



What are Design Patterns?

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

How do Design Patterns relate to the 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 Design Patterns, contact Nicholas Bogden (Nicholas.Bogden@va.gov)

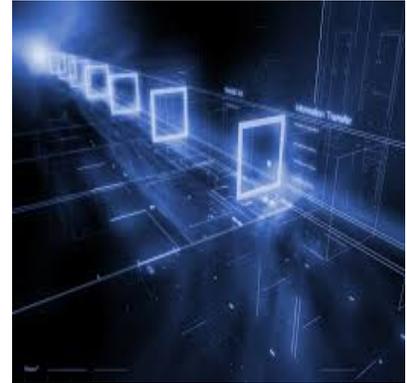
To read the full document, see the TS website:

www.techstrategies.oit.va.gov

To ask questions about Design Patterns in general, reach out to AskTS@va.gov

Enterprise Design Patterns: Mobile Architecture

- **The Demand for Mobility:** The number of organizational employees and stakeholders requiring support for the use of mobile computing devices to access information, tools and services on demand is growing at an accelerated rate.
- **Current State:** Within the Department of Veterans Affairs (VA) there is a mobile infrastructure present, but not at the enterprise-level and not fully capable of supplying the robust capabilities that have come to be expected in today's mobile landscape by both the user and the application developer.
- **Design Pattern Solution:** VA is in the process of evolving aspects of its mobile platform and environment through development and implementation of key components, projects, capabilities and policies within certain lines of business (LOBs).



This design pattern provides enterprise-level capability guidance that identifies best-practices for solving recurring technical problems within VA's mobile IT environment.

The document describes the vision for utilizing agreed upon common re-usable capabilities, as validated by VA LOBs, to provide seamless mobile access to VA Enterprise Shared Services (ESS) through the VA Mobile Framework (VAMF) and enterprise Messaging Infrastructure (eMI). It focuses on a vendor-agnostic framework for an enterprise mobile architecture environment, and refers to lower-level solution guidance associated with these capabilities.

Some of the problems that VA is facing include:

- Veterans do not have consistent visibility of their VA data and benefits/service history
- No single place for Veterans to update their own data within VA
- Ensuring confidentiality by preventing unauthorized access;
- Existence of domain-specific structures and processes, in addition to the utilization of existing structures and processes,
- Escalating numbers of varying mobile device, telecommunications, and operating license costs
- Insufficient IT standards, policies and processes in place for mobile technologies
- Insufficient support for mobile service development and implementation
- Multiple development, test and production environments

The "to-be" vision for VA's enterprise mobile architecture is the ability to provide a uniform network and data access experience across all Veteran and clinician facing applications.

Certain key components within the VA enterprise mobile infrastructure are applicable to solving the recurring problems within the current state of the IT environment. These include The VA Mobile Application Environment (MAE), an external production and testing environment that is located in the Terremark VA Dedicated Cloud, and the VAMF, a system that provides the capabilities and common services that allow mobile applications to access the VA infrastructure to achieve the business needs of stakeholders.

These components will influence the vendor-agnostic Enterprise Mobility Management (EMM) attributes of the VA Enterprise Mobile Architecture, which include Mobile Device Management (MDM), Mobile Application Management (MAM), and Mobile Security.