

ATHENA Model-Driven Interoperability (MDI) Framework

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1. Datasheet

Solution data	
Name	ATHENA Model-Driven Interoperability (MDI) Framework
Result type	<ul style="list-style-type: none"> • Framework • Methodology and guidelines
Description/functionality	<p>Model-driven development (MDD), and in particular OMG's Model Driven Architecture (MDA), is emerging as the state of practice for developing modern enterprise applications and software systems. The MDD paradigm provides us with a better way of addressing and solving interoperability issues compared to earlier non-modelling approaches.</p>
Benefits to interoperability	<p>The ATHENA Model-Driven Interoperability (MDI) Framework provides guidelines for how model-driven development (MDD) approaches can be applied in developing interoperable enterprise software systems.</p> <p>A reference guide that documents the purpose and concepts behind the model-driven interoperability results from ATHENA A5 and A6 in particular, and how to apply them. The reference guide does not cover the usage of the ATHENA A5 and A6 tools, but focuses on principles and methods.</p> <p>The MDI framework aims at providing guidelines for the following topics:</p> <ul style="list-style-type: none"> • Model-driven architecture (MDA) and interoperability • Metamodelling • UML profiles and domain-specific languages (DSLs) • Model transformations • Method engineering
Supported models/methodologies	-
Supported input interfaces	-
Supported output interfaces	-
Validation/demonstration	<p>MDI is used internally within A6 to develop the PIM4SOA models and tools. Results of SOI has been tested in the AIDIMA e-procurement scenario.</p>

Standards compliance	-
Availability	-
License	-
Status	-
Requirements/dependencies	-
Web references	<ul style="list-style-type: none"> Website: http://modelbased.net/mdi/
Composed of the following solutions	
Conceptual	-
Applicative	-
Technical	-
ATHENA metadata	
Contact person	Brian Elvesæter, SINTEF
Contributors	ESI, SINTEF, IBM, DFKI
Provided by project/activity	<ul style="list-style-type: none"> A6 – Model-driven and Adaptive Interoperability Architectures
Deliverables representing result	<ul style="list-style-type: none"> D.A5.2: Model and Specification of service description and usage as well as advanced concepts (M18) D.A5.4: Execution Framework(s) for Planned and Customisable Service-Oriented Architectures (M21) D.A6.4 “Model-Driven and Adaptable Interoperability Infrastructure” (M24) Training material developed in B6, namely the courses AP1, AP2, AP3, AP4, AP5 and AP6.
Contribution to key result	<ul style="list-style-type: none"> 7. Guidelines and Best Practices 13. Model-driven and Adaptable Interoperability Framework and Infrastructure
Used in pilot	-
Deliverable providing evaluation	<ul style="list-style-type: none"> D.A5.5 “Validation of Research Results” (M24) D.A6.4 “Model-Driven and Adaptable Interoperability Infrastructure” (M24)