



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 Veteran-Facing Applications

- **Design Pattern Scope:** Provides an enterprise-level view of the current and future mobile capabilities relevant to Veteran-facing mobile applications and the standard processes in use. The document refers to, rather than duplicates, lower-level solution guidance associated with these capabilities.
- **Current State:** Fourteen mobile applications are available on the Public App Store, ten of which are available on iOS only. These applications provide a wide range of functionality to Veterans, but the current architecture and runtime environments limit this mobile experience supporting the MyVA initiative.
- **Design Pattern Solution:** Veteran-facing mobile applications will help VA close the "mobile" infrastructure gap outlined in the Enterprise Technology Strategic Plan (ETSP) and move the VA towards a future-state IT vision supporting all VA lines of business. Extending enterprise resources to mobile devices requires consistent visibility of Veteran data and a central location to update this information. Veterans require a single access point to review their data and update personal information. A single access point reduces the burden on VA employees who are manually assisting and updating information for Veterans.

The Mobile Veteran-Facing Applications Enterprise Design Pattern represents the external, Veteran-facing component of the overarching Mobile Architecture Design Pattern.

This document establishes an enterprise direction for Veteran-facing mobile computing using enterprise services and common Information Technology (IT) infrastructure platforms. It focuses on technical capabilities supporting the "external user" component of the Mobile Architecture Design Pattern (see Appendix A). The document also provides guidance on the use of a standardized mobile solution via an enterprise-wide mobile middleware platform capable of supporting a robust, Veteran-centric customer experience.

A three-phase approach addresses the limitations to achieving future-state mobile capabilities.

The initial phase focuses on establishing an enterprise mobile strategy addressing technology, governance, compliance and security, and support. VA is currently deploying Enterprise Shared Services (ESS) to support Veteran-facing applications, and will expand on them in the next three years. The second phase defines Veteran User Experience as the process of enhancing the usability, accessibility, and interaction between the Veteran and the application. This phase also implements an efficient Application Development Lifecycle. The second and third phases involve transitioning to scalable mobile architecture and supporting infrastructure, and the third phase will utilize analytics and metrics to support increase application usage.

Veteran-facing applications must meet the following scalable and secure mobile infrastructure requirements to support business needs:

- **Deploy Mobile Middleware:** Implement Scalable Mobile middleware by leveraging backend Service-oriented Architecture (SOA) services and security capabilities. An enterprise mobile middleware platform will support increased user availability.
- **Adopt Single Sign-On:** A Federated identity management system and a transition to IAM Single Sign-On (AccessVA) will facilitate the sharing of identity information across administrative boundaries. A Veteran will be able to login with a single set of credential to access the authorized services provided they have the right level of assurance.
- **Establish Mobile Application Management:** Veterans will be able to access ESS and data through their mobile applications. Mobile Application Management ensures application security and remote application management.
- **Enforce Multi-Device and Multi-Channel Support:** Veteran's applications work on any device, instantly and seamlessly. This multi-channel approach provides users access to available information, with a consistent user experience. Transitioning to cross-platform development tools and an integration infrastructure will support a multichannel environment.