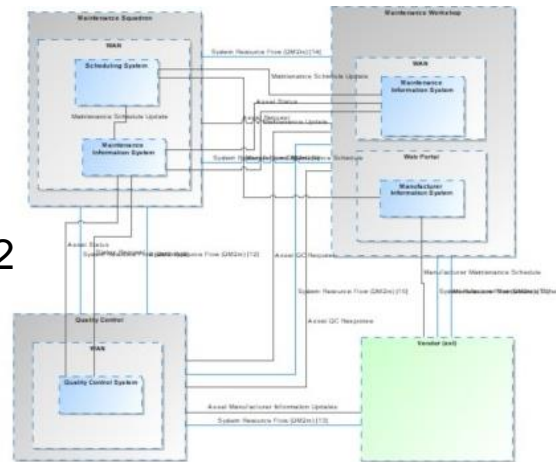
DoDAF 2.0 SVs, SVcVs DIVs Examples

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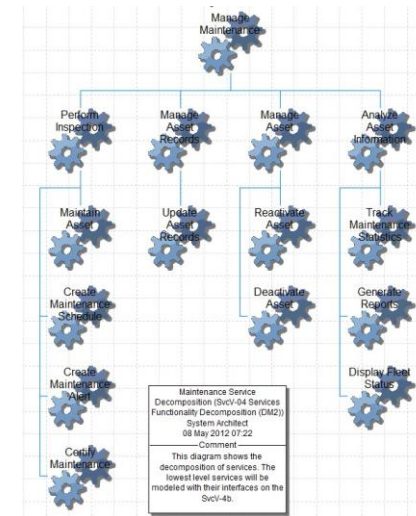
System Architect



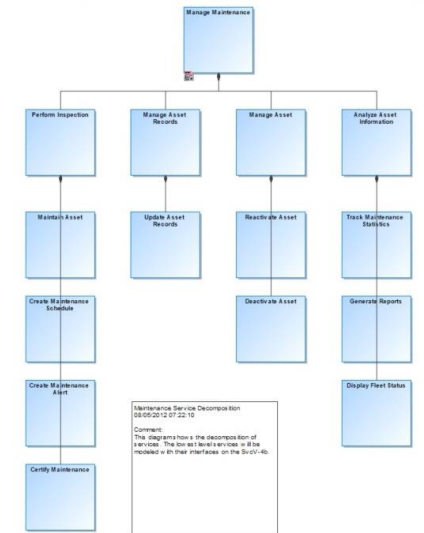
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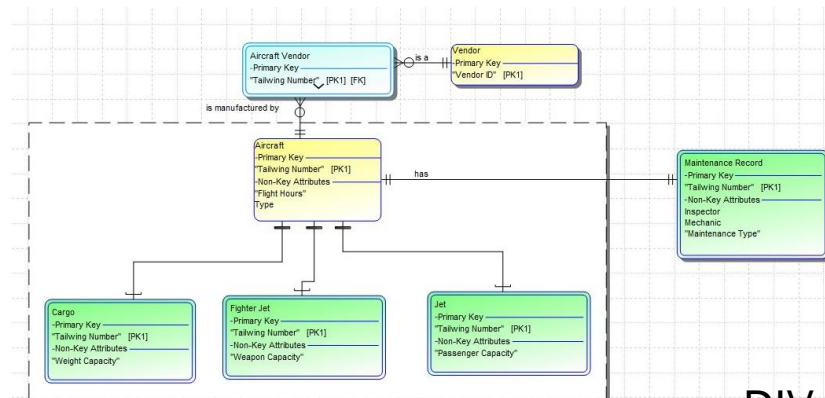
System Architect



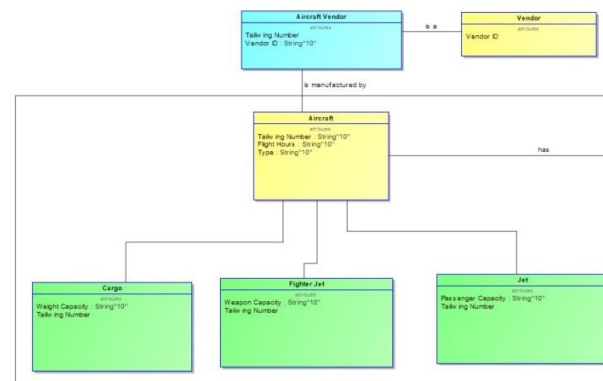
MagicDraw



System Architect



MagicDraw





Publisher

for Rational® Software Architect

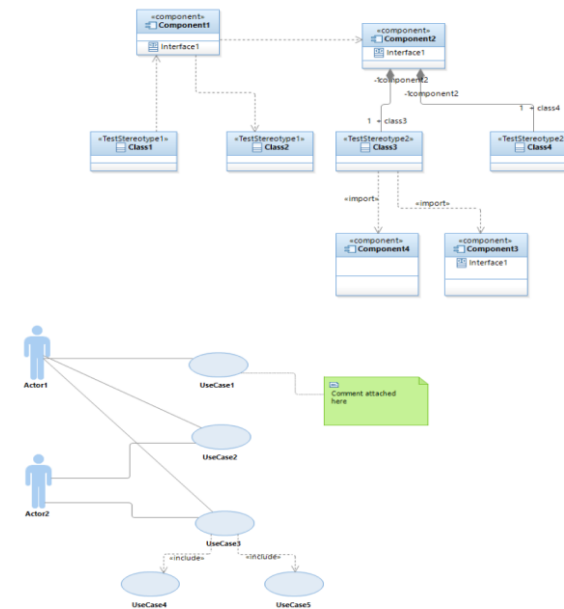
Publisher for Rational Software Architect

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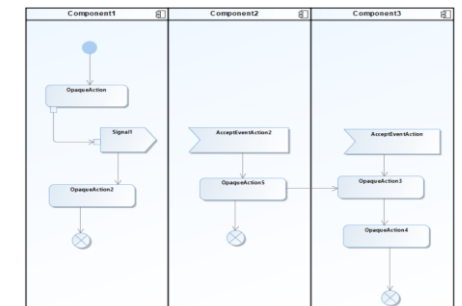
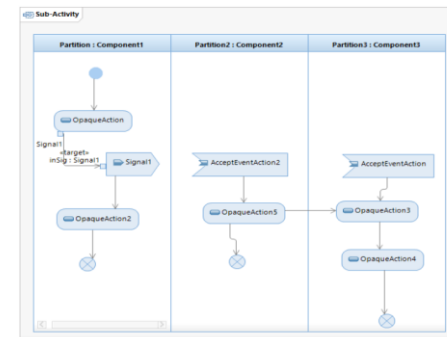
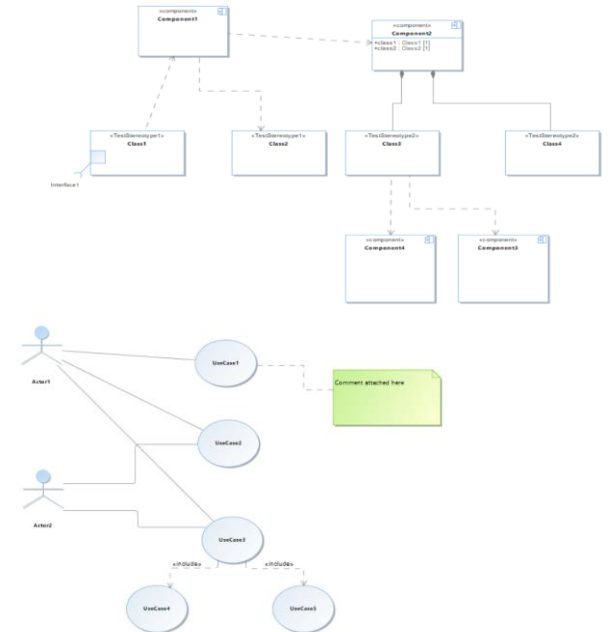
The **Publisher for Rational Software Architect** is a plug-in that generates complete UML MagicDraw models from RSA UML and UPIA, including:

- **All model elements**, structure, and hierarchy
- **Custom Profiles**
- **Diagrams** - maintaining layout
- **Full logging** of model transformation actions

Rational Software Architect



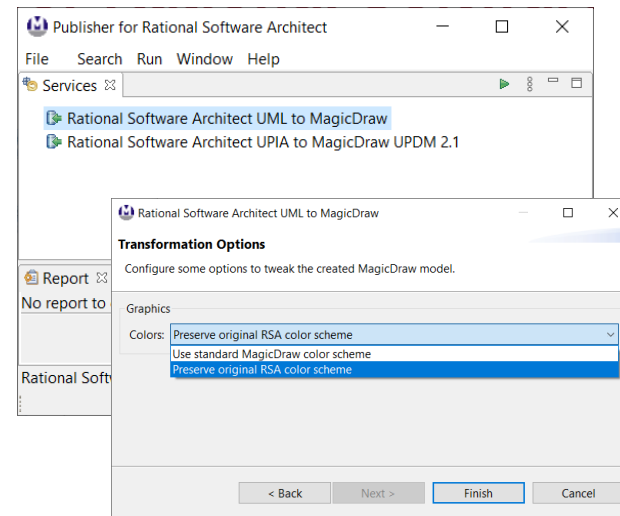
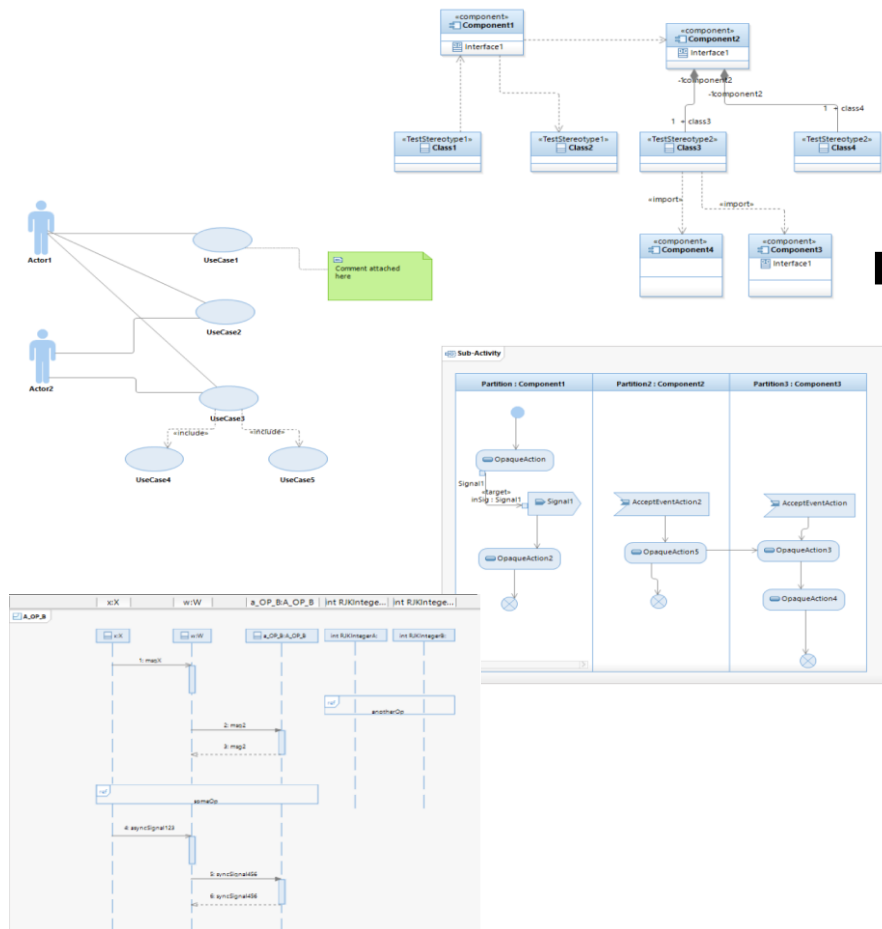
MagicDraw



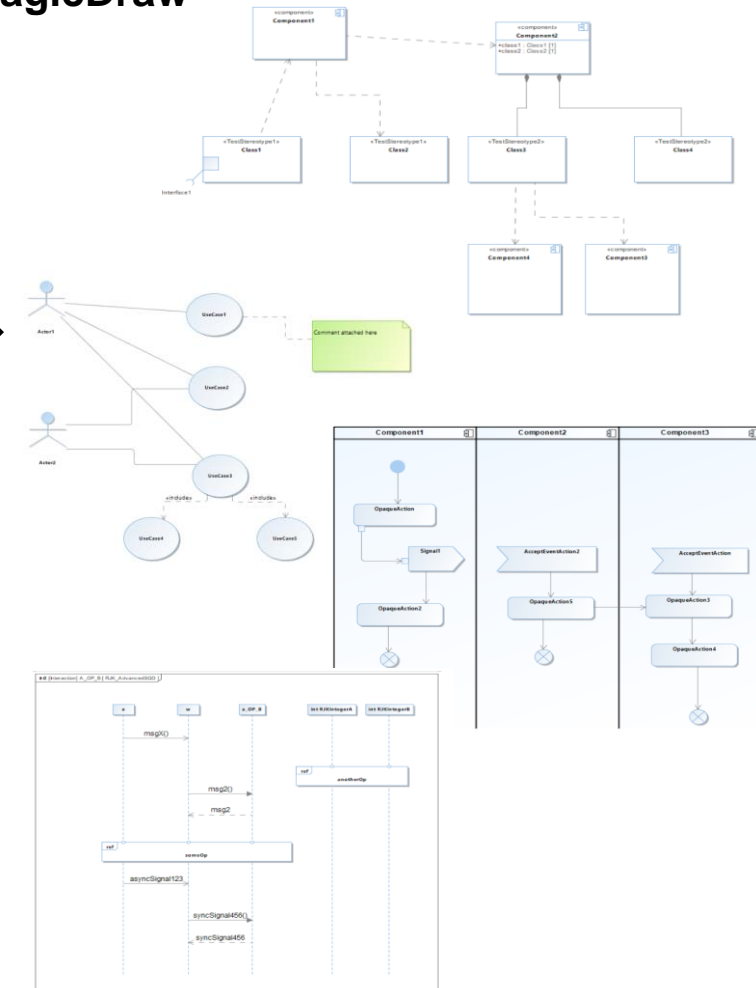
Rational Software Architect Examples

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Rational Software Architect

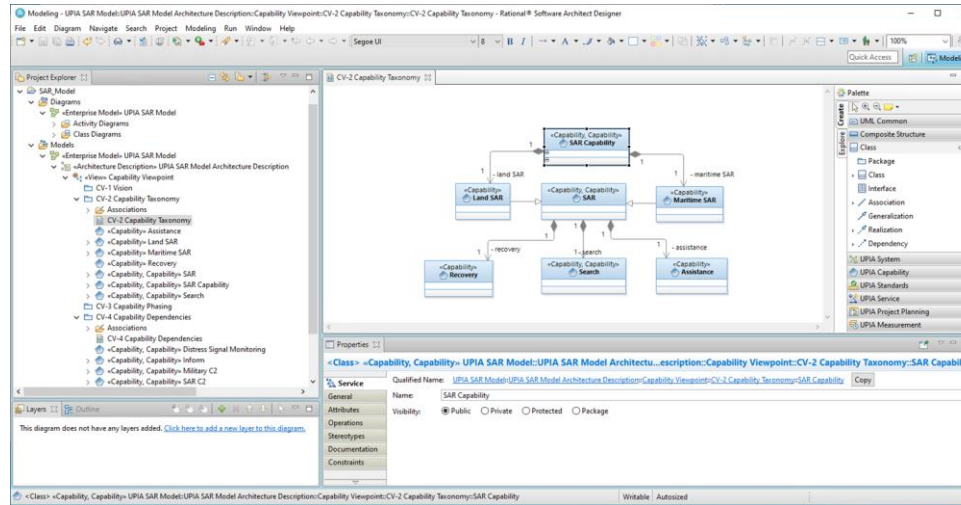


MagicDraw



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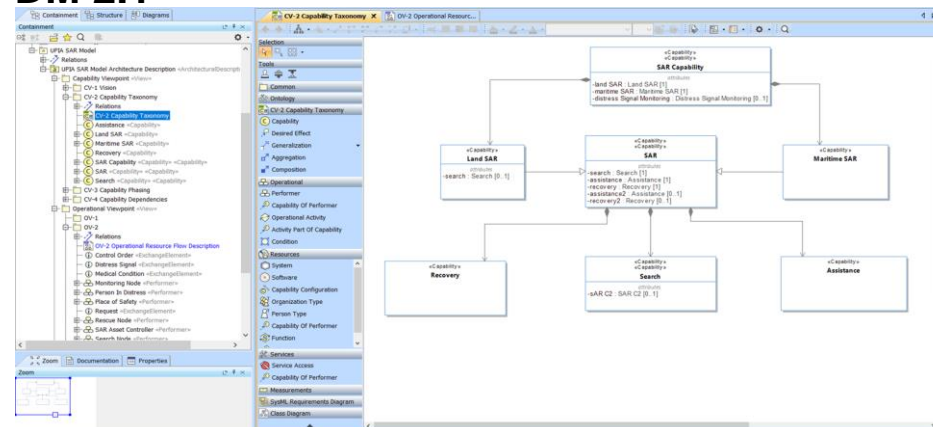
Rational Software Architect UPIA



The Publisher for Rational Software Architect UPIA add-on enables support for RSA's UPIA profile.

- Elements that have been stereotyped with the UPIA profile are converted into MagicDraw with the UPDM 2.1 profile.

MagicDraw UPDM 2.1



Licensing and Support

Licensing

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⑩ Licensing

- ⑩ *Program Based*
- ⑩ *Floating and Node-locked*
- ⑩ *Designed for use in both Secure and Non-secure Lab Environments*

⑩ Try before you buy

- ⑩ *Full software, with only a disclosure watermark on the diagrams.*
- ⑩ *No network connection necessary*
- ⑩ *Adjust the many user configurable styling settings to your team's preferences.*
- ⑩ *See the actual exported model in Cameo file format.*
- ⑩ *Manipulate the new model accordingly.*

Support

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10 We Support Your Teams

- 10 [Online Support](#) 24/7 from our team of technical experts in the tools and their usages.
- 10 [Online User Documentation](#)
- 10 [Knowledge Base Articles](#)
- 10 [Download Portals](#)

Sodius / MD Publisher Support / Raise a request



MD Publisher Support

Welcome! You can raise a MD Publisher Support request from the options provided.

What can we help you with?



Product Trial (PoC)
Proof of concept (PoC) to demonstrate the feasibility.



Bug
Bugs shall be used when the Customer perceives a difference between the result of the completion of a technical action and the expected result. Bugs can be caused by a software failure, a documentation error, a side effect of the use of a software not in the Product list, a volume limit, etc.



New Feature
New Features shall be used when the Customer wishes a new functionality or any kind of enhancement of the current Product.



Support Request
Support request shall be used when the Customer needs clarification on the use of the software as a Development Tool or for a future integration into a larger software solution. Support request shall address only the use of development tools or integration matters, exclusive of any architectural advice or implementation request.

The screenshot shows the Sodius Help portal interface. At the top, there's a search bar and a 'Go' button. Below it, a 'Contents' sidebar lists various topics. The main content area displays the 'Publisher for Rhapsody' section, which includes a list of links: Getting started, User guide, Installation guide, Administration guide, Release notes, and Legal notice. The 'Publisher for Rational Software Architect' and 'Publisher for Rational Software Architect UP' sections are also visible in the sidebar.

Sodius / MD Publisher Support / MagicDraw Publisher

MagicDraw Publisher

Maximize investment in your models and team. Realize the vision of tool flexibility in generating MagicDraw models directly from your source models.

Featured articles



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Error out of memory
Problem Error message: java.lang.OutOfMemoryError: Java heap space
The java.lang.OutOfMemoryError: Java heap space error will be triggered when the...

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BAE SYSTEMS

Customer Proof Points

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Raytheon

Integrated Defense Systems



**NORTHROP
GRUMMAN**

Content to export: 200 diagrams

Expected time w/o Publisher: 18 weeks

Total time to export: 2 hours

"By leveraging the MagicDraw

Publisher for Rhapsody,

*the total time to export the end-
customer deliverable was less than*

two hours. »

--

Chris Finlay – Project Manager

Content to export: 37,331 files in

Rhapsody UML format with 812,405

elements and 703 diagrams

Expected time without the Publisher: "This

kind of transformation, if done
manually, would take man-years to
complete."

Total time to export: Less than a day

*"The Publisher for Rhapsody quickly
enabled us to automate the
migration from Rhapsody UML
models to
Cameo/ MagicDraw models"*

--

Sean F., Dynetics Project Manager and
Lead Systems Architect
Redstone Arsenal

Content to export: 220,000 elements and

300 diagrams in Rhapsody SysML

Expected time w/o Publisher:

Total time to export: 30 minutes

*"We like it and the management is
very pleased. Redoing an entire
model that months were spent on
because of tool changes, would
have been a huge waste of
resources."*

Maxwell Yavaraski., Principal
System Engineer

MagicDraw™ Publisher Value Proposition

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SAVE ENGINEERING TIME

Save months or years of critical engineering resources converting and validating manually re-written models.

With the Publisher for Rhapsody, users of Rhapsody can **automate the migration or publication of models to MagicDraw** to meet industry standards within minutes or hours.



MAINTAIN DATA INTEGRITY

With a fully automated transformation, data is converted consistently within and between projects, in a **reproducible** way.

Any transferred data is uniquely identified **preserving traceability** after the conversion.



INCREASE ROI

By converting semantic and diagrams in the transformation process, you preserve the modeling intent. Your **engineering added-value is transferred to your new target environment increasing the ROI of modelling activities** in your organization by saving months to years of manual (re-) modeling.

Start Your Free Trial Today

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To access a no-cost trial license of the Publisher software click the following links:

- [Publisher for Rhapsody](#)
- [Publisher for Rational Software Architect](#)
- [Publisher for System Architect](#)

Enabling the Digital Thread of Engineering

Enabling the Digital Engineering Thread

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- Connect Jira to your engineering repositories including:
 - IBM DOORS,
 - IBM DOORS Next,
 - IBM Engineering Workflow Management,
 - IBM Engineering Test Management,
 - IBM Global Configuration,
 - IBM Reporting Solutions (TRS,)
 - Siemens Polarion
- Meet the needs of integration securely with linked data!



- Migrate your Requirements from DOORS to DOORS Next
 - Retain your Requirement Content,
 - Map to your new target Scheme in DOORS Next,
 - Migrate entire Projects, Folders, and Modules to DOORS Next,
 - Migrate your teams incrementally to DOORS Next.

Presented by:

Robin Mikola - Principal Solution Architect

For additional information:

Jeff Pilato – Chief Strategy Officer Sodius Corp

jpilato@sodius.com // 847-476-8000



SODIUS CORP

418 N. Main Street 2nd Floor

Royal Oak, MI 48067, USA

+1 (248) 270-2950

For more information visit sodius.com