Enterprise Architecture

The *Guide* is definitive. *Reality* is frequently inaccurate.

Douglas Adams - *The Restaurant at the End of the Universe*
Webinar Topic

- Enterprise Architecture (EA) at UC

  - Overview
  - Domains
  - Team
  - Roadmap
  - Objectives
  - EA Services
  - Value of EA

Enterprise Architecture is the organizing logic for business processes and IT infrastructure reflecting the integration and standardization requirements of the company's operating model.

A comprehensive set of cohesive models that describe the structure and functions of an enterprise.

. . . the documented results after examining the enterprise . . .

A methodology for developing and using architecture to guide the transformation of a business from a baseline state to a target state.

Models describing the logical business functions or capabilities, business processes, human roles and actors, the physical organization structure, data flows and data stores, business applications and platform applications, hardware and communications infrastructure.
What is Enterprise Architecture? – Part II

= Desired outcome

Thoughtfully designed systems that delight everyone!
Enterprise Architecture at UC - Overview

- Enterprise architecture is a practice focused on the alignment of **people, process and technology** in support of the UC mission, vision and strategy.

  - Enterprise architecture describes significant structural components such as information, process, application and technology assets and how they are used to support optimized business execution.

- Enterprise architecture is unique to every organization, however there are some common elements.
Enterprise Architecture Domains

- The four commonly accepted domains of enterprise architecture are:

- Each domain is described by multiple artifacts:
  - models
  - blueprints
  - processes
  - capabilities
  - standards
  - reference architectures
  - etc.

- EA artifacts are used to define target solutions, capabilities, etc.
UC Enterprise Architecture Focus Areas

- Enterprise architecture is focusing on five architectural areas
  - SOA (Service Oriented Architecture/Approach)
  - Identity and Access Management
  - Applications
  - Security
  - Data
• Domain Architects work with cadre of systemwide business and technical staff on:
  – Identification and development of capabilities, best practices, standards, reference architectures, services, shared or common solutions, etc.
Enterprise Architecture Objectives

• Establish an enterprise architecture for UC that supports the needs of our federated organization

• Create the architecture artifacts, locally and systemwide, that describe the desired:
  – Business processes
  – Information assets
  – Technology components
  – Interoperability capabilities, protocols
  – Security posture

• Foster the enterprise architecture discipline at each location
Enterprise Architecture Roadmap

• Systemwide Enterprise Architecture is nascent
  – Basic building blocks

• We start with the fundamentals
  – Locally, system wide

• Establish the discipline
  – Consistency, reuse

• Services, capabilities

• Innovation

Innovation
- Invention
- Innovative approaches
- Creative use

Services & Capabilities
- Shared Services
- Common Capabilities
- Flexibility and agility

Discipline
- Roadmaps
- Reference Architectures
- Blueprints & tools

Fundamentals
- Principles, standards
- Guidance
- Common practices
Enterprise Architecture *Modus Operandi*

- Enterprise Architecture places significant emphasis on reuse, interoperability and service orientation

- **Reuse** leverages existing data, technology and process assets as services.
  - Minimizing expense on redundant resources
  - Improving quality, consistency, time to delivery
  - Increasing security and management opportunities
  - Improved augmentation potential

- **Interoperability** facilitates reuse and access to information services by multiple consumers.
  - Reuse is possible when a shared service is discoverable, reliably available and accessible
  - A high degree of standardization is required for optimal reuse (e.g., standard protocols, data definitions and structures, etc.)

- **Service orientation** promotes delivery of services rather than tactical point systems/applications.
Enterprise Architecture Service Examples

- Enterprise Architecture services are most often requested for systemwide needs:

  - Shared Administrative Systems
    - UCPath

  - Shared Capabilities
    - Enterprise Metadata Repository
    - IdP Proxy Service

  - Common Capabilities
    - Managed File Transfer (MFT)
    - Enterprise Service Bus (ESB)

  - Interoperability
    - Integration patterns, standards and protocols
    - Service design
    - Service discoverability

  - Enterprise Data Models
    - HR & Payroll
    - Student
    - Party

  - Frameworks
    - Principles, standards
    - Technology & Tools
Recap: Why Enterprise Architecture?

• The UC business and technology landscape is vast, fragmented and has myriad opportunities for cohesion.

• Defining target state architectures and an enterprise roadmap enables the organization to leverage individual projects in a manner that supports long-term business strategies and efficiencies.

• Enterprise Architecture reduces
  – Redundancy, complexity and information silos
  – Business risks associated with IT investments

• Enterprise Architecture improves
  – Business and technology alignment
  – Consistency in a federated landscape
  – Interoperability and information sharing
  – Return on investment
  – Flexibility and agility
Enterprise Architecture Resources

- Enterprise Architecture SharePoint site
  - EA Body of Knowledge (EABoK)
  - Contains artifacts such as principles, standards, etc.
Questions?