Cameo Workbench

How to transform from MagicDraw to Enterprise Architect with Cameo Workbench

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Agenda

• What is Cameo Workbench?
  – Who need Cameo Workbench?
  – How does it work?

• Create your own bridge – How to transform a MagicDraw model to an Enterprise Architect model

• Conclusion
What is Cameo Workbench?
What is Cameo Workbench?

- A development environment for the rapid realization of configurable model-to-model transformations.
- An Eclipse-based environment.
- Develop Model to Text as well as Model to Model transformations.
- With an Application generator.
- With a debugger.
Who need Cameo Workbench?

- You are a Lead Architect supporting several Projects for Stakeholders demanding similar content in different model notations.
- You are a Engineering Technical Manager responsible for multiple Architects using different tools to craft similar systems.
- You are a Model-based Systems Engineer responsible for integrating Requirements, Enterprise Architectures, Software Systems, Test Cases, and Traditional Documentation.
- You don't have time or money to waste on expensive, Java-skilled software programmers with unique awareness of the details of the metamodels of many ALM and PLM tools.
- You are encountering the same transformation challenges over and over and this isn't going to go away soon.
How does it work?

- Write your rules using Cameo Workbench
- Run the rules
- Trace/Debug the logic of the rules
How does it work (2)?

- Deploy your rules
- Run them from Cameo Inter-Op
System Architect to MagicDraw

- Transform a System Architect DoDAF 1.5 encyclopedia to a MagicDraw UPDM 2 model, including graphical information

1. Connection to System Architect (COM API) in order to read the semantic information and graphical information (reader)
2. Conversion of the data using transformation rules
3. Creation of the UML 2.1 model in MagicDraw format (writer)
Create your own bridge:
How to transform a MagicDraw model to an Enterprise Architect model?
Create your own bridge
How to transform a MagicDraw model to an Enterprise Architect model?

- **MagicDraw to Enterprise Architect**
  - The same metamodel: uml21
  - Transformation of the elements + graphics
  - Mapping of the SysML profile
Requirement Diagram

- Missing containment edges - graphically
Activity Diagram

- Missing Input-Output pins
- Missing edges between pins
Activity Diagram (2)
Activity Diagram (3)

- Wrong waypoints
Block Definition Diagram
Block Definition Diagram (2)
Block Definition Diagram (3)
Block Definition Diagram (4)
Block Definition Diagram (5)

- Missing ports to DiagramFrame
Package Diagram
SysML Parametric Diagram
In Conclusion

• Confirm that the SysML profile is correctly mapped

• Some semantic elements are missing in the converted model:
  – Input/Output pins of Actions

• Some graphical elements are missing
  – Containment between Requirements