Architecture-Driven Modernization (ADM) Task Force: Overview, Scenarios & Roadmap

OMG Architecture-Driven Modernization Task Force

Session Overview

- **Definition, Mission, Goals & Benefits**
- **Architecture-Driven Modernization Roadmap**
- **Architecture-Driven Modernization Scenarios**

What is Architecture-Driven Modernization?

Process of understanding & evolving existing software assets for:

- Software improvement
- Modifications
- Interoperability
- Refactoring
- Restructuring
- Reuse
- Porting
- Migration
- Translation into another language
- Enterprise application integration
- Service-oriented architecture

Modernization starts where existing practices fail to deliver against business objectives

ADM Task Force Mission Statement

- Create specifications and promote industry consensus on modernization of existing applications

- Existing application systems are defined as any production-enabled software, regardless of the platform it runs on, language it is written in or length of time it has been in production

ADM Goals

- The ultimate goal - Revitalization of Existing Applications

- Make existing applications more agile

- Leverage existing OMG modeling standards and the MDA initiative

- Consolidate best practices leading to successful modernization

ADM Benefits

- Enable business agility by creating software agility
- Improve ROI in existing software
  - Improve productivity of software development
  - Reduce maintenance effort and cost
- Extending useful life of existing applications

ADM Scenarios

- Modernization Scenario: An initiative (e.g., portfolio management), project (e.g., migrating platforms) or a series of projects (e.g., consolidating, redesigning and redeploying an application in model-driven architecture) that is applied to existing systems.

ADM Scenario List

I. Information Systems Portfolio Analysis & Asset Management

II. Application Improvement (super scenario)

III. Language-to-Language Conversion

IV. Platform Migration

V. Services Oriented Architecture Transformation

VI. Non-Invasive Application Integration

ADM Scenario List - Continued

VII.   Data Architecture Migration

VIII.   Application & Data Architecture Consolidation

IX.   Data Warehouse Deployment

X.   Application Package Selection & Deployment

XI.   Reusable Software Assets / Component Reuse

XII.   Model-Driven Architecture Transformation

ADM – Standards Roadmap

- RFP #1: ADM: Knowledge Discovery Meta-Model (KDM) Package

- RFP #2: ADM: Abstract Syntax Tree Meta-Model (ASTM) Package

- RFP #3: ADM: Analysis Package

- RFP #4: ADM: Metrics Package

- RFP #5: ADM: Visualization Package

- RFP #6: ADM: Refactoring Package

- RFP #7: ADM: Target Mapping & Transformation Package

Architecture-Driven Modernization Roadmap

- Seven ADM standards are planned
- #1 – KDM standard: December 2005
- #2 – ASTM standard: 2006
- #3–#7 – Target dates under discussion
- White Papers to be discussed in Dec. 2005:
  - Analysis Package
  - Metrics Package
  - Software Assurance

ADM Overview

- Ways to Participate
- Comments
- Questions