Archuation in action...

Platform Independent Models (PIM)

Transformation Definition & Template Files

Generated Code & Configuration Files
The Archuuation MDA Toolkit
(ahr-kyoo-ey-shuhn)
Benefits of Archuation

1) Superior Software Quality
2) Simplification
3) Shorter Development Times
4) Lower Development Costs
5) IT Investment Protection
6) Improved Business-IT Partnership

HIGHLIGHTS

○ Realize the promise of MDA
  • Separate business concerns from technology concerns
  • Generate detailed designs & code from platform independent models
  • Increase developer efficiency and effectiveness
  • Small teams producing big results
  • A superior offshore model
  • Extreme (better than agile) rapid application development

○ Standards Based
  • Plugs into any EMF based modeling tool
  • IDE is Eclipse\EMF\UML2
  • Fully integrates w/ IBM’s RSM

○ Proven Results
  • Used by Fortune 50 companies to build enterprise systems
  • Used to quickly build small agile systems
  • Case studies showing huge cost savings

○ Fully Customizable
  • Transformation Editor
  • Annotations and Filters
  • Template Driven
  • Extensible Engine

○ Easy to Use
  • Ready to use right out of the box
  • Quickly and easily build enterprise scale architectures
  • Help facility and documentation
  • Fully declarative, no transformation logic needs to be written
  • Includes standard, “canned” reference architectures for J2EE and .Net that can be used from project to project
The Archuation Difference

HIGHLIGHTS

⦿ PIM to Code Transformations
  • Streamlines the MDA process
  • Full flexibility of generated code
  • All layers can be fully specified:
    • Services
    • Domain / Business
    • Data (ORM / DB)
    • Presentation (GUI)
  • No dependencies to Archuation in generated code

⦿ Simplifies Transformation Authoring
  • Fully declarative Transformation Definitions
  • Sophisticated pattern matching logic performed by the engine using the model’s meta-data
    (e.g. stereotypes, relationship kinds, multiplicities, etc.)
  • Templates look like the target code that will be produced
    • No complex logic or iteration in templates
  • Smart Tags easily pull meta-data from the model and inserts into the output code after applying language intelligence
  • Multiple Languages provided out-of-the-box
    • Java/JSP, .NET C#/ASP, ORM, XML, etc.

⦿ Highly Configurable Transformations
  • Multiple simple configuration options that influence the behavior of the Smart Tag code generation
    (e.g. inheritance, modifiers, filtering, etc.)
  • Completely Extensible
    • Add / Modify Model processing
    • Add / Modify Target Languages
    • Add / Modify Smart Tags

⦿ Simplifies Architecture Definitions
  • Easily apply Design Patterns to Model Elements
  • Easily define N-Tier Architectures
  • Mix n’ Match layer implementations to define an Architecture
    • Services: EJB, WS-* , .NET WCF, CORBA, etc.
    • Domain / Business: Java, C#, C++, etc.
    • Data (ORM / DB): JPA, JDO, Hibernate, Spring JDBC, etc.
    • Presentation (GUI): JSF, Struts, WPF, ASP.NET, etc.
Benefits of Archuation:
1) Superior Software Quality
2) Simplification
3) Shorter Development Times
4) Lower Development Costs
5) IT Investment Protection
6) Improved Business–IT Partnership

HIGHLIGHTS
- **Realize the promise of MDA**
  - Separate business concerns from technology concerns
  - Generate detailed designs & code from platform independent models
  - Increase developer efficiency and effectiveness
  - Small teams producing big results
  - A superior offshoring model
  - Extensive (partial to plug-in) rapid application development

- **Standards Based**
  - Plug into any EWM based modeling tool
  - IDE is Eclipse BIRT/UML 2
  - Fully integrates w/ BMM's RSIM

- **Proven Results**
  - Used by Fortune 50 companies to build enterprise systems
  - Used to quickly build small agile systems
  - Case studies showing huge cost savings

- **Fully Customizable**
  - Transformation Editor
  - Annotations and Filters
  - Template Driven
  - Extensible Engine

- **Easy to Use**
  - Ready to use sight out of the box
  - Quickly and easily build enterprise scale architectures
  - Help facility and documentation
  - Fully declarative, no transformation logic needs to be written
  - Includes standard, "custom" reference architectures for J2EE and .Net that can be used from project to project

The Archuation MDA Toolkit (ahr-kyoo-ey-shuhn)

HIGHLIGHTS
- **PIM to Code Transformations**
  - Full flexibility of generated code
  - All layers can be fully specified:
    - Services
    - Stewards / Business
    - Data (ORM / PL)
    - Presentation (GUI)
  - No dependencies to Archuation in generated code

- **Simplifies Transformation Authoring**
  - Fully declarative Transformation Definitions
  - Sophisticated pattern matching logic performed by the engine
  - Using the model’s meta data
   (e.g. stereotypes, relationship links, multiplicities, etc.)
  - Template tool: lets the target code that will be produced
  - No complex logic or iteration in template
  - Smart Tags: easily pull metadata from the model and insert into the output code after applying language intelligence

- **Multiple Languages provided out-of-the-box**
  - Java/SPK, .NET / GASP, J2EE, .NET, etc.

- **Highly Configurable Transformations**
  - Multiple single configuration options that influence the behavior of the Smart Tag code generation
  - (e.g. inheritance, modifiers, filtering, etc.)

- **Completely Extensible**
  - Add / Remove Model processing
  - Add / Remove Tag Language
  - Add / Remove Smart Tags

- **Simplify Architecture Definitions**
  - Easily apply Design Patterns to Model Elements
  - Easily define N-Tier Architectures
  - Mix n' Match layer implementations to define an Architecture
  - Servers: EJB, WAS, .NET IIS, J2EE, CORBA, etc.
  - Stewards / Business: Java, C#, C++, etc.
  - Data (ORM / EDI, JPA, ADO): Hibernate, Spring J2EE, etc.
  - Presentation (GUI, JSP, Struts, WPP, XML, NET, etc.)

The Archuation Difference