

VA ENTERPRISE DESIGN PATTERNS

MOBILITY

MOBILE ARCHITECTURE



Office of Technology Strategies (TS)
Office of Information and Technology (OI&T)

Version 3.0
Date Issued: July 2017

EXECUTIVE SUMMARY

Scope

This Enterprise Design Pattern (EDP) document provides an enterprise-level view of the “As-Is” and “To-Be” mobile architecture environment within the VA IT infrastructure. It describes the vision for utilizing agreed upon common re-usable capabilities, as validated by VA lines of business (LOBs), to provide seamless mobile access to VA Enterprise Shared Services (ESS) through the VA Mobile Framework (VAMF) and an enterprise messaging capability. The document will focus on a vendor-agnostic framework for an enterprise mobile architecture environment, and will refer to, rather than duplicate, lower-level solution guidance associated with these capabilities. This EDP focuses on the background on the “As-Is” state of the VA mobile environment; descriptions of key components of the Enterprise Mobile Architecture environment; EDP “To-Be” Enterprise Mobile Architecture and associated attributes; and table of enterprise-level mobile constraints and strategic guidance.

Business Need

VA’s future state information technology (IT) vision, as outlined in the Enterprise Technology Strategic Plan (ETSP), supports consistent implementation of mobile computing solutions throughout all LOBs. An architectural framework of required IT capabilities will make possible a seamless integration of enterprise resources deployed to devices that are not hardwired to the VA internal network. This integration provides an access point to common device-independent services at any time and at any location to both internal and external users. Enterprise mobile architecture must meet the following requirements: accelerate mobile solution deployment by facilitating rapid decision-making, using a repeatable process; facilitate the transition from a non-compliant mobile middleware solution to a scalable enterprise mobile platform; and

provide common access to data to improve business processes by reducing the time to retrieve information.

Approach

Achieving a “To-Be” mobile architecture requires a multi-year initiative that is supported by both the Office of Information & Technology (OI&T) and VA Administration leadership. The future state initiative encompasses strategy, governance, and technology investment.

The following describes the focus of this enterprise design pattern: identify the current capabilities and limitations with existing mobile architecture; provide enterprise-level capability guidance to identify best practices for solving recurring technical problems within VA’s mobile IT environment; and describe the key components of the VA “To-Be” enterprise mobile architecture that supports strategy and governance processes.

This document aligns with VA enterprise mobile strategic guidance and ETSP goals for the “To-Be” VA IT infrastructure. In addition to providing solution-level architectures and implementation guidelines, the “To-Be” reference architecture will guide the development of the Mobile Application Reference Architecture (MARA).

Enterprise Design Patterns (EDPs) are developed by TS in coordination with internal and external subject matter experts and stakeholders. An EDP is a reusable capability guidance document that identifies best practice approaches and resources for achieving VA IT strategic objectives. The EDP Team uses industry trends and innovations; enterprise architectural standards; and guiding principles for capabilities and constraints to improve efficiency and effectiveness and define solutions to reoccurring technical problems. The EDP helps guide the design of IT systems and services by VA project teams.