



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 Nicholas Bogden
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To read the full document, see the TS website:

www.techstrategies.oit.va.gov

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

Enterprise Design Patterns: Staff-Facing Mobile Devices and Applications

Enterprise Design Pattern Scope: This Enterprise Design Pattern is a supporting guidance document of the overarching Mobile Architecture Enterprise Design Pattern with a focus on VA staff (including contractor personnel) use of mobile devices. VA staff and contractors are increasingly using mobile devices to access enterprise resources. VA requires standardized approaches to regulating staff and contractor access to these resources while permitting flexibility as new mobile technologies become available.

This document provides an enterprise-level view of the "As-Is" and "To-Be" mobile capabilities relevant to Staff-Facing Mobile Devices and Applications and the standard processes in use. These capabilities (e.g., MDM and MAM) address reoccurring challenges associated with VA staff using GFE mobile devices or their own personal mobile devices configured for VA use (BYOD). This document will serve as a starting point for establishing centralized policy for VA staff GFE mobile devices and BYOD applicable to all lines of businesses. The growing demand for accessing VA services and external systems relevant to VA (e.g. Defense Health Management System Modernization (DHMSM) in DoD) among VA staff on mobile devices makes standardization of staff-facing applications a priority.

Current State: The Veterans Health Administration's (VHA) Office of Informatics and Analytics and Human Factors Engineering (HFE) group has found that clinicians will continue to leverage various forms of devices to access VA services. The Mobile and Security Technology office in Service Delivery and Engineering (SDE) Enterprise Systems Engineering (ESE) estimates up to 70,000 new mobile devices will be added to the VA network in the next two years. VA must continue to make investments in the mobile infrastructure to support this growing need. These investments help VA address IT infrastructure adaptability concerns that hinder a mobile workforce, in accordance with the Enterprise Technology Strategic Plan (ETSP). Secure connections with mobile infrastructure enhancements improve agility and responsiveness to customer demands. Four critical issues for staff-facing mobile devices and applications include incomplete mobile strategy, lack of a centralized mobile governance board, lack of access to the most up-to-date mobile technologies, and VA's unreliable and difficult-to-scale mobile infrastructure.

Design Pattern Solution: In the near-term, the approach to evolving enterprise capabilities for staff-facing mobile devices and applications is a multi-pronged effort. There are plans to continue support for existing government furnished equipment (GFE) mobile devices. New GFE mobile devices and bring your own device (BYOD) requirements will be incorporated into existing mobility governance functions. Enterprise mobile GFE and BYOD requirements on existing VA mobile infrastructure will be examined for impact in order to derive both functional requirements for infrastructure enhancements and non-functional requirements (e.g., security, availability, reliability). Existing GFE and BYOD devices will transition to enhanced mobile infrastructure that addresses functional and non-functional requirements.

The "to-be" mobile strategy requires stakeholder participation across all OI&T pillars and LOBs to establish consistent expectations and criteria for VA staff usage of mobile devices and applications. This includes secure access of enterprise resources through containerized applications and internal VA stores, using a rapidly elastic and robust enterprise mobility management platform, as explained in the Mobile Architecture Enterprise Design Pattern. The current information security policy listed in the VA Handbook 6500 states that all mobile devices that store and transmit VA data must be GFE. All applications developed and used must store and transmit data using a FIPS 140-2 validated cryptographic module. This policy limits BYOD to "thin client" solutions where no VA data is stored on the mobile device itself, which is consistent with standards in VA's Enterprise Technical Architecture (ETA).

