

# INSTITUTIONAL EFFECTIVENESS

## *Guiding Principles*

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UNIVERSITY  
OF WESTERN  
STATES

*Integrating Health and Science*

### MISSION

*To advance the science and art of integrated health care  
through excellence in education and patient care.*

## 1 Introduction

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Institutional Effectiveness (IE) establishes a consistent approach to overseeing the work within operations and projects through a set of guiding principles.

Enterprise architecture and enterprise data architecture guiding principles define the criteria for managing, acquiring, designing, and configuring technology and services. These guiding principles:

- Are included in the procurement process.
- Guide decision making.
- Inform system design and development.
- Used to evaluate projects, services, and products.

## 2 Enterprise Architecture Guiding Principles

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The following principles include general descriptions, desired outcomes, and constraints.

### 2.1 Standards Based

- Adopt industry and community standards
- Favor open standards, architectures, and systems [over closed, proprietary ones]

### 2.2 Scalable

- Design scalability into solutions from the start
- Use virtualization to meet unexpected, point-in-time demand
- Enable distribution of workload
- Strive for statelessness

### 2.3 Simple

- Follow well-defined patterns and blueprints
- Minimize duplication and reduce complexity
- Simpler is better
- Easy to understand
- Easy to use

### 2.4 Service Oriented

- Design modular components; create building blocks
- Design and build for reuse of data and functionality
- Deliver business functionality as modular, reusable, loosely coupled services and messages
- Make services and messages discoverable

### 2.5 Strategic

- Enable a single, federated, enterprise-wide architecture
- Align decisions and architecture with the strategic mission, vision, and values of UWS
- Align decisions and architecture with the UWS strategic plan imperatives and core themes
- Support long-term, business-driven capabilities
- Think bigger picture when making decisions

### 2.6 Reliable

- Avoid single point of failure - systems, people
- Define and design for target availability levels

- Design for fault tolerance and graceful failure

## 2.7 Data Driven

- Govern data to UWS policies and data management guidelines
- Manage authoritative data as a single source of truth
- Make data available and discoverable
- Enrich data with well-defined metadata

## 2.8 Sustainable

- Design and build for maintainability, manageability, and measurability
- Enable measuring system performance
- Design and build for monitoring, logging, run-time tuning, and diagnostics
- Make decisions based on the full lifecycle of things
- Design and build for extensibility
- Document knowledge needed by others (an undocumented system is not maintainable)

## 2.9 Secure

- Protect data according to UWS and/or regulatory policies using cost-effective access controls
- Base decisions on the classification and value of assets
- Secure the boundaries between architectural components
- Consider malicious threats and accidental misuse
- Ensure confidentiality, integrity, and availability of data
- Control access using authentication and authorization
- Manage UWS risk

## 2.10 Testable

- Design and build for testability
- Ensure releases are stable before production deployment
- Enable diagnostics and troubleshooting outside of the production environment