



## What are Enterprise Design Patterns?

Reusable templates that guide the enterprise to implement a set of technologies in standard ways

## How do Enterprise Design Patterns relate to the Enterprise?

Enterprise Design Patterns translate OI&T's strategic goals, as documented in the Enterprise Technology Strategic Plan (ETSP), into "real world" direction to guide system design

## How can I learn more?

To learn more about Mobile Enterprise Design Patterns, contact Jacqueline Meadows-Stokes (Jacqueline.meadows-stokes@va.gov)

To read the full document, see the TS website:

[www.techstrategies.oit.va.gov](http://www.techstrategies.oit.va.gov)

To ask questions about Enterprise Design Patterns in general, reach out to

[AskTS@va.gov](mailto:AskTS@va.gov)

## Enterprise Design Patterns: Change Management

- **Design Pattern Scope:** The Office of the Inspector General (OIG), Federal Information Security Management Act (FISMA) and Federal, Identify, Credential, and Access Management (FICAM) audits reported a material weakness in change management controls. VA has not fully implemented procedures to enforce enterprise standard system development and change management controls for mission-critical systems. Software changes to mission-critical systems and infrastructure network devices do not follow standard software change control procedures. The OIG audit discovered numerous test plans, test results, and approvals either incomplete or missing. Lines of business have invested in several tools for asset discovery, data normalization, and configuration management that do not align with an enterprise change control policy.
- **Current State:** Enterprise change management ensures compliance with governance, legal, contractual, and regulatory requirements. By not enforcing a standardized change control methodology, system development projects may be inconsistently developed, tested, and migrated into production. This places VA systems at risk of unauthorized or unintended software modifications. Service and infrastructure changes can be managed more effectively through enterprise change controls that will: Reduce failed changes and associated service disruption; Decrease unauthorized changes; Minimize unplanned outages; Lower the number of emergency changes; And reduce delayed project implementations.
- **Design Pattern Solution:** Change management is a control process responsible for ensuring that changes are business-aligned and do not pose undue risk. This Enterprise Design Pattern describes the process for establishing enterprise change management and defines the factors critical to the success of this process.

The purpose of this document is to provide guidance on applying best practices to plan, implement, monitor, and improve enterprise change management. Process initiatives and service implementation efforts should align with the proposed framework. Supporting this purpose, the document will:

- Define best practices to drive the implementation of Enterprise Change Management
- Define the change control framework required to meet compliance with approved standards
- Recommend a set of milestones for implementation

### **Enterprise Change Management will ensure all changes are assessed, approved, implemented, and reviewed in a controlled manner.**

As a result, any modification to the IT environment involving the addition, maintenance, or deletion of a service or service component—supports the overall business strategy. The goals of Enterprise Change Management are:

- Establish a single source of Change Record Information across the enterprise
- Automate and integrate change record logging and tracking
- Provide a single approval at the appropriate change management jurisdiction level
- Provide authorization(s) at the appropriate change management jurisdiction level
- Ensure Risk and Impact Assessment activities and Implementation activities are documented and linked to the Change Record
- Communicate Change Status awareness throughout the lifecycle
- Create Standard management reusable reports

### **An effective Enterprise Change Management framework provides the flexibility to address processes, technology, and the human aspect of change.**

Key steps required to transition to this type of process are: obtaining Executive and other Organizational Leadership/Stakeholder's sponsorship; establishing an Enterprise Change Control Office manage and oversee the CCB; identifying and leveraging existing procedures, policies, and tools; ensuring new changes are aligned to VA's strategic vision; and identifying and documenting overall risks while specifying mitigation plans to address those risks.

