ARQuest™ Blueprint
The Open Group Architecture Practitioners Conference

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Lockheed Martin Mission Systems
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Agenda

- Solution Background
- Solution Strategy, Approach and Alignment
- Tools Overview
- Process & Tools Alignment
- Architecture Foundational Relationships
ARQuest™ Blueprint Background

Solution Structure

ARQuest™ Blueprint Solution Offering

Deliverables

Benefits

Differentiators

ARQuest™ Blueprint
IT Enterprise Road Map
ARQuest™ Blueprint Overview

An Enterprise Architecture is more than pretty pictures of different views, it needs to be analyzable to determine:

1) how the IT resources support/align with the mission,
2) how the processes support/align with the mission, and
3) how the IT resources/align with the processes.

4) How to justify/prioritize IT project budgets.

Triple A-COM Model:
1. Architecture,
2. Analysis, and
3. Alignment.

For Enterprise IT resource:
✓ Consolidation, Optimization, and Modernization.
ARQuest™ Solution Strategy

• **Enterprise Architecture Approach**
  - Holistic, Framework Independent, Open, Integrated & Extensible
  - Align Business Strategies and Technology Implementations
  - Federal, LM Internal & Commercial Utilization

• **Multiple Entry Points Meeting Customer's Needs**
  - Value and Business Focused Gateway: Top-Down
  - Process Focused Gateway: Alignment to Business & Technology
  - Technology Focused Gateway: Bottom-Up
  - Horizontal and Vertical Implementations

• **Standards Based and Model Driven**
  - Frameworks: TOGAF, Zachman, ITAF, C4ISR,…, DoDAF
  - Process, System, Technology & Data Modeling
  - Extensive Automation & Analysis Features
  - Lean Six Sigma Process Optimization: Quality, Cost & Schedule
**ARQuest™ Solution Approach**

**System Evaluation, Enablement, & Deployment**

- **Customer Partners**
- **Mission Domain Analysis**
- **As-Is IT Architecture Evaluation**
- **Assessed Existing IT Architecture & Issues**

**Mission Domain Analysis**

**To-Be Architecture**

- **Issue Resolution & Redesign Requirements**

**High Available Return through Valued Enterprise System Transformation**

**ROI Definition**

**Implementation & Integration**

**Review**

- Mission Goals, Objectives and, Value Stream

- Criticality to Business Value Stream
- Complexity / Volatility

**Definition**

- System Evaluation, Enablement, & Deployment
- Customer Partners
- Mission Domain Analysis
- As-Is IT Architecture Evaluation
- Assessed Existing IT Architecture & Issues

**High Available Return through Valued Enterprise System Transformation**
1. Identify Architectural Needs

2. Define High-Level Requirements

3. Document Reality/As-Is Architecture

4. Perform Integrated Architectural Analysis

5. Develop To-Be Solution Architecture

6. Evaluate Blueprint Solution

7. Develop Roadmap - Transition Plan

8. Provide Support for Implementation

ARQuest™ Use Case

Define

Support

Create

Analyze
ARQuest™ Define & Collect Tools

Project Management Workbook & Startup

Tools Requirements Document Template

Architecture Data Collection Templates

Customizable Training Modules

Enterprise Architecture Repository

Data Collection / Cleansing Database

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ARQuest™ Analyze & Create Tools

Popkin SA & Enhancements

Architecture Analysis Reporting Database

IT Cost Benchmark Database

Macro
- Establish the Business Case
- Identify the Core Business Processes
- Scope the Business Processes
- Generate Use Cases/Scenarios
- Update the Business Model

Micro
- Prepare for BP Session
- Conduct BP Session

Application Maintenance Estimating Model

Business Process Optimization

Security Assessment

Popkin SA & Enhancements

Architecture Analysis Reporting Database

IT Cost Benchmark Database

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Application Maintenance Estimating Model

Business Process Optimization

Security Assessment
### ARQuest™ Analyze & Create Tools

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| **Business Strategies** |   |   |   |   |
|   | • Perform Engineering and Management Activities Consistently and Dependably with Accuracy and Velocity of Information | • Grow Customer Base and Markets Profitably |   |   |
|   | • Serve Customers Efficiently and Exceptionally - Anytime, Every Time |   |   |   |

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**Notes:**
- Wave I: 2002-2003
- Wave II: 2003-2004
- Wave III: 2004-2005
Key Activities & Tools Alignment

**Define Phase**
- Project Scope & Key Objectives
  - PMW & Reqs Templates
- Tools Requirements Document
  - Tools Req Template
- Framework
  - Templates
  - Reuse
  - Enterprise Arch Repository
- Team Build & JIT Training
  - Training Modules

**Collect Phase**
- Business & Technical Information
  - Data Collection Templates
- Information Cleansing & Alignment
  - Data Cleansing Database
- Architecture Definitions Loading
  - VB & API Programs
- Architecture Diagramming & Modeling
  - Popkin SA & Extensions

**Analyze Phase**
- Enterprise Snapshots
  - VB & API Programs
- Integrated Architecture Analysis
  - Architecture Analysis DB
- Extended Architecture & Eng Analysis
  - AMEM
  - BPO
  - Data
  - IT Cost Benchmarks
  - Security
  - Organization

**Create Phase**

**Support Phase**
- Enterprise Blueprint Definition
  - Roadmap Templates
  - Value & Risk
  - ROI Macro & Micro
  - Enablers Definitions
Tools Architecture

Key ARQuest™ Tool Components:

- Training
- Business Process Optimization
- IT Cost Models
- ROI Model

Core Components:
- Data Collection / Cleansing
- Popkin System Architect + Extensions
- Architecture Repository Database
- Reporting & Analysis Engine

Enterprise Architecture Repository
- Architecture Frameworks
- Alignment Models
- Miscellaneous Assessment Models
Integrated Architecture Relationships

Enterprise

Mission Objectives

Process

Applications

Data

Technology

Holistic view of the enterprise for IT Cost reduction, and Effective Communication.

Meta Data

Business-focused Priorities and Alignment

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ARQuest™ Offering Levels

**Bronze**
- Customized, standards-based architecture framework model
- Legacy applications and interface analysis
- Integrated architectural risk assessment

**Silver** (Bronze Plus)
- Multi-phase Roadmap including:
  - Application enablers,
  - Technical enablers, and
  - Process enablers.

**Gold** (Silver Plus)
- Customer, competitor and IT analysis
- Return on Investment model
- IT cost benchmark model

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**Scope Variables:**
- Company profile
- Business challenges
- # of Applications
- # of sites
- International vs. domestic
- IT budget
- Architecture portfolio
ARQuest™ Take Aways

ARQuest™ Blueprint:

✓ Is a process for developing an Enterprise Architecture (EA) Blueprint Roadmap/Transition Plan.

✓ Is a product with deliverables and training.

✓ Is an Analytical Framework for analyzing EA artifacts (e.g., views) with:
  - Patent-Pending tools/processes,
  - An open and extensible meta-data model,
  - Having Horizontal Integration focus.

✓ Is based on over a decade of EA experience and commercial leading/best practices.

✓ Is being used for commercial, internal and Federal projects.

✓ Will become part of the LM IS&S Horizontal Integration Tools Portfolio